California Immunization Registry Stakeholders Meeting

California Immunization Coalition
February 4, 2013
Sacramento, California
Welcome

Jeff Goad, PharmD, MPH, President
California Immunization Coalition

Mark Sawyer, MD, Past-President
California Immunization Coalition
Background

Coalition Support of Immunization Registry

- Development of Registry
- Sustainable Funding
- Legislative Support
Goal

Develop a statewide multi-sector strategy to achieve a fully functional, population-based immunization registry in California by 2015
A Fully Functional Immunization Registry in California

Erika Jenssen, MPH
Communicable Disease Programs Chief for the Public Health Division of Contra Costa Health Services
A “Full” Immunization Registry
Full of what?

- People
- Functionality
- Users
- Potential
Fully populated

- People who receive vaccines
- People with health coverage
- School children
- Birth data
- All ages
- Everyone
Fully Functional

- Store demographic and vaccine records
- Forecast vaccines due and overdue
- Track vaccine inventory
- Reminder/recall
- Available at point-of-service
- Exchange data electronically
- Secure and private
Fully accessible

- Individuals can get their own records
- Health care providers – in the office/clinic, when needed
- Vaccinators – pharmacies, school-based clinics, mass clinics
- Immunization assurers – daycares, schools, WIC Programs, CalWorks
Fully accessible

- Health plans/insurers – quality assurance and reporting
- Local and State Health Departments – outbreak investigations, vaccine coverage, vaccine supply management
- Researchers – vaccine uptake, adverse events, effectiveness, disparities
Full of potential

- Reduce missed opportunities
- Eliminate waste of vaccine
- Stop unnecessary doses
- Increase vaccination coverage
- Better clinical practice
- Share information
- Increase knowledge and confidence
- More efficient use of health care resources
- Keep people healthy
Potential to save lives
California Immunization Registry (CAIR) Update

John Talarico, DO, MPH
Chief, Immunization Branch
Division of Communicable Disease Control
Center for Infectious Diseases
Overview

• Current CAIR Statistics
• CAIR 2.0 Project
• CAIR & MU
• Immunization Gateway Project
• Kaiser
The California Immunization Registry System (CAIR)

- Consortium of 9 regional registries – no current data linkage
- 7 of 9 (87% of CA population) use same ‘CAIR’ software
- The ‘7’ registries have been co-located to a single site (UCB) and are managed by CDPH IZ Branch staff
<table>
<thead>
<tr>
<th>Measure</th>
<th>0-5 yrs</th>
<th>6-18 yrs</th>
<th>19+ yrs</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA Population</td>
<td>2,960,628</td>
<td>6,790,927</td>
<td>28,026,058</td>
<td>37,777,613</td>
</tr>
<tr>
<td>Patients In</td>
<td>2,475,953</td>
<td>5,542,255</td>
<td>5,113,029</td>
<td>13,131,237</td>
</tr>
<tr>
<td>% of Pop. In</td>
<td>83.6%</td>
<td>81.6%</td>
<td>18.2%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Patients w/ ≥2 doses</td>
<td>1,746,542</td>
<td>4,073,226</td>
<td>2,374,582</td>
<td>8,194,350</td>
</tr>
<tr>
<td>% of Pop. w/ ≥2 doses</td>
<td>59.0%</td>
<td>60.0%</td>
<td>8.5%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Vaccine Doses</td>
<td>30,822,365</td>
<td>83,082,928</td>
<td>25,784,639</td>
<td>139,689,932</td>
</tr>
</tbody>
</table>

* As of Sept. 30, 2012
## CAIR Users

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Number of Organizations &amp;</th>
<th>Individual Users*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Practices/ Organizations (e.g. health care providers)</td>
<td>6,387</td>
<td>69,301</td>
</tr>
<tr>
<td>Non-Clinical Organizations (e.g. schools, daycares, etc.)</td>
<td>1,953</td>
<td>17,083</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>8,340</strong></td>
<td><strong>86,384</strong></td>
</tr>
</tbody>
</table>

*As of Sept. 30, 2011. Does not include CAIR San Diego and CAIR San Joaquin individual users.

