



WELCOME **#AIRA2022**

Plenary: Vaccine Credentialing Panel



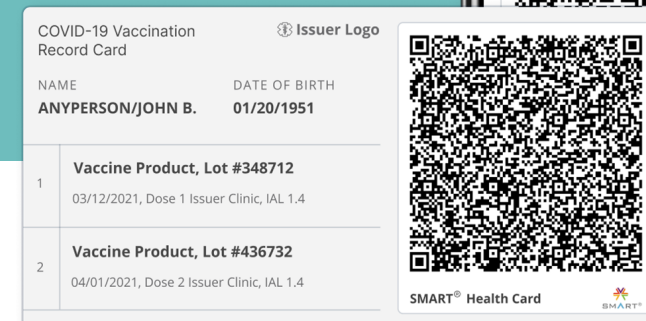
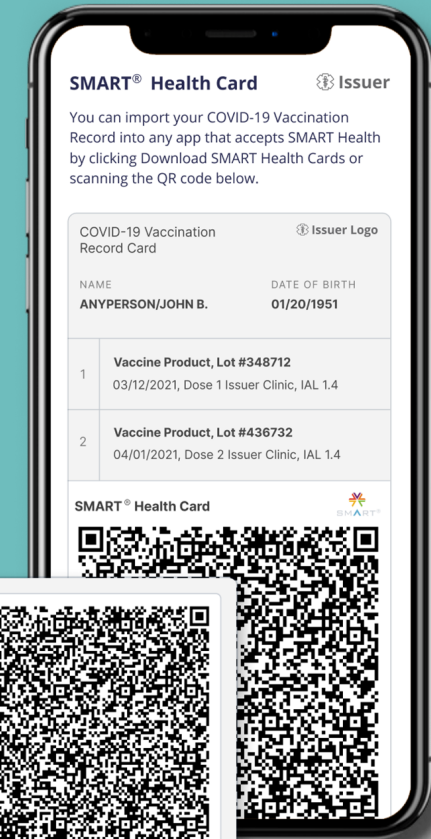
Plenary Overview



Vaccination Credentialing Panel

AIRA 2022 National Meeting

April 27, 2022



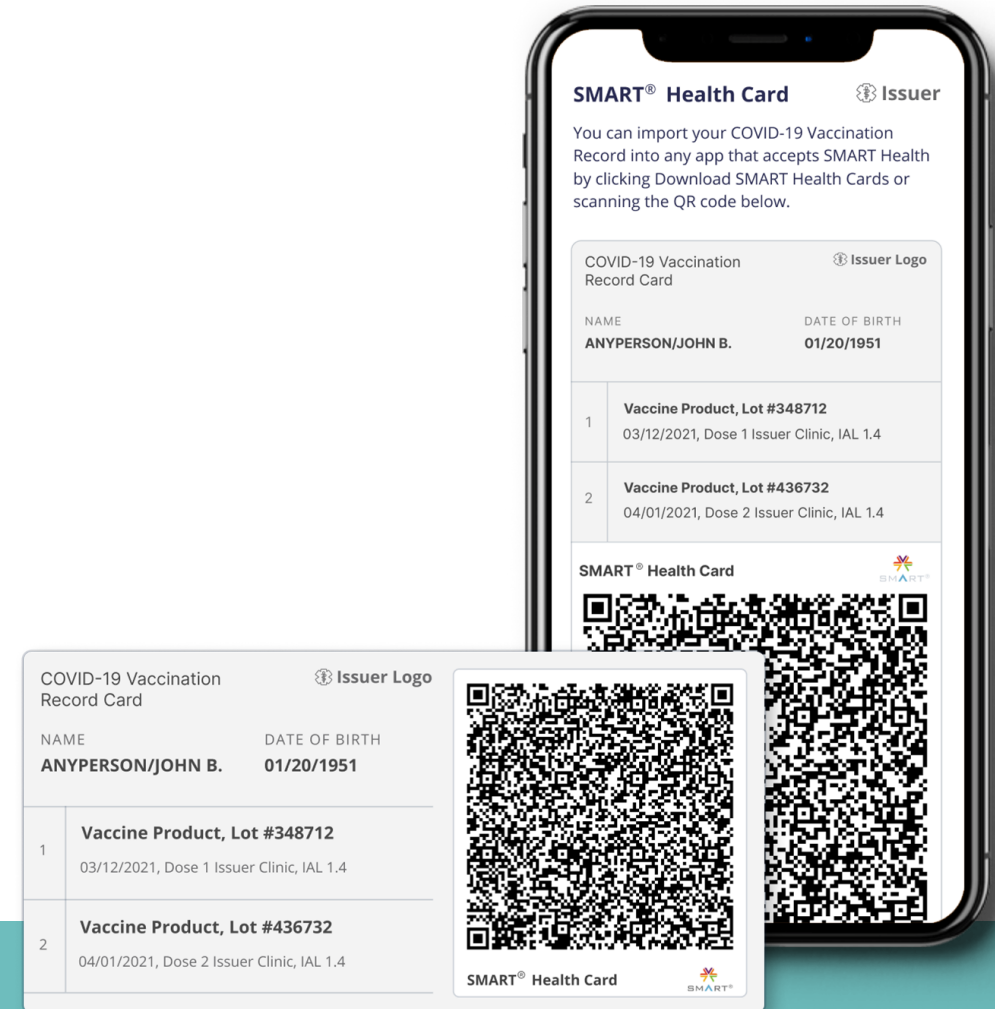
About SMART Health Cards

What is a SMART Health Card?

A SMART Health Card is a paper or digital version of an individual's clinical information, such as vaccination history or test results. They allow individuals to keep a copy of their records on hand and easily share this information with others if they choose.

Learn more at smarthealth.cards.

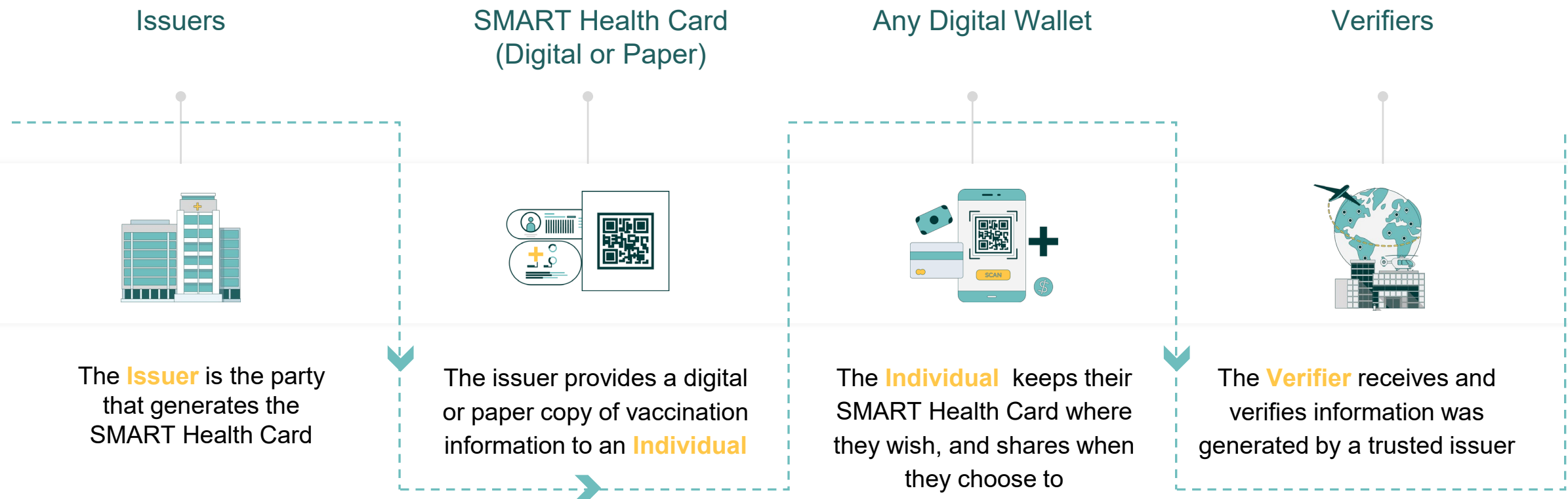
When scanned, a verifier can easily authenticate the information on the card, making SMART Health Cards a **safe and reliable way to demonstrate health status**.



