

Enhancing CIR Operations with a Customer Relationship Management (CRM) Platform

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NYC Department of Health and Mental Hygiene

AIRA 2026 National Meeting

Pittsburgh, PA

Outline

- Background
- Operational Challenges
- CRM Solution & Implementation
- System & Workflow Transformation
- Results and Impact
- Future Readiness & Key Takeaways

Citywide Immunization Registry (CIR)

NYC's Immunization Information System (IIS)

- Implemented citywide in 1997

Population-based

- Birth certificates loaded into CIR twice a week

Mandatory reporting of immunizations for children 0-18 years

- Reporting for adults ≥ 19 years requires consent

Contains >15.4 million patient records and >188 million immunizations

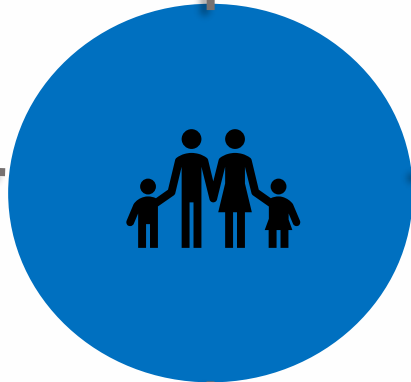
- Timely; ~91% of immunizations reported in ≤ 1 day; ~99% reported within 1 month of administration

Consumer access

- Available via the My Vaccine Record (MVR) website

Bureau of Immunization Inquiries

General Vaccine Questions



School Support

Record Requests

Clinic
Appointments

CIR Facility Registration/Edits

Provider Questions



Vaccine Orders

Single Sign-On/
Account Issues

Types of Inquiries

MVR Feedback

My Vaccine Record

Welcome > Certification > Parent/Guardian > Search > Results > 5 Feedback

5. Feedback

Step 5 of 5

Thank You for Using My Vaccine Record

You may return to the [homepage](#) to begin a new search. You must re-enter your information for each search.

We Welcome Your Feedback

All fields with an asterisk * are required.

First Name * Last Name * Email *

Mobile Phone Number * Topic *

Enter as #####

Feedback *

300 characters remaining



SurveyMonkey Submission

New York City Bureau of Immunization Citywide Immunization Registry (CIR) Record Assistance Request Form

Request Help With Immunization Records

- Please complete the form below if you were unsuccessful in accessing your or your child's immunization record using the New York City-[Citywide Immunization Registry \(CIR\) My Vaccine Record \(MVR\)](#) online application. This includes COVID-19 and mpox vaccination records. Please allow two business days for a reply. To complete this form, you will need your photo ID and any supporting documents. If you have already completed an [Immunization Record Request Application \(PDF\)](#) ([additional languages](#)), you may upload it here.
- Please note your provider can review and add missing immunizations to your record.
- CIR staff will review the information you submit and your request. You will be contacted if more information is needed.
- If you are inquiring about records for more than one individual, please fill out a separate form for each individual.
- For general questions about immunization records, contact NYCvaxrecord@health.nyc.gov.

* Reason for request: (Select all that apply)

You will be able to describe your request in detail later.

- CIR Immunization Record
 Other (please specify)

Pandemic Surge in Demand Exposed Limitations of Manual Systems



The Big Apple is dying. Its streets are empty. Tens of thousands have been plunged into poverty. Our leaders have no plans, no answers. New Yorkers have already learned to socially distance. Businesses can adjust. The elderly

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.

