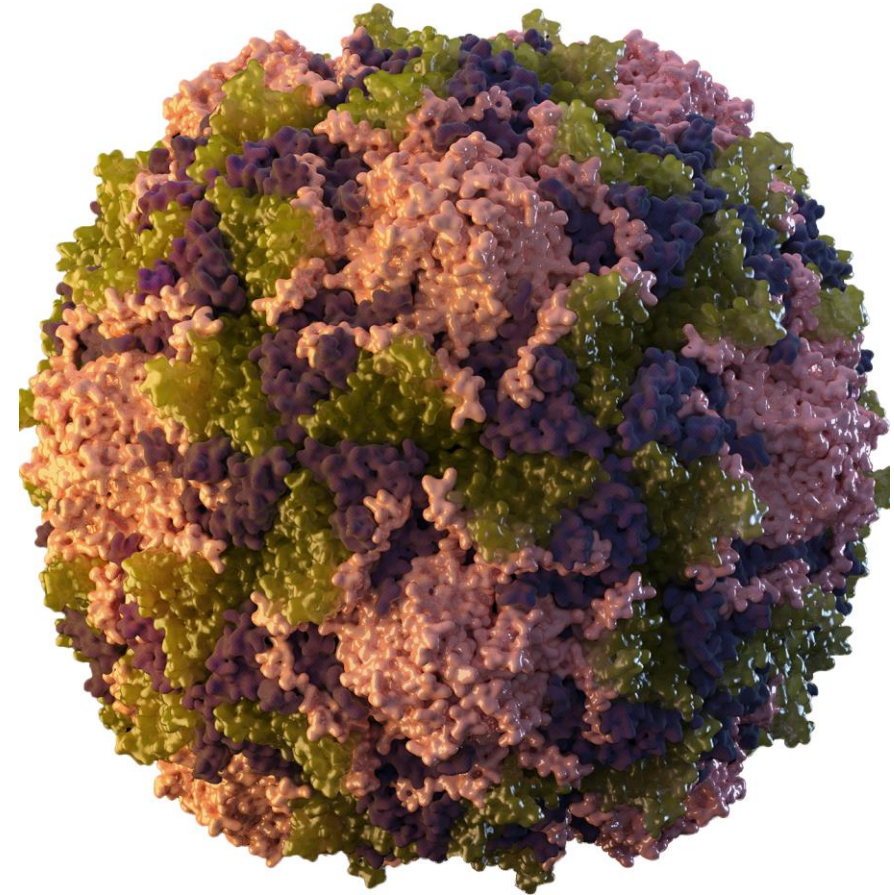# Lessons Learned from 2022 Polio Response on Immunization Data Exchange

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Informatics and Data Analytics Branch (IDAB)/ Immunization Services Division (ISD)/ National Center for Immunization and Respiratory Diseases (NCIRD)

Agenda and Overview

Agenda

- Overview of 2022 NYS Polio Response

- Immunization Data Exchange Environmental Scan in Rockland County: Technical Workflow Visits

- Lessons learned about factors impacting data collection and exchange

- Moving Forward

Polio Investigation in New York
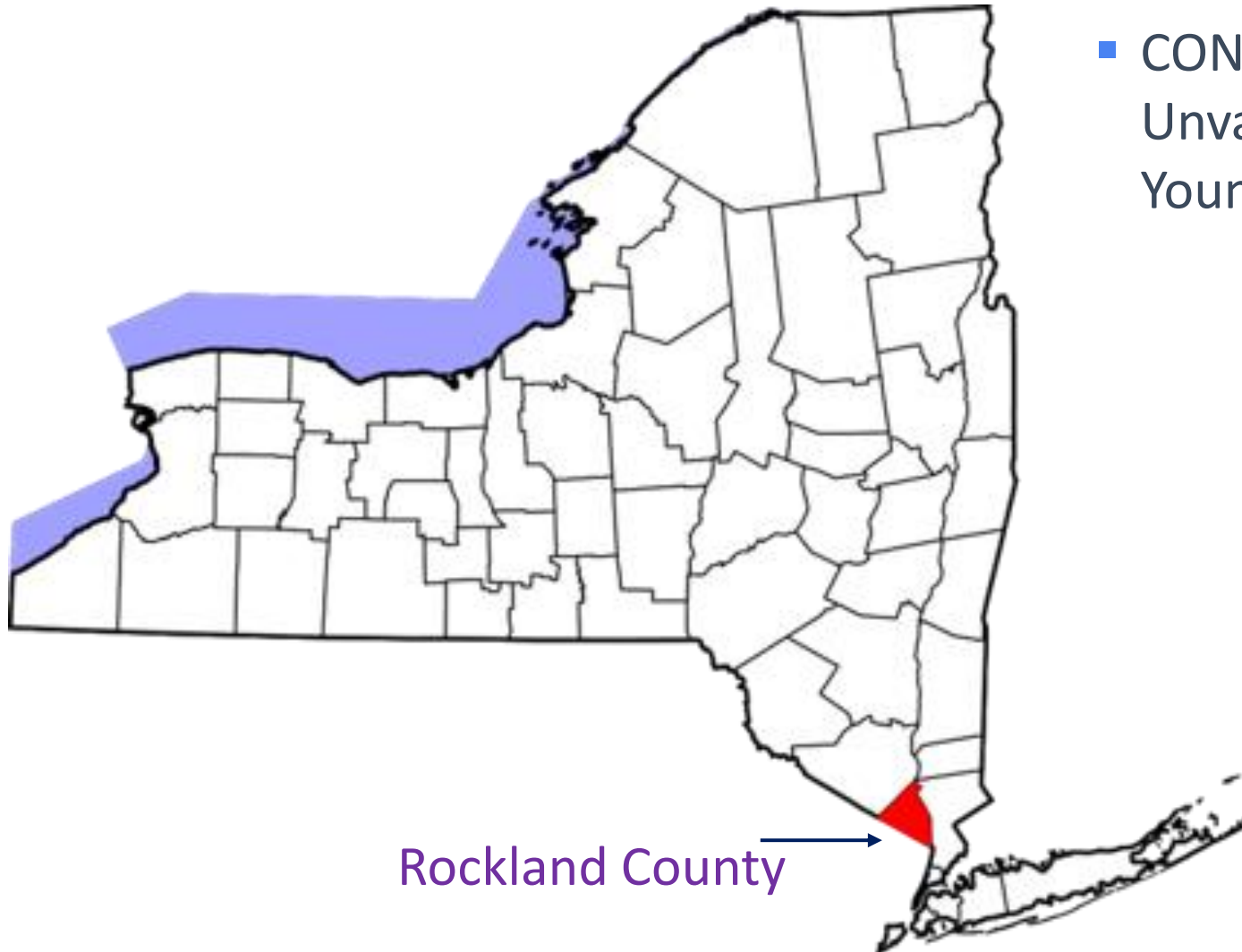
- CONFIRMED: Poliomyelitis Case in Unvaccinated, Previously Healthy Young Adult

