Consumer Access to IIS Records: Lessons Learned for IIS Operations

Sydney Kuramoto, MPH | MIIC Informatician | Minnesota

Kim Gulliver, MS | CIIS and Data Operations Manager | Colorado

Land Acknowledgement

Every community owes its existence and vitality to generations from around the world who contributed their hopes, dreams, and energy to making the history that led to this moment. Some were brought here against their will, some were drawn to leave their distant homes in hope of a better life, and some have lived on this land for more generations than can be counted. Truth and acknowledgment are critical to building mutual respect and connection across all barriers of heritage and difference.

We begin this effort to acknowledge what has been buried by honoring the truth. At the Minnesota Department of Health, we stand on the ancestral lands of the Dakota people. We want to acknowledge the Dakota, the Ojibwe, the Ho Chunk, and the other nations of people who also called this place home. We pay respects to their elders past and present. Please take a moment to consider the treaties made by the Tribal nations that entitle non-Native people to live and work on traditional Native lands. Consider the many legacies of violence, displacement, migration, and settlement that bring us together here today. Please join us in uncovering such truths at any and all public events.*

*This is the acknowledgment given in the USDAC Honor Native Land Guide – edited to reflect this space by Shannon Geshick, MTAG, Executive Director Minnesota Indian Affairs Council

Consumer Access

Why Implement?

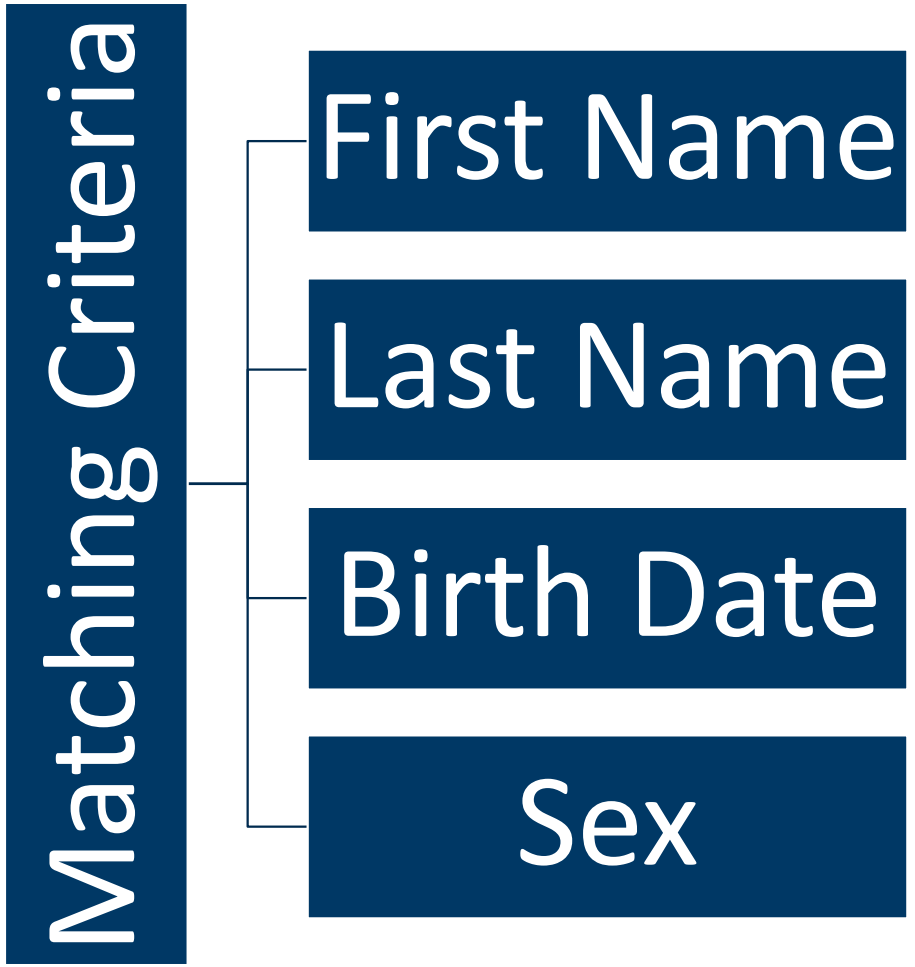
- Provide direct access to IIS records
- Allows people to easily access IIS record for providing immunization records for school/childcare, employment, travel, etc.
- Empower individuals with information to make decisions
- Reduce barriers to immunization records
- Decreased record requests from public
- Increased data quality