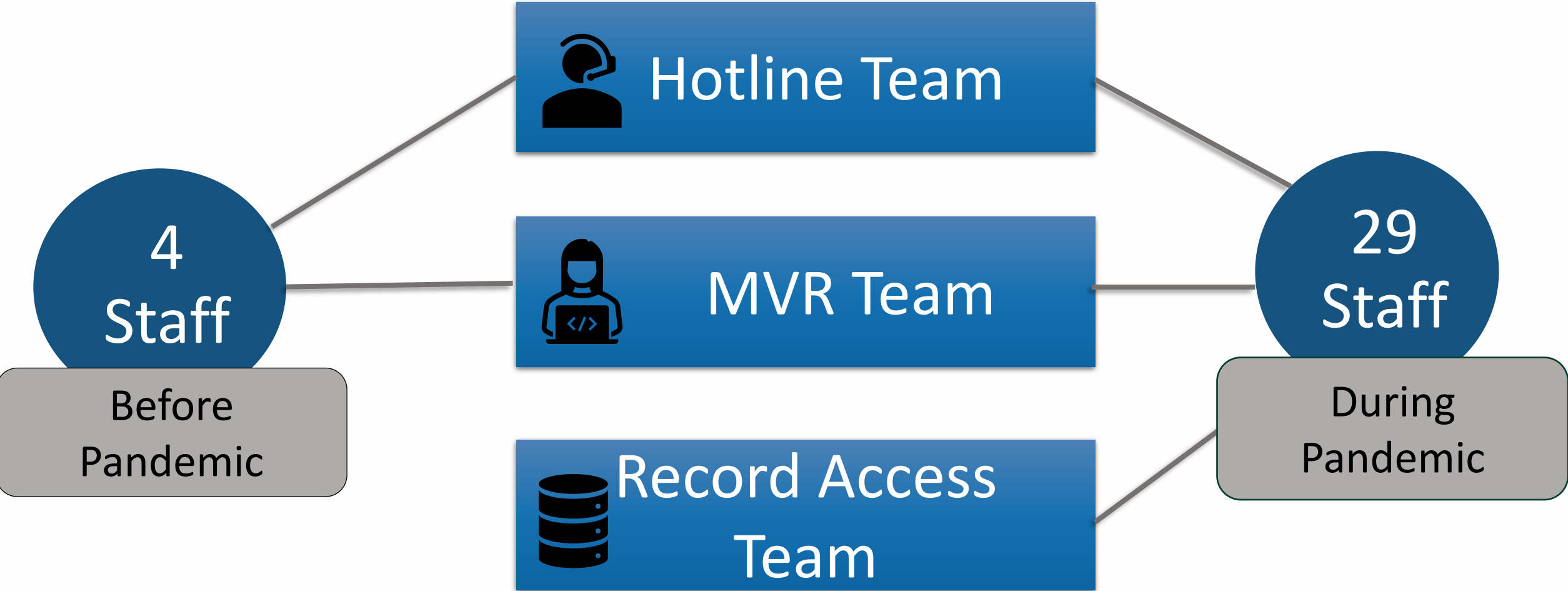
Last Name _____ First Name _____ M

Date of birth _____ Patient number (medical record or ITS record number) _____

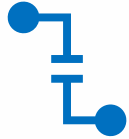
| | Product Name/Manufacturer Lot Number | Date | Healthcare Professional or Clinic Site |
|----------|--------------------------------------|-----------------|--|
| COVID-19 | 1 st Dose | / / mm da yy | |
| COVID-19 | 2nd Dose | / / mm da yy | |
| Other | _____ | / / mm da yy | |
| Other | / | / / mm da yy | |



CIR Frontline Operation Teams



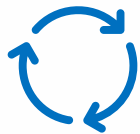
Pandemic Identified Operational Gaps



Fragmented intake channels



Limited performance metrics



Inconsistent assignment workflows



Limited staff for emergency responsiveness

Implement Salesforce as a Centralized Customer Relationship Management Platform to Streamline Operations