Sample SMART Health Card (paper and digital)

The lifecycle of a SMART Health Card

SMART Health Cards are paper or digital versions of an individual's clinical information, such as vaccination history or test results. The tech is free/open source and supported by the VCI coalition. There are several parties involved in the transfer of the information contained in a SMART Health Card, from its origin to its use in real world situations where trustworthy, secure, verifiable clinical information is needed.



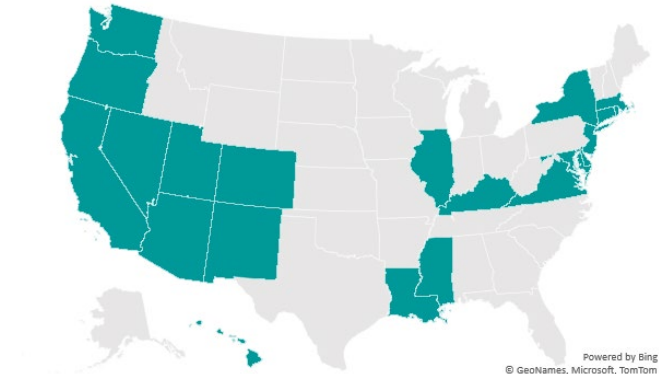
A **Trust Framework** is a registry of known Issuers a Verifier may check to ensure information is trustworthy.

SMART Health Cards – BY THE NUMBERS



200M+

People with Access to SMART Health Cards in the U.S.



24

U.S. State/Territory Public Implementations



smart[africa](#)
Connect - Innovate - Transform

200%

Increase in international adoption in Q1 2022

VCI

900+

VCI Member Organizations

Today's Panelists



Michael
Powell

Chief

Immunization
Branch, CDPH



Jeff Chorath

Acting IIS
Manager

WA State DOH



Bryant Karras

Chief
Informatics
Officer

WA State DOH



Liz Hunt

CRRU Tech
PM

OR Health
Authority



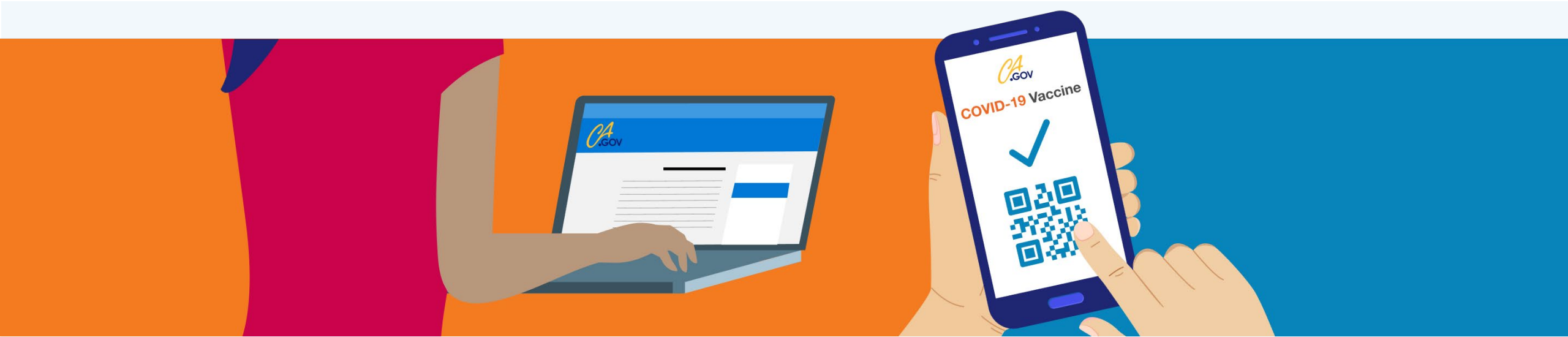
Quan Le

LINKS PM

LA
Immunization
Program



California: Michael Powell



Digital COVID-19 Vaccine Records

California's rapid deployment and lessons learned

April 2022



Digital COVID-19
Vaccine Record

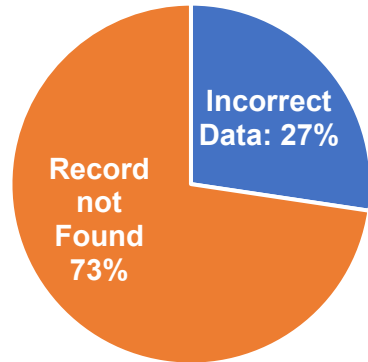
Digital COVID-19 Vaccine Record (DCVR)

- California launched the [Digital COVID-19 Vaccine Records \(DCVR\)](#) on June 18, 2021, after rapid development.
- Anyone with a vaccine administered in California can easily download a digital copy of their vaccination record in under 2 minutes when 4 required fields entered match to a record in the Immunization Registry.
- Their record can be saved to a file or to Apple Health, Apple Wallet, or Google Pay.
- The DCVR is available in 8 languages.



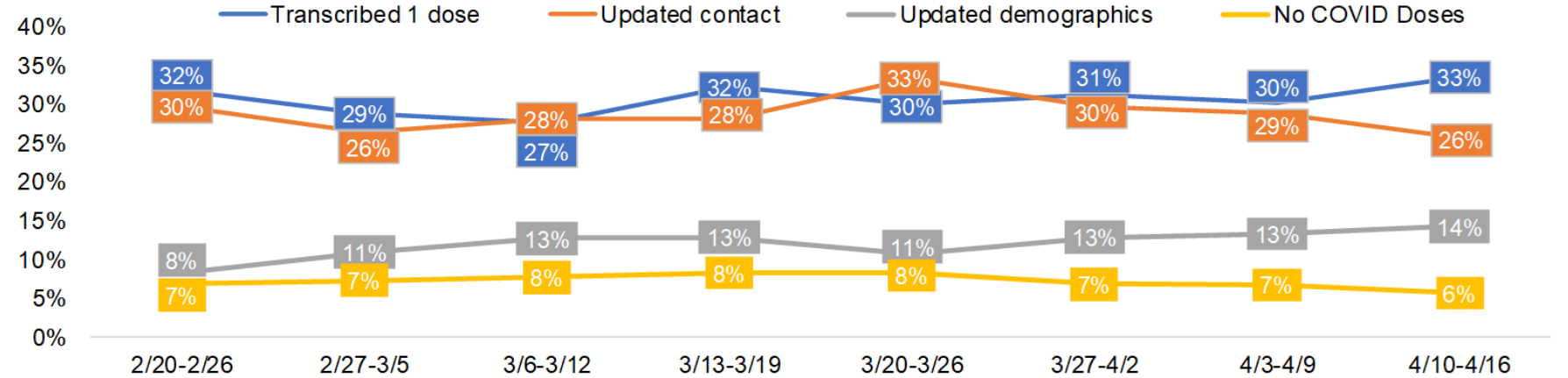
Data quality problems surfaced quickly...

Reason for Remediation Requests

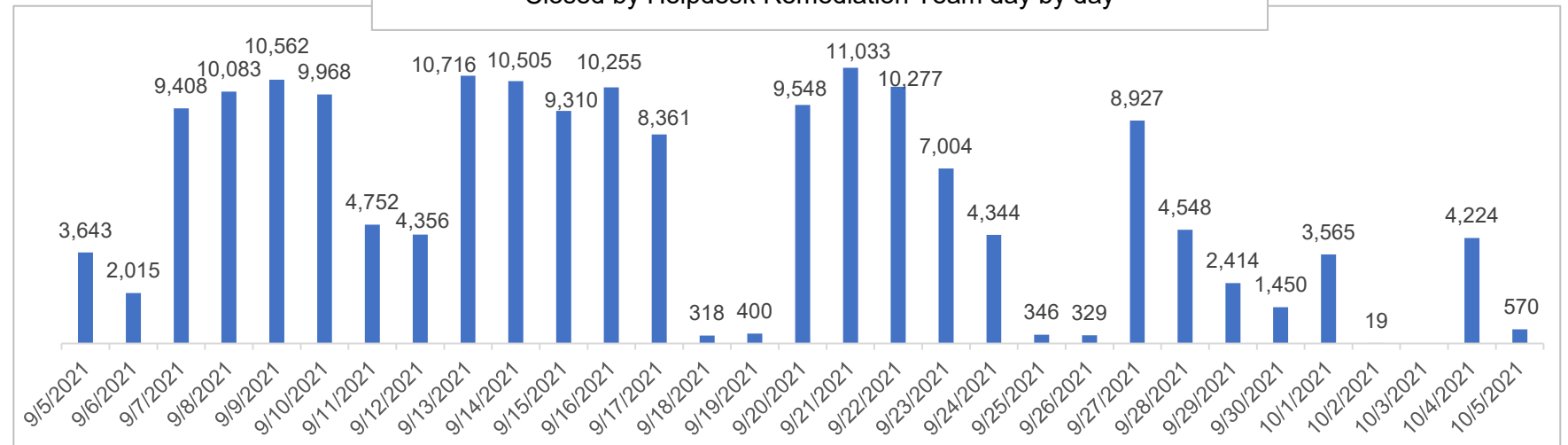


To date, CDPH has processed over **854,000** remediation requests from the public and at peak had ramped to process ~10,000 tickets per day.

