

LOINC WORKSHOP 2013

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Health Informatics Analyst 1
21 June 2013



you are here: home

log in new user?

Logical Observation Identifiers Names and Codes (LOINC®)

A universal code system for identifying laboratory and clinical observations.

From serum levels of hepatitis B surface antigen to diastolic blood pressure, LOINC has standardized terms for all kinds of observations and measurements that **enable exchange and aggregation of electronic health data from many independent systems.**

More than 20,000 people in 150 countries use LOINC to help make bridges across their islands of health data.

It's free, but invaluable. Both LOINC and the RELMA mapping program that helps link your local codes to LOINC terms are **distributed at no cost** by the Regenstrief Institute. LOINC is your key to interoperable data exchange.



Get LOINCing >

Current Versions

- LOINC 2.42**
Released: 2012-12-28
- RELMA 6.0**
Released: 2012-12-28

DOWNLOAD

Recent Forum Posts

System Implementation | Re: LOINC database and multi-axial hierarchy out of sync?

LOINC Forum Information | T3 UPTAKE

More posts...



LOINC The @LOINC Pioneer // RT @djvree: Congrats to Clem McDonald on 25 years of membership and outstanding contributions to @HL7 #HL7WGM 4 days ago · reply · retweet · favorite

Join the conversation

Common LOINC

Get started with the most frequently used LOINC result codes.

Top 2000 Results plus Mapper's Guide



You might also like: [Common LOINC Orders](#) | [Common UCUM units](#)

Explore LOINC

Search the latest version of LOINC right from your browser

search.loinc.org



Tap the Wisdom of the Crowd

RELMA now lets you see the mappings from other LOINC users.

Join our study to unlock these new crowd-based features.



Share the wealth. Send your mappings back to our community repository.

[We're hiring! Regenstrief Job Opening - LOINC Content Developer](#)

[Public Laboratory LOINC Workshop & Committee Meeting 06/06/13-06/07/13](#)

[Public Clinical LOINC Tutorial & Committee Meeting 08/29/13 - 08/30/13](#)



New to LOINC? [Watch the LOINC Introduction Webinar](#)

LOINC: An Introduction to the Universal Catalog of Laboratory and Clinical Observations

Daniel J. Vreeman, PT, DPT, MSc
Runtime: 58 mins

Documentation

- Background about LOINC
- LOINC Users' Guide
- Recommended Readings
- Presentations/Tutorials
- FAQ

Community

- International Forum
- Mapping Lists
- Registry of Adopters
- Integration with other SDOs
- Community Mapping Repository

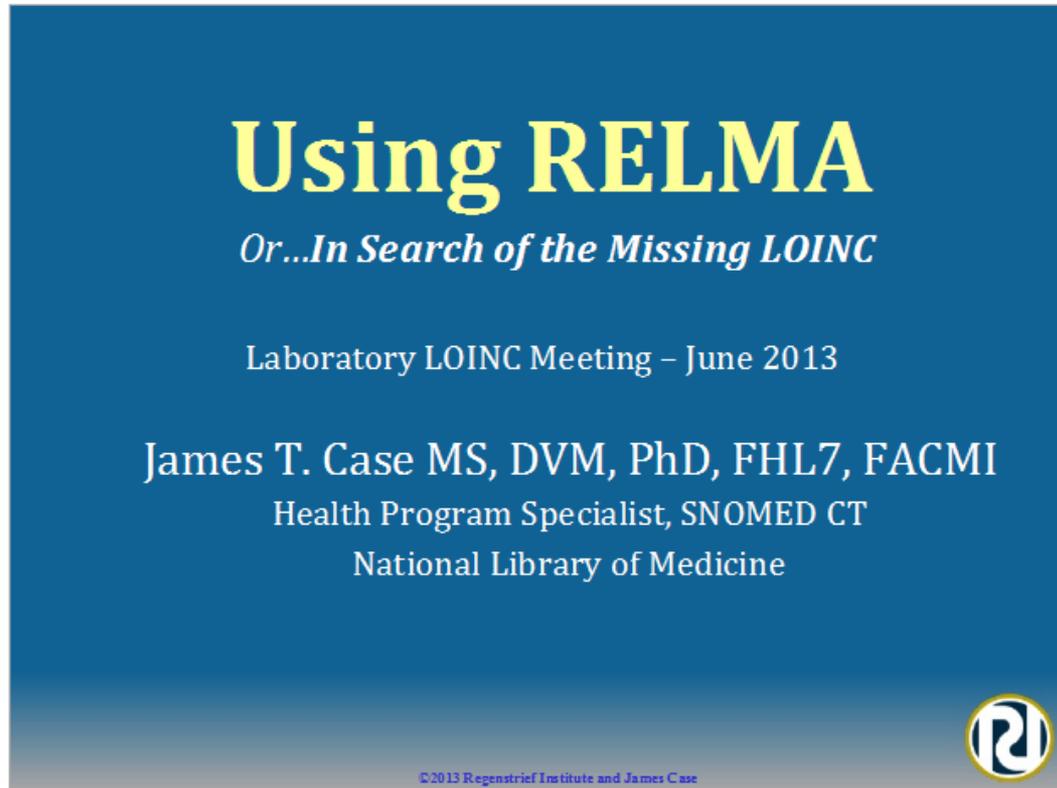
Content

- Top Result and Order Code Lists
- Newborn Screening
- Document Ontology
- HIPAA Attachments
- What's Coming in the Next Release
- Request New LOINC Terms



you are here: [home](#) → [slideshows](#) → lab loinc tutorial

Lab LOINC Tutorial - Current



Using RELMA
Or...In Search of the Missing LOINC

Laboratory LOINC Meeting – June 2013

James T. Case MS, DVM, PhD, FHL7, FACMI
Health Program Specialist, SNOMED CT
National Library of Medicine

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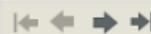


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by [Daniel Vreeman](#) – last modified 2013-06-10 11:58

Using RELMA

Or...In Search of the Missing LOINC

Laboratory LOINC Meeting – June 2013

James T. Case MS, DVM, PhD

Health Program Specialist, SNOMED CT

National Library of Medicine



What will we cover today?

- Overview of LOINC
- Reviewing new RELMA features
- Installing RELMA
- Setting personal preferences
- Loading a Local Observation File (LMOF)
- Searching for a LOINC Term
- Preparing LMOF for Mapping
- Review of Map Screen Functions
- Setting Search Limits
- Mapping Local Terms to LOINC
- Viewing LOINC Term Details
- Proposing/Submitting New LOINC Terms
- Exporting/Printing Mapped Terms
- Mapping your own LMOF data

Why are we doing this?

Goals of Health Information Standards

- **Interoperability** – the ability to exchange information between organizations
- **Comparability** – the ability to ascertain the equivalence of data from different sources
- **Data Quality** – the measurement of accessibility, completeness, accuracy and precision (and more)

Levels of Interoperability

- **Basic** – allows data to be exchanged between computer systems
 - Word processing documents, text messages
- **Functional** – describes the standard syntax (format) of the data
 - Document templates, forms, data structures
 - Message standards
- **Semantic** – requires use of standardized content (vocabularies) within the data structure

Comparability

- Meaning of the data is consistent when shared among different parties
 - Erysipelas – Human skin disease; *Streptococcus* Grp A
 - Erysipelas – Animal Septicemia/dermatitis; *Erysipelothrix rhusiopathiae*
- Common terminology required
 - Should work in the background
- Words are not enough
 - Codes – uniquely identify terms
 - Vocabulary – specialized, precise terms that remove ambiguity
 - Ontology – describes nature of entities and their relations
 - Classification – groups related terms

Test comparisons

What you see in the order list



Lab A

Test Name: Lyme Disease Serology

Measures: *B. burgdorferi* Ab IgG

Method: ELISA

Scale: quantitative

e.g.: Titer 1:40

LOINC Code = 5062-5

Lab B

Test Name: Lyme Disease Antibody

Measures: *B. burgdorferi* Ab IgM

Method: Immune blot

Scale: qualitative

e.g.: Positive

LOINC Code = 6321-4

Why LOINC?

“Within one laboratory, local jargon terms may be used which are usually well understood between colleagues, but would not be sufficiently widely known for communication with the outside world.”

U. Forsum et al., *Pure Appl. Chem* 72:555-745, 2000 *Properties and Units in the Clinical Laboratory Sciences Part VII. Properties and Units in Clinical Microbiology*

LOINC[®] 101

Emphasis on Laboratory

LOINC

Anatomy of a LOINC Term

5193-8:Hepatitis B virus surface Ab:ACnc:Pt:Ser:Qn:EIA

5193-8

LOINC Code

Hepatitis B virus surface Ab

ACnc

Pt

Ser

Qn

EIA

Component

Property Measured

Timing

System

Scale

Method

There are six major LOINC axes

NOT part of a LOINC Name

- Reason for the test (why it was ordered or the disease it diagnoses)
- Testing instrument
- Specific details about the specimen
- Priority (e.g. STAT)
- Where testing was done
- Who did the test
- Test interpretation
- Pricing or cost
- Anything not part of naming the test
- Things from other fields in an HL7 message

Component/Analyte

The substance or entity that is measured, evaluated, or observed

- Sodium
- Glucose
- Brucella sp. organism
- Influenza A Virus antigen
- Cytomegalovirus Virus antibody
- Lipids.Total

Component Structure

Analyte Name^Challenge^Adjustments

Formal analyte name

Specify “subanalytes”
May have subclasses

Calcium
Coronavirus Ag
Calcium.ionized

Challenge

Two parts separated by
“post”

1H post 100 g Glucose PO
<time delay>post<challenge type>

Adjustments

Adjusted to pH 7.4

Property

the most difficult LOINC axis

The characteristic or attribute of the analyte that is measured, evaluated, or observed

Major Categories

- **Mass:** Observations reported with mass (milligrams, grams, etc.) in the numerator of their units of measure
- **Substance:** Observations reported with moles or milliequivalents in the numerator of their units of measure
- **Catalytic activity:** Observations that report enzymatic activity
- **Arbitrary:** Results that report arbitrary units in the numerator of their units of measure
- **Number:** Counts

5193-8:Hepatitis B virus surface Ab:ACnc:Pt:Ser:Qn:EIA

Property

the most difficult LOINC axis

Combine Major Categories with Subtypes for Full Property

- MCnc – mass concentration (mass/unit vol)
- MCnt – mass content (mass/unit mass)
- NCnc – number concentration (number/unit vol)
- TmStp – time
- CCnc – catalytic concentration (activity)
- Prid – presence or identity
- Imp – impression/interpretation
- Find – subjective or objective observation
- Type – “Kind-of”

5193-8:Hepatitis B virus surface Ab:ACnc:Pt:Ser:Qn:EIA

Common Issues with LOINC Properties

Fraction (proportion) vs. Ratio

$a/a+b$ vs. a/b

- Fraction = Part/whole
 - Number fraction (NFr): % Eosinophils
 - Substance fraction (SFr): % HGB which is A2
- Ratio = Measures multiple analytes from the **same** system (specimen)
 - Mass concentration ratio - MCrto
 - e.g., BUN/Creat in urine specimen
 - Substance ratio-SCrto
 - Urea/Creatinine expressed as mmol/L (SI units)
- Relative Ratio = Measures from **different** systems
 - RelRto
 - RITm – time from actual and normal control

Timing*

The interval of time over which the observation or measurement was made

- Pt - at a point in time
- 12H - a twelve hour collection
- 24H - a twenty four hour collection

*non-Pt timings are usually associated with Rate Property

System

The system (context) or specimen type upon which the observation was made.

Ser	<i>serum</i>
Ser/Plas	<i>serum or plasma</i>
Bld	<i>whole blood</i>
Ur	<i>urine</i>
Flu	<i>body fluid</i>
Tiss	<i>tissue</i>
XXX	<i>specified elsewhere</i>



photo via [AlishaV](#)

5193-8:Hepatitis B virus surface Ab:ACnc:Pt:Ser:Qn:EIA

System Structure

System ^ Super System

- **Super System**
- Patient is the default
- Used to indicate
 - blood product unit
 - bone marrow donor
 - fetus



photo via [Xurble](#)

818-5:A Ag:ACnc:Pt:**RBC**^**BPU**:Ord:
54417-1:ABO+Rh group:Type:Pt:**Bld**^**fetus**:Nom:

Scale

Qn	<i>Quantitative</i> continuous numeric can have operators (<,>)
Ord	<i>Ordinal</i> Ranked set (1+, 2+, 3+)
Nom	<i>Nominal</i> unranked collection Taxonomy (e.g. bacteria)
Nar	<i>Narrative</i>



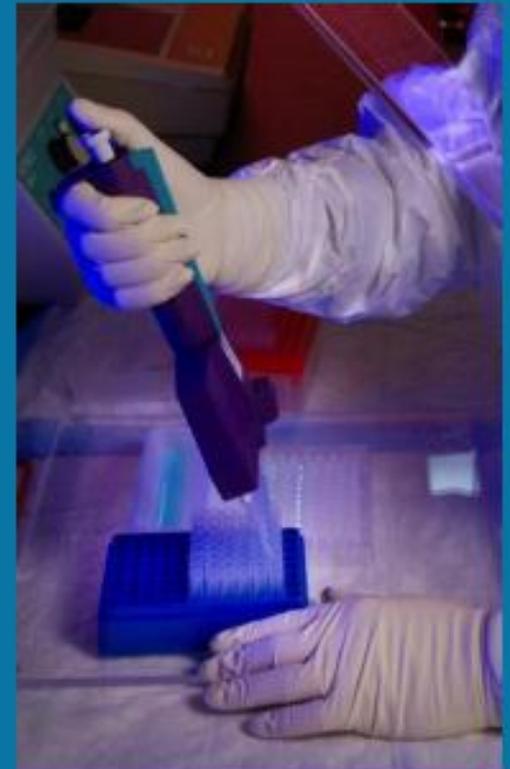
photo via [pwikibeach](#)

Scale (Special)

- OrdQn – Ordinal or Quantitative
 - Primarily used for antimicrobial observations e.g. MIC reported as resistant, intermediate, susceptible or as the mm diameter of the inhibition zone
 - Use is discouraged in other contexts
- Multi – structured text “globs”
 - e.g. chromatography output
 - Use is discouraged
- Doc – Clinical documents
- Set – Clinical attachments (headers)

Method

- **Only** needed if interpretation affected
 - Different normal ranges
 - Test sensitivity/specificity
- Listed at the generic level
 - Agglutination
 - Enzyme Immunoassay
 - Probe with target amplification



Hierarchies

- LOINC ‘class’
- Each LOINC axis
- Multi-axial
 - Component | System
 - Separate download 

Mapping Terms to LOINC

Things to Remember

- The thing ordered is not always the thing measured:
 - Blood Culture – live organism(s) identified
 - VDRL – *Treponema pallidum* Ab
 - Urinalysis – lots of different things
- The question (what am I measuring? e.g. Glucose) is not the answer (e.g. 90 mg/dl)
 - You are mapping the question, not the answer!
- You must know the specifics of the component being tested for (what is this test actually measuring?)

What is in LOINC?

Content

- Term structures
- Submitted units, Example UCUM units
 - aiming toward preferred units sorting
- Synonyms
- Answer lists (increasing number)
- Text descriptions – links to info sources about individual tests
 - Panel structures
 - Foreign language translations

RELMA®

Regenstrief LOINC Mapping Assistant



Purpose of Tutorial

- “Eliminate” need to read the User’s Manual
- Become familiar with RELMA features
- Provide some insight into mapping tips/pitfalls
- Help begin the mapping process for your institution

RELMA Functions

- LOINC files and indexes
- Manual and automated mapping functions
- Same free use as LOINC (see license)
- RELMA tools transform local words in local file
 - User creates file of local term/name and codes
- Assigns LOINC term to local test/battery code
- “Common tests” subset to speed mapping
- Context sensitive hierarchies for local use.
- Flexible “Google-like” search functions

New in Version


all of loinc.org

log in new user?

you are here: [home](#) → [downloads](#)

Get LOINC



LOINC and RELMA Complete Package

complete package
loinc

↓ DOWNLOAD

 [LOINC and RELMA Complete Download File \(All Formats Included\)](#) (273.1 MB)

File Version: LOINC 2.42 and RELMA 6.0 | Release Date: 2012-12-28 | File type: application/zip

This file contains the RELMA® program installer (which also includes the LOINC® and RELMA® Users' Guides), and the LOINC® database in both MS Access™ and tab-delimited formats.

To download this file you need to log in with your user name and password. If you do not have an account here, head over to the [registration form](#).

Current Versions

LOINC 2.42
Released: 2012-12-28

RELMA 6.0
Released: 2012-12-28

Recent Forum Posts

[System Implementation | Re: LOINC database and multi-axial hierarchy out of sync?](#)

[LOINC Forum Information | T3 UPTAKE](#)

[More posts...](#)

 [Join the conversation](#)

LOINC Table

LOINC icon

LOINC 2.42
Released: 2012-12-28

The LOINC table with fields for LOINC codes, each of the six parts of the formal name of the LOINC, synonyms, comments, and other information. Distributed as a tab-delimited text file, a CSV format text file, an Access database, and a release to release [Change File](#) and [Change Report](#). Documentation includes [LOINC Release Notes](#) and the comprehensive [LOINC User's Guide](#).

[Download icon](#)

Accessory Files



LOINC 2.42
Released: 2012-12-28

Additional files available in the LOINC distribution.

- [LOINC Panels and Forms File](#)
- [LOINC Top 2000 Results](#)
- [LOINC Top 300 Orders](#)
- [LOINC Multiaxial Hierarchy File](#)
- [Common UCUM units](#)
- [LOINC Context-specific Hierarchy Template File](#)

[Download icon](#)

RELMA



RELMA 6.0
Released: 2012-12-28

Regenstrief LOINC Mapping Assistant (RELMA®) is a Windows program for searching the LOINC database and helping you map local codes to LOINC codes. Documentation includes [RELMA Release Notes](#) and a comprehensive [RELMA User's Manual](#).

[Download icon](#)

New in Version (Rel. 6.0)

- Default - latest copy of LOINC details retrieved from the loinc.org website.
 - **LOINC Community Mapping project.**
 - shared repository of local tests and variables mapped to LOINC codes
 - allow you to contribute your mappings back to this community repository so that others can benefit from your seeing your work

What's available to download?

- RELMA - mapping and browsing tool
 - HL7 message converter- Makes a database suitable for mapping
 - HL7 lint (finds bad messages)
- LOINC database and spreadsheets
- LOINC User guide; RELMA User Guide
- Tools to assist language translations by part
- Tools for building databases to map from HL7 messages
- New guidance documents for mappers

Installing RELMA®



Installation Steps

- Make sure you have enough free disk space!
 - 2Gb is recommended
- From CD - Start – Run – *<drive>*:\RELMA\Setup
- Specify installation directory
 - Life will be easier if you accept the default
- Two database files installed
 - RELMA.MDB – LOINC Terms Database
 - LMOF3.MDB – Local Master Observation File
- Two sample files included
- Run from Start – (All) Programs – Regenstrief – RELMA

File Locations

- Database and Ancillary Files
 - Windows XP = C:\Documents and Settings\All Users\Documents\RELMA\
 - Windows Vista = C:\Users\Public\Documents\RELMA\
 - Windows 7 = C:\Users\Public\Documents\RELMA\
- Sample files
 - Windows XP = C:\Documents and Settings\All Users\Documents\RELMA\Samples\
 - Windows Vista =
C:\Users\Public\Documents\RELMA\Samples\
 - Windows 7 =
C:\Users\Public\Documents\RELMA\Samples\

Running RELMA®

Version 6.0



Copyright Screen



The Regenstrief LOINC® Mapping Assistant (RELMA®)
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Copyright Notice and License

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The RELMA® program, RELMA® database and associated search index files (subject to the copyright above with respect to the LOINC® codes and LOINC® table included therein), RELMA® Community Mapping Feature Database, RELMA® Release Notes, and RELMA® Users' Manual are copyright © 1995-2013, Regenstrief Institute, Inc. All

Continue

New Feature! Join the LOINC Community

 Log in ✕

 **The Regenstrief LOINC® Mapping Assistant (RELMA®)**
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Tap into the wisdom of the LOINC crowd! It's simple.

