

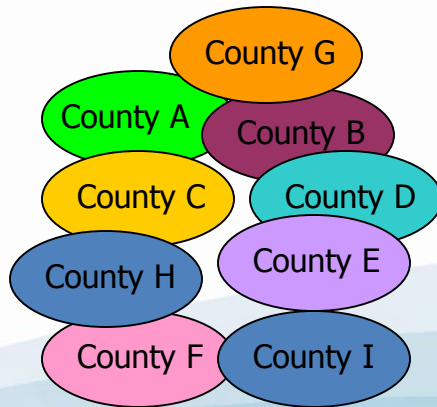
# CAIR2

*Bigger,  
Better,  
Faster!!*

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California Immunization Registry Manager

# CA IIS History

Counties  
1990s



10 'Regions'  
2000s



1 'CAIR'  
2010s



# The California Immunization Registry (CAIR) System

- Consortium of 10 regional registries – no current data linkage
- 7 of 10 use same 'CAIR' software (87% of population; 51 of 61 jurisdictions)
- The 'CAIR 7' registries are hosted at UCB and managed by IZB staff

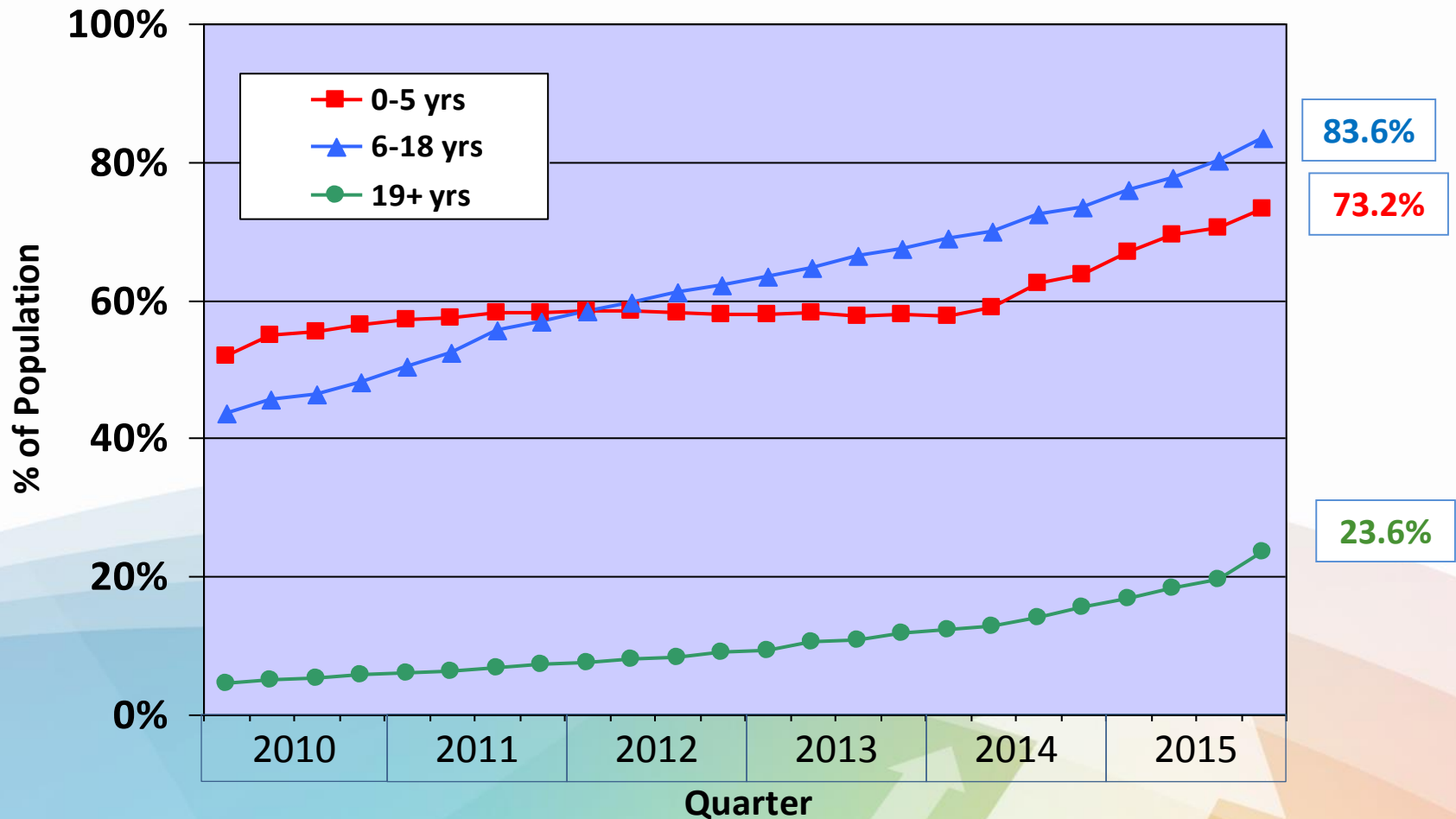


# CAIR – Patients and Doses\*

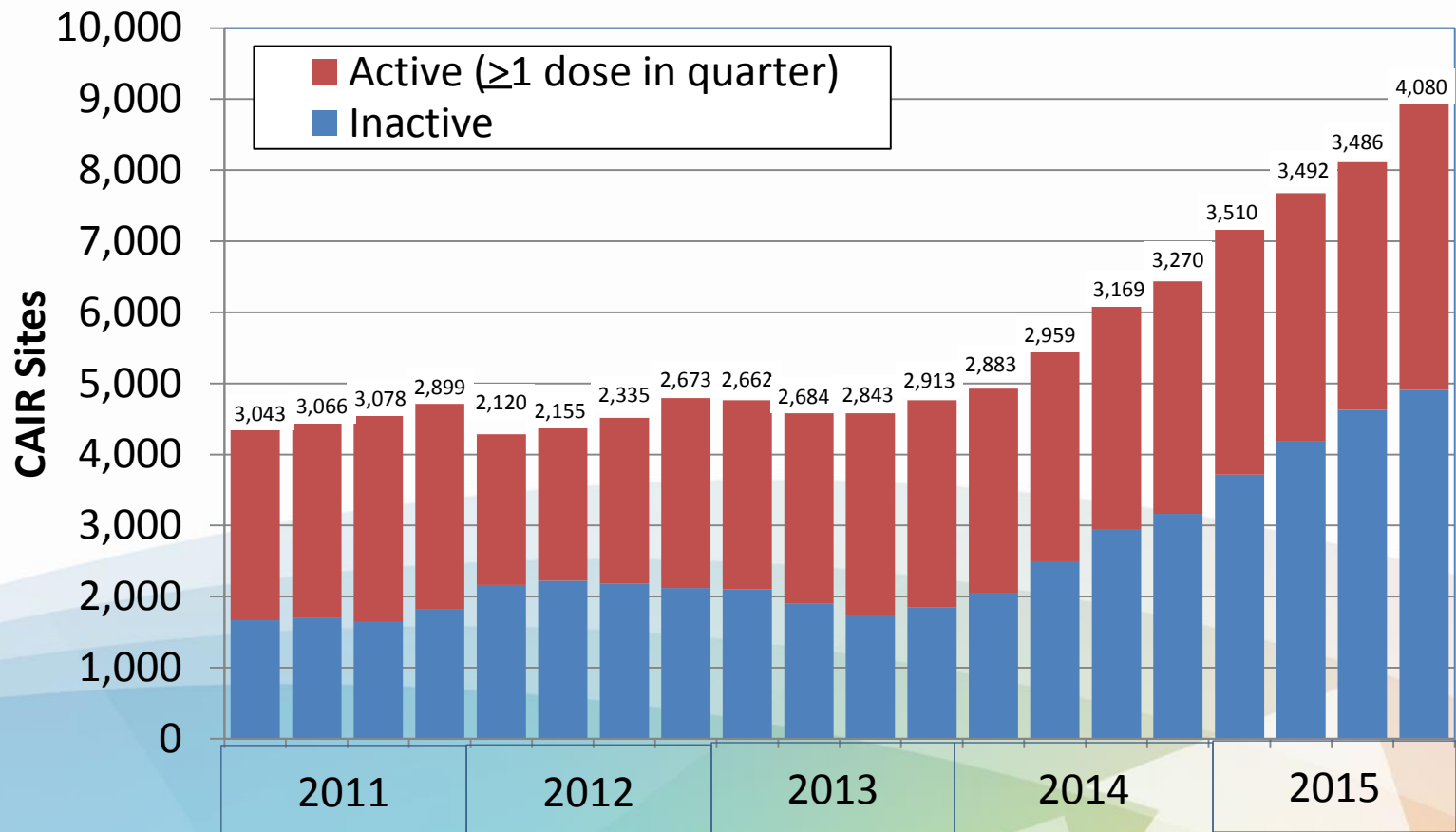
<i>Measure</i>	<i>0-5 yrs</i>	<i>6-18 yrs</i>	<i>19+ yrs</i>	<i>All Ages</i>
CA Population	3,009,697	6,626,735	29,807,550	39,443,982
Patients In	3,304,338	7,258,649	14,035,920	24,598,907
% of Pop. In	109.8%	109.5%	47.1%	62.4%
Patients w/ $\geq 2$ doses	2,203,688	5,541,321	7,045,517	14,790,526
% w/ $\geq 2$ doses	73.2%	83.6%	23.6%	37.5%%
Vaccine Doses	33,991,620	114,045,892	61,538,062	209,575,574

