

VENTURA COUNTY
Foster Health Link

**California State Association of Counties
November 29, 2016**

**Barry L. Zimmerman, Director
County of Ventura Human Services Agency**

Foster Health Link

Why Foster Health Link?

- Equip Foster Parents with Knowledge
- Better Care for Foster Children

Medical Records Integration

- Unique Technical Solution
- Multiple Systems Integrated

Impact

- Eliminate Patchwork of Info.
- Provide Real-time information



Better information for better health decisions

Medical Records Integration

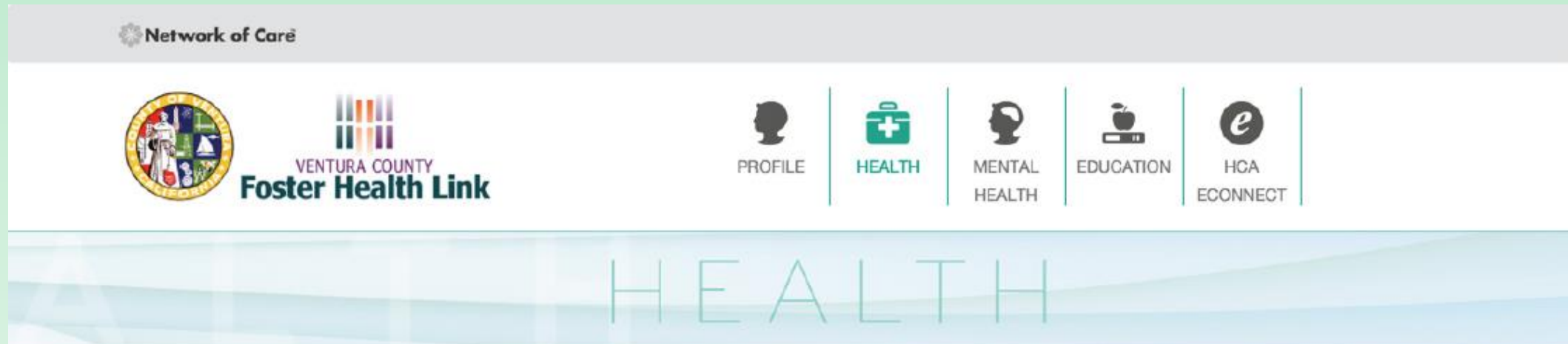
- Requirements
- Constraints
- Solution
- Security Analysis
- Risks
- Benefits



Better information for better health decisions

Requirements

- Caregiver can view information available in VC Health eConnect for each child
- Medical record information for each child should be viewable within the context of the child's other information on **Foster Health Link**



Better information for better health decisions

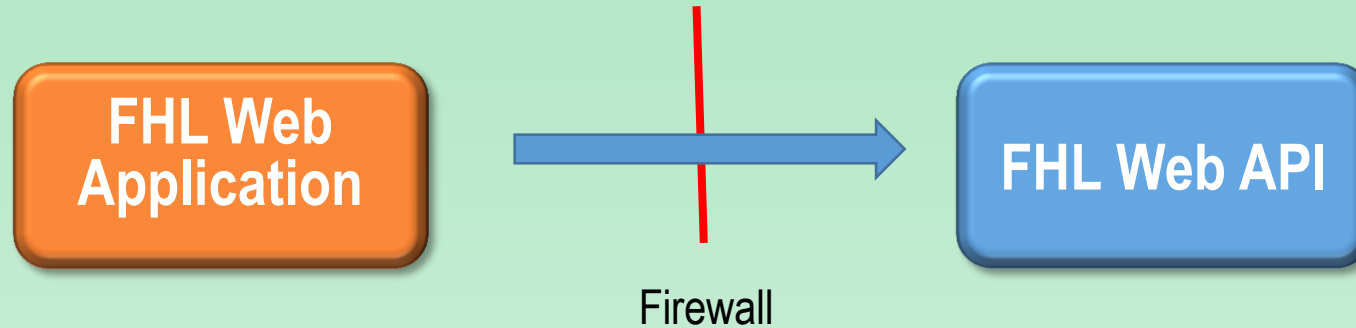
Constraints

- Caregiver is not required to authenticate into VC Health eConnect
- Child's medical record information is inaccessible from the same browser after the caregiver logs out of **Foster Health Link**



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Step 1: Foster Health Link Web App makes a secure request for the child's medical record information to Foster Health Link Web API. The requested information could be Profile, Medications, Documents, Labs, Messages, Appointments, etc.



