



*AIRA 2025 National Meeting  
Modernizing IIS Track*

# Improving Immunization Status Checks & Rate Reporting for Schools

**11:59**

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Chief, Registry and  
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Co-founder, 11:59

# Modernizing your IIS is achievable in phases, **on your terms and your timeline.**

Lower Risk

Cost-  
Effective

Efficient

Sustainable

# CDPH's School and Childcare Roster Lookup: Case Study

## The Situation

- CDPH anticipated adding COVID-19 to the list of required vaccines for school and childcare enrollment.
- In CAIR2, users could search for one student at a time, and the IIS generated an incomplete, static report—a time-consuming process that yielded information that was almost immediately out-of-date.

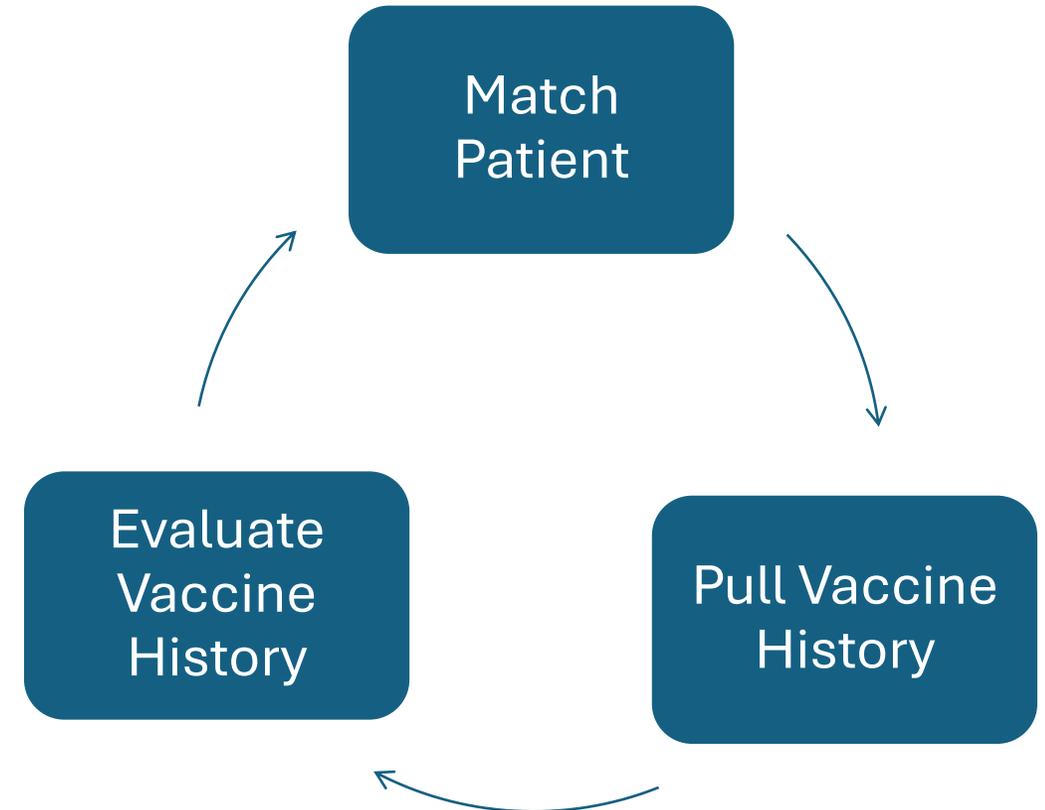


**The State needed a fast, dynamic, and efficient solution for school and childcare users to check immunization status.**

# CDPH's School and Childcare Roster Lookup: Case Study

## What Functionality Did We Need?

- Perform a **Patient Match**
  - Ideally using the same matching algorithm as IIS
- Pull the student's **Vaccine History**
  - Using data from IIS database or warehouse
- Perform **Vaccine Evaluation**
  - Both using ACIP and school requirements



# CDPH's School and Childcare Roster Lookup: Case Study

## What Architecture Options Did We Have?

- **Option 1: Modify the existing IIS functionality**

### Pros

- Limits code duplication
- Functions produce identical results
- Fewer modules to manage

### Cons

- Extends an already aging legacy IIS application
- IIS vendor busy working of other COVID priorities

# CDPH's School and Childcare Roster Lookup: Case Study

## What Architecture Options Did We Have?

- **Option 2: Create new module and access IIS database directly**

### Pros

- New module able to use modern architecture
- Vendors could work independently

### Cons

- Code redundancy for many complex functions
- Functions may produce slightly different results
- Creates a dependency on the IIS database structure