Rockland County
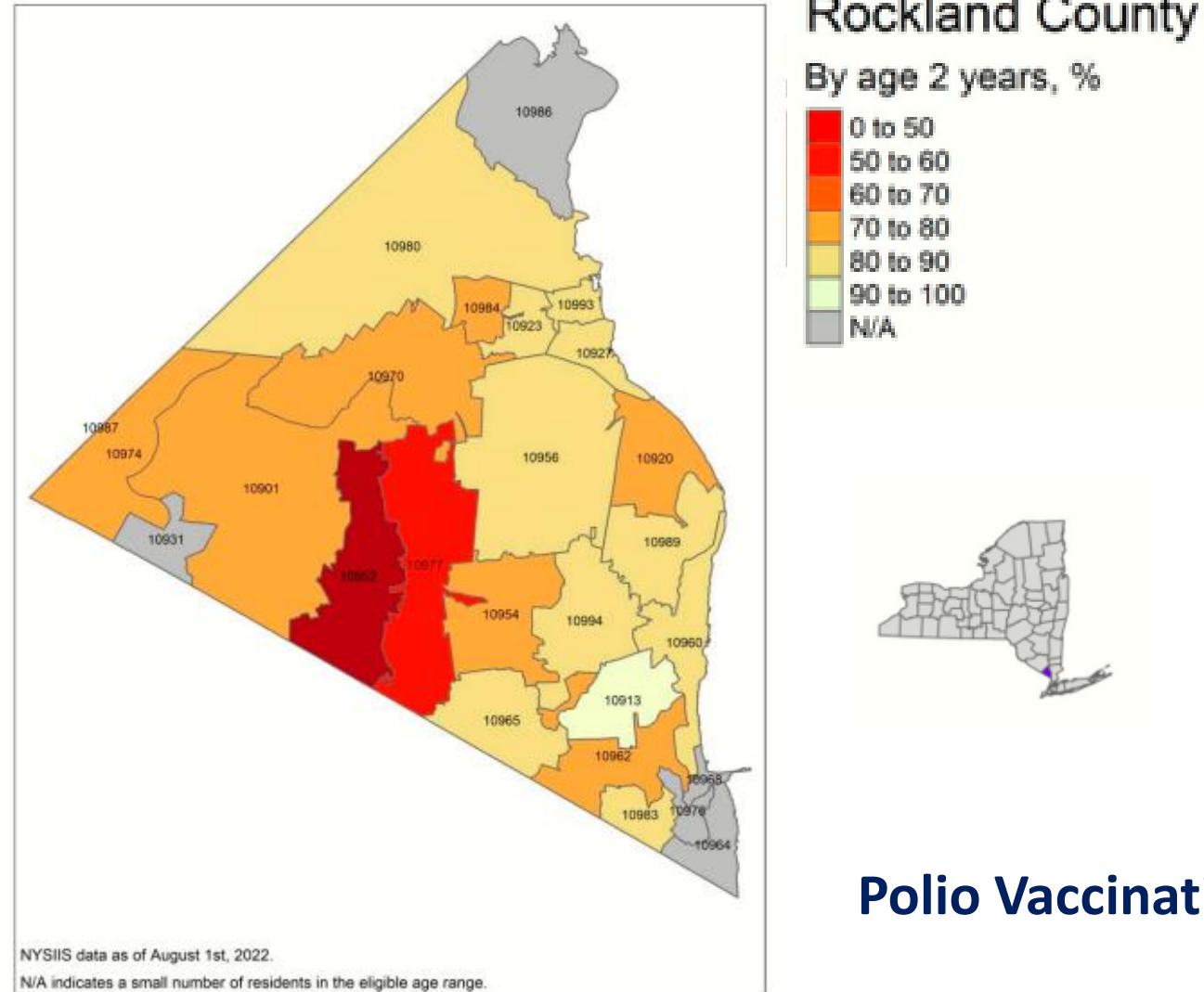
Vaccination in Rockland County, New York

