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August 2014 ICD-10 Follow On Class 1 Software Remediation Release Notes

LR*5.2*422
1. Introduction

1.1. Purpose

The purpose of these Release Notes is to identify enhancements to the VistA Laboratory: Anatomic Pathology (AP) package contained in patch LR*5.2*422.

1.2. Background

On January 16, 2009, the Centers for Medicare & Medicaid Services (CMS) released a final rule for replacing the 30-year-old International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code set with International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) with dates of service or dates of discharge for inpatients that occur on or after the ICD-10 activation date.

The classification system consists of more than 68,000 codes, compared to approximately 13,000 ICD-9-CM codes. There are nearly 87,000 ICD-10-PCS codes, while ICD-9-CM has nearly 3,800 procedure codes. Both systems also expand the number of characters allotted from five and four respectively to seven alphanumeric characters. This value does not include the decimal point, which follows the third character for the ICD-10-CM code set. There is no decimal point in the ICD-10-PCS code set. These code sets have the potential to reveal more about quality of care, so that data can be used in a more meaningful way to better understand complications, better design clinically robust algorithms, and better track the outcomes of care. ICD-10-CM also incorporates greater specificity and clinical detail to provide information for clinical decision-making and outcomes research.

### ICD-9-CM and ICD-10-CM Comparison

<table>
<thead>
<tr>
<th>ICD-9-CM</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,000 codes (approximately)</td>
<td>68,000 codes (approximately)</td>
</tr>
<tr>
<td>3-5 characters</td>
<td>3-7 characters (not including the decimal)</td>
</tr>
<tr>
<td>Character 1 is numeric or alpha (E or V)</td>
<td>Character 1 is alpha; character 2 is numeric</td>
</tr>
<tr>
<td>Characters 2 - 5 are numeric</td>
<td>Characters 3–7 are alpha or numeric (alpha characters are not case sensitive)</td>
</tr>
<tr>
<td>Decimal after first 3 characters</td>
<td>Same</td>
</tr>
</tbody>
</table>

### ICD-9-CM Procedure Codes and ICD-10-PCS Comparison

<table>
<thead>
<tr>
<th>ICD-9-CM Procedure Codes</th>
<th>ICD-10-PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4 characters</td>
<td>7 alphanumeric characters</td>
</tr>
<tr>
<td>All characters are numeric</td>
<td>Characters can be either alpha or numeric. Letters O and I are not used to avoid confusion with the numbers 0 and 1</td>
</tr>
<tr>
<td>All characters are numeric</td>
<td>Each character can be any of 34 possible values. The ten digits 0-9 and the 24 letters A-H, J-N and P-Z may be used in each character</td>
</tr>
<tr>
<td>Decimal after first 2 characters</td>
<td>Does not contain decimals</td>
</tr>
</tbody>
</table>
1.3. **Scope of Changes**

**NOTE: Existing ICD-9 functionality has not changed.**

Patch LR*5.2*422 makes the following changes to the AP application:

- ICD-10-CM will replace ICD-9-CM as the diagnostic coding system for Anatomic Pathology entries with date of interest on or after the ICD-10 activation date.
- There will be a period of time when the Veterans Health Administration (VHA) would require the use of dual code sets (ICD-9-CM, ICD-10-CM), based on the date of interest, to accommodate entries accessioned prior to and following the ICD-10 activation date as well as for reporting and research purposes.
- The resolution for Remedy ticket HD0000000741712.
- NSR 20070902, ICD-10-CM Conversion.

1.4. **Dependencies**

The following patches must be installed before installing Patch LR*5.2*422:

- LR*5.2*322
- LR*5.2*350
- LEX*2*80
- ICD*18*57
- DG*5.3*850

1.5. **Documentation**


The following AP user manuals are updated with changes for LR*5.2*422:

- AP Alerts and CPRS Report Changes User Guide
- AP CPT Corrections User Guide
- AP Electronic Signature User Manual
- AP User Manual - Revised

The following manuals are not updated for ICD-10:

- Laboratory Package Security Guide Version 5.2
- Laboratory Technical Manual Version 5.2
### 2. Menu Option Updates

The following menu options now display the generic designation of "ICD".

