

● ICD-10- Procedure Coding System (ICD-10-PCS)

- Development Background
- CMS awarded a contract to 3M Health Information Systems to develop a new procedure coding system
- The new system is intended to replace ICD-9-CM Volume 3 for reporting inpatient procedures

● Development History

1995 - 1996: First draft of ICD-10-PCS completed

1996 - 1997: Training program developed
Informal testing conducted
ICD-10-PCS revised

1997 - 1998: Independent formal testing conducted
ICD-10-PCS revised
Final draft completed

1998-present ICD-10-PCS updated annually

- Major Development Goals
- Improve accuracy and efficiency of coding
- Reduce training effort
- Improve communication with physicians

- Essential Attributes
- Completeness
 - All substantially different procedures have a unique code
- Expandability
 - The structure of the system allows incorporation of new procedures as unique codes
- Essential Attributes

Standardized terminology

- Includes definitions of the terminology used.
 - While the meaning of specific words can vary in common usage, ICD-10-PCS defines a single meaning for each term used in the system.

- Essential Attributes

Multiaxial

– The system has a multi-axial structure.

Each character has the same meaning within a section and across sections to the extent possible

- General Principles
- Diagnostic information is not included in the code description
- A ‘not elsewhere classified’ option is allowed for new devices and substances
- All substantially different procedures are defined
- General Principles
Limited NOS Option
A general body part, approach, or root operation can be used when the level of specificity required is

not available in the record or cannot otherwise be obtained

- General Principles

- Limited NOS Option

- Body Part:

- Example: “Liver” is used when the specific liver lobe is not identified

- Approach:

- “Open”, “Percutaneous” and “Via Natural or Artificial Opening” are used when a more specific type of approach is not documented and cannot otherwise be determined

- Root Operation:

- “Repair” is used when the procedure documentation does not support a specific root operation and the information cannot otherwise be obtained

- Code Structure

- Codes are comprised of seven components. Each component is called a “character”
 - All codes are seven characters long
- Individual units for each character are represented by a letter or number
 - Each unit is called a “value”
- 34 possible values for each character
 - Digits 0- 9
 - Letters A-H, J-N, P-Z
- System Structure
 - 16 Sections
 - Medical and Surgical
 - Obstetrics
 - Placement
 - Administration
 - Measurement and Monitoring
 - Extracorporeal Assistance and Performance
 - Extracorporeal Therapies
 - Osteopathic
 - Other Procedures

- Chiropractic
- Imaging
- Nuclear Medicine
- Radiation Oncology
- Physical Rehabilitation and Diagnostic Audiology
- Mental Health
- Substance Abuse Treatment
- ICD-10-PCS Tables

Each table contains four columns and varying numbers of rows

Column: Specifies the allowable values for characters 4-7

Row: Specifies the valid combinations of values

- Example: Table 0DB Excerpt
- ICD-10-PCS Index
- Provides the first three or four values of the code

- The tables must always be used to obtain the complete code
- No eponyms are included
- Index Conventions
- Main index term is a root operation, root procedure type, or common procedure name

Examples: Resection (root operation)

Fluoroscopy (root type)

Prostatectomy (common procedure name)

- Secondary entries are underneath the main term
- PCS Table or code reference as specific as possible
- Index Entry by Body Part

Bypass

Aorta, Thoracic **021W**

Aorta, Abdominal **0410**

Artery, Axillary, Left **03160**

Artery, Axillary, Right **03150**

Artery, Brachial, Left **03180**

Artery, Brachial, Right **03170**

Artery, Common Carotid, Left **031J0**

Artery, Common Carotid, Right **031H0**

● Medical and Surgical Section

● Medical and Surgical Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Part

- 5th Character = Approach
 - 6th Character = Device
 - 7th Character = Qualifier
 - Medical and Surgical Section
- ## Principles
- The root operation is based on the objective of the procedure
 - If multiple procedures as defined by distinct objectives are performed, then multiple codes are assigned
 - Medical and Surgical Section
- ## Principles
- Root Operation
 - Value is consistent throughout the section

- Approach
 - Value is consistent throughout the section
- Body part
 - Value is consistent within a specific body system

● Section

Character

Medical and

Surgical Section

- Section
(Character 1)
- Defines the general type of procedure

- In the Medical and Surgical Section the first character is always the number “0”

● Body System

Character

Medical and Surgical Section

- Body System
(Character 2)
- Defines the general physiological system on which the procedure is performed, or anatomical region where the procedure is performed
- Uses generally accepted anatomical or physiological categories

- Some traditional categories are subdivided into several body systems.