- Outbreaks of vaccine preventable diseases:
  - 2009-2010: Mumps*
  - 2018-2019: Measles**
  - 2022-2023: Pertussis

*Update: Mumps Outbreak --- New York and New Jersey, June 2009--January 2010 (cdc.gov)
**Notes from the Field: Measles Outbreaks from Imported Cases in Orthodox Jewish Communities — New York and New Jersey, 2018–2019 | MMWR (cdc.gov)
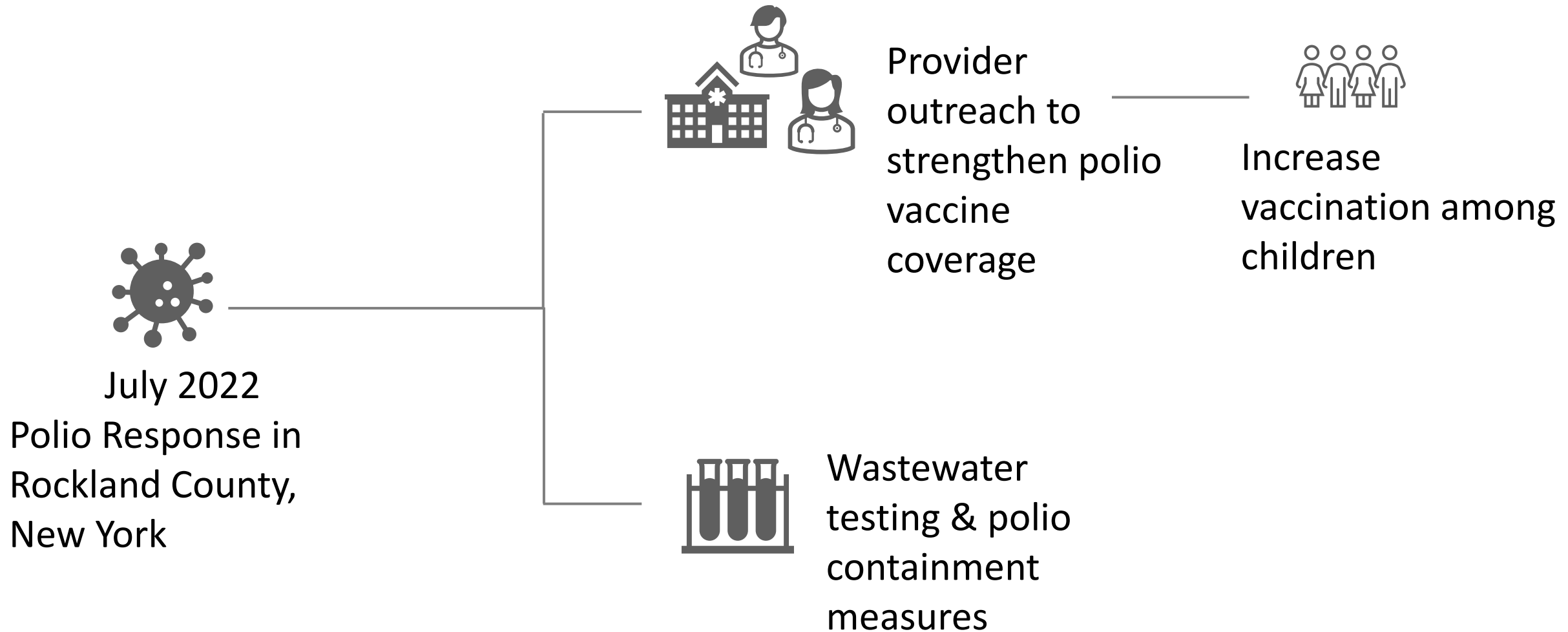
Polio Vaccination Rate in Rockland County as of August 1, 2022

