OBJECTIVES

- Review the definition of selected root operations for the Medical and Surgical section of ICD-10-PCS
- Identify the objective for selected root operations in the Medical and Surgical section of ICD-10-PCS
- Review special explanations for selected root operations in the Medical and Surgical section of ICD-10-PCS
- Identify examples of selected root operations in the Medical and Surgical section of ICD-10-PCS
MEDICAL AND SURGICAL SECTION

CHARACTER 1
Section

CHARACTER 2
Body System

CHARACTER 3
Root Operation

CHARACTER 4
Body Part

CHARACTER 5
Approach

CHARACTER 6
Device

CHARACTER 7
Qualifier
## MEDICAL AND SURGICAL SECTION

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<th>Alteration</th>
<th>Excision</th>
<th>Release</th>
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<td>Extirpation</td>
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<td>Change</td>
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<td>Repair</td>
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<td>Replacement</td>
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<td>Destruction</td>
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<td>Detachment</td>
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<td>Dilation</td>
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<td>Transplantation</td>
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PROcedures that take out or eliminate all or a portion of a body part

- Excision
- Resection
- Extraction
- Destruction
- Detachment
PROCEDURES THAT INVOLVE PUTTING IN OR ON, PUTTING BACK, OR MOVING LIVING BODY PARTS

- Transplantation
- Reattachment
- Reposition
- Transfer
PROCEDURES THAT TAKE OUT OR ELIMINATE SOLID MATTER, FLUIDS OR GASES FROM A BODY PART

- Drainage
- Extirpation
- Fragmentation
PROCEDURES THAT ONLY INVOLVE EXAMINATION OF BODY PARTS AND REGIONS

- Inspection
- Map
PROCEDURES THAT CAN BE PERFORMED ONLY ON TUBULAR BODY PARTS

- Bypass
- Dilation
- Occlusion
- Restriction
PROCEDURES THAT ALWAYS INVOLVE DEVICES

- Insertion
- Replacement
- Supplement
- Removal
- Change
- Revision
PROCEDURES INVOLVING CUTTING OR SEPARATION ONLY

- Division
- Release
PROCEDURES INVOLVING OTHER REPAIRS

- Control
- Repair
PROCEDURES WITH OTHER OBJECTIVES

- Alteration
- Creation
- Fusion
PROCEDURES THAT TAKE OUT OR ELIMINATE ALL OR A PORTION OF A BODY PART

- Excision
- Resection
- Extraction
- Destruction
- Detachment
**EXCISION (B)**

- **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

- **Example**
  - Partial nephrectomy
  - Liver biopsy
Which of the following would be an example of the root operation excision?

- Right total mastectomy
- Sigmoidoscopy with sigmoid polypectomy
- Laparoscopy with removal of endometrial implant from left ovary
- Cryotherapy of wart on left hand
- Percutaneous biopsy of right gastrocnemius muscle
**RESECTION (T)**

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

- **Example**
  - Total nephrectomy
  - Total lobectomy of lung
Which of the following would be an example of the root operation resection?

- Total excision of pituitary gland
- Right hemicolecctionomy
- Open excision of tail of pancreas
- Fifth toe ray amputation
- Removal right lower lobe of lung
EXTRACTION (D)

- **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

- **Example**
  - Dilation and curettage
  - Vein stripping
Which of the following would be an example of the root operation extraction?

- Laparoscopic cholecystectomy
- Removal of tooth
- Hysteroscopy with D&C
- Bone marrow biopsy
- Explantation of right failed kidney
DESTRUCTION (5)

- **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

- **Example**
  - Fulguration of rectal polyp
  - Cautery of skin lesion
Which of the following would be an example of the root operation destruction?

- Talc injection pleurodesis, left side
- Liposuction for medical purposes, left upper arm
- Removal of sebaceous cyst right buttock
- Sclerotherapy of brachial plexus lesion with alcohol injection
- Cautery of nosebleed
DETACHMENT (6)

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

Example
- Below knee amputation
- Amputation right elbow level
POP QUIZ

Which of the following would be an example of the root operation detachment?

