

hosted by the Missouri Department of Health and Senior Services' Bureau of Immunization Assessment and Assurance www.health.mo.gov/immunizations

webinar series

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Clinical Use and Benefits of State
Immunization Information Systems
August 21, 2014

What are Immunization Information Systems (IIS)?

- "[...]confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area."¹
- Sometimes called "Immunization Registries"
- Missouri's Statewide IIS is known as "ShowMeVax"
- All US states, territories and even some large cities (e.g. Chicago, NYC, LA, DC) have IIS



What are the Purposes of IIS?

- "At the point of clinical care, an IIS can provide consolidated immunization histories for use by a vaccination provider in determining appropriate client vaccinations." 1
- "At the population level, an IIS provides aggregate data on vaccinations for use in surveillance and program operations, and in guiding public health action with the goals of improving vaccination rates and reducing vaccine-preventable disease."



Who Uses IIS?

- Clinics
- Hospitals
- Pharmacies
- Schools
- Child care Facilities
- Public Health
 - Local public health agencies
 - DHSS Division of Community and Public Health
 immunizations

Fast Stats. (as of May 2014)

- Total Clients: 3,826,725
- Total Doses: 34,619,141
- 579 medical provider locations with 3,175 active users
- 481 schools and child care facilities with over 1,643 active users
- 200+ Connections with EMR/EHRs
 - 10 bi-directional connections



What are the benefits to patients?

- Easily tracks immunizations over time and for multiple medical facilities
- Helps ensure patients are properly immunized
 - On schedule
 - Not over immunized
- Makes school immunization verification quick
- Records medical alerts and adverse reactions



What are the benefits to providers?

- Ensures patients are up-to-date
- Helps complete medical records
- Easier to work with patients who are referred or transferred to new medical home
- Coverage reports for quality care measures or grant applications
- Reminder recall reports
- If using EMR/EHR, The Centers for Medicare and Medicaid Services (CMS) Meaningful Use incentive eligibility
- Faster Vaccines for Children (VFC) vaccine order processing and delivery



How are IIS Related to CMS EMR/EHR Meaningful Use?

 CMS is authorized to make incentive payments to eligible professionals (EPs) and eligible hospitals (EHs) demonstrating meaningful use of certified Medicare and Medicaid Electronic Health Records (EHR) technology.



How are IIS and CMS EMR/EHR Meaningful Use Related?

EPs

 For Stage 2 of Meaningful Use (MU) ongoing submission of electronic data for immunizations is in the core set for EP's and reporting for cancer and specialty registries is a menu selection.

• EHs

 The Stage 2 MU requirement for EHs ongoing submission of electronic data for immunizations, syndromic surveillance and electronic laboratory results.



What are the Data Sources for IIS?

- Manual Entry from Web Application
- Vital Records (hepatitis B birth doses)
- Electronic Medical Records / Electronic Health Records (EMR/EHR) via Health Level Seven (HL7) messages
 - Direct interface or
 - Health Information Networks (Missouri Health Connection)
- Medicaid Billing
- Batch files



Is reporting to an IIS subject to the HIPAA Privacy Rule?

 Per CDC, "No. Reporting of immunizations to an IIS are exempt from the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule since it is considered a public health activity."²



ShowMeVax

EMR/EHR Interoperability

- Uses HL7 version 2.5.1
- Interfaces with existing EMR/EHR systems
- Bi-directional capability with EMR/EHR
 - Submit & Query

Web Application

- Internet Browser basedapplication
- Provides similar features to some EMR systems
- Provides several aggregate reports





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Missouri's Statewide Immunization Information System

SHOWMEVAX WEB APPLICATION (NON EMR/EHR ACCESS & USE)

ShowMeVax Web Application Requirements

- PC*
- High Speed Internet
- Internet Explorer*
- Paperwork Memorandum of Agreement, User Security
- Does <u>not</u> work with mobile devices (smart phones and non-Windows based tablets)

*limited support is supplied for Mac and other browsers



ShowMeVax Web Application Key Features

- Updated immunization schedule guidance
- Online vaccine ordering for Vaccines for Children Program
- Data reports available to providers
- Auto deducting immunization inventory management
- Patient immunization-related medical alerts



Home Page



DHSS Home

State Home

eMomed

Tuesday, January 24, 201

Username: SMV32 Sign Out

DEPARTMENT OF HEALTH AND SENIOR SERVICES

Agency: CASS COUNTY HEALTH DEPARTMENT Change

ShowMeVax Home

Client

Search & Registration

Demographics

Immunizations

Inventory

DataWarehouse Reports Help

User Manual

FAQ Release Notes Welcome to the Missouri Immunization Registry

Immunization Announcements



08/19/2010 2010 Missouri Immunization Conference "Victories and Challenges"

ShowMeVax Announcements

08/23/2010 Possibly tainted meats sold at Walmart recalled



08/23/2010 Hurricane Danielle suddenly weakened on Tuesday morning, dropping from 100 to 80 mph.

