ICD-10 CM Case studies for Circulatory System Procedures
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AHIMA Approved
ICD-10-CM/PCS Trainer
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July 9, 2015 10:00 am – 12:00 pm

By attending this workshop, participants will
• Apply ICD-10-PCS Circulatory system-related and general coding guidelines by completing exercises and case studies for requested circulatory conditions
• Explain related ICD-10-PCS documentation requirements

Book for 2015 Sessions
• Basic ICD-10-CM/PCS Coding
  • Schraffenberger, Lou Ann
  • Chapter 2 Intro to ICD-10-PCS
  • Chapter 4-22B Last sections on PCS
  • Chapter 12 Diseases of Circulatory System
• 2014 Webinar
  • Transition to ICD 10 PCS – Preparing for October 1, 2015
Cardiovascular Procedures

- US screening for AAA
- CTs
- CardioPulmonary Rehab
- TPA/TNK
- Echocardiogram
- 2015 Survey

ICD-10-PCS

- Replaces Volume 3 of ICD-9-CM
  - INPATIENT Procedures ONLY
  - Some Payers will require in Outpt!
- Code structure
  - Multi-axial 7-character
  - Alphanumeric code structure
  - Unique codes for procedures
  - New codes for new procedures
    - Easy to incorporate into system

Components of ICD-10-PCS

- Index (Do NOT have to start here)
  - Used to access Root Operations Tables
    - Detachment, Ring finger 0X6---
- Tables (1st 3 characters at top) 0X6
  - Provide valid values available for code construction
  - 4 columns
  - Varying number of rows
  - Each row gives valid choices for characters 4-7
- List of Codes
Coders and ICD-10_PCSAttributes

- ICD-10-PCS should allow coders to construct accurate codes with minimal effort
- Logical, consistent coding process
- Codes CONSTRUCTED/BUILT
- Values (individual letters & numbers) selected in sequence
- Placed in 7 spaces (Characters) of code

Values in Table become Characters in Code
- 25% to 60% decrease in productivity
- Speakers at 2013 AHIMA Conference

Interpreting Documentation

- Coding Guideline A11
- Many of the terms used to construct PCS codes are defined within the system. 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. NOR is the coder required to query the physician when the correlation between the documentation and the defined PCS terms is clear.

ICD-10-PCS Coding Process

- Codes are constructed
- 1. ID Root Operation based on documentation
  - Then, Using Index (But NOT required)
- 2. ID Body System, Body Part
- 3. After finding the 1st 3-4 values, go to Table (Can go Directly to Tables)
- 4. Using documentation, ID last 3-4 values
  - Once 4th Character selected, MUST stay in Row
UHDDS

- When reporting ICD-10-PCS codes, continue complying with UHDDS, which includes data items for hospital reporting procedures. Definitions in UHDDS can be used to determine which inpatient procedures should be reported under ICD-10-PCS.

- All significant procedures reported
  - Surgical in nature
  - Carrying a procedural risk
  - Carrying an anesthetic risk
  - Requiring specialized training
  - Surgical procedures
    - Incision
    - Excision
    - Amputation
    - Introduction
    - Endoscopy
    - Repair
    - Destruction
    - Suture
    - Manipulation

Root Operation

- Intent or objective of procedure determines Root Operation
  - Coder translates from documentation of procedure’s intent, objective, goal to Root Operation definition

- Root Operation = Main term in AI
  - Determines which PCS table to review

- Use of “and” in ICD-10-PCS code description means “and/or”

Other Tables

- Body Part Key
- Definitions (by Section, then Character)
- Device Key
- Device Aggregation Table
- Substance Key
Body Part Key

- Body Part Key provides mapping from a very specific body sites to the more general Body Parts that have valid assigned character values.

<table>
<thead>
<tr>
<th>Body Site</th>
<th>Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anus, anus</td>
<td>Anal Valve</td>
</tr>
<tr>
<td>Ascending aorta</td>
<td>Thoracic Aorta</td>
</tr>
<tr>
<td>Lumbar dorsal roots</td>
<td>Lumbosacral, Right</td>
</tr>
<tr>
<td>Abdominal inferior</td>
<td>Abdominal, Left</td>
</tr>
<tr>
<td>Interosseous artery</td>
<td>Upper Artery, Right</td>
</tr>
</tbody>
</table>

Device Key

- Table with 2 columns:
  - One for device name, including the brand or common name
  - One for PCS device value

