The patient was admitted to the hospital with AIDS and worsening headaches. His history includes a cryptococcus infection treated 5 months ago. Examination of the patient reveals some evidence of encephalopathy, probably a result of AIDS progression. Social history includes cigarette smoking x one pack per day for the past 16 years. He denies IV drug abuse. Blood work and diagnostic lumbar puncture were performed, confirming a final diagnosis of meningoencephalitis due to toxoplasmosis.

Select the appropriate Principal/Secondary Diagnosis codes, along with the appropriate Procedure code(s).

✓	A)	B20
	B)	G04.90
✓	C)	B58.2
✓	D)	F17.210
	E)	F17.200
	F)	00933ZX
✓	G)	009U3ZX

ANSWER KEY

Principal Diagnosis:
ICD-10-CM: **B20** (Human Immunodeficiency virus [HIV] disease)
ICD-9-CM: 042

Secondary Diagnosis:
- **B58.2** (Meningoencephalitis with toxoplasmosis)
- **F17.210** (Nicotine dependence, cigarettes, uncomplicated)

Procedures:
- **009U3ZX** (Lumbar puncture)

To Locate Diagnosis Codes:
- **B20:** Index > AIDS
- **B58.2:** Index > Meningoencephalitis > in (due to) > toxoplasmosis
- **F17.210:** Index > Dependence > drug > nicotine > cigarettes

Feedback for Diagnosis Codes:
- **B20:** The coding guidelines for AIDS/HIV virus are the same in ICD-10-CM as they are in ICD-9-CM. B20 is to ICD-10 what 042 is to ICD-9-CM.

A&P/Meningoencephalitis is a medical condition that simultaneously resembles both meningitis, which is an infection or inflammation of the meninges and encephalitis, which is an infection and inflammation of the brain.

To Locate Procedure Code:
- **009U3ZX:** Px Index > Puncture > see Drainage > Spinal canal > 009U > After locating table 009, go across the row to finish building the code:

Lumbar puncture

Section	Body System	Root Operation	Body Part	Approach	Device	Qualifier
0	0	9	U	3	Z	X
Med/Surg	Central Nervous System	Drainage	Spinal Canal	Percutaneous	No Device	Diagnostic

Author's note: Not all the problems in this course have such extensive explanations. However, you can refer back to this problem as a good

resource, should you need additional review.

Character values: Each character contains up to 34 possible values. A code is derived from choosing a specific value for each of the 7 characters. Based on the details about the procedure performed, values for each character specifying the section, body system, root operation, body part, approach, device, and qualifier are assigned. In our scenario, the 3rd character is the root operation with a value of 3 for drainage. Drainage, is defined as "Taking or letting out fluids and/or gases from a body part." The spinal canal was punctured to gain access to the spinal fluid and is assigned a body part value of U. Since a needle was used, the approach is percutaneous. The 7th character value of X tells us that a biopsy, a diagnostic procedure, was performed.

Procedures are divided into sections that identify the type of procedure. The 1st character of the procedure code always specifies the section. The largest section of ICD-10-PCS is the Medical and Surgical section. Because most of the codes in this section don't have qualifiers, 7th characters are assigned the value of Z. Z is the placeholder in ICD-10-PCS and applies to ALL procedures, regardless of the section. Qualifiers provide additional information about a specific attribute of a given code. When no qualifier values are available or appropriate, the Z value is selected. However, in our scenario, the 7th character X indicates that a biopsy was done, i.e., spinal fluid was withdrawn for diagnostic purposes.

All PCS codes are alphanumeric and are 7 characters in length.

The various Tables in ICD-10-PCS are organized differently from ICD-9-CM. Think of the PCS Tables as the equivalent of the Tabular List for ICD-9-CM procedures, i.e., the PCS tables are to ICD-10-PCS what the Tabular is to ICD-9-CM. Each table in a particular section is composed of rows that specify the valid combinations of the code values. The **upper portion** of each table contains a description of the first 3 characters of the procedure code as well as the definition of the root operation. In our scenario the values 009 specify: Section - Med/Surg with a value of 0; Body System, Central Nervous System, with a value of 0, and the root operation, Drainage with a value of 9. All root operations in the PCS tables are accompanied by definitions of the respective root operations, the **objective** of the procedure.

