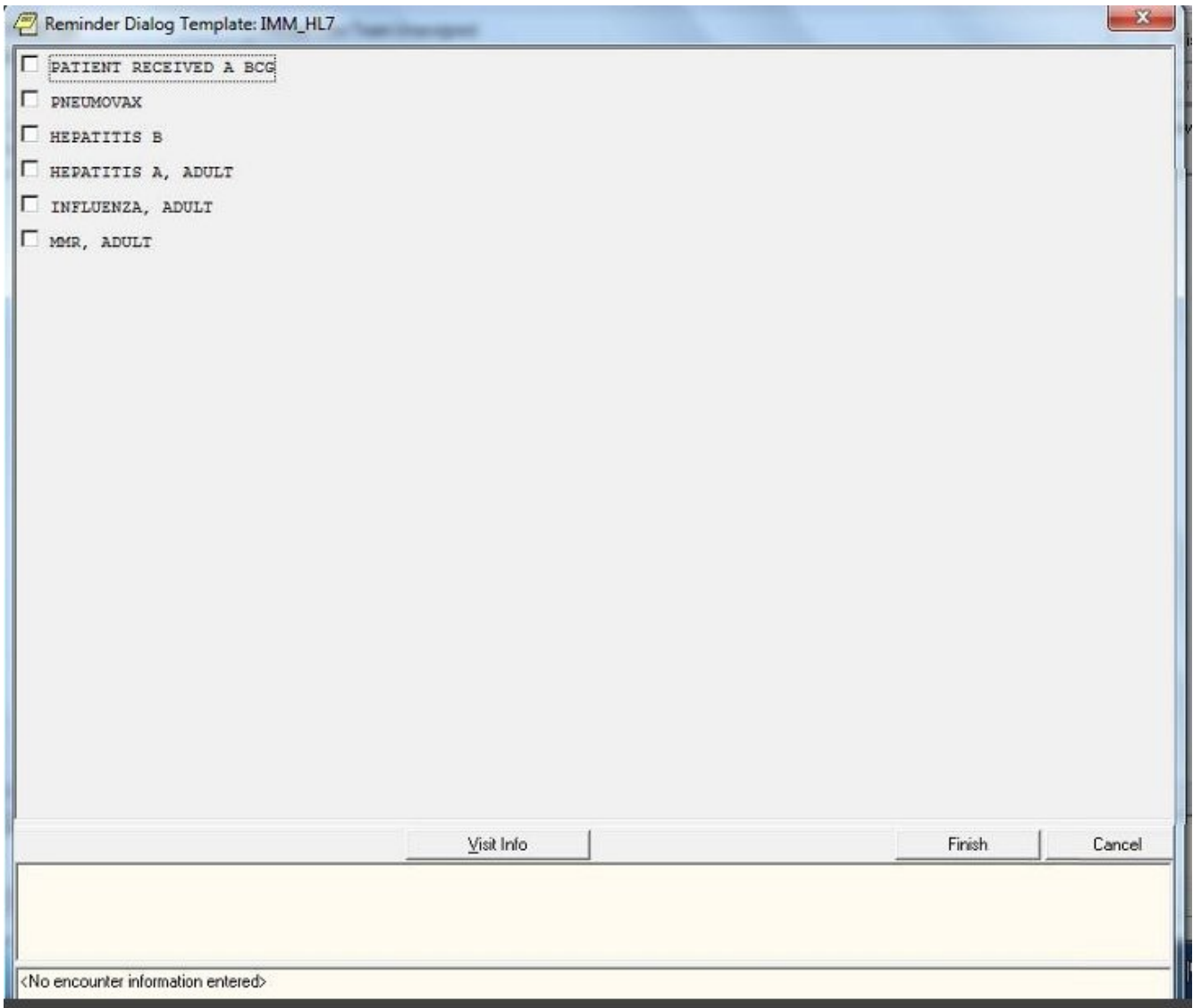


**§170.302.k: Submission to immunization registries**

<b>Requirement</b>	<b>Requirement Satisfied (Yes/No)</b>	<b>Vendor Response/Submission/Comments</b>
<b>§170.302.k: Submission to immunization registries</b>		
<p>Provide a unique patient record to be used for the testing of this module only.</p> <p>1) Record must contain the following data elements:</p> <ul style="list-style-type: none"> <li>• Patient ID Number</li> <li>• Patient ID Number Type</li> <li>• Family Name or Surname</li> <li>• Given name</li> <li>• Date of Birth</li> <li>• Administrative Sex/Gender</li> <li>• Race</li> <li>• Ethnicity</li> <li>• Patient address and phone data                             <ul style="list-style-type: none"> <li>○ Street Address</li> <li>○ City</li> <li>○ State</li> <li>○ Zip Code</li> <li>○ Country</li> <li>○ Address Type</li> <li>○ Home Telephone Number</li> </ul> </li> </ul>	<b>Yes</b>	See below
<p>Select Test Data from:</p> <ul style="list-style-type: none"> <li>- TD170.302.k</li> <li>- TDMS170.302.k</li> </ul>	<b>Yes</b>	See below
<p>Provide specification of whether the EHR uses HL7 2.3.1 or HL7 2.5.1 format.</p>		2.5.1
<p>Provide instructions on how to use the EHR functions to:</p> <p>1) Record immunization information to an immunization registry.</p> <p>2) Retrieve immunization information to an immunization registry.</p> <p>3) Submit immunization information to an immunization registry.</p>	<b>Yes</b>	See below

### Immunizations and Sending Messages



Creating an order for an immunization

Reminder Dialog Template: IMM\_HL7

- PATIENT RECEIVED A BCG
- PNEUMOVAX
- HEPATITIS B
- HEPATITIS A, ADULT
- INFLUENZA, ADULT
- MMR, ADULT

PATIENT RECEIVED A MMR VACCINE Date: \* March 10 2011 ...

LOT NUMBER

Visit Info Finish Cancel

MMR, ADULT  
PATIENT RECEIVED A MMR VACCINE  
