

California Immunization Registry (CAIR): Going Statewide

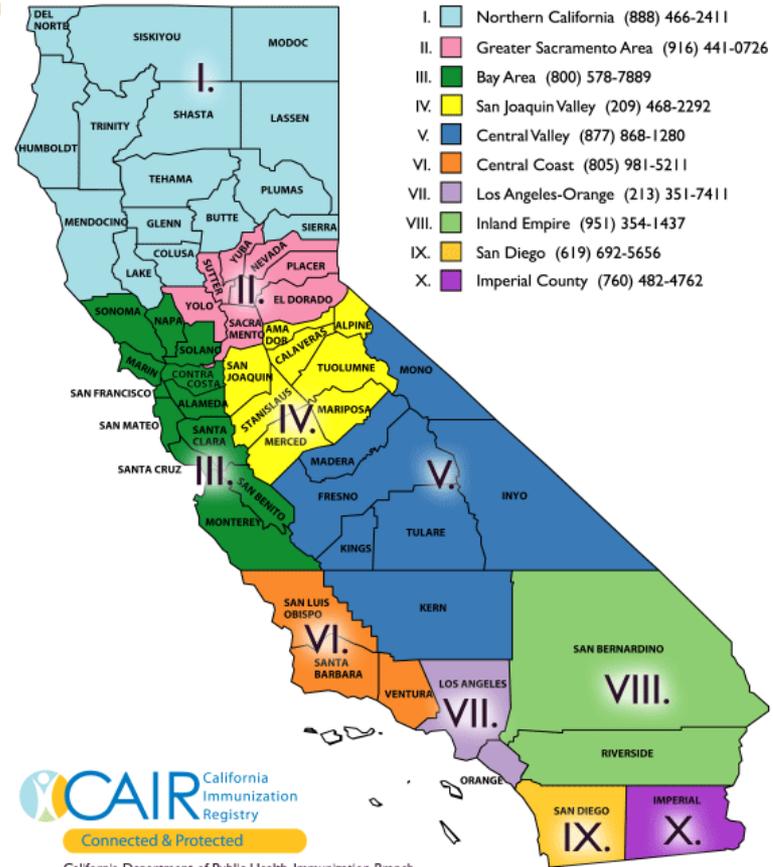
**John Talarico, D.O. M.P.H.
Chief, Immunization Branch
California Department of Public Health**

*Best Practice in Public Health
Sacramento CA -October 20, 2011*



Regional Immunization Registries in CA

- 10 regional or county immunizations registries statewide
- All but Imperial County comprise the California Immunization Registry (CAIR) System
- CAIR general direction, oversight, and funding provided by CDPH
- 65-70% of children in registry are Medicaid-eligible



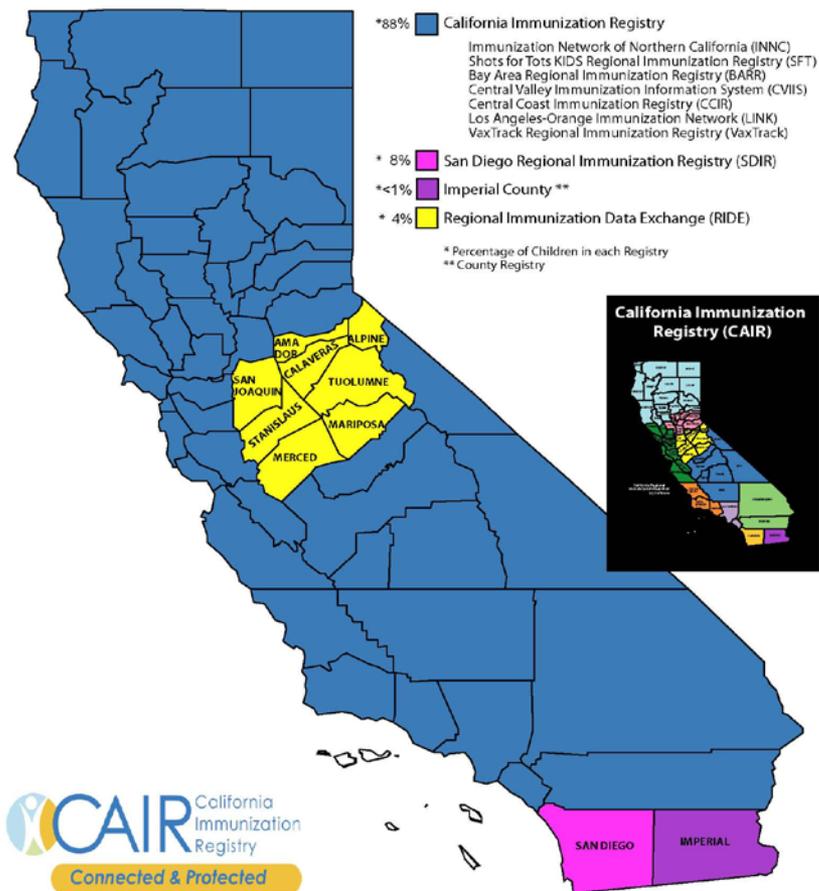
California Department of Public Health, Immunization Branch
850 Marina Bay Parkway, Building P, 2nd Floor, Richmond, CA 94804
www.ca-sis.org (510) 620-3737