Immunizations

Whats New

Upcoming Trainings and Conferences

Forms

VFC Provider Forms

Not a VFC Provider? Click here for more information about the VFC Progr. VIS Forms

Related WebSites

DHSS Immunization Homepage Immunization Action Coalition

CDC: Vaccines and Immunizations

List of Vaccines used in United States

Vaccine Immunization Schedules

Catch-up Immunization Scheduler

VAERS- Vaccine Adverse Event Reporting System

Inventory ite	ms that are Running	Low - 25 or less	on hand ▼ Records Pe	r Page: 5👇 🛚 I∢	∢ Page 1	of 3 ▶ ▶ I	4
Exp Date	Site Name	Vaccine Family	Vaccine Name	Trade Name	Lot Numbe	NDC Number	On Hand
12/13/2012	DJB TESTING	HEP B	HEP B (3 DOSE) PED/ADC	RECOMBIVAX HB	DJB321	00006-4981-00	10
03/08/2013	DJB TESTING	ZOSTER (SHINGL	ZOSTER VACCINE, LIVE	ZOSTAVAX	DJB987	00006-4963-00	9
06/05/2013	DJB TESTING	HEP B	HEP B ADULT	RECOMBIVAX HB	DJB456	00006-4995-41	9
03/31/2013	DJB TESTING	HEP A	HEP A PED/ADOL	VAQTA	DJB888	00006-4831-41	10
08/30/2012	DJB TESTING	HEP A	HEP A ADULT	VAQTA	DJB777	00006-4096-09	9 🔻

Inventory ite	ms that are Expiring	in 3 Months 🔻	Records Per Page:	5 🚝 🚄					
Exp Date	Site Name	Vaccine Family	Vaccine Name	Trade Name	Lot Numbe	NDC Number	On Har	Expires(Mc	
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01/31/2012	DJB TESTING	VARICELLA	VARICELLA	VARIVAX	DJB334	00006-4827-00	7	0	
01/31/2012	DJB TESTING	HEP B	DTAP/IPV/HEP B	PEDIARIX	DJB444	58160-0811-51	8	0	
01/31/2012	DJB TESTING	MMR	MMR	MMR II	DJB555	00006-4681-00	7	0	
01/31/2012	DJB TESTING	MENINGOCOCCAI	MENINGOCOCCAL (MENACTRA	DJB666	49281-0589-05	9	0	-

