
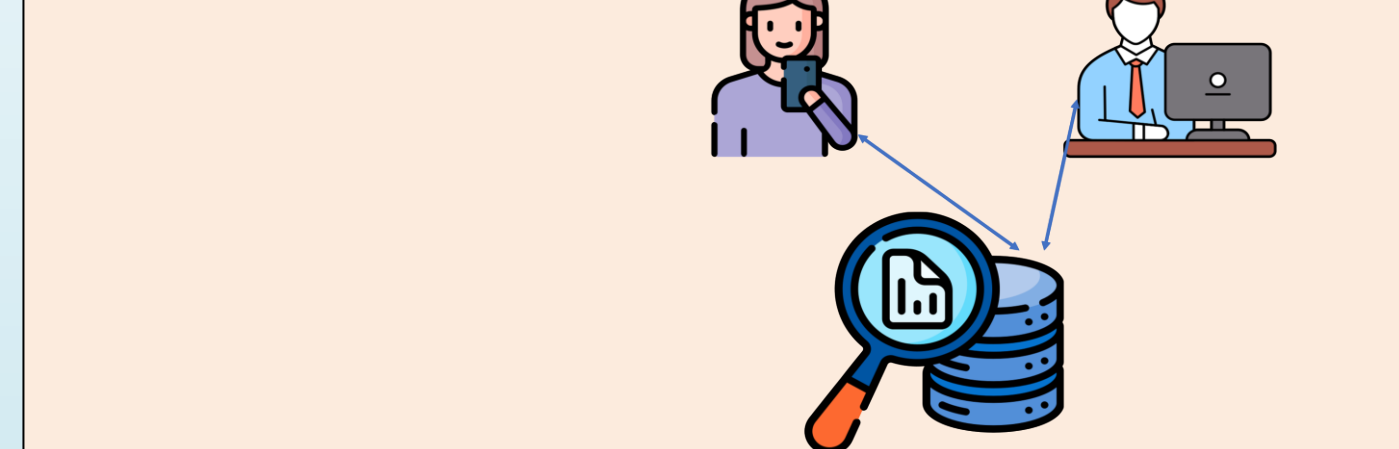
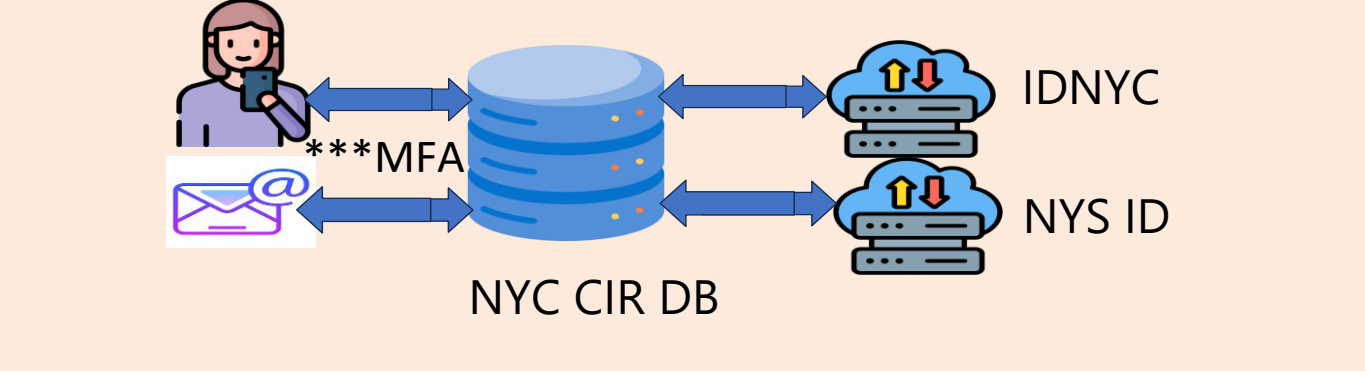
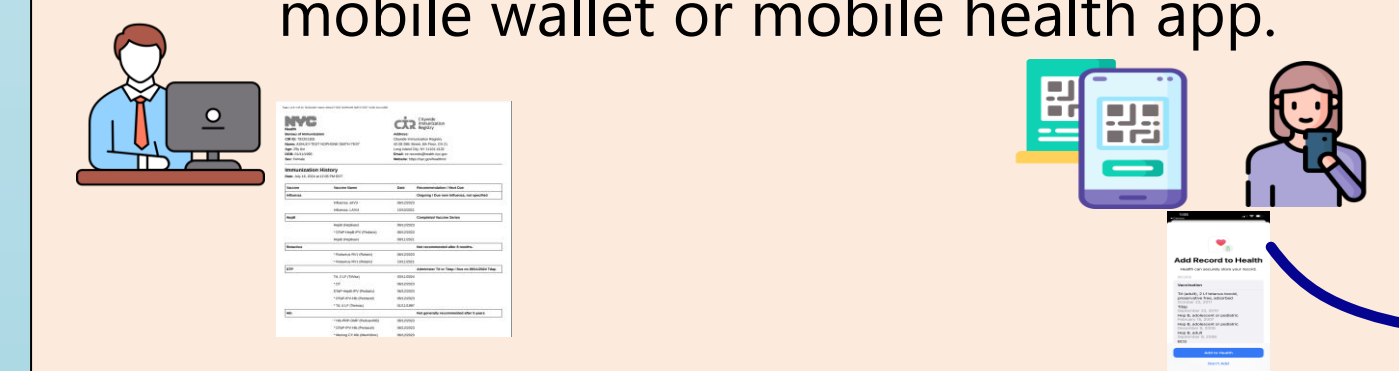
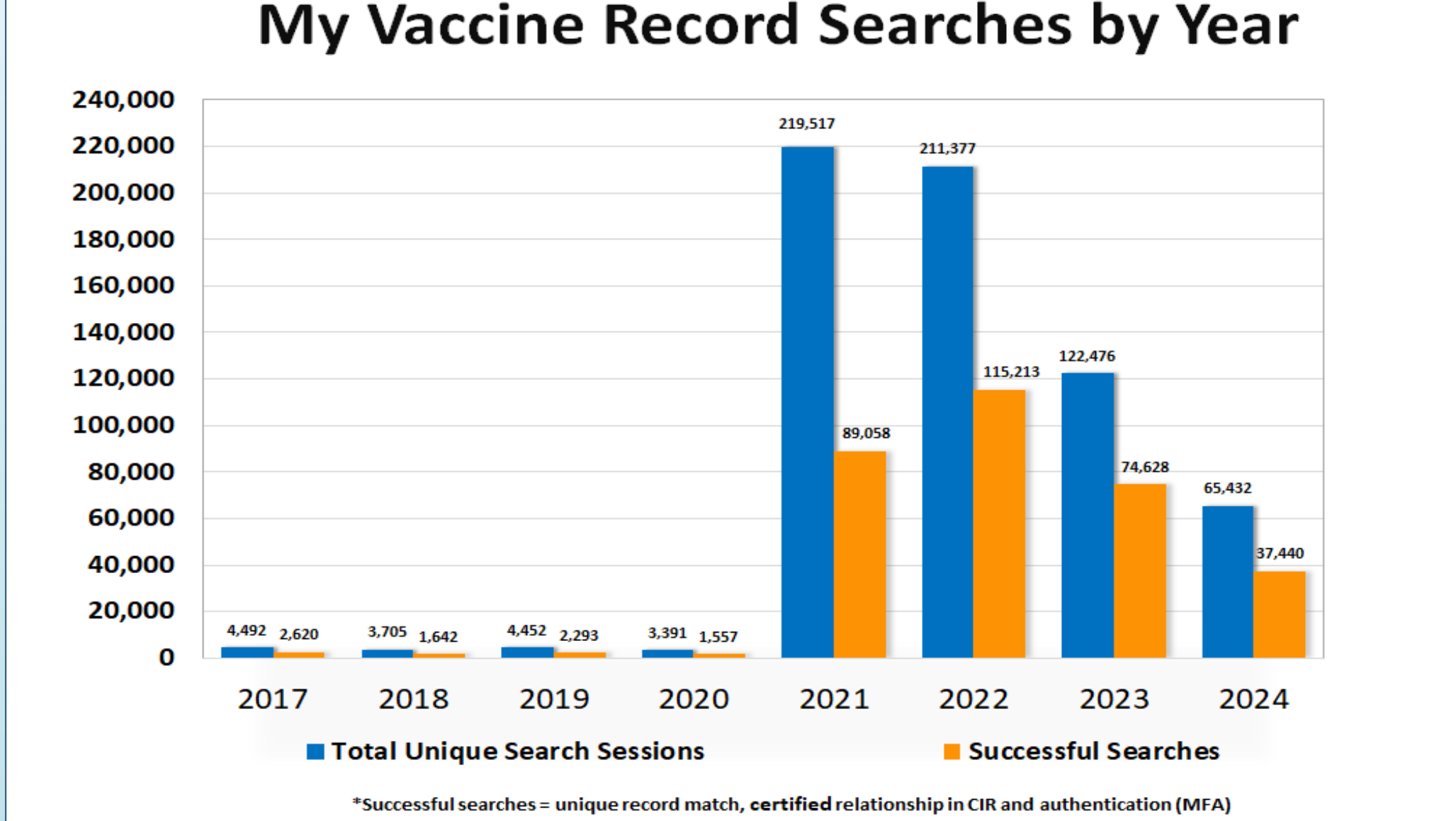
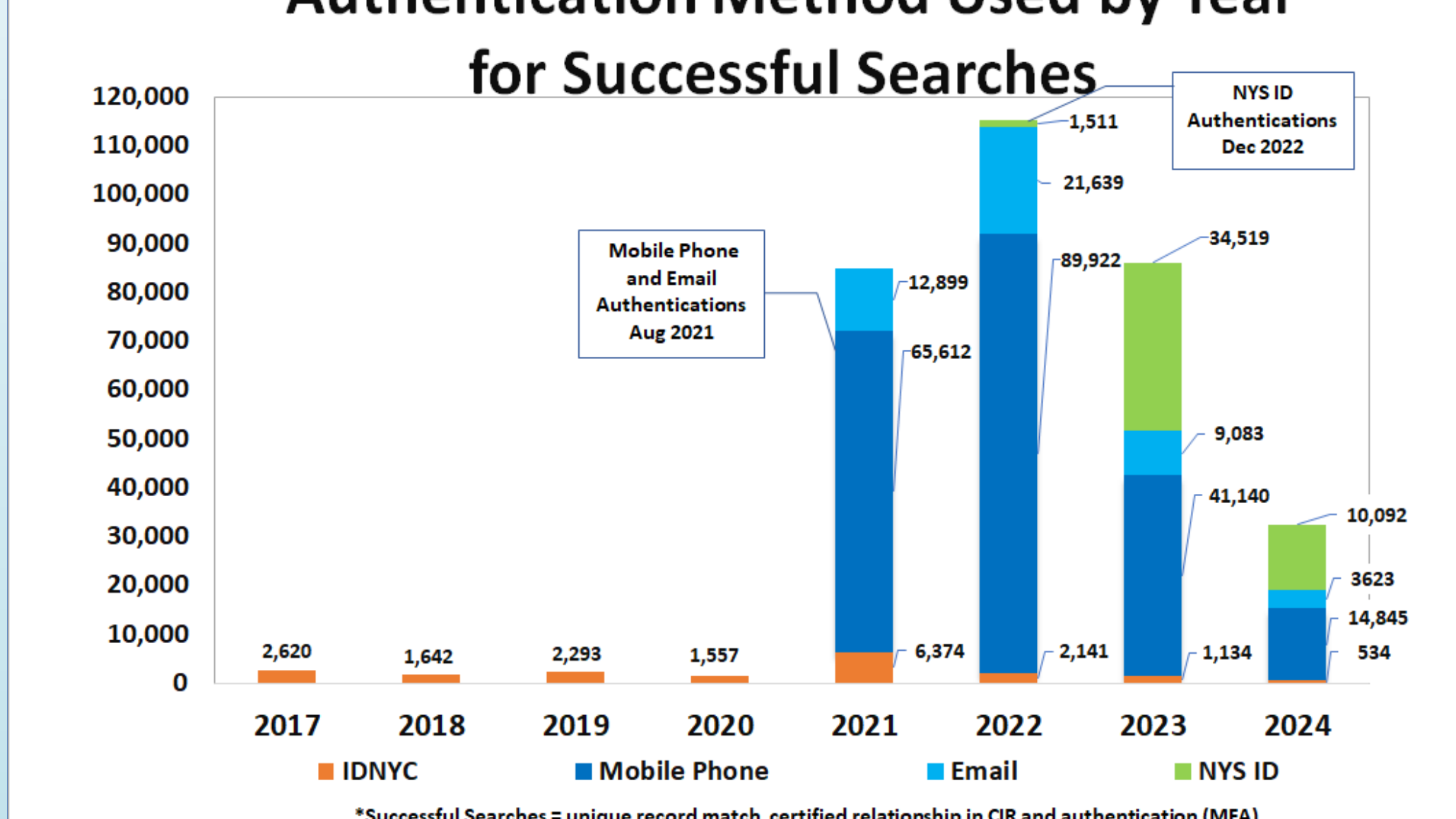
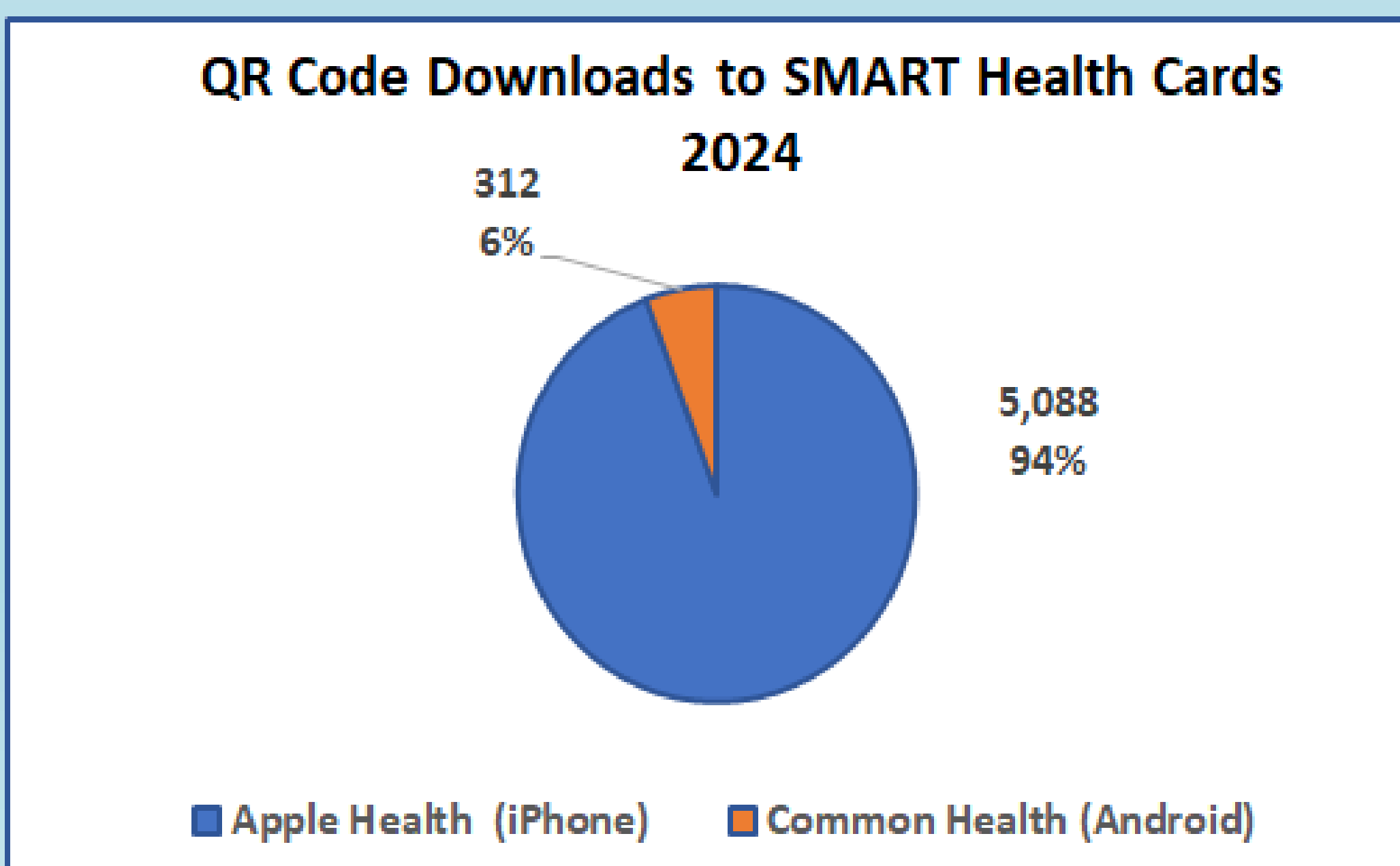
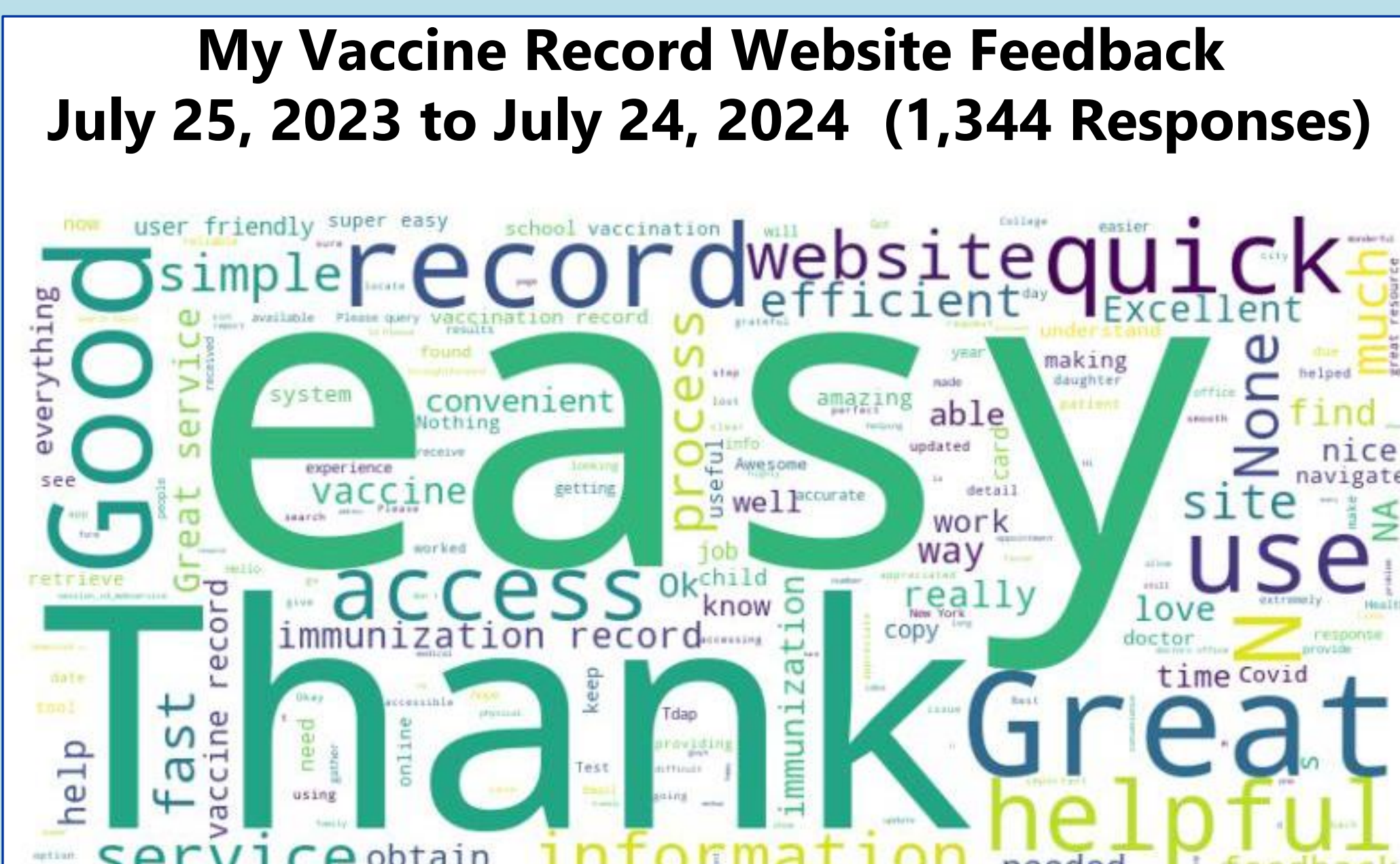
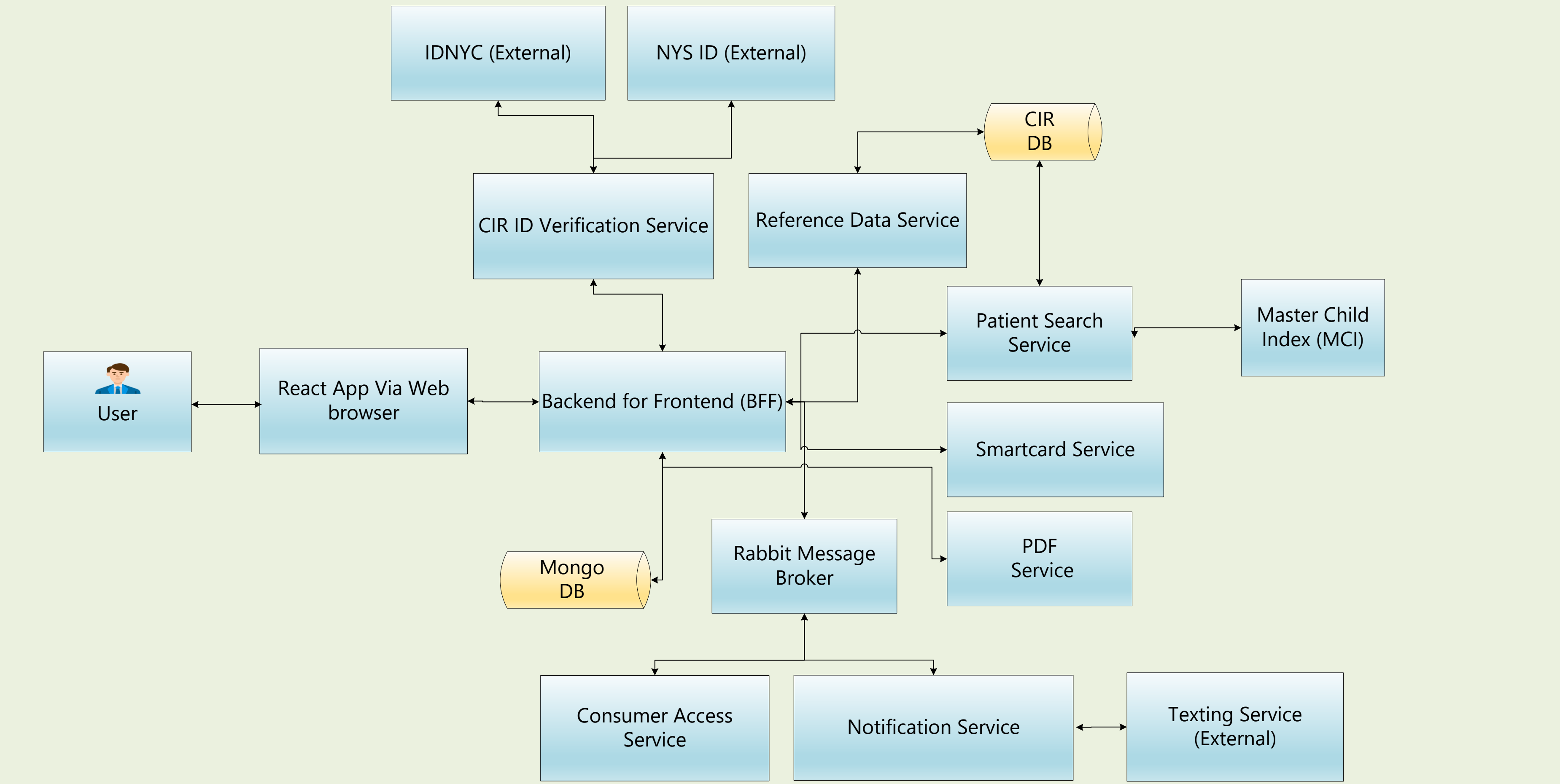



My Vaccine Record (MVR)

Improving Consumer Access to Immunization Records in New York City (NYC) Developed in Collaboration with HLN Consulting LLC.

Shirley Huie MPH¹, Gita Prabhakar PMP², Ashley Wilborn², Zachary Betz², Cathy Sripoonpak², Michael Suralik MCS²
¹New York City Department of Health and Mental Hygiene, Bureau of Immunization, ²HLN Consulting, LLC

Background	Application Workflow	SMART Health Card - Immunization History	Results																																																																		
<p>Citywide Immunization Registry (CIR) Profile</p> <ul style="list-style-type: none">New York City (NYC) Immunization Information System (IIS), also known as the Citywide Immunization Registry (CIR), started citywide in 1997~15 million patient records; >172 million immunizationsReporting of childhood immunizations is mandated, though reporting of adult immunizations requires patient consent <p>MVR Background</p> <ul style="list-style-type: none">CIR developed My Vaccine Record (MVR) in January 2017The general public may retrieve their or their children's immunization records and forecasts from the CIR using the MVR web application, which