



## State of New Mexico HIT Overview: New Mexico's HIT Website and NMSIIS

**Terry Reusser, CIO and  
Kevin Bersell, NMSIIS Manager**

NM HITREC  
Health Information Technology Seminar  
April 19, 2013

## NM HIT Website

**Terry Reusser, CIO**

### Role of Public Health Agencies

- Provide HL7 connectivity capacity so EHRs can connect to a Public Health Information System
  - Unidirectional (reporting-only) capacity is sufficient at Stage 1, but bidirectional (reporting plus supporting record queries) may be necessary by Stage 2 or 3 (already important to many projects aside from MU)
- Provide localized HL7 standard & implementation guide to requesting providers/EHR vendors

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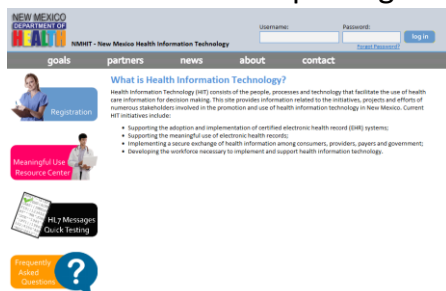
### Limits of Public Health's Role

**Public health is *NOT* responsible to:**

- Set or clarify MU standards
- Certify providers as meeting any MU standard
  - It is the provider's responsibility to attest to CMS that they've met the standards
  - Attestation for any of the Registry options involves having submitted a test message to your state registry, which may or may not succeed
  - Some agencies are setting up separate servers to accept these tests in order not to contaminate live data, or because the production system is not yet HL7-ready
  - If the registry will be unable to accept test messages (even through a test server) in 2011-2013, providers may be granted a waiver
- Certify or promote any EHR product as MU-ready
- Adapt its registry to accommodate non-standard EHR submissions
- Support the installation, configuration or use of any EHR or HIE (this is the vendor's role), though it may choose to do so

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### Public Health Reporting



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### Roadmap features



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## Registering

**Registration**

Please provide us with updated information about yourself and your organization. **Note: fields marked with (\*) are required.**

**Organization Information:**

Organization name (\*)  
New Mexico Department of Health

Street address, P.O. box, etc. (\*)  
1180 N. St., Phoenix St.,

Apartment, suite, unit, building, floor, etc. (\*)  
6-1030

City (\*)  
Santa Fe

State (\*)  
NM

ZIP code (\*)  
87505

Organization phone (\*)  
505-476-1000

Fax number  
505-476-8776

**Personal Information:**

First name (\*)  
Terry

Last name (\*)  
Reusser

E-mail address (\*)  
terry.reusser@state.nm.us

Work phone (\*)  
505-476-1000

Mobile phone  
505-476-1000

Fax  
505-476-8776

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## Registration

Please answer the following questions:

1) Which biosensor program are you or your organization participating in?  
☐ Medicare  
☐ Medicaid

2) Who is the vendor of your Electronic Health Record (EHR) system?  
(Required)  
[...]

3) What is the name of your Electronic Health Record (EHR) system?  
(Required)  
[...]

4) What is/are your objective(s) for data exchange with the New Mexico Department of Health?  
☐ I just want to test my EHR message to meet the meaningful use requirements for Medicaid/Medicare reimbursement.  
☐ I want to set up direct reporting with the state repository for data exchange.

5) For which public health reporting objectives are you or your provider wanting to report?  
☐ Immunization  
☒ Syndromic Surveillance (Emergency Department)  
☐ Electronic Laboratory Reports (ELR)

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## Email Confirmation

**NMNHIT Registration Information**

DOH NMNHIT DOH  
Unit: Mon 4/15/2013 4:07 AM  
To: Reusser, Terry DOH

Message: NMNHIT Quick Reference.pdf (2 KB) NMNHIT Welcome Guide.pdf (13 KB)

Terry Reusser,  
New Mexico Department of Health,

Thank you for visiting the New Mexico Health Information Technology website. We appreciate you taking the time and registering with NMNHIT.org.

Please let us know if you have any specific questions about **Data Exchange and Meaningful Use**.

Attached are the "Quick Reference" and "Welcome Guide" for your review. The documents will provide your team with additional details about NMNHIT.org.