1. First, [sign up for our study](#). (You can't use these features if you don't join).
2. Next, **login below** with your same loinc.org account.
3. Then, RELMA shows you how many others have mapped to each LOINC code and the local names for those tests.

Username

Password

Remember Me

Do not show on start up [join.loinc.org](#)

Main Menu/Welcome Screen



Set Preferred Language

The screenshot shows the RELMA application window. The title bar reads "RELMA" and includes standard window controls. The menu bar contains "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "File" menu is open, listing various options. A blue callout box with a white border points to the "Set Preferred Language..." option in the menu. To the right of the menu, there are five red buttons with white text and icons: "Propose New LOINC Term" (with a box and plus icon), "Panels, Forms, & Surveys" (with a notepad and checkmark icon), "Import Local Terms" (with a folder and down arrow icon), "Export Local Terms" (with a folder and up arrow icon), and "User Preferences" (with a person icon). Below these buttons is a grey bar with "User Preferences" and "Exit Program" (with a power icon). The footer contains copyright information and version details.

Click File, Set Preferred Language

File Tools HIPAA Lab Auto Mapper Help

- Search LOINC Database
- Map local terms to LOINC
- Select Local Term File to Process...
- View/Add/Edit Local Terms...
- Report Local Terms and Their LOINC Mappings...
- Export Local Terms and Their LOINC Mappings to Delimited File...
- View Local Term File Summary
- Review Panels, Forms & Surveys...
- Import Local Terms from Delimited File...
- Import Local Terms from HL7 File...
- Propose a new LOINC...
- Review and Submit Proposed LOINC...
- Set User Preferences...
- Set Preferred Language...
- Exit

Propose New LOINC Term

Panels, Forms, & Surveys

Import Local Terms

Export Local Terms

User Preferences Exit Program

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OINC Workshop OBR 12/ Welcome to RELMA, NIH\casejt/ Version 5.4

Select Linguistic Variant(s)

Preferred Linguistic Variant

RELMA supports multiple linguistic variants which can be displayed in the search results screen. You may select below your preferred linguistic variant. You may change this setting later using this dialog or the user preferences dialog.

You may view all of the linguistic variants for a particular LOINC anytime using the LOINC browser.

Additional information about linguistic variants, including full list of variants, is available at:

<http://loinc.org/international>

NOTE - selecting a linguistic variant for searching may require the creation of one or more additional indexes. This process can take several minutes to complete, so please be patient. These indexes will need to be refreshed with each update to the LOINC data. Additionally, these index files will not be removed if RELMA is un-installed. You may safely delete these files at any time.

Selecting a translation may require indexes to be built

My preferred linguistic variant is...

Display	Search	Variant	Producer
<input type="checkbox"/>	<input type="checkbox"/>	Chinese (CHINA)	Bethune International Peace Hospital
<input type="checkbox"/>	<input type="checkbox"/>	Draft Portuguese (BRAZIL)	Jussara Röttsch, MD, Brazilian Federal Agency for Health Plans and Insuranc...
<input type="checkbox"/>	<input type="checkbox"/>	Estonian (ESTONIA)	Estonian E-Health Foundation
<input type="checkbox"/>	<input type="checkbox"/>	French (CANADA)	Canada Health Infoway Inc.
<input type="checkbox"/>	<input type="checkbox"/>	French (FRANCE)	Société Française d'Informatique de Laboratoires
<input type="checkbox"/>	<input type="checkbox"/>	French (SWITZERLAND)	CUMUL, Switzerland
<input type="checkbox"/>	<input type="checkbox"/>	German (SWITZERLAND)	CUMUL, Switzerland
<input type="checkbox"/>	<input type="checkbox"/>	Greek (GREECE)	Efstratia Kontaxi, MD, MSc, and Evripidis Stefanidis, MD, with technical supp...
<input type="checkbox"/>	<input type="checkbox"/>	Italian (ITALY)	Consiglio Nazionale delle Ricerche
<input type="checkbox"/>	<input type="checkbox"/>	Italian (SWITZERLAND)	CUMUL, Switzerland
<input type="checkbox"/>	<input type="checkbox"/>	Korean (KOREA, REPUBLIC OF)	Korean Ministry for Health, Welfare, and Family Affairs
<input type="checkbox"/>	<input type="checkbox"/>	Spanish (ARGENTINA)	Conceptum Medical Terminology Center
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Spanish (SPAIN)	the Clinical Laboratory Committee of SERVICIO EXTREMEÑO DE SALUD, with...
<input type="checkbox"/>	<input type="checkbox"/>	Spanish (SWITZERLAND)	CUMUL, Switzerland

OK

Cancel

LOINC Terms with Spanish Linguistic Variant

Map Local Terms - LOINC Workshop OBR 12/6

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

View:

#: of 191 Auto Mapper Search:

Use	Local Words	# Hits	Use	Local Words
<input checked="" type="checkbox"/> 1	allergy	3942	<input type="checkbox"/> 5	
<input type="checkbox"/> 2			<input type="checkbox"/> 6	
<input type="checkbox"/> 3			<input type="checkbox"/> 7	
<input type="checkbox"/> 4			<input type="checkbox"/> 8	

All Spanish!

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	15236-3	Mezcla de alergenos ocupacional 2 (Acarus...	Concentración...	Punto...	Suero	Ord	Multidisco
2	48265-3	Mezcla B de alergenos del polvo (Acarus...	Concentración...	Punto...	Células sanguineas blancas	Qn	
3	15270-2	Mezcla de Alergenos de árboles (Acer...	Concentración...	Punto...	Suero	Ord	Multidisco
4	50653-5	Mezcla de Alergenos de árboles (Acer...	Concentración...	Punto...	Suero	Qn	Multidisco
5	15267-8	Mezcla de Alergenos de árboles (Acer...	Concentración...	Punto...	Suero	Ord	Multidisco
6	15262-9	Mezcla de alergenos de árboles 10(Acer...	Concentración...	Punto...	Suero	Ord	Multidisco
7	30184-6	Mezcla de alergenos de árboles 10(Acer...	Concentración...	Punto...	Suero	Qn	Multidisco
8	24479-8	Mezcla de alergenos de árboles 10(Acer...	Concentración...	Punto...	Suero	Ord	Multidisco

Truncated Text

Setting User Preferences



Set User Preferences

The screenshot displays the RELMA application window. The 'File' menu is open, listing various options. A callout box points to the 'Set User Preferences...' option in the menu. Another callout box points to the 'User Preferences' button on the welcome screen. The welcome screen features several red buttons: 'Review Panels, Forms, & Surveys', 'Import Local Terms', and 'Export Local Terms'. At the bottom, there are buttons for 'User Preferences' and 'Exit Program'. The footer contains copyright information and version details.

Select User Preferences From the File Menu

...or from Welcome Screen

File Tools HIPAA Lab Auto Mapper Help

- Search LOINC Database
- Map local terms to LOINC
- Select Local Term File to Process...
- View/Add/Edit Local Terms...
- Report Local Terms and Their LOINC Mappings...
- Export Local Terms and Their LOINC Mappings to Delimited File...
- View Local Term File Summary
- Review Panels, Forms & Surveys...
- Import Local Terms from Delimited File...
- Import Local Terms from HL7 File...
- Propose a new LOINC...
- Review and Submit Proposed LOINC...
- Set User Preferences...
- Set Preferred Language...
- Exit

Review Panels, Forms, & Surveys

Import Local Terms

Export Local Terms

User Preferences Exit Program

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OINC Workshop OBR 12 Welcome to RELMA, NIH/casejt Version 5.4

Set User Preference Dialog

The screenshot shows the 'RELMA User Preferences' dialog box with three tabs: 'General', 'Map Screen', and 'Details Pages'. The 'General' tab is active. It contains two text input fields for database paths, each with a 'Browse...' button to its right. A red box highlights both input fields. Below them is a red note: 'NOTE: You must restart RELMA for these changes to take effect.' At the bottom left, there is a section titled 'When RELMA starts, it should' with three radio button options. A blue callout box points to the first option, 'Take me to the Welcome Screen', with the text 'Startup Screen Preference'. Another blue callout box points to the two database path fields with the text 'New File Locations: (See prior slide for location)'. At the bottom right, there are 'OK' and 'Cancel' buttons.

RELMA User Preferences

General | Map Screen | Details Pages

Path to LOINC Database: C:\Documents and Settings\All Users\Documents\RELMA\RELMA.MDB

Path to Local Terms: C:\Documents and Settings\All Users\Documents\RELMA\LMOF3.MDB

NOTE: You must restart RELMA for these changes to take effect.

When RELMA starts, it should

- Take me to the Welcome Screen
- Take me to the Mapping Screen
- Take me to the Simple Search Screen

New File Locations:
(See prior slide for location)

Startup Screen Preference

User Map Screen Preferences

RELMA User Preferences

General | **Map Screen** | Details Pages

Pre-Search Options

- Auto Select Keyword
- Auto Wildcard Keywords (*)
- Use Local Battery Terms in Search

Sort Search Results

- By Component, System, Property
- By Search

Mapping & Linguistic Options

- Prompt for Comments When Mapping

Current Linguistic Preference:

Auto create search terms

Include/Exclude Battery Terms

Add comments on Mappings

Importing Local Terms into RELMA



4 Ways to Load LMOF Files

- Direct entry into LMOF from within RELMA (painful)
 - Handy for individual entries/edits
- Create an Access table that mimics the LMOF structure (less painful but tedious)
 - Appendix A: RELMA Manual
- Create a delimited ASCII file from your local test catalog (good choice)
- Load directly from HL7 v2.x messages
 - Pulls data from OBR and OBX segments
 - Stores NTE segment data

Constructing a Local Dataset

Create extract of your test catalog with:

- Battery/Panel Code
- Battery/Panel Description or Name
- *Local Code
- *Test Description or Name
 - Include Method if Important
- Units
- Example Values
- Laboratory Section

Creating Delimited ASCII File

- RELMA can't parse free text
 - Need to create separate fields
- Can use any of these delimiters
 - Tab, Semicolon, Comma, Space
 - Can define your own
- Fields can be in any order
- Minimum required fields
 - Local Code
 - Local Description
 - *Units (highly recommended)*

Entering New Local Terms into RELMA



Manual Enter/Edit

The screenshot displays the RELMA software interface. At the top, the title bar reads "RELMA" and includes standard window control buttons. Below the title bar is a menu bar with "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "File" menu is open, listing various options such as "Search LOINC Database", "Map local terms to LOINC", "Select Local Term File to Process...", "View/Add/Edit Local Terms...", "Report Local Terms and Their LOINC Mappings...", "Export Local Terms and Their LOINC Mappings to Delimited File...", "View Local Term File Summary", "Review Panels, Forms & Surveys...", "Import Local Terms from Delimited File...", "Import Local Terms from HL7 File...", "Propose a new LOINC...", "Review and Submit Proposed LOINCs...", "Set User Preferences...", "Set Preferred Language...", and "Exit". A callout box with a black border and blue background points to the "View/Add/Edit Local Terms..." menu item, containing the text "View/Add/Edit Local Terms".

The main area of the interface features a "Coding Assistant" section with four prominent red buttons: "Propose New LOINC Term" (with a box and plus icon), "Panels, Forms, & Surveys" (with a clipboard and checkmark icon), "Import Local Terms" (with a folder and down arrow icon), and "Export Local Terms" (with a folder and up arrow icon).

 **User Preferences**  **Exit Program**

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Edit Term Dialog

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Edit Term in Local Term File Add New Term to Local Term File Delete Term from Local Term File Export Local Term File

Enter words to find:

Row	Battery Code	Battery Description	Battery Codesystem	Test Code	Test Description	Units	LOINC
1	312370	MIC		309651			
2	312370	MIC		708007			
3	665670	Basic Metabolic Panel		754689			
4	665670	Basic Metabolic Panel		755363			
5	665670	Basic Metabolic Panel		755364	Sodium SerPl QN	mmol/L	
6	665670	Basic Metabolic Panel		755365	Potassium SerPl QN	mmol/L	
7	665670	Basic Metabolic Panel		755366	Chloride SerPl QN	mmol/L	
8	665670	Basic Metabolic Panel		755367	Carbon Dioxide SerPl QN	mmol/L	
9	665670	Basic Metabolic Panel		755368	Glucose SerPl QN	mg/dL	
				755369	BUN SerPl QN	mg/dL	
				755370	Calcium T		
				755177	Factor VI		
12	66768	Factor VIII(8) Assay		755179	Factor X Assay	%	
13	66768	Factor X(10) Assay		755181	Factor XI Assay	%	
14	66768	Factor XI(11) Assay		810892	Anti-A		
15	684308	ABO and Rh		810893	Anti-B		
16	684308	ABO and Rh		755435	Carboxyhemoglobin Bld.	%	
17	685703	Cooximetry Panel Bld QN		755474	Methemoglobin Bld QN	%	
18	685703	Cooximetry Panel Bld QN		755475	Oxyhemoglobin Bld QN	%	
19	685703	Cooximetry Panel Bld QN		755479	C-Reactive Prot SerPl QN	mg/dL	
20	685733	CRP SerPl QN		755372	Benzodiaz Scn SerPl QL		
21	685796	Drug Scn SerPl QL		755496	Tricyclid..		
22	685796	Drug Scn SerPl QL					

Truncated Text

Print preview

Entry #: 1 of 190

3765 records found: 0.21s

Export Local Term File

Export Local Term File

Term File to Export: LOINC Workshop OBR 12/8

Field Delimiter: Tab

Surround Text Fields with Double Quotations?
 Yes No

Fields to Write to Output File

<input checked="" type="checkbox"/> Test Code System	<input checked="" type="checkbox"/> LOINC Version
<input checked="" type="checkbox"/> Units	<input checked="" type="checkbox"/> LOINC Number
<input checked="" type="checkbox"/> Comments	<input checked="" type="checkbox"/> LOINC Long Common Name
<input checked="" type="checkbox"/> Name of Mapper	<input checked="" type="checkbox"/> LOINC Short Name
<input checked="" type="checkbox"/> Date Term was Mapped	<input checked="" type="checkbox"/> LOINC Component
	<input checked="" type="checkbox"/> LOINC Property
	<input checked="" type="checkbox"/> LOINC Time Aspect
	<input checked="" type="checkbox"/> LOINC System
	<input checked="" type="checkbox"/> LOINC Scale
	<input checked="" type="checkbox"/> LOINC Method

Include field names as first row

Write File Exit

LOINC Workshop OBR 12/8

**Delimiters supported:
Tab, comma, bar (|)**

Add Local Term

Add Local Term to LOINC Workshop OBR

Local Term

Local Term File:	LOINC Workshop OBR	Mapped To:		# Obs:	
Lab Section:	MICRO	Institution:		# Patients:	
Battery Code:		Units:		Min Value:	
Battery Name:				Max Value:	
Battery Code System:				Avg Value:	
Test Code:	BUBPLAG			Earliest Obs:	
Test Name:	BUBONIC PLAGUE - RRT PCR			Latest Obs:	
Test Code System:					
Comments:					

Sample Data:

Row	Count	Sample Value	Units	Abnormal Flag	Normal Range	OBR Note	OBX Note
Click to Add to Current Working File							

Truncated Text Preview

Save Cancel

Search Local Term File

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Edit Term in Local Term File Add New Term to Local Term File Delete Term from Local Term File Export Local Term File

Enter words to find:
Calcium

Found: 2 (1.05%) of 190

Row ^	Battery Code	Battery Description	Battery Codesystem	Test Code	Test Description	Test Codesystem	Units	LOINC
11	665670	Basic Metabolic Panel		755370	Calcium Total SerPl QN		mg/dL	
134	795511	PTH C-Terminal Ser QN		814195	Calcium Ser QN		mg/dL	

Return to Full List

Truncated Text Return to Local Term File Find Local Term in File Print Preview

Entry #: 1 of 190 3765 records found: 0.21s

Steps to Import Local Terms

1. Click **Import Local Terms** Button from Main Menu
 - a) **File>Import Local Terms from Delimited File**
2. Locate your local terms text file
 - a) E.g. WinXP Sample files loaded into C:\Documents and Settings\All Users\Shared Documents\RELMA
3. Name your Working Set
 - a) LMOF database can contain multiple work sets
4. Define default section (Optional)
5. Identify file delimiter
6. Assign fields to LMOF attributes
 - a) Ignore fields you don't need
 - b) Combine fields if needed
7. Check "Case-sensitive" if needed
8. Click **Import**.

Example Tab-Delimited File

File	Edit	Format	View	Help
312370	MIC	309651	Nafcillin	
312370	MIC	708007	Moxifloxacin	
665670	Basic Metabolic Panel	754689	Anion Gap	mmol/L
665670	Basic Metabolic Panel	755363	Creatinine SerPl QN	mg/dL
665670	Basic Metabolic Panel	755364	Sodium SerPl QN	mmol/L
665670	Basic Metabolic Panel	755365	Potassium SerPl QN	mmol/L
665670	Basic Metabolic Panel	755366	Chloride SerPl QN	mmol/L
665670	Basic Metabolic Panel	755367	Carbon Dioxide SerPl QN	mmol/L
665670	Basic Metabolic Panel	755368	Glucose SerPl QN	mg/dL
665670	Basic Metabolic Panel	755369	BUN SerPl QN	mg/dL
665670	Basic Metabolic Panel	755370	Calcium Total SerPl QN	mg/dL
667682	Factor VIII(8)-Assay	755177	Factor VIII-C Assay	%
667685	Factor X(10) Assay	755179	Factor X Assay	%
667688	Factor XI(11) Assay	755181	Factor XI Assay	%
684308	ABO and Rh	810892	Anti-A	
684308	ABO and Rh	810893	Anti-B	
685703	Cooximetry Panel Bld QN	755435	Carboxyhemoglobin Bld QN	%
685703	Cooximetry Panel Bld QN	755474	Methemoglobin Bld QN	%
685703	Cooximetry Panel Bld QN	755475	Oxyhemoglobin Bld QN	%
685733	CRP SerPl QN	755479	C-Reactive Prot SerPl QN	mg/dL
685796	Drug Scn SerPl QL	755372	Benzodiaz Scn SerPl QL	
685796	Drug Scn SerPl QL	755496	Tricyclic Antidepressants Scn SerPl QL	
685796	Drug Scn SerPl QL	755497	Salicylate SerPl QN	mg/dL
685796	Drug Scn SerPl QL	755498	Ethanol Pl QN	mg/dL
685849	Hgb A1C HPLC Bld QN	755572	Hemoglobin A1C HPLC Bld QN	%
685853	Hgb A1C POC	755573	"Hemoglobin A1C, POC"	%
686283	PTH Intact Ser QN	755757	PTH Intact Ser QN	pg/mL
693154	B Cell Subsets	755895	B Cells- IgG	%
693154	B Cell Subsets	755896	B Cells- IgM	%
693154	B Cell Subsets	755897	B Cells- IgD	%
693154	B Cell Subsets	755898	B Cells- IgA	%
693154	B Cell Subsets	755906	Flow Cytometry Interpretation	
693154	B Cell Subsets	2773454	B Cell Subset	
693154	B Cell Subsets	7124661	Flow Cytometry ASR Comment	

Importing Local Files

The screenshot displays the RELMA software interface. The title bar shows 'RELMA' and standard window controls. The menu bar includes 'File', 'Tools', 'HIPAA', 'Lab Auto Mapper', and 'Help'. The 'File' menu is open, listing various options. A callout box points to the 'Import Local Terms from Delimited File...' option. To the right, a vertical toolbar contains several buttons: 'Propose New LOINC Term', 'Panels, Forms, & Surveys', 'Import Local Terms', and 'Export Local Terms'. At the bottom, there are buttons for 'User Preferences' and 'Exit Program'. The footer contains copyright information and version details.