<table>
<thead>
<tr>
<th>Device Name</th>
<th>Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3' (Aortic) Bioprosthetic valve</td>
<td>Zygomatic Tissue in Heart and Great Vessels</td>
</tr>
<tr>
<td>AbsorCor® Total Replacement Heart</td>
<td>Synthetic Substitute</td>
</tr>
<tr>
<td>Absolute Pro Vascular (CTA) Self-Expanding Stent System</td>
<td>Intraluminal Device</td>
</tr>
<tr>
<td>Acculink® (Rx) Carotid Stent System</td>
<td>Intraluminal Device</td>
</tr>
</tbody>
</table>

Device Aggregation Table

Add’l reference table provides mechanism for directing coders from more specific device values used in original root operations to root operations in system where selection of device values less specific
Discontinued Procedures

- B3.3 “If the intended procedure is discontinued, code the procedure to the root operation performed. If a procedure is discontinued before any other root operation is performed, code the root operation ‘Inspection of the body part or anatomical region inspected.’”
- Also code appropriate ICD-10-CM “Z” code
CV Documentation Issues

- Transfusion specificities
  - Body system and qualifier
- tPA injections
  - Body system and qualifier
- Central Venous Access/PICC line insertions
  - Ending body part
- Declotting of A-V fistula (Body part)
- Angiography (Fluoroscopy or plain)
- Type of Contrast


Med/Surg Section 0

- Largest Section in ICD-10-PCS
  - 72,081 codes in ICD-10-PCS
  - 62,022 in Section 0

L Heart Cath w/laser ablation of arrhythmogenic focus

<table>
<thead>
<tr>
<th>Ablation type</th>
<th>Body Part Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduction Mechanism</td>
<td>0258</td>
</tr>
</tbody>
</table>

- Approach
- Device
- Qualifier
End Placement Documentation

- Coding Clinic 3rd Q '14 p5-6 states
- “When the provider’s documentation does not specify the end placement of the infusion device, the imaging report may be used to identify the body part.”

Heart Cath w Cardiac mapping

<table>
<thead>
<tr>
<th>Map</th>
<th>Conduction Mechanism</th>
<th>02K83ZZ</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Section</th>
<th>Medical and Surgical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Heart and Great Vessels</td>
</tr>
<tr>
<td>Operation</td>
<td>Heart Cath w Cardiac mapping</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduction Mechanism</td>
<td>Open</td>
<td>3 No Device</td>
</tr>
<tr>
<td></td>
<td>Percutaneous</td>
<td>2 No Qualifier</td>
</tr>
<tr>
<td></td>
<td>Percutaneous, Endoscopic</td>
<td></td>
</tr>
</tbody>
</table>

Adjusting Pacemaker Lead

Revision of device in Heart 02WA

<table>
<thead>
<tr>
<th>Section</th>
<th>Medical and Surgical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>Heart and Great Vessels</td>
</tr>
<tr>
<td>Operation</td>
<td>Adjusting Pacemaker Lead</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart</td>
<td>Open</td>
<td>3 No Device</td>
</tr>
<tr>
<td></td>
<td>Percutaneous</td>
<td>2 No Qualifier</td>
</tr>
<tr>
<td></td>
<td>Percutaneous, Endoscopic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 No Device</td>
</tr>
<tr>
<td></td>
<td>2 No Qualifier</td>
</tr>
<tr>
<td></td>
<td>1 No Qualifier</td>
</tr>
</tbody>
</table>
Adjusting Pacemaker Lead

- Adjusting = NOT Main Term in AI
    - Translation function of Coder

- Revision
  - Definition: Correcting, to extent possible, portion of malfunctioning device or position of displaced device
  - Explanation: Revision can include correcting malfunctioning/displaced device by taking out or putting in components of device such as screw or pin
  - Examples: Adjustment of position of pacemaker lead, recentering of hip prosthesis

---

Bx, R carotid body growth, open

- Biopsy
  - see Drainage with qualifier Diagnostic
  - see Excision with qualifier Diagnostic
  - Bone Marrow see Extraction with qualifier Diagnostic

<table>
<thead>
<tr>
<th>Section</th>
<th>Body System</th>
<th>Operation</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy</td>
<td>Head and Neck</td>
<td>Biopsy Carotid Artery, Right</td>
<td>Open</td>
<td>Device</td>
<td>Qualifier</td>
</tr>
</tbody>
</table>

- Need add'l documentation to complete code construction

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Open suture ligation of failed AV graft, R brachial artery

- Ligation
  - see Occlusion

<table>
<thead>
<tr>
<th>Section</th>
<th>Body System</th>
<th>Operation</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ligation</td>
<td>Head and Neck</td>
<td>Biopsy Carotid Artery, Right</td>
<td>Open</td>
<td>Device</td>
<td>Qualifier</td>
</tr>
</tbody>
</table>

- 03L70ZZ
Arterial Line placed percutaneously in L femoral artery for intra-arterial blood gas