Many of the **Values** are the same regardless of which table you are in. For example, let's take the Approach values from our scenario, table 009, lumbar puncture. There are 3 possibilities: 0 for open approach, 3 for percutaneous approach, and 4 for percutaneous endoscopic approach. In table 00B (Excision of a body part from the central nervous system,) the choice for values and the values themselves are the same as in table 009: 0 - open approach; 3 - percutaneous approach; 4 - percutaneous endoscopic.

The **lower** portion of the table specifies all the valid combinations of characters 4-7, the last 4 characters. In the Med/Surg section they are labeled Body Part, Approach, Device, and Qualifier. In our scenario, the body part is the spinal canal (U), the approach is percutaneous (3), the device is (Z) because only those devices that remain in the body after the procedure terminates are assigned a device value. The 7th character value (X) is diagnostic, a biopsy.

Percutaneous approach is entry by puncture or minor incision, of instrumentation through the skin and any other body layers necessary to reach and visualize the site of the procedure. To access the spinal fluid, a puncture was made.

NOTE: In the PCS coding book, the tables consist of the upper and lower portions, with the lower portion formatted in rows and columns. However, for this course, I arranged the entire code in table format because it is easier to visualize the codes and coding tables. If you refer back to the table for 009U3ZX and review the table for this problem, you will see how I've laid it out. All the procedures for this course are laid out using this format. However, the table below illustrates how all the procedure codes are formatted in the PCS coding book. For procedure code 009U3ZX, Lumbar Puncture, this is similar to how it looks in the PCS coding book. Please note that there are 22-23 values for character 4, but I have listed only the 1st 5 values:

0   Medical and Surgical
0   Central Nervous System
9   Drainage

Body Part Character 4	Approach Character 5	Device Character 6	Qualifier Character 7
0 Brain **1** Cerebral Meninges **2** Dura Mater **3** Epidural Space **4** Subdural Space **5** Subarachnoid	**0** Open **3** Percutaneous **4** Percutaneous Endoscopic	**Z** No Device	**X** Diagnostic **Z** No Qualifier

The 1st 3 characters are always assigned for you in the PCS coding book in the upper portion of the table. To complete the code, the coder must select the values for the last 4 characters, 4 - 7. So, 009 + U3ZX = code 009U3ZX, Lumbar puncture.

The ICD-10-PCS tables are the equivalent of the ICD-9-CM Tabular List for procedures. Regardless of whether the PCS lists the first 3-4 characters of the code or the entire code, it is important to verify the codes by locating the respective tables. The coder does not have to rely on the PCS Index to assign a code, as the codes can be assigned by going first to the appropriate section and then to the appropriate table. However, I recommend that you rely on the PCS Index to locate the PCS coding tables while you're in training. Some coders find it easier to bypass the PCS Index altogether and rely strictly on the tables for code assignment. Once you've completed this course, I encourage you to do the same. But for this course, just be aware that all instructions for procedure code location rely on the PCS Index.

Always stay within the same row when building a code. It is NOT permissible to change rows. Be careful - some of the procedures contain 20 + rows.

PCS Index: The purpose of the Alphabetic Index is to locate the appropriate table that contains all the information necessary to construct a procedure code. The PCS Tables should always be referenced to locate

the most appropriate code. However, per guideline A7, it is not required to consult the Index before proceeding to the tables to complete the code. A valid code may be chosen directly from the tables. I wouldn't advise going directly to the tables until you've reached a comfort level with ICD-10-PCS.

Incorrectly answered feedback:

Prinicpal Diagnosis:
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ICD-9-CM: 042

Secondary Diagnosis:
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