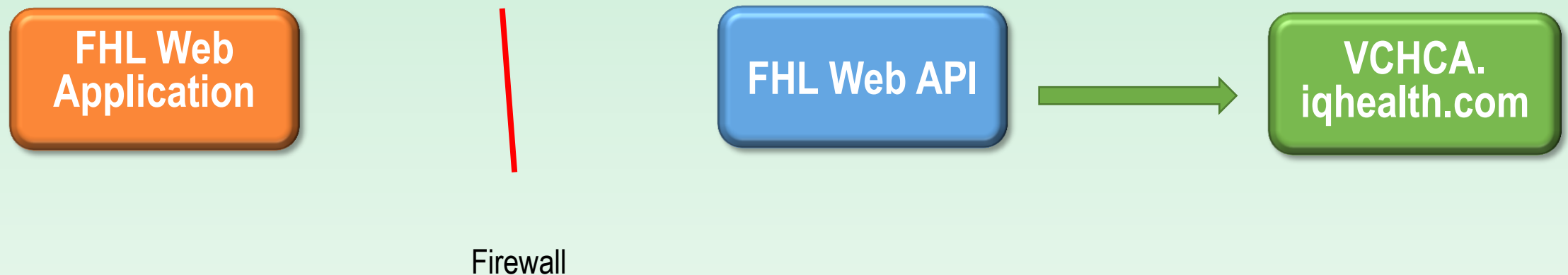
Step 2: Foster Health Link Web API calls the CernerHealth.com login page and caches cookies. It then authenticates into CernerHealth.com using the child's stored credentials. CernerHealth.com redirects to VCHCA.iqhealth.com.



Step 3: VCHCA.iqhealth.com returns the landing page for the user along with session cookies. FHL Web API caches iqhealth.com cookies and extracts Cerner ID from landing page. This Cerner ID is required in most subsequent URL requests to VCHCA.iqhealth.com



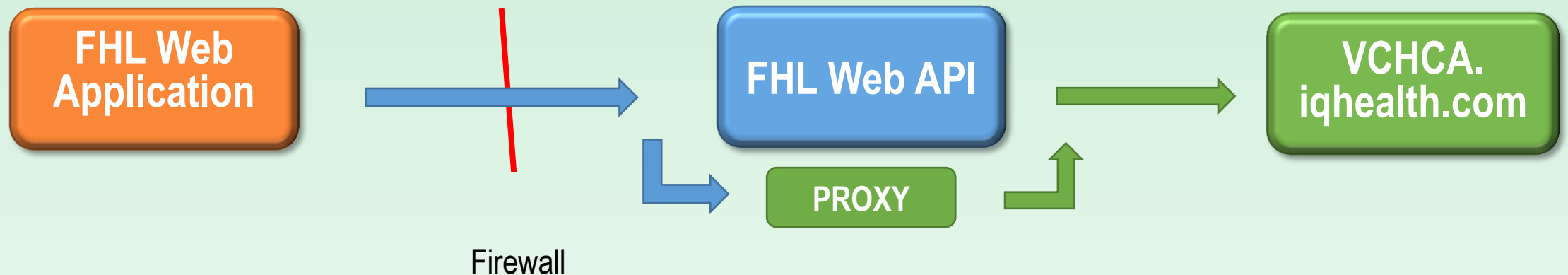
Step 4: Now, **Foster Health Link** Web API has an established session for the child's account and cookies required for authenticated requests to VCHCA.iqhealth.com in its cache. It makes the request for the information requested by the Caregiver in Step 1.



Step 5: VCHCA.iqhealth.com returns the requested page (e.g., Medications). **Foster Health Link** Web API strips extraneous information, rewrites all URLs to point to Foster Health Web API Proxy end-point, and returns the main content to **Foster Health Link** Web Application completing the request.



Step 6: All **Foster Health Link** Web Application requests for the same child by the Caregiver during the same session are routed through the Proxy end-point which uses the cached session cookies to make requests to VCHCA.iqhealth.com. The returned web page is processed as described in Step 5 and returned to **Foster Health Link** Web Application.



Step 7: Foster Health Link Web API caches the authenticated session information for VCHCA.iqhealth.com for a sliding 5-minute window. After the initial request and each subsequent request, if the FHL Web Application user does not make additional requests within 5 minutes, the cached cookies are destroyed.