is accessed from a mobile phone or computerThe initial version of MVR required users to verify their identity by providing an IDNYC number issued by New York City to residents who had registered for an IDNYC card. However, the COVID-19 pandemic as well as mpox and measles outbreaks underscored the need for record storage that is accessible to the patientDuring the COVID-19 pandemic, when there were vaccine mandates for work, school and visiting public venues, the Health Department received 36,310 manual record assistance requests via mail, phone, fax, or email	<div><div><div><div><div>1</div><div>User* Story</div><div>I need my vaccine information now. How do I get it?</div><div></div></div><div><div>2</div><div>Input from User</div><div>User supplies Personal Identifying Information for authentication and record retrieval.</div><div></div></div><div><div>3</div><div>Authentication Options</div><div><ul style="list-style-type: none">**IDNYC #Mobile Phone on recordEmail on recordNYS ID #</div><div></div></div><div><div>4</div><div>Outputs to User</div><div><ul style="list-style-type: none">Vaccine record<ul style="list-style-type: none">PDF (printable)QR Code (scannable)The QR code can be saved to their mobile wallet or mobile health app.</div><div></div></div></div><div><p><i>*Users are individuals seeking access to their vaccination records through an online application</i></p><p><i>**The IDNYC # issued by NYC has >2 million NYC cardholders</i></p><p><i>*MFA is Multi-factor Authentication (MFA), also known as two-factor authentication (2FA)</i></p></div></div><div><div><div>1:05</div><div>Camera</div><div>Health can securely store your record.