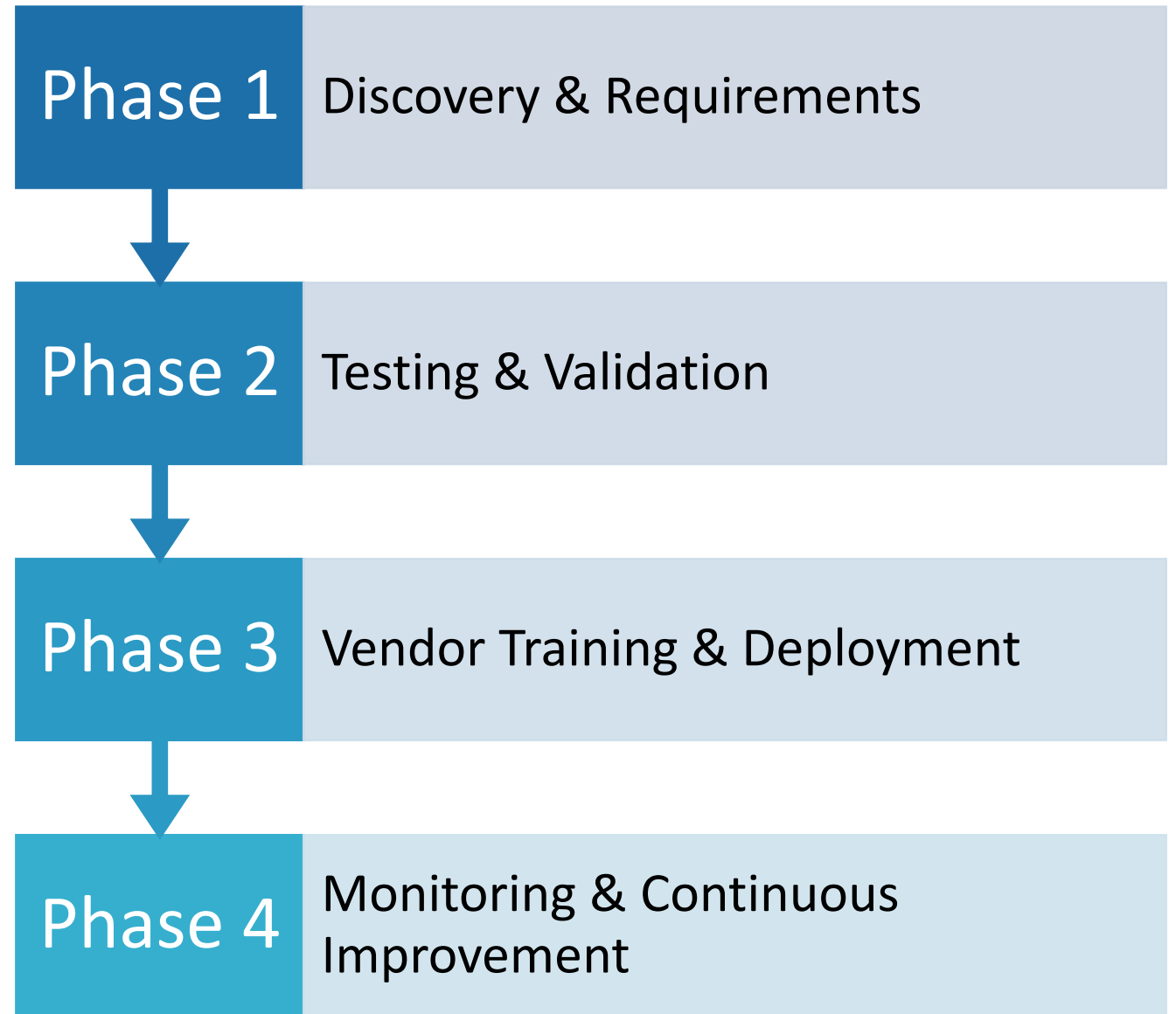
Centralized inquiry intake

Automated case creation

Real-time dashboards

Supervisor management of staff workload

Project Implementation Overview



Phase 1: Discovery and Requirements

- Began October 30, 2024
- Documented existing workflows and operational challenges
- Defined CRM requirements and success metrics
- Identified opportunities to improve case monitoring, reporting, and staff efficiency

Phase 2: Testing and Validation

- Began January 22, 2025
- 11 testing sessions
- Tested system functionality, accuracy, and usability
- Identified issues and refined workflows prior to go-live
- Validated that the system met operational requirements

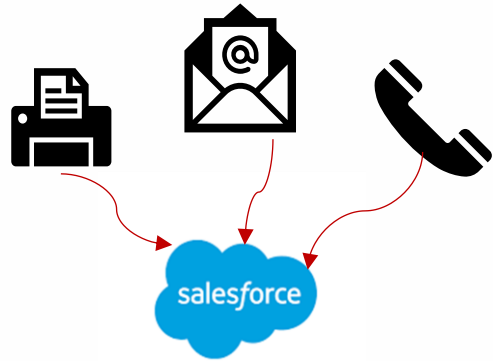
Phase 3: Vendor Training and Deployment

- 3 training sessions for staff prior to go-live
- Deployed February 24, 2025
- Vendor provided post-deployment support and issue resolution
- Monitored early adoption and system performance

Phase 4: CIR Monitoring and Continuous Improvement

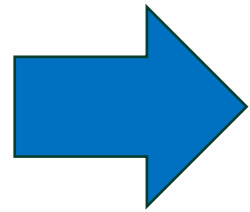
- Began March 2025 and is on-going
- Actively using the system to support daily operations
- Monitoring performance and user adoption in real time
- Reviewing case metrics to identify improvements
- Implementing enhancements based on staff feedback
- Continuously refining workflows and reporting

Case Assignment Workflow (1)



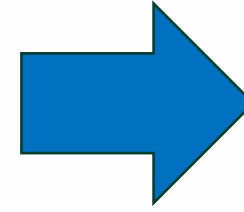
Inquiries Received

- Requests submitted via e-mails, Survey Monkey submission, phone calls, faxes, walk-ins and mailings



Case Creation

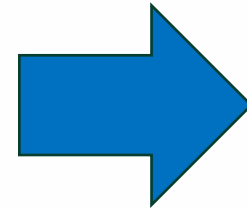
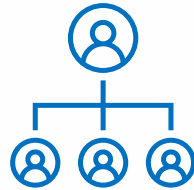
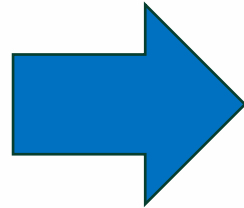
- Salesforce generates a case and captures all details
 - Automated - Email & Survey Monkey
 - Manually added by staff - Phone call, Faxes, walk ins and mailing



Case Routing & Assignment

- Case routed based on inquiry type and assigned to appropriate team

Case Assignment Workflow (2)



Staff Action & Case Updates

- Staff review, act, and document case notes
- Status updated in real time

Supervisor Oversight

- Supervisors monitor queues and staff workload
- Reassign cases as needed to balance workload

Case Resolution & Closure

- Case resolved and closed
- Data captured for reporting and performance monitoring

Manual Case Creation

Case Information

Case Owner
Adrienne Baylor

Case Number

Account/Person
Search Accounts...

Facility Code
This field is calculated upon save

Escalation Reason
--None--

Web Email

Parent Case
Search Cases...