Security Analysis

- Child's VC Health eConnect credentials are never exposed outside the firewall
- **Foster Health Link** Web API is entirely inside the firewall and VCHCA.iqhealth.com authentication cookies are cached by a server application (i.e., no web browser is part of the transaction)
- URLs for eConnect information are opaque as they point to the FHL Web API Proxy end-point

Benefits

- Writing code to interact with the Cerner API, fetch information and compose it into a functional UI for the FHL web application would be expensive and time-consuming
- VCHCA already has done the work of fetching and formatting eConnect information for display and interaction; building upon this is efficient and increases the value of public funds invested in building the VCHCA solution



Better information for better health decisions

Web Application

Live Demo



Better information for better health decisions



DASHBOARD

Caregiver Dashboard

Name search

Search

Clear

Name	School	Last Doctor Visit
WALKER, Mark Mathew (4/4/2004)	Lincoln Elementary	

WALKER, Mark Mathew (4/4/2004)

Age
11

Ethnicity
White*

Court Number

Gender
M

Religion

Case Number
9999-8888-7777-6666666

Also Known As

Primary Language
English

Medi-Cal Number
000000000

Date of Birth
4/4/2004

Secondary Language

ICWA Eligibility
Not Eligible

Jump To:

- Health Conditions**
- Education Summary
- Mental Health Screenings

School Information

Name
Lincoln Elementary

Phone
8056415438

Street
Extension

WALKER, Mark Mathew (4/4/2004)

- No** Sensitive health and medical information on file
- No** Limitation On Substitute Care Provider's Ability To Make Health Decision
- No** Individual Health Care Plan On File For Special Needs Child

Developmental/Functional Limitations

No limitations

Alerts

Condition Type	Condition Alert	Medication Name	Medication Alert
Other Physical Health Condition	No		No
Allergies	No		No
Obesity	No		No
Attention Deficit Hyperactive

Allergies

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations**
- Medications
- Referrals
- Service Providers
- Well Child Exams

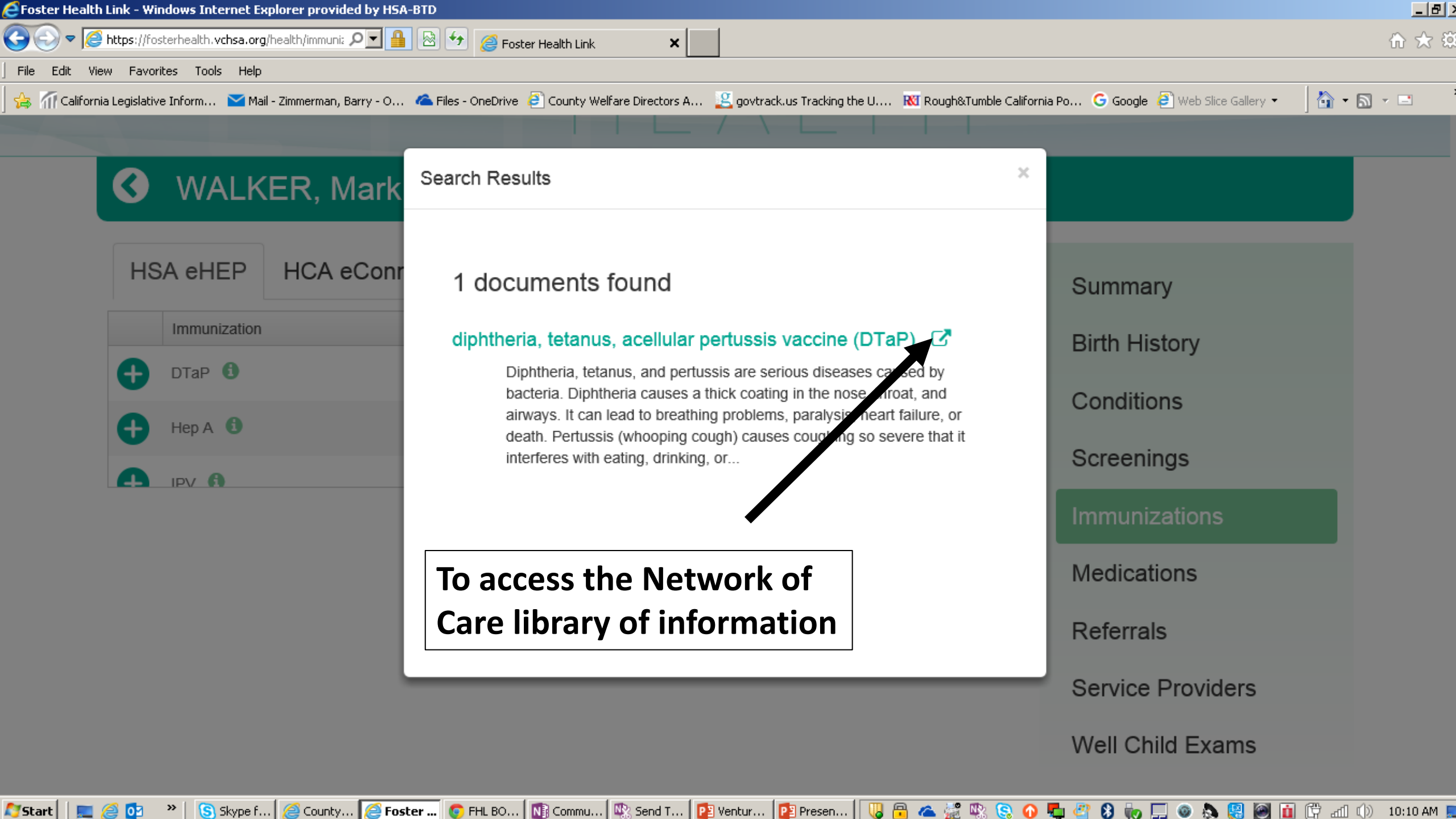
← WALKER, Mark Mathew (4/4/2004)