</div><div>Add Record to Health</div><div>Don't Add</div></div><div><div>1:05</div><div>Immunization Record</div><div>Td (tetanus and diphtheria toxoids, adsorbed, preservative free, for adult use)</div><div>Administered October 22, 2011</div><div>Record Verification</div><div>ARCHIE JUGHEAD-TEST</div><div>May 22, 1999</div><div>Contains 8 entries</div><div>Record Verification</div><div>Immunize.nyc</div><div>Verified records have not been changed since originally created</div><div>Summary</div><div>Share</div><div>Share</div></div><div><div>1:05</div><div>Immunizations</div><div>Export PDF</div><div>October 18, 2022</div><div>NEW YORK CITY CITYWIDE IMMUNIZATION REGISTRY (CIR)</div><div>Flu Vaccine</div><div>Seasonal trivalent influenza vaccine, adjuvanted, preservative free</div><div>Administered — ASHLEYSMOKE-TEST LASTSMOKE-TEST</div><div>October 22, 2011</div><div>IMMUNIZE.NYC</div><div>Tetanus and Diphtheria Vaccine</div><div>Td (tetanus and diphtheria toxoids), adsorbed, preservative free, for adult use</div><div>Administered — ARCHIE JUGHEAD-TEST</div><div>September 22, 2010</div><div>IMMUNIZE.NYC</div><div>Tdap Vaccine: Tetanus, Diphtheria,</div></div></div><div><p>Mobile phone screens examples</p></div></div>	<ul style="list-style-type: none">SMART Health Card