APRIL 2008



The California Immunization Registry System (CAIR)

- Consortium of 9 regional registries – no current data linkage
- 7 of 9 use same 'CAIR' software (87% of population)
- The '7' registries have been co-located to a single site and are now managed by CDPH contract staff

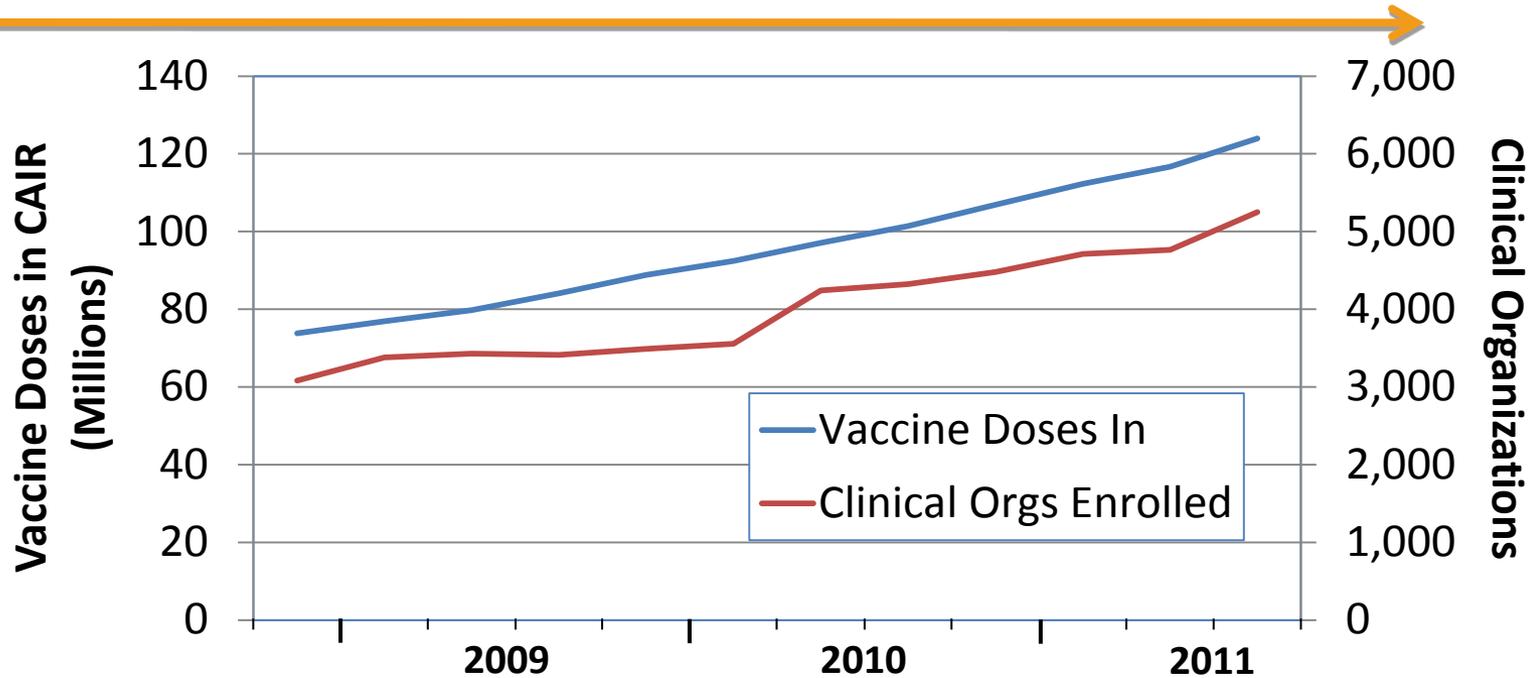


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June 2009



CAIR - 2009-2011 Progress



- 68% Increase in # of Vaccine Doses In
- 70% Increase in # of Clinical Orgs Enrolled

CAIR – Current Users

Organization Type	Number of Organizations	Individual Users*
Clinical Practices/ Organizations (e.g. health care providers)	5,249	69,301
Non-Clinical Organizations (e.g. schools, daycares, etc.)	1,498	17,083
TOTALS	6,747	86,384

*Numbers do not include CAIR San Diego and CAIR San Joaquin individual users.

CAIR – Current Statistics*

<i>Measure</i>	<i>0-5 yrs</i>	<i>6-18 yrs</i>	<i>19+ yrs</i>	<i>All Ages</i>
CA Population	3,272,863	7,292,336	27,938,390	38,503,589
Patients In	2,471,748	5,089,941	4,019,723	11,581,412
% of Pop. In	75.5%	69.8%	14.4%	30.1%
Patients w/ ≥ 2 doses	1,749,554	3,728,579	1,896,077	7,374,210
% of Pop. w/ ≥ 2 doses	53.5%	51.1%	6.8%	19.2%
Vaccine Doses	30,484,700	73,608,399	19,886,100	123,979,199

* As of September 30, 2011.