If you have any technical questions or questions related to Data Exchange please contact our Help Desk during normal hours (Monday-Friday, 7:30AM-5:00PM) using one of the following methods:

By Phone: Nationwide at (800) 280-1638 OPTION 1  
Santa Fe at (505) 476-8526 OPTION 1

By e-mail: [DOH.HelpDesk.Mem@state.nm.us](mailto:DOH.HelpDesk.Mem@state.nm.us)

Thank You,

**NEW MEXICO**  
Department of Health  
Promoting health and sound health policy, preventing disease and disability,  
improving health service systems, and assuring that essential public health

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## New: Multiple locations

**NEW MEXICO**  
Department of Health  
NMNHIT - New Mexico Health Information Technology

Account User: Terry Reusser (terry.reusser@state.nm.us) Logout

Organization: New Mexico Department of Health Current location: Primary location

**Location Management**

Primary	Location Name	Address	
	New Mexico Behavioral Health Institute	3801 West Springs Blvd Las Vegas, NM 87701	<a href="#">Edit</a> <a href="#">Remove</a>
	New Mexico State Veterans' Home	902 South Broadway Boulder/Corralvillero, NM 87901	<a href="#">Edit</a> <a href="#">Remove</a>
X	Primary location	1201 S. St. Francis St. Santa Fe, NM 87505	<a href="#">Edit</a>

[New Location](#)

Account Settings  
Locations  
Users  
Reference Library  
NMNHIT On Boarding Status  
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Message History

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## New: Multiple users

**NEW MEXICO**  
Department of Health  
NMNHIT - New Mexico Health Information Technology

Account User: Terry Reusser (terry.reusser@state.nm.us) Logout

Organization: New Mexico Department of Health Current location: Primary location

**User Management**

First name	Last name	User type	
terry	Reusser	Regular	<a href="#">Edit</a> <a href="#">Remove</a>
Terry	Reusser	Admin	<a href="#">Edit</a> <a href="#">Remove</a>

[Create New Account](#) [Link User to Organization](#)

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## Reference Library

**Account** User: Terry Reusser (terry.reusser@state.nm.us) Logout

Organization: New Mexico Department of Health Current location: Primary location

**Reference Library**

To demonstrate Meaningful Use in Stage 1, eligible providers must submit electronic immunization data and eligible hospitals are required to meet at least one of the four Public Health objectives from the menu set of Meaningful Use objectives that include electronic submission to the New Mexico Department of Health (NMDOH). In this section you can find a description of the methods to submit electronic health information to meet Public Health Meaningful Use.

**IMMUNIZATION INQUIRY REPORTING**

The New Mexico Department of Health (NMDOH) Immunization Program has published the local implementation guide for sending immunization data to the New Mexico Statewide Immunization Information System (NMIS). NMIS is able to accept HL7 v2.3.1 messages that meet the requirements specified in the published guide.

To comply with Meaningful Use requirements a host of submission to state immunization registry (NMIS) with continued submission qualifies for the program.

Recommended Standards:

- HL7 v2.3.1
- CDISC (Data content standard)
- ISO6593-1 (Data content standard)

**ELECTRONIC LABORATORY REPORTING (ELR)**

Laboratories wanting to send data to the NMDOH must follow the HL7 version 2.3.1 implementation guide. Statewide laboratory reporting to public health. Please download at <https://www.hlt.org/learn/index.cfm>. In order to submit Electronic Laboratory Reports (ELR) to the NMDOH, it is the responsibility for each reporting laboratory to crosswalk their local lab codes to <https://www.hlt.org/learn>. The most current LOINC table can be found at <http://www.loinc.org> where there are additional tools available to assist with the crosswalk.

To comply with Meaningful Use requirements a host of submission of reportable lab results to NMDOH with continued submission qualifies for the program.

Recommended Standards:

- HL7 v2.3.1
- CDISC (Data content standard)
- ISO6593-1 (Data content standard)

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## Progress checklists

Settings

Locations

Users

Reference Library

Messages On Boarding Status

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**1. REGISTRATION**

Submitter: Terry Reusser

DATE: 04/01/2013

Comments:

☒ Provider has registered on NMHIT

☐ HL7 2.3.1 NMHIT competence tests complete

☐ NMHIS Provider and EHR information sheet completed and submitted

**2. READY CHECK AND READY QUEUE**

Submitter: Terry Reusser

DATE: 04/01/2013

Comments:

☐ Readmission Checklist for Providers and EHR is complete and submitted

☐ Readmission Checklist for Providers and EHR is reviewed

☐ Provider placed in Ready Queue phase

☐ On-site orientation visit scheduled for date: \_\_\_\_\_

☐ On-site orientation visit completed on date: \_\_\_\_\_

☐ Provider is "Go" for message testing

☐ Status "Go" for message testing

☐ Provider moved from Ready Queue and placed in Message Testing phase

**3. MESSAGE TESTING - CONSECUTIVITY TEST**

**4. READY CHECK AND READY QUEUE**

**5. MESSAGE TESTING - VNU TESTS**

**6. MESSAGE TESTING - QBP TESTS**

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## HL7 Message Testing

NEW MEXICO  
DEPARTMENT OF  
HEALTH

NMHIT - New Mexico Health Information Technology

Account: User: Terry Reusser (Terry.Reusser@state.nm.us)

Organization: New Mexico Department of Health

Current location: Primary location

**Messages Testing**

**Disclaimer**

Protected health information cannot be submitted to this Website under any circumstances. All messages submitted should be for testing purposes only and must not contain actual protected information of clients or patients.