- Right leg and hip amputation through ischium
- Removal left thumbnail
- Left wrist joint amputation
- Disarticulation of shoulder
PROCEDURES THAT INVOLVE PUTTING IN OR ON, PUTTING BACK, OR MOVING LIVING BODY PARTS

- Transplantation
- Reattachment
- Reposition
- Transfer
**TRANSPANTATION (Y)**

<table>
<thead>
<tr>
<th>Definition</th>
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<tbody>
<tr>
<td>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</td>
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<table>
<thead>
<tr>
<th>Explanation</th>
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<tbody>
<tr>
<td>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</td>
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<table>
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<td>Kidney transplant</td>
</tr>
<tr>
<td>Heart transplant</td>
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Which of the following would be an example of the root operation transplantation with a qualifier of zooplast? 

- Liver transplant with donor matched liver
- Orthotopic heart transplant using porcine heart, open
- Left kidney and pancreas transplant, open, organ bank transplant
- Open transplant of large intestine, organ donor match
REATTACHMENT (M)

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

Example
- Reattachment of hand
- Reattachment of avulsed kidney
POP QUIZ

Which of the following would be an example of the root operation reattachment?

- Closed replantation of three avulsed teeth, upper jaw
- Suture attachment of severed left ear
- Skin transfer flap closure of complex open wound, right chest
- Replantation of avulsed scalp
REPOSITION (S)

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

Example
- Reposition of undescended testicle
- Fracture reduction
Which of the following would be an example of the root operation reposition?

- Endoscopic radial to median nerve transfer
- Open reduction internal fixation (ORIF), left tibia and ulna closed fracture
- Laparoscopy with gastropexy for malrotation
- Right scalp advancement flap to right temple
- Open transposition of ulnar nerve
TRANSFER (X)

- **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

- **Example**
  - Tendon transfer
  - Skin pedicle flap transfer
Which of the following would be an example of the root operation transfer?

- Right scalp advancement flap to right temple
- Fasciocutaneous flap closure of left upper arm, open
- Right knee arthroscopy with reposition of patellar ligament
- Reattachment of severed hand
- Skin transfer flap closure of complex open wound, left chest
PROCEDURES THAT TAKE OUT OR ELIMINATE SOLID MATTER, FLUIDS OR GASES FROM A BODY PART

- Drainage
- Extirpation
- Fragmentation
**DRAINAGE (9)**

- **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

- **Example**
  - Thoracentesis
  - Incision and drainage
Which of the following would be an example of the root operation drainage?

- Diagnostic percutaneous paracentesis for ascites
- Routine Foley catheter placement
- Transurethral cystoscopy with removal of bladder calculus
- Percutaneous chest tube placement for right pneumothorax
- Endoscopic drainage of right ethmoid sinus
**EXTIRPATION (C)**

- **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

- **Example**
  - Thrombectomy
  - Choledocholithotomy
Which of the following would be an example of the root operation extirpation?

- Forceps removal of foreign body in the left nostril
- De-clotting of arteriovenous dialysis graft
- Incision and removal of right lacrimal duct calculus
- Extracorporeal shockwave lithotripsy (ESWL) of left kidney
- Non-inscitational removal of intraluminal foreign body from vagina
**FRAGMENTATION (F)**

- **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

- **Example**
  - Extracorporeal shockwave lithotripsy
  - Transurethral lithotripsy
Which of the following would be an example of the root operation fragmentation?

- Transurethral cystoscopy with fragmentation of bladder neck calculus
- Hysteroscopy with intraluminal lithotripsy of left fallopian tube calcification
- Percutaneous radiofrequency ablation of right vocal cord lesion
- Thoracotomy with crushing of pericardial calcifications
PROCEDURES THAT ONLY INVOLVE EXAMINATION OF BODY PARTS AND REGIONS

- Inspection
- Map
INSPECTION (J)

- **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

- **Example**
  - Diagnostic arthroscopy
  - Exploratory laparotomy
● Which of the following would be an example of the root operation inspection?
  - Diagnostic colposcopy with examination of cervix
  - Thoracotomy with exploration of right pleural cavity
  - Laparoscopic cholecystectomy
  - Digital rectal exam
  - Laparotomy with palpation of liver
MAP (K)

- **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

- **Example**
  - Cardiac mapping
  - Cortical mapping
Which of the following would be an example of the root operation map?

- Esophagogastroduodenoscopy (EGD)
- Percutaneous mapping of basal ganglia
- Heart catheterization with cardiac mapping
- Functional endoscopic sinus surgery
QUESTIONS?