# Better Data Exchange to Support Childhood Immunizations: A Playbook

Connecting for Better Health

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## About this Playbook

The Childhood Immunization Status Combination 10 (CIS Combo 10) measures the percentage of children who have received the full combination of required childhood immunizations by age two.

The Department of Health & Social Care's Equity & Practice Transformation program in California is using the CIS Combo 10 measure as an indicator of practices' investment in up-stream models of care and population health. With growing controversy around childhood immunizations and increased vaccine hesitancy, accurate data on vaccines is crucial.

Connecting for Better Health facilitated the Pediatric Immunization Design Studio, which brought together pediatric practices, managed care plans, the California Immunization Registry (CAIR), and a local public health department to identify how improved data sharing could improve performance on the CIS Combo 10 measure, through a process of user-centered design. The Design Studio process surfaced insights and recommendations from participants to improve data exchange to support childhood immunization.

We found that performance on the CIS Combo 10 measure is being undermined not by lack of care delivery, but by fragmented, incomplete, or inaccessible immunization data.

### 10 Required Vaccinations:

- DTaP
- IPV (Polio)
- MMR
- Hib
- Hepatitis B
- Varicella
- PCV
- Rotavirus
- Hepatitis A
- Influenza (including LAIV by age 2).

This playbook translates insights from the Design Studio into practical workflows and checklists that organizations can use today to improve immunization data quality and completeness, strengthen collaboration, increase performance on the CIS Combo 10 measure, and contribute to practice transformation.

To learn more about the Design Studio approach and how Connecting for Better Health uses user-centered design to convene stakeholders and address data sharing challenges in health and social care, visit our website.

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## What This Playbook Provides

- **Workflow diagrams** for key CIS Combo 10 processes, including:
  - How to Share Immunization Data After Birth with CAIR: Standardizing immunization data reporting to improve quality and completeness of CAIR records
  - How Managed Care Plans and Practices Should Communicate About Immunization Data: Improving communication to increase performance on the CIS Combo 10 measure
  - How to Increase Patient Authorization for Data Sharing: Obtaining parental authorization to share data so key stakeholders can access immunization data
- **Implementation guidance** tailored to:
  - Pediatricians and practice office managers
  - Managed care plans and practice coaches
  - CAIR and data infrastructure partners
- **Guidance on how to align** with California's Data Exchange Framework and public health priorities, while remaining grounded in current operational realities

## Who is Involved in Pediatric Immunization Data Exchange

Getting accurate childhood immunization data depends on stakeholders across the health care system, including:

## Why Immunization Data Matters

Incomplete or fragmented immunization data means that:

- Providers may lack confidence in patients' immunization histories
- Patients may receive unnecessary vaccines
- Plans may not get credited accurately in value-based payment models
- Public health departments may struggle to target outreach effectively

Accurate pediatric immunization data depends on getting information across a range of settings and sharing it across the health care system.

## Key Problems for Pediatric Immunization Data

The Design Studio process identified three challenges with data exchange for pediatric immunization:

1. **No single source of truth:** Discrepancies and challenges with patient identity resolution between CAIR, claims, EHRs, and public health systems prevent stakeholders from getting complete and accurate data, causing uncertainty for patients and a lack of actionable data at a practice level.
2. **Manual, fragmented workflows:** Critical processes - such as patient authorization, vaccination record updates, and outreach coordination - rely on manual effort and informal communication. This can result in missed steps having serious consequences.
3. **Variable analytic capacity:** Many practices do not have the analytic capability they need to use data to drive improvements in childhood immunization and care delivery.