- Cardiovascular is subdivided into five body systems:

- Heart and Great Vessels
 - Upper Veins

- Upper Arteries
 - Lower Veins

- Lower Arteries

- Medical and Surgical Section

Body Systems

Central Nervous

Peripheral Nervous

Heart and Great Vessels

Upper Arteries

Lower Arteries

Upper Veins

Lower Veins

Lymphatic and Hemic

Eye

Ear, Nose, Sinus

Respiratory

Mouth and Throat

Gastrointestinal

Hepatobiliary and Pancreas

Endocrine

Skin and Breast

Subcutaneous Tissue and Fascia

Muscles

Tendons

Bursae and Ligaments

Head and Facial Bones

Upper Bones
Lower Bones
Upper Joints
Lower Joints
Urinary
Female Reproductive
Male Reproductive
Anatomical Regions, General
Anatomical Regions, Upper Extremities
Anatomical Regions, Lower Extremities

● Root Operation Character

Medical and Surgical Section

- Medical and Surgical Section
Root Operation
(Character 3)
- Defines the objective of the
procedure

- 31 different root operation values
 - Each root operation identifies a precise and distinct objective

- Medical and Surgical
Section
Root Operations

Alteration

Bypass

Change

Control

Creation

Destruction

Detachment

Dilation

Division

Drainage

Release

Removal

Repair

Replacement

Reposition

Resection

Restriction

Revision

Supplement

Transfer

Transplantation

- Medical and Surgical Section

Root Operation Principles

- The root operation is coded according to the objective of the procedure actually performed
 - Discontinued or modified procedures coded to procedure actually performed
- Composite terms (e.g., colonoscopy, sigmoidectomy) are not root operations

- Medical and Surgical Section
Root Operation Principles
- Combination procedures are coded separately
 - Each procedure with a distinct objective during an operative episode is coded separately
- The complete or partial redo of a procedure is coded to the root operation performed rather than *Revision*
 - Revision is confined to correcting a malfunctioning or displaced device
- Medical and Surgical Section
Root Operation Groups
- Procedures that take out or eliminate all or a portion of a body part

- Procedures that involve putting in or on, putting back, or moving body parts
- Procedures that take out or eliminate solid matter, fluids, or gases from a body part
- Procedures that only involve examination of body parts and regions
- Medical and Surgical Section

Root Operation Groups

- Procedures that can be performed only on tubular body parts
- Procedures that always involve devices
- Procedures involving cutting or separation only
- Procedures involving other repairs
- Procedures with other objectives
- Medical and Surgical Section

Root Operations

Procedures that take out or eliminate all or a portion of a body part

- Excision
 - Resection
 - Extraction
 - Destruction
 - Detachment
- Medical and Surgical Section
Root Operations

Excision

Definition Cutting out or off, without replacement, a portion of a body part

Explanation The qualifier *Diagnostic* is used to identify excision procedures that are biopsies

Examples Partial nephrectomy
Liver biopsy

- Medical and Surgical Section
Root Operations
Resection

Definition Cutting out or off, without replacement, all of a body part

Examples Total nephrectomy
Total lobectomy of lung

- Medical and Surgical Section
Root Operations
Extraction

Definition Pulling or stripping out or off all or a portion of a body part by the use of force

Explanation The qualifier *Diagnostic* is used to identify extraction procedures that are biopsies

Examples Dilation and curettage
Vein stripping

- Medical and Surgical Section

Root Operations

Destruction

Definition Physical eradication of all or a portion of a body part by the direct use of energy, force or a destructive agent

Explanation None of the body part is physically taken out

Examples Fulguration of rectal polyp
Cautery of skin lesion

- Medical and Surgical

Section

Root Operations

Detachment

Definition Cutting off all or part of the upper or lower extremities

Explanation The body part value is the site of the detachment, with a qualifier if applicable to

further specify the level where
the extremity was detached

Examples Below knee amputation
Disarticulation of shoulder

- Medical and Surgical Section

Root Operations

Procedures that involve putting in or on, putting back, or moving living body parts

- Transplantation
- Reattachment
- Reposition
- Transfer

- Medical and Surgical Section

Root Operations

Transplantation

Definition Putting in or on all or a portion of a living body part taken from another individual or animal to physically take the

place and/or function of all or a portion of a similar body part

Explanation The native body part may or may not be taken out, and the transplanted body part may take over all or a portion of its function

Examples Kidney transplant

Heart transplant

● Medical and Surgical Section

Root Operations

Reattachment

Definition Putting back in or on all or a portion of a separated body part to its normal location or other suitable location

Explanation Vascular circulation and nervous pathways may or may not be reestablished

Examples Reattachment of hand

Reattachment of avulsed kidney

- Medical and Surgical Section

Root Operations

Reposition

Definition Moving to its normal location or other suitable location all or a portion of a body part

Explanation The body part is moved to a new location from an abnormal location, or from a normal location where it is not functioning correctly. The body part may or may not be cut out or off to be moved to the new location

Examples Reposition of undescended testicle
Fracture reduction

- Medical and Surgical Section

Root Operations

Transfer

Definition Moving, without taking out, all or a portion of a body part to another location to

take over the function of all or a portion of a body part

Explanation The body part transferred remains connected to its vascular and nervous supply

Examples Tendon transfer
Skin pedicle flap transfer

- Medical and Surgical Section
Root Operations

Procedures that take out or eliminate solid matter, fluids or gases from a body part

- Drainage
- Extirpation
- Fragmentation

- Medical and Surgical Section
Root Operations

Drainage

Definition Taking or letting out fluids and/or gases from a body part

Explanation The qualifier *Diagnostic* is used to identify drainage procedures that are biopsies

Examples Thoracentesis
Incision and drainage

- **Medical and Surgical Section**
Root Operations

Extirpation

Definition Taking or cutting out solid matter from a body part

Explanation The solid matter may be an abnormal byproduct of a biological function or a foreign body; it may be imbedded in a body part or in the lumen of a tubular body part. The solid matter may or may not have been previously broken into pieces

Examples Thrombectomy

Cholelithotomy

- Medical and Surgical Section

Root Operations

Fragmentation

Definition Breaking solid matter in a body part into pieces

Explanation Physical force (e.g., manual, ultrasonic) applied directly or indirectly is used to break the solid matter into pieces.