Client Search



Client Search

	My Recent Clients My Lo	cation Recent Clien					
Client Sea	rch Instructions						
Person Na	me (Minimum Required Fields: Eitl	her Clients Last and Firs	st Name or Mothe	rs Maiden Name a	and Date of Birth)		Search
Last Name	: wa		First Name :	un			DSS Search
Gender :			Date of Birth	: Mon	Day Year		Register With DCN
Gender .			Date of Birth	. 14011	Day real		Clear Search
Mother's Ma Name :	aiden		Search Type :	LIKE	•		
Person Ide	entifier (Minimum Required Fields	: Either Client's DCN or	SSN or Client Id	0			
DCN:			SSN:				
Client Id :							
Ciletti Id :							
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Search result	s exceed more than 500 pc		Displaying on			◆ Page 1 DCN	of 34 • • • • • • • • • • • • • • • • • •
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Search result Please refine Client Id	s exceed more than 500 po your search criteria to nar Client Name WAHOFF, UNKNOWN Primary Name: SMETZER, CAR WALTERS, UNKNOWN	row your results. Mother's Maiden	Gender C	oly the first 50	00 matches.	,	
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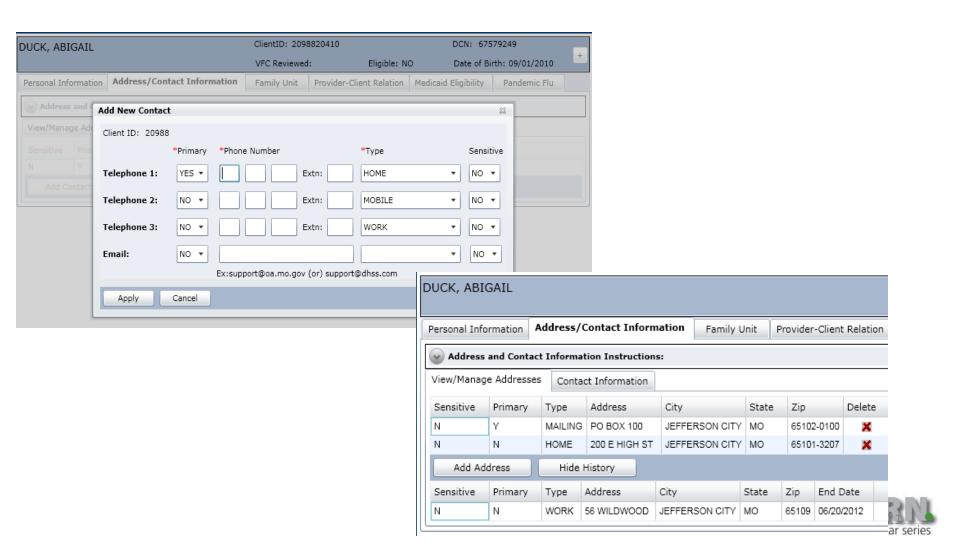


Personal Information & Demographics

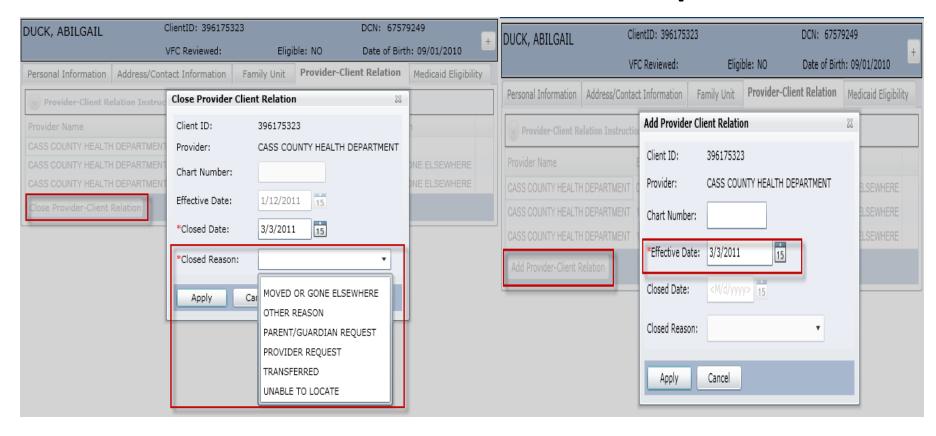
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				VFC Reviewed	d:	Eliç	gible: NO	Date of	f Birth: 09	9/01/2010	Ŀ
Personal I	nformation	Address/Co	ontact Informatio	n Family U	nit	Provider-Clie	nt Relation	Medicaid Elig	ibility		
Person:	al Informati	ion Instruction	s:								
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A.K.A.	N	ABIGAIL		DUCK		×					
Add											
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Person	al Informat	tion Instruction	ns:								
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A.K.A.	N	ABIGAIL		DUCK		×					
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Gender: FE	MALE	-									
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Adding/Deleting Contact Information