Select Import Local Terms from Delimited File...

Assistant

Propose New LOINC Term

Panels, Forms, & Surveys

Import Local Terms

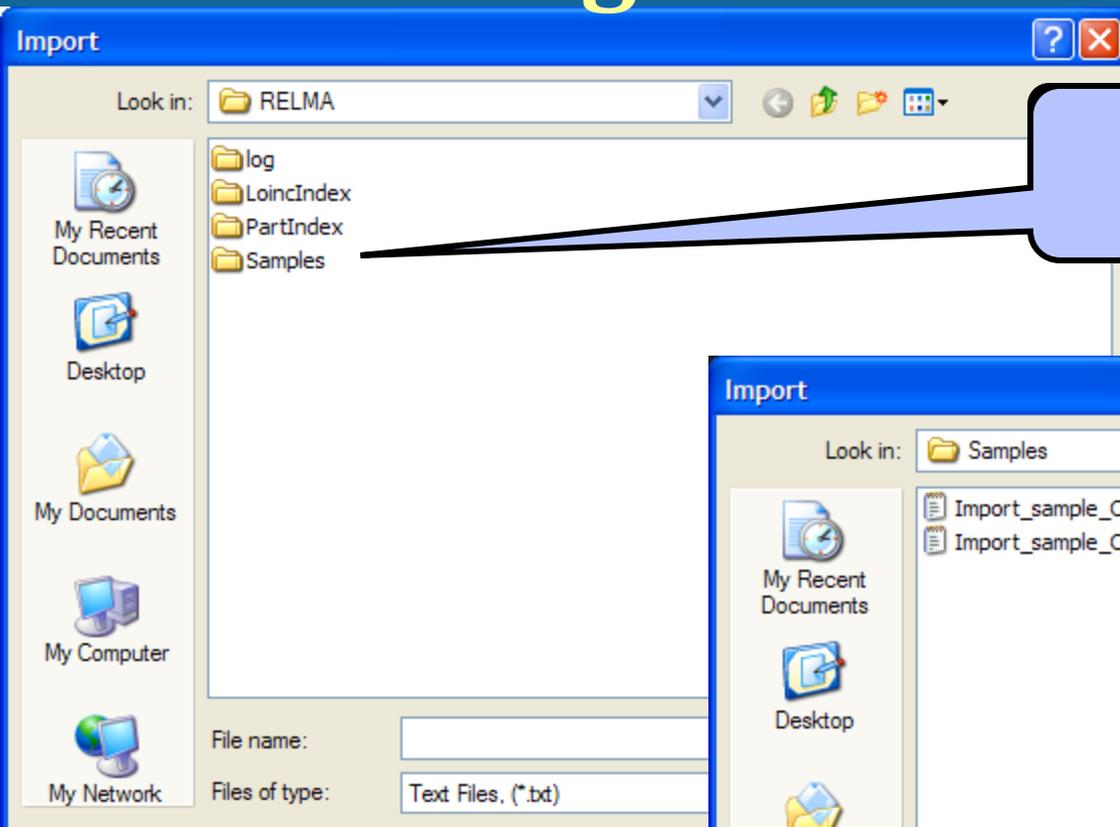
Export Local Terms

User Preferences Exit Program

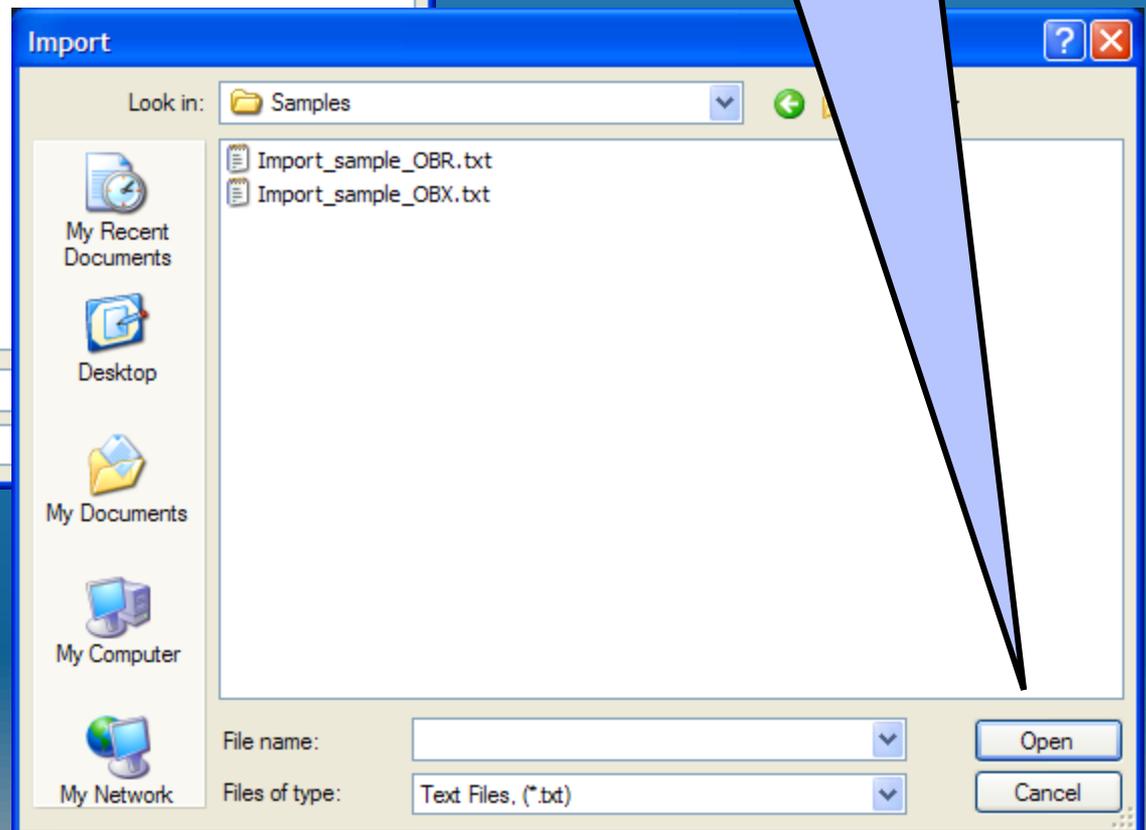
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OINC Workshop OBR 12/ Welcome to RELMA, NIH\casejt Version 5.4

Navigate to File Location



Sample files stored in
RELMA Directory



Open File in RELMA

Name your working set. RELMA allows multiple sets in LMOF database

Need Import Information

You still need to enter the test code and test description before RELMA can import your data.

Import Button

1	312370	MIC	30965			
2	312370	MIC	70800			
3	665670	BasicMetabol				
4	665670	BasicMetabol				
5	665670	BasicMetabolic Panel	755364	Sodium SerPl QN	mmol/L	
6	665670	BasicMetabolic Panel	755365	Potassium SerPl QN	mmol/L	
7	665670	BasicMetabolic Panel	755366	Chloride SerPl QN	mmol/L	
8	665670	BasicMetabolic Panel	755367	Carbon Dioxide SerPl QN	mmol/L	
9	665670	BasicMetabolic Panel	755368	Glucose SerPl QN	mg/dL	
10	665670	BasicMetabolic Panel	755369	BUN SerPl QN	mg/dL	
11	665670	BasicMetabolic Panel	755370	Calcium Total SerPl QN	mg/dL	
12	667682	Factor VIII(8)-Assay	755177	Factor VIII-C Assay	%	
13	667685	Factor X(10) Assay	755179	Factor X Assay	%	
14	667688	Factor XI(11) Assay	755181	Factor XI Assay	%	
15	684308	ABO and Rh	810892	Anti-A		

C:\Documents and Settings\All Users\Documents\RELMA\Samples\Import_sample_OBR.txt

Fields Segregated

Import Local Terms from Delimited File

Name of Local Term File:

Default Lab Section:

Choose the delimiter that separates your fields:
 Tab Semicolon Comma Space Other:

First Row Contains Column Headers

To assign a column of data to one of the fields, click on the second header row of the grid, click on the arrow right of the drop down list, and select the field into which you desire your data to be imported. Text and Description are required fields.

	#1	#2	#3	#4	#5
	Ignore Field	Ignore Field	Ignore Field	Ignore Field	Ignore Field
1	Ignore Field		309651	Nafcillin	
2	Battery Code		708007	Moxifloxacin	
3	Battery Description	Public Panel	754689	Anion Gap	mmol/L
4	Battery Code System	Public Panel	755363	Creatinine SerPl QN	mg/dL
5	Test Code	Public Panel	755364	Sodium SerPl QN	mmol/L
6	Test Description	Public Panel	755365	Potassium SerPl QN	mmol/L
7	665670	Basic Metabolic Panel	755366	Chloride SerPl QN	mmol/L
8	665670	Basic Metabolic Panel	755367	Carbon Dioxide SerPl QN	mmol/L
9	665670	Basic Metabolic Panel	755368	Glucose SerPl QN	mg/dL
10	665670	Basic Metabolic Panel	755369	BUN SerPl QN	mg/dL
11	665670	Basic Metabolic Panel	755370	Calcium Total SerPl QN	mg/dL
12	667682	Factor VIII(8)-Assay	755177	Factor VIII-C Assay	%
13	667685	Factor X(10) Assay	755179	Factor X Assay	%
14	667688	Factor XI(11) Assay	755181	Factor XI Assay	%
15	684308	ABO and Rh	810892	Anti-A	

Case-sensitive Import

C:\Documents and Settings\All Users\Documents\RELMA\Samples\Import_sample_OBR.txt

Choose field name

Ready to Import

Import Local Terms from Delimited File

Name of Local Term File:

Default Lab Section:

Choose the delimiter that separates your fields:
 Tab

First Row Contains Column Headers Text Qualifier:

To assign a column of data to one of the fields, click on the header row of the grid, click on the arrow to the right of the drop down list, and select the field into which your data to be imported. TestCode and Test Description are required fields.

	#1	#2	#3	#4	#5
	Battery Code	Battery Description	Test Code	Test Description	Units
1	312370	MIC	309651	Nafcillin	
2	312370	MIC	708007	Moxifloxacin	
3	665670	Basic Metabolic Panel	754689	Anion Gap	mmol/L
4	665670	Basic Metabolic Panel	755363	Creatinine SerPl QN	mg/dL
5	665670	Basic Metabolic Panel	755364	Sodium SerPl QN	mmol/L
6	665670	Basic Metabolic Panel	755365	Potassium SerPl QN	mmol/L
7	665670	Basic Metabolic Panel	755366	Chloride SerPl QN	mmol/L
8	665670	Basic Metabolic Panel	755367	Carbon Dioxide SerPl QN	mmol/L
9	665670	Basic Metabolic Panel	755368	Glucose SerPl QN	mmol/L
10	665670	Basic Metabolic Panel	755369	BUN SerPl QN	mmol/L
11	665670	Basic Metabolic Panel	755370	Calcium Total SerPl QN	mmol/L
12	667682	Factor VIII(8)-Assay	755177	Factor VIII-C Assay	
13	667685	Factor X(10) Assay	755179	Factor X Assay	
14	667688	Factor XI(11) Assay	755181	Factor XI Assay	%
15	684308	ABO and Rh	810892	Anti-A	

Case-sensitive Import

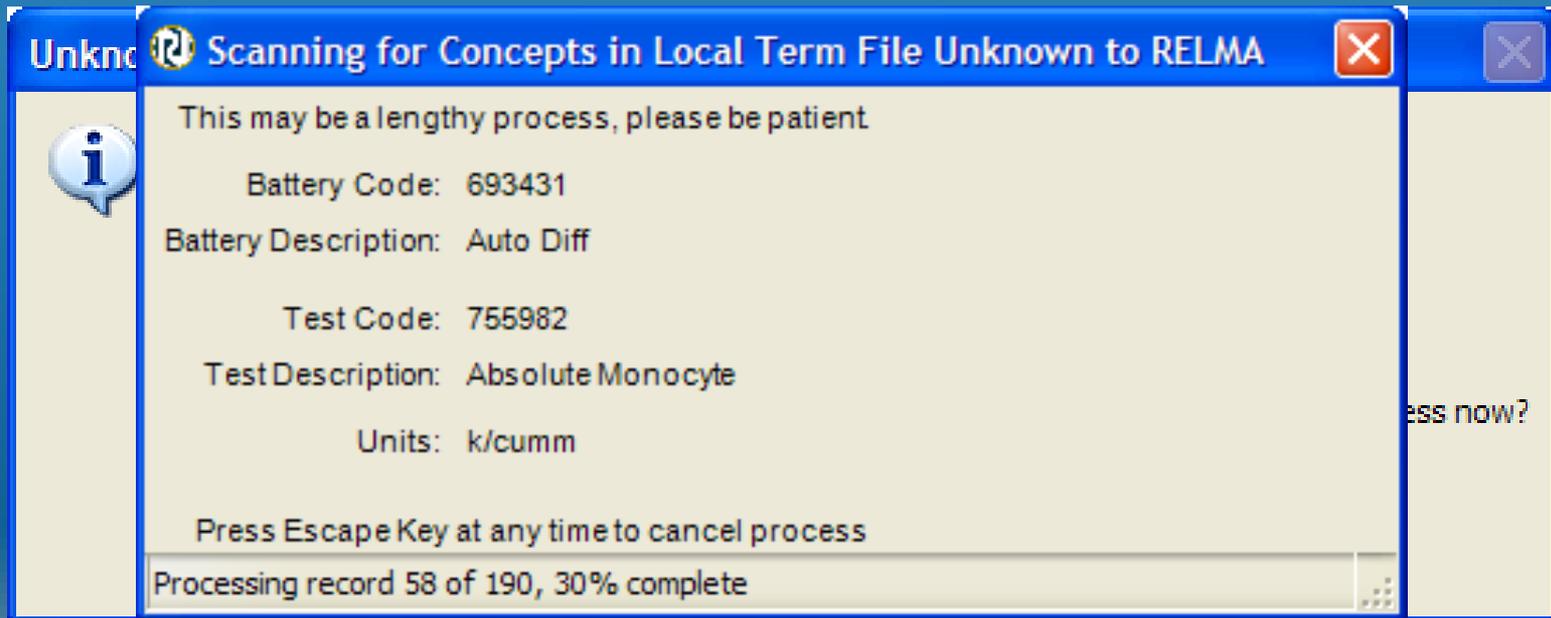
C:\Documents and Settings\All Users\Documents\RELMA\Samples\Import_sample_OBR.txt

Minimum assignments

Now you can click the Import button!

Post-Processing of Local File

- After import, RELMA Searches for terms (words) that it does not recognize
- Stored in a file for future reconciliation



Change Local Term File

The screenshot displays the RELMA application window. The 'File' menu is open, showing options such as 'Search LOINC Database', 'Map local terms to LOINC', and 'Select Local Term File to Process...'. A callout box points to the 'Select Local Term File to Process...' option with the text 'Select the Working Set'. Another callout box points to the 'Current mapping status' text in the dialog box.

Select the Working Set

Current mapping status

Select Local Term File to Process

Choose a Local Term File:

Term File Name	# of Terms	#Mapped	#Unmapped	% Mapped
LOINC Workshop OBR	190	0	190	0
SAMPLE	105	6	99	6

OK Cancel

LOINC Workshop OBR... Welcome to RELMA... Version 5.4

Alternative Pragmatic Way

- Use large set of HL7 messages
- Automatically make dataset of:
 - OBR ID
 - OBR description
 - OBX ID
 - OBX description
 - Sample of results with
 - Real values
 - Units
 - Abnormal flags
 - Normal ranges

Generate Local term file from HL7 messages

The screenshot shows the RELMA software window with the 'File' menu open. The menu items are: Search LOINC Database, Map local terms to LOINC, Select Local Term File to Process..., View/Add/Edit Local Terms..., Report Local Terms and Their LOINC Mappings..., Export Local Terms and Their LOINC Mappings to Delimited File..., View Local Term File Summary, Review Panels, Forms & Surveys..., Import Local Terms from Delimited File..., Import Local Terms from HL7 File..., Propose a new LOINC..., Review and Submit Proposed LOINCs..., Set User Preferences..., Set Preferred Language..., and Exit. A blue callout box with a white border points to the 'Import Local Terms from HL7 File...' menu item. The callout box contains the text 'Select Import Terms from HL7 File'.