& As of Dec 31, 2012
CAIR 2.0 Project

• Issues
  – 9 regional registries - *no data linkage*
  – 7 use ‘legacy’ software that is not web standard, state IT-supported, and does not support federal HITECH MU.

• Project Goal
  – Consolidate 7 databases into statewide immunization registry
  – Adopt new software solution that is fully-functional, web-standard, state-IT compliant to support meaningful use
  – Utilize interoperability (HL7) to connect to independent registries if they decide not to join larger group

• Status - Submitted August 2011; Approved by CTA Dec. 10, 2012
# CAIR 2.0 Project - Timeline

<table>
<thead>
<tr>
<th>Major Milestones</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date</td>
<td>December 2012</td>
</tr>
<tr>
<td>Solicitation Document Preparation</td>
<td>September 2013</td>
</tr>
<tr>
<td>Vendor on Board</td>
<td>April 2014</td>
</tr>
<tr>
<td>Requirements Specifications Completed</td>
<td>July 2014</td>
</tr>
<tr>
<td>Design Documents Completed</td>
<td>October 2014</td>
</tr>
<tr>
<td>Hosting Configuration &amp; Deployment</td>
<td>December 2014</td>
</tr>
<tr>
<td>System Build Complete</td>
<td>April 2015</td>
</tr>
<tr>
<td>Integration &amp; System Testing</td>
<td>June 2015</td>
</tr>
<tr>
<td>User Acceptance Testing</td>
<td>September 2015</td>
</tr>
<tr>
<td>Data Migration</td>
<td>September 2015</td>
</tr>
<tr>
<td>User Training</td>
<td>November 2015</td>
</tr>
<tr>
<td>Transition to M&amp;O</td>
<td>November 2015</td>
</tr>
</tbody>
</table>
CAIR - Data Exchange Activity *

<table>
<thead>
<tr>
<th>Region</th>
<th>DE Doses as % of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Doses</td>
</tr>
<tr>
<td>Northern Cal</td>
<td>17.2%</td>
</tr>
<tr>
<td>Greater Sac</td>
<td>5.8%</td>
</tr>
<tr>
<td>Bay Area</td>
<td>6.1%</td>
</tr>
<tr>
<td>San Joaquin</td>
<td>6.8%</td>
</tr>
<tr>
<td>Central Valley</td>
<td>5.6%</td>
</tr>
<tr>
<td>Central Coast</td>
<td>3.6%</td>
</tr>
<tr>
<td>LA-Orange</td>
<td>2.4%</td>
</tr>
<tr>
<td>Inland Empire</td>
<td>17.3%</td>
</tr>
<tr>
<td>San Diego</td>
<td>40.0%</td>
</tr>
<tr>
<td>CAIR</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

*As of Sept 2012.
CAIR & ‘Meaningful Use’

- Federal program to incentivize the adoption and ‘meaningful use’ of electronic health records (EHR) systems
- 3 stages, each with more rigorous qualifying expectations
- MU Standards for content exchange (HL7) and message vocabulary (CVX)

<table>
<thead>
<tr>
<th>Submission to Immunization Registry</th>
<th>When</th>
<th>Qualifying activity*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITECH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1</td>
<td>2011-13</td>
<td>1 time test, fup submission if successful</td>
</tr>
<tr>
<td>Stage 2</td>
<td>2014-15</td>
<td>Batch, ongoing</td>
</tr>
<tr>
<td>Stage 3</td>
<td>2016+</td>
<td>Real-time, bidirectional, ongoing</td>
</tr>
</tbody>
</table>

*CMS allows exemption if registry does not have capacity to receive.
## CAIR - ‘MU’ Readiness

<table>
<thead>
<tr>
<th>Time</th>
<th>CAIR 7</th>
<th>CAIR San Joaquin</th>
<th>CAIR San Diego</th>
<th>Imperial County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-July 2012</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>July 2012</td>
<td>Yes*</td>
<td>Yes (2.3.1)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Via HL7 Jump translator
CAIR ‘HL7Jump’