Minnesota

Sydney Kuramoto, MPH | MIIC Informatician

Consumer Access in MN

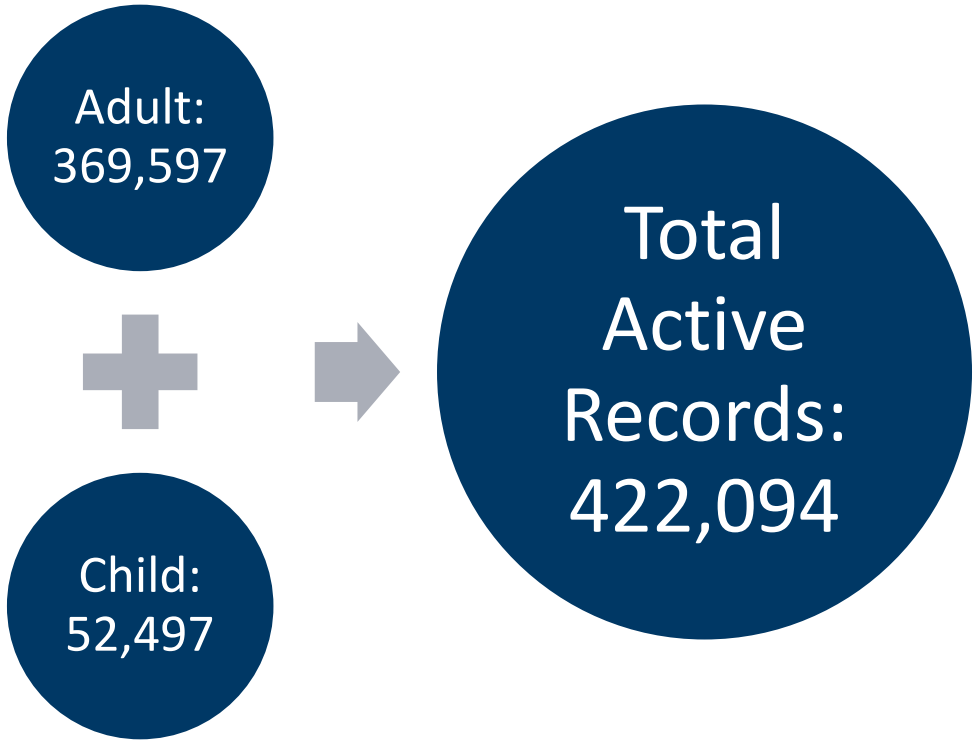
- Receiving hundreds of record requests a day.
- Docket rolled out in September 2021.
- Validation: Matching criteria.
- Verification: Phone or Email.



Docket

Search Records
Adult Records
Child Records
First Name
Mickey
Last Name
Mouse
Date Of Birth
11/18/1928
Legal Sex
Male
Female
Other
Unknown
I am...
the patient.
the patient's legal guardian.
Search
Records
docket
Immunization Records
Updated: 09/30/2022
New shot? Drag to refresh.
MICKEY MOUSE
PDF
OVERDUE
COVID-19
Due on 07/28/2021
2 SHOTS RECORDED IN MIIC
DUE NOW
Influenza
Due after 02/11/2022
5 SHOTS RECORDED IN MIIC
COMPLETE
Varicella
1 SHOT RECORDED IN MIIC
COMPLETE
Hib
1 SHOT RECORDED IN MIIC
Polio
Search
Records
Immunization Reports
Minnesota History Report
DEPARTMENT OF HEALTH
Minnesota Immunization Report
Generated 08/10/2022
Name (L, F):MOUSE, MICKEY
Date of Birth: 11/18/1928
MIIC ID: 14530164
Gender:M
Immunization History
Vaccine Group
Dose Number
Date Given
Vaccine (Trade Name)
Update PDF
Search
Records

