

University of Mississippi Medical Center

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Lab Data and ADAP Importation



WHO ARE WE?

- UMMC maintains CW instance for ~20 providers across MS
- Providers include
 - Health Department clinics and ADAP
 - Local and Hospital Clinics
 - Correctional Facilities and County Jails
 - State Mental Health Hospitals



Project Decision



- CAREWare was chosen due to its user friendliness
- Lab data import vs manual entry
- Eliminate possible non-medical human error
- Providers used LabCorp

Initial Prep for Lab Import

- Each Provider established a new separate acct # with LabCorp
- jProg changed PID19 and MSH6 fields to accommodate multiple providers for LabCorp hypersend

Steps to Import

- jProg assigns an Activation Code for each LabCorp acct#/Provider
- Activation Code entered
- Map the Provider with LabCorp as the data source

Mapping Providers

Provider Mapping

Edit Provider Mapping

MSH3 (Application ID): MSH6 (Provider ID): Matching Value:

RW CAREWare Provider: Table Name: Field Name:

RW CAREWare Data Source: Client Demographic Threshold:

Account Type	MSH3(LabID)	Matching Value	MSH6(ProviderID)	Provider	Table Name
Split Account (Active)	1100	MB001842	MB001842		cw_map_client_provider
Sub Account (Active)	1100	23204285	MB001842	GA Carmichael Fa...	cw_map_client_provider
Sub Account (Inactive)	1100	23206070	MB001842		
Sub Account (Inactive)	1100	23801500	MB001842		
Sub Account (Inactive)	1100	23310150	MB001842		
Sub Account (Active)	1100	23204630	MB001842	GA Carmichael Fa...	cw_map_client_provider
Sub Account (Active)	1100	23310335	MB001842	MDOC-Wide	cw_map_client_provider
Sub Account (Active)	1100	23206090	MB001842	MDOC-Wide	cw_map_client_provider
Sub Account (Active)	1100	23801990	MB001842	MDOC-Wide	cw_map_client_provider
Sub Account (Inactive)	1100	23402869	MB001842		
Split Account (Active)	1100	TE012503	TE012503		cw_map_client_provider
Main Account (Active)	UMSLab	UMS-Lab	UMS-Lab	University of Missis...	cw_map_client_provider

Mapping Test Definitions

Test Definition Mapping

Edit Test Definition Mapping

Map Test Actions Map Qualitative Results **Last HL7**

MSH3 (Application ID):
1100

OBX4.0 (Lab Test Definition ID):
550421

RW CAREWare Test Definition (Type/Name):
Lab/Viral Load (Copies/mL)

Lab/Viral Load (Copies/mL)
Lab/WBC (x 10³/mm³)
Screening/AFB
Screening/Blastomycosis antigen
Screening/Breast Biopsy
Screening/CBC
Screening/Child Development Screening
Screening/CMV Eye Screen

UMSLab	HIVPCRQN2	HIV RNA QUANT(VIRAL LOAD)...	Lab/Viral Load (Copies/...	N/A	N/A
UMSLab	PVHIVSUB	HIV SUBTYPE		N/A	N/A
UMSLab	HIV1WB	HIV-1 IGG ABS-IMMUNOBLOT		N/A	N/A
UMSLab	HIVAGS	HIV-1 P24 AG		N/A	N/A
UMSLab	HIVAGC	HIV-1 P24 NEUTRALIZATION		N/A	N/A
UMSLab	HIVPHENOR	HIV-1 PHENOTYPE		N/A	N/A
1100	550421	HIV-1 RNA by PCR	Lab/Viral Load (Copies/...	N/A	N/A

HL7 Segments and Values for Result: 550421, HIV-1 RNA by PCR

HL7 File Name: R_MB001842_XX_193_101024.HL7
Last Modified Date: 7/12/2010

HL7 segments (OBR, OBX, NTE)

```
OBR|2|18970515980^LAB|18970515980^LAB|550420^RNA, Real Time PCR (Graph)^L|||201007081042|||||201007082035|||||41314509003||
18970515980||201007121010||F
OBX|1|NM|550421^HIV-1 RNA, by PCR^L||7570|copies/mL||||N|F||||201007101436|LA
NTE|1|L|
NTE|2|L|The reportable range for this assay is 48 to 10,000,000
NTF|3|L|copies HIV-1 RNA/mL
```