Bilateral renal angiograms and R renal angioplasty

Bilateral renal angiograms and R renal angioplasty
Thrombectomy of L Cephalic Vein

Extirpation

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Basic Ven.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Cephalic Ven.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Cephalic Ven.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Hand Ven.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Hand Ven.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Insertion of tunneled CV Hemodialysis Catheter, via R Femoral vein to Inferior Vena Cava

Extirpation

- Definition: Taking or cutting out solid matter from a body part
- Explanation: Solid matter may be abnormal byproduct of biological function or foreign body; it may be imbedded in body part or in lumen of tubular body part. Solid matter may or may not have been previously broken into pieces
- Biopsies Root Operation = Extirpation, Excision OR Drainage w/7th character for Diagnostic
Excision, Extirpation vs. Drainage

- According to ICD-10-PCS Index
  - Evacuation of hematoma = Extirpation
  - Evacuation of other fluids = Drainage
- Excision—Root operation B
  - Definition: Cutting out or off, without replacement, a portion of a body part
- Explanation: Qualifier Diagnostic used to identify excision procedures that are biopsies

Excision

- Coded when portion of body part cut out or off using sharp instrument.
- All root operations that cut to accomplish objective allow use of any sharp instrument, incl. but not limited to:
  - Scalpel
  - Wire
  - Scissors
  - Bone saw
  - Electrocautery tip
- Coding note:
  - Bone marrow & endometrial biopsies biopsies are NOT coded to Excision
  - Coded to Extraction, with qualifier Diagnostic

Open placement of pacemaker single-chamber rate-responsive generator in chest wall

- No MT entry for Placement in AI?
- Determine Root Operation: Objective of Procedure = Insertion of device
  - Chest Wall
    - Medical and Surgical
    - Body System
      - Cardiac System
      - Medical-Technical Devices, General
      - Insertion
        - Insertion of a medical-technical device that monitors, assists, performs, or prevents a physiological function
  - Insertion of device
    - Body Part
      - Thoracic Cavity
        - Chest Wall
      - Peritoneal Cavity
        - Peritoneal Cavity
      - Vascular Cavity
        - Vascular Cavity
    - Device
      - Intrathoracic Device
      - Intraperitoneal Device
      - Other Device
    - Qualifier
      - New

OOPS! Nothing works here – need to rethink Body Part
Open placement of pacemaker single-chamber rate-responsive generator in chest wall, cont.

- Knowledge of procedure = Subcutaneous pocket for pacemaker

Totally Implantable Vascular Access Device (TIVAD)

Insertion = Procedures where only objective = to put in device without doing anything else to body part

- Always involving device
- Insertion: Putting in non-biological device
- Replacement: Putting in device that replaces body part
- Supplement: Putting in device that reinforces or augments body part
- Change: Exchanging device w/out cutting /puncturing

Removal: Taking out device
Revision: Correcting malfunctioning/displaced device
Objective of Procedure?

1: Obstetrics
2: Placement
3: Administration
4: Measurement and Monitoring
5: Extracorporeal Assistance & Performance
6: Extracorporeal Therapies
7: Osteopathic
8: Other Procedures
9: Chiropractic

Medical/Surgical-Related Sections

- 1: Obstetrics
- 2: Placement
- 3: Administration
- 4: Measurement and Monitoring
- 5: Extracorporeal Assistance & Performance
- 6: Extracorporeal Therapies
- 7: Osteopathic
- 8: Other Procedures
- 9: Chiropractic

Administration

M/S Related Section 3

Procedures where either a diagnostic or therapeutic substance is given to Patient (Infusions, Injections, Transfusions, Irrigation, Tattooing)

Three Possible Operations (Character 3)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infusion</td>
<td>1. Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products</td>
</tr>
<tr>
<td>Injection</td>
<td>2. Putting in or on a cleansing substance</td>
</tr>
<tr>
<td>Transfusion</td>
<td>3. Putting in blood or blood products</td>
</tr>
</tbody>
</table>
Inhaled Drugs

- In ICD-10-PCS tables, use “via natural or artificial opening” Approach for inhaled drugs/medical substances
- Inhalation involves drawing substance into lungs by breathing through nostrils
  - natural opening in body

Transfusion

- Table 302 - NO single substance value for fresh frozen plasma
- No official ICD-10-PCS guideline for this situation
  - B3.2 “During same operative episode, multiple procedures are coded if same root operation performed on different body parts, as defined by distinct values of body part character.”
- For infusion of fresh frozen plasma, consider assigning 2 codes: one for "frozen plasma" substance and one for "fresh plasma" substance.
  - Ex: patient has donor-fresh frozen plasma transfused through a central venous line = 30243K1 and 30243L1.
- Jones, L. M. One Hundred Tips for ICD-10-PCS Coding: Tip 72. 7/16/2013.