HSA eHEP HCA eConnect 

+	Immunization	Date	Waived
+	DTaP 	7/28/2008	No
+	Hep A 	7/28/2008	No
+	IPV 	7/28/2008	No

Information button for terms and definitions

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations**
- Medications
- Referrals
- Service Providers
- Well Child Exams



Search Results

1 documents found

[diphtheria, tetanus, acellular pertussis vaccine \(DTaP\)](#)

Diphtheria, tetanus, and pertussis are serious diseases caused by bacteria. Diphtheria causes a thick coating in the nose, throat, and airways. It can lead to breathing problems, paralysis, heart failure, or death. Pertussis (whooping cough) causes coughing so severe that it interferes with eating, drinking, or...

To access the Network of Care library of information



All Health Topics by Category

- Medications
- Medical Tests
- Interactive Tools
- Symptom Checker
- Other Resources

Diphtheria, Tetanus, Acellular Pertussis Vaccine (DTaP)


Pronunciation: dif THEER ee uh, TET a nus, ay SEL yoo ler per TUS iss

Brand: Daptacel (DTaP), Infanrix (DTaP), Infanrix (DTaP) Preservative Free, Tripedia (DTaP)

What is the most important information I should know about diphtheria, tetanus, acellular pertussis vaccine?

This vaccine is given in a series of shots. The first shot is usually given when the child is 2 months old. The booster shots are then given at 4 months, 6 months, 15 months, and 18 months of age, and again between 4 and 6 years of age. Your child's booster schedule may be different from these guidelines. Follow your doctor's instructions or the schedule recommended by your local health department.

← WALKER, Mark Mathew (4/4/2004)

HSA eHEP HCA eConnect 

Immunization	Date	Waived
 DTaP 	7/28/2008	No
 Hep A 	7/28/2008	No
 IPV 	7/28/2008	No

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations**
- Medications
- Referrals
- Service Providers
- Well Child Exams

Tab to access the actual medical record

← WALKER, Mark Mathew (4/4/2004)

HSA eHEP

HCA eConnect



Immunization	Received
influenza virus vaccine, inactivated	Nov 18, 2014
influenza virus vaccine, inactivated	Nov 18, 2014
hepatitis B pediatric vaccine	Nov 18, 2014
hepatitis B pediatric vaccine	Nov 18, 2014
influenza virus vaccine, inactivated	Nov 14, 2014