The solid matter may be an abnormal byproduct of a biological function or a foreign body. The pieces of solid matter are not taken out

Examples Extracorporeal shockwave lithotripsy

Transurethral lithotripsy

- Medical and Surgical Section

Root Operations

Procedures that only involve examination of body parts and regions

- Inspection
- Map
- Medical and Surgical Section
Root Operations

Inspection

Definition Visually and/or manually exploring a body part

Explanation Visual exploration may be performed with or without optical instrumentation. Manual exploration may be performed directly or through intervening body layers

Examples Diagnostic arthroscopy
Exploratory laparotomy

- Medical and Surgical Section
Root Operations

Map

Definition Locating the route of passage of electrical impulses and/or locating functional areas in a body part

Explanation Applicable only to the cardiac conduction mechanism and the central nervous system

Examples Cardiac mapping
Cortical mapping

- Medical and Surgical Section
Root Operations

Procedures that can be performed only on tubular body parts

- Bypass
- Dilation

- Occlusion
- Restriction

- Medical and Surgical Section
Root Operations

Bypass

Definition Altering the route of passage of the contents of a tubular body part

Explanation Rerouting contents of a body part to a downstream area of the normal route, to a similar route and body part, or to an abnormal route and dissimilar body part. Includes one or more anastomoses, with or without the use of a device

Examples Coronary artery bypass
Colostomy formation

- Medical and Surgical Section
Root Operations

Dilation

Definition Expanding an orifice or the lumen of a tubular body part

Explanation The orifice can be a natural orifice or an artificially created orifice.

Accomplished by stretching a tubular body part using intraluminal pressure or by cutting part of the orifice or wall of the tubular body part

Examples Percutaneous transluminal angioplasty Pyloromyotomy

- Medical and Surgical Section
Root Operations

Occlusion

Definition Completely closing the orifice or lumen of a tubular body part

Explanation The orifice can be a natural orifice or an artificially created orifice

Example Fallopian tube ligation
Ligation of inferior vena cava

- Medical and Surgical Section
Root Operations

Restriction

Definition Partially closing the orifice or lumen of a tubular body part

Explanation The orifice can be a natural orifice or an artificially created orifice

Examples Esophagogastric fundoplication
Cervical cerclage

● Medical and Surgical Section

Root Operations

Procedures that always involve devices

- Insertion
- Replacement
- Supplement
- Removal
- Change
- Revision

● Medical and Surgical Section

Root Operations

Insertion

Definition Putting in a nonbiological appliance that monitors, assists,

performs or prevents a physiological function but does not physically take the place of a body part

Examples Insertion of radioactive implant Insertion of central venous catheter

- Medical and Surgical Section

Root Operations

Replacement

Definition Putting in or on biological or synthetic material that physically takes the place and/or function of all or a portion of a body part

Explanation The body part may have been taken out or replaced, or may be taken out, physically eradicated, or rendered nonfunctional during the Replacement procedure. A Removal procedure is coded for taking out the device used in a previous replacement procedure

Examples Total hip replacement, bone graft
Free skin graft

- Medical and Surgical Section
Root Operations
Supplement

Definition Putting in or on biological or synthetic material that physically reinforces or augments the function of a body part

Explanation The biological material is non-living, or the biological material is living and from the same individual. The body part may have been previously replaced. If the body part has been previously replaced, the *Supplement* procedure is performed to physically reinforce and/or augment the function of the replaced body part

Examples Herniorrhaphy using mesh, free nerve mitral valve ring annuloplasty, put a new acetabular liner in a previous hip replacement

- Medical and Surgical Section
Root Operations
Removal

Definition Taking out or off a device from a body part

Explanation If a device is taken out and a similar device put in without cutting or puncturing the skin or mucous membrane, the procedure is coded to the root operation *Change*. Otherwise, the procedure for taking out a device is coded to the root operation *Removal*

Examples Drainage tube removal
Cardiac pacemaker removal

● Medical and Surgical Section

Root Operations

Change

Definition Taking out or off a device from a body part and putting back an identical or similar device in or on the same body part without cutting or puncturing the skin or a mucous membrane

Explanation All Change procedures are coded using the approach *External*

Examples Urinary catheter change

Gastrostomy tube change

- Medical and Surgical Section

Root Operation

Revision

Definition Correcting, to the extent possible, a malfunctioning or displaced device

Explanation Revision can include correcting a malfunctioning or displaced device by taking out or putting in components of the device such as a screw

Examples Adjustment of position of pacemaker lead Recementing of hip prosthesis

- Medical and Surgical Section

Root Operations

Procedures involving cutting or separation only

- Division
- Release

- Medical and Surgical Section

Root Operations

Division

Definition Cutting into a body part without draining fluids and/or gasses from the body part in order to separate or transect a body part

Explanation All or a portion of the body part is separated into two or more portions

Examples Spinal cordotomy, osteotomy

- Medical and Surgical Section

Root Operations

Release

Definition Freeing a body part from an abnormal physical constraint by cutting or by use of force