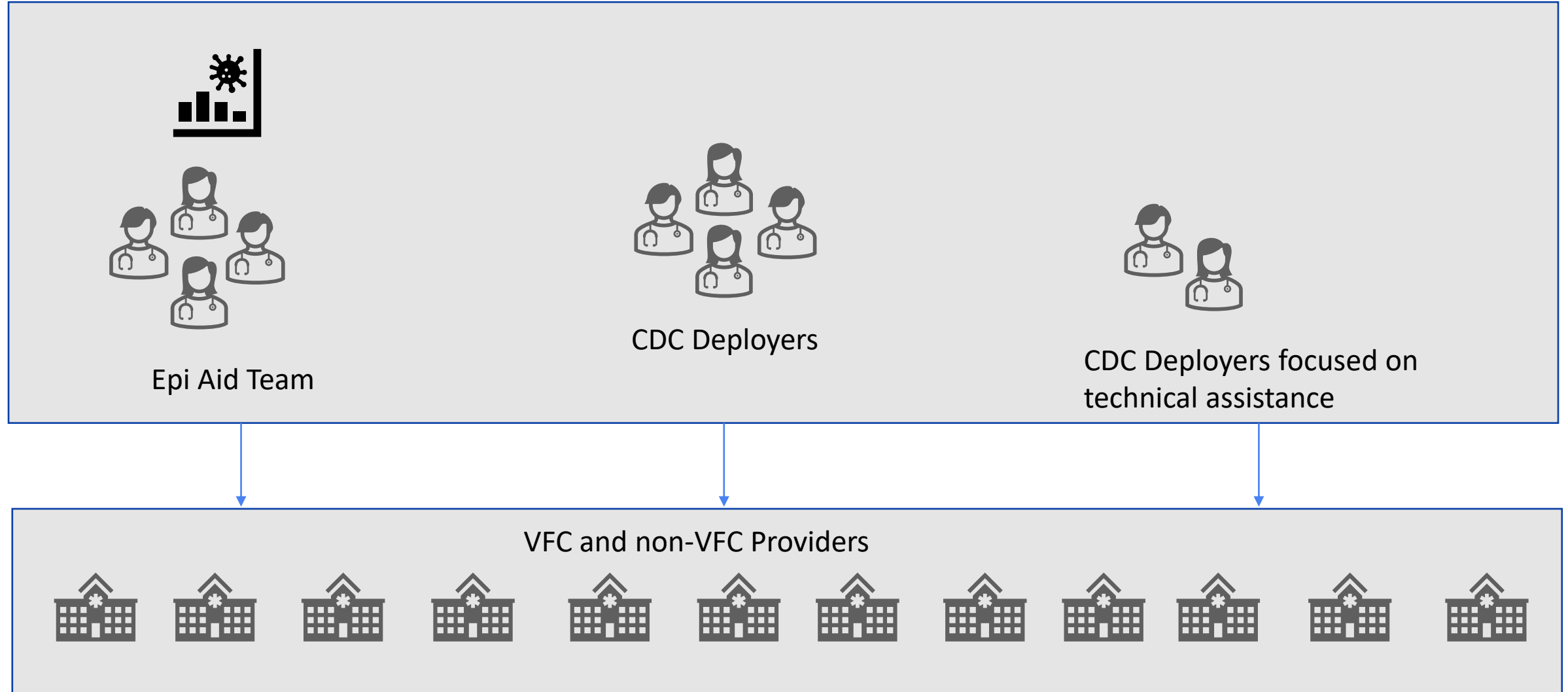Figure 1: Rockland County Polio Vaccination Rates by Zip Code

Rockland County
By age 2 years, %

- 0 to 50
- 50 to 60
- 60 to 70
- 70 to 80
- 80 to 90
- 90 to 100
- N/A

NYSIIS data as of August 1st, 2022.
N/A indicates a small number of residents in the eligible age range.

Polio Vaccination Rate: 60.34%

Outbreak Response Measures

July 2022
Polio Response in
Rockland County,
New York

Provider
outreach to
strengthen polio
vaccine
coverage

Increase
vaccination among
children

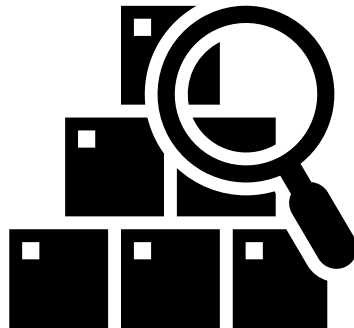Wastewater
testing & polio
containment
measures

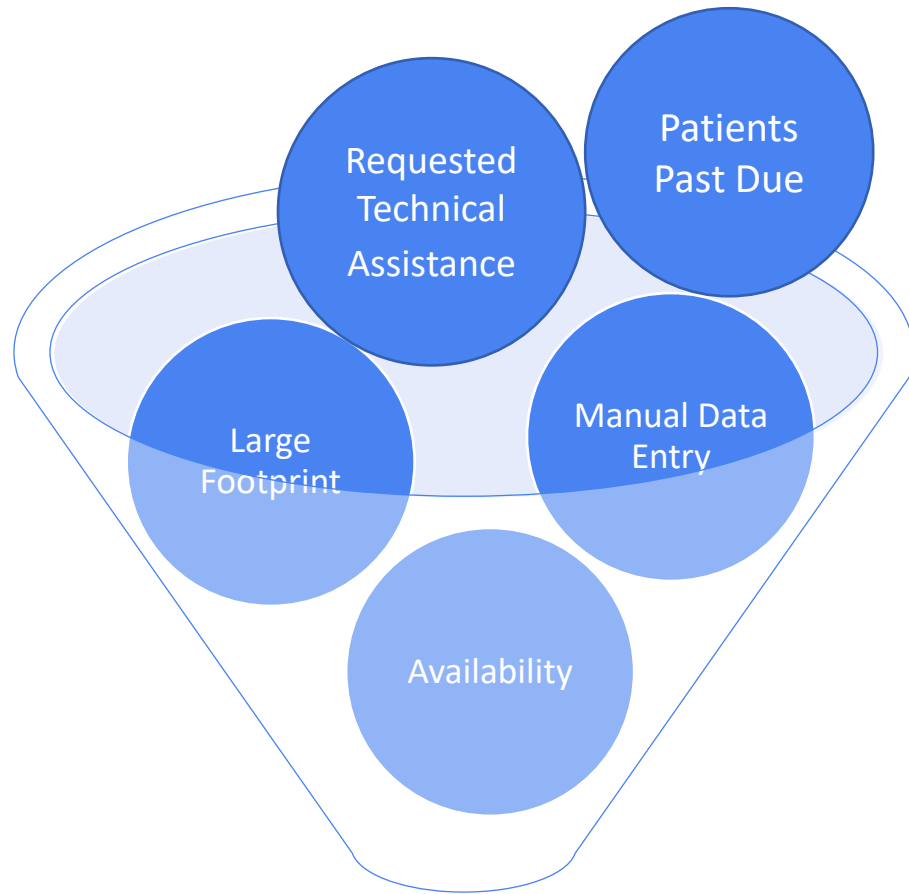# How It Started: Provider Outreach

Objective

- Understand factors impacting immunization data exchange between providers and immunization information systems (IIS)