# Immunization Data Workflows

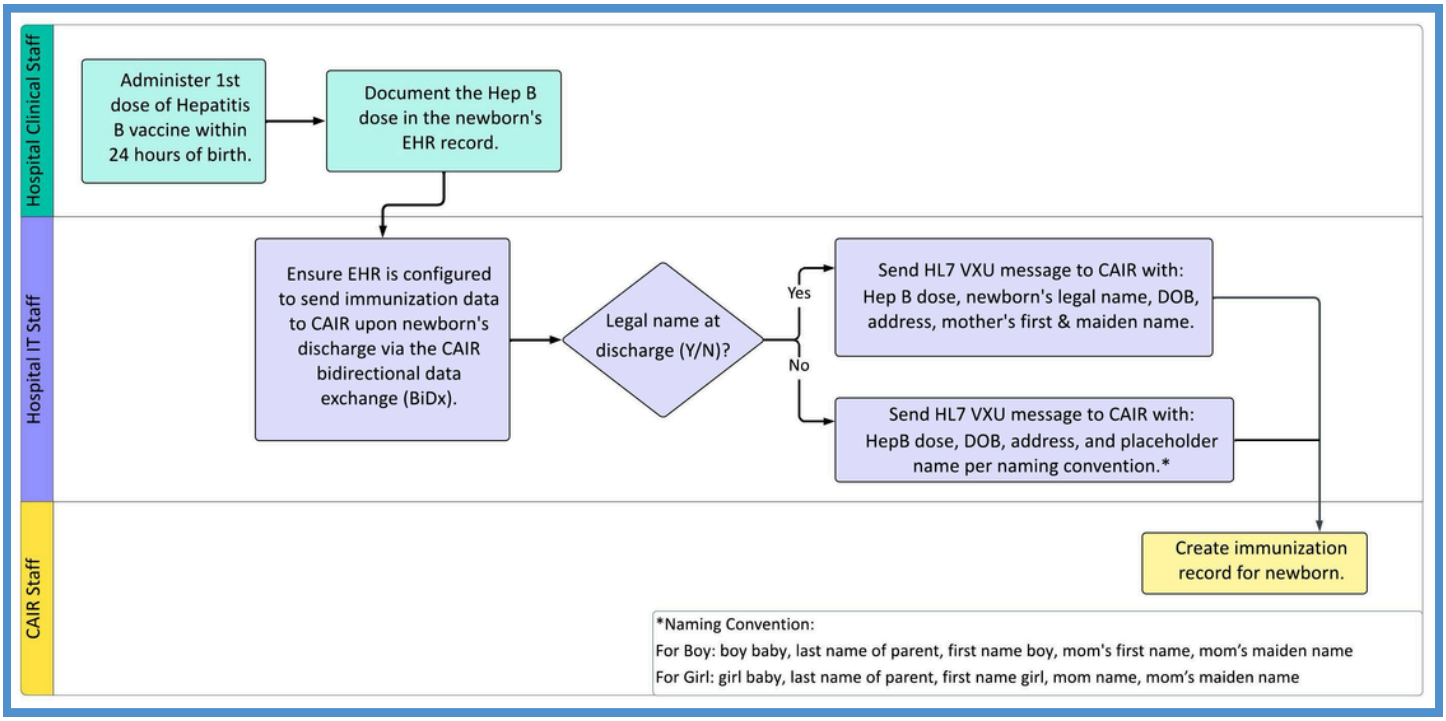
## 1. How to Share Immunization Data After Birth with CAIR

### Why This Matters

This workflow outlines the standardized process for how hospitals should report a newborn's birth dose of Hep B to the California Immunization Registry (CAIR). Standardized reporting of data at birth allows for accurate data that flows with the patient across future immunizations.

### Who Is This For?

- Pediatricians
- Managers in labor & delivery settings




### Things to Consider

- Ensure hospital EHRs are configured to submit immunization data automatically at discharge.
- Use standardized placeholder naming conventions consistently when legal names are unavailable.
- Prioritize timely submission over delayed reporting to prevent downstream data gaps.