Blood Clot Drugs

- Antithrombotic
  - PREVENT clots from forming
  - 2 Classes
    - Anticoagulants – Slow clotting down
      - Usu. For preventing venous thrombosis
    - Antiplatelets – Prevent platelets from clumping; clots from forming/growing
      - Usu. For prevention of arterial thrombosis
- Thrombolytic
  - DESTROY clots once formed (Thrombolysis)
    - Limits damage caused by blockage or occlusion of blood vessel
Examples of Drugs

<table>
<thead>
<tr>
<th>Thrombolytic</th>
<th>Anticoagulant</th>
<th>Antiplatelet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue Plasminogen Activator (t-PA)</td>
<td>Warfarin (Coumadin)</td>
<td>Aspirin</td>
</tr>
<tr>
<td>*Alteplase (Activase)</td>
<td>Acenocoumarol</td>
<td>Triflusal (Disgen)</td>
</tr>
<tr>
<td>*Reteplase (Retavase)</td>
<td>Phenprocoumon</td>
<td>Clopidogrel (Plavix)</td>
</tr>
<tr>
<td>*Tenecteplase (TNKase)</td>
<td>Atorvastatin</td>
<td>Prasugrel (Effient)</td>
</tr>
<tr>
<td>Anistreplase (Eminase)</td>
<td>Brodilacoum</td>
<td>Abciximab (ReoPro)</td>
</tr>
<tr>
<td>Streptokinase</td>
<td>Phenindione</td>
<td>Ticlopidine (Aggrastat)</td>
</tr>
<tr>
<td>Urokinase</td>
<td>Heparin</td>
<td>Dipyridamole</td>
</tr>
</tbody>
</table>

*Additional drugs include:
- Anistreplase (Eminase)
- Brodifacoum
- Abciximab (ReoPro)
- Phenindione
- Ticlopidine (Aggrastat)

Locating Drug Codes

- Go to Section Administration; Body System Physiological Systems and Anatomical Regions, and Root Operation Introduction (3E0)
- Find appropriate vein/artery
- Find Approach = How drug administered
- Substance Column
  - Anti-coagulant and Anti-platelet drugs = platelet inhibitors (P)
  - Thrombolytic agents = thrombolytic (1)
  - Platelet Inhibitor drugs - NO Qualifier (Z).
- Qualifier = Recombinant Human-activated Protein C (6) or Other Thrombolytic (7).

Thrombolytic agents

HUGE TABLE!
Nonautologous platelet transfusion via central venous line

- Example: 30243R1

- 3 Rows; 2 w/4 for Body System Which is Correct Row?

Transfusion of cell saver red cells via central venous catheter

- 30243N0

IV tPA

- 3E03317
Measurement & Monitoring – M/S Related Section 4

- Ch 3 =
  - 0 – Measurement: Determining level of physiological or physical function at point in time
  - 1 – Monitoring: Determining level of physiological or physical function repetitively over period of time
- Ch 6 = Physiological or physical function being tested

External EKG, single reading

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Cardiac</th>
<th>Action Currents</th>
<th>Electrical Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>4</td>
<td>Action Currents</td>
<td>4</td>
</tr>
<tr>
<td>Operation</td>
<td>4</td>
<td>Electrical Activity</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section</th>
<th>Body System</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Cardiac</td>
<td>External</td>
<td>Electrical Activity</td>
</tr>
<tr>
<td>2 Cardiac</td>
<td>External</td>
<td>Electrical Activity</td>
</tr>
</tbody>
</table>

Single measurement cardiac stress test 4A02XM4

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Cardiac</th>
<th>Total Activity, Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body System</td>
<td>4</td>
<td>Action Currents</td>
</tr>
<tr>
<td>Operation</td>
<td>4</td>
<td>Electrical Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section</th>
<th>Body System</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
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<td>External</td>
<td>Electrical Activity</td>
</tr>
<tr>
<td>2 Cardiac</td>
<td>External</td>
<td>Electrical Activity</td>
</tr>
</tbody>
</table>

One Row of VERY Large Table
Break Time

- Fluid Exchanges

Extracorporeal Assistance and Performance

- Medical/Surgical-Related Section 5
- Procedures where equipment outside body used to assist/perform physiological function

Extracorporeal Assistance and Performance

- Root Operations – Character 3
  - 0 Assistance = Taking over portion of physiological function by extracorporeal means
  - 1 Performance = Completely taking over physiological function by extracorporeal means
  - 2 Restoration = Returning, or attempting to return, physiological function to its original state by extracorporeal means
Hemodialysis

Hemodialysis must be documented as single or multiple filtration, per root operation table 5A1. Physician must document this.