CAIR – Patient Search Activity

<i>Measure</i>	<i>Number</i> *
Patient Look-ups(July-Sept 2011)	55,985,383
Clinical Organizations	4,345
Average Look-ups/Clinical Org/Day	215
CAIR-wide Look-ups per Minute (8 hour day/5 day wk)	1,944

* For period July-September 2011.

CAIR – Data Exchange



CAIR Region	% of All Doses	% of 'New' Doses
Northern Cal	10.6%	26.6%
Greater Sac	2.9%	16.7%
Bay Area	4.3%	16.9%
San Joaquin	6.3%	15.4%
Central Valley	4.2%	25.9%
Central Coast	3.1%	5.6%
LA-Orange	1.8%	8.6%
Inland Empire	12.9%	27.6%
San Diego	28.8%	36.0%
ALL CAIR	6.8%	15.7%

* FY11 Q1 (July-Sept 2011)

CAIR – New Provider Support Model

- No state GF – had to abandon regional funding model
- CDPH is hiring 10 additional field staff to support registry users in the 7 ‘CAIR SW’ regions, supervision will be by CDPH Senior Field Reps
- CAIR San Joaquin and CAIR SD will receive provider support funding based on size

VFC Region	Senior Field Reps	Number of Registry Staff
Nor Cal	Cindy Klaisle	1
Bay Area	Steve Vantine	2
Central Valley	Karen Turner	1
LA	Laurel Fowler	3
So Cal	John Hetsko	3

CAIR 2.0 Project

- Issues
 - No data linkage among CAIR System registries.
 - 7 of CAIR regions use 'legacy' software that is not web standard, cannot be supported by state IT, and does not current support federal HITECH 'meaningful use' (MU).
- Solution
 - Implement a single, statewide immunization registry that is web-standard, state IT-supportable, and supports HITECH 'meaningful use' health information exchange

CAIR 2.0 - Feasibility Study Report (FSR)

- Document developed by CDPH in collaboration with *Cal eConnect* and several contractors
- Stakeholder input sought in series of webinars where alternatives directions were presented
 - Local Jurisdictions - LHOs & CEs
 - Users (health plans, professional societies, et.c)
 - Other State and Federal agencies (HCS, CDE, HIS, etc.)
- Completed document submitted to CHHS on August 22, 2011

CAIR 2.0 – Alternatives Considered

1. Connection Regions via HL7
2. Partial Data Consolidation (7 regions into 1)
 - Option A: Rewrite Software
 - Option B: Adopt New software
3. Full Data Consolidation (9 regions into 1)
 - Option A: Rewrite Software
 - Option B: Adopt New software
4. Connect Regions through HIEs
5. Expanded IIS/Integrated Systems

CAIR 2.0 Project – Recommended Alternative #2, Option B

- Initiate a business-based procurement (RFP) seeking a technical solution from vendors to:
 - Consolidate 7 ‘CAIR’ Software regional registry databases into a single database that will be brought inside the state IT domain
 - Implement a new registry software solution that supports current user needs, is state-IT compliant, and is capable of HL7-formatted data exchange to support HITECH MU
 - Establish interoperable connectivity to the two remaining independent CAIR registries (CAIR San Joaquin and CAIR San Diego)

CAIR 2.0 Project – Rationale for Selection of Alt. #2B

- Brings CAIR closest to full registry consolidation without mandating regional participation
 - 87% of state will be included in the consolidated registry.
 - Other regions can join consolidated system if they choose.
 - Independent regions favor a single, consolidated statewide registry but remain cautious about joining unless the new registry software functionality meets or exceeds what they currently provide their users.

CAIR 2.0 Project – Rationale for Selection of Alt. #2B

- Adoption of new HL7-capable software will facilitate:
 - Health information exchange between providers and the CAIR consolidated registry to support MU,
 - Enable interoperable data exchange with the independent regional registries,
 - Assure compliance with state IT requirements, thereby allowing the consolidated system to become an ‘official’ state system, and
 - May attract independent regions to join if their functional requirements are included in software specs.
- Consolidation will reduce barriers to participation by large providers because it will minimize registry points of contact.

CAIR 2.0 Project -Timeline



Major Milestones	Date Completed
Start Date	July 2012
Contractor Solicitation and Acquisition Approval	June 2013
SPR Approval	October 2013
Requirements Specifications	February 2014
Design Documents	May 2014
System Build	November 2014
System Testing	January 2015
User Acceptance Testing	April 2015
User Training	June 2015
Data Migration/System Go Live	June 2015
End Date	June 2015

CAIR 2.0 Project - Summary

- The CAIR 2.0 Project will leverage CMS 90/10 matching and CDC IZ Grant federal funds to achieve the long-term goal of a single, statewide immunization registry that allows healthcare providers and other authorized users easy online access to consolidated immunization histories Californians living anywhere in the state.
- CAIR 2.0 will offer improved usability and performance through the adoption of new system software that will meet current web standards, be state IT-compliant, and fully interoperable so that health information exchange (HIE) between CAIR 2.0 and HIE partners, including independent registries, will be possible.