Date: March 10, 2011

Immunizations: MEASLES,MUMPS,RUBELLA (MMR) (Historical)  
Health Factors: CVX 03 (Historical)  
Orders: IMMUNIZATION HISTORICAL ENTRY (Historical)

As work is done entering data, it shows what data is being collected.

§170.302.k: Submission to immunization registries

The screenshot shows a software window titled "IMMUNIZATION HISTORICAL ENTRY". It contains several input fields for vaccine information:

- ENTER THE VACCINE DATE AND TIME: MAR 2, 2010
- MANUFACTURER: (empty dropdown)
- ORDER START: NOW
- ORDER STOP: T+730D
- VACCINE NAME: Measles Mumps Rubella Vaccine
- VACCINE AMOUNT (QUANTITY): 999
- UNITS: (empty dropdown)
- LOT NUMBER: (empty dropdown)
- SEND IMMUNIZATION HL7 MESSAGE: Yes

A green arrow points to the "SEND IMMUNIZATION HL7 MESSAGE" dropdown. At the bottom, a summary bar displays: "MAR 2, 2010 Measles Mumps Rubella Vaccine 999 Yes". To the right of this bar are "Accept Order" and "Quit" buttons.

Entering the vaccine data.

The screenshot shows a window titled "Order Details - 588;1" with a text-based summary of the order:

```
>> Mar 02, 2010 Measles Mumps Rubella Vaccine 999 YES
Activity:
06/20/2011 21:13 New Order entered by KING,MATTHEW MICHAEL (ANALYST)
Order Text:      Mar 02, 2010 Measles Mumps Rubella Vaccine 999 YES
Nature of Order: ELECTRONICALLY ENTERED
Ordered by:      KING,MATTHEW MICHAEL (ANALYST)
Signature:       NOT REQUIRED

Current Data:
Treating Specialty:
Ordering Location:      DR OFFICE
Start Date/Time:
Stop Date/Time:
Current Status:        UNRELEASED
Order #588

Order:
ENTER THE VACCINE DATE AND TIME: Mar 02, 2010
ORDER START:           NOW
ORDER STOP:            730 DAYS FROM TODAY
VACCINE NAME:          Measles Mumps Rubella Vaccine
VACCINE AMOUNT (QUANTITY): 999
SEND IMMUNIZATION HL7 MESSAGE YES
```

At the bottom right of the window are "Print" and "Close" buttons.