Top 4 Closure Reason Trends



Closed by Helpdesk Remediation Team day by day



The approach that resulted in drastic improvements in data quality...

1

Improved backend lookup and matching

- ❖ Continuous improvement to matching logic and backend lookups
- ❖ Categorization of remediation requests for faster remediations
- ❖ Auto-remediation of contact when remediation request match found

2

Data cleanup to address sources of non-match

- ❖ Analyses: Extra dose, duplicate recipients, duplicate doses, etc.
- ❖ Duplicate record cleanup using a bot
- ❖ Heavily resourced pending and merge record cleanup
- ❖ Developed an override patch for merged records in remediation

3

Focused provider outreach and collaboration

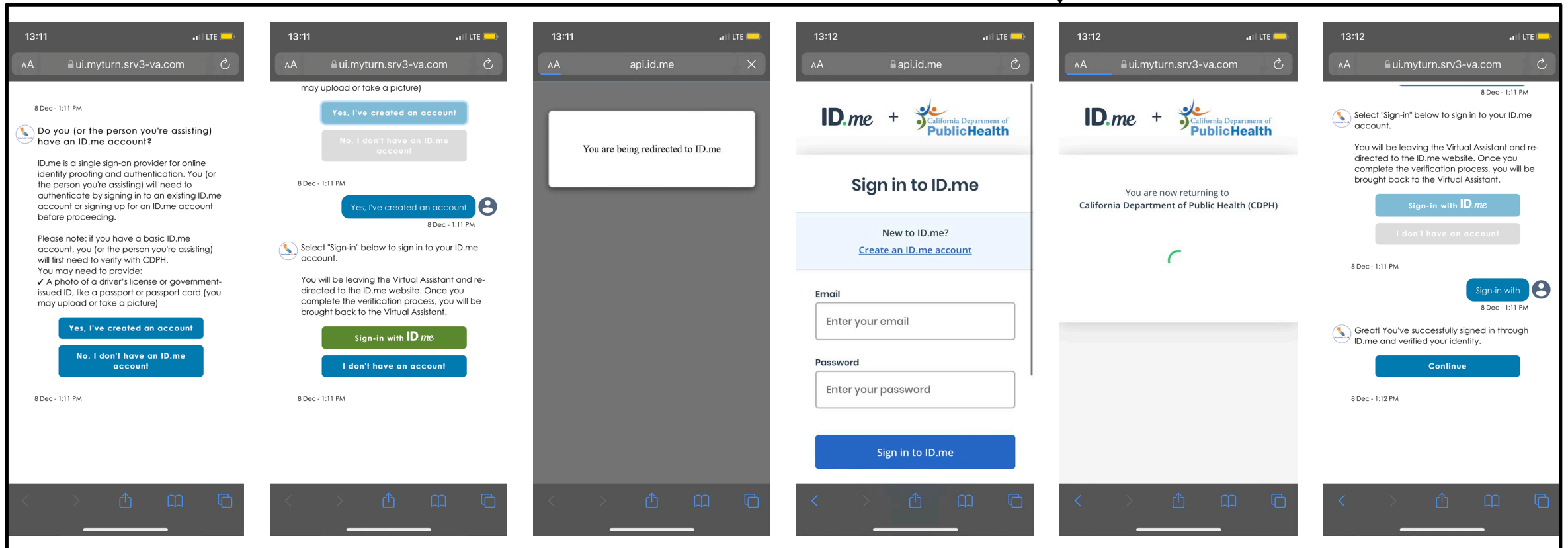
- ❖ Analyses, ranking, and focused outreach for remediation
- ❖ Requested evaluation and update to patient intake forms and processes to collect contacts
- ❖ Health Order effective 10/1/21 required collection and submission of contact information to ensure equitable access to the DCVR by all vaccine recipients

Outcome

- ✓ Increased match rate from <50% at deployment to >89% today.
- ✓ Delivered 15.5 million DCVRs to 8 million Californians.
- ✓ Removed over 5,000 records from override status.
- ✓ Respond to 99% of remediation requests within 5 days.
- ✓ At launch, 28% of COVID-19 vaccination recipients had neither email nor cell phone attached to their record. Today, the gap is down to <5%.

Solutions were developed rapidly to support remediations

July	August	September	October	November	December
Implemented a Virtual Assistant Tool for public to submit remediation requests	Implemented a Staff Remediation Tool for Ticketing	Staffed up to over 120 people to address remediations	Enhanced backend integrations	Go Live - ID.me integration with Virtual Assistant Tool	Auto-remediate contacts



The DCVR presented unprecedented opportunities for collaboration...

- A commitment to equitable access by the public to their DCVR drove efforts to rapidly improve data quality and optimize the solution – every remediation requester is treated as a VIP
- Unprecedented collaboration between the California Department of Technology and the CDPH, supported by vendors already engaged on other COVID-19 initiatives
- California's source code has been leveraged now by Washington State, Washington D.C., and Oregon
 - We have shared our lessons learned with them as well as Texas, Wisconsin, Michigan, Illinois, & Virginia
- 22 states, Washington DC, Puerto Rico, and six countries now issue SMART Health Cards
- DCVR has opened the door to consumer access in California...

Booster SMS reminder

Two booster campaigns in January pushed match rate above our target of 95%.

Date	Total DVR Queries	Unique Recip ID Match
1/22/2022	62108	85%
1/23/2022	50569	86%
1/24/2022	56457	85%
1/25/2022	58811	79%
1/26/2022	59779	85%
1/27/2022	57439	86%
1/28/2022	61007	85%
1/29/2022	141677	94%
1/30/2022	173367	96%

Date	Total DCVR Queries	Unique Recip ID Match
2/11/2022	50445	85%
2/12/2022	54721	86%
2/13/2022	35189	85%
2/14/2022	40630	84%
2/15/2022	46031	85%
2/16/2022	46962	86%
2/17/2022	46832	85%
2/18/2022	108962	92%
2/19/2022	125941	94%
2/20/2022	134459	95%
2/21/2022	56093	89%

DCVR Site Analytics

CDPH Digital Vaccine Record
myvaccinerecord.cdph.ca.gov

Apr 14, 2022 - Apr 20, 2022

Select a date range above to filter the data below. Default is the previous 7 days.