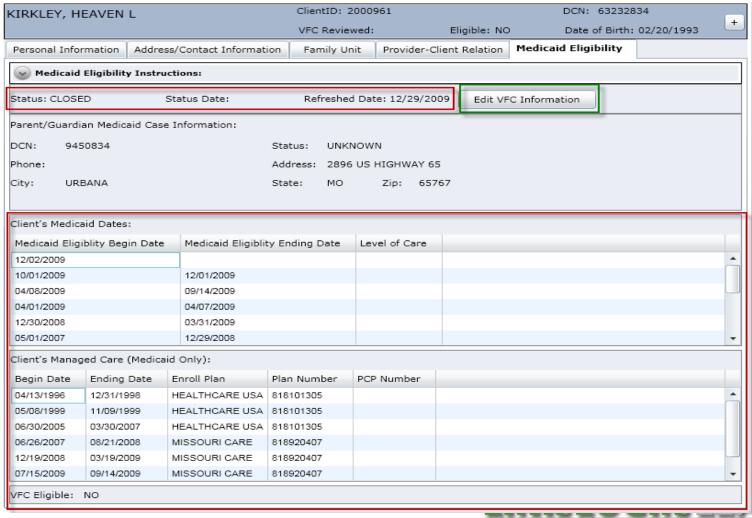
Provider Client Relationship



- •If a relationship already existed for the client, then the only option available is to close.
- •After clicking the Close button, user can enter the Closed Date and Closed Reason.

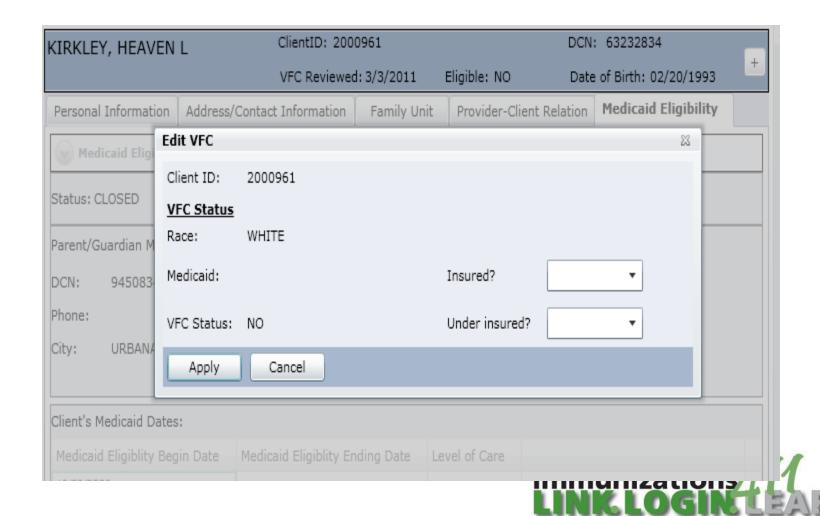
- •If a client's relationship is closed, the provider can re-open or open a new relationship by clicking the Add Providerclient Relation button.
- •In the Add screens, the only required field is the effective date.