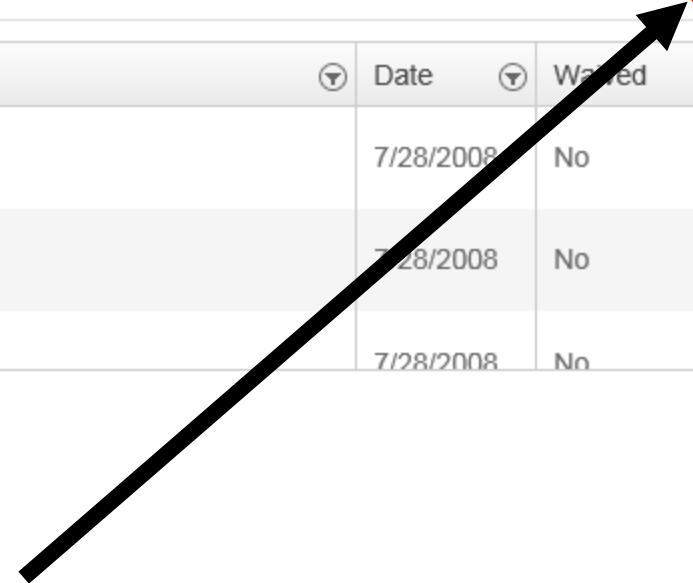
Print

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations
- Medications
- Referrals
- Service Providers
- Well Child Exams

← WALKER, Mark Mathew (4/4/2004)

HSA eHEP HCA eConnect

Immunization	Date	Waived
+ DTaP <i>i</i>	7/28/2008	No
+ Hep A <i>i</i>	7/28/2008	No
+ IPV <i>i</i>	7/28/2008	No



Option to print selected information

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations**
- Medications
- Referrals
- Service Providers
- Well Child Exams



Immunization Report

WALKER, Mark Mathew (4/4/2004) 1

County of Ventura's Human Services Agency Immunization Information

Data Source: Child Welfare Services Case Management System (CWS/CMS) – HSA eHEP

Immunization	Information Source	Date	Waived
DTaP	CMH-Saviors	7/28/2008	No
Hep A	CMH-Saviors	7/28/2008	No
IPV	CMH-Saviors	7/28/2008	No
MMR	CMH-Saviors	7/28/2008	No
VZV	CMH-Saviors	7/28/2008	No
Hep A	CMH-Main	2/28/2007	No
DTaP	Transcribed	2/3/2006	No
Hib	Transcribed	2/3/2006	No
Pneumonia	Transcribed	2/3/2006	No
MMR	Transcribed	4/20/2005	No

HEALTH

WALKER, Mark Mathew (4/4/2004)

HSA eHEP

HCA eConnect

	Medication	Dose	Started
+	warfarin 1 mg oral tablet	See Instructions	Aug 17, 2016
+	warfarin 1 mg oral tablet	See Instructions	Aug 17, 2016
+	lisinopril 5 mg oral tablet	1 tab	Aug 17, 2016

- Summary
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HEALTH

WALKER, Mark Mathew (4/4/2004)

HSA eHEP HCA eConnect

Name	Medi...	Medi...
Methylphenidate <i>i</i>	12/18/2014	2/5/2015
Ritalin <i>i</i>	4/29/2014	6/6/2014
Strattera <i>i</i>	2/5/2015	



What are the effects of this medication

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations
- Medications**
- Referrals
- Service Providers

WALKER, Mark

HSA eHEP HCA eConn

	Name
	Methylphenidate
	Methylphenidate

Search Results

2 documents found

- [methylphenidate \(oral\)](#)**
Methylphenidate is a central nervous system stimulant. It affects chemicals in the brain and nerves that contribute to hyperactivity and impulse control. Methylphenidate is used to treat attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), and narcolepsy. Methylphenidate may also be used...
- [methylphenidate \(transdermal\)](#)**
Methylphenidate is a central nervous system stimulant. It affects chemicals in the brain and nerves that contribute to hyperactivity and impulse control. Methylphenidate is used to treat attention deficit hyperactivity disorder (ADHD). Methylphenidate may also be used for purposes not listed in this medication guide.

- Summary
- Birth History
- Conditions
- Screenings
- Immunizations
- Medications**
- Referrals
- Service Providers



ECONNECT

WALKER, Mark Mathew (4/4/2004)

	Test	Status	Date
+	Chol	(High)	Jul 20, 2016
+	Glucose	(Critical)	Jul 20, 2016
+	Trig		Jul 20, 2016
+	HDL		Jul 20, 2016

- Health Summary
- Medications
- Immunizations
- Allergies
- Conditions
- Lab Results



PROFILE



HEALTH



MENTAL HEALTH



EDUCATION



HCA ECONNECT

EDUCATION

WALKER, Mark Mathew (4/4/2004)

No Parent(s)/Guardians educational rights limited

Court-appointed education representative

Phone

No Individualized Education Program (IEP/LIFSP)?