Statistics



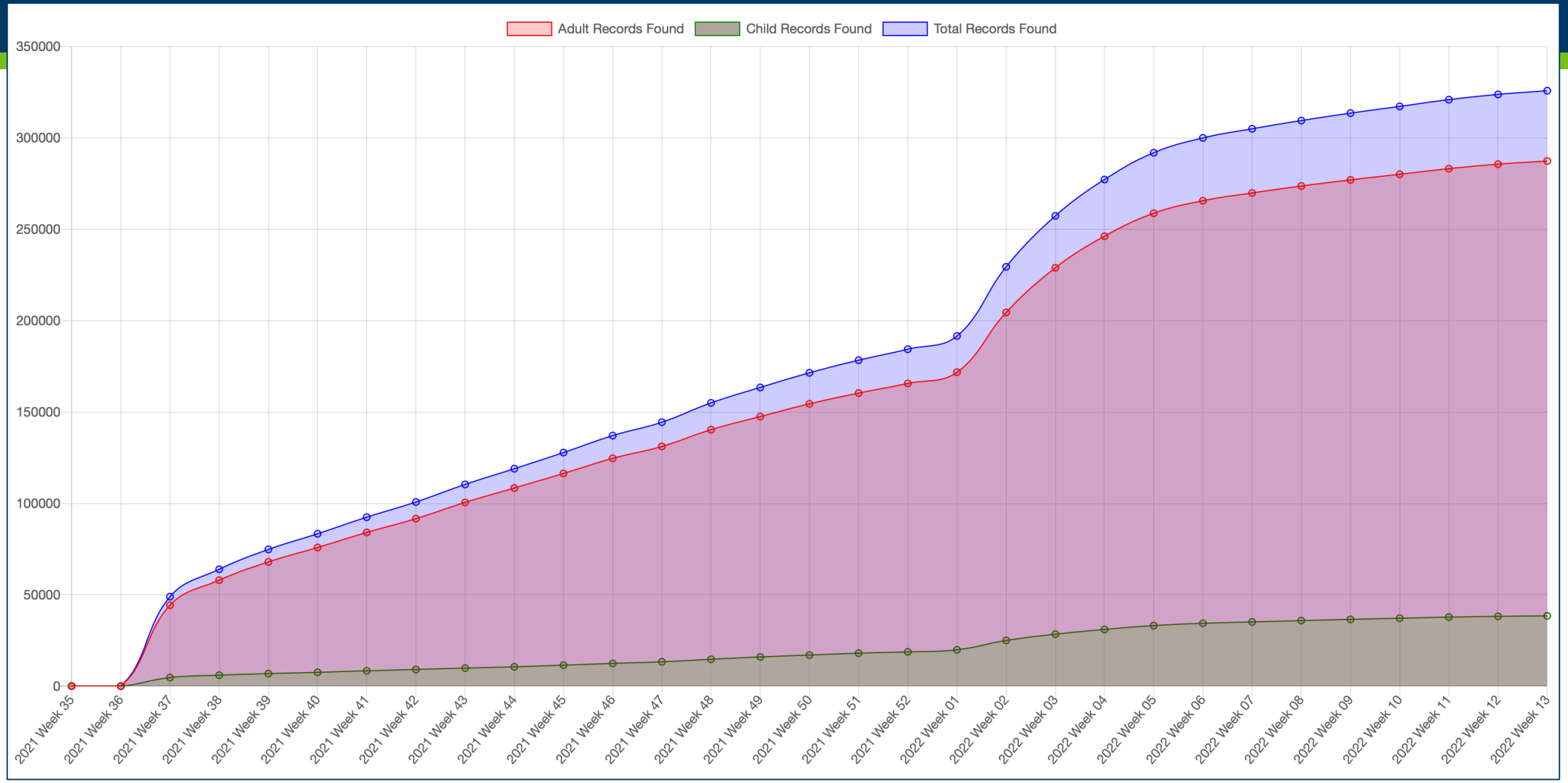
Users

Total unique users: 365,507

Percent of users with at least one record: 77.8%

Average number of records per user: 1.15

Docket Uptake

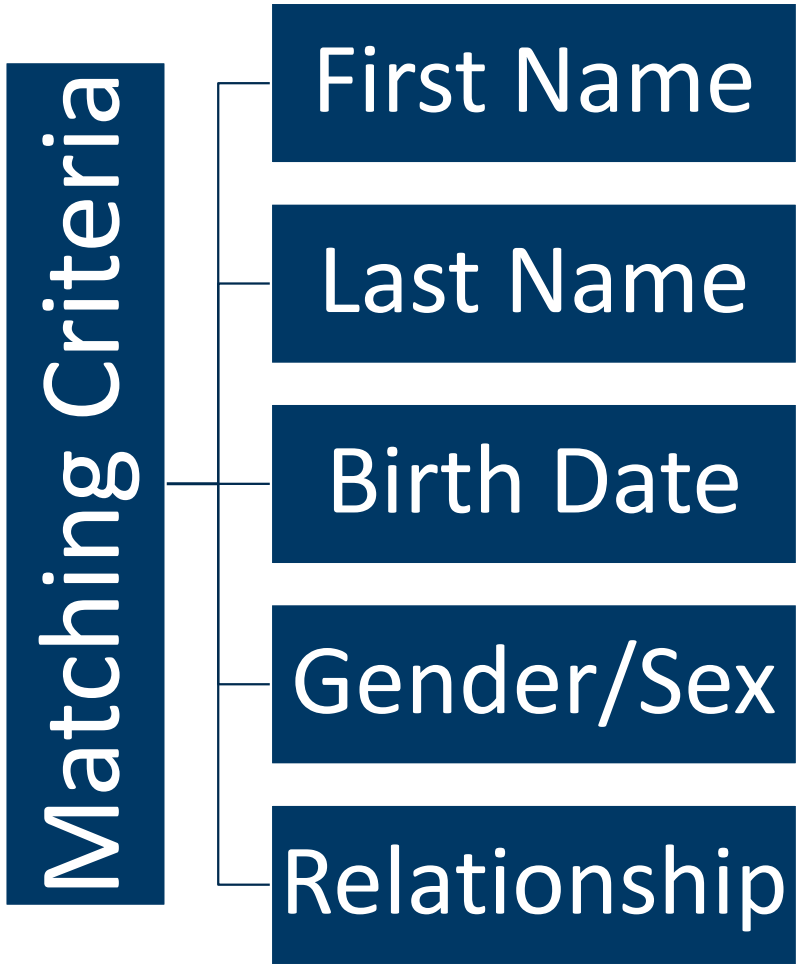


Colorado

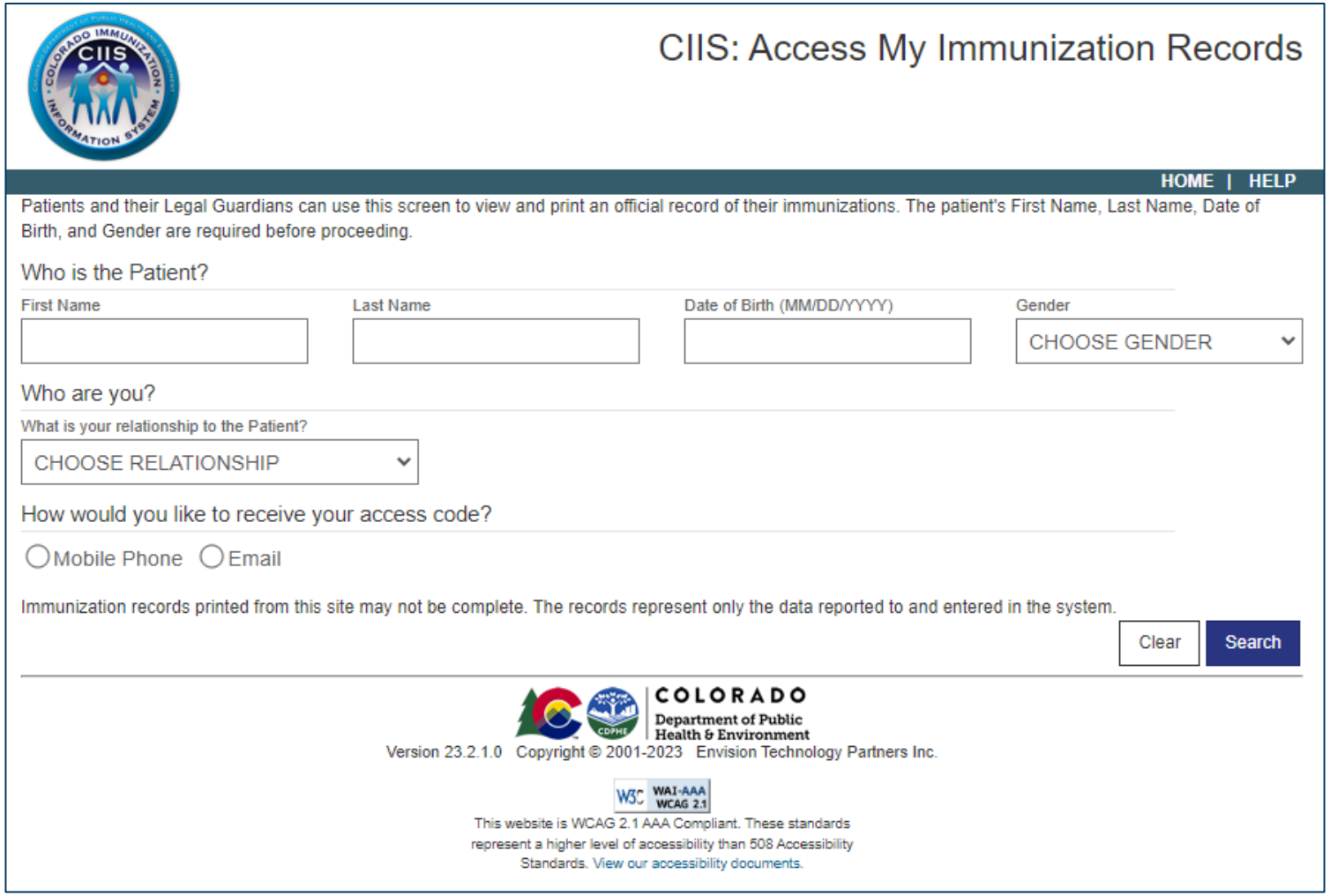
Kim Gulliver, MS | CIIS and Data Operations Manager

