

Vermont Immunization Registry and AFIX Assessments

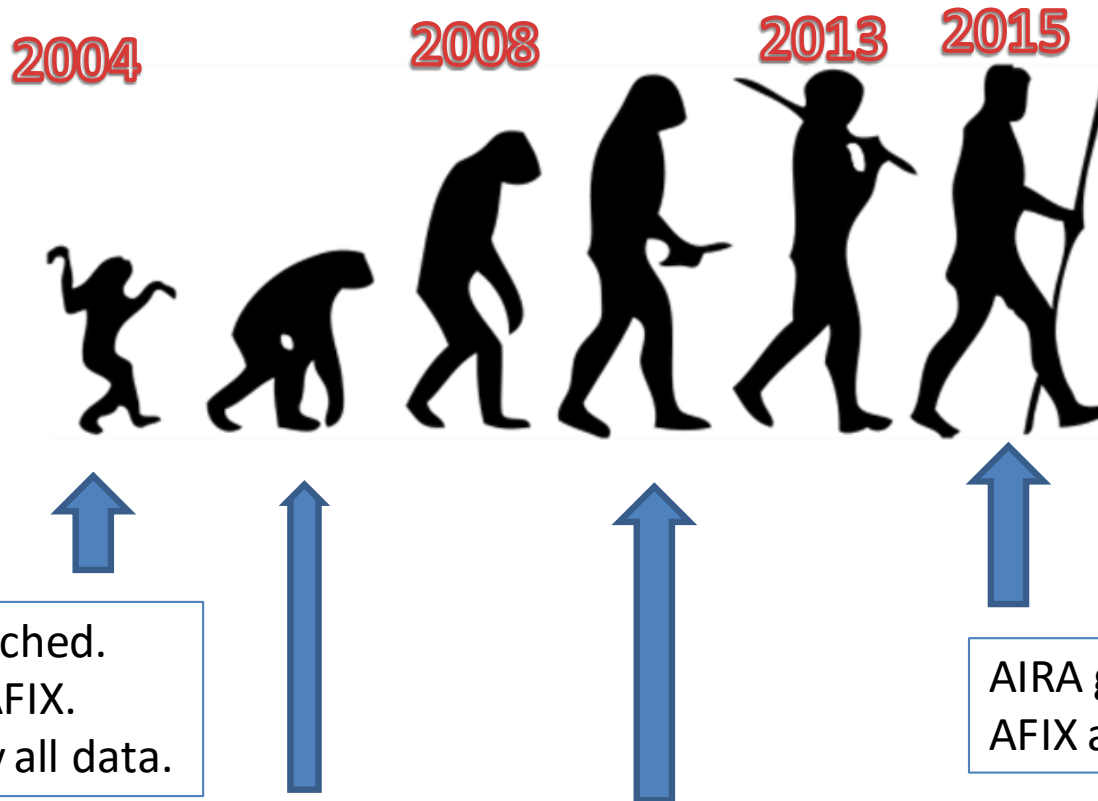


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It's a No-Brainer!

- AFIX is a quality improvement strategy used by Immunization Programs to **increase vaccine coverage** and **promote best practices** around immunization.
- Utilizing IIS information for quantitative AFIX assessment makes sense.
- But...how do you do that???

Vermont Department of Health



Vermont Immunization Registry (IMR)

- IMR Application developed in-house.
- AFIX conducted by **Immunization Designees** (PH Nurses) at local Health Offices.
- IMR used for AFIX since 2013.
- IMR active participation close to 85%.

What are the AFIX parameters?

- What can your IIS already do?
- Where are the shortcomings/needs?
- How do you ask for changes?

HELP – is on the AIRA Website

AFIX-IIS Integration


Operational and Technical Guidance for Implementing
IIS-Based Coverage Assessment – Phase 1

August 2015



Guidance Helps

- Explains AFIX requirements
- Organized way to assess your needs
- Provides Business Rules
- Gives “gravitas”



So it sounds like you
Know what you are
talking about!!

Needs Assessment using Guidance

Our Strengths

- Existing reports that included vaccine coverage.
- Used forecaster in report, to assess UTD.
- Excluded invalid doses.
- Excluded contraindications.