\* As of December 31, 2015.

# CAIR – Patients w/ 2 or more doses



# CAIR – Growth in Participation

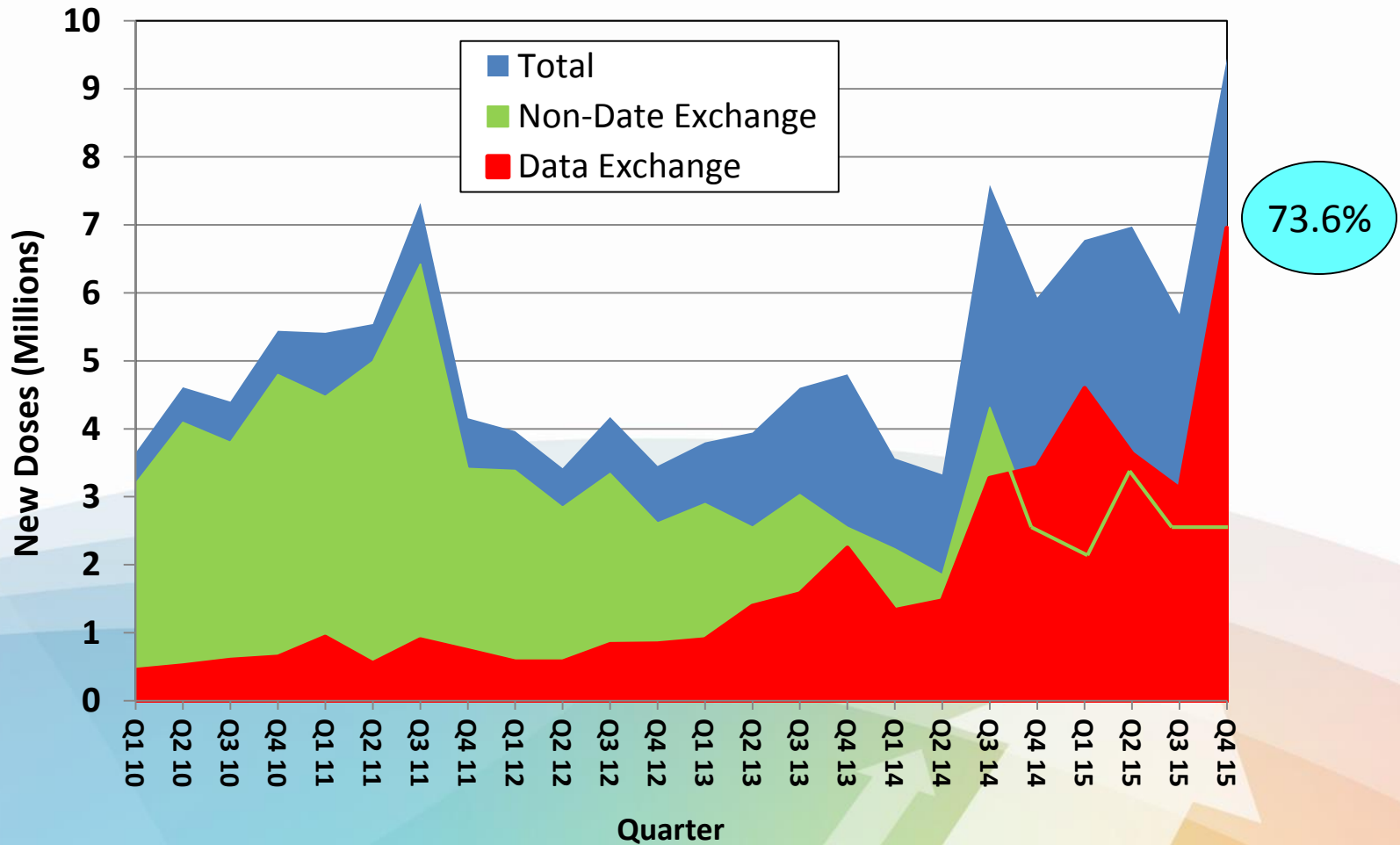


# CAIR – Data Exchange Sites\*

Site Type	Total	Data Submission Status		
		# Testing	# 'Prod'	% 'Prod'
EHR → CAIR	1,369	1,229	140	
EHR → HIE → CAIR	4,667	824	3,843	
<b>Totals</b>	<b>6,036</b>	<b>2,053</b>	<b>3,983</b>	<b>66%</b>