1. "Autopsy protocol & ICD9CM coding [LRAPAUDAA]" is now "Autopsy protocol & ICD coding [LRAPAUDAA]."
2. "FS/Gross/Micro/Dx/ICD9CM Coding [LRAPDGI]" is now "FS/Gross/Micro/Dx/ICD Coding [LRAPDGI]."
3. "ICD9CM coding, anat path [LRAPICD]" is changed to "ICD coding, anat path [LRAPICD]."
4. "ICD9CM code search [LRAPSI]" is changed to "ICD code search [LRAPSI]."

<table>
<thead>
<tr>
<th>Menu Options List</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU   Data entry for autopsies ...</td>
</tr>
<tr>
<td>BS   Blocks, Stains, Procedures, anat path</td>
</tr>
<tr>
<td>CO   Coding, anat path ...</td>
</tr>
<tr>
<td>GD   Clinical Hx/Gross Description/FS</td>
</tr>
<tr>
<td>GM   FS/Gross/Micro/Dx</td>
</tr>
<tr>
<td>GS   FS/Gross/Micro/Dx/SNOMED Coding</td>
</tr>
<tr>
<td>GI   FS/Gross/Micro/Dx/ICD Coding</td>
</tr>
<tr>
<td>OR   Enter old anat path records</td>
</tr>
<tr>
<td>SR   Supplementary Report, Anat Path</td>
</tr>
<tr>
<td>SS   Spec Studies-EM;Immuno;Consult;Pic, Anat Path</td>
</tr>
<tr>
<td>LEDI AP LEDI Data Entry</td>
</tr>
</tbody>
</table>

Select Data entry, anat path Option: AU Data entry for autopsies

PD   Provisional anatomic diagnoses
AP   Autopsy protocol
AS   Autopsy protocol & SNOMED coding
AI   Autopsy protocol & ICD coding
AF   Final autopsy diagnoses date
SR   Autopsy supplementary report
SS   Special studies, autopsy

Select Data entry for autopsies Option:

Select Data entry, anat path Option: CO Coding, anat path

SN   SNOMED coding, anat path
IC   ICD coding, anat path

Select Coding, anat path Option:

DS   Display surg path reports for a patient
DC   Display cytopath reports for a patient
DE   Display EM reports for a patient
BD   Display stains/blocks for a patient
PA   Show list of accessions for a patient
SE   Search options, anat path ... |
CS   Cum path data summaries
FR   Display final path reports by accession #

Select Inquiries, anat path Option: SE Search options, anat path

MC   MORPHOLOGY code search, SNOMED
DC   DISEASE code search, SNOMED
EC   ETIOLOGY code search, SNOMED
PC   PROCEDURE code search, SNOMED
PC   FUNCTION code search, SNOMED
IC  ICD code search
AX  MULTIAXIAL code search, SNOMED

Select Search options, anat path Option:
3. Data Entry Updates

Autopsy, Cytopathology, Electron Micropsy, and Surgical Pathology data entry screens allow the entry and display of the relevant ICD code sets based on the date the specimen is received. It also tells you if the specified code is inactive. You are first asked to choose between ICD-9 or ICD-10 diagnosis code, or ICD-9 or ICD-10 operation/procedure code, and then asked to enter the desired code.

If the date the specimen is received is prior to the ICD-10 activation date, then ICD-9 codes are available for data entry selection.

If the date the specimen is received after the ICD-10 activation date, then the ICD-10 codes are available for data entry selection.

ICD-10 diagnosis codes can be added, stored, and deleted for the ICD-10 implementation.

The "Select AUTOPSY ICD9CM CODE:" prompt in the Autopsy protocol & ICD coding [LRAPAUDAA] option is now "Select AUTOPSY ICD CODE:"

For Autopsy, the date of interest is the Autopsy date.

The "Select ICD9CM DIAGNOSIS:" prompt in the ICD Coding, Anat Path [LRAPICD] is now "Select ICD DIAGNOSIS:"

Example: Autopsy Protocol & ICD Coding

Select Data entry for autopsies Option: AI Autopsy protocol & ICD coding

AUTOPSY (AU)

Data entry for 2012 ? YES// (YES)

Select one of the following:

1. Accession number
2. Unique Identifier (UID)
3. Patient Name

Select one: 1// Accession number

Select Accession Number/Pt name: 2 for 2012

LABPATIENT,ONE 000-00-0001 DOB: Feb 1, 1800

Collection Date: Jun 25, 2012
Acc #: AU 12 2 []
Test(s): AUTOPSY LOG-IN

DATE AUTOPSY REPORT COMPLETED:
Select AUTOPSY COMMENTS: ICD testing...
Select AUTOPSY COMMENTS:

CLINICAL DIAGNOSES:
No existing text
Edit? NO//

PATHOLOGICAL DIAGNOSES:
No existing text
Edit? NO//

Select AUTOPSY QA CODE:
Select AUTOPSY ICD CODE: abdomen

36 matches found

1. A18.- Tuberculosis of other organs (32)
2. A52.- Late syphilis (30)
3. C47.- Malignant neoplasm of peripheral nerves and
Example: FS/Gross/Micro/Dx/ICD Coding

Select Data entry, anat path Option: FS/Gross/Micro/Dx/ICD Coding

Select ANATOMIC PATHOLOGY SECTION: CYTOPATHOLOGY

Data entry for 2012? YES// (YES)

Select one of the following:

1. Accession number
2. Unique Identifier (UID)
3. Patient Name

Select one: 1// Accession number

Select Accession Number/Pt name: 5 for 2012

TestPatient,One ID: 000-01-1122
LABPATIENT,ONE 000-00-0001 DOB: Feb 1, 1800
Collection Date: Jun 25, 2012
Acc #: CY 12 5 []

Tissue Specimen(s):
KIDNEY
LIVER

GROSS DESCRIPTION:
No existing text
Edit? NO//

MICROSCOPIC EXAMINATION:
No existing text
Edit? NO//

CYTOPATHOLOGY DIAGNOSIS:
No existing text
Edit? NO//

CYTOTECH:
PATHOLOGIST/CYTOTECHNOLOGIST:
DATE REPORT COMPLETED:
REVIEWED BY PATHOLOGIST: 1 YES

Select ICD DIAGNOSIS: laboratory

6 matches found

1. R75. Inconclusive Laboratory Evidence of Human Immunodeficiency Virus [HIV]
2. Z00.00 Encounter for General Adult Medical Examination without Abnormal Findings
3. Z00.01 Encounter for General Adult Medical Examination with Abnormal Findings
4. Z01.812 Encounter for Preprocedural Laboratory Examination
<table>
<thead>
<tr>
<th></th>
<th>CPT Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Z04.8</td>
<td>Encounter for Examination and Observation for other specified Reasons</td>
</tr>
<tr>
<td>6.</td>
<td>Z20.89</td>
<td>Contact with and (Suspected) Exposure to other Communicable Diseases</td>
</tr>
</tbody>
</table>

Select 1-6: **4** Z01.812

**Z01.812** Encounter for preprocedural laboratory examination
4. Data Dictionary Updates

The field descriptions in the LAB DATA File (#63) now reflect the general term "ICD" instead of "ICD9CM".

Surgical Pathology Subfile

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Field Description</th>
<th>Pointer To</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.808,.01</td>
<td>AUTOPSY ICD CODE</td>
<td>0;1</td>
<td>POINTER TO ICD DIAGNOSIS FILE (#80)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Multiply asked)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INPUT TRANSFORM:</td>
<td>I $D(X) S</td>
<td>DINUM=X</td>
</tr>
<tr>
<td></td>
<td>LAST EDITED:</td>
<td>JUN 28, 2012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HELP-PROMPT:</td>
<td>Enter ICD code on this autopsy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DESCRIPTION:</td>
<td>This is the ICD code on this autopsy.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field Number</th>
<th>Field Description</th>
<th>Pointer To</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.203,.01</td>
<td>ICD CODE</td>
<td>0;1</td>
<td>POINTER TO ICD DIAGNOSIS FILE (#80)</td>
</tr>
<tr>
<td></td>
<td>(Multiply asked)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAST EDITED:</td>
<td>JUN 28, 2012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HELP-PROMPT:</td>
<td>Enter the ICD code on this specimen.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DESCRIPTION:</td>
<td>This is the ICD code on this specimen.</td>
<td></td>
</tr>
</tbody>
</table>
5. Print Updates

The **ICD Code Search** report provides the ability to print ICD diagnosis codes up to eight characters with short text descriptions. The Date Range prompt and the Select ICD Diagnosis prompt interchange, so that the ICD coding set displayed is based on the ICD coding date.

The date range entered for the report cannot overlap ICD coding systems activation dates. If dates overlap, a warning message appears as shown below.