 Propose New LOINC Term

 Panels, Forms, & Surveys

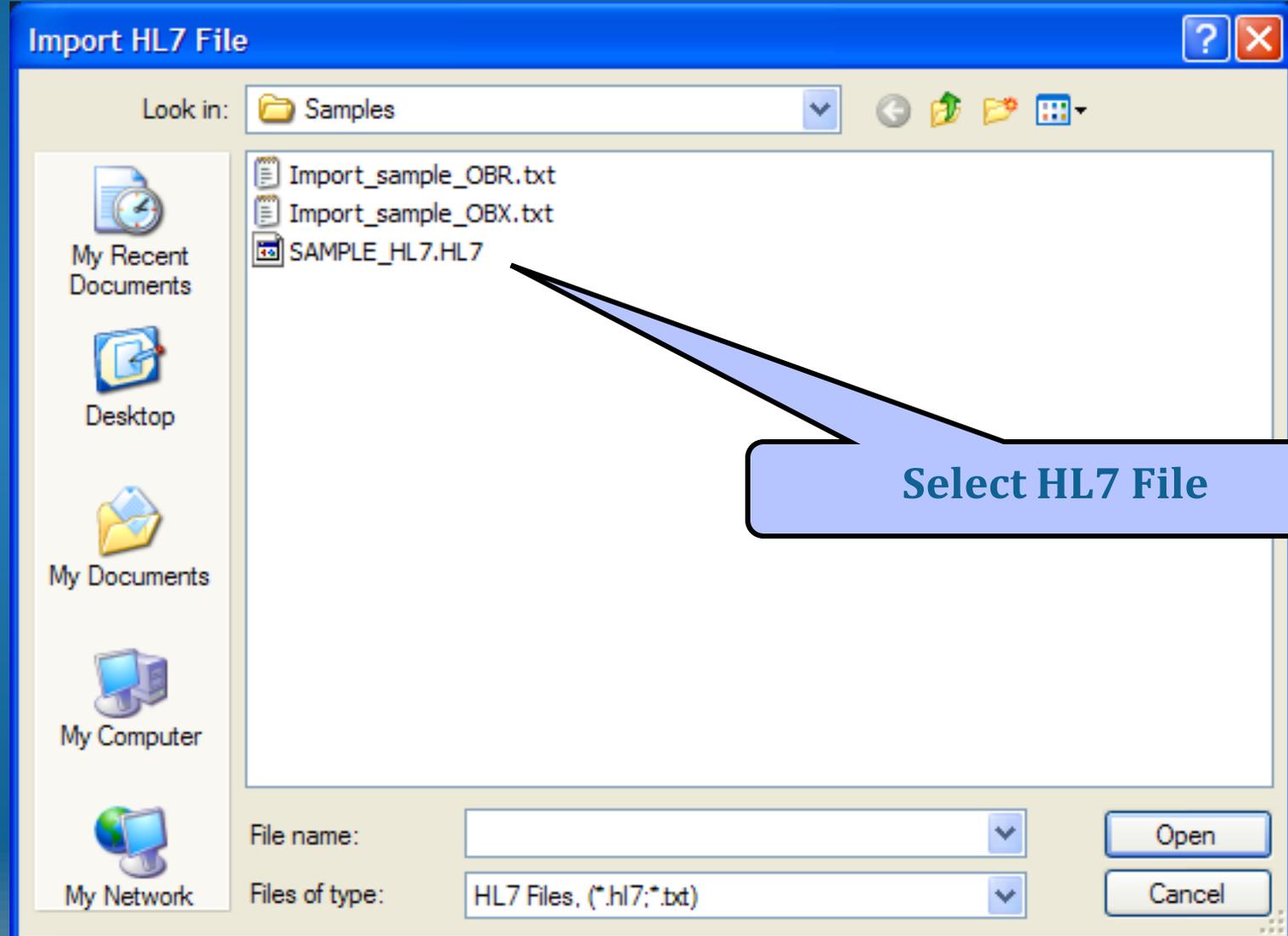
 Import Local Terms

 Export Local Terms

 User Preferences  Exit Program

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Select File to Import



Specify HL7 File Name and Sample Size

The screenshot shows a dialog box titled "Import Local Term File from HL7". It contains several fields and options:

- Path to HL7 File:** C:\Documents and Settings\All Users\Documents\RELMA\Samples\SAMPLE_HL
- Name of Local Term File:** LOINC Workshop OBR HL7 12/8
- Default Lab Section:** (empty dropdown)
- Import Local Terms from:** Radio buttons for "Primary Codes Only (Default)", "In Primary and Alternate Codes", and "Alternate Codes Only".
- Sample Values to Store:** A checkbox for "Skip Import Process" and three input fields for "# of Most Frequent", "# of Highest (numeric)", and "# of Lowest (numeric)", all set to 5.
- HL7 Message Filter:** ^R01
- Import Progress:** A progress bar.
- Statistics Table:** A table with columns "Statistics" and "Value".
- Buttons:** "Stop", "Import Terms", and "Exit".

Four callout boxes provide instructions:

- Name the Local Term File (working set)** points to the "Name of Local Term File" field.
- Select which codes to store** points to the "Import Local Terms from" radio buttons.
- Skip import of sample values** points to the "Skip Import Process" checkbox.
- Select the number of sample values** points to the "# of Most Frequent", "# of Highest (numeric)", and "# of Lowest (numeric)" input fields.

Name the Local Term File (working set)

Select which codes to store

Skip import of sample values

Select the number of sample values

HL7 Messages Data Statistics

Import Local Term File from HL7

Path to HL7 File: Browse...

Name of Local Term File:

Default Lab Section: You may create a new lab section by typing a name in the box.

Import Local Terms from: Primary Codes Only (Default) Both Primary and Alternate Codes Alternate Codes Only

Sample Values to Store: Skip Import Process # of Most Frequent
of Highest (numeric)
of Lowest (numeric)

HL7 Message Filter:

Post Processing Progress:

Statistics	Value
Number of Messages	195
Number of OBR Segments	195
Number of OBX Segments	1,217
Number of NTE Segments	24
Msgs / Sec	5
Total Time	00:00:42
Estimated Time till Completion	00:00:00
File Size	157,491

Unknown Concept Scan

The import process has imported 283 terms.

RELMA needs to inspect the LOINC Workshop OBR HL7 12/8 file. Can RELMA initiate the process now?

New Terms added to LMOF

Map Local Terms - LOINC Workshop OBR

File Tools HIPAA Intelligent Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Edit Term in Local Term File Add New Term to Local Term File Delete Term from Local Term File Export Local Term File

Enter words to find:

Row	Battery Code	Bat	Codesystem	Test Code	Test Description	Codesystem	Units	LOINC	Order	# Pat	# Obs	Recent
251	1210	RO		13672	UROBILINOGE...	L	EU/DL...					12/5/20
252	1210						(12/5/20
253	1210						#/HPF					12/5/20
254	1210						#/HPF					12/5/20
255	1210						(12/5/20
256	1210						#/HPF					12/5/20
257	1210	ROUTINE...		1231	AMORPHOUS...	L						12/6/20
258	1804	CULTURE...		4839	PREDOM ORG	LCR						12/1/20
259	1804	CULTURE...		4840	ORG 2	LCR						12/1/20
260	1804	CULTURE...		4841	ORG 3	LCR						12/1/20
261	1804	CULTURE...		4842	ORG 4	LCR						12/1/20
262	4816	FUNGAL AB...		4817	HISTORP							12/4/20
263	4816	FUNGAL AB...		4818	ANTHMYCIN...	L						12/4/20
264	4816	FUNGAL AB...			COCCIDIO SCN	L						12/4/20
265	4816	FUNGAL AB...		4820	ASPERGIL SCN	L						12/4/20
266	5381	CARBOXY...		5381	CARBOXYHEM...	L	% SAT					12/6/20
267	5605	HEAR PANEL 2		4720	AMMONIA	L	mcmol/L					12/6/20
268	5635	BLOOD GAS...		6131	PH BLD	L						12/5/20
269	5635	BLOOD GAS...		6139	PCO2	L	mm Hg					12/5/20
270	5635	BLOOD GAS...		6140	PO2	L	mm Hg					12/5/20
271	5635	BLOOD GAS...		5870	BASE EXCESS...	L	mmol/L					12/5/20
272	5635	BLOOD GAS...		6136	BICAR(HCO3)...	L	mmol/L					12/5/20
273	5635	BI OOD GAS		6141	CO2 TOTAL	L	mmol/l					12/5/20

Truncated Text Print Preview

Entry #: 1 of 473 Multi-axial search tree load time: 10.24s

Click on "Edit Term" to see Sample Data

New Battery Code

Sample Results for Observation

Edit Local Term from LOINC Workshop OBR

Local Term

Local Term File: LOINC Workshop OBR
Lab Section:
Battery Code: 5635
Battery Name: BLOOD GAS PANEL
Battery Code System:
Test Code: 6131
Test Name: PH BLD
Test Code System: L
Comments:

Mapped To:
Institution:
As:

Obs:
Patients:
Min Value:
Max Value:
Avg Value:
Earliest Obs: 12/5/2004

New Test Code

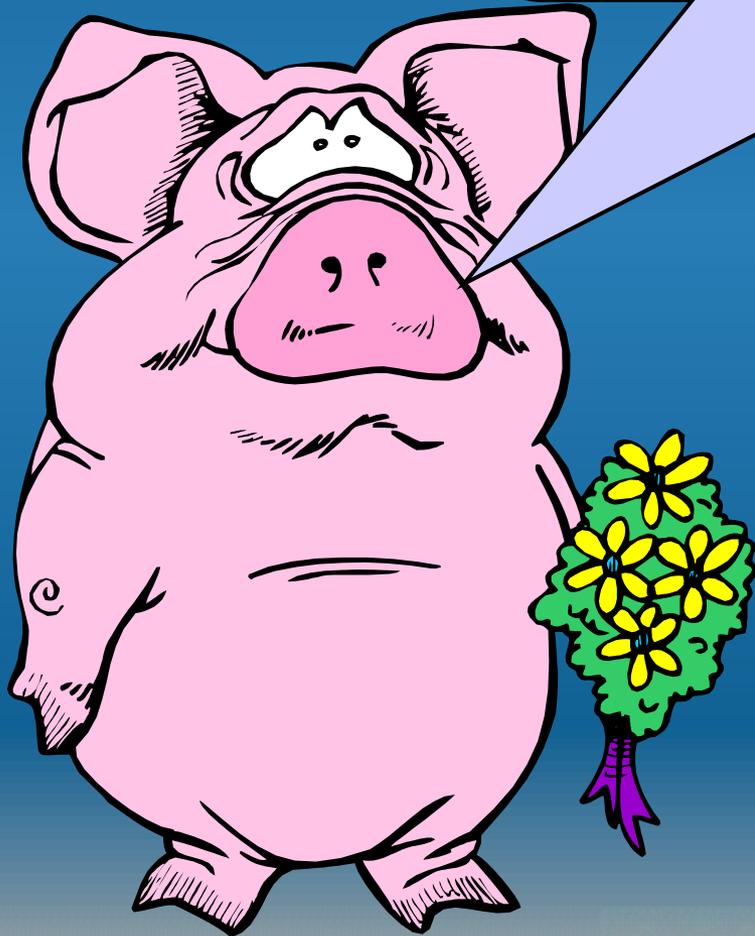
Sample Data:

Row	Count	Sample Value	Units	Abnormal Flag	Normal Range	OBR Note	OBX Note
1	1	7.440		H	7.380-7.42		
2	2	7.060		LL	7.380-7.42	, Results Checked	
3	1	7.410			7.380-7.42		
4	1	7.500		H	7.380-7.42		
5	1	7.340		L	7.380-7.42		

Truncated Text Print Preview

Save Cancel

**Lenny L'OINC says:
“Load the Sample Files
Into RELMA now!”**



- Import the two sample files provided
 - Import_Sample_OBR.txt
 - Contains battery code and description
 - Import_Sample_OBX.txt
 - Contains test code and description
- Create 2 working sets
- Load your personal data set

Cleaning your data



Preparing your Data for Mapping

- Improve mapping success by:
 - Expanding abbreviations
 - Standardizing colloquial terms
 - Ignoring “administrative” terms
 - Standardizing time references
- Can be done prior to importing
- Better to use tools built into RELMA

RELMA Cleaning Tools

The screenshot displays the RELMA software interface. At the top, the title bar reads "RELMA" and includes standard window controls. Below the title bar is a menu bar with "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "Tools" menu is open, showing several options: "Define Default Specimens for Local Lab Sections...", "Define Word Substitutions for Local Term Vocabulary...", "Check the Test Names in Local Term Submission...", "Check the Units in Local Term Submission...", "Find Local Terms Mapped to Deprecated/Discouraged LOINC...", and "Context Specific Hierarchies...". A callout box points to the "Tools" menu with the text "Use this tool to edit unknown terms".

Below the menu bar, the main interface features a "Assistant" section with a red header. It contains several red buttons with icons and text:

- Propose New LOINC Term
- Map Local Terms to LOINC
- Panels, Forms, & Surveys
- View/Add/Edit Local Terms
- Import Local Terms
- Report Local Terms
- Export Local Terms

At the bottom of the interface, there are two buttons: "User Preferences" (with a person icon) and "Exit Program" (with a power icon).

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Review Unknown Local Terms

Revise Unknown Local Term Concepts

Match RELMA Concepts to Unknown Words

Local Term Information

ID	Battery	Battery Description	Test	Test Description	Units	Lab Section
1011	693431	Auto Diff				
1012	693431	Auto Diff				
1013	693431	Auto Diff				
1014	693431	Auto Diff				
1423	27883	RXL BATTERY	15598	CK MB % Tot		
1370	16813	LYMPHOMA/LEUK IMMUNO	13789	CD2 T Cells %		

If the word or unit is an abbreviation, acronym or truncation, please type in a fully spelled out version of the concept. If the word or phrase is already spelled out, see if there is an equivalent in the LOINC dictionary.

Unknown Word: %

Enter Your Word:

Known Words:

- '%
- %'
- a
- b
- c
- d
- e
- f
- g

May Re-Scan File for Unknown Terms

Replace Everywhere

Replace for Lab Section

Replace for Term

Ignore Everywhere

Ignore for Lab Section

Ignore for Term

Scan For Unknown Concepts

Print Concepts Not in LOINC

Exit

First Previous Next Last

Item 1 of 52 unknown words LOINC Workshop OBR

Replace Local Terms

Revise Unknown Local Term Concepts

Match RELMA Concepts to Unknown Words

Local Term Information

ID	Battery	Battery Description	Test	Test Description	Units	Lab Section
1069	768328	Allergen Helminthospr IgG	963253	Allergen Helminthospr IgG		
1068	768328	Allergen Helminthospr IgG	772546	Allergen Helminthosporium spp IgG		

If the word or unit is an abbreviation, acronym or truncation of a larger word or phrase, please select the replacement options.

Replacement Options

Unknown Word: HELMINTHOSPR

Enter Your Word: helm

Known Words:
HELMET
HELMINTH
HELMINTHOSPORIUM
HELMINTHS

Replace Everywhere

Replace for Lab Section

Replace for Term

Ignore Everywhere

Ignore for Lab Section

Ignore for Term

Scan For Unknown Concepts

Print Concepts Not in LOINC

Exit

First

Previous

Next

Last

RELMA Cleaning Tools

The screenshot displays the RELMA software interface. At the top, the title bar reads "RELMA" and includes standard window control buttons. Below the title bar is a menu bar with "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "Tools" menu is open, showing several options: "Define Default Specimens for Local Lab Sections...", "Define Word Substitutions for Local Term Vocabulary...", "Check the Test Names in Local Term Submission...", "Check the Units in Local Term Submission...", "Find Local Terms Mapped to Deprecated/Discouraged LOINC...", and "Context Specific Hierarchies...". A callout box points to the "Define Word Substitutions..." option with the text "Use this tool to make global substitutions".

Below the menu bar, the main interface features a grid of red buttons with white text and icons:

- Propose New LOINC Term**: Includes a box icon with a green plus sign.
- Map Local Terms to LOINC**: Includes a magnifying glass icon with a green checkmark.
- Panels, Forms, & Surveys**: Includes a notepad icon with a green checkmark.
- View/Add/Edit Local Terms**: Includes a notepad icon with a pencil.
- Import Local Terms**: Includes a folder icon with a green arrow pointing down.
- Report Local Terms**: Includes a printer icon.
- Export Local Terms**: Includes a folder icon with a green arrow pointing up.

At the bottom of the interface, there are two buttons in a grey bar: "User Preferences" (with a person icon) and "Exit Program" (with a power button icon).

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Term Substitution

Define Word Substitutions for Local Term Vocabulary

Local Word: TOTL

Local Translation: TOTAL

RELMA's Suggestions:

- TOTAL
- TOTALS

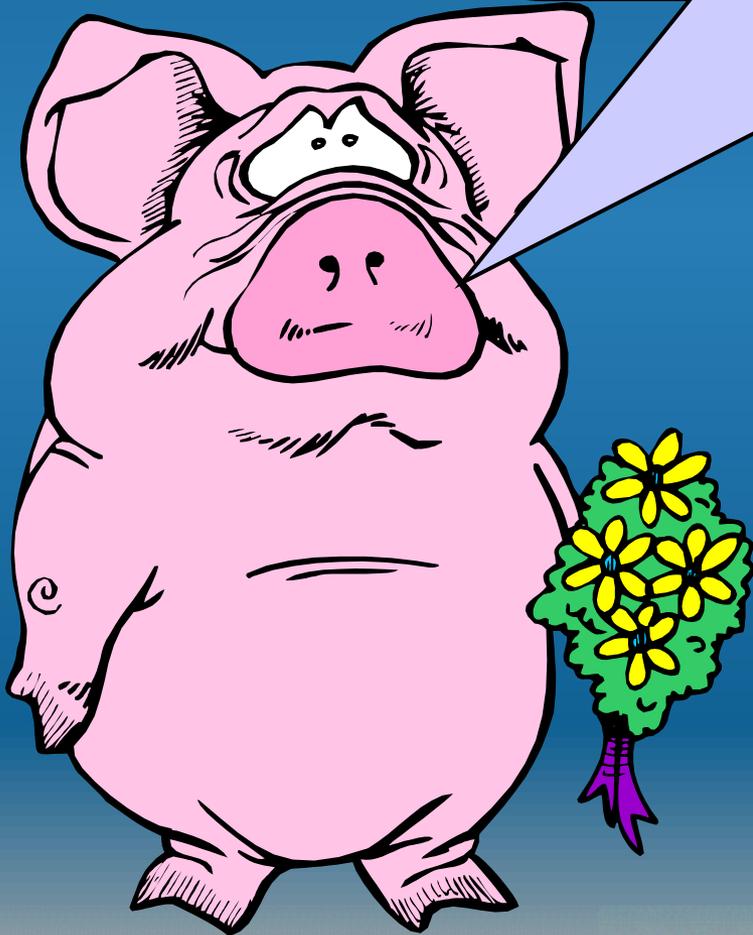
Options:

- Ignore Local Word
- Limit to Local Term File: [Dropdown]

Buttons: Add New, Save, Delete, Exit

**Save this global substitution
for only this working set**

**Lenny L'OINC says:
“Begin to clean your
data now!”**



- Using the OBR or OBX sample files, take 15-20 minutes to clean up these unrecognized terms
- You may use your own data if you wish.

Lab Auto Mapper

- Run in batch mode to find N- closest terms
- Can then use this output to do final mapping
- Again units are VERY important
- Can pick all limits available to regular mapping

Picking the Lab Auto Mapper

The screenshot shows the RELMA software interface. The title bar reads "RELMA" and the menu bar includes "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "Lab Auto Mapper" menu is open, showing "Lab Auto Mapper (LAM) ...". The main window displays a welcome message: "welcome to RELMA® the Regenstrief LOINC Mapping Assistant". Below this are two columns of red buttons with icons and text:

- Search LOINC
- Propose New LOINC Term
- Map Local Terms to LOINC
- Panels, Forms, & Surveys
- View/Add/Edit Local Terms
- Import Local Terms
- Report Local Terms
- Export Local Terms

At the bottom, there are two buttons: "User Preferences" and "Exit Program". The footer contains the following text:

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OINC Workshop OBR.12 Welcome to RELMA, NIH\casejt Version 5.4

Lab Auto Mapper Start Screen

Lab Auto Mapper (LAM)

This process scans the Local Term File using a recommendation engine to propose probable LOINC terms. Once completed, you may use the probable list to easily map your terms via the 'Choose From' screen to LOINC codes.

Warning - This function is optimized for processing of lab terms. Using this function on other types of codes may produce unexpected results. The statistical data used by this function is based on a US sample.

Process only unmapped local terms Maximum number of close LOINC term matches to return:

Prefer Common Lab Results:

Local Term Currently Processing

This may be a lengthy process, please be patient.