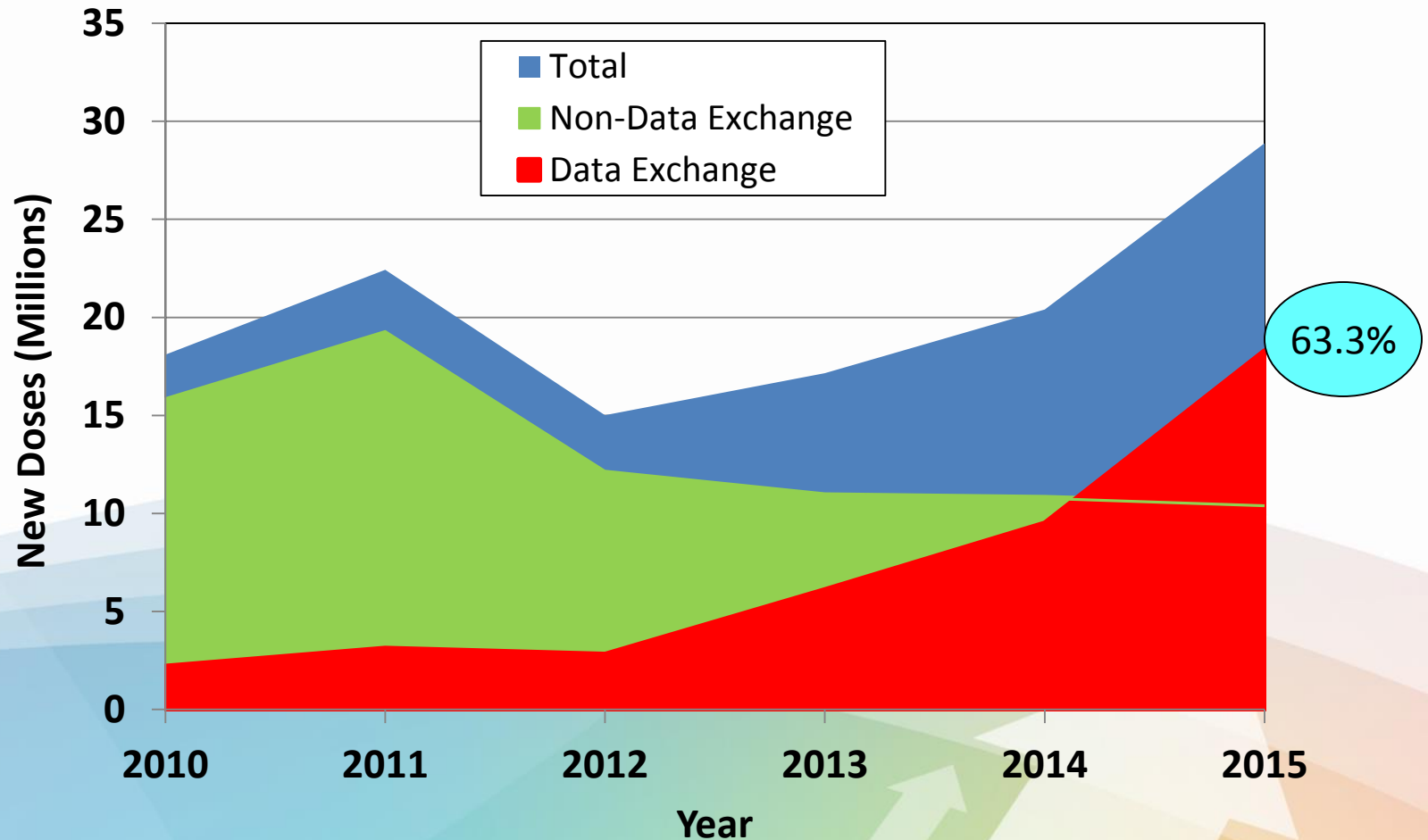
\* 'CAIR 7' only. As of 3/1/2016.

# CAIR – New Doses by Quarter





# CAIR – New Doses by Year



# CAIR – Progress We've Made in 5 yrs!

Measure	2010 (Q4)	2015 (Q4)	5-YR Change
Total Doses	106,896,227	209,575,574	2.0X
Patients	10,010,744	24,598,907	2.2x
0-5 yrs w/ $\geq 2$ doses	56.5%	73.5%	+17.0%
Total Clinical Sites	4,479	8,990	1.9x
Active Clinical Sites*	2,944	4,083	1.4x
Read-only Sites	998	4,489	4.5x
New Doses/Q	5,441,551	9,446,324	1.7x
New DE Doses/Q	577,648	7,303,184	12.6x
% DE Doses of All New	10.6%	77.3%	+66.7%

# CAIR2 – New Features

- Automatic upload of received VFC shipments into inventory
- Decrementing inventory for DE submitters
- ‘Datamart’ for more robust reporting
- Push-button Co-CASA-like reports (Assessment, Benchmark)
- ‘Ad hoc’ reporting capability
- County access to county data; no more need for county-specific specialized exports
- School module w/ roster status report (compliant, missing doses)
- Real-time access to submitted data, e.g. POS
- Real-time, bi-directional HL7 messaging capability

# #1 Priority for Branch in 2016-2017

- Transition Plan Beginning March 31, 2016
  - Key Activities, Timelines
  - Resources Dedicated to Project
  - Resource Gaps
  - Go Live Concerns

# Stakeholders

## External Stakeholders

- CAIR Users
- FQHCs
- LHDs
- Managed-care Plans
- Large Health Systems
- Pharmacies
- Schools
- WIC
- Professional Associations

## Internal Stakeholders

- CDPH Leadership
- CDPH Branch Staff
- CDC
- State IT
- CCLHO
- AIRA
- General Public/Patients
- Health Advocates

# Communication Plan Overview

## **Stage 1: Pre-Transition (Spring 2016)**

- Notify all existing users and stakeholders
- Drum up excitement
- Spring cleaning
- Update contact info and sign up for training
- Direct everyone to CAIR2 website for more information