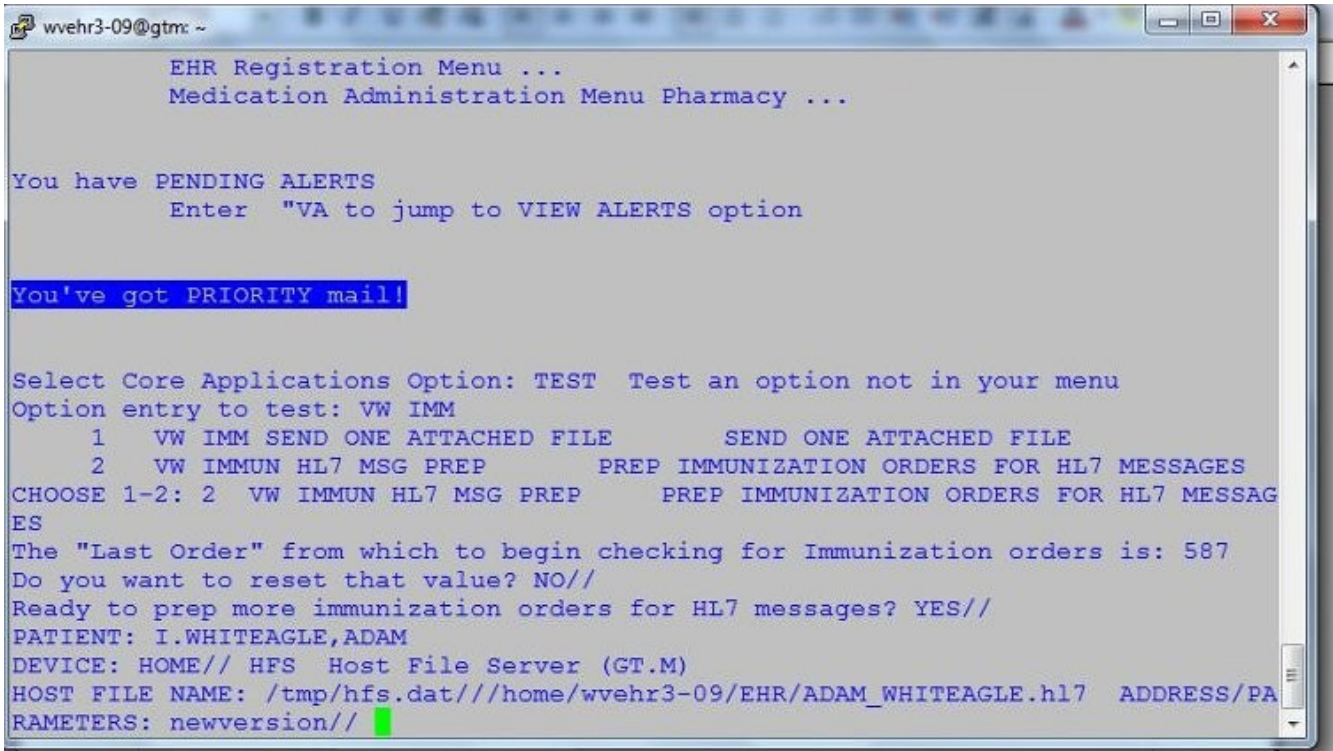
Showing data that is collected and stored

```
wvehr3-09@gtm: ~  
IRM   CPRS Configuration (IRM) ...  
LAB   Laboratory DHCP Menu ...  
OP    Outpatient Pharmacy Manager ...  
TIUI  TIU Maintenance Menu ...  
TIUM  Text Integration Utilities (MIS Manager) ...  
      EHR Registration Menu ...  
      Medication Administration Menu Pharmacy ...  
  
You have PENDING ALERTS  
Enter "VA to jump to VIEW ALERTS option  
  
You've got PRIORITY mail!  
  
Select Core Applications Option: TEST Test an option not in your menu  
Option entry to test: VW IMM  
1    VW IMM SEND ONE ATTACHED FILE          SEND ONE ATTACHED FILE  
2    VW IMMUN HL7 MSG PREP                  PREP IMMUNIZATION ORDERS FOR HL7 MESSAGES  
CHOOSE 1-2: 2  VW IMMUN HL7 MSG PREP      PREP IMMUNIZATION ORDERS FOR HL7 MESSAGES  
ES  
The "Last Order" from which to begin checking for Immunization orders is: 587  
Do you want to reset that value? NO//
```