# CDPH's School and Childcare Roster Lookup: Case Study

## What Architecture Options Did We Have?

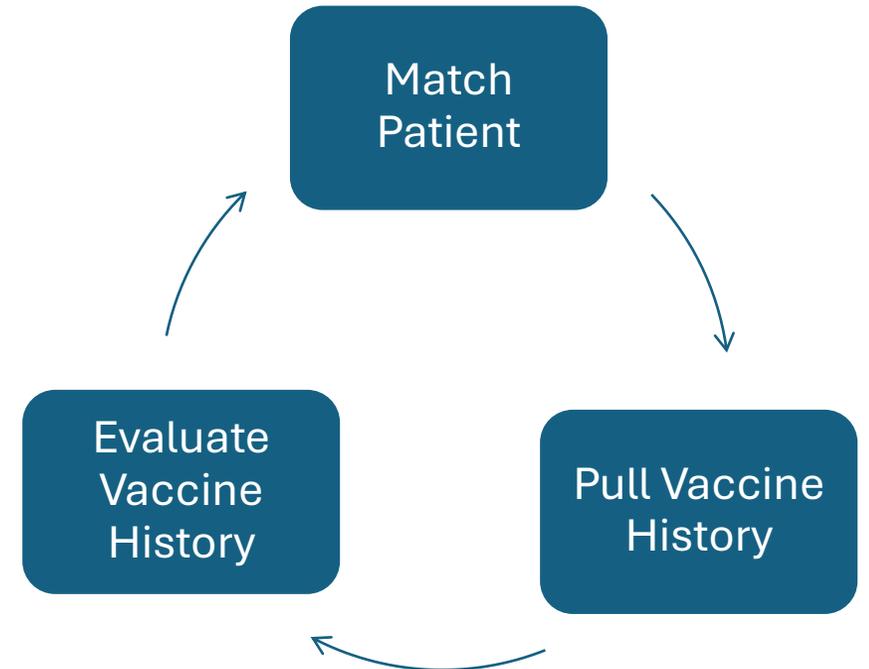
- Option 3: ????????

**Question:**

***What functionality, already available, performs these three tasks?***

**Answer:**

***Our HL7 friend - the **QBP** Transaction***



## What Architecture Options Did We Have?

- **Option 3: Create new module and use standard interoperability to access needed functionality**

### Pros

- New module able to use modern architecture
- Vendors could work independently
- No code duplication
- Consistent functional results
- Decoupled from IIS
- Enables any IIS to take advantage regardless of technology used

### Cons

- Still looking for one



# CDPH's School and Childcare Roster Lookup: Case Study

## Modular Architecture Benefits

- Decouple logic to reduce dependencies
- Eliminate monoliths
- Utilize standardized interoperability methods
- Increase maintainability
- Reduce code redundancy
- Improve scalability
- Reduce risk



A modular approach to modernization can isolate complex IIS functionalities **without a costly, time-intensive full technology transformation.**

# CDPH's School and Childcare Roster Lookup: Case Study

## User-Centric Design

- Engaged school district staff, including a district nurse, to understand workflows and challenges
- Users' primary needs included addressing the volume of children to check and decreasing time on manual lookups in CAIR2:
  - Integration with student information systems
  - Streamlined child lookup
- **User-Centric Design Outcomes**
  - Increased user satisfaction
  - Intuitive user experience
  - Innovative features
  - Reduced development cost
  - Higher user adoption

## SCRL Features

- ✓ Secure web portal
- ✓ Upload rosters from student information systems
- ✓ Intuitive screens and workflows
- ✓ Robust filtering
- ✓ Quickly select and export student lists for follow-up
- ✓ Customizable IZ history forms and vaccine schedules



**CAIR Hub School & Child Care Roster Lookup (SCRL)**

## School and Childcare Roster Lookup (SCRL)

SCRL processed nearly 2,000,000 student IZ record queries in 2024.

Each roster can hold up to 4,000 students. SCRL notifies users when processing is done.

