

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Health Information Technology Council Meeting

May 7, 2018



Agenda



1. Welcome

Undersecretary Lauren Peters

2. EOHHS ENS Initiative Update

David Whitham

3. Hlway 2.0 Migration Update

Dave Bowditch

4. Hlway Outreach Transition and HAUS Initiative Update

Julie Creamer and Keely Benson

5. Cape Cod Healthcare Use Case Success Story

Darlene Vendittelli, Greg Everson, and Jennifer Bendfeldt

Appendix A: Hlway Operations Update



Welcome

Undersecretary Lauren Peters



EOHHS would like to welcome and thank HIT Council members who have joined since the Council's last meeting

- *Dr. Dicken Ko*
Chief Medical Officer/ Vice-President of Medical Affairs, St. Elizabeth's Medical Center
HIT Council seat: Representative from a community hospital
- *Linda McGoldrick*
CEO and President, Financial Health Associates International
HIT Council seat: Representative with experience or expertise in health information technology
- *Dr. Pramila Yadav*
Private Practice Obstetrics & Gynecology, Beth Israel Deaconess Medical Center
HIT Council seat: Representative from a small physician group practice



EOHHS Event Notification Service (ENS) Initiative Update

David Whitham



ENS Initiative – Request for Responses (RFR) Milestones:

- The RFR was posted to COMMBUYS on February 15
- Questions from potential Bidders were received on March 15
- Seven potential Bidders submitted 48 questions
- Answers were posted in two parts, on April 2 and April 11
- The RFR Bid Opening date was extended to April 27
- EOHHS received 6 Responses that are currently under review

Questions encompassed:

- Administrative aspects of setting up an ADT Repository and an ENS
- Operational and technical inquiries regarding the SaaS platform and housing of the solution
- Policies involving governance and partnering with EOHHS



Answers clarify aspects of the ENS Initiative including:

- The phases of the Initiative
- The centralized opt-in/opt-out mechanism
- The roles and relationships among the participants

Answers to the questions also:

- Promote flexibility in the proposals from potential Bidders
- Highlight future partnership undertakings

The RFR is available on COMMBUYS:

- Bid #: BD-18-1039-EHS01-EHS02-18707
- Hyperlink: <https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-18-1039-EHS01-EHS02-18707&external=true&parentUrl=bid>



ENS Initiative: Anticipated Timeline



First and Second Quarter of Calendar Year 2018:

- Release RFR (**completed**)
- Review Responses
- Select Vendor
- Negotiate Contract

Third and Fourth Quarter of Calendar Year 2018:

- Begin Preparations for Launching the ADT Repository
(includes establishing business processes, testing, and defect remediation)

First Quarter of Calendar Year 2019:

- ENS Soft Launch (repository ready to receive and distribute ADTs)



Hiway 2.0 Migration Update

Dave Bowditch



HIway 2.0

- The HIway team at EOHHS is working closely with Orion Health to implement and operate a new Mass HIway Direct Messaging System, also known as “HIway 2.0”
- HIway 2.0 uses Orion Health Communicate, an EHNAC/DirectTrust accredited, cloud-based, multi-tenant, Software as a Service solution that is an ONC 2015 Edition certified Direct Project, Edge Protocol, and XDR/XDM product
- The upgrade to HIway 2.0 was necessary to leverage the national standards for Direct messaging that didn’t exist when the HIway was launched in 2012, and to make it easier for organizations to connect to the Mass HIway and to other health care organizations via the Mass HIway

Migration Progress Highlights

- The testing team is verifying connectivity to the Clinical Gateway nodes for Public Health Reporting and processes for migrating each connection type (Webmail, Direct XDR, and Connect devices)
- The communications team is preparing the forms and documents required for EHNAC compliant identity proofing of all migrating Participant organizations
- The onboarding team is lining up pilot sites that are willing to step carefully through the migration process and provide feedback to help improve the process as well as the instructions, forms, and other materials prior to their general availability



Migration Activities Timeline

- **Initial Setup & Install – Complete**
 - Connection of EOHHS to Communicate, Orion Health’s EHNAC Accredited platform
 - DirectTrust HISP-to-HISP setup for HIway 2.0 domains and services
- **CG Node Testing and Pilot Participant Coordination – April and May 2018**
 - Clinical Gateway node connection and interoperability testing with Communicate
 - Pilot Participant coordination
 - Specific sites are being identified by the Mass HIway team
 - Pilot Participants will complete registration paperwork
 - The Mass HIway team will configure Pilot Participant connections
 - Mass HIway and Pilot Participants will review test and cut-over plans
 - Early adopter planning: OCHIN, MEDITECH Multi-Recipient Users, etc.



Migration Activities Timeline (continued)

- **Pilot Operations – June and July 2018**
 - Clinical Gateway nodes tested and moved to production
 - Pilot Participant connections tested and moved to production
- **Production Operations – starting August 2018**
 - All new Participants will be onboarded to HIway 2.0
 - Existing Participants will start migrating from HIway 1.0 to HIway 2.0
 - Migrations will take place in waves
 - Migration date will be set when registration and identity proofing is complete
 - HIway 1.0 will continue to operate in maintenance-only mode with no new enhancements or upgrades
- **HIway 1.0 Sunset – 1st Quarter 2019**
 - All existing Participants expected to be migrated from HIway 1.0 to HIway 2.0
 - HIway 1.0 will be decommissioned after all Participant migrations have completed



What Migration to HIway 2.0 means for current Participants

- **New verification and paperwork requirements for LOA 3**
 - Level of Assurance 3 (LOA 3) is the government standard for electronic authentication of identity required for health information exchange
- **Domain names and Direct addresses do not change (unless desired)**
- **Webmail to *Communicate Webmail***
 - Low Participant impact
 - Migration of mailbox data
- **LAND to *Communicate Connect***
 - Device and Usage review (replace old hardware if necessary)
 - Remote login and image update will be more common
- **XDR/XPL to *Communicate Direct XDR***
 - New certificate chain and personal certificate delivery
 - Participant installs certificates on their infrastructure
 - Test in non-production environment may be required



Hiway Outreach Transition and HAUS Initiative Update:

Julie Creamer

Keely Benson, MeHI



New Contract Signed!