Consumer Access in CO

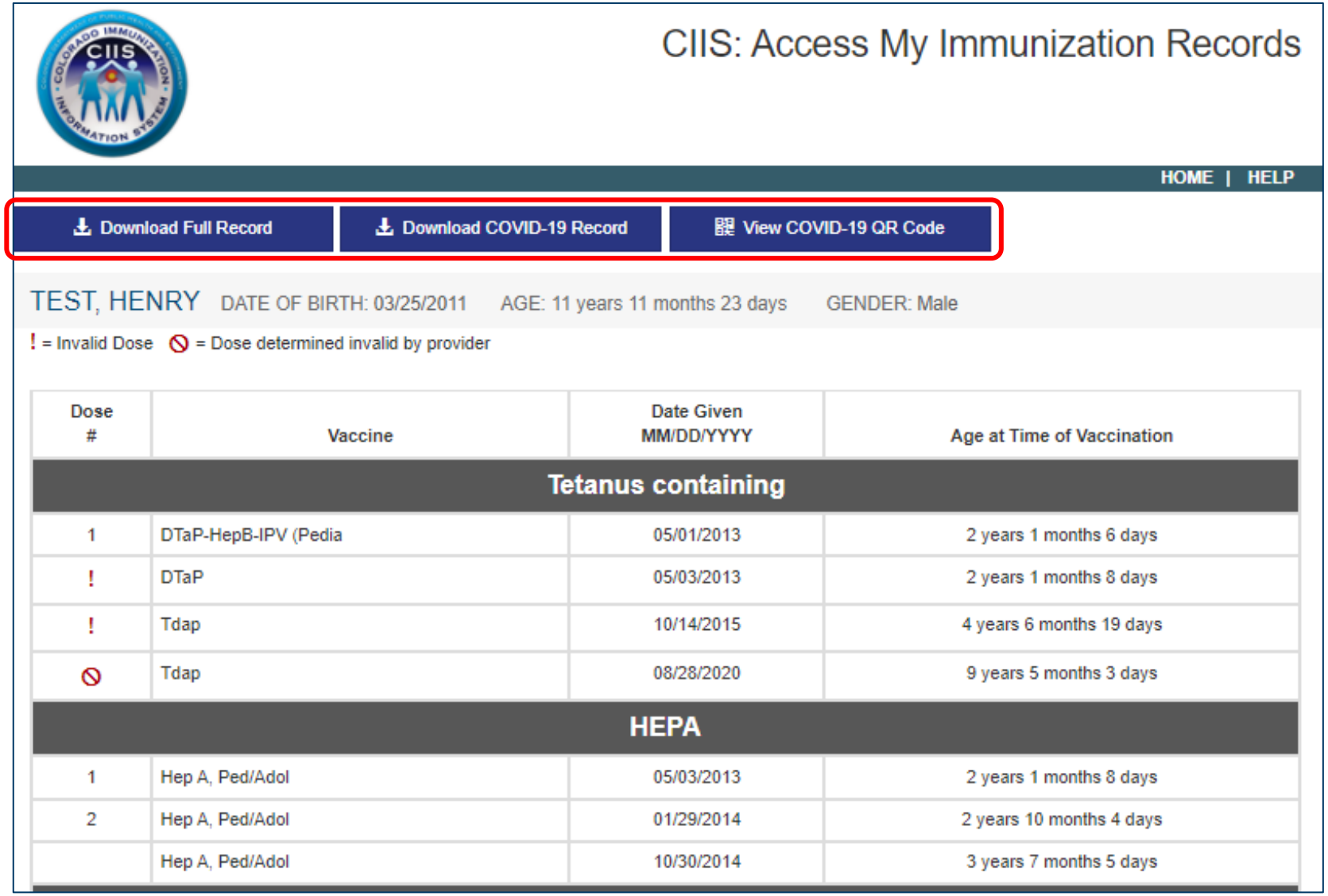
- Colorado has 2 consumer access solutions
  - Vendor solution: CIIS Public Portal
  - OIT solution: myColoradoApp
- Rolled out in May 2021
- Validation: Matching criteria
- Verification: Mobile Phone or Email
  - Vendor solution: match sends authentication code