In Table B51 (Imaging, veins, fluoroscopy), body part value "W Dialysis Shunt/Fistula" actually surgically created access used for dialysis administration.

Only assign W when AV fistula or graft imaged (AV shuntogram or AV fistulogram).

Unsuccessful attempted cardiac defibrillation; Pt Expired

Same code assigned, whether procedure considered successful or not (and patient expires).

Patient expiration captured in patient disposition of UB04/5010.
Failed cardioversion

- Restoration = ONLY external cardioversion and defibrillation procedures
- Failed cardioversion procedures also included in Restoration, and coded same as successful procedures

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Closed chest Cardiac massage

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Phototherapy of Circulatory system
Blood collection from indwelling vascular access device

Ancillary Sections

- B: Imaging
- C: Nuclear Medicine
- D: Radiation Therapy
- F: Physical Rehabilitation & Diagnostic Audiology
- G: Mental Health
- H: Substance Abuse Treatment

Imaging – Ancillary Section B

- Imaging root types (3rd Character)
  - 0 – Plain Radiography
  - 1 – Fluoroscopy:
  - 2 – Computerized Tomography (CT scan)
  - 3 – Magnetic Resonance Imaging (MRI):
  - 4 – Ultrasonography
### Imaging Transplanted Body Part

- **ICD-10-PCS Imaging section**
  - Only two transplant body part values -
    1. Renal artery transplant (such as in table B42)
    2. Kidney transplant (such as in table BT3).
- **NO body part values for heart transplant, liver transplant, lung transplant, pancreas transplant, or intestinal transplant.**
- **Use body part value for actual body part when coding imaging of transplanted organ**
  - Ex: Imaging of heart transplant use heart body part value

### MRI of brain w/o contrast to assess acute confusion & headache

**Magnetic Resonance Imaging (MRI)**

<table>
<thead>
<tr>
<th>Section</th>
<th>B</th>
<th>Imaging System</th>
<th>Central Nervous System</th>
<th>Magnetic Resonance Imaging (MRI)</th>
<th>Computer-aided diagnostic display of multiple images developed from the capture of radiofrequency signals emitted by nuclei in a body site exposed to a magnetic field</th>
</tr>
</thead>
</table>

- **Body Part** | **Contrast** | **Qualifier** |
- Renal artery | Y: Other Contrast | Z: None |
- Kidney | Other Contrast | Z: None |
- Bladder | Z: None | Z: None |
- Acoustic Emissary | Z: None | Z: None |

### Left ventriculography using omnipaque contrast

**Left ventriculography using Fluoroscopic Views**

<table>
<thead>
<tr>
<th>Section</th>
<th>B</th>
<th>Imaging System</th>
<th>Heart Left</th>
<th>B215</th>
</tr>
</thead>
</table>

- **Body Part** | **Contrast** | **Qualifier** |
- Right Atrium | Z: None | Z: None |
- Right Ventricle | Z: None | Z: None |
- Right Ventricular Outflow Tract | Z: None | Z: None |
- Left Ventricle | Z: None | Z: None |
- Left Ventricular Outflow Tract | Z: None | Z: None |
- Coronary Artery Bypass Graft, Right | Z: None | Z: None |
- Coronary Artery Bypass Graft, Left | Z: None | Z: None |
- Pulmonary Artery | Z: None | Z: None |
- Atria | Z: None | Z: None |
- PULMONARY COMMAI | Z: None | Z: None |
- Right Pulmonary | Z: None | Z: None |
**CT to Detect Coronary Artery Calcification**

**Imaging, diagnostic**
- CT scan
- Coronary angiography
- Fluoroscopy
- Computerized tomography (CT Scan)
- Magnetic resonance imaging (MRI)

**Computerized Tomography (CT Scan)**
- Coronal Artery Bypass Grafts, Multiple
- Heart, Right and Left

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Contrast</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronal Artery, Multiple</td>
<td>High Density</td>
<td>None</td>
</tr>
<tr>
<td>Heart, Right and Left</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Need Documentation of CABG or NOT**

**CT Scan of Heart**

**Computerized Tomography (CT Scan)**
- Coronal Artery Bypass Grafts, Multiple
- Heart, Right and Left

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Contrast</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronal Artery, Multiple</td>
<td>High Density</td>
<td>None</td>
</tr>
<tr>
<td>Heart, Right and Left</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Table = B22**

**Echocardiogram of R&L Heart**

**Echocardiogram**
- Contrast & Qualifier

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Contrast</th>
<th>Qualifier</th>
</tr>
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<tbody>
<tr>
<td>Coronal Artery, Multiple</td>
<td>High Density</td>
<td>None</td>
</tr>
<tr>
<td>Heart, Right and Left</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