Message type: [Electronics Laboratory Reporting (ELR)]

Message version: [HL7 version 2.3.1]

Paste your message below:

Upload a file: [Browse...]

OR

Run test

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## Message Results

Account: User: Terry Reusser (Terry.Reusser@state.nm.us)

Organization: New Mexico Department of Health

Current location: Primary location

**Messages Testing**

**Disclaimer**

Protected health information cannot be submitted to this Website under any circumstances. All messages submitted should be for testing purposes only and must not contain actual protected information of clients or patients.

Message type: [Electronics Laboratory Reporting (ELR)]

Message version: [HL7 version 2.3.1]

Paste your message below:

Upload a file: [Browse...]

OR

Run test

An error was encountered while submitting your HL7 message. Here is the original description provided by the server:

HL7 9 (Message Type) value is invalid. Message Type Expected: OLM/MS03/Message Type Found in Message Header: ADP/MS03 Please click New Test to try testing another message. Please verify that you are submitting the correct type and version of message and that Note in Message Type contains the correct value.

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## Results Detailed reporting

Account: User: Terry Reusser (Terry.Reusser@state.nm.us)

Organization: New Mexico Department of Health

Current location: Primary location

**Messages Testing**

**Disclaimer**

Protected health information cannot be submitted to this Website under any circumstances. All messages submitted should be for testing purposes only and must not contain actual protected information of clients or patients.

Message type: [Synthetic Surveillance]

Message version: [HL7 version 2.3.1]

Paste your message below:

Upload a file: [Browse...]

OR

Run test

Click Results

Congratulations! The HL7 message you submitted was successfully processed. Here is the result breakdown:

**HL7 Validation Report**

HL7 Testing Results

Validation Errors

Test	Test Name	Test Result	Test Description	Test Date	Test User
1	HL7 9 (Message Type) value is invalid.	Failed	Message Type Expected: OLM/MS03/Message Type Found in Message Header: ADP/MS03	04/01/2013	Terry Reusser

Total Errors: 0

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## Sample Report

Congratulations! The HL7 message you submitted was successfully processed. Here is the result breakdown:

**HL7 Validation Report**

HL7 Testing Results

Validation Errors

Test	Test Name	Test Result	Test Description	Test Date	Test User
1	HL7 9 (Message Type) value is invalid.	Failed	Message Type Expected: OLM/MS03/Message Type Found in Message Header: ADP/MS03	04/01/2013	Terry Reusser

Total Errors: 0

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## PID information

Test	Test Name	Test Result	Test Description	Test Date	Test User
1	HL7 9 (Message Type) value is invalid.	Failed	Message Type Expected: OLM/MS03/Message Type Found in Message Header: ADP/MS03	04/01/2013	Terry Reusser

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## History of testing and exchange

**Message History**

Test results for messages submitted are available in the list below. Successful messages show a gold ribbon icon while failed messages show a red ribbon. To get a certificate of your result in PDF format click on the ribbon icon.

Msg ID	RefID	Type	Format	Status	Received
1234567890	1234	200	XML	SUCCESS	4/12/2013 10:30 AM

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## Letter of confirmation

SUSANA MARTINEZ, GOVERNOR



RETTA WARD, SECRETARY

04/05/2013

John Doe  
TEST VENDOR  
123 A STREET  
Santa Fe, Nm 87502

Congratulations! You have successfully tested your electronic laboratory message with the New Mexico Department of Health.

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## Future: WIKI links

**HL7 Validation Report**

Msg ID	RefID	Type	Format	Status	Received
1234567890	1234	200	XML	FAILURE	4/12/2013 10:30 AM

Total Errors: 9

24

## Detailed help via WIKI

**HL7 VALIDATION ERROR MESSAGE KNOWLEDGE BASE**

Search: **Invalid character in field**

Results: 4 of 4

1. Invalid character in field  
Error: HL7001: Invalid character in field  
Message: HL7001: Invalid character in field  
Severity: Error  
Resolution: Check the field for invalid characters and correct them.

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## User friendly

**HL7 VALIDATION ERROR MESSAGE KNOWLEDGE BASE**

Search: **Invalid character in field**

Results: 4 of 4

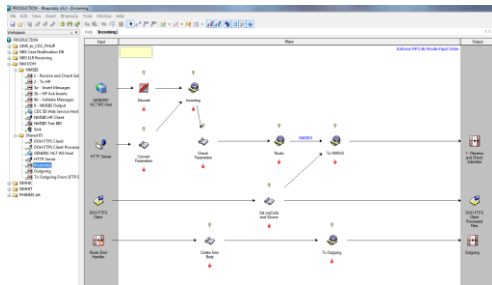
1. Invalid character in field  
Error: HL7001: Invalid character in field  
Message: HL7001: Invalid character in field  
Severity: Error  
Resolution: Check the field for invalid characters and correct them.