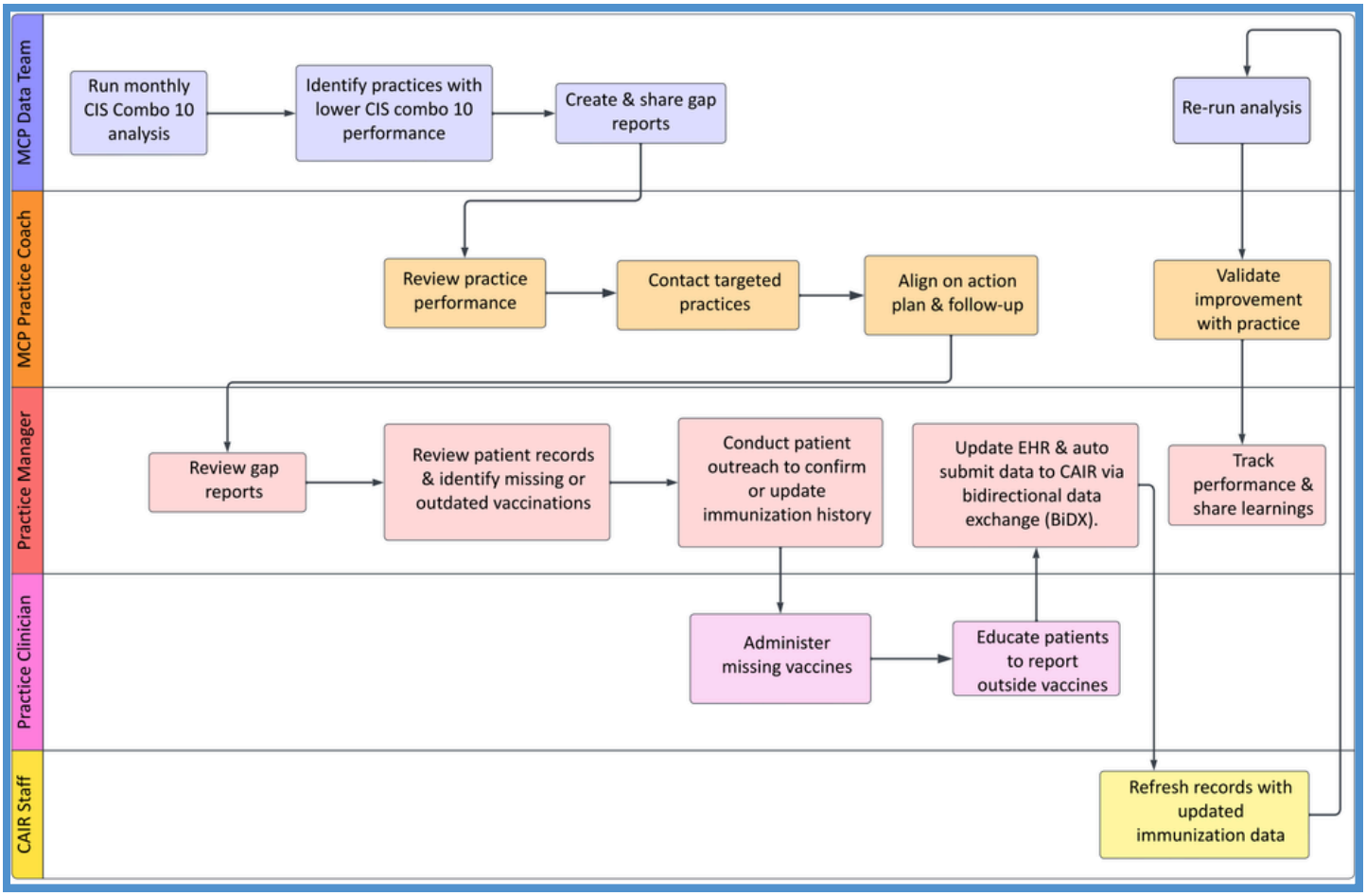
## 2. How Managed Care Plans and Practices Should Communicate about Immunization Data

### Why This Matters

This workflow describes how managed care plans and practices coordinate to identify immunization gaps, update vaccination records, and improve CIS Combo 10 performance. Coordinating consistently can support timely outreach and accurate reporting.

### Who Is This For?

- Pediatricians
- Practice Managers
- Quality and Analytics teams and Practice Coaches in MCPs




### Things to Consider

- Run performance analyses on a monthly basis.
- Use gap reports to inform outreach efforts to practices and patients.
- Re-run analyses after data updates to confirm that immunization rates have improved.