Users
302,620

↓ -4% from previous 7 days

Pageviews
691,749

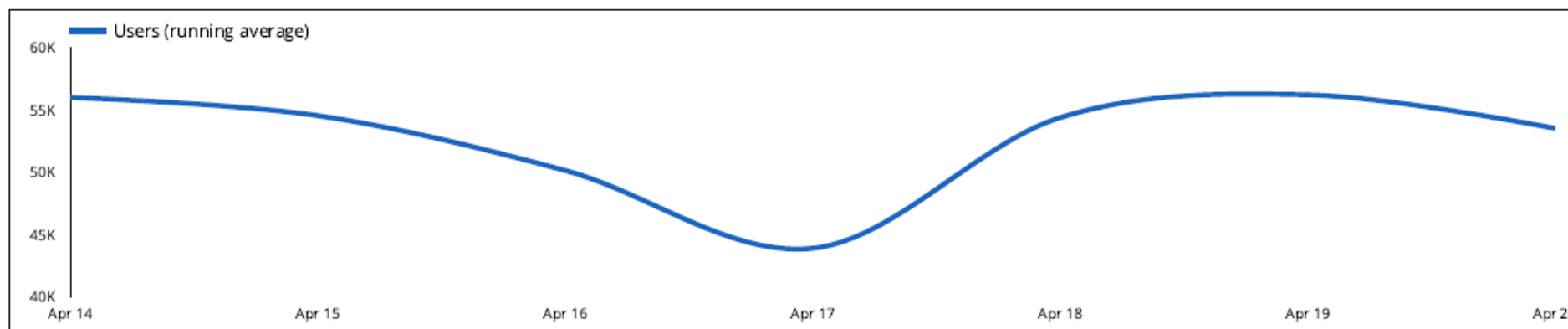
↓ -5% from previous 7 days

Number of Sessions per User
1.5

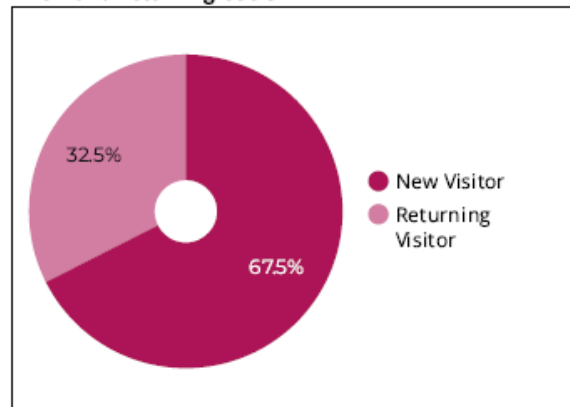
↓ -0.0 from previous 7 days

Avg. Session Duration
00:01:46

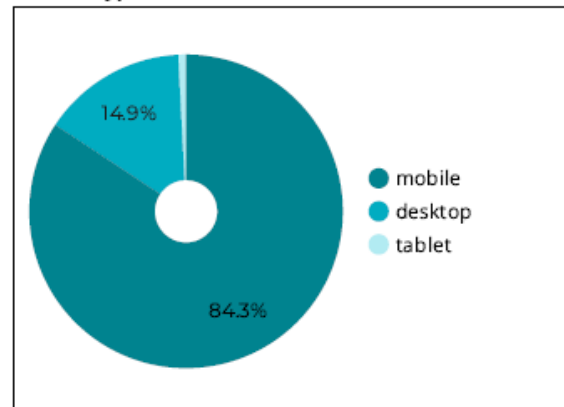
↑ 00:00:01 from previous 7 days



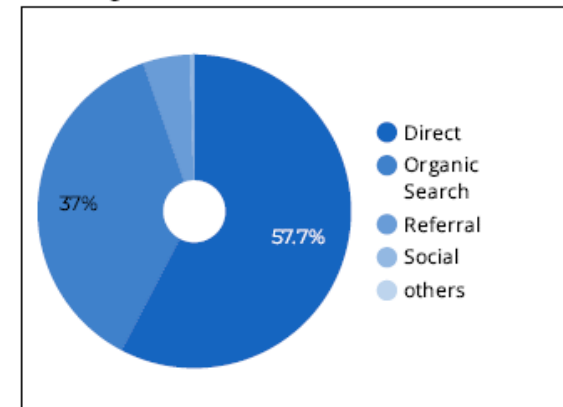
New and Returning Users



Device Types



Referring Channel



DCVR Site Analytics

Census Region		Users ▾
1.	SF Bay Area	97K
2.	Los Angeles County	95.3K
3.	Other Geos	47K
4.	San Diego - Imperial	23.2K
5.	Superior California	17.6K
Grand total		302.6K
		1 - 5 / 11 < >

Language		Users ▾	% of total users
1.	English	288.3K	95%
2.	Spanish	9.9K	3%
3.	Chinese	2.7K	1%
4.	Korean	1.2K	+0%
5.	Japanese	523	+0%
Grand total		302.6K	100%
			1 - 5 / 40 < >

FAQ (Accordions)		Users with FAQ click	% Δ	% users with FAQ click ▾
1.	If I get an Additional or Booster dose, will it show on my digital vaccine record?	3.4K	-5.7% ↓	39%
2.	How will my vaccine record be delivered?	2.3K	-3.3% ↓	27%
3.	Can I save my digital vaccine record on my smartphone?	2.2K	-7.4% ↓	26%
4.	What if my record is not found?	2.1K	5.2% ↑	25%
5.	What is a Digital COVID-19 Vaccine Record (DCVR)?	2K	2.5% ↑	23%
6.	When will my vaccine dose be available in my digital vaccine record?	1.5K	-9.9% ↓	17%
7.	What if my digital vaccine record is incorrect?	1.5K	-0.9% ↓	17%
8.	Can I use my DCVR as proof of vaccination outside of California?	1.3K	-6.6% ↓	15%
9.	Can I reset my PIN?	724	-4.5% ↓	8%
10.	What if I made multiple vaccination appointments for multiple people with a single phon...	397	-13.5% ↓	5%
Grand total		8.5K	-3.3% ↓	100%
				1 - 10 / 122 < >



Washington:
Jeff Chorath &
Bryant Karras



Washington: WA Verify

AIRA 2022 National Meeting on **April 26-27, 2022**

● Bryant Thomas Karras, MD, CMIO

● Jeff Chorath, MBA, MHA

Visual Guide to Official Washington State Proof of COVID-19 Vaccination

CDC COVID-19 Vaccination Record Card



COVID-19 Vaccination Record Card

Please keep this record card, which includes medical information about the vaccines you have received.

Por favor, guarde esta tarjeta de registro, que incluye información médica sobre las vacunas que ha recibido.

Last Name: _____ PI: _____

Date of birth: _____ (if number) _____ Professional: _____

Vaccine: _____

1st Dose COVID-19: _____

2nd Dose COVID-19: _____

3rd Dose COVID-19: _____ mm / dd / yy

4th Dose COVID-19: _____ mm / dd / yy

SAMPLE

- Originals, copies or photographs on a mobile device are acceptable.
- Full vaccination is valid two weeks after last recorded dose:
 - Single dose for Johnson & Johnson (Janssen) vaccine.
 - Two doses of Pfizer-BioNTech/Comirnaty or Moderna vaccine.

Certificate of COVID-19 Vaccination or QR Codes



Certificate of COVID-19 Vaccination

Vaccination Series COMPLETE

Name: Ash Williams

Date: 4/23/2021

Dose 1: _____

Date: _____

Lot number: _____

SAMPLE

Health

Certified by Washington State Department of Health on 4/30/2021

A

- **Sample A:** Certificate of COVID-19 Vaccination available from MyIRmobile.com.
- **Sample B:** WAverify.org SMART Health Card QR Code
- **Sample C:** QR Code displayed on an endorsed partner mobile app. (Apps may vary)



Please fill out the required fields to receive a link to a QR code / digital copy of your COVID-19 Verification Record:

Required fields marked with *

First name *

Last name *

Date of birth *



Provide a mobile phone or email that may be associated with your vaccine record. If you do not get a match using your mobile phone, try again using your email address.

☒ Mobile Phone ☐ Email

Mobile Phone *

Create a 4-digit PIN number. You'll receive a link to enter the PIN number and access your digital vaccine record. *

— — — —

Note: Your PIN is needed to securely access your digital record.

☐ By checking this box, you are declaring under penalty of perjury under state and federal laws that you are the Patient or Parent/Guardian of the Patient and are therefore authorized to access the Patient's immunization record.

Submit

The Process

WAverify State of Washington



SMART Health Card

Name: JEFF CHORATH
DOB: 09/19/1988

Dose Date: 04/15/2021
Dose Type/Mfr.: J&J

FirstNet 11:36 AM 93%

< Verification result



Verified

- ✓ Valid SMART® Health Card
- ✓ Issuer verified

COVID-19 Vaccination Record



Name

CHORATH/JEFF

Date of Birth

//****



Always verify identity with a government-issued I.D.

Issuer

Washington State Department of Health



CommonTrust Verified

Scan next vaccination record



Options



Screenshot



Print



Apple Wallet



Google Pay

“Washington State this week **“quietly”** launched a new online tool that shows proof of a COVID-19 vaccination...”