- Conduct workflow assessments and provide technical support

- Understand factors impacting our ability to have up-to-date patient immunization status

# Eligibility Criteria for High Priority Providers

- Requested Technical Assistance
- Patients Past Due
- Large Footprint
- Manual Data Entry
- Availability

9 High Priority Providers

- 9 Rockland County providers with a combined estimated active patient population over 16,000 children aged <5 years
  - 3 large providers with an estimated patient population >2,000
  - 3 mid-sized providers with an estimated patient population between 1,000 and 2,000
  - 3 small providers with an estimated patient population between 100 and 600

Provider Workflow Assessment | Improve Understanding of Provider Systems
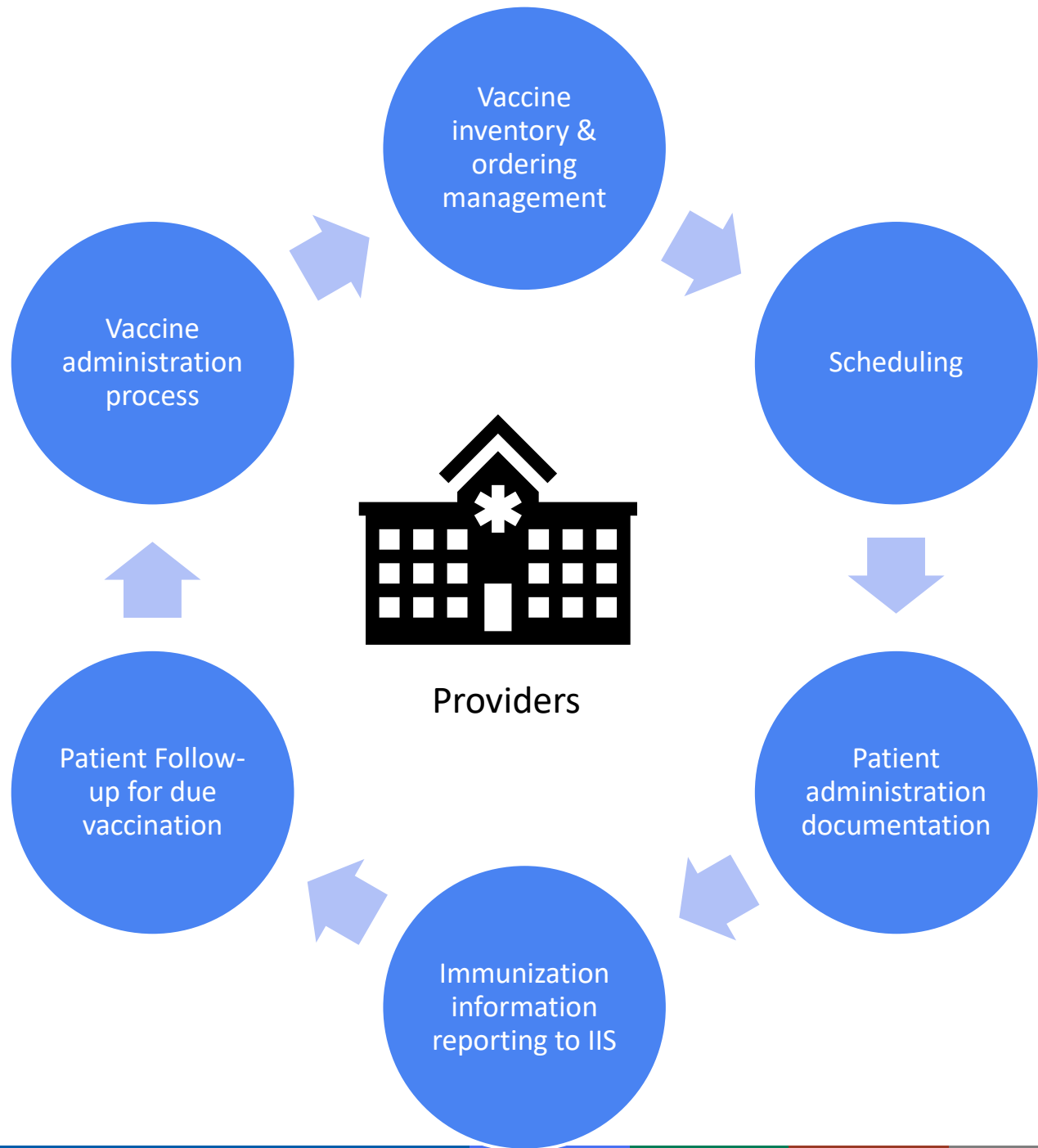
Key Questions

Patient level record management in EHR and immunization information system
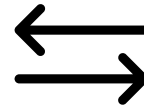
Process for immunization data reporting to immunization information system