• **HL7Jump** is an open source HL7 translator that we have configured to convert HL7-formatted files into the standard CAIR SW ‘flat file’ format for import into CAIR

• HL7 messages are delivered via sFTP

• FIFO process
  – Files with <100 patients: Immediate
  – Files with >100 patients: Overnight
CAIR – Attestation/Exemption (7 regions)

- 2.5 FTE
- Minimal qualifying criteria
  - Must be enrolled in CAIR
  - Ability to export HL7 VXU
- ‘MU’ Activity (all Regions)
<table>
<thead>
<tr>
<th>Region</th>
<th>Attestations</th>
<th>Exemptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAIR 7</td>
<td>930</td>
<td>214</td>
</tr>
<tr>
<td>CAIR SD</td>
<td>&gt;100</td>
<td>~10</td>
</tr>
<tr>
<td>CAIR SJ</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>
- CAIR 7 Onboarding:
  - 97 active, 38 testing, 399 pending, 396 in queue
CAIR – Immunization Gateway

• Funded by cooperative agreement between DHHS and IPHI/UC Davis

• Web portal will allows DEs in 7 regions to:
  – Enroll in CAIR/receive data exchange IDs, passwords
  – Upload test messages for validation & MU attestation
  – Upload patient data (ongoing submission)
  – SOAP transport

• Completed by April 2013

• May become state portal for public health reporting
CAIR - Immunization Gateway

High-level Architecture of Immunization Gateway Service
CAIR – Kaiser data

- Have agreed to share data
- Ongoing series of meetings to discuss specifics/process
Questions?
HIE, EHRs, and Public Health Registries

Robert M. Cothren, PhD
California Health eQuality Program

Institute for Population Health Improvement
UC Davis Health System

Immunization Registry Stakeholders Meeting 4 February 2013
In the beginning…

2004 Presidential order:
An electronic health record for every American that wants one by 2014.

- Created Office of the National Coordinator for Health Information Technology
- Started Nationwide Health Information Network
…and then along came HITECH

American Recovery and Reinvestment Act of 2009…

- Establishes ONC permanently
- Creates incentive program for adoption and meaningful use of EHR technology
  - for eligible providers and hospitals
- Creates **statewide HIE initiatives**
- Other stuff (RECs, Workforce, Beacons)
“PIN” Priorities

- ePrescribing
- Electronic lab results delivery
- Care summary exchange
- Public health reporting
  - Immunizations
  - Reportable conditions
  - Syndromic surveillance
- Clinical quality metric reporting
Where is HIE in California today?
What are we doing?

1. **Enabling Trusted Exchange**
   - Enabling exchange between unaffiliated providers
   - Promoting uniform consensus standards: HIE Ready
   - Exploring HIO and HIE service provider accreditation

2. **Increasing Public Health Capacity**
   - Building support for immunization reporting
   - Integrating public health with clinical information exchange

3. **HIE Acceleration**
   - Investing in HIE infrastructure and interfaces
   - Creating HIE services for rural California
   - Exploring health information analytics
   - Updating labs for LOINC reporting
   - Increasing data exchange to support dual eligibles
Back to HITECH…

American Recovery and Reinvestment Act of 2009…

- Establishes ONC permanently
- Creates incentive program for adoption and meaningful use of EHR technology – for eligible providers and hospitals
- Creates statewide HIE initiatives
- Other stuff (RECs, Workforce, Beacons)
**Stage 2**
Include HIE
- Interoperability
- Electronic information exchange
- Patient engagement

**Stage 1**
Focus on EHRs
- Electronic information capture
What is meaningful use?

“The use of certified EHR technology to achieve health and efficiency goals.”

- Measures for compliance with incentive program.
- Standards for certification of EHRs.

and…
- Industry pressure.
Where are we?

Result of MU

- Certification has produced hundreds of EHRs that can report immunizations.
- HIEs have the capability to forward information to public health.
- Public health has the capability to accept immunizations… …but lacks the capacity to do so.