Medicaid Eligibility Information

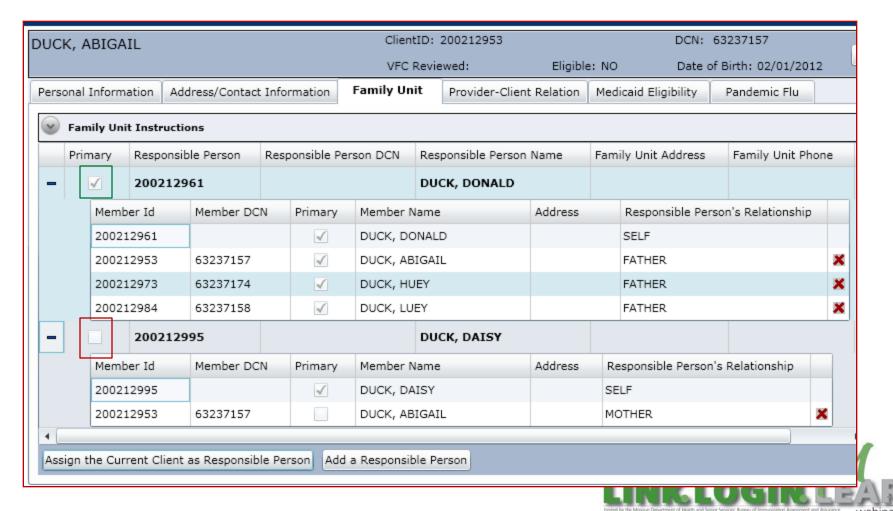


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VFC Eligibility Information



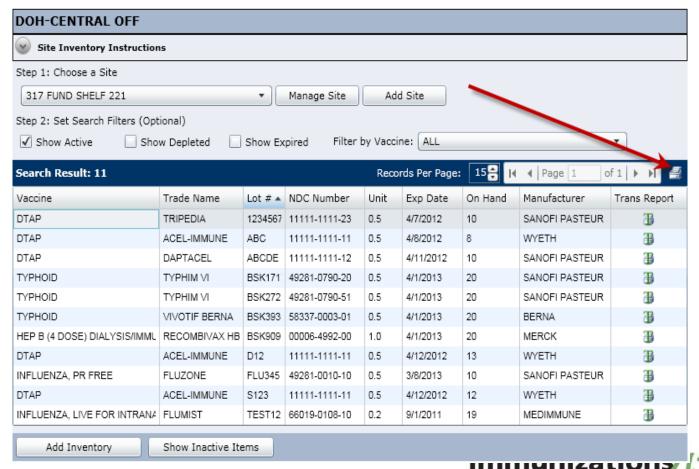
Family Unit With Responsible Persons



INVENTORY



Viewing and Printing Inventory Items

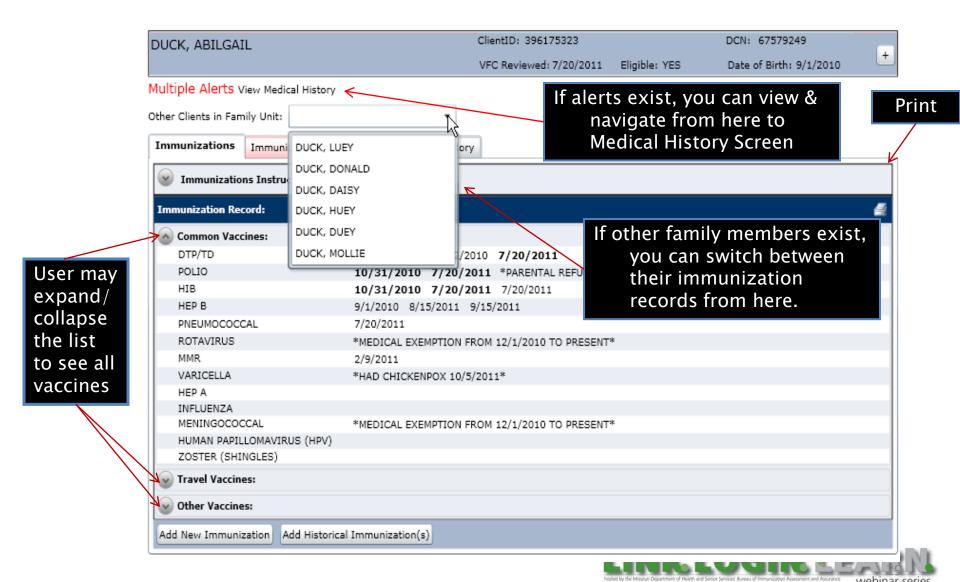


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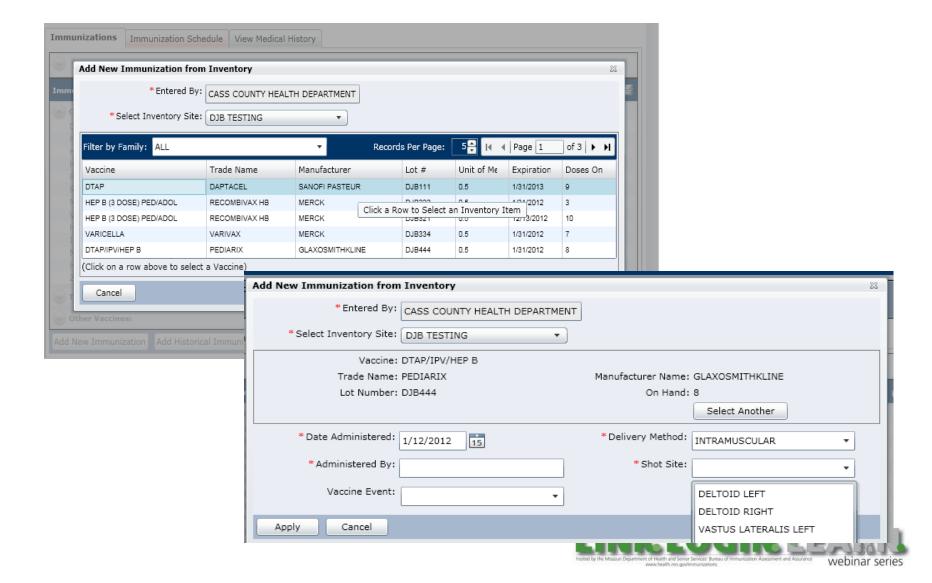
IMMUNIZATIONS