Vaccine administration steps

Process for ensuring immunization data exchange from EHR to immunization information system
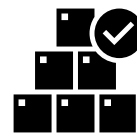
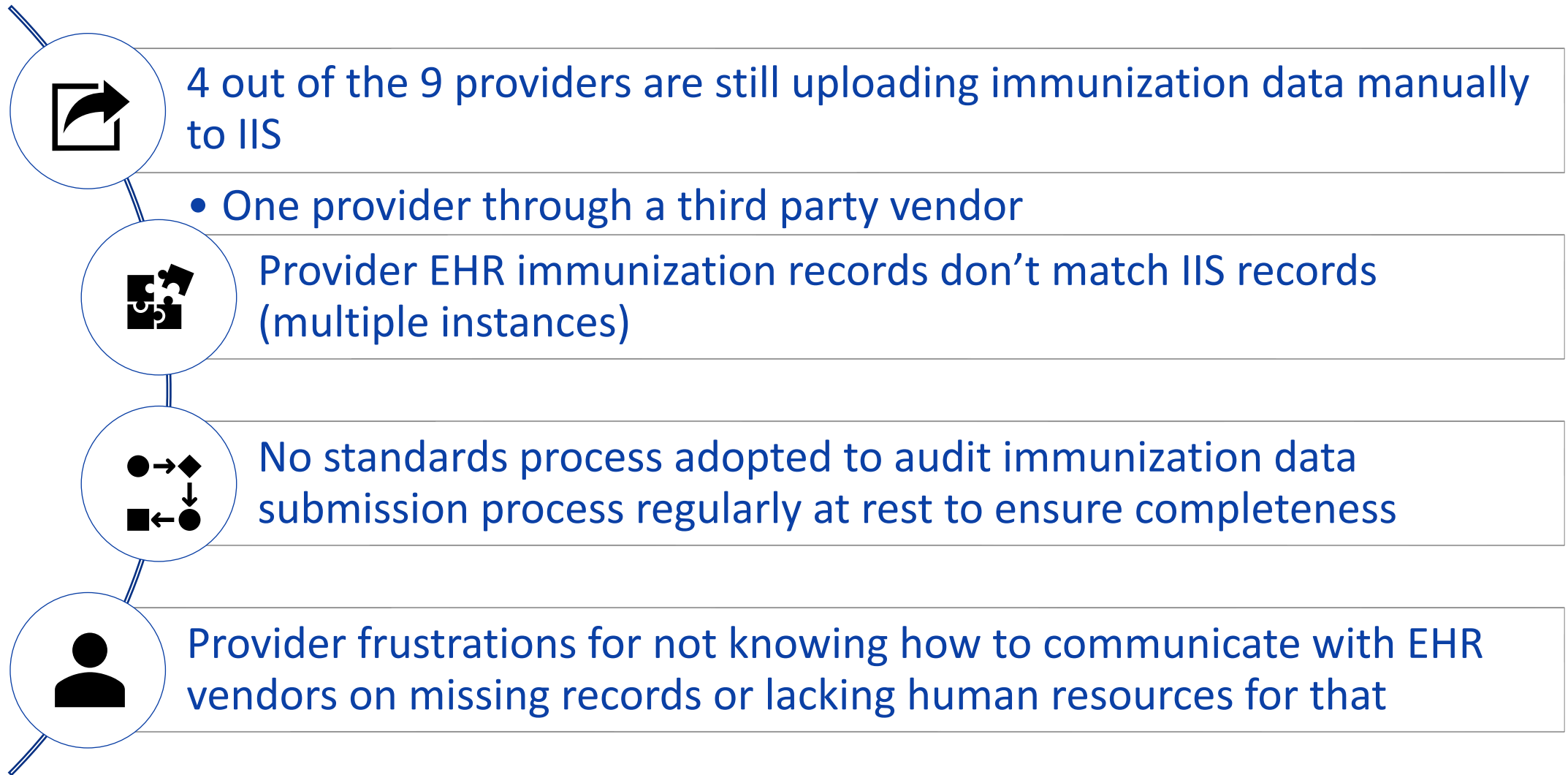Vaccine level record management

Patient follow-up for due vaccinations

Historical administrations documentation

Vaccine ordering and inventory management

Immunization Data Reporting to IIS

4 out of the 9 providers are still uploading immunization data manually to IIS

- One provider through a third party vendor

Provider EHR immunization records don't match IIS records (multiple instances)

No standards process adopted to audit immunization data submission process regularly at rest to ensure completeness

Provider frustrations for not knowing how to communicate with EHR vendors on missing records or lacking human resources for that

Current State

| Provider Name	EHR	Connectivity to NYSIIS	Cadence
Provider 1		Manual direct data entry	Frequent
Provider 2		Automated	Realtime
Provider 3		Automated (third-party)	Once a week
Provider 4		Automated	Realtime
Provider 5		Automated	Realtime
Provider 6		Export/Upload Bulk	Once a week
Provider 7		Export/ Upload (third party)	Unknown
Provider 8		Export/ Bulk Upload	Once a week
Provider 9		Automated	Realtime

