

PUTTING THE “QUALITY” BACK IN DATA QUALITY

NESIIS Data Exchange Quality Review

Purpose

- Drive Successful Data Exchange Relationships
 - Improve data quality
 - Improve submission frequency
 - Improve outreach and communication

Approach



- Track and Analyze DX Activity
- Identify & Eliminate Roadblocks
- Follow-Up & Continued Communication

On-Boarding



- Work with File Creators, Copy the Decision Makers
- Hold Your Ground, This is Your IIS
- Make Testing Worth Your Time
- Be Prompt

Holding Your Ground, An Example

From: Benedict, Scott

To: JimBob the Support Guy; JimBob's Boss

Cc: Myself (I track everything)

Subject: RE: Provider Office HL-7 specs for registry - 8021

1. MSH-4 should be: SFMM
2. MSH-6 should be: NESIIS
3. ORC-3 is a required value in all 2.5.1 submissions
4. I will need to see actual values for RXA-5, and before we complete testing this will have to incorporate every possible imm the clinic might provide so I can verify the accuracy of what will be submitted.

Use the specs I provided. We match up with federal standards fairly well, but there will always be items unique to each state. We reference those tables within our documents very clearly.

Scott Benedict

Holding Your Ground, An Example (2)

From: JimBob the Support Guy

To: Benedict, Scott; JimBob's Boss

Subject: RE: Provider Office HL-7 specs for registry - 8021

Dear Scott,

Because we match up with the federal standards we can't change our export for every state. Please let me know if you are able to match our standard specs.

Regards,

JimBob the Support Guy

Holding Your Ground, An Example (3)

From: Benedict, Scott

To: JimBob the Support Guy; JimBob's Boss

Cc: Provider Owner; Me (just for kicks as well as tracking purposes)

JimBob the Support Guy,

Well then, your clients in Nebraska will not be able to share data with the registry. Here is your simple answer: there are 450 EHR/EMR vendors and 50 states. Simple math.

Additionally, the CDC has given states the right to set their own standards. THAT is a federal standard as well.

We follow federal standards for required fields, but very obviously have our own values that are required for certain items you may submit, some of which are required fields (i.e. race, ethnicity, identifier type, county codes, what we accept in RXA-6 and RXA-7, etc.).

You can choose not to modify your code, but that's not going to get you very far with clients who are desirous of attesting to Meaningful Use beyond Stage 1 and, if they still want to attest further, I suspect they will be looking for a new vendor.

I'll be happy to work with you on testing Nebraska-coded messages at any time. Every vendor is in this exact same boat nationally. It's up to you, I suppose, to determine whether or not you want to support clients who need to meet Meaningful Use.

Scott Benedict

Day to Day Approach

□ Monitor Jobs

- Organizations send files at least once a week; most continuously through each day
- Identify immediately if DX drops off

□ Monitor Records

- Data quality
- Identify problems with the HL7 format/structure
- Identify problem with the organization's data
- Help new organizations establish quality DX

Data Exchange Quality Overview

- Track Job Status and Volume
 - ▣ Completed
 - ▣ Failed (exception or error)
- Track Records
 - ▣ Volume
 - ▣ Status (processed or rejected)
 - ▣ Rejection reasons
- Identify Trends in Immunization Reporting
 - ▣ General
 - ▣ Organization-specific

Tracking Jobs

□ Simple Count

Copy weekly list of jobs from Job Monitor into a macro-enabled spreadsheet that tallies them by organization, parent, and vendor

No data/PHI from within the job is copied or pulled out of NESIIS

Tracking Records

□ Various Scripts

- Job numbers of rejected records
- Immunization counts by organization
- Email

□ Review Rejected Records Individually

- Depends on various red flags or indicators (listed later in the presentation)

Reporting Tool

- Customized Spreadsheets
- Local Database,
 - ▣ Identify the organizations
 - ▣ Tally a set of stats by org, parent organization, and vendor
 - ▣ Compile the data in report format.

DX Quality Report

High Level Summary

	Sum of Weekly Imms	Records	Rejected	Jobs	Jobs (Failed)
	3448	3458	10	3033	0
	1892	1955	63	6	0
	4	4	0	1	0
	0	0	0	0	
	100	157	57	21	0
	1391	1393	2	965	0
	3062	3079	17	225	0
	3372	3424	52	16691	0
	0	123	123	18	0
	445	1192	747	3171	0
	8	8	0	9	0
	0	6	6	1972	0
	4	4	0	1	0
	595	796	201	137	0
	597	597	0	756	0
	100	102	2	119	0
	0	0	0	0	
	13	13	0	0	
	12	12	0	5	0
	53	56	3	137	0
	62	62	0	63	0
	450	450	0	0	
	0	0	0	0	
	22	25	3	17	0
	2	2	0	2	0
	1	1	0	2	0
	84	84	0	187	0
Total	15717	17003	1286	27538	0