available for all vaccines reported to CIR (in addition to COVID-19 vaccines)Private, secure, verifiable, sharable, digital vaccination record that is downloadable and printableUsers can connect their vaccination records to a number of existing smart phone health wallet apps	<ul style="list-style-type: none">Individuals have conducted more than 320,000 successful searchesOver 31,000 QR codes have been generated, of which over 6,000 have been downloaded to SMART Health CardsMobile phone authentications are used about 24% more than the other methods combinedMVR received unsolicited, overall positive feedback on the enhanced system's efficiency and usefulness <div><div><div>My Vaccine Record Searches by Year</div><table><tr><th>Year</th><th>Total Unique Search Sessions</th><th>Successful Searches</th></tr><tr><td>2017</td><td>4,461</td><td>2,630</td></tr><tr><td>2018</td><td>2,630</td><td>1,842</td></tr><tr><td>2019</td><td>3,795</td><td>2,293</td></tr><tr><td>2020</td><td>1,942</td><td>1,597</td></tr><tr><td>2021</td><td>4,452</td><td>6,374</td></tr><tr><td>2022</td><td>4,381</td><td>21,461</td></tr><tr><td>2023</td><td>3,281</td><td>89,932</td></tr><tr><td>2024</td><td>1,037</td><td>5,088</td></tr></table><p><small>*Successful searches = unique record match, verified relationship in CIR and authentication (MFA)</small></p></div><div><div>Authentication Method Used by Year for Successful Searches</div><table><tr><th>Year</th><th>IDNYC</th><th>Mobile Phone</th><th>Email</th><th>NYS