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## Web Services

- NMDOH has ability to do bi-directional data exchange via HTTPS Post or WSDL (Web Services Definition Language).
- Providers ability to submit Electronic Lab Record, Immunization or Syndromic Surveillance data via web services.
- Rhapsody Integration Engine utilization for Data validation.

## Rhapsody Engine



## In progress

- On-boarding process
- Hospital Inpatient Discharge Data
- Ambulatory
- Other data from the HIE

## NMSIIS Update

Kevin Bersell, NMSIIS Manager

## New Mexico Statewide Immunization Information System Facts

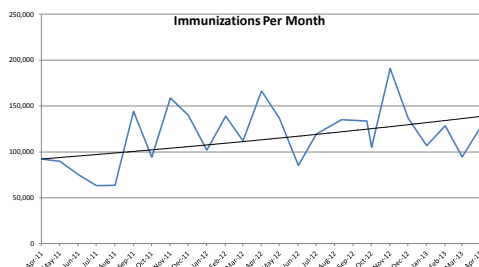
Began in 2005  
Major Upgrade in 2009

Life Time Registry

18,600,000 Vaccinations  
1,800,000 Individuals



## Upward Trend in Reporting



## Because...

...It's the Law!

On April 1, 2013 Gov. Martinez Signed SB58  
Making Reporting of Immunization Mandatory  
Effective July 1, 2013

## Data Exchange

- What Is It?
  - Providers electronically send files containing immunization information to NMSIIS
- Why Is It Important?
  - Quality
  - Timeliness
  - Participation
  - Cost
  - Meaningful Use

## Data Exchange Project Status

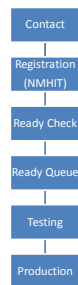
- Upgraded NMSIIS to improve data exchange and implement HL7 2.5.1
- Implement data transport engine (Rhapsody)
- 8 Current Providers with 184 sites
  - 7 HL7 2.3.1
  - 1 HL7 2.5.1

## Current Goals

- Move all current providers to HL7 2.5.1
- Have all new providers use HL7 2.5.1
- Have 50% of all current providers using data exchange by August 2014

## On-Boarding Process

- Takes 3-12 Weeks depending on Vendor Readiness
- Based on Date of NMSIIS Registration
- 44 Providers/Groups Invited
- Currently 12 Providers Actively Onboarding



## Contact

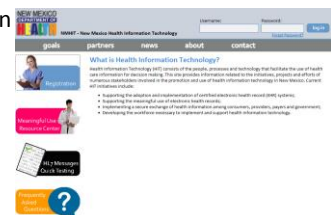
Providers find out about ADX through:

- Meaningful Use activities
- Vendors
- Other Providers
- Immunization Program Contacts

All Contacts are directed to the NMHIT Website to Register

## Registration

- Welcome
- Contact Info
- Documentation



## Ready Check

Provider and Vendor confirm that required components are in place:

- Provider Ready
- IT Support Available
- Registered on NMHIT and NMSIIS
- Transport Technology in Place
- HL7 2.5.1 Compliant including NMSIIS Spec

## Ready Queue

- Waiting for Opening in Testing Phase
- DOH may conduct On-Site visit

## Testing

- Transport Testing
  - HTTP-Post
  - WSDL
- VXU & ADT Testing
  - Test Cases Defined in Documentation
- QBP Testing (Optional)

Test Case ID	Test Case Description	Test Case Status	Test Case Owner
TC-001	Verify that the system can accept a well-child visit request via HTTP-Post.	Pass	John Doe
TC-002	Verify that the system can accept a well-child visit request via WSDL.	Pass	John Doe
TC-003	Verify that the system can accept a well-child visit request via VXU.	Pass	John Doe
TC-004	Verify that the system can accept a well-child visit request via ADT.	Pass	John Doe
TC-005	Verify that the system can accept a well-child visit request via QBP.	Pass	John Doe

## Production

### Transition to Production

- Verification of Readiness
- Provision of Production Information
- Monitoring

## Post-Production

- Monitoring
- Support
- Troubleshooting

## Contact Information

Terry Reusser: [Terry.Reusser@state.nm.us](mailto:Terry.Reusser@state.nm.us)

Web page: [www.nmhit.org](http://www.nmhit.org)

Support: [nmhit@state.nm.us](mailto:nmhit@state.nm.us)

Kevin Bersell: [DOH-NMSIIS-Onboarding@state.nm.us](mailto:DOH-NMSIIS-Onboarding@state.nm.us)

Web page: <http://immunizenm.org/>