OBR-4 (Battery) Code: Description:

OBX-3 (Test) Code: Description:

Process Report Map Exit

LOINC OBR 12/6

Can restrict search to
common tests

Maximum number of terms
to return

Lab Auto Mapper Start Screen

Lab Auto Mapper (LAM)

This process scans the Local Term File using a recommendation engine to propose probable LOINC terms. Once completed, you may use the probable list to easily map your terms via the 'Choose From' screen to LOINC codes.

Warning - This function is optimized for processing of lab terms. Using this function on other types of codes may produce unexpected results. The statistical data used by this function is based on a US sample.

Process only unmapped local terms Maximum number of close LOINC term matches to return:

Prefer Common Lab Results:

Local Term Currently Processing

This may be a lengthy process, please be patient.

OBR-4 (Battery) Code:	<input type="text" value="952927"/>	Description:	<input type="text" value="Newborn Screen"/>
OBX-3 (Test) Code:	<input type="text" value="963225"/>	Description:	<input type="text" value="Homocystinuria"/>

Process Terms Report Map to Results Exit

Now processing term 160 of Press Esc to Abort. LOINC Workshop OBR 12/6

Local test code

Local terms used for mapping

Lab Auto Mapper - Mapping Screen

Choose from N Best LOINC Matches to Local Terms

Revised: Ignored Words:
panel

Part Detection Phrases:
{Probe:creatinine} -> (PART:{LP32035-5:Creatinine})

Comments: Lab Section:

LOINC:

Battery: **Basic Metabolic Panel** 665670 Local Term Details

Test: **Creatinine SerPI QN** 755363 U = mg/dL Map UnMap

Words Matched	LOINC Words	LOINC	Component	Property	Time	System	Scale	Method
4	3	2160-0	CREATININE	MCNC	PT	[SER]/[PLAS]	[QN]	
4	4	40248-7	CREATININE^BASELINE	MCNC	PT	[SER]/[PLAS]	[QN]	
4	5	16188-5	CREATININE^2H SPECIMEN	MCNC	PT	[SER]/[PLAS]	[QN]	
4	5	16189-3	CREATININE^4H SPECIMEN	MCNC	PT	[SER]/[PLAS]	[QN]	
4	5	44784-7	CREATININE	MCNC	STDY^MAX	[SER]/[PLAS]	[QN]	
4	5	11042-9	CREATININE^PRE DIALYSIS	MCNC	PT	[SER]/[PLAS]	[QN]	
4	5	11041-1	CREATININE^POST DIALYSIS	MCNC	PT	[SER]/[PLAS]	[QN]	
4	6	39955-0	CREATININE^PRE XXX CHALLENGE	MCNC	PT	[SER]/[PLAS]	[QN]	
4	7	39963-4	CREATININE^4H POST XXX CHALLENGE	MCNC	PT	[SER]/[PLAS]	[QN]	
4	7	39971-7	CREATININE^12H POST XXX CHALLENGE	MCNC	PT	[SER]/[PLAS]	[QN]	

Find Local code

Bat. Test Find First Previous Next Last LOINC
Lookup Exit

10 LOINCS | 4 of 190 | LOINC Workshop OBR 12/8

Exporting Mapped Terms

The screenshot displays the RELMA software interface. The title bar reads "RELMA" and includes standard window controls. The menu bar contains "File", "Tools", "HIPAA", "Lab Auto Mapper", and "Help". The "File" menu is open, listing various options. A callout box points to the option "Export Local Terms and Their LOINC Mappings to Delimited File...".

File

- Search LOINC Database
- Map local terms to LOINC
- Select Local Term File to Process...
- View/Add/Edit Local Terms...
- Report Local Terms and Their LOINC Mappings...
- Export Local Terms and Their LOINC Mappings to Delimited File...
- View Local Term File Summary
- Review Panels, Forms & Surveys...
- Import Local Terms from Delimited File...
- Import Local Terms from HL7 File...
- Propose a new LOINC...
- Review and Submit Proposed LOINCs...
- Set User Preferences...
- Set Preferred Language...
- Exit

Export Terms to Delimited File

Export Local Terms

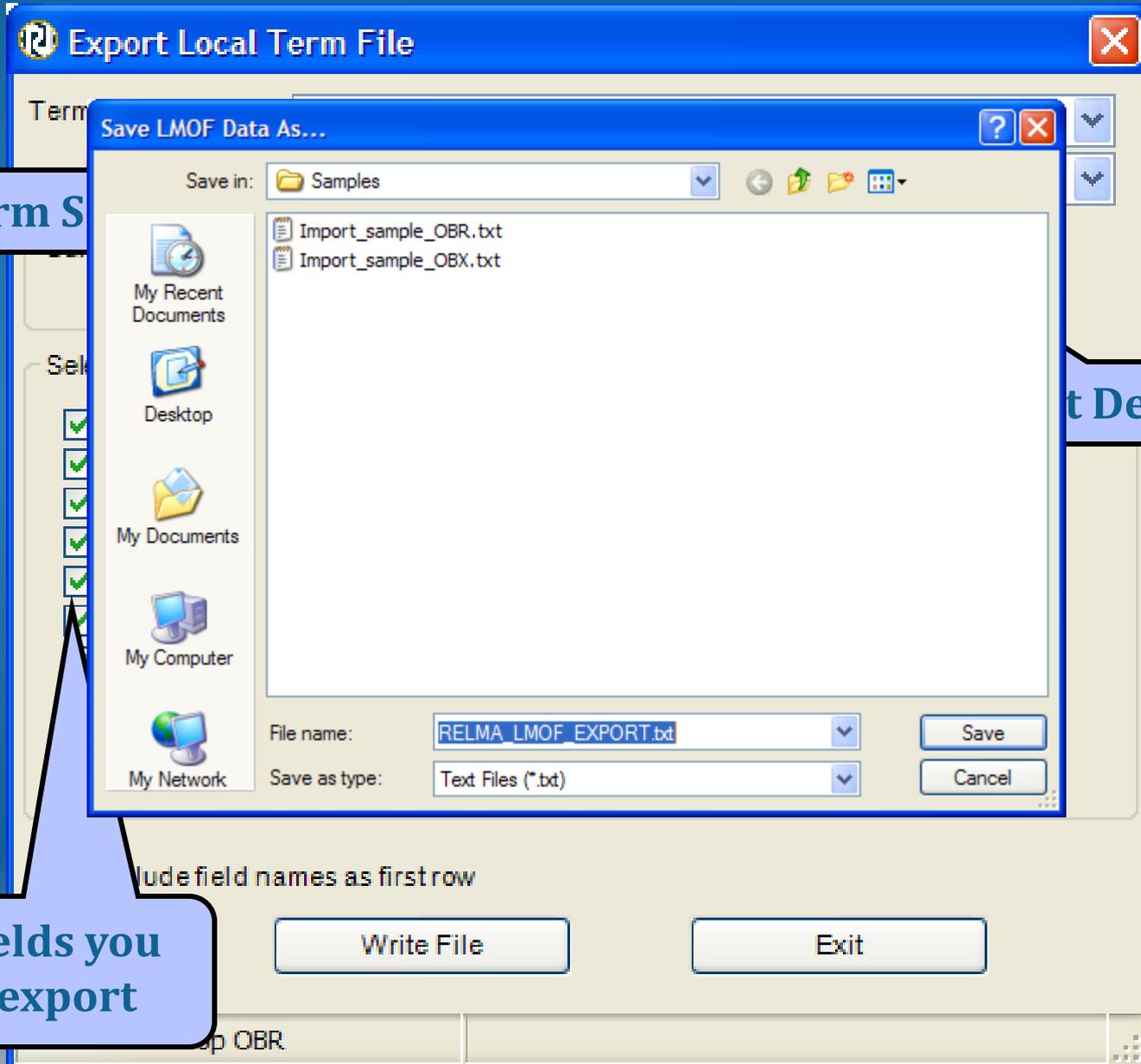
Review Panels, Forms, & Surveys

User Preferences **Exit Program**

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OINC Workshop OBR 12 | Welcome to RELMA, NIH\casejt | Version 5.4

Export Terms Dialog



Select Term S

t Delimiter

Check Fields you wish to export

Searching for LOINC Terms



welcome to
RELMA[®]
the Regenstrief LOINC Mapping Assi

Simplified Search
Only Tool

 Search LOINC

 Propose New LOINC Term

 Map Local Terms to LOINC

 Panels, Forms, & Surveys

 View/Add/Edit Local Terms

 Import Local Terms

 Report Local Terms

 Export Local Terms

 User Preferences  Exit Program

Search Window

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The interface includes a menu bar (File, Tools, HIPAA, Lab Auto Mapper, View, Help) and a search bar with a 'Search' button. Below the search bar are checkboxes for 'Common Orders Only' and 'Common Lab Results Only', and a dropdown for 'Auto Mapper Search' set to 'No'. A table with columns 'Row', 'LOINC', 'Component', 'Property', 'System', 'Scale', 'Method', and 'Class' is visible. Five callouts point to specific features: 'Enter Search' points to the search bar; 'Link Specifics' points to the search bar area; 'Restrict to "Common Results"' points to the 'Common Lab Results Only' checkbox; 'Restrict to "Common Orders"' points to the 'Common Orders Only' checkbox; and 'Use Automapper logic' points to the 'Auto Mapper Search' dropdown. A 'Help File' callout points to a question mark icon. The status bar at the bottom shows 'Entry #: 1 of 190' and 'Multi-axial search tree load time: 6.55s'.

Help File

Enter Search

Link Specifics

Restrict to "Common Results"

Restrict to "Common Orders"

Use Automapper logic

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Units of Measure Common Orders Only Common Lab Results Only Auto Mapper Search: No

Row	LOINC	Component	Property	System	Scale	Method	Class

Entry #: 1 of 190 Units Specimen Methodless Common Labs Battery Max Words: Multi-axial search tree load time: 6.55s

Search Window

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

hematocrit qn bld Search ?

Units of Measure: Common Orders Only Common Lab Results Only Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class	ExUnits	Rank	OtherC
1	20570-8	Hematocrit	VFr	Pt	Bld	Qn		HEM/BC	%	28	
2	4544-3	Hematocrit	VFr	Pt	Bld	Qn	Automated count	HEM/BC	L/L;%	14	
3	31100-1	Hematocrit	VFr	Pt	Bld	Qn	Impedance	HEM/BC	%	165	
4	4545-0	Hematocrit	VFr	Pt	Bld	Qn	Spun	HEM/BC	%	546	

“Common Tests” rank

Units Specimen Methodless Common Labs Battery Max Words: 4 records found: 0.02s

New RELMA Helpfile

RELMA Help

Hide Back Forward Print

Contents Search

- Purpose
- Installation
- Program Overview
- RELMA Terminology
- Running the RELMA P
- Copyright Screen
- Opening the LOINC an
- Basic Search Syntax
- Advanced Search Syri
- Import Local Terms intc
- Import Local Terms intc
- Pre-Mapping Activities
- Appendix A: LOINC Su

Basic Search Syntax

The search syntax is similar to that of Google. Basic searches will follow the rules outlined below.

- Searches are case-insensitive so an upper case search term will return the same results as a lower case search term.
- Search terms will be separated by the AND operator when no operator is specified.

The following special characters can also be used in a basic search.

Special Characters	Example	Definition
" "	influenza "virus A"	Phrase.
AND	morphine AND opiates	Both terms must exist somewhere in each search result.
OR	influenza OR parainfluenza	Either of the terms exist somewhere in each search result.
NOT	influenza NOT equine	Excludes records that contain the term after NOT. The NOT operator cannot be used with just one term.
?	allergy artemi?	Single character wildcard search. Cannot be used in phrases.
*	allergy artemi*	Multiple character wildcard search. Cannot be used in phrases.
FieldName:	Field1:opiates AND Field2:hair	Field that must contain the term. The field is only valid for the term that it directly precedes. See the Basic LOINC Field Names section and Basic Part Field Names section for a list of the basic field

Context Menu

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

hematocrit qn bld Search ?

Units of Measure: Common Orders Only Common Lab Results Only Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class	ExUnits	Rank	OtherC...
1	20570-8	Hematocrit	VFr	Pt	Bld	Qn		HEM/BC	%	28	
2	4544-3	Hematocrit	VFr	Pt	Bld	Qn	Automated count	HEM/BC	L/L;%	14	
3	31100-1	Hematocrit	VFr	Pt	Bld	Qn	Impedance	HEM/BC	%	165	
4	4545-0	Hematocrit	VFr	Pt	Bld	Qn	Spun				

Export
Configure Export
Sort Grid
Configure Grid
View Details - Simple
View Details - Comprehensive
View Details - Custom
View Panel Children
Truncate Text
Wrap Text
Print
Propose a new LOINC
Propose a LOINC based on selected term
Find Panels with all these LOINCs
Find Panels with any of these LOINCs

Right click to bring up context menu

Units Specimen Methodless Common Labs Battery Max Words: 4 records found: 0.02s

Mapping Local Terms



Mapping Local Terms

- Select your Working Set to Map
 - File>Select Local Term File to Process
- Select “Map Local Terms to LOINC” from Welcome Screen
- Select the subset of terms to work with:
 - All
 - Mapped
 - Unmapped
- Set your Search Limits
 - Set Search Limits Button

Standard Mapping Window Features

- Customizable grid
- View details of LOINC term
- Sort by column
 - Click column
 - Custom Sort
- Print or export results grid
- Spell check squiggly line to signify words not known to RELMA

Mapping Screen

The screenshot shows a software interface for mapping local terms. The window title is "Map Local Terms - LOINC Workshop OBR 12/8". The menu bar includes "File", "Tools", "HIPAA", "Lab Auto Mapper", "View", and "Help". The "Mapping" tab is active, showing options for "Search", "View All Working Set Terms", and "Hierarchy".

View or edit local term: A callout points to the "Local Term Details" button in the top right of the form area.

Enter local term number: A callout points to the "Search" button in the "Local Term File" section.

Quick select button list: A callout points to a vertical list of buttons on the right side of the grid, including "View Details", "Print Grid", "Map", "Same", "Export", "Configure Export", and "Configure Grid".

Custom Grid Configuration: A callout points to the "Configure Grid" button in the quick select list.

The main area contains a table with columns: "Row", "LOINC", "Component", "Scale", "Method", and "Class". The table is currently empty. Below the table are two input fields: "Truncated Text" and "Print Preview".

At the bottom of the window, there is a status bar with the following information: "Entry #: 1 of 190", "Units", "Specimen", "Methodless", "Common Labs", "Battery", "Max Words:", and "4 records found: 0.02s".

Configure Grid

The screenshot shows the 'Configure Result Grid' dialog box. It features a list of columns with checkboxes for selection and a width column. Below the list are 'Move Up' and 'Move Down' buttons. At the bottom, there are 'Reset column order', 'Reset column widths', 'OK', and 'Cancel' buttons. A preview table at the bottom shows the current grid configuration.

Column Name	Width
<input checked="" type="checkbox"/> Row	
<input type="checkbox"/> Score	66
<input checked="" type="checkbox"/> LOINC	72
<input checked="" type="checkbox"/> Component	192
<input checked="" type="checkbox"/> Property	72
<input checked="" type="checkbox"/> Timing	72
<input checked="" type="checkbox"/> System	96
<input checked="" type="checkbox"/> Scale	72
<input checked="" type="checkbox"/> Method	111
<input checked="" type="checkbox"/> UCUMunits	50
<input checked="" type="checkbox"/> Units	50
<input checked="" type="checkbox"/> Rank	50
<input checked="" type="checkbox"/> Class	72
<input checked="" type="checkbox"/> Longname	400
<input checked="" type="checkbox"/> Shortname	144

Output - move columns and modify widths:

NC	Component	Property	Timing	System	Score	Method
8-9	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	

Select elements to display

Reorder grid elements

Visually resize elements

Reset Default Configuration

Quick choice buttons

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words:

View:

#: of 190 Auto Mapper Search:

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	CL
1	2028-9	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn		CH
2	57922-7	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	Calculated	CH

Truncated Text

Entry #: 8 of 190 Units Specimen Methodless Common Labs Battery Max Words: 2 records found: 0s

View Local Term Details

[Multiple LOINCs/Parts]

2028-9 Carbon dioxide, total [Moles/volume] in Serum or Plasma

NAME

Fully-Specified Name:	Component	Property	Time Aspect	System	Scale	Method
	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	

STATUS

Active.

BASIC ATTRIBUTES

Class/Type:	CHEM/Lab
CDISC Lab Test:	Y
Order vs. Obs.:	Both
Percent of INPC Sample:	2.1866%

PARTS

Part Type	Part No.	Part Name
Component	LP15150-3	Carbon dioxide
System	LP7576-4	Ser/Plas [Serum or Plasma]

EXAMPLE UNITS

Unit	Source Type
mmol/L	EXAMPLE UCUM UNITS
mmol/L	REGENSTRIEF
mmol/L	eCHN

CURATED RANGE AND UNITS

Range	Units Type
21-30	mmol/L

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Simple Display ▼ Text Size - Medium All on 1 page Previous 2028-9 Next Print Close

Simple Display
Comprehensive Display
Custom Display

of the details. (multiple Items) display all on 1 page: 0.05 sec

Select level of detail to display

View Local Term Details

Select text size

Details for LOINC record # 2028-9

2028-9 Carbon dioxide, total [Moles/volume] in Serum or Plasma

NAME

Fully-Specified Name:	Component	Property	Time Aspect	System	Scale	Method
	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	

STATUS

Active.
Last updated 1998/03/11.

BASIC ATTRIBUTES

Class/Type: CHEM/Lab
CDISC Lab Test: Y
Order vs. Obs.: Both
Common Lab Results Rank: #7

HL7 ATTRIBUTES

HL7 v2 Data Type: NM/ST
HL7 v3 Data Type: PQ

ADDITIONAL ATTRIBUTES

Molar Mass: 44.01

MEMBER OF THESE PANELS

24320-4	Basic metabolic 1998 panel in Serum or Plasma
24321-2	Basic metabolic 2000 panel in Serum or Plasma
24323-8	Comprehensive metabolic 2000 panel in Serum or Plasma
24326-1	Electrolytes 1998 panel in Serum or Plasma
24362-6	Renal function 2000 panel in Serum or Plasma
34554-6	Electrolytes 1998 & Venous pH panel in Serum or Plasma - Blood ven

PARTS

Part Type	Part No.	Part Name
Component	LP15150-3	Carbon dioxide

Source: Regenstrief Institute

Description: CO2 Content is a measurement of all the CO2 in the blood. Most of this of the CO2 is dissolved in the blood, and in the form of soluble carbonic acid (H2CO3), unusual losses (diarrhea). Respiratory disease can significantly effect CO2 content, but on Arterial Blood Gas, Brookside Associates Medical Education Division.

Source: Wikipedia

Comprehensive Display Text Size - Smallest Separated pages Previous

Type Ctrl-F to search the text of the details.

Details for LOINC record # 2028-9

2028-9 Carbon dioxide, total [Moles/volume] in Serum or Plasma

NAME

Fully-Specified Name:	Component	Property	Time Aspect	System	Scale	Method
	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	

STATUS

Active.
Last updated 1998/03/11.