## **Stage 2: Transition (Fall 2016)**

- Notify users by region groups 1, 2, 3
- Take training
- Contact CAIR support team for any issues

## **Stage 3: Post-Transition (Spring 2017)**

- Focus on recruiting schools, WIC, MCPs and others
- Support any efforts to require use of CAIR
- Encourage data-exchange users to set up bi-directional exchange

# Key Messages

- **The California Immunization Registry (CAIR) is getting even better.** We're implementing a new, faster, Immunization Information System (IIS) with many new features such as easy integration with EHR systems. No more double entry! The same software has already been successful in 17 other states.
- **You will be able to access immunization information from across the state.**  
All existing immunization data from the regional registries in California are being combined into one system.
- **The functions you love are still here.** You can add historical shots; update demographic or vaccine information; run inventory and usage reports; even run your own reminder/recall letters!

# Keys Messages

- **We're committed to supporting you.**  
We'll be making training available to help you learn how to navigate the new look of CAIR2. Plus, we'll have help desk support just an email or phone call away, Monday through Friday, 8:00 to 5:00.
- **Data confidentiality and privacy is still of primary importance.**  
We're committed to maintaining and improving our security protocols with strict password protection.



# Timeline

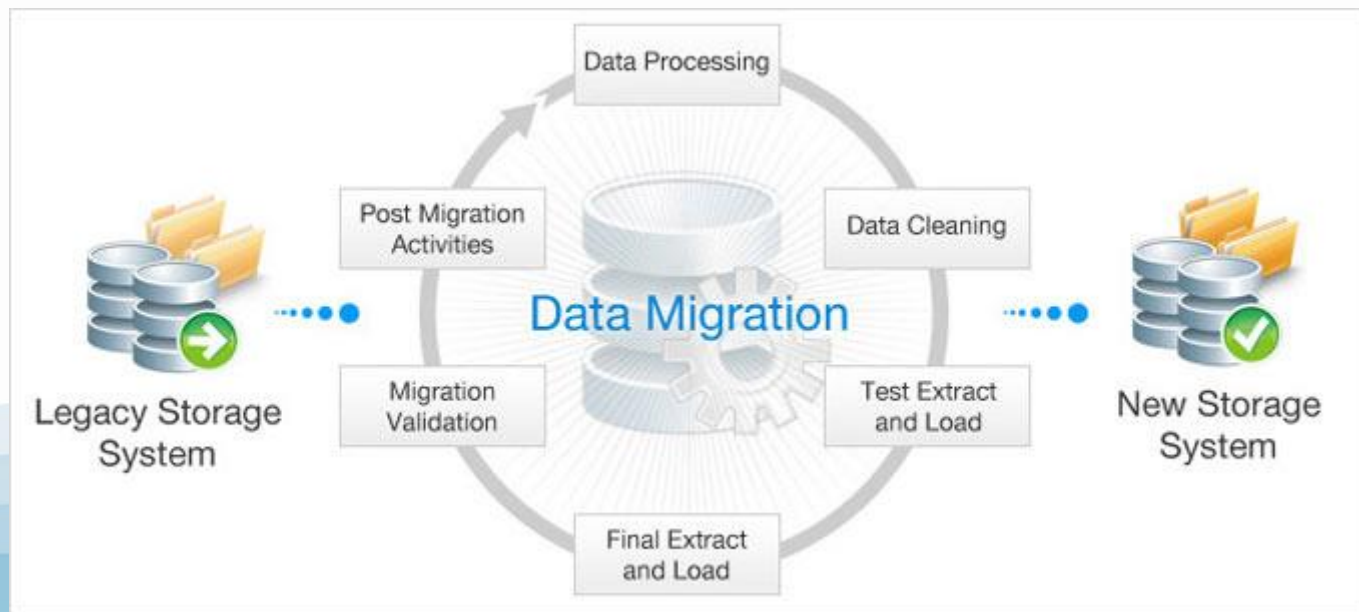
Task	Dates
Data Migration Meetings	3/2015 – 9/2016
Data Processing and Cleaning	12/2015 – 6/2016
Export Scripts [CDPH]	12/2015 – 5/2016
Import Scripts [HPE]	12/2015 – 5/2016
Migration Modeling	3/2015 – 5/2016
ETL [Test]	6/2016 – 8/2016
UAT Training	6/2016
UAT	6/2016 – 7/2016
ETL [Final]	8/2016 – 9/2016
Migration Validation	9/2016
Post Migration Activities	9/2016