CIIS Consumer Portal



CIIS Consumer Portal



CIIS: Access My Immunization Records

HOME | HELP

Download Full Record | Download COVID-19 Record | View COVID-19 QR Code

TEST, HENRY DATE OF BIRTH: 03/25/2011 AGE: 11 years 11 months 23 days GENDER: Male

! = Invalid Dose ⃠ = Dose determined invalid by provider

Dose #	Vaccine	Date Given MM/DD/YYYY	Age at Time of Vaccination
Tetanus containing			
1	DTaP-HepB-IPV (Pedia	05/01/2013	2 years 1 months 6 days
!	DTaP	05/03/2013	2 years 1 months 8 days
!	Tdap	10/14/2015	4 years 6 months 19 days
⃠	Tdap	08/28/2020	9 years 5 months 3 days
HEPA			
1	Hep A, Ped/Adol	05/03/2013	2 years 1 months 8 days
2	Hep A, Ped/Adol	01/29/2014	2 years 10 months 4 days
	Hep A, Ped/Adol	10/30/2014	3 years 7 months 5 days

Statistics

Adult: 2,096,428

Child: 343,689

Total Records Requested: 2,440,117

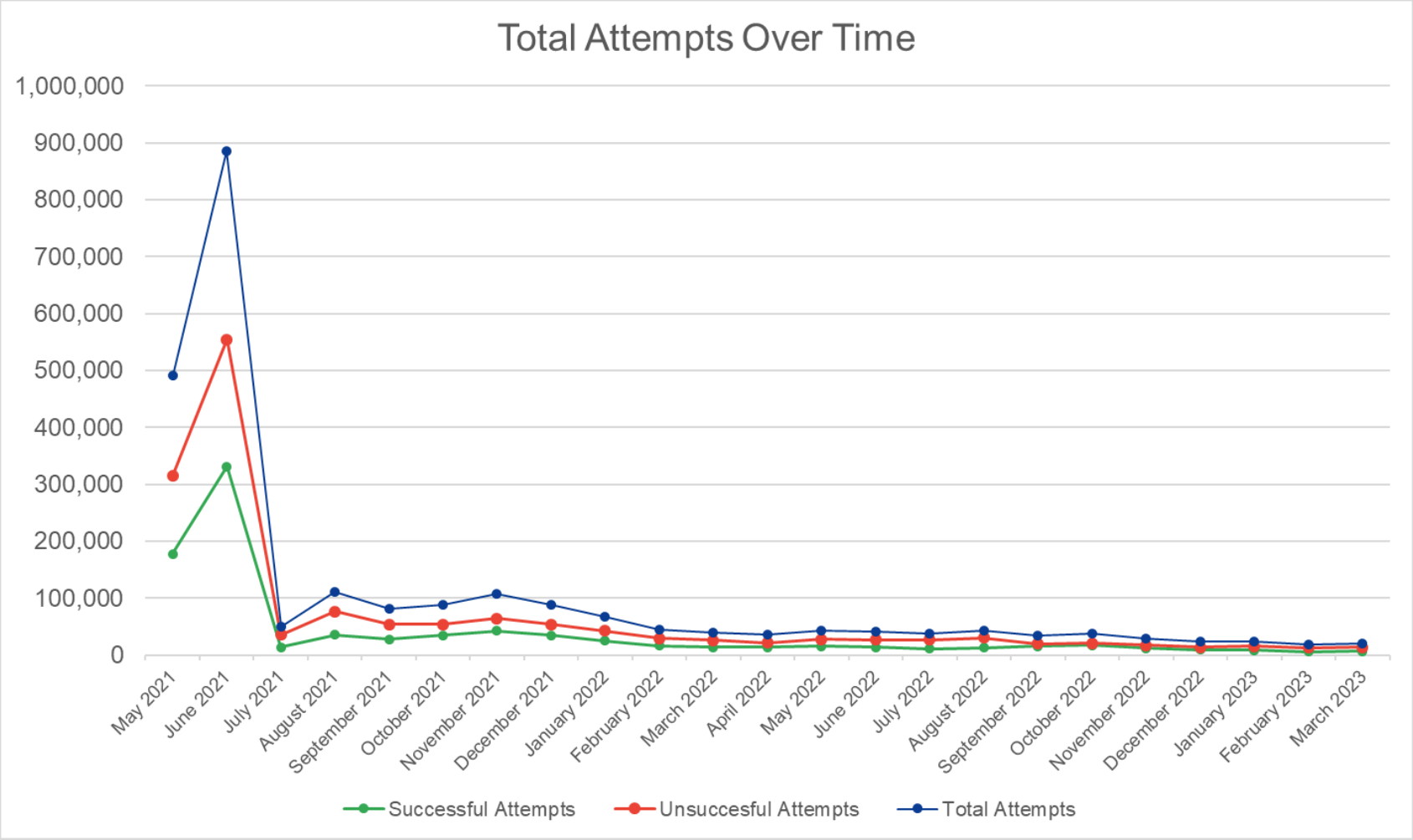
Successful Requests

Percent of successful child requests: 2.27%

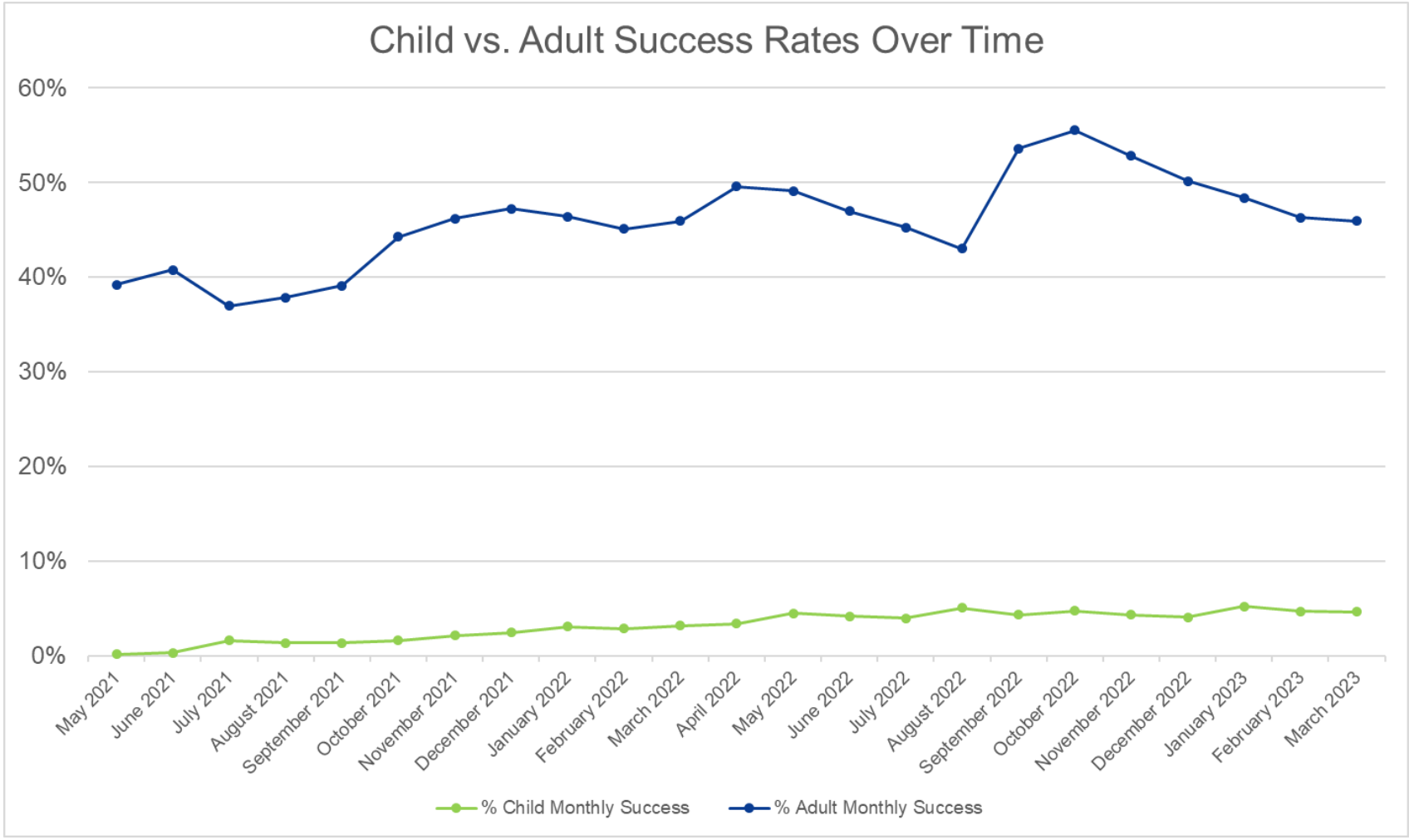
Percent of successful adult requests: 42.16%

Percent of successful total requests: 36.54%

Data Slide


Total Attempts Over Time
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
May 2021
June 2021
July 2021
August 2021
September 2021
October 2021
November 2021
December 2021
January 2022
February 2022
March 2022
April 2022
May 2022
June 2022
July 2022
August 2022
September 2022
October 2022
November 2022
December 2022
January 2023
February 2023
March 2023
Successful Attempts
Unsuccesful Attempts
Total Attempts