**Ultrasound**
- Intrasosseal
- Transoesophageal

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Contrast</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronal Artery, Multiple</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Heart, Right and Left</td>
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<td>None</td>
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<tr>
<td>Heart with Aorta</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Pericardium</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

**Need Documentation to finish constructing code = Contrast & Qualifier**
**Transesophageal Echocardiogram to evaluate congenital AV canal defect in pediatric pt**

- **Echocardiogram**
  - Heart
  - 27

- **Ultrasonography**
  - Heart
  - 27

**Body Part Values**
- Single coronary artery
- Multiple coronary arteries
- Right heart - Left heart - Both R & L heart
- Heart with aorta - Pericardium
- Pediatric heart

**Echocardiogram Documentation**
- Ultrasonography of R & L heart
- One code required
  - Need documentation of intravascular or transesophageal
  - Also documentation when contrast used

**Body Part Values**
- - Single coronary artery
- - Multiple coronary arteries
- - Right heart - Left heart - Both R & L heart
- - Heart with aorta - Pericardium
- - Pediatric heart

**MRI of the brain with contrast**
- Brain
  - 81
  - B030YZZ
### Intravascular ultrasound

**Bilateral internal Carotid arteries**

Intravascular ultrasound involves real-time display of images of anatomy or flow information developed from the capture of reflected and transmitted high-frequency sound waves.

<table>
<thead>
<tr>
<th>Section</th>
<th>Study System</th>
<th>Type</th>
<th>Sub Part</th>
<th>Contrast</th>
<th>Qualifier</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Imaging</td>
<td>Artery</td>
<td>Internal Carotid Artery, Right</td>
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<td>Interscalular</td>
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<tr>
<td>2</td>
<td>Imaging</td>
<td>Artery</td>
<td>Internal Carotid Artery, Left</td>
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<td>Interscalular</td>
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<td>3</td>
<td>Imaging</td>
<td>Artery</td>
<td>Internal Carotid Artery, Bilateral</td>
<td>None</td>
<td>Interscalular</td>
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</tbody>
</table>

### Ultrasound Screening for Aneurysm of Abdominal Aorta

Ultrasound screening for aneurysm of the abdominal aorta is performed to detect aneurysms in the descending and infrarenal abdominal aorta.

<table>
<thead>
<tr>
<th>Section</th>
<th>Study System</th>
<th>Type</th>
<th>Sub Part</th>
<th>Contrast</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Imaging</td>
<td>Aorta</td>
<td>Abdominal, Intravascular</td>
<td>None</td>
<td>Interscalular</td>
</tr>
</tbody>
</table>

### Venous US

Venous ultrasound involves real-time display of images of anatomy or flow information developed from the capture of reflected and transmitted high-frequency sound waves.

<table>
<thead>
<tr>
<th>Section</th>
<th>Study System</th>
<th>Type</th>
<th>Sub Part</th>
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<th>Qualifier</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Imaging</td>
<td>Vein</td>
<td>Inferior, Intravascular</td>
<td>None</td>
<td>Interscalular</td>
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</tbody>
</table>

All subterms under Vein = Table B54
Nuclear Medicine — Ancillary Section C

- Organized like Imaging section
- But 5th character defines radionuclide instead of contrast
- Radionuclide = Radiation source
- 6th/7th values not specified in this section

- 463 Possible Codes

PET scan of myocardium using Fluorine 18 (F-18)

PET scan of Position Emission Tomographs (PET) Imaging
M Brain C030
M Bronchi and Lungs CB33
M Central Nervous System C00YZZ
M Heart C23YYZZ
M Lungs and Bronchi CB32
M Myocardium C23G

Physical Rehabilitation & Diagnostic Audiology

Section F

- Character definitions unlike other sections
- 2nd character = section qualifier, IDs procedure as Rehab or Diagnostic audiology
- 3rd character = general procedure root type
- 4th character = Defines body system & body region combined, where applicable
- 5th character = Specifies procedure type
- 6th character = Equipment used, if any

- 1,382 possible codes
Documentation

- Areas of Concern
- Documentation analysis conducted by HRS across thousands of MR reviews in late 2013 and early 2014
- Rehabilitation
- Atrial Fibrillation
- Nicotine Dependence
- External Causes
- Respiratory Failure
- Glaucoma
- Transfusions
- Contrast

Rehabilitation

Rehabilitation

Physiatry see Motor Treatment, Rehabilitation F07
Physical medicine see Motor Treatment, Rehabilitation F07
Physical therapy see Motor Treatment, Rehabilitation F07