* Case Origin
--None--
[View all dependencies](#)

Priority
Level 1

Case Type
--None--
[View all dependencies](#)

Is Out of State Request

Case Age in Days
This field is calculated upon save

* Status

Cancel Save & New Save

Team-Specific Queues



Cases

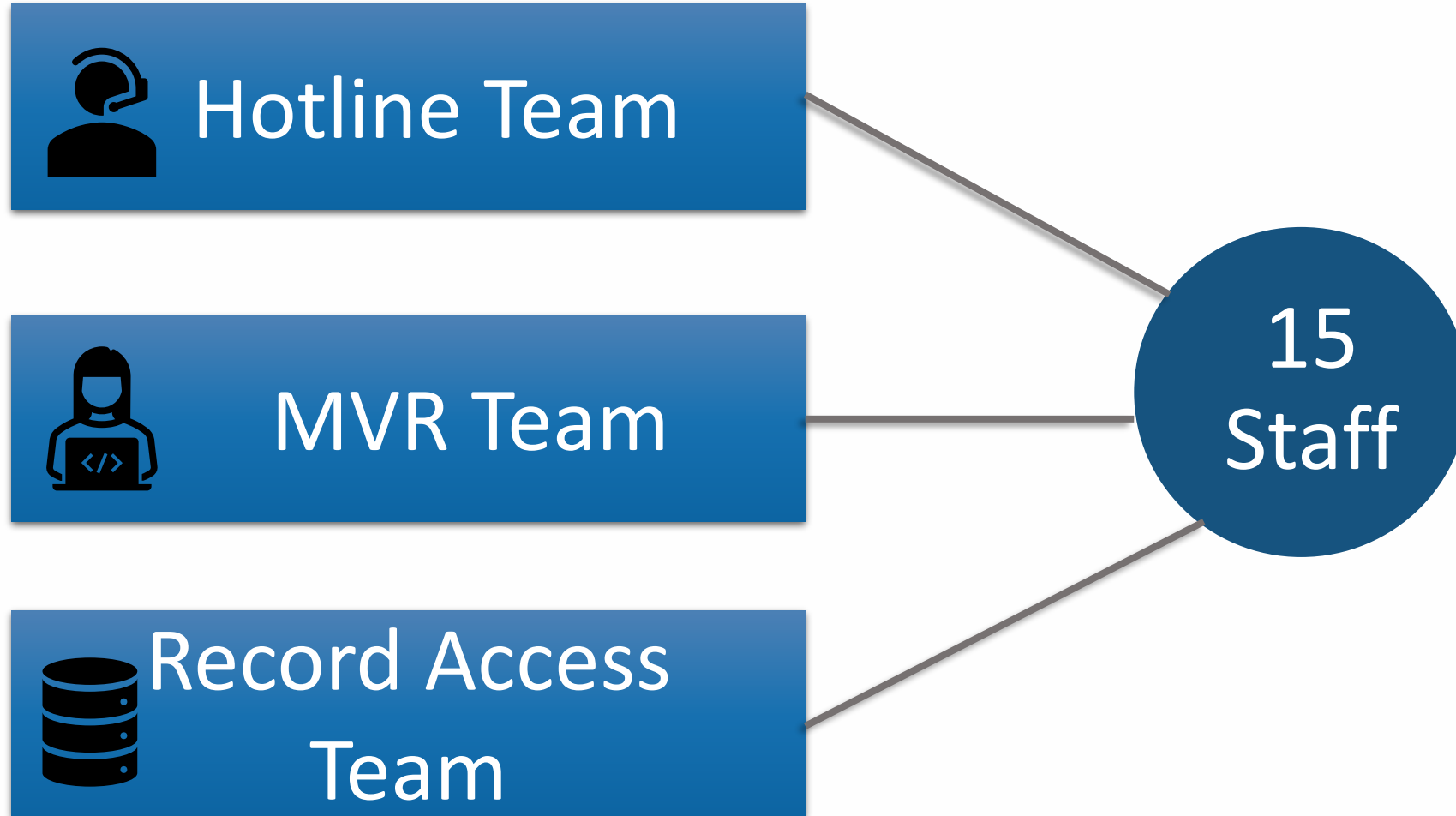
Record Access Queue ▾



16 items • Sorted by Case Age in Days • Filtered by Status • Updated a minute ago

| | <input type="checkbox"/> | Case Number | Date/Time Opened | Priority | Case Origin | Case Age in Days | Status |
|---|--------------------------|-------------|---------------------|----------|--------------|------------------|-------------|
| 1 | <input type="checkbox"/> | 00044881 | 4/11/2026, 10:32 AM | Level 1 | CIR Email | 4 | In Progress |
| 2 | <input type="checkbox"/> | 00045120 | 4/14/2026, 5:57 PM | Level 1 | SurveyMonkey | 1 | New |
| 3 | <input type="checkbox"/> | 00045118 | 4/14/2026, 5:18 PM | Level 1 | CIR Email | 1 | New |
| 4 | <input type="checkbox"/> | 00045107 | 4/14/2026, 3:38 PM | Level 1 | CIR Email | 1 | In Progress |
| 5 | <input type="checkbox"/> | 00045095 | 4/14/2026, 2:36 PM | Level 1 | CIR Email | 1 | In Progress |
| 6 | <input type="checkbox"/> | 00045065 | 4/14/2026, 1:06 PM | Level 1 | CIR Email | 1 | Re-Open |
| 7 | <input type="checkbox"/> | 00045047 | 4/14/2026, 10:54 AM | Level 1 | CIR Email | 1 | In Progress |
| 8 | <input type="checkbox"/> | 00045158 | 4/15/2026, 10:20 AM | Level 1 | CIR Email | 0 | New |