FRIDAY, OCTOBER 29, 2021



RAIN LIKELY
High, 51. Low, 40. > A15
seattletimes.com/weather

The Seattle Times

WINNER OF 11 PULITZER PRIZES

INDEPENDENT AND LOCALLY OWNED FOR MORE THAN 125 YEARS

SEATTLETIMES.COM

\$2.00

Washington launches online tool for verifying COVID vaccinations

By ELISE TAKAHAMA
Seattle Times staff reporter

Washington state this week quietly launched a new online tool that shows proof of a COVID-19 vaccination, taking a step toward improving its verification systems as it prepares to require full vaccination, or a

recent negative coronavirus test, at all large indoor and outdoor venues starting Nov. 15.

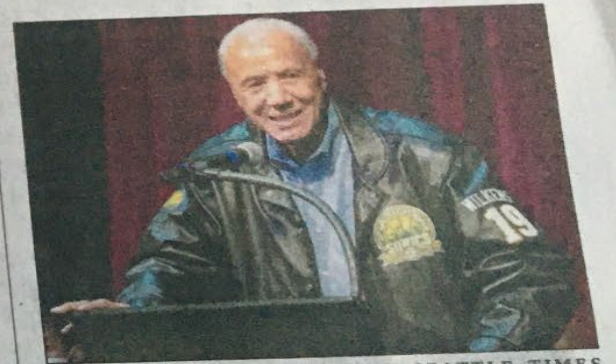
The tool, WA Verify (waverify.doh.wa.gov), is fairly straightforward: Provide your name, date of birth, contact information and a four-digit PIN (needed to securely access digital records, accord-

ing to the website), and the system will text a link leading to a scannable QR code and a digital copy of your COVID-19 vaccination records.

The electronic record is drawn from the data stored in the state's immunization registry, according to WA Verify's FAQ page.

Once you receive WA Verify's QR code, you can take a screenshot and present it in restaurants, gyms or other venues that require proof of immunization.

If you have an iPhone, you can save the QR code to the Apple Health app (on the newest operating system).
See > **VERIFICATION, A16**



KEN LAMBERT / THE SEATTLE TIMES

Lenny Wilkens Way

Seattle honors the superstar SuperSonics with a street-renaming party > **Sports, B1**

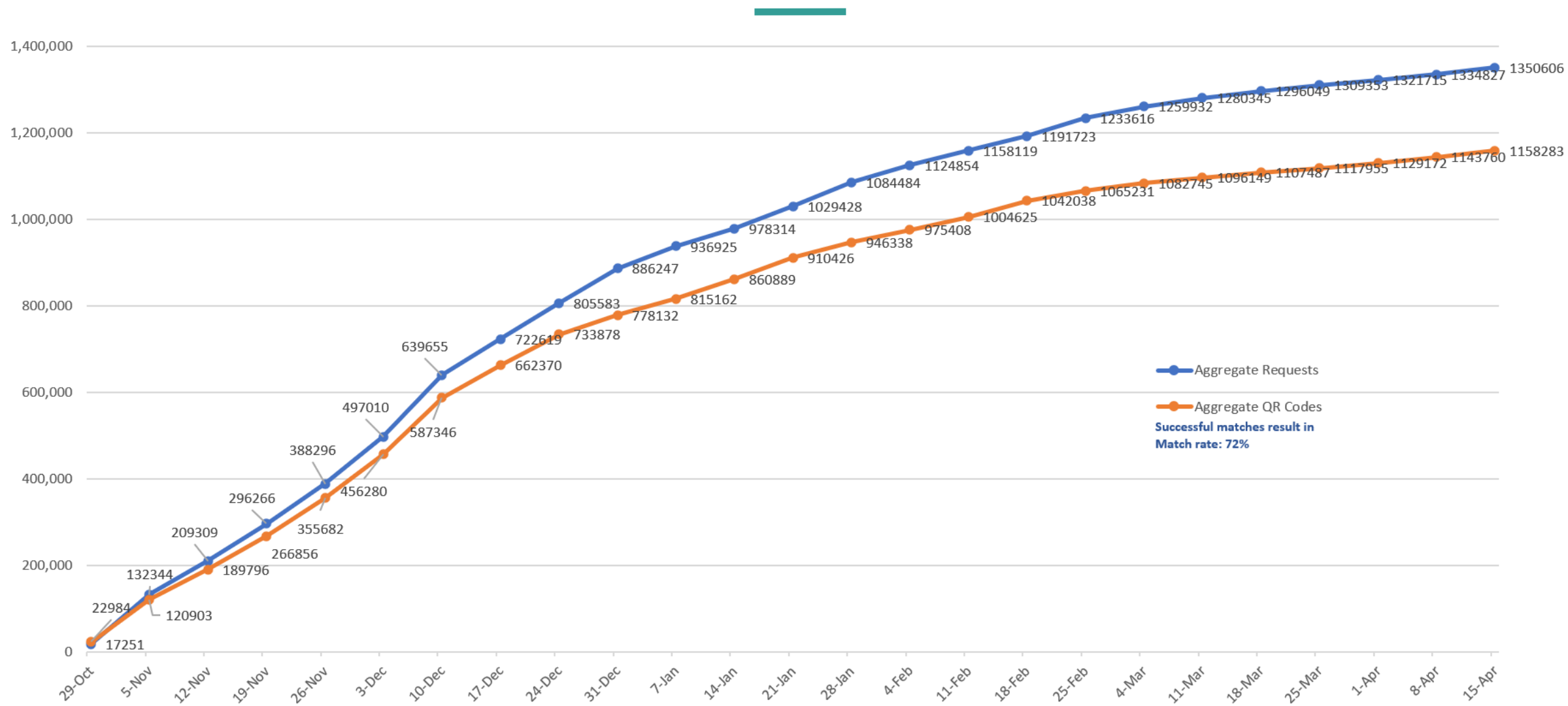
User Matching

Phone*	Email*	First Name	Last Name	DOB	Result
✓		✓	✓	✓	Match
✓		✓	✓		Match
✓		✓		✓	Match
✓			✓	✓	Match
✓				✓	Match
	✓	✓	✓	✓	Match
	✓	✓	✓		Match
	✓	✓		✓	Match
	✓		✓	✓	Match
	✓			✓	Match
Any other combination					No Match

Relaxed matching logic will be used if strict match logic does not return result. Relaxed matching logic will try to match on a subset of the input fields (FN, LN, DOB, Phone, Email)

*Required Fields for 2nd Factor Authentication

>1.15 Million Verifications since Launch

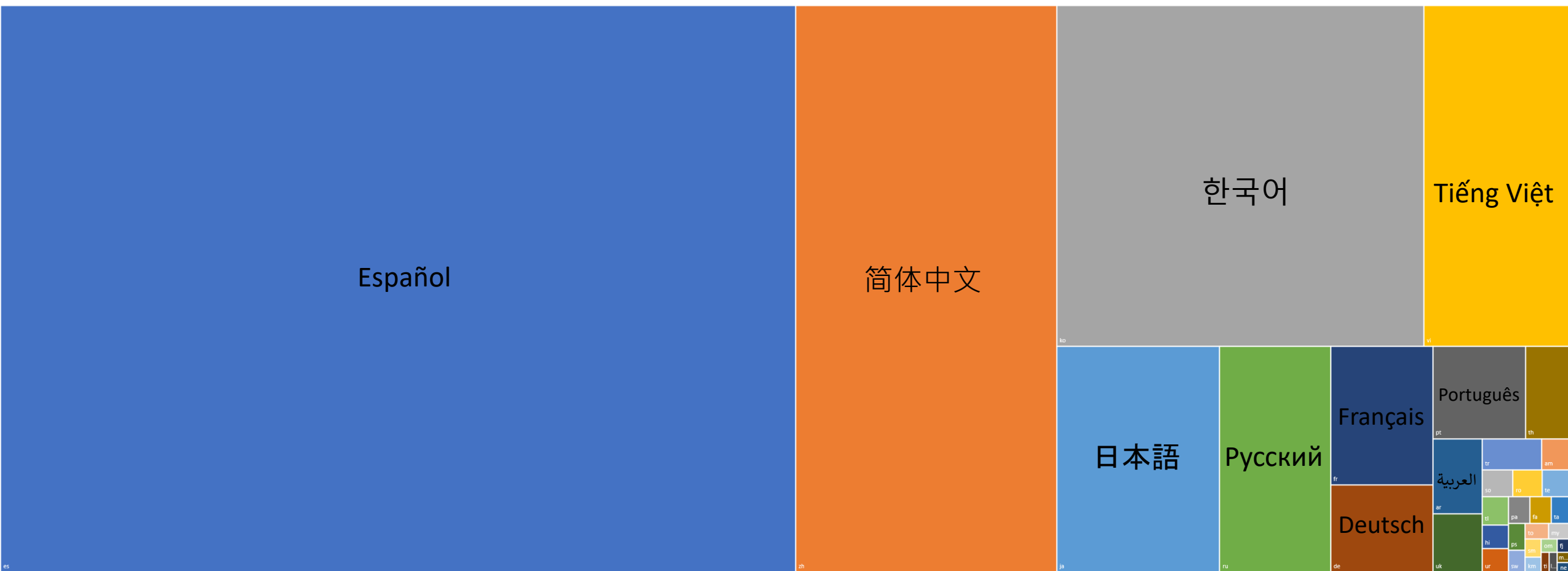


Language Usage (Oct 25th, 2021 – April 18th, 2022)