Only F07 Row w/ Circulatory System For 4th Character

Root Type (Rehabilitation)

- 0 – Speech Assessment
- 1 – Motor and/or Nerve Function Assessment
- 2 – Activities of Daily Living Assessment
- 6 – Speech Treatment
- 7 – Motor Treatment
- 8 – Activities of Daily Living Treatment
- 9 – Hearing Treatment
- B – Cochlear Implant Treatment
- C – Vestibular Treatment
- D – Device Fitting
- F – Caregiver Training
ADLs Evaluation CVA InPt w/ CAD, S/P CABGx3

• Pt is 80-y-o female admitted to hospital on 4/17 w/diagnosis of CVA and unsteady gait per Dr. Johnson.
• PMH: TIA in 1980s, CAD w/CABG x3 in 1981, HTN, L hip Fx in 1999, R hip Fx in 2000, COPD, depression
• Social Hx: Pt lives at near-by ALF. Uses a cane or rolling walker.
• Precautions: DNR, orthostatic at times.

ADLs Evaluation CVA InPt w/ CAD, S/P CABGx3

• Mentation: Alert and Oriented X 3
• Observation: Pt resting in bed. Therapist observed/assisted w/ADLs for showering, personal hygiene, dressing, and feeding at breakfast.
• Assessment: Good mobility despite some instability. ADL capabilities include independent to assist of 1.
• Rehab potential: Good.
• Plan: 3x daily visits to prepare pt for ALD functions and return to ALF w/possible HH PT assistance at D/C

ADLs Evaluation CVA InPt w/ CAD, S/P CABGx3

<table>
<thead>
<tr>
<th>Activities of Daily Living Assessment Form</th>
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<tbody>
<tr>
<td>Section</td>
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</table>
ADLs Evaluation CVA InPt w/ CAD, S/P CABGx3

Section X

• New Section for New Technologies
Section X
• Public request to create new section in ICD-10-PCS for new technologies
  • Discussed at C&M Meeting on March 18, 2015
  • Drugs and supplies were mentioned as Concerns
  • MLN Matters® Article SE1519
• Annual updates to ICD-10-CM/PCS posted on ICD-10 website in June
  • Because of partial code freeze, limited number of new codes for new technologies & new diseases
  • After X codes serve purpose, proposals to delete X codes & create new codes in ICD-10-PCS addressed at later C&M Meetings

Section X Goals
• Create codes uniquely IDing procedures requested via New Technology Application Process or that capture services not routinely captured in ICD-10-PCS that have been presented for public comment at a C&M Meeting
• Create codes that maintain continuity with other sections in ICD-10-PCS to extent possible

Section X Codes
• Use same root operation values as their closest counterparts in other sections of ICD-10-PCS
  • X section for types of technologies
    • usually not captured by coders or
    • not usually have desired specificity within current ICD-10-PCS structure required for new technology approval
  • Codes for new technologies consistent with current ICD-10-PCS codes may still be created w/in current ICD-10-PCS structure
Section X Code Structure

• 1st character – Letter X
• 2nd character– Body system/region value
• 3rd character– Root operation value
• 4th character– Body part value
• 5th character– Approach value
• 6th character– Device/substance/technology value
• 7th character– Indicating year created

ICD-10-PCS X Code Guideline

• Section X codes are standalone codes, not supplemental codes
• Section X codes fully represent specific procedure described in code title, and do not require any additional codes from other sections of ICD-10-PCS.
• When section X contains code title which describes specific new technology procedure, only that X code reported
  • No need to report broader, non-specific code in another section of ICD-10-PCS

Section X Example

• XW04321 Introduction of Ceftazidime-Avibactam Anti-infective into Central Vein, Percutaneous Approach, New Technology Group 1,
  • Indicates that Ceftazidime-Avibactam Anti-Infective administered via central vein
  • Code from Table 3E0 in Administration section of ICD-10-PCS NOT coded in addition to this code
### Section X Table XW0

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device/Technology/Technology</th>
<th>Modifier</th>
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<tbody>
<tr>
<td>1</td>
<td>Peripheral Vessel</td>
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<td>Peritoneal</td>
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### Section X Table X2C

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<tr>
<td>1</td>
<td>Carotid Artery</td>
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### Section X Table XR2

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Knee Joint</td>
<td>6</td>
<td>Open</td>
</tr>
</tbody>
</table>
Case Study 1

- 62 y-o male pt admitted to hospital with progressive episodes of chest pain determined to be crescendo angina. He had MI 5 years ago and progressively has been having more frequent chest pain episodes. During hospital stay, he was given IV nitroglycerin and subsequently placed on Cardizem. Scheduled for cardiac cath next week, after he refused to have it done during this admission.
Case Study 2

- Patient brought in via ambulance and found to have acute inferolateral ST elevation MI. Her vitals were unstable and cardiogenic shock was suspected. Swan-Ganz catheter was inserted percutaneously in R subclavian vein and guided into right pulmonary artery. Pressures monitored overnight. She was then transferred to University Hospital.
Case Study 3

• Severe L leg claudication after walking < one block

• Procedures
  • Abdominal aortography using fluoroscopy w/Omnipaque contrast
  • Bilateral iliac artery angiography
  • Bilateral iliofemoral popliteal and tibial angiography

Where are iliac and iliofemoral popliteal and tibial arteries?
What is contrast category?