### Example: ICD Code Search and Warning Code Overlap

```
SURGICAL PATHOLOGY SEARCH BY ICD CODE
Start with Date TODAY// Oct 02, 2012
Go to Date TODAY// 10/1/14 (OCT 01, 2014)
Beginning and Ending dates must both be prior to <ICD-10 Activation Date will display here> (ICD-9) or both be on or after <ICD-10 Activation Date will display here> (ICD-10).
Start with Date TODAY//
```

```
SURGICAL PATHOLOGY SEARCH BY ICD CODE
Start with Date TODAY// T-100 (JUN 27, 2012)
Go to Date TODAY// Oct 05, 2012
Select ICD Diagnosis: M30.0
One match found
M30.0 Polyarteritis nodosa (CC)
OK? Yes// YES
DEVICE: HOME// HOME (CRT)
Oct 05, 2012 14:49 TEST VAMC Pg: 1
SURGICAL PATHOLOGY SEARCH (Jun 27, 2012=>Oct 05, 2012)
ICD CODE: M30.0 Polyarteritis nodosa
NAME ID SEX AGE ACC #
APPATIENT,ELEVEN 1999 M 62 SP 12 31
Oct 05, 2012 14:49 TEST VAMC Pg: 2
SURGICAL PATHOLOGY SEARCH (Jun 27, 2012=>Oct 05, 2012)
ICD CODE: M30.0 Polyarteritis nodosa
```
6. ICD-10 Searches

NOTE: Existing ICD-9 functionality has not changed.

The AP package provides the ability to search on ICD-10 diagnosis codes within the following options:

<table>
<thead>
<tr>
<th>Options</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autopsy protocol &amp; ICD coding</td>
<td>Search</td>
</tr>
<tr>
<td>IC ICD coding, anat path</td>
<td>Add/Edit/Store</td>
</tr>
<tr>
<td>FS/Gross/Micro/Dx/ICD Coding</td>
<td>Display</td>
</tr>
<tr>
<td>ICD code search</td>
<td></td>
</tr>
</tbody>
</table>

Select Diagnosis Code Prompts On or After the ICD-10 Activation Date

Select **ICD10** DIAGNOSIS CODE: E08.22, Diabetes mellitus due to an underlying condition with diabetic chronic kidney disease

...OK? YES/ <Enter> (YES)

Displayed Reports for Patients with Accession Date on or After ICD-10 Activation Date

SNOMED/ICD10 codes:
T81.535, Perforation due to foreign body accidentally left in body following heart catheterization

6.1. ICD-10 Diagnosis Code Search

The AP ICD-10 diagnosis code search functionality allows you to select a single, valid ICD-10 diagnosis code and display its description. The AP user interface prompts you for input, invokes the Lexicon utility to get data, and then presents that data to you.

ICD-10 diagnosis code search provides you with the following:

- Matching codes with descriptions, consisting of any combination of categories, sub-categories, and valid codes. The length of the list of items that is presented is set to a default of 20,000. If the list is longer, you are prompted to refine the search.
- Ability to “drill down” through the categories and sub-categories to identify the single, valid ICD-10 code that best matches the patient diagnosis.
- Short descriptions for the valid ICD-10 codes display.

ICD-10 Code Search modifications are as follows:

- The date range prompt and the Select ICD Diagnosis prompt are interchanged so that the ICD coding set displayed is based on the ICD coding date.
- A warning message displays if the date entered overlaps the ICD coding system. The warning message shown is as follows: “Beginning and Ending dates must both be prior to <Actual ICD-10 Activation Date will display here> (ICD9) codes or both be on or after <Actual ICD-10 Activation Date will display here> (ICD-10).”
A search string displays findings based on a particular ICD coding system. For example, if the dates entered are for ICD-9 then a search of ICD codes will produce a list of ICD-9 codes. The same will be true for ICD10 codes.

Five reports now use the Application Program Interface (API) $$ICDDX^ICDEX, instead of $$ICDDX^ICDCODE, to return ICD information based on the relevant ICD coding system.