Factors Impacting Data Quality
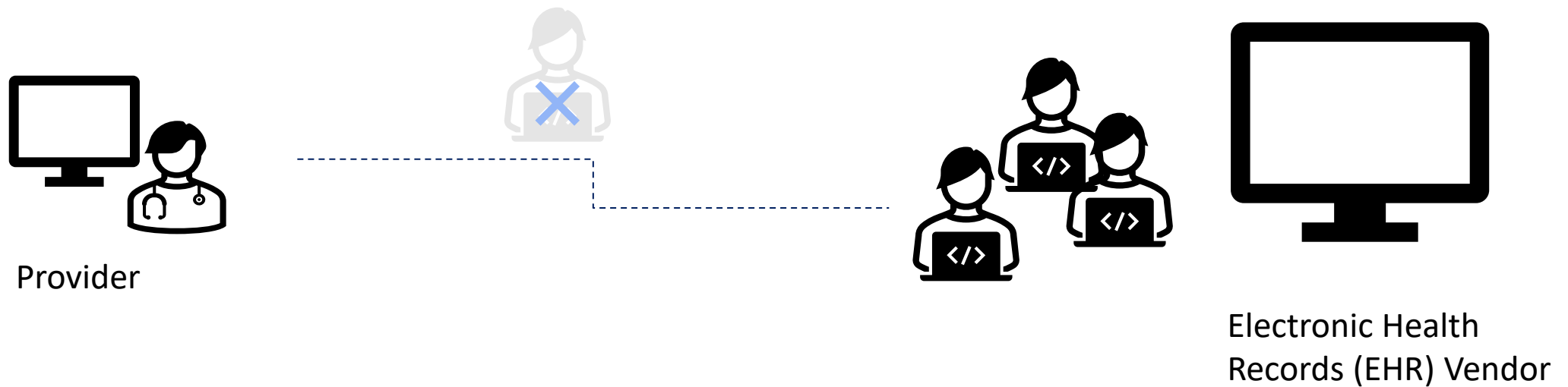
Factors Impacting Immunization Data Exchange

Data Transfer Process

- **Manual Data Entry**
- **Manual EHR Extract Upload**
- **Automated Interface**
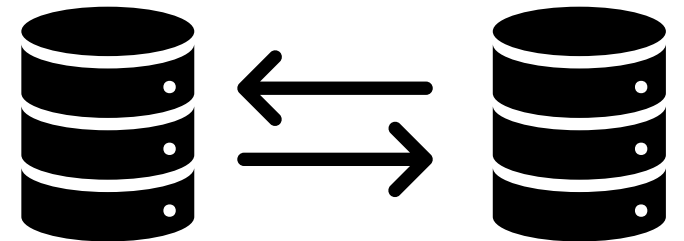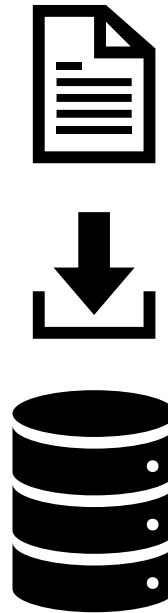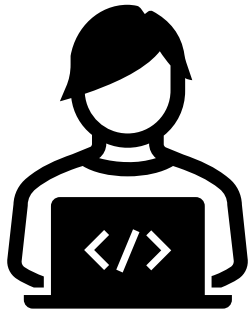
Factors Impacting Immunization Data Exchange

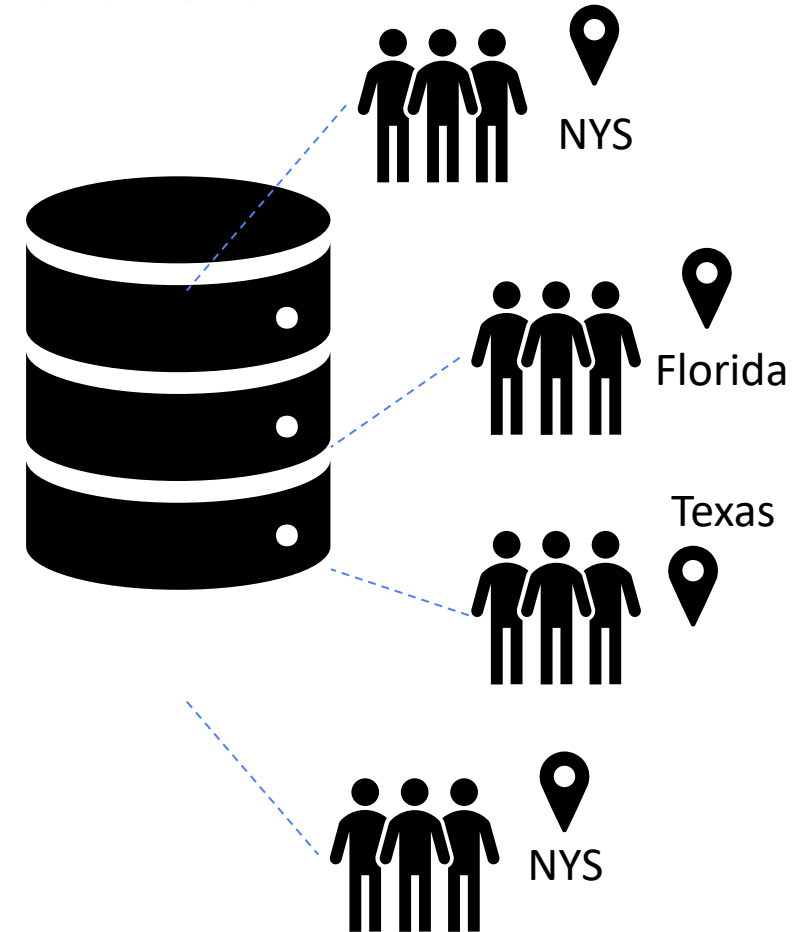## Human Resources

Provider

Electronic Health
Records (EHR) Vendor

Factors Impacting our Ability to Understand Patient Immunization Status
Multiple Reasons for Why Patients are Still Active in IIS