Immunization Record



Adding New Immunizations



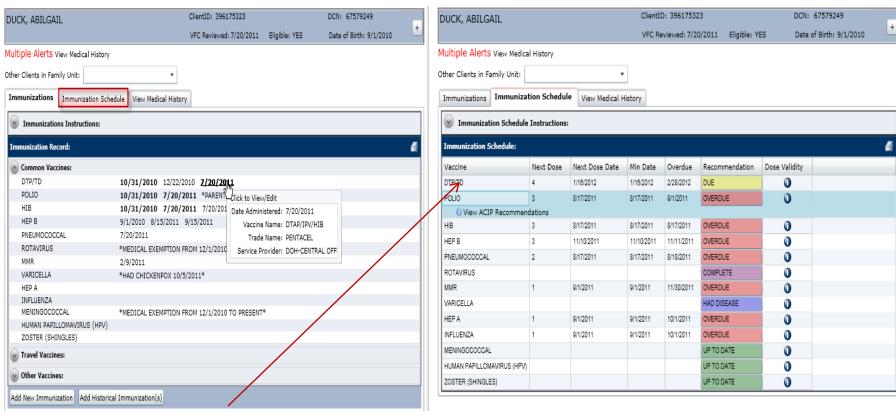
Adding Historical Immunizations

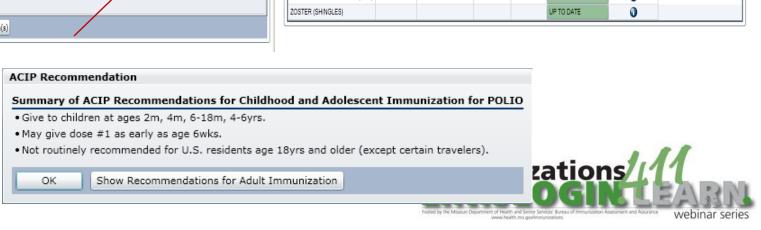


CLINICAL APPLICATION

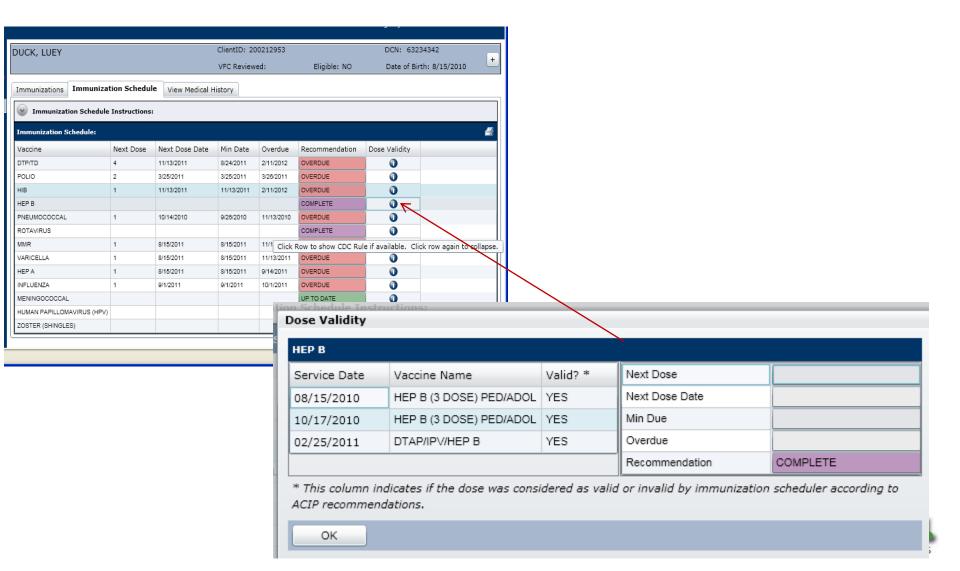


Immunization Schedule





Vaccine Schedule / Dose Validity



Age inappropriate vaccine (DTaP given to adult)