DX Quality Report

High Level Summary

	Jobs	Failed	Records	Rejected	Imms
⊕ ፍቅጣታዎቻችን	223	0	80	0	80
⊕ ርዕሰ ጽ/ቤት	4811	0	3660	9	3651
⊕ ፍጥነት	147	0	4664	15	4649
⊕ ርዕሰ ጽ/ቤት ለ ጽ/ቤት	0	0	0	0	0
⊕ ርዕሰ ጽ/ቤት ለ ጽ/ቤት	950	0	2107	6	2101
⊕ ጽ/ቤት ለ ጽ/ቤት	1	0	0	0	0
⊕ ጽ/ቤት ለ ጽ/ቤት	20	0	169	65	104
⊕ ጽ/ቤት	6	0	6	1	5
⊕ ጽ/ቤት	15826	0	3162	14	3148
⊖ ጽ/ቤት ለ ጽ/ቤት					
⊖ ጽ/ቤት ለ ጽ/ቤት					
ፍቅጣታዎቻችን ለ ጽ/ቤት	0		100		100
ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		262		262
ጽ/ቤት ለ ጽ/ቤት	4237	0	798	798	
ጽ/ቤት ለ ጽ/ቤት	0		56	10	46
ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		0		
ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		33		33
ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		0		
ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		9	0	9
⊕ ጽ/ቤት ለ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	140	0	220		220
⊕ ጽ/ቤት ለ ጽ/ቤት	492	0	426	0	426
⊕ ጽ/ቤት	0		0		
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	153	0	947	218	729
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		86	1	85
⊕ ጽ/ቤት	3	0	4		4
⊕ ጽ/ቤት	2	0	1		1
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	3	0	13		13
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	3	0	1881	17	1864
⊕ ጽ/ቤት	356	0	0		
⊕ ጽ/ቤት	1	0	1		1
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		0		
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	0		2		2
⊕ ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	1	0	2		2
ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት ጽ/ቤት	27375	0	18689	1154	17535

DX Quality Report

High Level Summary

Vendor	Sum of Wt	Records	Rejected Jobs	Jobs (Failed)	
Parent 1					
Organization	3	3	0	35	0
Organization	68	68	0	75	0
Parent 2					
Organization	1401	1411	10		
Organization	0	0	0	2923	0
Parent 3					
Organization	0	0	0	0	
Parent 4					
Organization	0	0	0	0	
Organization	657	657	0	0	
Parent 5					
Organization	402	402	0	0	
Organization	208	208	0	0	
Parent 6					
Organization	709	709	0		
Next Vendor					

DX Quality Report Details

Org Name	Org Level	Org Short Name	Org ID	Parent	Vendor	Weekly Imm	Completed Jobs	Failed Jobs	Rejected Record	Total Jobs	Percent Complete	Total Record	Percent Rejected	PID-5 Rejected	MSH Rejected
						53			3	0		56	5.36%		
						208			0	0		208	0.00%		
						0	8	0	0	8	100.00%	0			
						0			0	0		0			
						14			1	0		15	6.67%	1	
						0			0	0		0			
						0	2	0	2	2	100.00%	2	100.00%		
						0			0	0		0			
						0			0	0		0			
						0	137	0	0	137	100.00%	0			
						0			0	0		0			
						34			0	0		34	0.00%		
						657			0	0		657	0.00%		
						0			0	0		0			
						0			0	0		0			
						4	1	0	0	1	100.00%	4			
						25	26	0	0	26	100.00%	25	0.00%		
						164	30	0	0	30	1	164	0		
						0	21	0	0	21	100.00%	0			
						0	79	0	1	79	100.00%	1	100.00%	1	
						8	9	0	0	9	100.00%	8	0.00%		

Name

Org ID Number

Parent Name

Vendor Name

No. of Immunizations

No. of Jobs

No. of Rejects

Percent Completed Jobs

Percent Rejected Records

Reject reasons

Monthly Immunizations Report

Summary Page

Values	Dec. 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	June 2013	July 2013	August 2013
	4508	2073	0	6333	2310	1513	1747	1624	3748
	0	0	0	158	282	135	7366	10271	19056
	8243	8957	4757	5295	5979	5802	5724	6799	7691
	44	113	70	84	58	63	72	62	60
						3	11	12	3
	50	47	33	28	29	15	24	34	16
	12434	16177	7785	1993	601	8159	10645	14294	18072
	138	175	276	310	153	66	368	548	64
	502	757	381	590	436	549	518	761	840
	3102	1945	1035	1046	1485	1232	1983	1976	2144
	533	853	564	1864	874	1192	869	1265	2438
	783	772	509	473	393	394	470	449	472
				461	481	423	494	510	1061
	10082	17251	2302	102	37	0	0	0	0
	15058	18934	11402	12094	12004	12056	13714	15422	17965
			87	71	35	152	140	206	322
	31	25	92	21	27	32	12	34	29
	515	869	187	0	3	3	0	2	8
	1692	2294	1643	1819	10599	2215	2466	2938	3022
		337	131	50	77	66	73	61	49
							28	45	64
	7	14525	0	0	38	0	0	0	0
		4009	310	328	261	203	193	310	334