Current CIR Frontline Operation Teams



Metrics & Dashboards

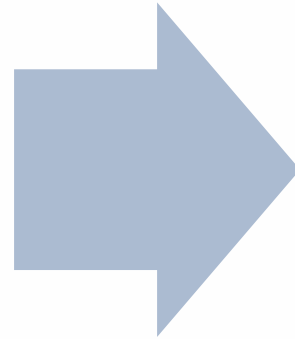
Track & Improve Case Performance

- Monitor case resolution time and backlog
- Identify trends by case type and source
- Measure staff productivity and workload
- Use dashboards for real-time insights and decision
 - *Role-based dashboard views enable staff to track individual performance*

Resolution Time Reduced

Before CRM Platform

- Manual processes slowed response
- High inquiry volume and overload
- Average resolution: 7 days



After CRM Platform

- Streamlined case management
- Improved workflow and monitoring
- Average resolution: 1.08 days

**84.6% reduction in resolution time
following stabilization**

Improved Inquiry Resolution Time

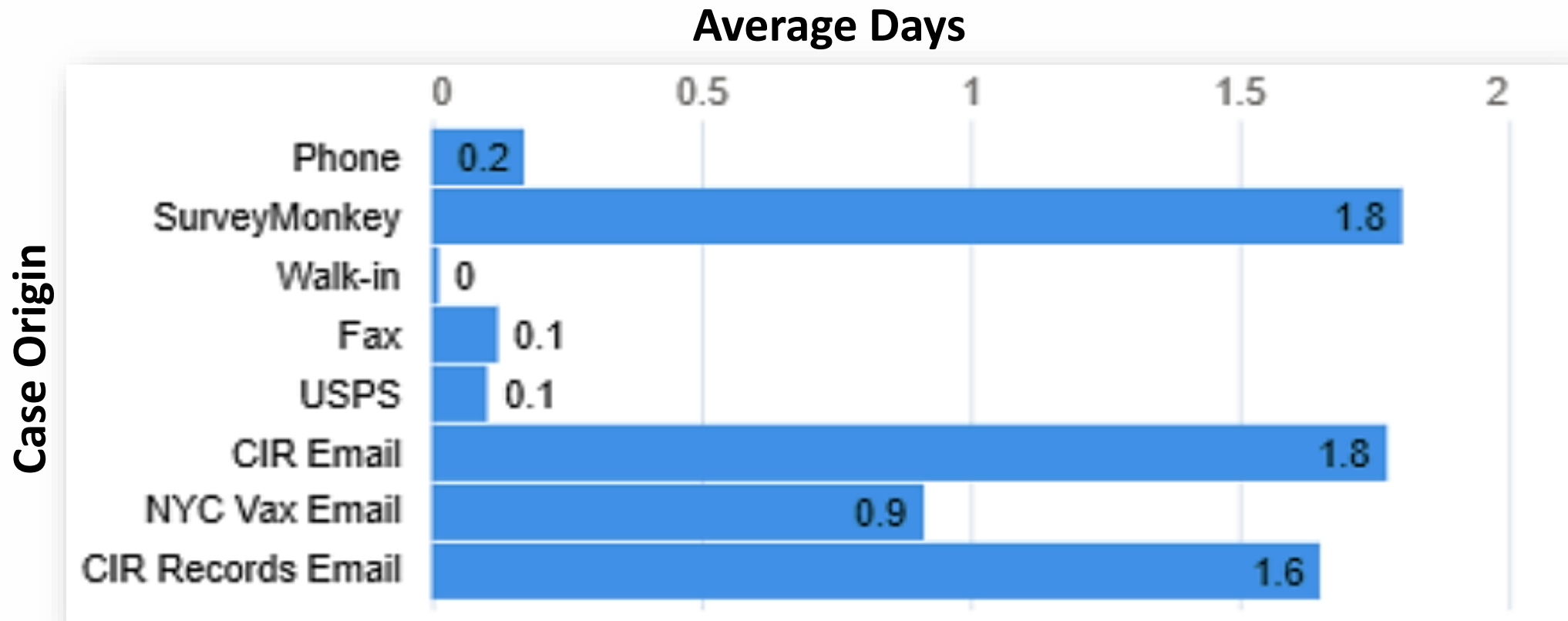
Feb 2025 – Feb 2026

| Total Records | | Average Age | Total closed flag | % closed | |
|--|--------------------|--------------------|-------------------|-------------------------------------|--|
| 34,461 | | 1.077 | 34,457.00 | 99.99% | |
| <input type="checkbox"/> Opened Date ↑ ▾ | Average Age (Days) | Sum of closed flag | Record Count | <input type="checkbox"/> % closed ▾ | |
| <input type="checkbox"/> February 2025 | 3.411 | 582.00 | 582 | 100.00% | |
| <input type="checkbox"/> March 2025 | 1.838 | 2,328.00 | 2328 | 100.00% | |
| <input type="checkbox"/> April 2025 | 1.302 | 2,491.00 | 2491 | 100.00% | |
| <input type="checkbox"/> May 2025 | 1 | 2,315.00 | 2315 | 100.00% | |
| <input type="checkbox"/> June 2025 | 1.473 | 2,209.00 | 2210 | 99.95% | |
| <input type="checkbox"/> July 2025 | 0.983 | 2,766.00 | 2766 | 100.00% | |
| <input type="checkbox"/> August 2025 | 1.185 | 2,855.00 | 2855 | 100.00% | |
| <input type="checkbox"/> September 2025 | 1.007 | 3,377.00 | 3377 | 100.00% | |
| <input type="checkbox"/> October 2025 | 0.968 | 4,218.00 | 4218 | 100.00% | |
| <input type="checkbox"/> November 2025 | 0.787 | 3,758.00 | 3758 | 100.00% | |
| <input type="checkbox"/> December 2025 | 0.818 | 2,994.00 | 2995 | 99.97% | |
| <input type="checkbox"/> January 2026 | 0.775 | 2,555.00 | 2556 | 99.96% | |
| <input type="checkbox"/> February 2026 | 0.824 | 2,009.00 | 2010 | 99.95% | |
| Total | 1.077 | 34,457.00 | 34461 | 99.99% | |