Checking for immunization orders.

```
wvehr3-09@gtm: ~  
TIUI  TIU Maintenance Menu ...  
TIUM  Text Integration Utilities (MIS Manager) ...  
      EHR Registration Menu ...  
      Medication Administration Menu Pharmacy ...  
  
You have PENDING ALERTS  
Enter "VA to jump to VIEW ALERTS option  
  
You've got PRIORITY mail!  
  
Select Core Applications Option: TEST Test an option not in your menu  
Option entry to test: VW IMM  
1    VW IMM SEND ONE ATTACHED FILE          SEND ONE ATTACHED FILE  
2    VW IMMUN HL7 MSG PREP                  PREP IMMUNIZATION ORDERS FOR HL7 MESSAGES  
CHOOSE 1-2: 2  VW IMMUN HL7 MSG PREP      PREP IMMUNIZATION ORDERS FOR HL7 MESSAGES  
ES  
The "Last Order" from which to begin checking for Immunization orders is: 587  
Do you want to reset that value? NO//  
Ready to prep more immunization orders for HL7 messages? YES//  
PATIENT: I.WHITEAGLE,ADAM  
DEVICE: HOME//
```

Getting ready to produce the HL7 Message



Preparing to write the file with the message.



Converting the file for use on a Windows system

```
unix2dos: converting file P8.hl7 to DOS format ...
wwehr3-09@gtm:~/EHR$ gtm

GTM>S DUZ=77

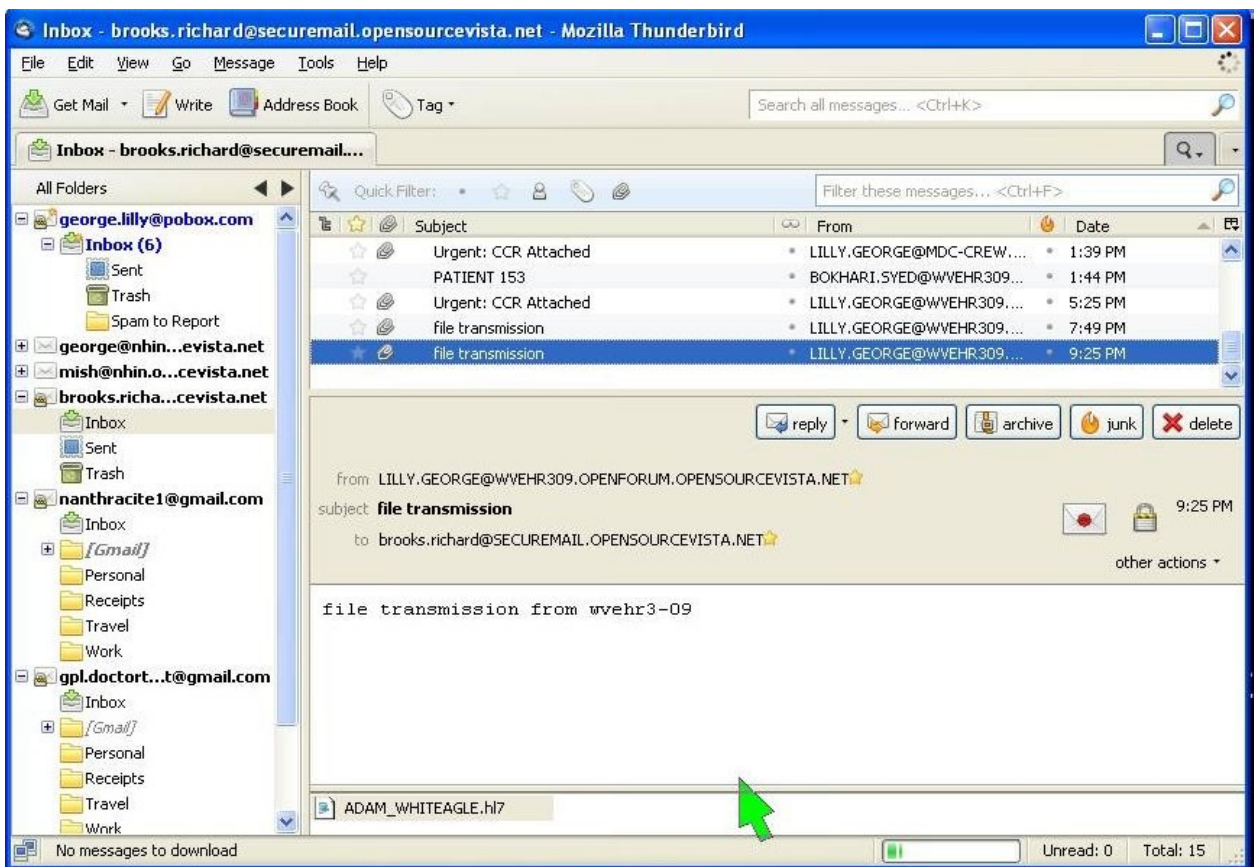
GTM>D ^XUP

Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT100

You have 41 new messages.
Select OPTION NAME: VW IMM
  1  VW IMM SEND ONE ATTACHED FILE      SEND ONE ATTACHED FILE
  2  VW IMMUN HL7 MSG PREP              PREP IMMUNIZATION ORDERS FOR HL7 MESSAGES
CHOOSE 1-2: 1  VW IMM SEND ONE ATTACHED FILE      SEND ONE ATTACHED FILE
SEND ONE ATTACHED FILE
File name: ADAM_WHITEAGLE.hl7
Email address: brooks.richard@securemail.opensourcevista.net
```