BASIC ATTRIBUTES

Class/Type: CHEM/Lab
CDISC Lab Test: Y
Order vs. Obs.: Both
Common Lab Results Rank: #7

HL7 ATTRIBUTES

HL7 v2 Data Type: NM/ST
HL7 v3 Data Type: PQ

ADDITIONAL ATTRIBUTES

Molar Mass: 44.01

MEMBER OF THESE PANELS

24320-4	Basic metabolic 1998 panel in Serum or Plasma
---------	---

Comprehensive Display Text Size - Largest Separated pages Previous 2028-9 Next Print Close

Type Ctrl-F to search the text of the details. | 2028-9 | 1 of 1 | LOINC HTML: 0.73 sec

Select detail display level

The screenshot shows the 'Map Local Terms' application window. The title bar reads 'Map Local Terms - LOINC Workshop OBR 12/8'. The menu bar includes 'File', 'Tools', 'HIPAA', 'Lab Auto Mapper', 'View', and 'Help'. The main interface has tabs for 'Search', 'Mapping', 'View All Working Set Terms', 'Hierarchy & Search Limits', and 'Part Search'. The 'Mapping' tab is active, showing a search for 'Chloride [Moles/volume] in Serum or Plasma' with LOINC code 2075-0 and OBX-3 code 755366. A search result for 'BASIC METABOLIC PANEL CHLORIDE SERPL QN' is displayed. A context menu is open over the search result, listing various actions. A blue callout box points to the 'View Details' options in the menu.

Select level of detail to display

- Export
- Configure Export
- Sort Grid
- Configure Grid
- View Details - Simple
- View Details - Comprehensive
- View Details - Custom
- View Panel Children
- Truncate Text
- Wrap Text
- Print
- Map
- Repeat Mapping
- Propose a new LOINC
- Propose a LOINC based on selected term
- Find Panels with all these LOINC's
- Find Panels with any of these LOINC's

Row	LOINC	Component	Property	Timing	System	Scale	M

Truncated Text

Entry #: 7 of 190

Units Specimen Methodless Common Labs Battery Max Words: and: 0.12s

Standard Mapping Screen

The screenshot shows the 'Map Local Terms' application window. The title bar reads 'Map Local Terms - LOINC Workshop OBR 12/8'. The menu bar includes 'File', 'Tools', 'HIPAA', 'Lab Auto Mapper', 'View', and 'Help'. The 'Mapping' tab is active, showing search criteria: 'Mapped to: 2075-0 Chloride [Moles/volume] in Serum or Plasma', 'OBR-4 Code: 665670', 'OBR-3 Code: 755366', 'Units: mmol/L', and 'Extra Search Words: BASIC METABOLIC PANEL CHLORIDE SERPL QN'. A 'No Matches' dialog box is displayed, stating: 'No records matched your search criteria. Note that the following search restrictions caused records to be eliminated from the search result set. No LOINC's were found to contain the keywords basic, metabolic, panel, chloride, serpl, and qn.' A cartoon character with a speech bubble says 'EEK! What'll I do?!'. A callout box points to the search input field with the text 'Begin a search (or hit "enter")'. The status bar at the bottom shows 'Entry #: 7 of 190' and '0 records found: 0.12s'.

Begin a search (or hit "enter")

EEK! What'll I do?!

No Matches
No records matched your search criteria. Note that the following search restrictions caused records to be eliminated from the search result set.
No LOINC's were found to contain the keywords basic, metabolic, panel, chloride, serpl, and qn.

Truncated Text Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 0 records found: 0.12s

Standard Mapping Screen

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: 2075-0 Name: Chloride [Moles/volume] in Serum or Plasma [Local Term Details](#)

OBR-4 Code: 665670 OBR-3 Code: 755366 Units: mmol/L Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

BASIC METABOLIC PANEL CHLORIDE SERPL QN [?](#)

Search Clear Inputs Clear Most Limits Common Lab results Lookup Term By #

#: 7 of 190 [Show Words](#) [Propose Term](#) Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class	ExUnits	Rank	Other
-----	-------	-----------	----------	--------	--------	-------	--------	-------	---------	------	-------

[View Details](#)
[Print Grid](#)
[Map](#)
[Same](#)
[Export](#)
[Configure Export](#)
[Configure Grid](#)

Truncated Text [Print Preview](#)

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 0 records found: 0.12s

Click to
show words
used in
search

Initial Mapping Results

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name: [] [] Local Term Details

OBR-4 Code: 665670 OBR-3 Code: 755366 Units: mmol/L Sample Values: [] Limit to Default Specimen: []

Extra Search Words: [] Accept or enter OBR name and/or OBX name

[] BASIC METABOLIC PANEL CHLORIDE SERPL QN [?]

Search Clear Inputs Clear Most Limits Common labresults Lookup Term By #

View: All [v]

#: 7 of 190 Hide Words Propose Term Auto Mapper Search: No [v]

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	basic	23	<input checked="" type="checkbox"/>	serpl	7455
<input checked="" type="checkbox"/>	metabolic	17	<input checked="" type="checkbox"/>	qn	34485
<input checked="" type="checkbox"/>	panel	784	<input type="checkbox"/>	[]	[]
<input checked="" type="checkbox"/>	chloride	124	<input type="checkbox"/>	[]	[]

Tree

RO	LOINC	Component	Property	Timing	System	Scale	Method

View Details Print Grid Map Same Export Configure Export Configure Grid

Truncated Text [] []

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: [] 0 records found: 0.58s

Use term checkbox

Number of LOINC terms containing keyword

Battery terms included in search

Revised Mapping Results

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: 665670 OBR-3 Code: 755366 Units: mmol/L Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

#: 7 of 190 Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	1 chloride	124	<input type="checkbox"/>	5 <input type="text"/>	
<input checked="" type="checkbox"/>	2 serpl	65	<input type="checkbox"/>	6 <input type="text"/>	
<input checked="" type="checkbox"/>	3 qn	485	<input type="checkbox"/>	7 <input type="text"/>	
<input type="checkbox"/>	4 <input type="text"/>		<input type="checkbox"/>	8 <input type="text"/>	

Match units selected by default

Number of matching records found

Row	LOINC	Component	Property	Timing	System	
1	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn
2	54369-4	Chloride	SCnc	Pt	Ser/Plas	Qn

Truncated Text

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 2 records found: 0.14s

Re-revised Mapping Results

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name:

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

665670 755366 mmol/L

Extra Search Words: Accept or enter OBR name and/or OBX name

CHLORIDE SERPL QN

#: 7 of 190 Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	1 chloride	124	<input type="checkbox"/>	5	
<input checked="" type="checkbox"/>	2 serpl	7455	<input type="checkbox"/>	6	
<input checked="" type="checkbox"/>	3 qn	34485	<input type="checkbox"/>	7	
<input type="checkbox"/>	4		<input type="checkbox"/>	8	

Match units unselected

Number of matching records found

Row	LOINC	Comp	Property	Timing	System	
1	13006-2	1,4-D		Pt	Ser/Plas	Qn
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn
3	54369-4	Chloride^p	SCnc	Pt	Ser/Plas	Qn
4	9505-9	Chlorobenz	MCnc	Pt	Ser/Plas	Qn
5	54937-8	Chlorofom	MCnc	Pt	Ser/Plas	Qn
6	39357-9	Cholinest	CFr	Pt	Ser/Plas	Qn
7	12999-9	Epichloro	MCnc	Pt	Ser/Plas	Qn
8	17661-0	Succinyl	MCnc	Pt	Ser/Plas	On

Truncated Text

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.08s

Standard Mapping Screen

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search **Mapping** View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Next

Previous

First

Last

View: All

#: 7 of 190

Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

CANINE DISTEMPER VIRUS IF

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Hide Words Propose Term Auto Mapper Search: No

Local Term Details

Use	Local Words	# Hits
<input type="checkbox"/> 1	<input type="text"/>	
<input type="checkbox"/> 2	<input type="text"/>	
<input type="checkbox"/> 3	<input type="text"/>	
<input type="checkbox"/> 4	<input type="text"/>	

Use	Local Words	# Hits
<input type="checkbox"/> 5	<input type="text"/>	
<input type="checkbox"/> 6	<input type="text"/>	
<input type="checkbox"/> 7	<input type="text"/>	
<input type="checkbox"/> 8	<input type="text"/>	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
Truncated Text							

Print Preview

View Details

Print Grid

Map

Same

Export

Configure Export

Configure Grid

Entry #: 7 of 190
Units Specimen Methodless Common Labs Battery Max Words:
8 records found: 0.08s

Ad hoc term search

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name: [Local Term Details](#)

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

CANINE DISTEMPOR VIRUS IF [?](#)

View: All

#: of 190 Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	<input type="text" value="canine"/>	76	<input type="checkbox"/> 5	<input type="text"/>	
<input checked="" type="checkbox"/> 2	<input type="text" value="distemper"/>	15	<input type="checkbox"/> 6	<input type="text"/>	
<input checked="" type="checkbox"/> 3	<input type="text" value="virus"/>	4609	<input type="checkbox"/> 7	<input type="text"/>	
<input checked="" type="checkbox"/> 4	<input type="text" value="if"/>	1608	<input type="checkbox"/> 8	<input type="text"/>	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	23689-3	Canine distemper virus Ab	ACnc	Pt	Ser	Ord	IF
2	26903-5	Canine distemper virus Ab.IgG	Titr	Pt	CSF	Qn	IF
3	23691-9	Canine distemper virus Ab.IgG	Titr	Pt	Ser	Qn	IF
4	26890-4	Canine distemper virus Ab.IgM	Titr	Pt	CSF	Qn	IF
5	23693-5	Canine distemper virus Ab.IgM	Titr	Pt	Ser	Qn	IF
6	20742-3	Canine distempervirus Ag	ACnc	Pt	Cnjt	Ord	IF
7	23695-0	Canine distempervirus Ag	ACnc	Pt	Tiss	Ord	IF

Truncated Text

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 7 records found: 0.09s

Standard Mapping Screen

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

665670 755366 mmo/L

Extra Search Words: Accept or enter OBR name and/or OBX name

chloride serpl qn

View:

#: 7 of 190 Auto Mapper Search:

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method

Truncated Text

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 7 records found: 0.09s

Tabbed Access to Functions

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name: [] [] Local Term Details

Next Previous First Last

OBR-4 Code: 665670 OBR-3 Code: 755366 Units: mmo/L Sample Values: Limit to Default Specimen: []

Extra Search Words: []

View: All

#: 7 of 190

Search [] Clear Most Limits Common lab results Lookup Term By # Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
[Truncated Text]							

View Details Print Grid Map Same Export Configure Export Configure Grid

Truncated Text Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 7 records found: 0.09s

Navigate to Functions from Mapping Page

Switch between Grid and Tree Views

Tree View

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

665670 755366 mmol/L

Extra Search Words: Accept or enter OBR name and/or OBX name

CHLORIDE SERPL QN

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

View: All

#: 7 of 190 Show Words Propose Term

Auto Mapper Search: No

Grid Tree

Row	Category or...	Component	Prope...	Timing	System	Scale	Method	ExUCUM...	ExUnits	Rank	DocSedi...	Code
18168	Chemistry											LP31...
21510	Enzymes (see also Inborn errors metabolism lysosomal)											LP31...
22017	Cholinesterase											LP14...
22018	Cholinesterase.chloride Inhibited Bld-Ser-Plas											LP5181
22019	Choline... Cholinesterase.dlori...	CFr	Pt	Ser/Plas	Qn			%	%			39357-9
30325	Electrolytes - single valence											LP19...
30389	Chloride											LP15...
30392	Chloride Bld-Ser-Plas											LP4643
30394	Chlorid... Chloride	SCnc	Pt	Ser/Plas	Qn			mmol/L	mmol/L	8		2075-0
30395	Chlorid... Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn			mmol/L	mmol/L			54369-4
34592	Drug/Tox											LP3138
35335	Halogenated organic molecules											LP1811
35388	Chlorobenzene											LP17...

Truncated Text Expand Branch Collapse Branch Hide LOINCS

View Details Print Grid Map Same Export Configure Export Configure Grid

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.01s

Tree View

- Results displayed hierarchically
 - Defined by the multi-axial hierarchy in search restrictions (covered later)
- Map to a term in tree by clicking Map button or double clicking term
 - Only rows that have LOINC Codes

Tree View

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local

Sample Values: Limit to Default

Chloride SERPL QN

View: Inputs Clear Most Limits Common

Propose Term

Search: No

Row	Category or...	Prope...	Timing	System	Scale	Method	ExUnits	Rank	DocSedi...	Code
18168	Chemistry									31...
21510	Enzymes (see also Inb... metabolism lysosomal)									LP31...
22017	Cholinesterase									LP14...
22018	Cholinesterase.chloride... Bld-Ser-Plas									LP5181
22019	Choline... Cholinesterased...	Er	Pt	Ser/Plas	Qn	%	%			39357-9
30325	Electrolytes - single valence									LP19...
30389	Chloride									LP15...
30392	Chloride Bld-Ser-Plas									LP4643
30394	Chlorid... Chloride	SCnc		Ser/Plas	Qn	mmol/L	mmol/L	8		2075-0
30395	Chlorid... Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn	mmol/L	mmol/L			54369-4
34592	Drug/Tox									LP3138
35335	Halogenated organic molecules									LP1811
35388	Chlorobenzene									LP17...

Truncated Text Expand Branch Collapse Branch Hide LOINCS

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.01s

Can map to terms with LOINC Codes

Tree Navigation Buttons

Cannot map to terms representing LOINC parts

Assigning a LOINC Map

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

665670 755366 mmol/L

Extra Search Words: Accept or enter OBR name and/or OBX name

CHLORIDE SERPL QN

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

View: All

#: 7 of 190 Show Words Propose Term Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn	
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn	
3	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn	
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn	
5	54937-8	Chloroform	MCnc	Pt	Ser/Plas	Qn	
6	39357-9	Cholinesterase	CFr	Pt	Ser/Plas	Qn	
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn	
8	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn	

View Details Print Grid Map Same Export Configure Export Configure Grid

Tru Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.01s

Highlight correct term

Click "Map" Button (or doubleclick)

Adding Mapping Comments

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name: [] [] Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen: []

665670 755366 mmol/l

View: All [v]

#: 7 of 190

Clear Most Limits Common lab results Lookup Term By #

Auto Mapper Search: No [v]

Mapping Comments

Please enter mapping comment(s) if desired:

OK Cancel

Check with Frank in Chemistry

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn	
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn	
3	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn	
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn	
5	54937-8	Chlorofom	MCnc	Pt	Ser/Plas	Qn	
6	39357-9	Cholinesterase chloride	MCnc	Pt	Ser/Plas	Qn	
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn	
8	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn	

View Details Print Grid Map Same Export Configure Export Configure Grid

Truncated Text Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.01s

If comments option is selected, prompt appears

Assigning a LOINC Map

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name: 2075-0 Chloride [Moles/volume] in Serum or Plasma Local Term Details

OBR-4 Code: 665670 OBX-3 Code: 755366 Units: mmol/L Sample Values: Limit to Default Specimen:

Extra Search Words: CHLORIDE SERPL QN ?

View: All

#: 7 of 190

Show Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Auto Mapper Search: No

Propose Term

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn	
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn	
3	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn	
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn	
5	54937-8	Chloroform	MCnc	Pt	Ser/Plas	Qn	
6	39357-9	Cholinesterase,chlorige...	CFr	Pt	Ser/Plas	Qn	
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn	
8	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn	

View Details Print Grid Map Same Export Configure Export Configure Grid

Truncated Text Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: Map term: 3.33s



View LOINC Term Details

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name: 2075-0 Chloride [Moles/volume] in Serum or Plasma

OBR-4 Code: 665670 OBX-3 Code: 755366 Units: mmol/L Sample Values: Limit: []

Extra Search Words: CHLORIDE SERPL QN

Search Clear Inputs Clear Most Limits Common lab results Looku #

Show Words Propose Term

View: All # 7 of 190

Grid Tree

Row	LOINC	Component	Property	Timing	System
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/PL
2	2075-0	Chloride	SCnc	Pt	Ser/PL
3	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/PL
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/PL
5	54937-8	Chloroform	MCnc	Pt	Ser/PL
6	39357-9	Cholinesterase,chlorige...	CFr	Pt	Ser/PL
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/PL
8	17661-0	Succinylcholine	MCnc	Pt	Ser/PL

Export
Configure Export
Sort Grid
Configure Grid
View Details
View Details - Simple
View Details - Comprehensive
View Details - Custom
View Panel Children
Truncate Text
Wrap Text
Print
Map
Repeat Mapping
Propose a new LOINC
Propose a LOINC based on selected term
Find Panels with all these LOINC's
Find Panels with any of these LOINC's

View Details
Print Grid
Map
Same
Export
Configure Export
Configure Grid

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: Map term: 3.33s

View details for a specific LOINC Term

Right clicking on a LOINC term brings up a Task Menu

LOINC Term Details

Details for LOINC record # 2075-0

2075-0 Chloride [Moles/volume] in Serum or Plasma

NAME

Fully-Specified Name:	Component	Property	Time	Method
	Chloride	SCnc	Pt	

STATUS

Active.

BASIC ATTRIBUTES

Class/Type:	CHEM/Lab
CDISC Lab Test:	Y
Order vs. Obs.:	Both
Percent of INPC Sample:	2.1479%

PARTS

Pa	
Co	
Sy	

EXAMPLE UNITS

Unit	
mmol/L	
mmol/L	
mmol/L	

CURATED RANGES AND UNITS

Range	Units
98-106	mmol/L

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Simple Display | Text Size - Medium | Separated pages | Previous | 2075-0 | Next | Print | Close

Type Ctrl-F to search the text of the details. | 2075-0 | 1 of 1 | LOINC HTML: 0.52 sec

Can scroll down a single formatted page

Change to expanded details view

Change text size

Can scroll through returned subset of terms

Configure Export Options

The screenshot shows the 'Custom Export' dialog box with a table of columns and a list of output options. A red bracket groups the output options, and a blue callout points to the 'Include column headers' checkbox. Another blue callout points to the 'Export and Save Configuration' button, and a third points to the 'Selected Rows' radio button.

#	Column Name
<input checked="" type="checkbox"/>	1 Row
<input checked="" type="checkbox"/>	2 LOINC #
<input checked="" type="checkbox"/>	3 Component
<input checked="" type="checkbox"/>	4 Property
<input checked="" type="checkbox"/>	5 Time Aspect
<input checked="" type="checkbox"/>	6 System
<input type="checkbox"/>	7 Scale
<input type="checkbox"/>	8 Method
<input type="checkbox"/>	9 Ex. UCUM
<input type="checkbox"/>	10 Ex. Unit
<input type="checkbox"/>	11 %99.+ Common Tests
<input type="checkbox"/>	12 Ex. UCUM
<input type="checkbox"/>	13 Ex. Unit
<input type="checkbox"/>	14 Ex. UCUM
<input type="checkbox"/>	15 Ex. Unit
<input type="checkbox"/>	16 Ex. UCUM
<input type="checkbox"/>	17 Doc./S...