ID</th></tr><tr><td>2017</td><td>2,630</td><td>1,842</td><td>2,293</td><td>1,597</td></tr><tr><td>2021</td><td>4,452</td><td>6,374</td><td>21,461</td><td>89,932</td></tr><tr><td>2022</td><td>4,381</td><td>21,461</td><td>89,932</td><td>5,088</td></tr><tr><td>2023</td><td>3,281</td><td>89,932</td><td>5,088</td><td>14,445</td></tr><tr><td>2024</td><td>1,037</td><td>5,088</td><td>14,445</td><td>10,092</td></tr></table><p><small>*Successful Searches = unique record match, verified relationship in CIR and authentication (MFA)</small></p></div></div> <div><div>QR Code Downloads to SMART Health Cards 2024</div><table><tr><th>Platform</th><th>Count</th><th>Percentage</th></tr><tr><td>Apple Health (iPhone)</td><td>5,088</td><td>94%</td></tr><tr><td>Common Health (Android)</td><td>312</td><td>6%</td></tr></table></div> <div><div>My Vaccine Record Website Feedback July 25, 2023 to July 24, 2024 (1,344 Responses)</div></div>	Year	Total Unique Search Sessions	Successful Searches	2017	4,461	2,630	2018	2,630	1,842	2019	3,795	2,293	2020	1,942	1,597	2021	4,452	6,374	2022	4,381	21,461	2023	3,281	89,932	2024	1,037	5,088	Year	IDNYC	Mobile Phone	Email	NYS ID	2017	2,630	1,842	2,293	1,597	2021	4,452	6,374	21,461	89,932	2022	4,381	21,461	89,932	5,088	2023	3,281	89,932	5,088	14,445	2024	1,037	5,088	14,445	10,092	Platform	Count	Percentage	Apple Health (iPhone)	5,088	94%	Common Health (Android)	312	6%
Year	Total Unique Search Sessions	Successful Searches																																																																			