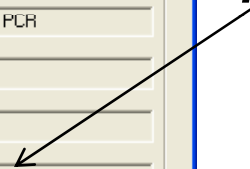
Segment Values

Control Number (OBR 2):	18970515980	Test Value Type (OBX 2):	NM
Ascension Number (OBR 3):	18970515980	Test ID (OBX 3a):	550421
Order ID (OBR 4a):	550420	Test Name (OBX 3b):	HIV-1 RNA by PCR
Order Name (OBR 4b):	RNA, Real Time PCR (Graph)	Test Coding System (OBX 3c):	
Order Coding System (OBR 4c):	L	Test Result (OBX 5):	7570
Order Action Code (OBR 11):		Unit of Measure (OBX 6):	copies/mL
Order Date Reported (OBR 22):	201007081042	Reference Range (OBX 7):	
Order Result Status (OBR 25):	F	Abnormal Flag (OBX 8):	
Comments/Notes (NTE):	The reportable range for this assay is 48 to 10,000,000 copies HIV-1 RNA/mL.	Nature Abnormal (OBX 10):	
		Test Result Status (OBX 11):	F
		Test Producer ID (OBX 15):	LA

Close

Last HL7

Unit of Measurement



Mapping Qualitative Data

Test Definition Mapping

Edit Test Definition Mapping

Map Test Actions

Map Qualitative Results

Last HL7

MSH3 (Application ID):

1100

Clinical Encounter Setup

Close

OBX4.0 (Lab Test Definition ID):

006072

Purge By Test ID

Delete Mapping

Save

RW CAREWare Test Definition (Type/Name):

Screening Lab/Syphilis

Cancel

Skip Import

MSH3 (...)	OBX4.0 (Lab ID)	OBX4.1 (Lab Name)	RW CAREWare Test De...	Un-Mapped ...	Un-Mappe...	Action Class
1100	005025	WBC	Lab/WBC (x 10 ⁹ /mm ³)	N/A	N/A	
1100	005033	RBC	Lab/RBC TH/CMM x 10 ⁹ ...	N/A	N/A	
1100	005041	Hemoglobin	Lab/Hemoglobin (g/dL)	N/A	N/A	
1100	005058	Hematocrit	Lab/Hematocrit %	N/A	N/A	
1100	005215	Sedimentation Rate-Westergren		N/A	N/A	
1100	005280	Reticulocyte Count		N/A	N/A	
1100	006072	RPR	Screening Lab/Syphilis	166	4	STI
1100	006171	RA Latex Turbid.		N/A	N/A	
1100	006189	Mononucleosis Test, Qual		N/A	N/A	
1100	006399	Hep B Surface Ab	Screening Lab/Hepatitis ...	166	N/A	

Mapping Qualitative Results

Qualitative Test Result Mapping

Edit Qualitative Test Result Mapping

Clinical Encounter Setup Close

MSH3 (Application ID): OBX4.0 (Lab Test Definition ID):

1100 186098

Purge By Result Save

RW CAREWare Test Definition (Type/Name):

Screening Lab/Chlamydia

Delete Mapping

OBX6 (Reported Result): RW CAREWare Result:

2/Presumptive

Skip Import Cancel

OBX6 (Reported Result)	RW CAREWare Qualitative Result	Skip Import
POS*H	1/Positive	No
POSITIVE	1/Positive	No
Positive	1/Positive	No
Positive	1/Positive	No
POSITIVE	1/Positive	No
POSPRO	1/Positive	No
Presumptive	2/Presumptive	No
REA(NOTES)	1/Positive	No
Reactive	1/Positive	No
REACTIVE	1/Positive	No
RESISTANCE	1/Positive	No

Checking for Unmapped Clients

- Open Provider domain
- Admin Options/HL7 Client Mapping

The screenshot shows a web application window titled "Unmapped Clients". The window contains a table with the following data:

ID	Name	DOB	Gender	Address	Phone	# of Tests
0000	TEST, EDITEST	11/1/2001	F			42

On the left side of the window, there is a sidebar with the following options:

- Esc Close
- F2 Map Selected Client
- Delete Delete Import Row
- F3 Refresh
- F5 Apply Filter
- F4 Clear Filter
- F7 Fix Incoming Data

Below the sidebar, there is a "Filter:" section with three input fields:

Last Name:

First Name:

Middle Name:

Problems Encountered

- Quantitative data reported as qualitative (VL = TND)
- Staff using incorrect LabCorp acct #
- UMC Lab Issues:
 - Genotypes imported as + when -
 - Lag time in processing files for importation
 - Import script requires specific computer configuration



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QUESTIONS??