- Not one standard across providers to inactivating patients

- Some providers inactivate patients in their EHR but not in the IIS

NYS

Florida

Texas

NYS

Factors Impacting Our Ability to Understand Patient Immunization Status
Deduplication Process at the IIS and Provider Level

- Some reasons that could trigger duplicate records in IIS with names spelled differently

    - Patient visited multiple facilities

    - Multiple records for the same patient created at a facility
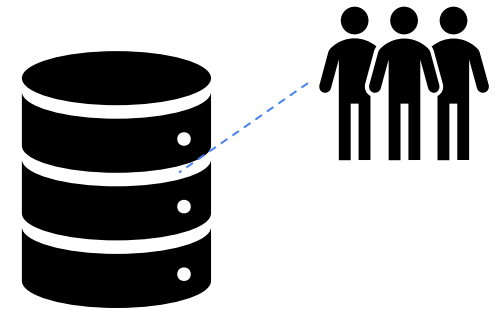
Initiatives Moving Forward
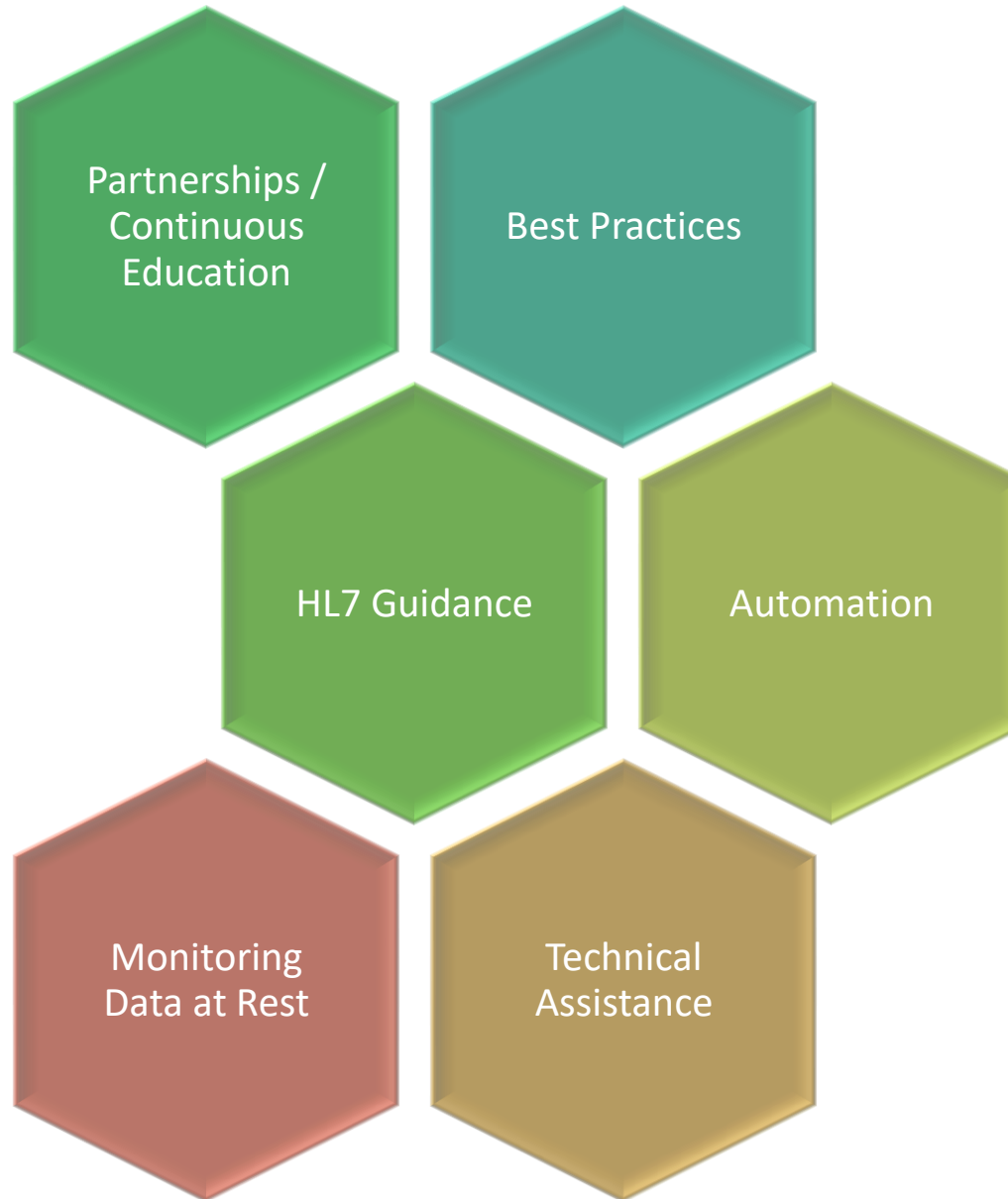
Thank You

For additional information, please contact qld9@cdc.gov