Our Challenges

- Used the date of assessment, for UTD measurement.
- Used UTD for all series – not dose count.
- Had not included influenza, or polio.
- No ability to measure missed opportunities.
- No immunity by titer for MMR, HepB.



BestChoice Health Care

xyz
Winooski, VT 05404

"All" AFIX Report - Practice View Vaccine Coverage

Assessment Type: Child

Assessment Date: 12/01/2015

Patients Born Between 12/02/2012 and 12/01/2013

Report Date: 12/23/2015

Vaccine Series	# of Patients Up to Date	# of Patients In Age Group	% Patients Up To Date
Dtap	3	6	50.0%
Polio	5	6	83.3%
MMR	6	6	100.0%
Hib	4	6	66.7%
HepB	5	6	83.3%
Varicella	6	6	100.0%
Pneumococcal	4	6	66.7%
All Series Above	3	6	50.0%

Please Note:

- Accuracy of this report depends on the accuracy and completeness of records entered at your practice.
- This report excludes any 'invalid' immunizations administered outside the guidelines set by the Advisory Committee for Immunization Practices.

Vaccine Coverage

"All" AFIX Report - Missing Series

Assessment Type: Child

Assessment Date: 12/01/2015

Patients Born Between 12/02/2012 and 12/01/2013

Report Date: 12/23/2015



Patient Name	Date of Birth	Vaccines Due	Address	PI
FETTUCINI, FREDDIE	02/01/2013	DTP/aP Hib Pneumo Conjugate	See Medical Chart	
PICKLES, PAUL	02/18/2013	DTP/aP HepB Hib Pneumo Conjugate Polio	X Winooski, VT 05404	
SNOW, WINTER	09/14/2013	DTP/aP	1 Main St. South Burlington, VT 05407	

ID Problem Patterns

Please Note:

- This record reflects only those immunizations recorded in the Vermont Immunization Registry.
- This record may not reflect the complete immunization history for the patient.
- Accuracy of this report depends on the accuracy and completeness of records entered at the practice.



BestChoice Health Care

xyz
Winooski, VT 05404

"All" AFIX Report - Invalid Doses

Assessment Type: Child

Assessment Date: 12/01/2015

Patients Born Between 12/2/2012 and 12/1/2013

Report Date: 12/23/2015

Last Name	First Name	DOB	Invalid Immunizations	Date of Invalid Immunization
FETTUCINI	FREDDIE	02/01/2013	MMR	01/20/2014
FETTUCINI	FREDDIE	02/01/2013	Varicella	01/20/2014

Please Note:

- Invalid doses are doses administered that are in direct conflict with ACIP recommendations.
- For questions about Invalid Immunizations, see individual's Immunization History for details,

ID Schedule Errors

Vermont Department of Health

Patient Summary

Patient: fettucini, freddie

Date of Birth: 2/1/2013

Patient Age: 2 years 10 months and 22 days

Residence: Burlington

Practice Name: BestChoice Health Care

The Vermont Immunization Registry is a tool to assist in tracking and forecasting immunizations currently due and overdue, based on date of birth. It is not intended to replace medical expertise.

Immunizations

Enter immunizations as:

☒ Current ☐ Historical

Status	Vaccine	Dose 1	Dose 2	Dose 3	Dose 4	Dose 5
	DTaP-HepB-IPV					
	DtaP-IPV/Hib	4/4/2013	5/25/2013	8/1/2013		
	Hib-PRP-T					
	PCV 7, Pneumococcal conjugate					
	PCV-13 Pneumococcal conjugate	4/4/2013	5/25/2013			
	DTaP					
	DTaP-IPV					
	IPV					
	HepA, ped/adol 2 dose					
	HepA-Adult					
	HepB, pediatric or adolescent	2/2/2013	4/4/2013	5/28/2013	8/1/2013	
	HepB-Adult					
	HepA-HepB Adult					
	Rotavirus (3 dose) RV5					
	Rotavirus (2 dose) RV1	4/4/2013				
	MMR	1/20/2014	12/1/2015			
	MMRV					
	Varicella	1/20/2014	12/1/2015			

