

# **Challenges and Responses in Immunization Programs: California Strategies to Extend Registries to All Communities in the State**



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## Background

- California is a large and diverse state
  - Total population: 34 million
  - Number of live births / year: 530,000
  - 58 counties; 92% urban, with rural population spread over great distances
- Healthy People 2010 goals- 95% of children 5 years and under included in a population-based Immunization Registry.
- State authorized and began support of immunization registries in 1995. Annual appropriation of \$3.5 million.



## **Background: Vision and Structure**

Vision: Adequate immunization of all children in California

Local/Regional Registry Functions: Maintain records; outreach to providers and community; reminder notices for IZs due; local immunization coverage; send data to the State.

State Level Functions: Leadership, coordination, standards; funding; strategy for statewide network; state hub for linking registries and other programs; assess immunization coverage.

Structure: State hub linking distributed databases; complete records at hub; updates from and to local/regional registries.



# Challenges and Progress

## Challenges

Delay of state hub

Loss of software support

Insufficient funding

## Progress

Development of local registries

Development of statewide infrastructure

Publication of registry development guidelines



## **Strategies to Expand Registry Development**

1. Evaluation – focus on software
2. Proposed strategies for further development
3. Qualitative change in development strategy
4. Begin regionalization process
5. Counties develop local implementations



## **Strategy 1: Evaluation – Focus on Software**

CA SIIS & consultants assessed software developed by California immunization registry projects.

Four good products identified, developed by Contra Costa, San Bernardino, San Diego, and San Joaquin Counties.

Selected Contra Costa County software product (CCAIR) to be replicated for use by other counties. CCAIR to be supported by 3<sup>rd</sup> party vendor.



## **2: Strategies for Further Development**

Develop regional registries using CCAIR or one of the other three products.

- Base on patient and provider areas of activity
- Collaboration of local jurisdictions
- Achieve economy of scale

Use standards-based and evaluated best practices

Use web-enabled software



## **3: Change in Development Strategy**

### Research and development phase

Originally single-county registries, testing and adapting to local conditions

Path breaking - learning best methods

### Regionalization phase

Based on products and lessons of first phase

Will allow expansion of registry coverage within constraints of resources





## **4: Begin Regionalization Process**

State issues RFA for development of Regional Immunization Registries, requiring:

collaboration of counties to establish & govern;  
establishment of regional database & structure;  
migration of existing registries to regional.

Review of applications & awards:

Internal & external reviewers

7 applications, covering 82% of population

All 7 regions funded but at less than requested



## **5: Counties Develop Local Implementations**

Counties address tough questions. How to:

- satisfy regional requirements with limited funds.
- maintain users while migrating to new system & new software.
- coordinate activities among experienced registry developers and brand new counties.
- develop regional governance and inter-county agreements.
- get sign-on of county officials on legal and policy issues.



## Conclusions

It is difficult to form regions, especially the larger the number of counties involved.

The counties are rising to the challenge.

It was time to move ahead to regional registries, using proven software and web enablement.

We have a basis on which to expand to cover the rest of California's children in an IZ registry.



## **CALIFORNIA REGIONAL REGISTRIES**

### **June 2000**

<b><u>Region</u></b>	<b><u>Population</u></b>	<b><u>Jurisdictions in Region (counties/3 cities)</u></b>	
<b>Bay Area Region (BAR)</b>	5,175,800	Alameda City of Berkeley Monterey San Benito	San Mateo Santa Clara Solano Sonoma
<b>Central Coast Immunization Registry (CCIR)</b>	1,400,700	Santa Barbara San Luis Obispo Ventura	

**Central Valley Immunization  
Information System (CVIIS)**

Fresno  
Madera  
Kern  
Tulare  
Kings

**Los Angeles County Regional**

**Immunization Registry  
(LACRIR)**

9,790,000  
City of Long Beach  
City of Pasadena  
Los Angeles

**Inland Empire Immunization  
Tracking System (IEITS)**

3,178,800

Riverside  
San Bernardino

**San Diego & Imperial Counties  
Regional Immunization Registry**

3,029,100

Imperial  
San Diego-All Kids Count

**San Joaquin Region & Shots for Tots** 3,323,700

<b>SJR:</b>	<b>SFT:</b>
Amador	El Dorado
Calaveras	Nevada
Mariposa	Placer
Merced	Sacramento
San Joaquin	Sutter
Stanislaus	Yolo
Tuolumne	Yuba

Total population covered in State-funded regional registries: **27,953,300**