	Shot administered after maximum age		
** Select Inv	Maximum age for this vaccine is 2555 days. Are you sure you want to continue?	EPARTMENT	23
	OK Cancel	Manufacturer Name: GLAXOSMITHKLINE On Hand: 14 Select Another	
* Date Ad	Iministered: 5/13/2014 15	*Delivery Method: INTRAMUSCULAR	
* Admi	nistered By: DF	*Shot Site: DELTOID LEFT	
Va	ccine Event:		
Apply	Cancel	Please wait Retrieving Records	

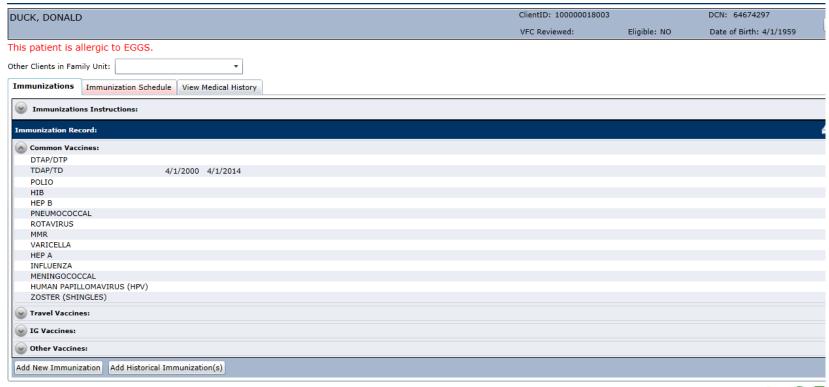
immunizations/

Too closely spaced (hep. B)

Add New Immunization from Inventory	X
* Entered By: COLUMBIA-BOONE COUNTY HEALTH DEPARTMENT Shots too closely spaced * Select Inve	
The shot is too closely spaced to other existing similar shot(s). Are you sure you want to continue? Lc nd: 3	
* Date Adm OK Cancel id: INTRAMUSCULAR	
* Administered By: DF *Shot Site: DELTOID LEFT	•
Vaccine Event:	
Apply Cancel Please wait Retrieving Records	



Medical Alerts





Next Dose Reminder Recall Reports

Name and Date of Birth

DUCK, DAFF D

573-000-000

05/24/2013

Small Town MO 65550

123 Main Street

Client Reminder Recall

Next Due Date 05/24/2014	Overdue Date 08/22/2014	Shot Family RUBELLA	Next Dose Number 1
05/24/2014	08/22/2014	MUMPS	1
05/24/2014	08/22/2014	MMR	1
06/06/2014	08/22/2014	HIB	1
06/06/2014	06/07/2014	HEP B	3
05/24/2014	08/22/2014	VARICELLA	3
05/24/2014	06/23/2014	HEP A	1
05/24/2014	08/22/2014	MEASLES	1

BUNNY, BUGS

573-000-000

06/05/2013

Small Town MO 65550

123 Main Street

Client Reminder Recall

Next Due Date	Overdue Date	Shot Family	Next Dose Number
06/05/2014	09/03/2014	MMR	1
06/05/2014	09/03/2014	HIB	1
06/05/2014	07/05/2014	HEP A	4
06/05/2014	09/03/2014	VARICELLA	1
06/05/2014	09/03/2014	MEASLES	1



Additional Reports

- Vaccine Tally Sheet
- Doses Administered by Inventory Site, Vaccine Name,
 Trade Name and Age Group
- Doses Administered by Vaccine Name and Age Group (Historical)
- Doses Administered by Vaccine Name and Age Group (From HL7 Only)
- Client Listing
- Immunization Data by Vaccine Series
- Immunization Data by Vaccine Type and Summary of Vaccine Coverage By Age Group

Questions / Discussion





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Clinical Use and Benefits of State Immunization Information Systems

ETC.

Resources:

- Four self-paced learning modules:
 - http://ShowMeVaxU.com
- Missouri Public Health Meaningful Use Page:
 - http://health.mo.gov/atoz/mophie
- Centers for Disease Control & Prevention Meaningful Use Page:
 - http://www.cdc.gov/EHRmeaningfuluse/
- Centers for Disease Control & Prevention Immunization Information Systems Page:
- http://www.cdc.gov/vaccines/programs/iis/



References

- About Immunization Information Systems,
 Centers for Disease Control and Prevention
 http://www.cdc.gov/vaccines/programs/iis/a
 bout.html
- IIS Frequently Asked Questions
 http://www.cdc.gov/vaccines/programs/iis/r
 esources-refs/faq.html#Q8