Data Slide


Child vs. Adult Success Rates Over Time
60%
50%
40%
30%
20%
10%
0%
May 2021
June 2021
July 2021
August 2021
September 2021
October 2021
November 2021
December 2021
January 2022
February 2022
March 2022
April 2022
May 2022
June 2022
July 2022
August 2022
September 2022
October 2022
November 2022
December 2022
January 2023
February 2023
March 2023
% Child Monthly Success
% Adult Monthly Success

Lessons Learned

Staffing Needs

Minnesota

- MIIC Public Inquiry Program (MN)
- For MIIC-related inquiries from the public
- Staffed by
  - Content Leads (3 staff at 0.20 FTE each)
  - Student Workers (3-5 staff at 0.75 FTE each)
  - Contractors (3 staff at 0.75 FTE each)

Colorado

- CIIS Help Desk (CO)
- Provide support to users of CIIS and assist the public with accessing immunization records
- Staffed by
  - Full-Time, Permanent Staff (1)
  - Term-Limited – thru 6/2024 (2)
  - Contractors (2)

Handling High-Volume/Surges

Technical

- MN: Docket queuing system
- CO: Vendor updated Twilio account; vendor required states to set up own Twilio account

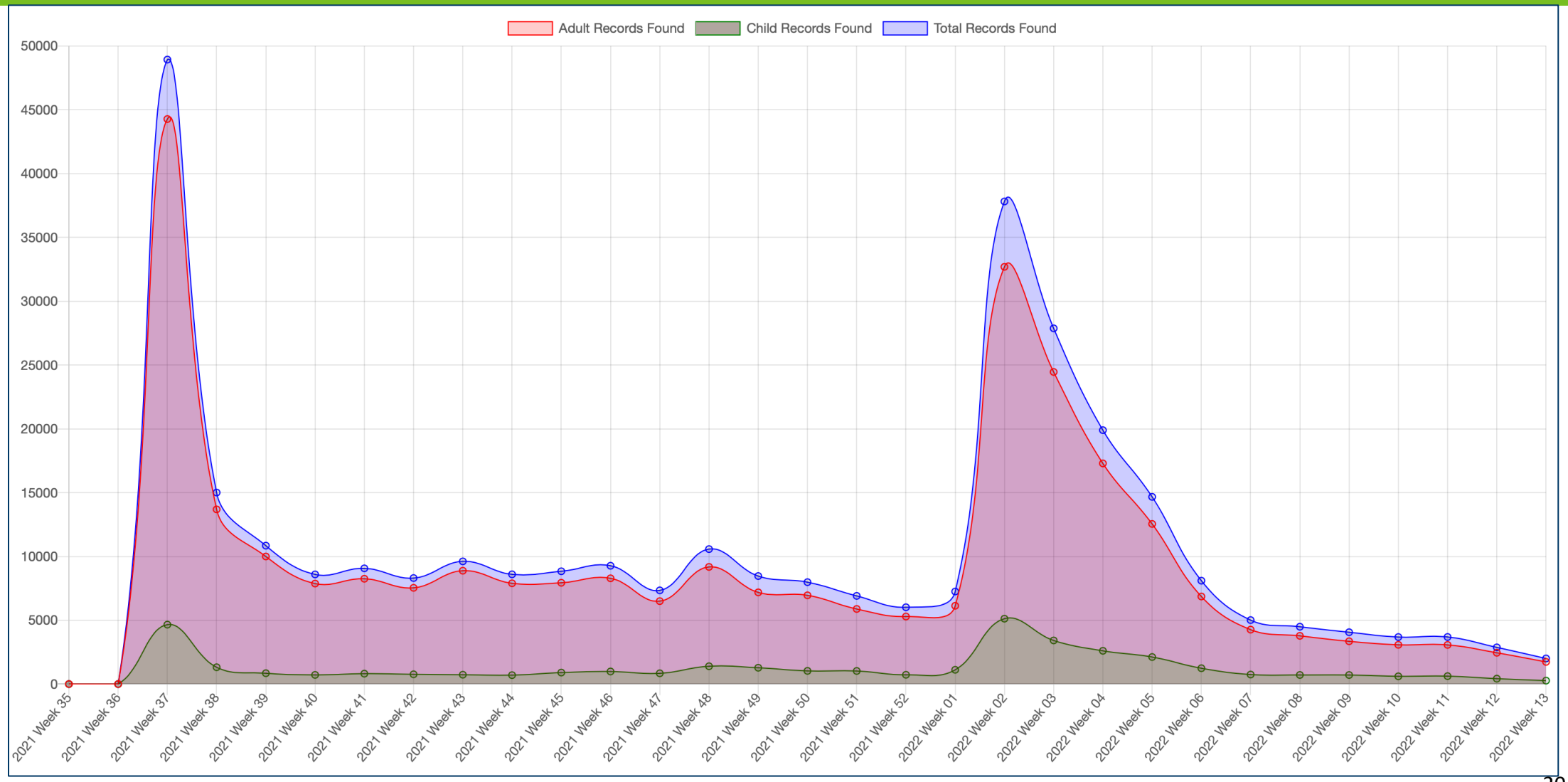
Staffing

- MN: Staffing Plan with phases
- CO: No Staffing Plan. Very reactive as a result of Sweepstakes