Problem

- Providers are opting out.

Result...
Meaningful use for immunizations…

- **Objective:** Capability to submit to registries and submission according to applicable law and practice.

- **Measures:** One test of certified EHR capacity to submit and follow-up submission if successful.

- **Standards:** HL7 2.3.1 or 2.5.1 Implementation Guides for Immunization and HL7 Standard Code Set CVX.
What are we doing?

Increasing capacity of public health to accept electronic submissions in a format compliant with meaningful use.

1. Registration Portal
2. Validation Service
3. Gateway Service
The components…

1. **Registration Portal**
   - Allows online submission of key elements for Access Agreements Data Exchange Screening Forms.
   - Assigns unique Location ID and unique Sending Facility ID necessary for submissions.

2. **Validation Service**
   - Validates that test messages from the submitter conform to the requirements of meaningful use and of the California Immunization Registry.

3. **Gateway Service**
   - Validates, queues, and routes immunization data to the appropriate regional registry.
The vision…
The timeline…

- In implementation now.
- Expect all components to be ready for use by May.
Questions?
Contact Information

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UC Davis Health System

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http://www.ucdmc.ucdavis.edu/iph/
Immunization Reporting in the Context of the HITECH Act

Linette T Scott, MD, MPH
Chief Medical Information Officer
Department of Health Care Services
Health Outcome Policy Priorities

1) Improving quality, safety, efficiency and reducing health disparities.

2) Engage patients and families in their healthcare.

3) Improve care coordination.

4) Improving population and public health.

5) Ensure adequate privacy and security protections for personal health information.
CMS EHR Incentive Program: Changing the Norm

Health Outcome Policy Priorities

1) Improving quality, safety, efficiency and reducing health disparities.

2) Engage patients and families in their healthcare.

3) Improve care coordination.

4) Improving population and public health.

5) Ensure adequate privacy and security protections for personal health information.
How is the Norm Changing?
Re-engineering business processes

Paper-based Care

Provider Focused Programs

Infrastructure Necessary for Provider Achievement of MU

EHR-based Care
Effective, Quality Care
EHR Incentive Payments by State
October 2012

Total Payments in Nation: $8.408 Billion

164,593 providers and hospitals paid

All payments are federal funding under ARRA-HITECH
Extending the Norm Change with Stage 2 Meaningful Use

- **Today** … data we use to describe the population comes from:
  - Vital Records (Birth and Death)
  - Reporting Registries (Cancer, Birth Defects, Communicable Disease, National Health Safety Network, Hospital Discharge and Emergency Departments, etc.)
  - Telephone Surveys (Behavioral Risk Factor Survey, California Health Interview Survey, etc.)

- **In the Future** … data we use may also come from:
  - EHRs in ambulatory as well as hospital-based settings
  - Patient managed data and health histories
  - Community services
**EHR Data – Driving System Change & National Program Alignment**

- *National Prevention Strategy* is going beyond the health care setting
- *National Quality Strategy* is focusing on outcomes
- Changing the health care delivery system through data availability
- Payment models being tested through CMS programs:
  - Accountable Care Organizations
  - Dual Eligible Pilots
  - Delivery System Reform Incentive Payments
National Quality Strategy

- **Better Care:**
  Improve the overall quality, by making health care more patient-centered, accessible, and safe.

- **Healthy People/Healthy Communities:**
  Improve the health of the U.S. population by supporting proven interventions to address behavioral, social and, environmental determinants of health in addition to delivering higher-quality care.

- **Affordable Care:**
  Reduce the cost of quality health care for individuals, families, employers, and government.