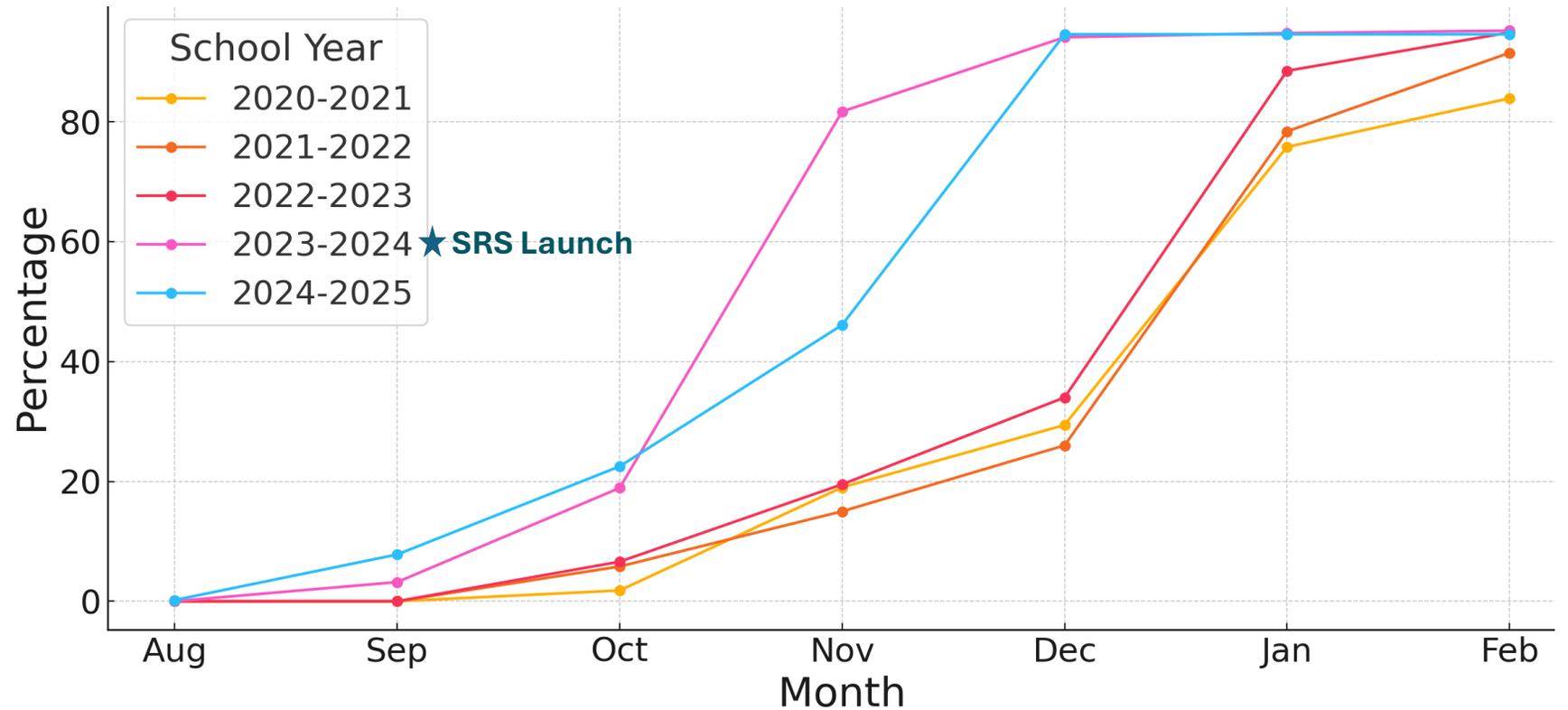
## School Reporting System (SRS)

Over 20,000 CA schools and childcares report annual immunization rates using the School Reporting System.

In early 2025, 11:59 successfully transitioned ownership of the SRS back to the CDPH's Immunization Branch.

## School Reporting System (SRS) Reporting Rates

Percent of Schools/Childcares Reporting by Month



Higher reporting rates enabled CDPH to close the reporting period early and significantly decreased State and local health office staff outreach to non-reporting facilities.

# Thank you!



# Today's Speakers



**Michael Powell**

Chief, Registry and Immunization Rate Assessment Section

Passionate about improving community health, Michael has been with the California Department of Public Health since 2010. He holds a bachelor's degree in Business, a master's in Computer Science, and is currently pursuing an MPH at Boston University. Outside of work and studies, Michael is a San Jose Sharks fan, a billiards enthusiast, a licensed amateur radio operator (K8MSP), and a level 80 Void Elf Frost Mage.



**Chuck Czajkowski**

Co-founder, 11:59

Chuck has led 11:59 (M Corp) for over 20 years, including two decades of partnership with CDPH. This partnership has included two registry transformations and the COVID-19 pandemic response, four applications, and program, operational, and project management support for over 30 immunization-related initiatives and projects. Outside of work, Chuck used to be really good at Frogger.