Explanation Some of the restraining tissue may be taken out but none of the body part is taken out

Examples Adhesiolysis

Carpal tunnel release

- Medical and Surgical Section

Root Operations

Procedures involving other repairs

- Control

- Repair

- Medical and Surgical Section

Root Operations

Control

Definition Stopping, or attempting to stop, post-procedure bleeding

Explanation The site of the bleeding is coded as an anatomical region and not to a specific body part

Examples Control of post-prostatectomy hemorrhage

Control of post-tonsillectomy
hemorrhage

- Medical and Surgical Section
Root Operations

Repair

Definition Restoring, to the extent possible, a body part to its normal anatomic structure and function

Explanation Used only when the method to accomplish the repair is not one of the other root operations

Examples Colostomy takedown
Suture of laceration

- Medical and Surgical Section
Root Operations
Procedures with other objectives

- Alteration
- Creation
- Fusion
- Medical and Surgical Section
Root Operations

Alteration

Definition Modifying the anatomical structure of a body part without affecting the function of the body part

Explanation Principal purpose is to improve appearance

Examples Face lift
Breast augmentation

- Medical and Surgical Section
Root Operations
Creation

Definition Making a new genital structure that does not take over the function of a body part

Explanation Used only for sex change operations

Examples Creation of vagina in a male
Creation of penis in a female

- **Medical and Surgical Section**
Root Operations

Fusion

Definition Joining together portions of an articular body part rendering the articular body part immobile

Explanation The body part is joined together by fixation device, bone graft, or other means

Examples Spinal fusion
Ankle arthrodesis

● Body Part Character

Medical and Surgical Section

- Medical and Surgical Section
Body Part Character
(Character 4)
- Defines the specific anatomical site
where the procedure is performed
- 34 possible body part values in each
body system
- Medical and Surgical Section
Body Part Values
Hepatobiliary and Pancreas
Liver

Liver, Right Lobe
Liver, Left Lobe
Gallbladder
Hepatic Duct, Right
Hepatic Duct, Left
Cystic Duct
Common Bile Duct
Ampulla of Vater
Pancreatic Duct
Pancreatic Duct, Accessory
Pancreas

● Approach

Character

Medical and Surgical Section

- Medical and Surgical Section
Approach
(Character 5)
- Defines the technique used to reach the site of the procedure
- 7 different approach values
- Medical and Surgical Section
Approach

Approaches through the skin or mucous membrane

- Open
- Percutaneous
- Percutaneous Endoscopic
- Medical and Surgical Section
Approach Definitions
OPEN

Cutting through the skin or mucous membrane and any other body layers necessary to expose the site of the procedure

Example: Abdominal hysterectomy

- Medical and Surgical Section
Approach Definitions

PERCUTANEOUS

Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach the site of the procedure

Example: Needle biopsy of liver

- Medical and Surgical Section
Approach Definitions

PERCUTANEOUS ENDOSCOPIC

Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach and visualize the site of the procedure

Example: Arthroscopy

- Medical and Surgical Section Approach

Approaches through an orifice

- Via Natural or Artificial Opening
- Via Natural or Artificial Opening Endoscopic
- Via Natural or Artificial Opening Endoscopic with Percutaneous Endoscopic Assistance

- Medical and Surgical Section
Approach Definitions

VIA NATURAL OR
ARTIFICIAL OPENING

Entry of instrumentation through a natural or artificial external opening to reach the site of the procedure

Example: Endotracheal intubation

- Medical and Surgical Section
Approach Definitions

VIA NATURAL OR
ARTIFICIAL OPENING
ENDOSCOPIC

Entry of instrumentation through a natural or artificial external opening to

reach and visualize the site of the procedure

Example: Sigmoidoscopy

- Medical and Surgical Section

Approach Definitions

VIA NATURAL OR
ARTIFICIAL OPENING
ENDOSCOPIC WITH
PERCUTANEOUS
ENDOSCOPIC ASSISTANCE

Entry of instrumentation through a natural or artificial external opening and entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to aid in the performance of the procedure

Example: Laparoscopic-assisted vaginal hysterectomy

- Medical and Surgical Section
Approach Definitions

EXTERNAL

Procedures performed directly on the skin or mucous membrane and procedures performed indirectly by the application of external force through the skin or mucous membrane

Example: Closed fracture reduction

● Device

Character

Medical and Surgical Section

- Medical and Surgical Section

Device Character

(Character 6)

- The term “device” includes only devices that remain after the procedure is completed
- Instruments that describe how a procedure is performed are not specified in the device character
 - Instruments for visualization are specified in the approach character
- Materials incidental to a procedure such as clips and sutures are not considered devices
- Medical and Surgical Section
- Device Categories
- Biological or synthetic material that takes the place of all or a portion of a

body part (e.g., skin graft, joint prosthesis)

- Biological or synthetic material that assists or prevents a physiological function (e.g., urinary catheter, IUD)
- Medical and Surgical Section
Device Categories
- Therapeutic material that is not absorbed by, eliminated by, or incorporated into a body part (e.g., radioactive implant, orthopedic pins).
Therapeutic materials that are considered devices can be removed
- Mechanical or electronic appliances used to assist, monitor, take the place of, or prevent a physiological function (e.g., diaphragmatic pacemaker, hearing device)