Sending off a secure encrypted email to an external system.



The email arrives.

The screenshot shows a web browser window with the URL `http://xreg2.nist.gov:8080/HL7V2MuValidation2011/#message%2Ffiles.htm%3Fts%3D1308614`. The page title is "NIST 2011 Meaningful Use Tool" and the subtitle is "HL7 V2 Message Validation Tool". There are navigation links for "Contact" and "Disclaimer". A yellow navigation bar contains tabs for "Overview", "Message Validation", "Preferences", "Documentation", "Download", and "About". Below this, there are sub-tabs for "Validate", "Report", and "View Errors".

The "Tests" section includes a "Select test" area with three radio buttons: "2.3.1 Immunization Message (VXU\_V04)", "2.5.1 Immunization Message (VXU\_V04)" (which is selected), and "2.5.1 Lab Results Message (ORU\_R01)". To the right is a "Validation Context (corresponds to data set)" dropdown menu with "VXU\_V04\_2.5.1\_VCTestCase6" selected.

The "Message" section contains a text area with the following HL7 message content:

```
MSH|^~\s|VW IMMUNIZATION|WorldVista EHR 3-09|CDC IMMUNIZATION REG|CDC|20110620211545-0400||VXU
PID|1||155^^^DFN^MR||I WHITEAGLE^ADAM^^^^L|19800321|M||1002-5^AMERICAN INDIAN OR ALASKA NATI
ORC|RE||588||||||63-VASTANUM^KING^MATTHEW^MICHAEL^^DR^MD^99VA4|
RXA|O|1|20100302|20100302|03^Measles Mumps Rubella Vaccine^CVX|999|||||||A|
```

NIST test is run.



The screenshot shows a web browser window displaying the NIST 2011 Meaningful Use Tool. The browser's address bar shows the URL: `http://xreg2.nist.gov:8080/HL7V2MuValidation2011/#message%2Freport.htm%3Fts%3D13086`. The page title is "NIST 2011 Meaningful Use Tool" and the subtitle is "HL7 V2 Message Validation Tool".

The navigation menu includes: Overview, Message Validation, Preferences, Documentation, Download, About. The sub-menu under "Message Validation" includes: Validate, Report, View Errors.

The main content area features a "Summary" table:

Summary	
Errors	0
Affirmatives	57
Warnings	0
Ignored	1
Alerts	0

Below the summary, there are options to generate reports: "XML Report" and "HTML Report".

A "Display:" section contains checkboxes for: Errors (checked), Warnings (checked), Alerts (checked), Affirmatives (unchecked), Ignored (checked), and Message Content (checked). An "update" button is located to the right of these checkboxes.

The "Message Validation Report" section includes a date stamp: "Date: 06 20 2011, 21:37:37.871-04:00".

At the bottom, a table provides details about the profile used for validation:

Profile	Name	Value
	Name	MeaningfulUseImmunization2011-2
	Organization	NIST
	Type	VXU^V04^VXU_V04
	Profile Version	1.0
	HL7 Version	2.5.1
	File	