34,457 out of
34,461 inquiries
were resolved with
a 99.99% closure
rate within one day

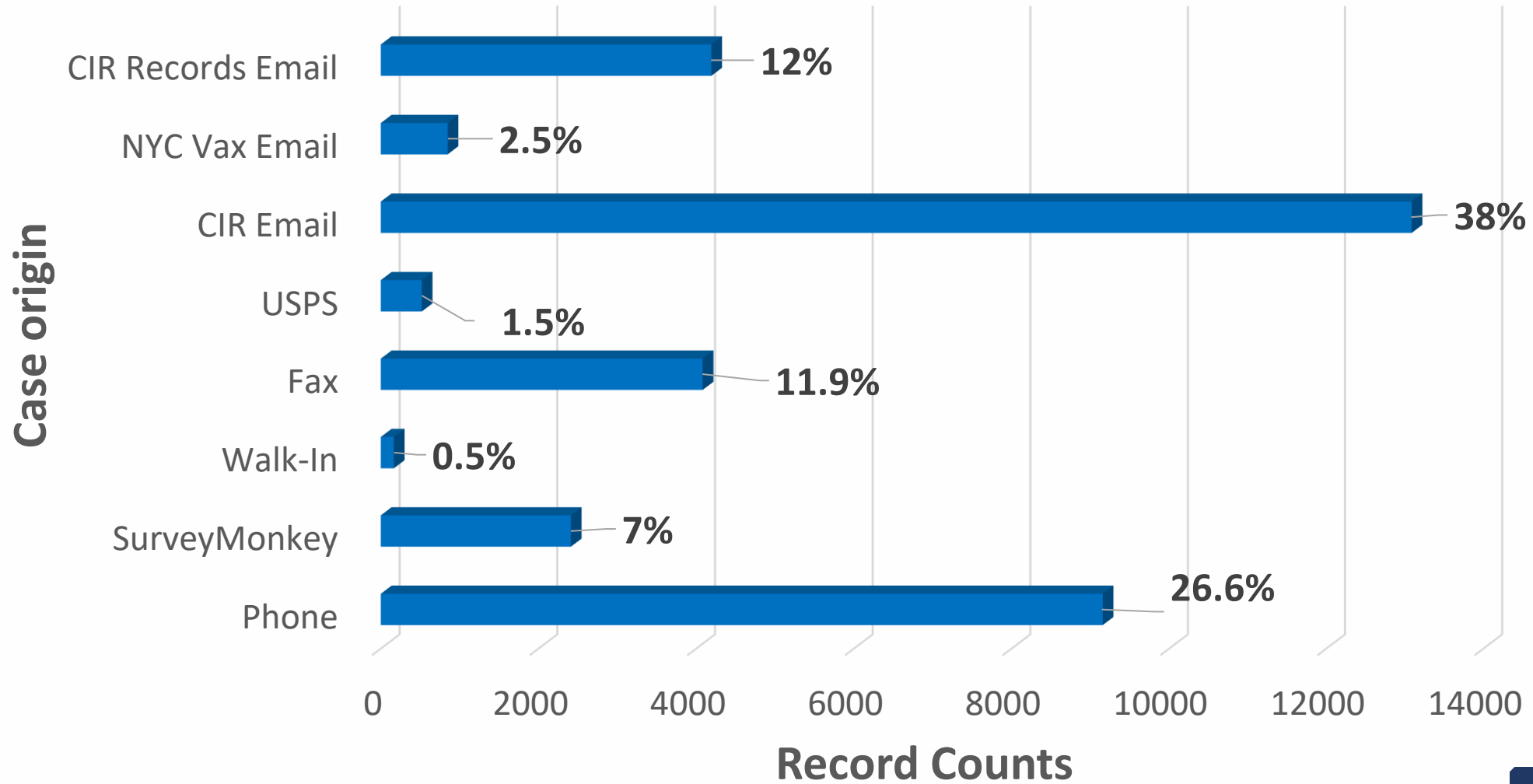
Average Resolution Time by Case Origin

Feb 2025 – Feb 2026



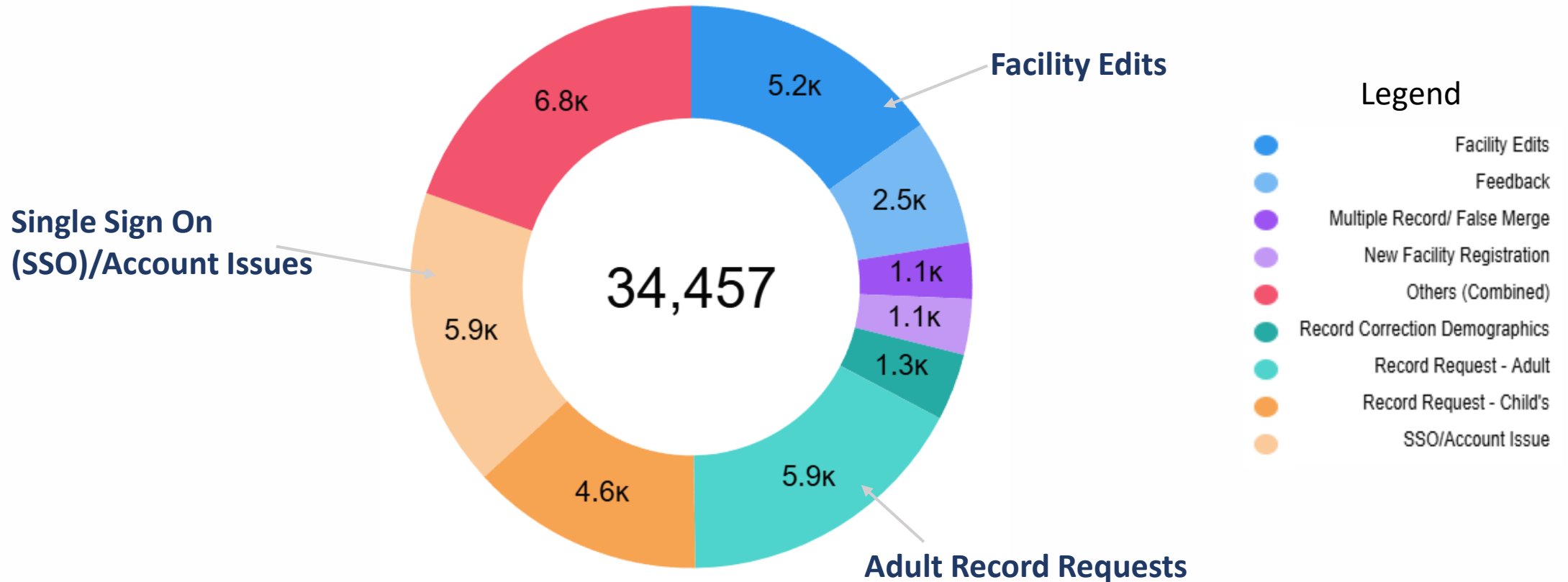
Multi-Channel Inquiries

Feb 2025 – Feb 2026



Top Case Types

Feb 2025 – Feb 2026



Dashboards by Role

Dashboard Name ▾

Executive Dashboard

Hotline Supervisor Dashboard

Record Access Supervisor Dashboard

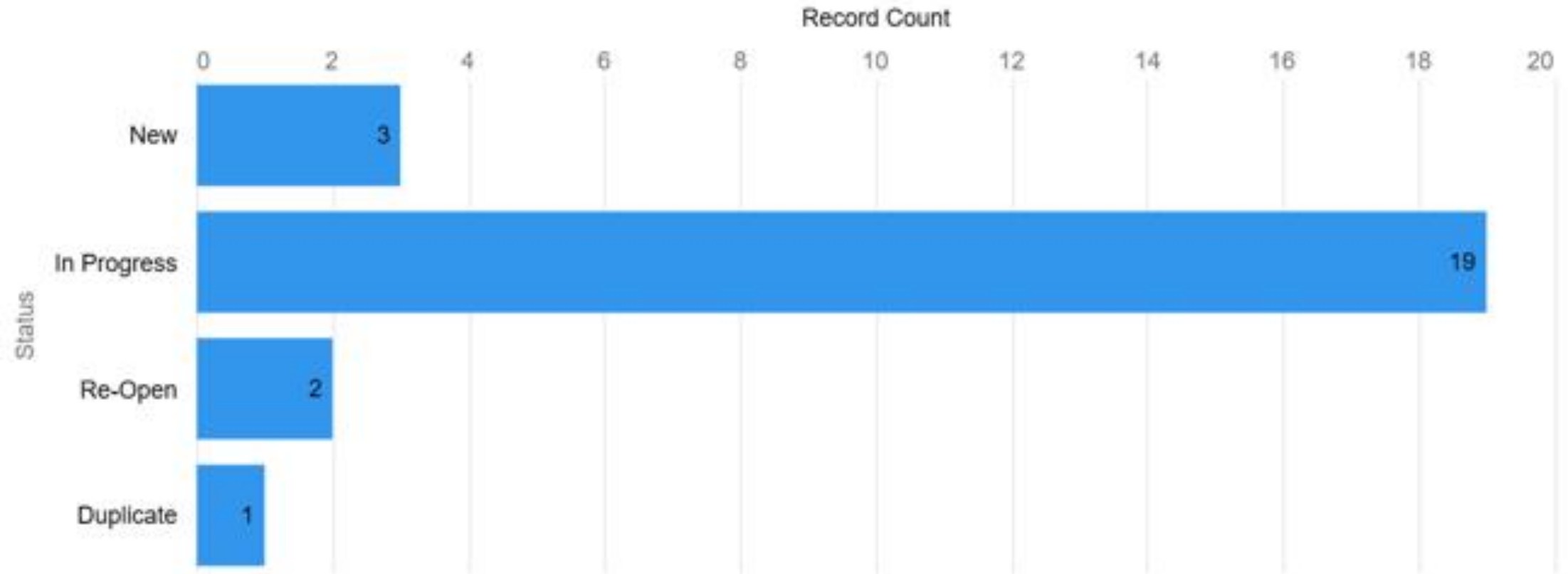
Request Handler Dashboard

MVR Supervisor Dashboard

- **Executive:** High-level oversight of operations
- **Supervisors:** Monitor team performance and workload
- **Staff:** Manage assigned cases and daily tasks

Executive Dashboard

Open Cases by Status



[View Report \(Assigned Cases by Origin\)](#)

As of Apr 14, 2026, 1:01 PM

CRM Generated Reports



Bureau of Immuniz...

Reports



Reports

All Reports

145 items

Search all

| REPORTS | Report Name | Description | Folder | Created By | Created On |
|--------------------|--|-------------|-----------------------------|----------------|---------------------|
| Recent | Activities by Salesperson | | Sales and Marketing Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |
| Created by Me | Age of Cases Currently Open by Type | | Service Dashboards Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |
| Private Reports | Aged Cases by Account | | Service Dashboards Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |
| Public Reports | Aged Cases by Agent | | Service Dashboards Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |
| All Reports | All Open Cases by Queue | | Executive Reports | Wasif Khan | 2/20/2025, 12:39 PM |
| | Assigned Cases by Origin | | Executive Reports | Wasif Khan | 2/20/2025, 12:39 PM |