- Medical and Surgical Section
Examples of Device Values
- Drainage Device
- Radioactive Element
- Autologous Tissue Substitute
- Extraluminal Device
- Intraluminal Device
- Synthetic Substitute
- Nonautologous Tissue Substitute

● Qualifier

Medical and Surgical Section

- Medical and Surgical Section
Qualifier
(Character 7)
- Defines an additional attribute of the procedure performed, if applicable

- May have a narrow application, to a specific root operation, body system, or body part
- Medical and Surgical Section
Examples of Qualifiers
- Type of transplant
- Second site for a bypass
- Diagnostic excision (biopsy)

● Obstetrics Section

- Obstetrics Section
Character Specification
- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Part

- 5th Character = Approach
 - 6th Character = Device
 - 7th Character = Qualifier
 - Obstetrics Section
 - Includes only procedures performed on the products of conception
 - Operations on the pregnant female are coded in the Medical and Surgical section (e.g., episiotomy)
 - Two root operations unique to this section
 - Other root operations same as Medical and Surgical section (e.g., Drainage, Inspection)
 - Obstetrics Section
Body System
(Character 2)
- Contains a single body system:
- Pregnancy

- **Obstetrics Section**
Root Operation
(Character 3)

Abortion: Artificially terminating a pregnancy

Delivery: Assisting the passage of the products of conception from the genital canal

- **Obstetrics Section**
Body Part
(Character 4)

Contains three different values for body part

- Products of Conception
- Products of Conception, Retained
- Products of Conception, Ectopic

- **Obstetrics Section**
Body Part

- Products of conception refers to all components of a pregnancy, including the fetus, embryo, amnion, umbilical cord and placenta
- There is no differentiation of the products of conception based on gestational age
- Obstetrics Section
Device
(Character 6)

Some device values unique to this section

Examples:

Laminaria

Abortifacient

Monitoring Electrode

- Obstetrics Section
Qualifier
(Character 7)

Values are dependent on the root operation, approach, or body part

Examples (root operation dependent):

Method of extraction (e.g., low forceps, vacuum)

Substance drained (e.g., amniotic fluid, fetal blood)

- Obstetrics Section Table 10Q

- Placement
Section

- Placement Section
Character Specification
- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Region/ Orifice
- 5th Character = Approach
- 6th Character = Device
- 7th Character = Qualifier

- Placement Section

Body System

(Character 2)

Contains two body system values:

- Anatomical Regions
- Anatomical Orifices

- Placement Section

Root Operation

(Character 3)

- Five root operations unique to this section
 - Compression
 - Dressing
 - Immobilization
 - Packing
 - Traction
- Two root operations common to other sections
 - Change
 - Removal

- Placement Section
 Root Operation
 (Character 3)

Compression: Putting pressure on a body region

Dressing: Putting material on a body region for protection

Immobilization: Limiting or preventing motion of a body region

Packing: Putting material in a body region or orifice

Traction: Exerting a pulling force on a body region in a distal direction

- Placement Section

Body Regions/Orifices

(Character 4)

- Two types of values:

- External body regions (e.g., chest wall)

- Natural orifices (e.g., mouth and pharynx)

- Placement Section

Device

(Character 6)

- Specifies the material or device in the placement procedure (e.g., splint, bandage)

- Includes casts for fractures and dislocations

- Devices in the placement section are off the shelf and do not require any extensive design, fabrication or fitting

- The placement of devices that require extensive design, fabrication or fitting are coded in the Rehabilitation section
- Placement Section
Table 2Y4

● Administration Section

- Administration Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Physiological System
 - 3rd Character = Root Operation
 - 4th Character = Body System/ Region
 - 5th Character = Approach
 - 6th Character = Substance
 - 7th Character = Qualifier

- Administration Section
Body System
(Character 2)

Contains three body system values:

- Physiological Systems and Anatomical Regions
- Circulatory
- Indwelling Device

- Administration Section
Root Operation
(Character 3)

Physiological Systems and Anatomical Regions

Introduction: Putting in a therapeutic, diagnostic, nutritional, physiological or

prophylactic substance except blood
or blood products

Irrigation: Putting in or on a
cleansing substance

- Administration Section

Root Operation

(Character 3)

Circulatory System

Transfusion: Putting in blood or blood
products

- Administration Section

Root Operation

(Character 3)

Indwelling Device

Irrigation: Putting in or on a
cleansing substance

- Administration Section

- Body Part

- (Character 4)

- For Introduction, the body part specifies where the procedure occurs and not necessarily the site where the substance introduced has an effect
- For Irrigation, the body part specifies the site of the irrigation

- Administration Section

- Approach

- (Character 5)

- Approach uses values defined in the Medical and Surgical section
- The approach value for intradermal, subcutaneous and intramuscular introductions (i.e., injections) is percutaneous
- If a catheter is used to introduce a substance into a site within the circulatory system, the approach value is also percutaneous

- Administration Section
Substance
(Character 6)
- Substances are specified in broad categories
- Substance values depend on body part
- Administration Section
Substance
Physiological System &
Anatomical Regions

Antineoplastic

Thrombolytic

Anti-infective

Anti-inflammatory

Radioactive Substance

Nutritional Substance

Electrolytic and Water Balance Substance

Irrigating Substance

Dialysate

Local Anesthetic

Regional Anesthetic

Inhalation Anesthetic

Gas

Contrast Agent

Fertilized Ovum

Sperm

Pigment

Platelet Inhibitor

Destructive Agent

- Administration Section
Substance
Circulatory System

Examples:

Serum Albumin

Frozen Plasma

Fresh Plasma

Plasma Cryoprecipitate

Red Blood Cells

Stem Cells, Hematopoietic

- Administration Section
Qualifier
(Character 7)

- May further specify a substance

- *Examples:*
 - High-dose Interleukin-2
 - Liquid Brachytherapy Isotope
 - Insulin
- Administration Section
Table 302

● Measurement and Monitoring Section

- Measurement and
Monitoring Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Physiological System

- 3rd Character = Root Operation
- 4th Character = Body System
- 5th Character = Approach
- 6th Character = Function
- 7th Character = Qualifier



Measurement and Monitoring
Body System
(Character 2)

Contains a single body system
value:

– Physiological Systems

- Measurement and Monitoring
Root Operation
(Character 3)

- **Measurement:** Determining the level
of a physiological or

physical
in time

function at a point

- **Monitoring:** Determining the level of a physiological or physical function repetitively over a period of time

- **Measurement and Monitoring Approach (Character 5)**

Approach contains values also in the Medical and Surgical section

Examples:

Percutaneous

Via Natural or Artificial Opening

Endoscopic

- Measurement and Monitoring Function
(Character 6)
Specifies physiological or physical functions (e.g., nerve conductivity, cardiac electrical activity, respiratory capacity)
- Measurement and Monitoring
Table 4A1
- Extracorporeal Assistance and

Performance Section

- Extracorporeal Assistance
and Performance Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Physiological System
 - 3rd Character = Root Operation
 - 4th Character = Body System
 - 5th Character = Duration
 - 6th Character = Function
 - 7th Character = Qualifier
- Extracorporeal Assistance
and Performance

Body System

(Character 2)

Contains a single body system value:

- Physiological Systems
- Extracorporeal Assistance and Performance

Root Operation

(Character 3)

Assistance: Taking over a portion of a physiological function by extracorporeal means

Performance: Completely taking over a physiological function by extracorporeal means

Restoration: Returning, or attempting to return, a physiological function to its normal state by extracorporeal means

- Extracorporeal Assistance
and Performance

Duration

(Character 5)

- Specifies whether the procedure was a single occurrence, multiple occurrence, intermittent, or continuous

- For respiratory ventilation assistance or performance, the range of hours is specified

(<24 hours, 24-96 hours or >96 hours)

- Extracorporeal Assistance
and Performance

Function

(Character 6)

Specifies the physiological function assisted or performed (e.g., oxygenation, ventilation)

- Extracorporeal Assistance and Performance

Qualifier

(Character 7)

May specify equipment used in the procedure (e.g., balloon pump)

- Extracorporeal Assistance and Performance

Table 5A2

● Extracorporeal Therapies Section

● Extracorporeal Therapies Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological System
- 3rd Character = Root Operation
- 4th Character = Body System
- 5th Character = Duration
- 6th Character = Qualifier
- 7th Character = Qualifier

- Extracorporeal Therapies
Body System
(Character 2)

Contains a single body system
value:

- Physiological Systems
- Extracorporeal Therapies
Root Operation
(Character 3)

Contains ten root operation values:

Atmospheric Control	Pheresis
Decompression	Phototherapy
Electromagnetic Therapy	Ultrasound Therapy
Hyperthermia	Ultraviolet Light Therapy
Hypothermia	Shock Wave Therapy

- Extracorporeal Therapies
Duration
(Character 5)
Specifies whether the procedure was a single occurrence, multiple occurrence, or intermittent

● Osteopathic Section

- Osteopathic Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Anatomical Regions
 - 3rd Character = Root Operation
 - 4th Character = Body Region
 - 5th Character = Approach

- 6th Character = Method
- 7th Character = Qualifier

- Osteopathic Section
Body System

(Character 2)

Contains a single body system
value:

- Anatomical Regions

- Osteopathic Section
Root Operation

(Character 3)

Contains a single root operation value

Treatment:

- Manual treatment to eliminate or alleviate somatic dysfunction and related disorders

- Osteopathic Section
Method
(Character 6)

- Articulatory - Raising
- Fascial Release
- General Mobilization
- High Velocity - Low Amplitude
- Indirect
- Low Velocity- High Amplitude
- Lymphatic Pump
- Muscle Energy - Isometric
- Muscle Energy - Isotonic
- Other Method

- Other
Procedures
Section

● Other Procedures Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological Systems/
Anatomical Regions
- 3rd Character = Root Operation
- 4th Character = Body Region
- 5th Character = Approach
- 6th Character = Method
- 7th Character = Qualifier

● Other Procedures Section

Root Operation

(Character 3)

Contains a single root operation
value

Other Procedures:

– Methodologies which attempt to remediate or cure a disorder or disease

- Other Procedures Section
Body Region
(Character 4)

Contains physiological system and anatomical region values:

- Nervous System
- Circulatory System
- Head and Neck Region
- Integumentary System and Breast
- Musculoskeletal System
- Female Reproductive System
- Male Reproductive System
- Trunk Region
- Upper Extremity
- Lower Extremity
- None