2017	4,461	2,630																																																																			
2018	2,630	1,842																																																																			
2019	3,795	2,293																																																																			
2020	1,942	1,597																																																																			
2021	4,452	6,374																																																																			
2022	4,381	21,461																																																																			
2023	3,281	89,932																																																																			
2024	1,037	5,088																																																																			
Year	IDNYC	Mobile Phone	Email	NYS ID																																																																	
2017	2,630	1,842	2,293	1,597																																																																	
2021	4,452	6,374	21,461	89,932																																																																	
2022	4,381	21,461	89,932	5,088																																																																	
2023	3,281	89,932	5,088	14,445																																																																	
2024	1,037	5,088	14,445	10,092																																																																	
Platform	Count	Percentage																																																																			
Apple Health (iPhone)	5,088	94%																																																																			
Common Health (Android)	312	6%																																																																			
Project Goal & Objectives	Technical Architecture	Conclusions & Next Steps																																																																			
<p>Goal</p> <ul style="list-style-type: none">To improve public access to immunization records <p>Objectives</p> <ul style="list-style-type: none">Add additional two-factor authentication options: phone number, email address, New York State IDEnable MVR users to instantaneously download and store their vaccination record on SMART Health Card compliant QR codes in their smart phone walletMigrate MVR to modern technology to improve usability and reduce maintenance efforts		<ul style="list-style-type: none">Enhancements to MVR allow the public to securely access their official immunization records online and on-the-go, without contacting the Health Department or their immunization provider. The records can be used for school, employment, or access to venues requiring vaccinationThrough the use of MVR, NYC is prepared to meet a high volume of requests in the event of a future vaccine-preventable disease outbreak in which vaccine requirements are implementedFor the future, NYC is evaluating ways to make immunization records even more accessible, such as:<ul style="list-style-type: none">Addressing the content size limitations of QR codes by delivering information using SMART health linksSending instructions on accessing and updating their SMART Health Card each time a vaccine dose is reported to the CIR																																																																			
Methods	<ul style="list-style-type: none">Enhanced MVR to provide additional options for two-factor authentication, including a phone number or email address registered with the individual's healthcare provider, or a New York State Identification (NYS ID)Added a QR Code compliant with the SMART Health Card standards to contain the immunization record and to be saved on a smart phone-walletMigrated MVR to modern technology, significantly improving usability and reducing maintenance efforts and related costs																																																																				
For More Information																																																																					
<p>For more information about MVR, visit My Vaccine Record, NYC Website: https://myvaccinerecord.cityofnewyork.us/myrecord/ or scan QR Code</p> <p>Email: Shirley Huie at shuie@health.nyc.gov Gita Prabhakar at gita@hln.com</p>																																																																					
Acknowledgements																																																																					
<p>Citywide Immunization Registry Staff, Bureau of Immunization, NYC DOHMH Julian Matiz, BCS, Emily Liang, MPH, Dayvonn Jones, MPI, Max Veillard, MPH, Fritzner Paul, Cinthia Castro, Minyi Ruan, Christina Barron, MPH</p>																																																																					