Most Recent Date

Summary

Schools

Special Education



PROFILE



HEALTH



MENTAL HEALTH



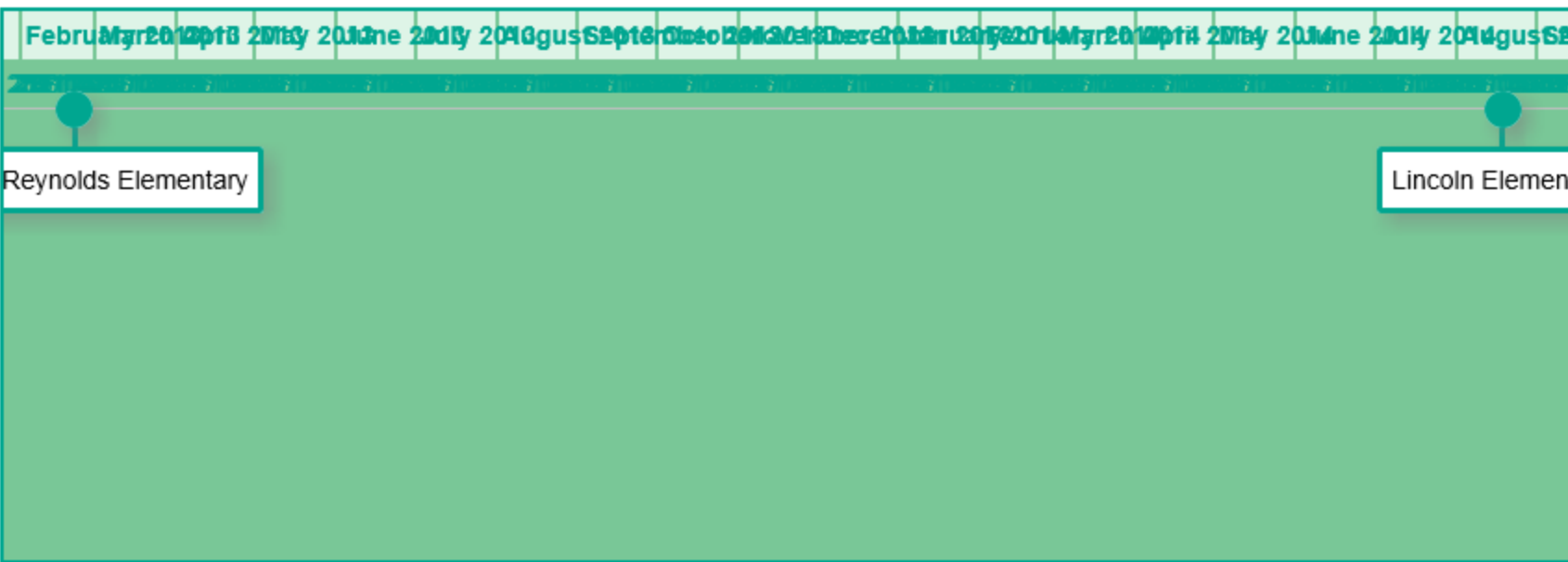
EDUCATION



HCA ECONNECT

EDUCATION

WALKER, Mark Mathew (4/4/2004)



- Summary
- Schools
- Special Education

Caregiver Feedback

- **Foster Health Link** is easy to navigate
- Health information for foster children can typically be found quickly
- The medical dictionary can be helpful because it provides additional information about certain medical conditions

“I appreciate the easy access to information that I haven’t always had when I needed it. I also like having so much information so accessible, including case numbers and immunization records that I may need to supply to schools and clinics.”



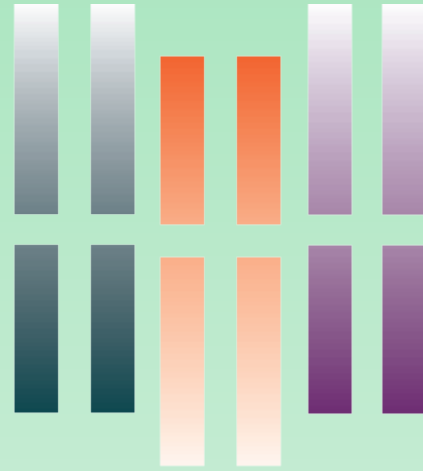
Better information for better health decisions

Next Steps

- Continue enhancing **Foster Health Link** to ensure that it meets the needs of caregivers
- Explore the addition of more information, such as school records, to **Foster Health Link**



Better information for better health decisions



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Overview Video



Impact

Video Clip