Output Options

- Copy to Clipboard
- Save to File
- Export to Excel
- Send as Email
- Print

Include column headers

Include column headers

Save Configuration and/or Export

Rows to Export
 Selected Rows All Rows

Select All Clear All Export and Save Configuration Save Configuration Cancel

Excel Export Format

The screenshot displays the Microsoft Excel interface with a table of data. The table has the following columns: Row, LOINC #, Component, Property, Time Aspect, System, Scale, and Method. The data is as follows:

Row	LOINC #	Component	Property	Time Aspect	System	Scale	Method
1	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn	
2	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn	
3	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn	
4	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn	
5	39357-9	Cholinesterase.chloride inhibited/Cholinesterase	CFr	Pt	Ser/Plas	Qn	
6	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn	
7	54937-8	Chloroform	MCnc	Pt	Ser/Plas	Qn	
8	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn	
9							
10							
11							
12							

More on Searching Mapping Screen



Basic Search Syntax

Special Character(s)	Example	Definition
“ ”	Influenza “virus A”	Linked terms must appear together
AND	Morphine AND Opiates	Both terms must appear in the search result term
OR	Influenza OR Parainfluenza	Either or both terms must appear in the search result term
NOT	Influenza NOT equine	Excludes terms with the word following the NOT. Cannot be used alone.
?	Gluc?se (glucose,glucase)	Substitutes a single character in the string. Cannot be used as the first character; cannot be used in “phrases”
*	Gluc*se (glucose, glucuronidase, etc.)	Substitute multiple characters in the string. Cannot be used as the first character; cannot be used in “phrases”

Search Qualifiers

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Gluc*ase Search

Units of Measure: Common Orders Only Common Lab Results Only Auto Mapper Search: No

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	21064-1	Acid alpha glucosidase	CCnc	Pt	Amnio fld	Qn		CHEM
2	55827-0	Acid alpha glucosidase	CCnc	Pt	Bld.dot	Qn		CHEM
3	24050-7	Acid alpha glucosidase	CCnt	Pt	Fibroblasts	Qn		CHEM
4	1814-3	Acid alpha glucosidase	CCnc	Pt	Semen			CHEM
5	38475-0	Acid alpha glucosidase	CCnc	Pt	Ser/Plas			CHEM
6	1815-0	Acid alpha glucosidase	CCnt	Pt	Tiss			CHEM
7	30315-6	Acid alpha glucosidase	CCnt	Pt	Tsmi			CHEM
8	1816-8	Acid alpha glucosidase	CCnc	Pt	WBC			CHEM
9	24051-5	Acid alpha glucosidase	CCnc	Pt				CHEM
10	44037-0	Acid beta glucosidase	ACnc	Pt				CHEM
11	55917-9	Acid beta glucosidase	CCnc	Pt				CHEM
12	25829-3	Acid beta glucosidase	CCnt	Pt	Fibroblasts	Qn		CHEM
13	38477-6	Acid beta glucosidase				Qn		CHEM
14	18195-8	Acid beta glucosidase				Ord		CHEM
15	1943-0	Acid beta glucosidase				Qn		CHEM
16	32540-7	Acid beta glucosidase				Qn		CHEM
17	33661-0	Acid beta glucosidase				Qn		CHEM
18	35303-7	Acid beta glucosidase				Qn		CHEM
19	24091-1	Alpha-N-acetylglucos				Qn		CHEM
20	1837-4	Alpha-N-acetylglucosaminidase	CCnc	Pt		Qn		CHEM
21	1838-2	Alpha-N-acetylglucosaminidase	CCnt	Pt	Tiss	Qn		CHEM

Detailed help available

Includes Glucuronidase, Glucosidase, Glucosylceramidase, etc.

77 records found: 0.14s

Combining Search Terms

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Gluc*ase -Glucosidase Search

Units of Measure: Common Units Only Common Lab Results Only Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Timing	System	Scale	Method	Class
1	24091-1	Alpha-N-acetylglucosaminidase	CCnc	Fibroblasts	Qn		CHEM
2	1837-4	Alpha-N-acetylglucosaminidase	CCnc	Ser/Plas	Qn		CHEM
3	1838-2	Alpha-N-acetylglucosaminidase					CHEM
4	2644-3	Alpha-N-acetylglucosaminidase					CHEM
5	24092-9	Alpha-N-acetylglucosaminidase					CHEM
6	63429-5	Bacterial beta-glucuronidase (uidA) gene	ACnc	XXX	Ord	Probe.amp.tar	MICRO
7	11209-4	Beta glucuronidase	CCnc	CSF	Qn		CHEM
8	24064-8	Beta glucuronidase	CCnt	Fibroblasts	Qn		CHEM
9	13962-6	Beta glucuronidase	CCnc	Ser/Plas	Qn		CHEM
10	14284-4	Beta glucuronidase	SCnc				
11	1944-8	Beta glucuronidase	CCnt				
12	1945-5	Beta glucuronidase	CCnc				
13	24065-5	Beta glucuronidase	CCnt	WBC	Qn		CHEM
14	34191-7	Beta glucuronidase	CCnc	XXX	Qn		CHEM
15	49862-6	G6PC genemutation analysis	Prid	Bld/Tiss	Nar		MOLPA...
16	53732-4	GCK gene mutation analysis	Prid	Bld/Tiss	Nar		MOLPA...
17	32779-1	Glucose-6-Phosphatase	CCnc	RBC	Qn		CHEM
18	2354-9	Glucose-6-Phosphatase	CCnc	Ser	Qn		CHEM
19	2355-6	Glucose-6-Phosphatase	CCnt	Tiss	Qn		CHEM
20	2361-4	Glucosylceramidase	CCnt	Tiss	Qn		CHEM
21	35473-8	HEXA gene 7.6kb deletion	Arb	Bld/Tiss	Ord	Molgen	MOLPA...

Exclude Glucosidase

Reduced number of terms

Units Specimen Methodless Common Labs Battery Max Words: 36 records found: 0.04s

Advanced Search Syntax

based on Google-like search syntax

Parameter	Description
+	Term must be included in search
-	Term must be excluded from the search
()	Group terms for subquery (i.e. A OR B; A AND B)
Fieldname:	Limit term search to the associated field (e.g. Component: glucose)
Fieldname:()	Group multiple terms in a single field
~	Fuzzy search (e.g. Hemophilus~)
" "~	Proximity search for multiple terms (e.g. "function panel"~1)
{}, []	Upper and lower bounds; {} exclusive, [] inclusive
\	Special character escape

Applying advanced search

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

hemofhilus~ Ag -QN System:CSF Search ?

Units of Measure: Common Orders Only Common Lab Results Onl Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	16926-8	Haemophilus influenzae A Ag	ACnc	Pt	CSF	Ord		MICF
2	6610-0	Haemophilus influenzae A Ag	ACnc	Pt	CSF	Ord	IF	MICF
3	32139-8	Haemophilus influenzae Ag	ACnc	Pt	CSF	Ord		MICF
4	24010-1	Haemophilus influenzae B Ag	ACnc	Pt	CSF	Ord		MICF
5	6611-8	Haemophilus influenzae B Ag	ACnc	Pt	CSF	Ord	IF	MICF
6	14321-4	Haemophilus influenzae B Ag	ACnc	Pt	CSF	Ord	LA	MICF
7	31835-2	Haemophilus influenzae C Ag	ACnc	Pt	CSF	Ord		MICF
8	6612-6	Haemophilus influenzae C Ag	ACnc	Pt	CSF	Ord	IF	MICF
9	31837-8	Haemophilus influenzae D Ag	ACnc	Pt	CSF	Ord		MICF
10	6613-4	Haemophilus influenzae D Ag	ACnc	Pt	CSF	Ord	IF	MICF
11	31839-4	Haemophilus influenzae E Ag	ACnc	Pt	CSF	Ord		MICF
12	6614-2	Haemophilus influenzae E Ag	ACnc	Pt	CSF	Ord	IF	MICF
13	31841-0	Haemophilus influenzae F Ag	ACnc	Pt	CSF	Ord		MICF
14	6615-9	Haemophilus influenzae F Ag	ACnc	Pt	CSF	Ord	IF	MICF

Units Specimen Methodless Common Labs Battery Max Words: 14 records found: 0.72s

Limiting Searches



Setting Search Limits

- Narrows search to specific subset of LOINC terms
- Reduces number of candidate terms
- Limits can be applied to all components
- Component attribute can be further restricted by number of words
- Tree structure allows for hierarchical constraints

General Search Constraints

- Controls features including:
 - Limit to LOINC terms compatible with submitted units
 - Forced match with any specimen contained in name
 - Method-less terms only
 - Limit to components/analytes with N or fewer words in their name
 - Pop up search timing statistics after each search
- Use carefully or search may not be successful
(Note parallel control switches at bottom of screen)

Setting Search Limits

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms **Hierarchy & Search Limits** Part Search

Local Term File

Mapped to: Name: 2075-0 Chloride [Moles/Volume] in Serum or Plasma Local Term Details

OBR-4 Code: OBR-3 Code: 665670 755366 Units: Sample Values: Limit to Default Specimen: mmo/L

Extra Search Words: Accept or enter OBR name and/or OBX name

CHLORIDE SERPL QN

Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Propose Term Auto Mapper Search: No

View: All

#: 7 of 190

Show Words

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn	
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn	
3	54369-4	Chloride^post dialy	SCnc	Pt	Ser/Plas	Qn	
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn	
5	54937-8	Chlorofom	MCnc	Pt	Ser/Plas	Qn	
6	39357-9	Cholinesterase.d	CFr	Pt	Ser/Plas	Qn	
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn	
8	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn	

View Details Print Grid Map Same Export Configure Export Configure Grid

Print Preview

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.05s

Click Hierarchy & Search Limits Tab

Setting search limits

Can also set most of them by toggling buttons at the bottom of the screen

The screenshot displays a software interface with a table of LOINC codes and their properties. The table has columns for Row, LOINC #, Component, Property, Time Aspect, System, Scale, Method, Ex...., and Ex. Unit. The data is as follows:

Row	LOINC #	Component	Property	Time Aspect	System	Scale	Method	Ex....	Ex. Unit
1	13006-2	1,4-Dichlorobenzene	MCnc	Pt	Ser/Plas	Qn			
2	2075-0	Chloride	SCnc	Pt	Ser/Plas	Qn		mmol/L	mmol/L
3	54369-4	Chloride^post dialysis	SCnc	Pt	Ser/Plas	Qn		mmol/L	mmol/L
4	9505-9	Chlorobenzene	MCnc	Pt	Ser/Plas	Qn			
5	54937-8	Chlorofom	MCnc	Pt	Ser/Plas	Qn		ug/L	ug/L
6	39357-9	Cholinesterase.chloride...	CFr	Pt	Ser/Plas	Qn			
7	12999-9	Epichlorohydrin	MCnc	Pt	Ser/Plas	Qn			
8	17661-0	Succinylcholine	MCnc	Pt	Ser/Plas	Qn			

At the bottom of the screen, there is a row of buttons: Units, Specimen, Methodless, Common 99%, Battery, and Max Words:. A blue callout box labeled "Toggle Buttons" points to this row of buttons. The status bar at the bottom right shows "8 records found: 0.03s".

Search Constraints

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Full Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Favor Prop Favor None

Order/Obs Ignore

Pharma MS Exclude MS* Terms

Local Unit Constraint: Default is "ON"

Include These LOINC's:

- Trial
- Discouraged
- Deprecated

Max # of

Predefined, general search constraints

Type toggle boxes

Lab Test Resolutions

- None
- Lab Tests only
- CDISC Lab Tests only
- Common Lab Tests only

Methodless Terms Only

If no methodless version exists, then return the method specific terms

Units Specimen Methodless Common Labs Battery Max Words:

8 records found: 0.05s

Terms Consistent with Units

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

665670 755367 **mmol/L**

Extra Search Words:

View: All

#: 8 of 190 Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	2028-9	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn		CH
2	57922-7	Carbon dioxide	SCnc	Pt	Ser/Plas	Qn	Calculated	CH

New! - Status saved between editing sessions

Only terms consistent with mmol/L appear

Truncated Text

Entry #: 8 of 190 Units Specimen Methodless Common Labs Battery Max Words: 2 records found: 0s

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. Under the 'Restrict Search' section, the 'Terms consistent with specimen' checkbox is checked. A callout box labeled 'Specimen constraints' points to this checkbox. Other options include 'Terms consistent with local units', 'Exclude terms with system 'left' or 'right'', and 'Common Orders only'. The 'Include These LOINC's' section has 'Trial', 'Discouraged', and 'Deprecated' checkboxes. The 'Lab Test Restrictions' section has radio buttons for 'None', 'Lab Tests Only', 'CDISC Lab Tests Only', and 'Common Lab Results Only'. The 'Favor Prop' dropdown is set to 'Favor None', 'Order/Obs' is 'Ignore', and 'Pharma MS' is 'Exclude MS* Terms'. The status bar at the bottom shows '8 records found: 0.05s'.

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

Terms consistent with local units

Terms consistent with specimen

Exclude terms with system 'left' or 'right'

Common Orders only

Favor Prop Favor None

Order/Obs Ignore

Pharma MS Exclude MS* Terms

Include These LOINC's:

Trial Discouraged Deprecated

Max # of common words

Methodless

If no method return the

Lab Test Restrictions

None

Lab Tests Only

CDISC Lab Tests Only

Common Lab Results Only

Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.05s

Terms Consistent with Specimen

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name: 2075-0 Chloride [Moles/volume] in Serum or Plasma Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen: 665670 755366 mmol/L CSF

Extra Search Words: Accept or enter OBR name and/or OBX name ASPERGILLUS FLAVUS

View: All

#: 7 of 190

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Hide Words Propose Term Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	1 aspergillus	167	<input type="checkbox"/>	5	
<input checked="" type="checkbox"/>	2 flavus	17	<input type="checkbox"/>		
<input type="checkbox"/>	3		<input type="checkbox"/>		
<input type="checkbox"/>	4		<input type="checkbox"/>		

Enter default Specimen

Row	LOINC	Component	Property	Timing	System	Scale	Measurement
1	51529-6	(Aspergillus fumigatus+Aspergillus...	ACnc	Pt	Ser	Ord	Mu
2	31229-8	Aspergillus flavus Ab	ACnc	Pt	Body fld	Ord	
3	27377-1	Aspergillus flavus Ab	ACnc	Pt	Body fld	Ord	Im
4	16415-2	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord	
5	21084-9	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord	Im
6	13193-8	Aspergillus flavus Ab	ACnc	Pt	CSF	Qn	
7	9490-4	Aspergillus flavus Ab	ACnc	Pt	Ser	Ord	
8	23820-4	Aspergillus flavus Ab	ACnc	Pt	Ser	Ord	Im

View Details Print Grid Map Same Export Configure Export

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 17 records found: 0.09s

Terms Consistent with Specimen

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name: 2075-0 Chloride [Moles/volume] in Serum or Plasma Local Term Details

OBR-4 Code: 665670 OBR-3 Code: 755366 Units: mmol/L Sample Values: Limit to Default Specimen: CSF

Extra Search Words: Accept or enter OBR name and/or OBX name ASPERGILLUS FLAVUS

View: All

#: 7 of 190

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Hide Words Propose Term Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	1 aspergillus	167	<input type="checkbox"/>	5	
<input checked="" type="checkbox"/>	2 flavus	17	<input type="checkbox"/>	6	
<input type="checkbox"/>	3		<input type="checkbox"/>	7	
<input type="checkbox"/>	4		<input type="checkbox"/>	8	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method
1	16415-2	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord	
2	21084-9	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord	Immuni
3	13193-8	Aspergillus flavus Ab	ACnc	Pt	CSF	Qn	

View Details Print Grid Map Same Export Configure Export

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 3 records found: 0.04s

Only CSF Terms are returned

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. The 'Restrict Search' section contains several checkboxes and dropdown menus. A callout box with a blue background and black border points to the 'Exclude terms with system 'left' or 'right'' checkbox, containing the text 'New! - Exclude laterality'.

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions

- None
- Lab Tests Only
- CDISC Lab Tests Only
- Common Lab Results Only

Other Settings:

- Favor Prop: Favor Mass
- Order/Obs: Ignore
- Pharma MS: Exclude MS* Terms
- Max # of comp...
- Methodless Te...
- If no methodless version exists, then return the method specific terms

Callout: New! - Exclude laterality

Footer: Units Specimen Methodless Common Labs Battery Max Words: 105 records found: 0.25s

Exclude laterality

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

EYE ACCOMODATION

View:

#: of 190 Auto Mapper Search:

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class	ExUnits	Rank	Ot
1	28763-1	Accommodation...	Len	Pt	Eye	Qn		EYE.R...	cm		
2	28751-6	Accommodation...	Len	Pt	Eye	Qn	Hand...	EYE.R...	cm		
3	28757-3	Accommodation...	Len	Pt	Eye	Qn	Minus glass	EYE.R...	cm		
4	29131-0	Accommodation...	Len	Pt	Eye	Qn		EYE.R...	cm		
5	28752-4	Accommodation...	Len	Pt	Eye	Qn	Hand...	EYE.R...	cm		
6	28758-1	Accommodation...	Len	Pt	Eye	Qn	Minus glass	EYE.R...	cm		
7	29132-8	Accommodation...	Len	Pt	Eye	Qn		EYE.R...	cm		
8	28753-2	Accommodation...	Len	Pt	Eye	Qn	Hand...	EYE.R...	cm		
9	28759-9	Accommodation...	Len	Pt	Eye	Qn	Minus glass	EYE.R...	cm		
10	28762-3	Accommodation width.relative	InvLen	Pt	Eye	Qn		EYE.R...	Diopter		
11	28750-8	Accommodation width.relative	InvLen	Pt	Eye	Qn	Hand...	EYE.R...	Diopter		
12	28756-5	Accommodation width.relative	InvLen	Pt	Eye	Qn	Minus glass	EYE.R...	Diopter		

Truncated Text

Entry #: 1 of 190 Units Specimen Methodless Common Labs Battery Max Words: 12 records found: 0s

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. Under the 'Restrict Search' section, the 'Common Orders only' checkbox is checked. A callout box with a blue background and black border points to this checkbox, containing the text 'New! - Restrict to common orders'. Other search constraints include 'Terms consistent with local units', 'Terms consistent with specimen', 'Exclude terms with system 'left' or 'right'', 'Favor Prop' (set to 'Favor Mass'), 'Order/Obs' (set to 'Ignore'), and 'Pharma MS' (set to 'Exclude MS* Terms'). The 'Lab Test Restrictions' section has 'None' selected. The bottom status bar shows '12 records found: 0s'.