Stage 2 MU: EP Core
Clinical Quality Measures (CQMs)

Selected based on analysis of several factors:

› Conditions that contribute to the morbidity and mortality of the most Medicare and Medicaid beneficiaries
› Conditions that represent national public health priorities
› Conditions that are common to health disparities
› Conditions that disproportionately drive healthcare costs and could improve with better quality measurement
› Measures that would enable CMS, States, and the provider community to measure quality of care in new dimensions, with a stronger focus on parsimonious measurement
› Measures that include patient and/or caregiver engagement
CQMs align with National Quality Strategy Domains:

- Patient and Family Engagement
- Patient Safety
- Care Coordination
- Population and Public Health
- Efficient Use of Healthcare Resources
- Clinical Processes/Effectiveness

EPs, eligible hospitals, and CAHs must select CQMs that cover *at least 3 of the 6 domains*
Medicaid EHR Incentive Program Reporting Clinical Quality Measures

- EPs, eligible hospitals, and CAHs participating only in a Medicaid EHR Incentive Program will submit their CQM data directly to their State.

- Each State is responsible for sharing the details on the process for electronic reporting with its provider community.

- Subject to CMS’s prior approval, the process and the timeline are within the States’ purview.

- DHCS will develop this process over the next year in partnership with other states.
Submit data from EHR to immunization registry

Clinical Quality Measures:

- NQF 0038 – (Alternate Core) (Recommended Pediatric Core for Stage 2)
  - **Title**: Childhood Immunization Status
  - **Description**: Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio(IPV), one measles, mumps and rubella (MMR); two H influenza type B (HiB); three hepatitis B (Hep B); one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (Hep A); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate for each vaccine and nine separate combination rates.
Clinical Quality Measures Continued:

- NQF 0041/ PQRI 110 (Alternate Core)
  **Title:** Preventive Care and Screening: Influenza Immunization for Patients $\geq$ 50 Years Old
  **Description:** Percentage of patients aged 50 years and older who received an influenza immunization during the flu season (September through February).

- NQF 0043/ PQRI 111 –
  **Title:** Pneumonia Vaccination Status for Older Adults
  **Description:** Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine.
Thank you!

For more information:

- [http://www.dhcs.ca.gov/provgovpart/Pages/dhcsohit.aspx](http://www.dhcs.ca.gov/provgovpart/Pages/dhcsohit.aspx)
- [http://ehealth.ca.gov](http://ehealth.ca.gov)
- [http://healthit.hhs.gov](http://healthit.hhs.gov)
Registries: The National Experience

Andrew J. Resignato, MS
Director San Francisco Immunization Coalition
SAN FRANCISCO IMMUNIZATION COALITION

www.sfimmunize.org

LIKE Us on Facebook 😊

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Director
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“Without change there is no innovation, creativity, or incentive for improvement.

Those who initiate change will have a better opportunity to manage the change that is inevitable.”

– William Pollard
Percentage of children aged < 6 years participating in an immunization information system -- United States, five cities§, DC, and eight Territories†, 2010

National Coverage: 82% (excluding Territories)
Source: CY2010 IISAR
Differences in States

- Immunization Reporting Mandates/Requirements
- Funding
- Stakeholder Buy-in
- System Capacity/Statewide or Regional
What Is An Immunization Reporting Mandate / Requirement?

A law or rule requiring providers to report to the State immunizations given to patients.

Some States require information for children and others require all vaccines to be reported. Some States specify types of providers that must report.

‘Gold Standard’ – American Immunization Registry Registry Association
Types of Immunization Reporting Mandates/Requirements

• Legislative mandate in statute for specific populations or provider. (ex. children, adults, pharmacists)

• Rules for specific providers (ex. VFC, local health departments, Medicaid)
Collective Action

Strong Incentive To Receive More Complete IZ Record

Stronger Incentive to Share Information
Collective Action Problem

Weak Incentive To Receive Incomplete IZ Record

Weaker Incentive to Share Information

California Immunization Registry Connected & Protected
States With Immunization Reporting Mandates

Arizona, Arkansas, Connecticut, Delaware, District of Columbia, Georgia, Indiana, Maine, Maryland (public providers only), Michigan, Minnesota, Mississippi, Nevada, New York, Texas, Vermont, West Virginia

Mean IIS Child Participation Rate – 88% (children <6 y.o. with 2 or more Izs)
California is Different!
Large and Neighboring States

Percentage of children aged <6 years participating in an immunization information system (IIS)