Code	Total	Language
en	940193	English
es	10949	Spanish
ko	3041	Korean
zh	3596	Chinese
ja	895	Japanese
vi	1207	Vietnamese
ru	609	Russian
fr	344	French
de	217	German
pt	207	Portuguese
th	99	Thai
ar	90	Arabic
uk	70	Ukrainian
tr	45	Turkish
am	21	Amharic

Code	Total	Language
ro	19	Romanian
so	20	Somali
tl	18	Tagalog
te	18	Telugu
ur	15	Urdu
hi	15	Hindi
pa	14	Punjabi
fa	14	Farsi
ta	12	Tamil
ps	11	Pashto
to	9	Tongan
sw	9	Swahili
sm	7	Samoan
my	8	Burmese

Language Usage



Questions?

Please contact:

Bryant Thomas Karras, MD

Chief Medical Informatics Officer

bryant.karras@doh.wa.gov

206-418-5540

Jeff Chorath, MBA, MHA

Immunization Information System Manager

jeff.chorath@doh.wa.gov

360-878-7461

For more information visit: [WAverify.org](https://www.WAverify.org)





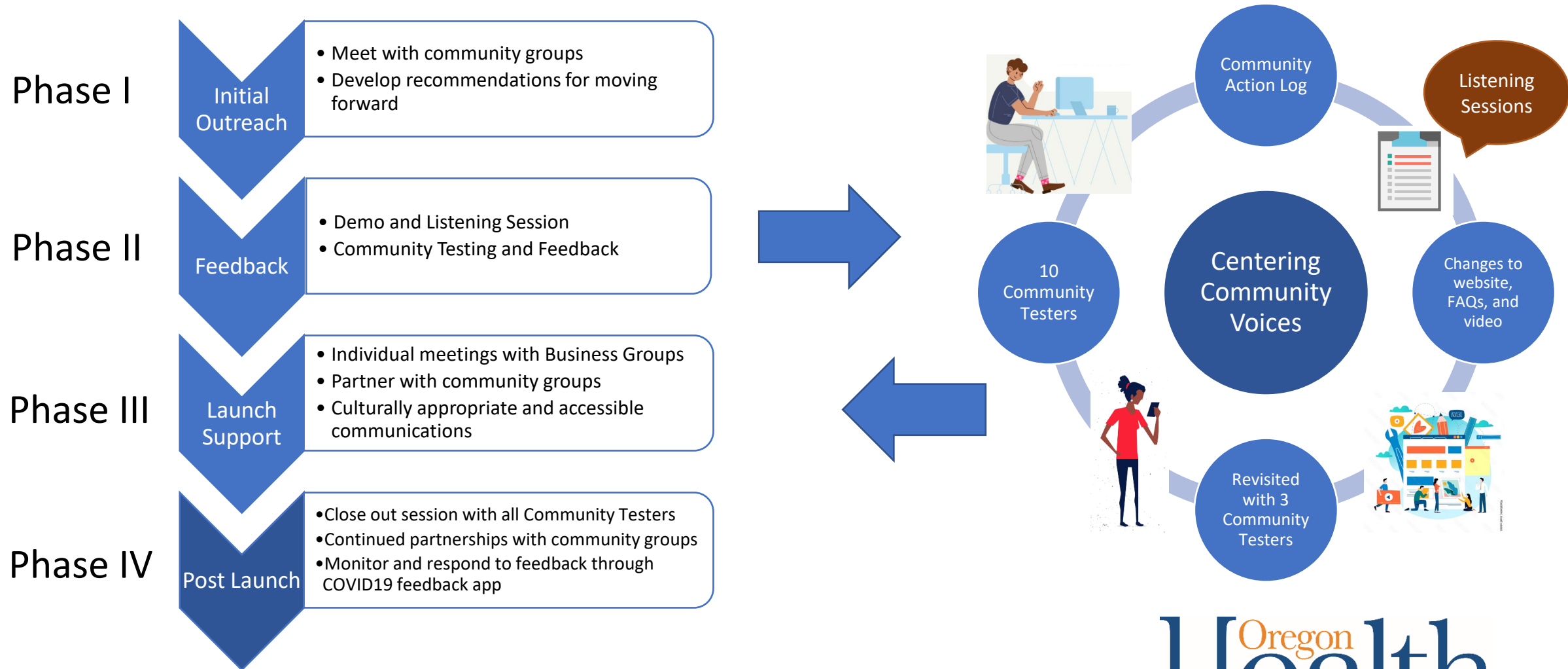
Oregon:
Liz Hunt

Oregon's Electronic Vaccine Card

Leading with Equity

- Provide access in 13 languages
 - 13 languages go-live simultaneously
 - Translations completed and reviewed by native speakers (not autogenerated)
- Accessible web platform
 - Built to conform with WCAG 2.1 AA
 - Tested by a team of native assistive tech users
- Center community voices
 - Continuous engagement with community
 - User acceptance testing by community prior to go-live

Community Outreach and Engagement Overview



Accessibility

Key Strategies

- Engaged early
- Built a team with native assistive tech users
- Partnered with developers

Accomplishments

- Developed **15** personas
- Included **114** user stories in the FDD
- Completing an Accessibility Conformance Report (ACR) for WCAG 2.0 and 2.1 AA
 - **39** fully supported criteria
 - **1** partially supported
 - **10** n/a criteria
- Driving change by private technology companies

Technologies and Testers

Consultant	Native Tech Tester #1	Native Tech Tester #2
NVDA (Screen Reader)	JAWS (Screen Reader)	Apple Switch Control with Auto-Scan
Able Net Blue 2 (Universal Switch)	VoiceOver (Screen Reader)	
Keyboard Access		
Dragon Naturally Speaking (Text-to-Speech Software)		
ZoomText (Magnification Software)		

Oregon Code Updates

- Additional QR code delivery options
 - Email it to someone
 - Print a copy
 - Request a mailed copy
- Language review
 - Simplified copy
 - Translations done by native speakers
 - Review within the web app by language testers
- Accessibility Conformance Report
 - Log of all compliance with criteria and type of testing done
 - Documentation of level of compliance up to WCAG 2.1 AA



Louisiana:
Quan Le

Consumer Access and SMART Health Card (Immunization)-Background

Lessons Learned from Hurricane Katrina

Consumer Access Portal (MyIR)

Online Medical record (Blue Button, Health Vault)



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Search



Louisiana Expands LA Wallet to Include an Individual's COVID-19 Vaccine Verification Information for Those Who Opt-In

May 05, 2021

Louisianans who choose to do so are now able to access their COVID-19 vaccination record through a new, optional feature of the state's digital driver's license, the LA Wallet app, Gov. John Bel Edwards announced on Wednesday.

"If someone wants to have a digital copy of their vaccination record, they should be able to easily get one at no cost, which is what this optional feature of LA Wallet allows them to do. This enhancement is about connecting people with their own personal health information in a simple, secure way," Gov. John Bel Edwards said. "The LA Wallet app is free, safe, and private and people who use it are assured that their personal health information is well protected."

LA Wallet launched in 2018 as Louisiana's Digital Driver's License App. It is available on both the Apple App store and the Google Play store and is a legal driver's license for all in the state of Louisiana. Live helpdesk, chat, and the LA Wallet website will be available for support.

People without access to smartphones can get printed copies of their vaccine records from their parish health unit or from any provider that administers vaccines and uses the LINKS system. Residents can also print their complete immunization record through MyIR.