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms **Hierarchy & Search Limits** Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

Terms consistent with local units

Terms consistent with specimen

Exclude terms with system 'left' or 'right'

Common Orders only

Favor Prop Favor Mass

Order/Obs Ignore

Pharma MS Exclude MS* Terms

Include These LOINC:

Trial Discouraged Deprecated

Lab Test Restrictions

None

Lab Tests Only

CDISC Lab Tests Only

Common Lab Results Only

Max # of ... words

Methodless Te

If no metho
return the n

New! - Restrict to common orders

Units Specimen Methodless Common Labs Battery Max Words: 12 records found: 0s

Restriction to common orders

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

GLUCOSE

View: All

#: of 190 Auto Mapper Search: No

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class	ExUnits	Rank	Otl
1	2339-0	Glucose	MCnc	Pt	Bld	Qn		CHEM	mg/dL	13	
2	32016-8	Glucose	MCnc	Pt	BldC	Qn		CHEM	mg/dL		
3	41653-7	Glucose	MCnc	Pt	BldC	Qn	Glucometer	CHEM	mg/dL		
4	2344-0	Glucose	MCnc	Pt	Body fld	Qn		CHEM	mg/dL	795	
5	2342-4	Glucose	MCnc	Pt	CSF	Qn		CHEM	mg/dL	551	
6	2345-7	Glucose	MCnc	Pt	Ser/Plas	Qn		CHEM	mg/dL	4	

New! Common orders rank

View Details Print Grid Map Same Export Configure Export Configure Grid

Truncated Text Print Preview

Entry #: 1 of 190 Units Specimen Methodless Common Labs Battery Max Words: 1 6 records found: 0.02s

Setting Search Limits

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms **Hierarchy & Search Limits** Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Favor Prop: Favor None

Order/Obs: Ignore

Pharma MS: Exclude MS* Terms

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Max # of component words:

Lab Test Restrictions

- None
- Lab Tests Only
- CDISC Lab Tests Only
- Common Lab Results Only

Methodless Terms Only

If no methodless version exists, then return the method specific terms

Methodless Terms Restriction

Override Methodless Terms Restriction

Units Specimen **Methodless** Common Labs Battery Max Words: 3 records found: 0.04s

Limit to Methodless Terms

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

View: All

#: of 190 Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	aspergillus	167	<input type="checkbox"/> 5	<input type="text"/>	
<input checked="" type="checkbox"/> 2	flavus	17	<input type="checkbox"/> 6	<input type="text"/>	
<input type="checkbox"/> 3	<input type="text"/>		<input type="checkbox"/> 7	<input type="text"/>	
<input type="checkbox"/> 4	<input type="text"/>		<input type="checkbox"/> 8	<input type="text"/>	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	51529-6	(Aspergillus...	ACnc	Pt	Ser	Ord	Multi disk	AL
2	31229-8	Aspergillus flavus Ab	ACnc	Pt	Body fld	Ord		MI
3	27377-1	Aspergillus flavus Ab	ACnc	Pt	Body fld	Ord	Immune diffusion	MI
4	16415-2	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord		MI
5					CSF	Ord	Immune diffusion	MI
6				Pt	CSF	Qn		MI
7				Pt	Ser	Ord		MI

Both method and method-less terms

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 17 records found: 0.04s

Limit to Methodless Terms

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name:

Next Previous First Last

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

ASPERGILLUS FLAVUS

View: All

#: 7 of 190

Search Clear Inputs Clear Most Limits Common lab results Lookup Term By #

Hide Words Propose Term

Auto Mapper Search: No

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/>	1 aspergillus	167	<input type="checkbox"/>	5	
<input checked="" type="checkbox"/>	2 flavus	17	<input type="checkbox"/>	6	
<input type="checkbox"/>	3		<input type="checkbox"/>	7	
<input type="checkbox"/>	4		<input type="checkbox"/>	8	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	31229-8	Aspergillus flavus Ab	ACnc	Pt	Body fld	Ord		MI
2	16415-2	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord		MI
3	13193-8	Aspergillus flavus Ab	ACnc	Pt	CSF	Ord		MI
4	9490-4	Aspergillus flavus Ab	ACnc	Pt		Ord		MI
5					Ser	Qn		MI
6				Pt	Ser	Qn		MI
7				Pt	Ser	Qn		AL

View Details Print Grid Map Same Export

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 10 records found: 0.71s

Only Methodless Terms Appear

More on Methodless Terms

- Some LOINC categories do not have methodless terms
- Checking methodless only will remove these from view on results grid
- Checking additional box allows these to be seen

Methodless Only Unchecked

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter:

View: All

#: 7 of 190 Auto Mapper Search: No

All terms returned

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	viral	451	<input type="checkbox"/> 5		
<input checked="" type="checkbox"/> 2	hemorrhagic	58	<input type="checkbox"/> 6		
<input checked="" type="checkbox"/> 3	disease	1318	<input type="checkbox"/> 7		
<input type="checkbox"/> 4			<input type="checkbox"/> 8		

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	23573-9	Viral hemorrhagic disease virus	ACnc	Pt	Tiss	Ord	Microscopy.electron	MI
2	23574-7	Viral hemorrhagic disease...	ACnc	Pt	Ser	Ord		MI
3	23577-0	Viral hemorrhagic disease...	ACnc	Pt	Ser	Ord	EIA	MI
4	31699-2	Viral hemorrhagic disease...	ACnc	Pt	Ser	Qn		MI
5	23575-4	Viral hemorrhagic disease...	Titr	Pt	Ser	Qn		MI
6	23576-2	Viral hemorrhagic disease...	Titr	Pt	Ser	Qn	EIA	MI
7	23578-8	Viral hemorrhagic disease...	Titr	Pt	Ser	Qn	HAI	MI

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 12 records found: 0.07s

Methodless Only Checked

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Samp: Alt Specimen:

Extra Search Words: Accept or enter O:

View: All

#: 7 of 190 Auto Mapper Search: No

Use Local Words # Hits Use Local Words # Hits

<input checked="" type="checkbox"/>	1	viral	451	<input type="checkbox"/>	5	<input type="text"/>	
<input checked="" type="checkbox"/>	2	hemorrhagic	58	<input type="checkbox"/>	6	<input type="text"/>	
<input checked="" type="checkbox"/>	3	disease	1318	<input type="checkbox"/>	7	<input type="text"/>	
<input type="checkbox"/>	4	<input type="text"/>		<input type="checkbox"/>	8	<input type="text"/>	

Grid Tree

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	23574-7	Viral hemorrhagic disease...	ACnc	Pt	Ser	Ord		MICR
2	31699-2	Viral hemorrhagic disease...	ACnc	Pt	Ser	Qn		MICR
3	23575-4	Viral hemorrhagic disease...	Titr	Pt	Ser	Qn		MICR

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 3 records found: 0.02s

Only Methodless terms returned

Differ in one or more components

Conditional Methodless

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search

Local Term File

Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units:

Extra Search Words: Accept or enter OBR name and/or OBX name

View:

#: of 190

Auto Mapper Search:

1 451 5

2 58 6

3 1318 7

4 8

No method-less term; all shown

Grid	Row	Property	Timing	System	Scale	Method	Class
1			Pt	Tiss	Ord	Microscopy,electron	MI
2				Ser	Ord		MI
3	31699-2	Viral hemorrhagic disease...	ACnc	Pt	Ser		MI
4	23575-4	Viral hemorrhagic disease...	Titr	Pt	Ser		MI
5	23581-2	Viral hemorrhagic disease...	ACnc	Pt	Tiss	Ord	Aggl
6	23580-4	Viral hemorrhagic disease...	ACnc	Pt	Tiss	Ord	EIA
7	23579-6	Viral hemorrhagic disease...	ACnc	Pt	Tiss	Ord	IF
8	23582-0	Viral hemorrhagic disease...	ACnc	Pt	Tiss	Ord	Immune stain

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max words: 8 records found: 0.07s

More terms returned

Setting Search Limits

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms **Hierarchy & Search Limits** Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Favor Prop: Favor None

Order/Obs: Ignore

Pharma MS: Exclude MS* Terms

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions:

- None
- Lab Tests Only
- CDISC Lab Tests Only
- Common Lab Results Only

Max # of component words

Methodless Terms Only

If no methodless version exists, then return the method specific terms

**Limit to Lab Tests Only
(No Clinical LOINC Terms)**

Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.07s

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. The 'Restrict Search' section includes several checkboxes: 'Terms consistent with local units' (checked), 'Terms consistent with specimen', 'Exclude terms with system 'left' or 'right'', and 'Common Orders only'. The 'Include These LOINC:' section has checkboxes for 'Trial', 'Discouraged', and 'Deprecated'. The 'Lab Test Restrictions' section has radio buttons for 'None', 'Lab Tests Only', 'CDISC Lab Tests Only', and 'Common Lab Results Only' (selected). The 'Favor Prop' dropdown is set to 'Favor None', 'Order/Obs' is 'Ignore', and 'Pharma MS' is 'Exclude MS* Terms'. The 'Max # of component words' checkbox is unchecked, and the 'Methodless Terms Only' checkbox is also unchecked, with a sub-option 'If no methodless version exists, then return the method specific terms' also unchecked. A callout box with the text 'Limit to common lab tests' points to the 'Common Lab Results Only' radio button. The bottom status bar shows 'Units Specimen Methodless Common Labs Battery Max Words:' and '8 records found: 0.07s'.

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

Terms consistent with local units

Terms consistent with specimen

Exclude terms with system 'left' or 'right'

Common Orders only

Favor Prop Favor None

Order/Obs Ignore

Pharma MS Exclude MS* Terms

Include These LOINC:

Trial Discouraged Deprecated

Lab Test Restrictions

None

Lab Tests Only

CDISC Lab Tests Only

Common Lab Results Only

Max # of component words

Methodless Terms Only

If no methodless version exists, then return the method specific terms

Limit to common lab tests

Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.07s

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. The 'Restrict Search' section contains several checkboxes and dropdown menus. A callout box points to the 'Max # of component words' checkbox, which is currently unchecked. The status bar at the bottom indicates '8 records found: 0.07s'.

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms **Hierarchy & Search Limits** Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Favor Prop: Favor None

Order/Obs: Ignore

Pharma MS: Exclude MS* Terms

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions

- None
- Lab Tests Only
- CDISC Lab Tests Only
- Common Lab Results Only

Max # of component words

Methodless Terms Only

If no methodless version exists, then return the method specific terms

Limit Number of Words in the Component Attribute

Units Specimen Methodless Common Labs Battery Max Words: 8 records found: 0.07s

Limit Number of Component Words

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Local Term File Mapped to: Name:

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

View:

#: of 190

Without Limit Applied: 850 terms returned

Use	Local Words	# Hits	Use	Local Words
<input checked="" type="checkbox"/>	1 glucose	877	<input type="checkbox"/>	5
<input type="checkbox"/>	2		<input type="checkbox"/>	6
<input type="checkbox"/>	3		<input type="checkbox"/>	7
<input type="checkbox"/>	4		<input type="checkbox"/>	8

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	52041-1	Blood glucose monitors...	Find	Pt	^Patient	Doc		ATTAC
2	58494-6	C peptide^1.5H post dose...	MCnc	Pt	Ser/Plas	Qn		CHAL
3	47583-0	C peptide^1.5H post dose...	SCnc	Pt	Ser/Plas	Qn		CHAL
4	47584-8	C peptide^10M post dose...	SCnc	Pt	Ser/Plas	Qn		CHAL
5	58500-0	C peptide^15M post dose...	MCnc	Pt	Ser/Plas	Qn		CHAL
6	47585-5	C peptide^15M post dose...	SCnc	Pt	Ser/Plas	Qn		CHAL
7	58503-4	C peptide^1H post dose...	MCnc	Pt	Ser/Plas	Qn		CHAL

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 850 records found: 0.25s

Limit Number of Component Words

Restriction appears on Toggle Bar (cannot toggle off)

Component limited to 1 word

With Limit Applied: 68 terms returned

Row	LOINC	Component	Property	Timing	System	Scale	Method	Class
1	41896-2	Class	Type	Pt	glucose...	Nom		DEVIC
2	6300-8	Glucose	MCnc	Pt	minio fld	Qn		CHEM
3	2339-0	Glucose	MCnc	Pt	d	Qn		CHEM
4	2340-8	Glucose	MCnc	Pt	ld	Qn	Test strip auto	CHEM
5	2341-6	Glucose	MCnc	Pt	Bld	Qn	Test strip manual	CHEM
6	15074-8	Glucose	SCnc	Pt	Bld	Qn		CHEM
7	41651-1	Glucose	MCnc	Pt	BldA	Qn		CHEM

Entry #: 7 of 190 Units Specimen Methodless Common Labs Battery Max Words: 1 68 records found: 0.14s

Setting Search Limits

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application window. The 'Hierarchy & Search Limits' tab is active, and the 'Search Constraints' sub-tab is selected. The 'Restrict Search' section includes several checkboxes: 'Terms consistent with local units' (checked), 'Terms consistent with specimen' (unchecked), 'Exclude terms with system 'left' or 'right'' (unchecked), and 'Common Orders only' (unchecked). The 'Include These LOINC:' section has 'Trial', 'Discouraged', and 'Deprecated' all checked. The 'Lab Test Restrictions' section has 'None' selected. The 'Favor Prop' dropdown is set to 'Favor None', 'Order/Obs' to 'Ignore', and 'Pharma MS' to 'Exclude MS* Terms'. A callout box points to the 'Include These LOINC:' section with the text: 'Include Trial, Deprecated or Discouraged LOINC Codes with Returned Terms'. The status bar at the bottom shows '68 records found: 0.14s'.

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions

- None
- Lab Tests Only
- CDISC Lab Tests Only
- Common Lab Results Only

Favor Prop: Favor None

Order/Obs: Ignore

Pharma MS: Exclude MS* Terms

Max # of component words

Methodless Terms Only

If no methodless version exists, then return the method specific terms

Include Trial, Deprecated or Discouraged LOINC Codes with Returned Terms

Units Specimen Methodless Common Labs Battery Max Words: 68 records found: 0.14s

Include Deprecated LOINC Terms

The screenshot shows the 'Map Local Terms - LOINC Workshop OBR 12/8' application. The interface includes a menu bar (File, Tools, HIPAA, Lab Auto Mapper, View, Help) and a toolbar with buttons for Search, Mapping, View All Working Set Terms, Hierarchy & Search Limits, and Part Search. The main area is divided into sections for 'Local Term File' (with navigation buttons like Next, Previous, First, Last and a View dropdown), a search input field containing 'HEMOGRAM', and a table of 'Local Words'. A modal dialog box titled 'Discouraged LOINC Mapping Substitution' is open, displaying the message: 'LOINC # 24317-0 is discouraged. Do you wish to map to 58410-2 instead?' with 'Yes' and 'No' buttons. A table at the bottom shows a list of LOINC terms with their components and units. The table has columns for Row, LOINC, Component, Units, and Sample Values. The status of each term is indicated by a symbol in the first column: a green checkmark for active terms, an inverted triangle for discouraged terms, and a red circle with a slash for deprecated terms.

- You cannot map to deprecated LOINC terms

- You are warned before mapping to discouraged LOINC terms

Discouraged LOINC Terms appear as an inverted triangle

Deprecated LOINC Terms appear as Strikethrough Text with a "Do Not" Symbol

Row	LOINC	Component	Units	Sample Values
4	47288-6	CRCM		
5	58410-2	Complete blood count...	Pt	Bld Qn
6	24317-0	Hemogram & platelets WO...	Pt	Bld Qn
7	24359-2	Hemogram WO		
8	24358-4	Hemogram		
9	47287-8	Hemogram wo		
1	34527-2	Hemogram, Pla		

Entry #: 7 of 190 Units Specimen 11 records found: 0.07s

Favor Property Restriction

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions

- None
- Lab Tests Only

Favor Prop: Favor None

Order/Obs: Favor None

Pharma MS: Favor Mass

Methodless Terms Only:

If no methodless version exists, then return the method specific terms:

Max # of component words:

Units Specimen Methodless Common Labs Battery Max Words:

11 records found: 0.07s

Favor one type of property over others

All other components being equal MCnc only will be displayed

Order/Observation Restriction

Map Local Terms - LOINC Workshop OBR 12/8

File Tools HIPAA Lab Auto Mapper View Help

Search Mapping View All Working Set Terms Hierarchy & Search Limits Part Search

Search Constraints Class Hierarchy Multi-axial Hierarchy Component Hierarchy System Hierarchy Method Hierarchy

Restrict Search

- Terms consistent with local units
- Terms consistent with specimen
- Exclude terms with system 'left' or 'right'
- Common Orders only

Include These LOINCs:

- Trial
- Discouraged
- Deprecated

Lab Test Restrictions

- None
- Lab Tests Only

Favor Prop Favor Mass

Order/Obs Ignore

Pharma MS Ignore

- Favor Observations
- Favor Orders
- Obs or Orders
- Subset Only
- Unclassified Only

Max # of component words

Methodless Terms Only

- If no methodless version exists, then return the method specific terms

Order or Observation preference

Units Specimen Methodless Common Labs Battery Max Words: 11 records found: 0.07s

Navigating through the Mapping Process



LOINC Mapping Tactics

- Limit effort to one lab section at a time and focus expertise
- Chemistry and hematology will be easiest
- For manufactured assays, use package insert as source information
- Sample results give clue to property and scale
- Consider prioritizing by frequency of use

A Rationale for Parsimonious Laboratory Term Mapping by Frequency

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ABSTRACT

Mapping local observation codes to a standard vocabulary provides a bridge across the many islands of data that reside in isolated systems, but mapping is resource intensive. To help prioritize the mapping effort, we analyzed laboratory results reported over a thirteen month period from five institutions in the Indiana Network for Patient Care. Overall, more than 4,000 laboratory observation codes accounted for almost 49 million results. Of the observations reported in the thirteen months, 80 codes (2%) accounted for 80% of the total volume from all institutions and 784 codes (19%) accounted for 99% of the volume from all institutions. The 244 to 517 observation codes that represented 99% of the volume at each institution also captured all results for more than 99% of the patients at that institution. Our findings suggest that focusing the mapping effort on this modest set of high-yield codes can reduce the barriers to interoperability.

INTRODUCTION

Indiana Medicaid, and RxHub. The federated INPC repository now stores more than a billion discreet clinical observations.

The INPC has coalesced many of the various sources that produce and store data in our community, with emerging clinical^{3,4} and financial⁵ benefits. In the INPC collaborative, Regenstrief Institute serves as a neutral third party convener. Regenstrief receives all of the clinical messages streams from participating systems and accomplishes the task of integrating data these sources by mapping the idiosyncratic local terms to a common master dictionary based on LOINC® (Logical Observation Identifiers Names and Codes), a universal code system for identifying laboratory and other clinical observations.⁶ Presently, over one hundred source systems send HL7 clinical result messages to Regenstrief within the INPC.

Mapping the local observation codes from all of these data sources requires substantial effort and domain expertise. Laboratory data is particularly challenging to map because of the large number (2,000-5,000) of

More LOINC Mapping Tactics

- Try using method-less terms first
 - Specific methods can be transmitted in:
 - OBX-17 (v2.x), Observation.methodCode (v3.0)
- Examine local units or real results to verify correct property and scale
 - Properties are rarely distinguishable in test names
- You don't have to do it all at one sitting
 - Use the "Unmapped" function to return where you left off
- With every release - Update previous mappings to identify deprecated terms

Common Mapping Issues

- Locally Defined Test Name Ambiguity
 - Reuse of local test code
- “Analyte-free” Local Test Names
 - (Miscellaneous serology)
- Incongruent Value sets (Scale ambiguity)
- Result vs. Interpretation
- Available LOINC Terms too Specific/General
- Panel vs. Discrete Test
 - Common in Microbiology

Can't find the
term you
want?



Search Hints and Tips

- Keywords with zero frequency are ignored
 - May need to rephrase – use synonym
- Some causes for no returned terms
 - Too many keywords in search – uncheck some
 - Limits applied that don't make sense
 - E.g. Method-less tests plus Method tree set to EIA
 - Did not find and revise words not in RELMA
 - Local units not in RELMA
- Units are GREAT discriminators
- You may have tests that need to be added to LOINC

Q and A Session



Exercise

Map your own data