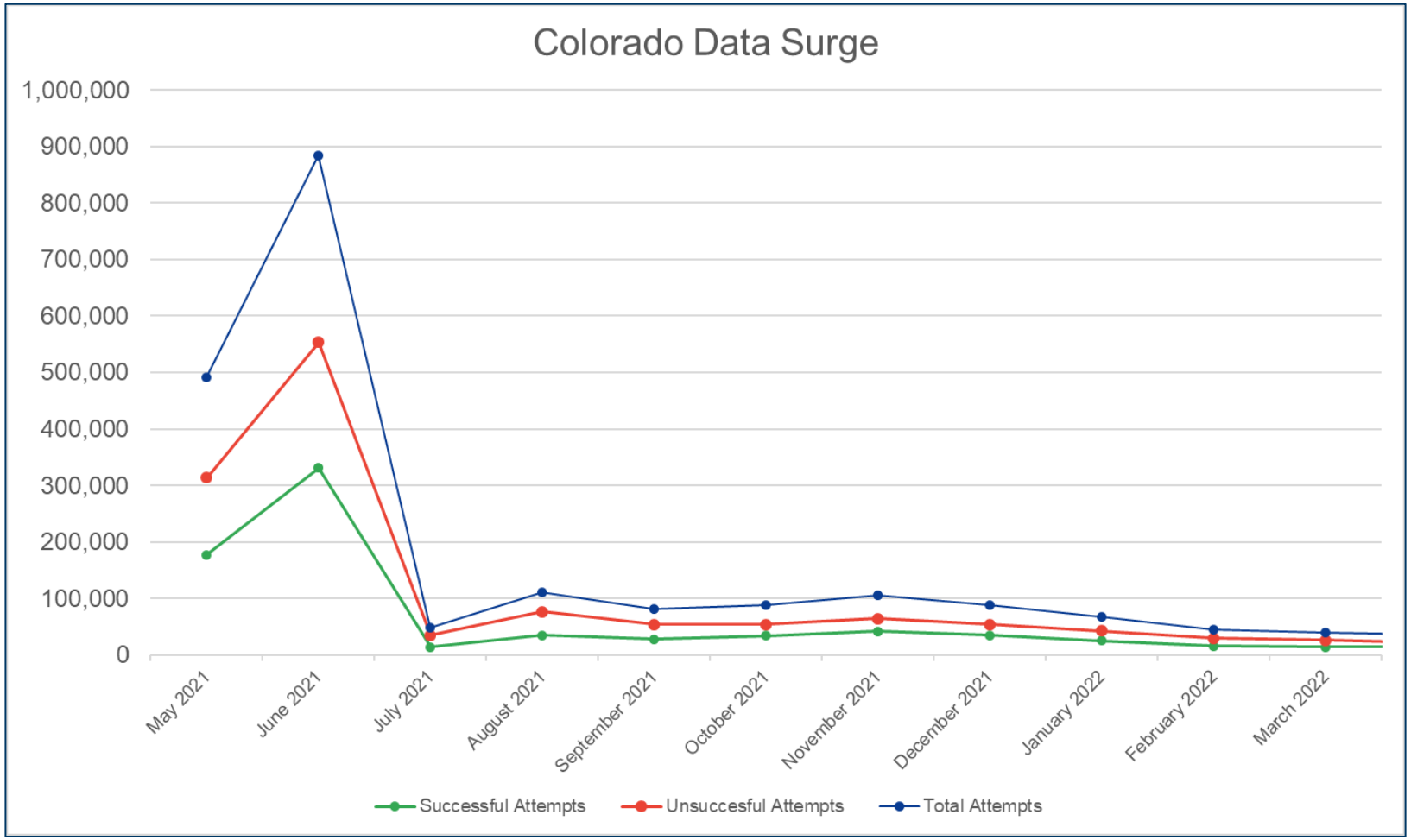
Surges

- Twin Cities Proof of Vaccination (January 2022)
- Colorado COVID-19 Vaccine Sweepstakes (May 2021)

Minnesota: Twin Cities Proof of Vax Surge



Colorado: Sweepstakes Surge



Data Quality

Errors

- Inaccurate information
- Extra doses

Completeness

- Missing immunizations
- Missing information

Customer Service

Web pages

- Find My Immunization Record (MN) (www.health.state.mn.us/people/immunize/miic/records.html)
- CIIS Immunization Records for General Public (https://cdphe.colorado.gov/information-about-ciis-immunization-records-for-the-general-public)

Help Desks

- MIIC Public Inquiry Team
- CIIS Help Desk

Forms

- MIIC Record Update Request (https://redcap.health.state.mn.us/redcap/surveys/?s=TMNT9MANNM)
- CO Immunization Record Information Request Form (https://docs.google.com/forms/d/e/1FAIpQLSd-ob3B01s6FBrkRTFce_5ewV_Lxy1rKuEBILAqJBeRNtrFaw/viewform)

Conclusions

- Have a staffing plan
- Technical/process for handling surges/high-volume
- Check IIS data to drive planning
- Form/process/policies for updating records
- Have a soft rollout
- Coordinate with data quality team

Thank You!

Sydney Kuramoto (Minnesota)

Sydney.Kuramoto@state.mn.us

Kim Gulliver (Colorado)

Kim.Gulliver@state.co.us