- Miscellaneous Section
Method
(Character 6)

- Acupuncture
- Therapeutic Massage
- Collection

● Chiropractic Section

- Chiropractic Section
 - Character Specification
 - 1st Character = Section
 - 2nd Character = Anatomical Regions
 - 3rd Character = Root Operation
 - 4th Character = Body Region
 - 5th Character = Approach
 - 6th Character = Method
 - 7th Character = Qualifier

- Chiropractic Section
Body System
(Character 2)

Contains a single body system
value:

- Anatomical Regions

- Chiropractic Section
Root Operation
(Character 3)

Contains a single root operation value
Manipulation:

- Manual procedure that involves a directed thrust to move a joint past the physiological range of motion, without exceeding the anatomical limit

- Chiropractic Section
Method
(Character 6)
- Non-Manual
- Indirect Visceral
- Extra-Articular
- Direct Visceral
- Long Lever Specific Contact
- Long and Short Lever Specific Contact
- Mechanically Assisted
- Other Method

● Imaging Section

- Imaging Section
Character Specification
- 1st Character = Section

- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Body Part
- 5th Character = Contrast
- 6th Character = Qualifier
- 7th Character = Qualifier
- Imaging Section
- Contains diagnostic radiology procedures
 - Nuclear medicine is a separate section
 - Radiation Oncology is a separate section
 - Interventional Radiology
 - The intervention procedure is coded in the Medical and Surgical section
- Imaging Section
Root Type
(Character 3)

- Plain Radiography
- Fluoroscopy
- CT Scan
- MRI
- Ultrasound

● Imaging Section

Root Type

Definitions

(Character 3)

- Imaging Section
Root Type

Plain Radiography

Planar display of an image developed from the capture of external ionizing radiation on

photographic or photoconductive plate

- Imaging Section
Root Type

Fluoroscopy

Single plane or bi-plane real time display of an image developed from the capture of external ionizing radiation on a fluorescent screen. The image may also be stored by either digital or analog means

- Imaging Section
Root Type

Computerized Tomography (CT Scan)

Computer-reformatted digital display of multiplanar images developed from the capture of multiple exposures of external ionizing radiation

- Imaging Section

Root Type

Magnetic Resonance Imaging (MRI)

Computer-reformatted digital display of multiplanar images developed from the capture of radio-frequency signals emitted by nuclei in a body site excited within a magnetic field

- Imaging Section

 - Root Type

 - Ultrasonography

 - Real time display of images of anatomy or flow information developed from the capture of reflected and attenuated high frequency sound waves

- Imaging Section

 - Contrast Material

 - (Character 5)

- Contrast is differentiated by the concentration of the contrast material (e.g., high or low osmolar)

- Imaging Section
Qualifier
(Character 6)
- Specifies an imaging procedure
without contrast followed by contrast

● Nuclear Medicine Section

- Nuclear Medicine Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Body System
 - 3rd Character = Root Type
 - 4th Character = Body Part

- 5th Character = Radionuclide
- 6th Character = Qualifier
- 7th Character = Qualifier

● Nuclear Medicine

Section

Type Definitions

(Character 3)

- Nuclear Medicine

Root Type

Planar Imaging

Introduction of radioactive materials into the body for a single plane display of images developed from the capture of radioactive emissions

- Nuclear Medicine

Root Type

Tomographic (Tomo)

Imaging

Introduction of radioactive materials into the body for three dimensional display of images developed from the capture of radioactive emissions

- Nuclear Medicine

Root Type

Positron Emission

Tomographic (PET) Imaging

Introduction of radioactive materials into the body for three dimensional display of images

developed from the simultaneous capture, 180 degrees apart, of radioactive emissions

- Nuclear Medicine

Root Type

Nonimaging Uptake

Introduction of radioactive materials into the body for measurements of organ function, from the detection of radioactive emissions

- Nuclear Medicine

Root Type

Nonimaging Probe

Introduction of radioactive materials into the body for the study of distribution and fate of certain

substances by the detection of radioactive emissions; or, alternatively, measurement of absorption of radioactive emissions from an external source

- Nuclear Medicine

 - Root Type

 - Nonimaging Assay

 - Introduction of radioactive materials into the body for the study of body fluids and blood elements, by the detection of radioactive emissions

- Nuclear Medicine

 - Root Type

 - Systemic Therapy

Introduction of unsealed radioactive materials into the body for treatment

- Nuclear Medicine Section
Body Part
(Character 4)
- Indicates the body part or region to the degree of specificity that is usual and appropriate for the section
- Regional (e.g., lower extremity veins) and combination body parts (e.g., liver and spleen) are commonly used
- Nuclear Medicine Section
Radionuclide
(Character 5)

- Character 5 is the source of the radiation
- An “Other Radionuclide” option is included for new FDA approved radiopharmaceuticals

● Radiation Oncology Section

- Radiation Oncology Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Body System

- 3rd Character = Root Type
- 4th Character = Treatment Site
- 5th Character = Modality Qualifier
- 6th Character = Isotope
- 7th Character = Qualifier

- Radiation Oncology Section
Root Type
(Character 3)

Classified by the basic mode of radiation delivery used:

- Beam Radiation
- Brachytherapy
- Stereotactic Radiosurgery
- Other Radiation

- Radiation Oncology Section
Treatment Site
(Character 4)