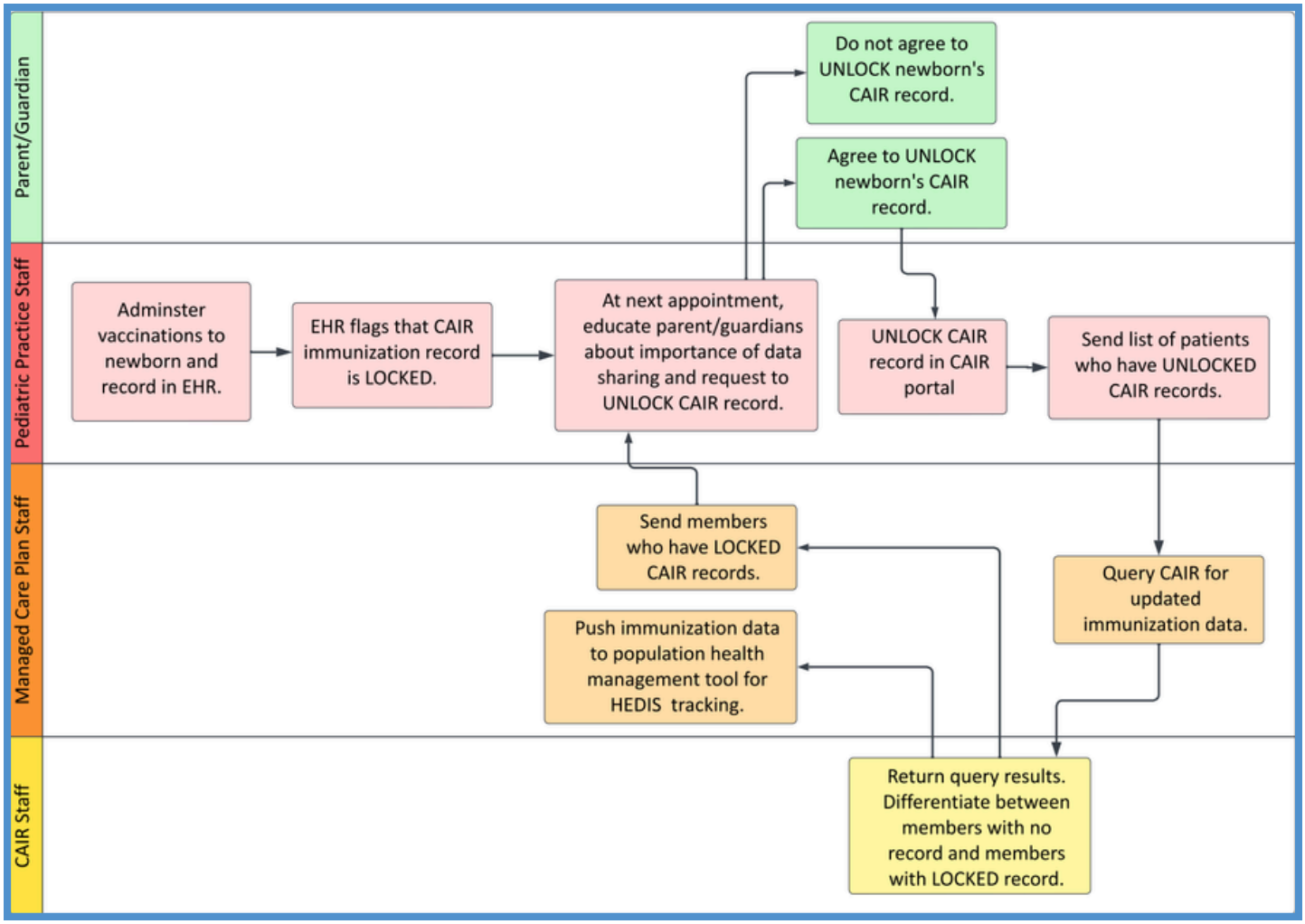
# 3. How To Increase Patient Authorization for Data Sharing

## Why This Matters

Pediatric practices, managed care plans, and CAIR should coordinate to identify patients with locked CAIR records (locked means that CAIR cannot share their records with other stakeholders) and obtain parental authorization to unlock these records when possible. Locked CAIR records limit visibility into vaccinations already delivered to patients, which negatively impacts performance on the CIS Combo 10 measure.

## Who Is This For?

- Pediatricians
- Practice Managers
- MCP Practice Coaches and Quality Improvement teams




## Things to Consider

- Incorporate authorization discussions into routine pediatric visits.
- Provide clear education to parents about data sharing.
- Use simple tracking to support follow-up.

## Future Recommendations

The workflow recommendations highlighted in this document are all steps that practices, hospitals, payers, and CAIR can take now to help improve childhood immunization rates.

Our Design Studio process also surfaced several opportunities for system-level improvements that could strengthen immunization data exchange and drive better outcomes.

These include:

- **Continued investment in CAIR** to automate patient identity resolution and improve patient immunization record matching.
- **Development of standardized immunization analytics dashboards within CAIR**, enabling consistent, actionable insights for county public health departments and providers.
- **Targeted support for county public health departments** to more effectively and strategically use immunization data to allocate resources, plan interventions, and execute vaccination campaigns.
- **Routine reporting on performance outcomes and implementation barriers** to promote shared learning and continuous improvement at a system-level.

To learn more about our work please visit www.connectingforbetterhealth.com.

## How To Get Involved

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