■ For more information about LA Wallet, visit lawallet.com.

CONNECT *with* the GOVERNOR

[EMAIL *the*
GOVERNOR](#)[REQUEST *of*
the GOVERNOR](#)[APPLY *to*
SERVE](#)

“If someone wants to have a digital copy of their vaccination record, they should be able to easily get one at no cost, which is what this optional feature of LA Wallet allows them to do. This enhancement is about connecting people with their own personal health information in a simple, secure way,” Gov. John Bel Edwards said. “The LA Wallet app is free, safe, and private and people who use it are assured that their personal health information is well protected.”



Challenges/Opportunities

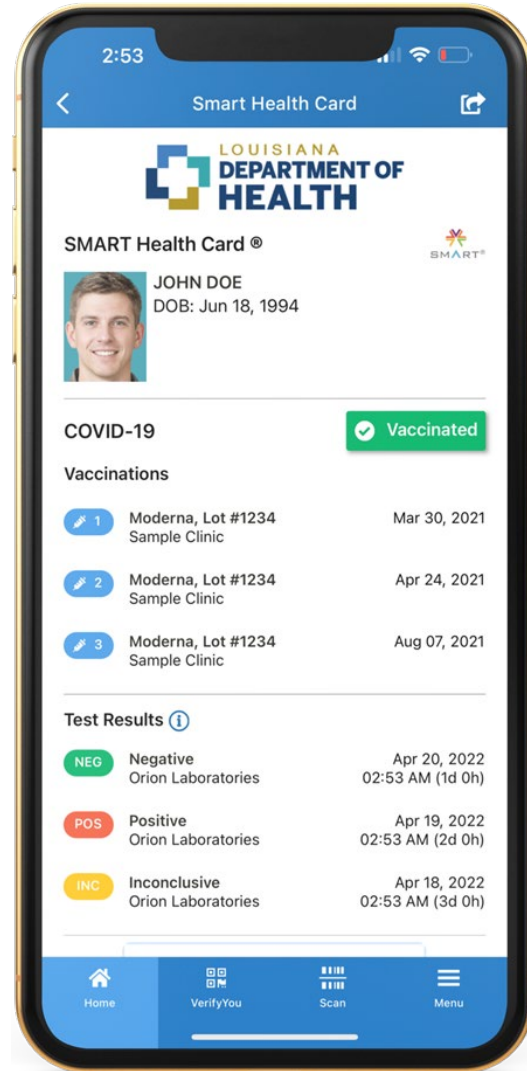
Matching issues/up-to-date demographics


No data found/New patient data added to IIS

Consumer requests/Helpdesk support coordination




Success!





Certificate of COVID-19 Vaccination



Vaccination is considered complete after two weeks have passed since the second dose of mRNA vaccines or first dose of single-dose vaccines.

Vaccination Series COMPLETE

Name: _____

Date of Birth: _____

Dose 1

Date: _____

Manufacturer: _____

Lot number: _____

Dose 2

Date: _____

Manufacturer: _____


Lot number: _____


Dose 3

Date: _____

Manufacturer: _____

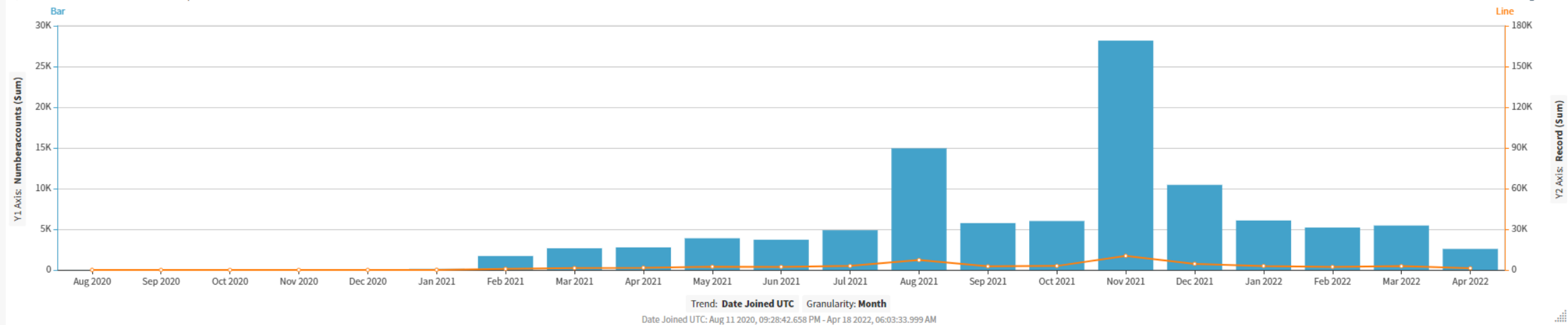
Lot number: _____



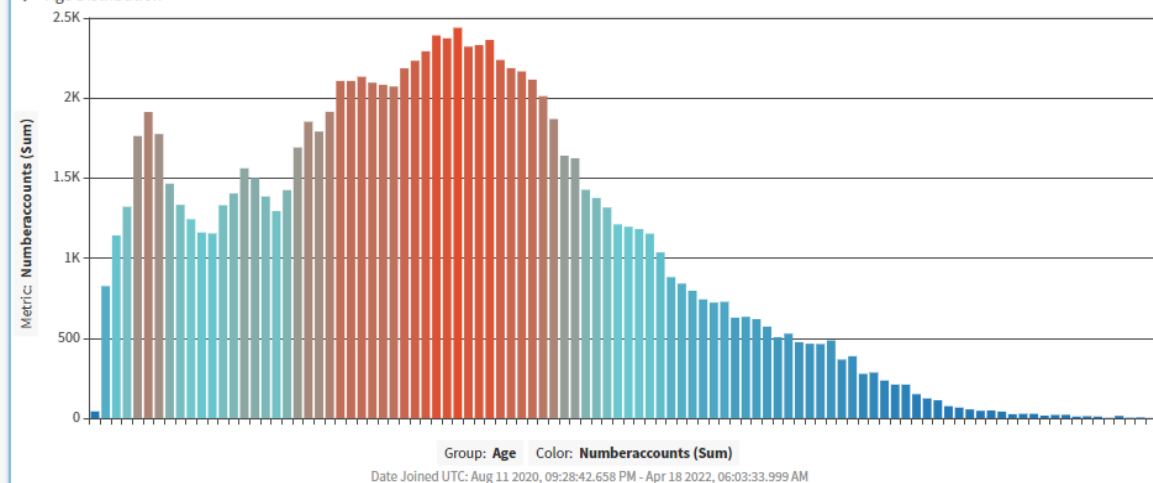




of Accounts VS # of Accounts W/ Records



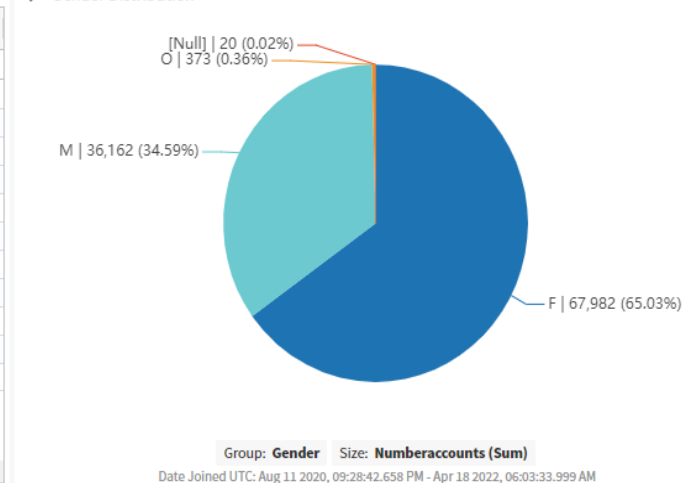
Age Distribution



Referral Type

Referral Type	Numberaccounts SUM
Total	104,537
DEPARTMENT_OF_HEALTH	19,244
DOCTOR_HEALTHCARE_PROVIDER	7,550
EMPLOYER_COLLEAGUE	1,701
FRIEND_FAMILY_MEMBER	6,051
INTERNET	28,816
MAIL	78
OTHER	5,653
RADIO_TV	498
SCHOOL_UNIVERSITY	2,288
SOCIAL_MEDIA	2,141
[Null]	30,517