1. Display surg path reports for a patient [LRAPSPCUM]
2. Display cytopath reports for a patient [LRAPCYCUM]
3. Display EM reports for a patient [LRAPEMCUM]
4. 10% random case review, surg path [LRAPQAR]
5. Tissue committee review cases [LRAPQAT]

The “date of interest” within the Lexicon Utility Requirements Specification Document (RSD) is equivalent to the following by Anatomic Pathology Section for the VistA AP package:

- For Autopsy: AUTOPSY DATE/TIME
- For Electron Microscopy: DATE/TIME SPECIMEN RECEIVED
- For Cytopathology: DATE/TIME SPECIMEN RECEIVED
- For Surgical Pathology: DATE/TIME SPECIMEN RECEIVED

Note: If the “Date of Interest” is prior to ICD-10 Activation Date, the VistA AP package retains the current search functionality for ICD-9-CM diagnosis codes and descriptions/definitions.
7. Technical Information

7.1. Routines

Some AP routines were modified to replace direct global reads and old APIs with new Standards and Terminology Services (STS) APIs and Lexicon APIs wherever possible. The following new routines are added:

<table>
<thead>
<tr>
<th>Routine Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRAPICD</td>
<td>Used for ICD-10 Code Processing</td>
</tr>
<tr>
<td>LRAPICD2</td>
<td>Used for ICD-10 Code Processing</td>
</tr>
</tbody>
</table>
8. Known Issue

The ICD-10 Class I Remediation project will update VistA to include the ICD-10 Diagnosis and Procedure codes. The first patches to be delivered by this project will be the STS patches ICD\*18.0*57 and LEX*2.0*80, which will include both the ICD-10 Diagnosis and Procedure codes and new or updated APIs that will be used by the other VistA applications to select, retrieve and display these new codes.

Several VistA applications do not currently utilize code set versioning. Those applications are Prosthetics, Home Based Primary Care, and Laboratory: Anatomic Pathology. As a result, these applications currently allow inactive ICD-9 codes to be displayed and selected for ICD-9 dates of service.

During the interim, after the installation of the STS ICD-10 Class I Remediation patches and prior to the ICD-10 Implementation date, these applications will also allow the display and selection of inactive ICD-10 codes including statuses of Inactive or Pending. The users of these applications should use CAUTION to select ICD-9 or ICD-10 codes that are appropriate and active.

The following examples show how the software appears in these applications:

**EXAMPLE 1: Inactive ICD-9 codes**

The warning (Inactive) appears at the end of the short description.

```
Select ICD DIAGNOSIS: 100.0// 488.1

4 matches found

1. 488.1     FLU DT IDEN H1N1 VIRUS (Inactive)
2. 488.11    FLU DT 2009 H1N1 W PNEU (Major CC)
3. 488.12    FLU-2009 H1N1 W OTH RESP
4. 488.19    FLU-2009 H1N1 W OTH MAN (Inactive)

Select 1-4:

Select ICD DIAGNOSIS:
```

**EXAMPLE 2: Inactive ICD-10 codes**

The warning (Pending) appears at the end of the short description.

```
Select ICD DIAGNOSIS: 100.0// A27.

4 matches found

1. A27.0     Leptospirosis icterohemorrhagica (10/01/2014) (Pending)
2. A27.81    Aseptic meningitis in leptospirosis (10/01/2014) (Pending)
3. A27.89    Other forms of leptospirosis (10/01/2014) (Pending)
4. A27.9     Leptospirosis, unspecified (10/01/2014) (Pending)

When creating or editing records dated after the ICD-10 Activation Date (10/01/2014), the software will correctly screen out both the inactive ICD-9 and inactive ICD-10 codes.
9. **Online Help**

Help text (?) and extended help text (??, ???) is included for prompts related to ICD-10 codes for the AP package within the following options:

- Autopsy protocol & ICD9CM coding
- ICD9CM coding, anat path
- FS/Gross/Micro/Dx/ICD9CM Coding

When entering ?:

Enter code or “text” for more information.

When entering ??:

Enter a "free text" term or part of a term such as "femur fracture".

Or

Enter a "classification code" (ICD/CPT, etc.) to find the single term associated with the code.

Or

Enter a "partial code". Include the decimal when a search criterion includes 3 characters or more for code searches.

When entering ???:

**Number of Code Matches**

The ICD-10 Diagnosis Code search will show the user the number of matches found, indicate if additional characters in ICD code exist, and the number of codes within the category or subcategory that are available for selection.

19 matches found

M91. - Juvenile osteochondrosis of hip and pelvis (19)

This indicates that 19 unique matches or matching groups have been found and will be displayed.

M91. - the "-" indicates that there are additional characters that specify unique ICD-10 codes available.

(19) Indicates that there are 19 additional ICD-10 codes in the M91 “family” that are possible selections.