Vaccination Record

Vaccine Group	Date Administered	Status
DTP/aP	4/4/2013	1 of 5
DTP/aP	5/25/2013	2 of 5
DTP/aP	8/1/2013	3 of 5
HepB	2/2/2013	1 of 3
HepB	4/4/2013	2 of 3
HepB	5/28/2013	
HepB	8/1/2013	3 of 3
Hib	4/4/2013	1 of 4
Hib	5/25/2013	2 of 4
Hib	8/1/2013	3 of 4
Influenza	12/1/2015	
MMR	1/20/2014	Not Valid
MMR	12/1/2015	1 of 2
Pneumo Conjugate	4/4/2013	1 of 4
Pneumo Conjugate	5/25/2013	2 of 4
Polio	4/4/2013	1 of 5
Polio	5/25/2013	2 of 5
Polio	8/1/2013	3 of 5
Rotavirus	4/4/2013	1 of 2
ROTIX	4/4/2013	1 of 2
Varicella	1/20/2014	Not Valid
Varicella	12/1/2015	1 of 2

Vaccines Recommended by Tracking Schedule

Vaccine Group	Earliest Date	Recommended Date	Overdue Date	Latest Date
DTP/aP	2/1/2014	5/1/2014	9/1/2014	1/31/2020
HepA	2/1/2014	2/1/2014	2/1/2015	
HepB	Complete			



THIS IS A JOB FOR.....

- REQUIREMENTS
- RECOMMENDATIONS
- DEFINITIONS
- REPORT DESCRIPTIONS



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IMR Reports and AFIX Assessment

ASSESSMENT	IMR has	IMR needs Now	Later?
Vaccine Coverage Report, others	x		
Providers can run own reports	x		
Add missing antigen and series		x	
Adjust Compliance Date for CHILD Assessment		x	
Add missed opportunity assessment		x	
Display vacman pin		x	
Add variables for immunity by titer			?
Export Report		x	
Reasons for Invalid Doses			?

User Story

- As <Role>
 - I want to <make these changes>
 - So that <rationale>
-
- Acceptance Criteria <define>
 - Priority <need in relation to other enhancements>

Revision to User Story #1 for AFIX-IMR Integration (excerpt)

As the IMR manager and Immunization Program Staff responsible for AFIX

We want to change the logic used on the AFIX coverage report for determining whether children are counted as having met the measure for certain vaccines. This includes:

- **Changing the date of compliance** for the Childhood Assessment from the date of the assessment to the child's second birthday.
- **Using number of doses by age two vs. series complete as the standard for certain vaccine series in the Childhood Assessment.**
 - Dtap, Polio, MMR, Varicella, HepA, influenza, and the series measure "4:3:1:3:3:1:4" will be assessed by number of doses.
 - Hib, HepB, PCV, and Rotavirus will be assessed using "UTD" (up to date) via the forecasting algorithm.
 - Influenza will be assessed based on the previous flu season. A flu season is defined as July 1 through June 30.

Antigen and Series Adjustments

Childhood Assessment Defaults

Assessment Date: "Today's Date"

Age Range (in Months): 24-35

As of Date: "Today's Date"

Compliance by (Age): 24 months

Series Selection:

4 DTaP

3 Polio

1 MMR

UTD Hib

UTD Hep B

1 VAR

UTD PCV

UTD RV

1 Influenza (previous season)

2 Hep A

4:3:1:3:3:1:4 (series)

Adolescent Assessment Defaults

Assessment Date: "Today's Date"

Age Range (in Years): 13-17

As of Date: "Today's Date"

Compliance by (Date): "Today's Date"

Series Selection:

UTD Hep B

2 MMR

2 VAR

1 Tdap

UTD Meningococcal

3 HPV

2 HPV

1 HPV

1 Influenza (previous season)

2 Hep A

UTD Polio

Missed Opportunity Evaluation

Requirement: Missed Opportunities calculations will be based on the last immunization visit.

On the patient's last visit for an immunization he/she received a dose of a different antigen than the antigen in question, or there was a reason a different antigen was not given, and at the time of that visit a valid dose of the antigen in question could have been administered in keeping with the patient's age and the time interval from the previous valid or invalid dose.

Challenges

- IT is shared resource.
- We have competing priorities:
 - Vaccine Ordering, VTrcks
 - HL7 Standardization
 - Forecaster update

AFIX is worth the effort!

- AFIX reports give useful information.
- Puts EVALUATION into provider hands
 - “Just enough” information.
 - Provider can choose area of focus.
 - Measurable Improvements.
 - Useful for other QC projects.

Contact Information

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