\*UAT – User Acceptance Testing

\*ETL – Extract, Transform, Load



# CAIR Data Migration



# CAIR2 – Tentative Timeline\*

Phase	Software	2016						2017				
		Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1 CCIR, IE INNC, SFT	CAIR 2			CAIR2 Training Registration	CAIR2 E Training	CAIR2 E CAIR2 N	CAIR2 E CAIR2 N	CAIR2 N	CAIR2 N	CAIR2 N	CAIR2 N	CAIR2 N
	CAIR 1	CAIR1 N	CAIR1 N	CAIR1 N								
2 BARR, CVIIS	CAIR 2					CAIR2 Training Registration	CAIR2 E Training	CAIR2 E CAIR2 N	CAIR2 E CAIR2 N	CAIR2 N	CAIR2 N	CAIR2 N
	CAIR 1			CAIR1 N	CAIR1 N	CAIR1 N						
3 LINK	CAIR 2								CAIR2 Training Registration	CAIR2 E Training	CAIR2 E CAIR2 N	CAIR2 E CAIR2 N
	CAIR 1					CAIR1 N	CAIR1 N	CAIR1 N				

\* CAIR1 N = CAIR1 trainings for new regional users still on CAIR 1  
 CAIR2 E = CAIR2 trainings for existing regional users migrating to CAIR 2  
 CAIR2 N = CAIR 2 trainings for new users migrating to CAIR 2  
 Red vertical lines designate the proposed dates for switchover to CAIR 2.

# User Training Modalities

- Live trainings
- Webinars
- User Guides: Manual, Regular (Basic), Inventory, Read-Only
- Videos
- On-screen Help pages in the software

# User Training Requirements

**EXISTING Users:** No hands-on training. Will include a Demo and Q&A. Larger class sizes (40+). Webinar and live.

- **Regular:** Training required. Users from Clinical, Limited Clinical and Data Exchange (DE) sites.
- **Power:** Training required. Both Regular and Power training will be covered in one training.
- **Data Exchange (DE) Power:** Training required. Both Regular and Power training will be covered in one training.
- **Read-only:** No training. Will be given a R/O User Guide and video.

# User Training Requirements

**NEW Users:** Hands-on training. Smaller class size (15 max).  
Interactive, participation required. Webinar only.

- **Regular:** Training required. Users from Clinical, Limited Clinical and Data Exchange (DE) sites.
- **Power:** Training required. Will be required to take a Regular training first. Power training is separate.
- **Read-only:** No Training. Will be given a R/O User Guide and video.

# Communication to Users

**Via email, login screens, CAIRWEB, etc., we will communicate:**

- Training requirements for each user level
- Training Priorities
- Training registration information

**Via our Training Registration System, we will control training registration based on:**

- Region (Phase)
- User Level
- Active vs Non-Active Users
- Existing vs. New User

# Training Priorities

**Training registration will begin two months before the Switchover date.  
Training will begin one month before the Switchover date.**

Active existing users will be allowed to attend training the month before Switchover in their Phase.

Non-Active existing users will have to request a new user account and go through New User training in order to get access to CAIR2. These users will be allowed to attend training after the Switchover in their Phase.



# Number of Trainings

**Enough trainings will be scheduled to ensure all Active Existing Users have the opportunity to attend a training before the Switchover date.**

- Estimate 80-130 trainings per month depending on the month
- Estimate up to 2 simultaneous trainings in up to 3-4 timeslots per day

Will monitor closely and add more trainings as needed during the Transition period based on real-time registration demand.