LOCM: Nonionic monomer: iohexol 240 (Omnipaque): 518 mosm/kg H2O *
LOCM: Nonionic monomer: iohexol 300 (Omnipaque): 672 mosm/kg H2O *
LOCM: Nonionic dimer: ioxitalam 320 (Visipaque): 290 mosm/kg H2O *

1st Webinar Questions

- Chapter 12 Review Exercise
- Question 1 - You are right, code should be I69.321, NOT I69.821. This is only correct code for dysphasia for this case, since documentation specifies cerebral infarction.
- Question 9 - You are right, the answer sheet has an incomplete code. Code used will depend on 2 different situations.
  - 1) If provider does not know that Staph Aureus is MSSA/MRSA, then code B95.7
  - 2) If you find documentation of MSSA OR MRSA from provider, you would code B95.61 OR B95.62. If you can't find specific documentation re MRSA/MSSA, then query to be sure

ICD-10-PCS Resources

- ACCP Inpatient/Facility List. Top 100 Inpatient ICD-9 Codes Mapped to ICD-10.
- ACCP Outpatient/Office List. Top 100 Outpatient ICD-9 Codes Mapped to ICD-10. AAPC. (Diagnoses)
- AHIMA. ICD-10 Home.
- AHIMA. ICD-TEN (Top Emerging News), e-Newsletter. Membership required.

ICD-10-PCS Resources

- AMA. ICD-10 Code Set.
ICD-10-PCS Resources

  - [Link](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_050653.hcsp?dDocName=bok1_050653)
  - [Link](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_050625.hcsp?dDocName=bok1_050625)
  - [Link](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_046936.hcsp?dDocName=bok1_046936)
- Bissonette, D. *Coding Procedures in the Medical and Surgical-Related Sections.*
  - [Link](ftp://ftp.ihs.gov/pubs/EHR/Training/Manuals/Have%20No%20Fear%20-%20ICD-10%20is%20Here%20-%20PCS%20March%202014/2.2%20-%20ICD10PCS%20SECTIONS%201-4.pdf)
  - [Link](http://cyntcodinghealthinformationservices.blogspot.com/2014/04/coding-yesterdays-nomenclature-today_21.html)

ICD-10-PCS

  - [Link](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_049129.hcsp?dDocName=bok1_049129)
  - [Link](http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_049129.hcsp?dDocName=bok1_049129)
- Endicott, M. A. "ICD-10-CM/PCS codes for musculoskeletal system include greater level of specificity." 8/30/11
  - [Link](http://www.justcoding.com/270313/icd10cmpcs-codes-for-musculoskeletal-system-include-greater-level-of-specificity)
  - [Link](http://journal.ahima.org/2015/02/11/coding-heart-procedures-in-icd-9-cm-and-icd-10-PCS/)
ICD-10-PCS Resources

- Eramo, L. A. Capture all aspects of a procedure to ensure compliance today and when using ICD-10-PCS. HCPro. 8/13/2013.
- HIMSS. ICD-10 Playbook.
- ICD-10-PCS Files
  - www.cms.gov/Medicare/Coding/ICD10/2012-ICD-10-PCS.html

ICD-10-PCS Resources

- ICD-10 Checkpoint. What are correct codes to report transthoracic echocardiogram of L & R heart, w/o contrast, performed on adult patient? CodeWrite. AHIMA. March 2015.

ICD-10-PCS Resources

ICD-10-PCS Resources

- Jones, L. M. One Hundred Tips for ICD-10-PCS Coding: Tip 72. 7/16/2013.
  - http://www.ahima.org/downloadcenter/article.cfm?articleid=20629
- Kuehn, L. Cardiovascular Coding with ICD-10-PCS.
- Simmons, C. R. Understanding the Differences within ICD-10-PCS. ICD-TEN: Top Emerging News (September 2010).
- Using the ICD-10-PCS New Technology Section X Codes. MLN Matters® Number: SE1519. CMS.
ICD-10-PCS Resources

  
  


Questions???

ilemten@gmail.com

Thank You!