Arizona  >95%
Michigan  >95%
Nevada    91%
New York  88%
Texas     83%
Oregon    >95%

Source: Immunization Information System Annual Report, CY2010
Oregon (ALERT)

- Immunization Registry since 1996 (ALERT)

- Public/private partnership (Kaiser, Providence, Legacy Health, Medicaid)

- Robert Wood Johnson grant & strong physician buy-in

“Pushing data out to illustrate usefulness”
Oregon

Reporting Requirements

• All County Health Departments are required to report all doses within 14 days to the registry including adults as a condition of State funding

• All VFC providers and special project vaccine required to report all doses (Sec. of State)

• State law requires pharmacists to report all doses to the registry

92% of data received is electronic. Only 8% manually entered into registry.
Oregon

Funding

• OR receives annual contributions from Kaiser, Legacy, other small health plans, and Medicaid

• Federal funding

Oregon shares data with Washington
Nevada (Web IZ)

2008 – 43% Childhood IIS Utilization Rate

2009 – Immunization Reporting Mandate Passed (Across the Lifespan)

2012 – 85% Childhood IIS Utilization Rate

No State funding for Registry
Arizona (ASIIS)

1998 – Arizona Medical Association (AMA) lobbied for IZ reporting mandate

15% increase in toddler immunization rates after passage

2011 – >90% IIS Utilization Rate
(Children <6 with 2 or more Izs)
Arizona

Reporting Mandate: All patients under 18 and all immunizations given by pharmacists must be reported to the registry.
Arizona

Funding

• General Revenue State funding

• Medicaid funding based on the # of Medicaid children in the registry

• Federal funding
Texas (ImmTrac)

1996 – ImmTrac system established

1999 – Went from ‘Opt in’ to ‘Opt out’ (Setback)

2005 – House Bill 1921 passed requiring all health-care providers and payors to report to ImmTrac all vaccines administered to children younger than 18 years of age.

2010 – 83% IIS Utilization Rate  
(children <6 y.o. with 2 or more Izs)
The New York State legislature passed the Immunization Registry Law in 2008 which requires health care providers to report all immunizations administered to persons less than 19 years of age, along with the person's immunization histories, to the New York State Department of Health.
Percent of Children Less Than 6 Years of Age with Two or More Immunizations in NYSIIS* New York State (Outside of New York City)

*New York State Immunization Information System

**Based on Claritas population estimates for 2008 (Jan-Nov08), 2009 (Jan-Nov09), 2010 (Jan10-Mar12) and 2011 (May12-Jan13).
Michigan (MCIR)

All children born in Michigan from 1994 to present are required to be entered into MCIR

Help Desk/data quality separated into 6 region

2012 – 96% IIS Utilization Rate (children <6 y.o. with 2 or more Izs)

32% IIS Utilization Rate for Adults
Michigan (MCIR) System

• HL7 compliant less than one year

• 60% of data shared electronically, 40% manual entry
Michigan (MCIR)

Funding

- Federal 317 funding
- Federal PPHF funding for continued development related to those grants
- State General Funds
- Title XIX Medicaid match funding
- MCH Block Grant funding
Questions Raised from Looking at Other States’ Strategies

• Should CA pursue reporting mandates/requirements for all providers, specific providers (ex. VFC, pharmacists) or specific patient age groups?

• Are there other possible funding sources (Medicaid, other State or Federal funding, other sectors)?

• How can we get more buy in from stakeholders?
Acknowledgements:

- New York Department of Health
- The Arizona Partnership for Immunization
- Michigan Department of Community Health
- Nevada State Health Department
- Oregon Health Authority
- American Immunization Registry Association
Questions

What are the potential barriers to a fully populated/functional immunization registry in California?
Questions

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Questions

What are the potential barriers to a fully populated/functional immunization registry in California?
Questions

What are the potential opportunities/strategies to getting to a fully populated/functional immunization registry in California, in addition to what's already currently happening?
Questions

How could you or your organization contribute to getting to a fully populated/functional immunization registry in California?
Questions

Who else needs to be included in this effort?
Next Steps