Gender Distribution



Aug 11, 2020 9:28:42.658 PM

Date Joined
UTC

Min

Q3 2020

Q4 2020

Q1 2021

Q2 2021

Q3 2021

Q4 2021

Q1 2022

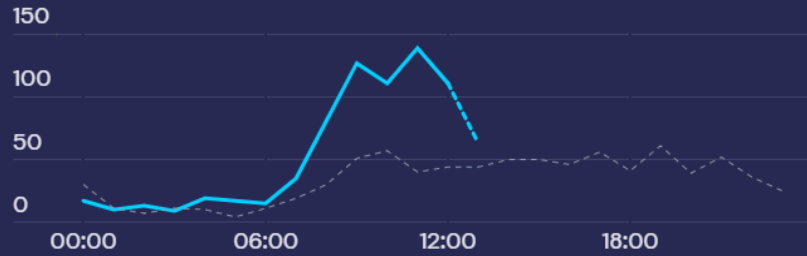
Q2 2022

Apr 18, 2022 6:03:33.999 AM

Max



New Users Today



1,382,134 Residents Activated

174.4k Hunting & Fishing Licenses

Visitor Map



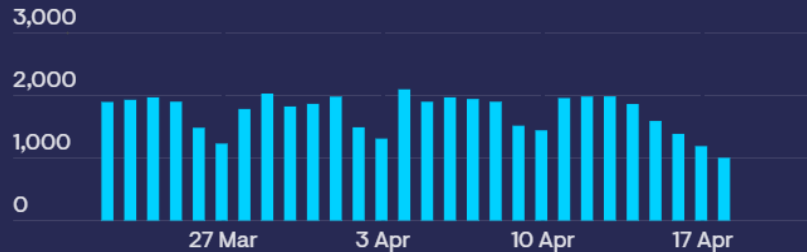
COVID-19 Vaccination Card

806.4k
Vax Matches

95.18%
Match Rate



Website Sessions



lawallet.com Visitors



798
Activations Today



LA Wallet COVID Powered by Geckoboard

13:43



Moving Forward

Access to dependent's
immunization record

Consolidated IZ Record
with QR code

Consumer initiated option
to share

Child's Name: LA KID TEST Date of Birth: 11/12/2005 Parent or Guardian:
SIIS Patient ID: 13587281

Vaccine	MONTH, DAY AND YEAR EACH DOSE WAS GIVEN							
	Dose 1	Dose 2	Dose 3	Dose 4	Dose 5	Dose 6	Dose 7	Dose 8
FLU	9/15/2020							
DTaP/DT/Td	1/12/2006	3/12/2006	9/12/2006					
MMRV								
POLIO	1/12/2006	3/12/2006	9/12/2006	11/12/2009				
HEP-A	11/12/2006	5/12/2007						
HIB	1/12/2006	3/12/2006	9/12/2006					
PNEUMO (PCV)								
MMR	11/12/2006	11/12/2009						
VARICELLA	11/12/2006	11/12/2009						
HEP-B 3 DOSE	11/12/2005	1/12/2006	5/12/2006					
ROTAVIRUS								
Meningococcal	11/12/2016							

* **School Entry Complete-Minimum:** 4-DTP, 3-Polio,(last DTP and Polio after 4th birthday), 2-MMR after 1st birthday and, 3-Hep B
*** **Daycare Center:** Hib also required

*** Beginning Aug 2003, Varicella vaccine or history of the disease will be required for school and daycare entry.

Varicella History:

I certify that this child has received the above noted immunizations and is in compliance with rules set forth by the State of Louisiana. Department of Health and Hospitals, Office of Public Health until the expiration date above.



Authorized Signature

8/11/2021

Date

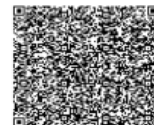
MyIR

Clinic of Issue

Tracking ID: 700af3-e832-48d8-ae0e-5fa9a55f8:

Falsification of this record could result in imprisonment for not more than five years or by a fine of not more than five thousand dollars, or both, pursuant to R.S. 14:132 or R.S. 14:133.

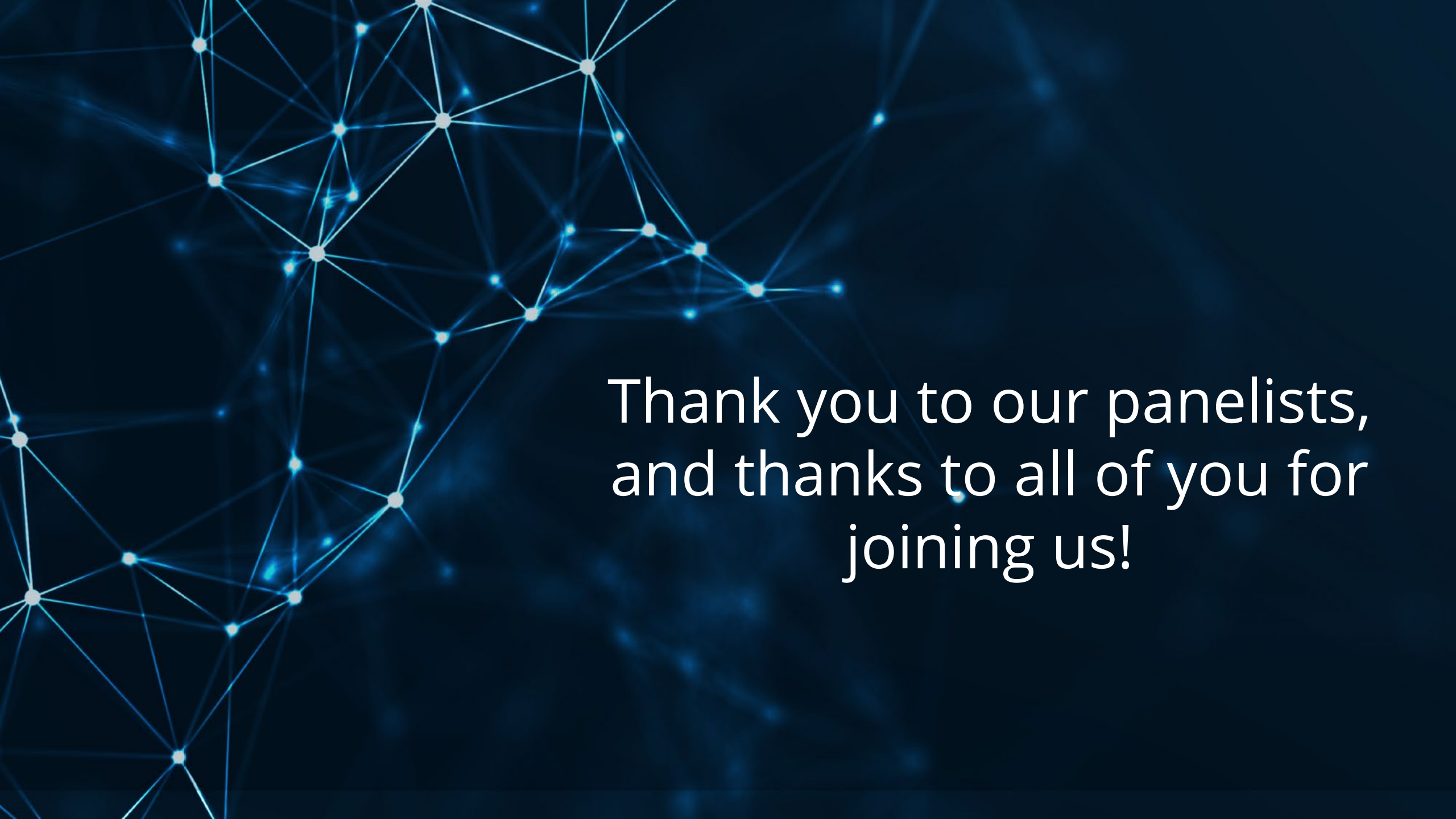
COVID-19 Digital
Information



Thank You.

*In Louisiana –
“We Do That”*



An abstract graphic on the left side of the slide, consisting of a complex network of white dots connected by thin white lines, resembling a molecular structure or a data network. The dots and lines are set against a dark blue background with some lighter blue bokeh-like effects.

Thank you to our panelists,
and thanks to all of you for
joining us!



Announcements & Closing Remarks