| FOLDERS | Assigned Hotline Cases by Origin | | Hotline Reports | Wasif Khan | 2/20/2025, 12:40 PM |
| All Folders | Assigned MVR Cases by Origin | | MVR Team Reports | Wasif Khan | 2/20/2025, 12:40 PM |
| Created by Me | Assigned Record Access Cases by Origin | | Record Access Team Reports | Wasif Khan | 2/20/2025, 12:40 PM |
| Shared with Me | Average Case Resolution Time | | Service Dashboards Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |
| FAVORITES | Average Case Resolution Time MTD | | Service Dashboards Reports | Cynthia Boscia | 8/14/2024, 6:11 PM |

Reports: Cases Over 7 Days Old

| Age ↑ | Status | Case Number | Priority | Case Owner |
|-------|-------------|-------------|----------|------------|
| 8 | In Progress | 00043427 | Level 1 | Jane Doe |
| 9 | New | 00043246 | Level 1 | Jane Doe |
| 12 | In Progress | 00043151 | Level 1 | Jane Doe |
| 14 | In Progress | 00042910 | Level 1 | Jane Doe |
| 23 | In Progress | 00042138 | Level 1 | John Doe |
| 26 | In Progress | 00042030 | Level 1 | John Doe |
| 30 | In Progress | 00041436 | Level 3 | John Doe |

Drives accountability by flagging overdue cases for action and escalation

Project Summary

- Built infrastructure to handle high-volume inquiries
- Improved ability to scale operations during future emergencies
- Standardized workflows enable faster response under pressure
- Enhanced visibility supports proactive workload management

CRM Best Practices

Workflow Improvements

- Created a smoother, more organized workflow through the integration of Case Types and Facility Codes.

Case notes, Metrics, Integration of Public Online Forms

- Strengthened the team's ability to assign and follow up on cases efficiently, ensuring nothing falls through the cracks.