Monthly Immunizations Report

Details Page

Start Live DX	HL7 Version	Transaction Type	Parent	Vendor	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
01/29/2013	2.4	Live, PHINMS	AthenaHealth	AthenaHealth		4009	310	328	261	203
07/08/2013	2.5.1	LIVE PHINMS	NeHII - HIE	NextGen						
01/05/2012	HL7 2.4	Live, PHINMS	Alegent Health	Cerner						
01/05/2012	HL7 2.4	Live, PHINMS	Alegent Health	Cerner	4	3		4	1	
01/05/2012	HL7 2.4	Live, PHINMS	Alegent Health	Cerner	90	108	74	60	56	35
11/18/2011	HL7 2.4	Live, PHINMS	NeHII	NeHII - Elysium						
	HLS 3.4	LIVE, PHINMS	Allscripts	ALLSCRIPTS						
11/18/2011	HL7 2.4	Live, PHINMS	NeHII	NeHII - Elysium						
11/18/2011	HL7 2.4	Live, PHINMS	NeHII	NeHII - Elysium						
11/18/2011	HL7 2.4	Live, PHINMS	NeHII	NeHII - Elysium						
01/29/2013	2.4	Live, PHINMS	Self	AthenaHealth						
04/18/2012	HL7 2.4	LIVE, PHINMS	North Platte Nebraska Physicians Group	ALLSCRIPTS						
01/05/2012	HL7 2.4	Live, PHINMS	Alegent Health	Cerner	317	391	261	280	171	170
07/08/2013	2.5.1	LIVE PHINMS	NeHII-HIE	NEXTGEN						
06/10/2013	2.5.1	Live PHINMS	NEHII-HIE	NextGen						
07/08/2013	2.5.1	Live PHINMS	NeHII	NextGen						
09/23/2011	HL7 2.4	Live, PHINMS	Broadstone Hospital	Healthland	9	6	1	1	5	2
09/27/2011	HL7 2.4	Live, PHINMS	Self	Allscripts	88	86		56	87	109
01/09/2012	HL7 2.4	Live, PHINMS	Self	Healthland	1	8	2	2	3	1
08/07/2013	2.5.1	Live, PHINMS	Self	e-MDs						
8/7/2013	HL7 2.5.1	Live, PHINMS	Self	e-MDs						
			Catholic Health Initiatives	Meditech						

Priority Indicators



- Failed Jobs
- High Number of Rejections
- New Organization Activity

Other Indicators

- ❑ Zero Jobs Submitted
- ❑ Higher Number of Rejections
- ❑ Percent Completed Jobs
- ❑ Percent Rejected Records
- ❑ Completed Jobs but No Imms
- ❑ Rejected Records, but No Jobs
- ❑ Previous Week's Performance

Indicators (cont.)

- Trend Deviation
- Rate of Change
- Sudden Drop Offs
- Zero Deltas

Action When Issues Are Found

- **From:** Benedict, Scott [<mailto:Scott.Benedict@nebraska.gov>]
Sent: Tuesday, June 11, 2013 12:48 PM
To: Vendor Rep
Subject: CMED, FMCH, NEIM
-
- Vendor Rep,
-
- Hey, can you reach out to each of the above sites again and impress upon them the fact they **MUST** enter a value in the CVX field regardless?
-
- Yesterday, 36 records rejected as they came in with values of 999 in RXA-5, mostly from CMED but a few from the others as well. It is certainly not for lack of information on their part. Seems to be an inside training issue on their part.
-
- **Scott Benedict**
NESIIS Help Desk Coordinator
- **Data Exchange Coordinator**
Nebraska DHHS
Personal: 402-471-6520
Help Desk: 888-433-2510 or dhhs.nesiis@nebraska.gov

Results Over Time



44,703
Immunizations

September
2012

147,141
immunizations

September
2013

Administrator use of this data:

- Web Site listing of participating facilities
- Administrative updates to Directors and Legislators
- Coordination with other MU measures (SS, ELR, etc.)
- Internal DX promotion and recruitment
- Provider participation rates

Future Use for Reports and MU:

- NE Medicaid and Managed Care Unit
- Project tracking tool
- Attestation Verification
- Public Health Role in the MU process

Value

- Drive Successful Data Exchange Relationships
 - Improve data quality
 - Improve submission frequency
 - Improve outreach and communication

Accurate Information



QUESTIONS