Specifies the body part that is the target of the radiation therapy

- Radiation Oncology Section
Modality Qualifier
(Character 5)

Further specifies the type of radiation used:

- photons
- electrons
- heavy particles
- contact radiation

- Radiation Oncology Section
Isotope
(Character 6)

- Specifies the isotope administered in oncology treatments

- Physical
Rehabilitation and
Diagnostic
Audiology Section

- Physical Rehabilitation and
Diagnostic Audiology
Section

- Character Specification

- 1st Character = Section
- 2nd Character = Section Qualifier
- 3rd Character = Root Type
- 4th Character = Body System and
Region
- 5th Character = Type Qualifier

- 6th Character = Equipment
- 7th Character = Qualifier
- **Physical Rehabilitation
and
Diagnostic Audiology
Root Type
(Character 3)**

Treatment:

Use of specific activities or methods to develop, improve and/or restore the performance of necessary functions, compensate for dysfunction and /or minimize debilitation

Assessment:

Includes a determination of the patient's diagnosis when appropriate, need for treatment, planning for treatment, periodic assessment and documentation related to these activities

- Physical Rehabilitation and Diagnostic Audiology

- Root Type
(Character 3)

- **Fitting(s):**

- Design, fabrication, modification, selection and/or application of splint, orthosis, prosthesis, hearing aids and/or rehabilitation device

- **Caregiver Training:**

- Educating caregiver with the skills and knowledge used to interact with and assist the patient

- Physical Rehabilitation and Diagnostic Audiology
Body System and Region
(Character 4)

- Body Systems

- Neurological System

- Circulatory System
- Respiratory System
- Integumentary System
- Musculoskeletal System
- Genitourinary System
- **Body Regions**
 - Head and Neck
 - Upper Back/Upper Extremity
 - Lower Back/Lower Extremity
 - Whole Body
- **Physical Rehabilitation
and
Diagnostic Audiology
Type Qualifier
(Character 5)**

Specifies the precise test or method
employed

Examples:

Therapeutic exercise treatment

Dressing or transfer assessment

Prosthesis fitting

Transfer caregiver training

- **Physical Rehabilitation**

and

Diagnostic Audiology

Equipment

(Character 6)

- Specific types of equipment are not listed
- General categories of equipment are listed (e.g., physical agents, mechanical modalities, assistive/adaptive/supportive devices)

● Mental Health Section

- Mental Health Section
Character Specification
 - 1st Character = Section
 - 2nd Character = Body System
 - 3rd Character = Root Type
 - 4th Character = Type Qualifier
 - 5th Character = Qualifier
 - 6th Character = Qualifier
 - 7th Character = Qualifier
- Mental Health Section
Root Type
(Character 3)

Psychological Tests

Crisis Intervention

Medication Management

Individual Psychotherapy
Counseling
Family Psychotherapy

Electroconvulsive Therapy
Biofeedback
Hypnosis
Narcosynthesis
Group Psychotherapy
Light Therapy

- Mental Health Section
Type Qualifier
(Character 4)
- Type qualifier provides additional
specificity
- Not all types have type qualifier
- Mental Health Section
Type Qualifier
(Character 4)

Example:

Psychological Tests

- Developmental
- Personality and Behavioral
- Intellectual and Psychoeducational
- Neuropsychological
- Neurobehavioral and Cognitive Status
- Mental Health Section

Qualifier

(Character 5 - 7)

Have a value of “Z” None

● Substance

Abuse Treatment
Section

● Substance Abuse Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Type Qualifier
- 5th Character = Qualifier
- 6th Character = Qualifier
- 7th Character = Qualifier
- Substance Abuse Treatment

Root Type

(Character 3)

Detoxification Services

Individual Counseling

Group Counseling

Individual Psychotherapy

Family Counseling

Medication Management

Pharmacotherapy

- Substance Abuse Treatment
Type Qualifier
(Character 4)
- Type qualifier provides additional
specificity
- Not all types have type qualifier
- Substance Abuse Treatment
Type Qualifier
(Character 4)

Example:

Pharmacotherapy

- Nicotine Replacement Therapy
- Methadone Maintenance
- LAAM
- Antabuse
- Naltrexone
- Naloxone
- Clonidine

- Bupropion
- Psychiatric Medications
- Other Replacement Medication
- Substance Abuse Treatment Qualifier
(Character 5 - 7)
Have a value of “Z” None

● ICD-10-PCS

Testing

- ICD-10-PCS Testing
- Tested by Clinical Data Abstraction Centers (CDACs)
 - FMAS, Columbia, MD
 - DynKePRO, York, PA
- Coded 5,000 records
 - Offered feedback on issues found
 - Suggested improvements

- Additional comparison test of 100 records
- Additional testing on ambulatory records
- Major Modifications as a Result of Testing
- Limited Not Otherwise Specified (NOS) options added
- Number of approaches reduced
- Training manual revised
- Index entries added
- Testing Findings
- More complete than ICD-9-CM, greater specificity
- Easy to expand the system
- Multi-axial structure makes it easier to analyze

- Standardized terminology makes it easier to use once the coder has initial training
- Testing Findings

Initial training time will be a factor since it differs significantly from ICD-9-CM

- Having all terms defined makes it easier to teach
- Once basic knowledge is acquired, the coder does not use the index