Email Templates

- Standardized responses to ensure staff are using consistent, approved messaging.

Global search and linking cases into "Parent-Child" threads

- Links related cases into Parent-Child threads to consolidate interactions from the same inquiry, especially during high-volume events.

CRM Key Lessons Learned (1)

Post Deployment Warranty Support

- The warranty support period was too short and should have been extended by at least two additional weeks.

Rapid User Acceptance Testing (UAT)

- Many staff were new to the CRM, making it difficult to learn the system while simultaneously participating in testing within a short UAT timeline.

Engage frontline staff early

- Develop dashboards that supervisors will actively use.
- Standardize workflows before scaling system use.
- Continuously monitor post-go-live metrics.

CRM Key Lessons Learned (2)



Operational redesign should come before automation



Dashboards promote accountability and improve performance



CRM enhances emergency preparedness and operational resilience



CRM Improved workflow efficiency

Faster response times

Consistently high case closure rates

Stronger IIS operational resilience

Future Developments

- Automated case creation for phone calls
 - Direct integration of call data into Salesforce to reduce manual entry for improved monitoring and efficiency
- Scalability through licensing and system expansion
 - Ability to rapidly increase users and capacity during high-demand events
 - Expand CRM adoption across additional immunization program teams

Thank You

Special thanks to my co-authors and collaborators:

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