May also increase class sizes depending on logistics and technical ability.

Will also offer a weekly 'Ask The Trainer' webinar throughout the Transition period for users who have been trained.

# Post-Transition Training

## After the Transition, we will:

- Continue Regular and Power trainings for New Users.
- Create additional Guides and Cheat-sheets as needed (e.g., Reminder/Recall, Special Reports)
- Implement additional trainings as needed (e.g., Reminder/Recall, Special Reports)

# Timely Opportunity

A CDC grant has been awarded to CDPH that focuses on adult immunization.

Multicomponent project:

- Increase general knowledge of adult iz standards in large healthcare systems - work with Medi-Cal, Medicare, FQHCs
- Expand use of 317 vaccines to uninsured adults
- Work with one FQHC to implement standards and support IT needs for data exchange with CAIR
- **Expand pharmacist role in adult immunization**
  - **Establish a Statewide Pharmacy Task Force**
  - **Survey/interview pharmacists**
  - **Enroll and train pharmacists in use of CAIR**
  - **Identify best practices for expanding role in adult IZ and use of CAIR**

# Board of Pharmacy - Pending Regulations

Establishes training, continuing education, notification and recordkeeping requirements for pharmacists who initiate and/or administer vaccinations.

- Improve provision of ACIP-recommended vaccines
- Requires timely communication with the primary care provider (and prenatal care provider, if pregnant).

Draft text - [http://www.pharmacy.ca.gov/laws\\_regs/regulations.shtml](http://www.pharmacy.ca.gov/laws_regs/regulations.shtml)  
(go to “Pending Regulations” under title “Vaccinations”)

# PROPOSED Regulations: Documentation (Title 16 CCR Section 1746.4)

## Proposed Documentation Requirements:

- Requires the pharmacist to notify the patient's primary care provider (PCP) of immunizations administered or advise the patient to consult a health care provider (if patient does not have a PCP).
- For pregnant women, the pharmacist should notify the prenatal care provider, if known, of immunizations administered.
- Requires reporting immunizations administered into the state and/or local immunization registry and informing patient/guardian of immunization record sharing preferences.
- Notifications must take place within 14 days of vaccine administration.

# CAIR - Doses Submitted by Pharmacies\*

Pharmacy Type	# of Sites	0-18 Yrs Doses	19+ Yrs Doses
Chain	2,087	2,081	50,479
Mass Merchandiser	520	203	6,521
Supermarket/Grocery Store	391	242	5,776
Independent Pharmacy	4	-	-
All	3,002	2,526	62,776

\*CAIR 7 regions only, Q1 2016

# CAIR - Adult Doses Submitted by Pharmacies - selected vaccines\*

Pharmacy Type	Flu	HAV	HAV-HBV	HBV	HPV	MCV4	Meng B	MMR	PCV13	PPV23	Tdap	Zoster
Chain	27,034	597	228	470	85	255	132	492	5,182	1,146	10,071	6,437
Mass Merchandiser	2,949	86	51	133	18	30	3	87	868	314	1,169	960
Supermarket/ Grocery Store	2,708	116	59	39	16	42	2	54	958	173	991	806
<b>All</b>	<b>32,691</b>	<b>799</b>	<b>338</b>	<b>642</b>	<b>119</b>	<b>327</b>	<b>137</b>	<b>633</b>	<b>7,008</b>	<b>1,633</b>	<b>12,231</b>	<b>8,203</b>

\*CAIR 7 regions only, Q1 2016

# CAIR Components

- Survey other state IZ registries with pharmacy mandates to learn best practices
- Educate pharmacies about the new CA IZ Registry mandate
- Recruit, enroll, train and support pharmacies in their CAIR use
  - Develop a landing page on CAIRWEB.org
  - Identify the best mechanisms for training pharmacy staff
  - Dedicate a staff member to support pharmacies in their CAIR electronic data submission



# Conclusion

**Questions????**

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**Thank You**