EOHHS has signed a new contract with the Massachusetts eHealth Institute (MeHI) to provide outreach and education, account management, and provider consulting services to Mass Hlway Participants

- The selection of MeHI as the new vendor is the result of an open, competitive procurement process that took place over many months
- These services had been provided by the Massachusetts eHealth Collaborative (MAeHC) through March
- The Mass Hlway team at EOHHS is grateful to the MAeHC team for their dedication and hard work and recognizes the team for its significant contribution to the growth of the Mass Hlway over the past 5 years



Vendor Transition and Key Priorities



Vendor Transition Complete

- A smooth transition occurred over the last six weeks and MeHI is fully onboard and assuming all responsibilities as the Mass HIway's vendor

Key Areas of Focus

- The team will focus on the following key areas in the coming year:
 - **HIway Adoption and Utilization Services (HAUS):** Provider Consulting Services aimed at supporting health information exchange among MassHealth ACOs, Community Partners, and Community Service Agencies
 - **HIway Regulations:** Providing subject matter expertise to providers regarding HIway attestation and connection requirements, including the creation of written communication materials, webinars, and in-person presentations
 - **HIway 2.0 Migration Support:** Account Managers will work with EOHHS and Orion Health to ensure a smooth and efficient migration to HIway 2.0. The team will act as a resource for Participants with questions related to the migration. The team also will actively assist the onboarding team with initial and follow up outreach to Participant contacts, as needed.



Highlights

1. The HIway Adoption & Utilization Services (HAUS) initiative (formerly known as the Deep Dive initiative) will be re-aligning its services in the spring of 2018 to support MassHealth's transition to alternative payment models
2. The goal of the initiative is to increase use of Direct Messaging for care coordination purposes and to more closely align these services with the real driver of change in the Health IT space – payment reform
3. Mass HIway is working closely with MassHealth to understand the health information exchange needs of its ACO participants, Behavioral Health and Long Term Services and Supports Community Partners (CPs), and Community Service Agencies (CSAs)
4. Services provided will include technical assessments, end-to-end management of health information exchange projects among multiple trading partners, workflow support, and overall change management
5. Mass HIway also will develop on-demand resources and host events to support efforts to advance care coordination using the Mass HIway



MeHI Background

- **MeHI, the Massachusetts eHealth Institute at the Massachusetts Technology Collaborative, is the designated state agency for promoting Health IT innovation, technology, and competitiveness to improve the safety, quality, and efficiency of health care across the Commonwealth of Massachusetts**
- **MeHI's background and experience with the Mass HIway has paved the way for a smooth transition:**
 - MeHI provided similar services on behalf of the Mass HIway when it was first launched back in 2012 and has continued to support the HIway via the development of its HIE toolkit and its HIway participant trading partner map
 - MeHI has managed numerous grant programs (eQIP and Connected Communities) for Massachusetts healthcare providers to support the adoption of EHR systems, encourage information exchange between regional partners, and to fuel connections to the Mass HIway
 - MeHI's designation as the implementing agency for the Commonwealth's Digital Health Initiative ensures the Mass HIway remains aligned with the rapidly changing HIT landscape



Cape Cod Healthcare Use Case Success Story

Darlene Vendittelli, Executive Director, Information Systems, CCHC

Greg Everson, Senior Manager, Patient Care Systems, CCHC

Jennifer Bendfeldt, Consultant, ECG Management Consulting

Cape Cod Healthcare Connected Communities

May 7, 2018



CAPE COD HEALTHCARE

Project Timeline

Spring 2016

MeHI awarded CCHC a Connected Communities grant.

Summer 2016

ECG worked with CCHC to develop a transformation plan.

Summer 2016

Finalized collaborating partners for implementation.

Summer 2017

Completed activities for milestone two:

- Instituted new processes to send/receive electronic CCDAs through the Mass HIway
- Evaluated opportunities for improving workflows/outcomes
- Developed process improvement plans

Winter 2018

Completed activities for milestone four:

- Monitored transaction performance
- Adjusted workflows as needed
- Developed expansion plans

Summer 2016

CCHC engaged ECG to help manage the project.

Fall 2016

CCHC/ECG assessed over 30 organizations to finalize collaborating partners for the implementation.

Winter/Spring 2017

Completed activities for milestone one:

- Assessed current-state workflows, policies, security, and IT capabilities
- Developed standardized CCDAs, future-state workflows, and testing plans
- Sent test electronic CCDAs through the Mass HIway

Fall 2017

Completed activities for milestone three:

- Implemented process improvement plans
- Established metrics, and developed custom reports to monitor performance

Spring 2018





Invited all stakeholders to a final networking event at CCHC.



Project Participants

22

Coordinating activities between so many different stakeholders and organizations with varying levels of sophistication was one of the most difficult challenges.

Key Stakeholder Groups	
	State agency that promotes improved care through technology; issued Connected Communities
	Includes Cape Cod Hospital and Falmouth Hospital; Connected Communities award recipient
	State agency that facilitates the secure transmission of healthcare data between providers
	Provided strategic advice and managed the Connected Communities project on behalf of CCHC

- The project began with over 30 potential collaborating organizations.
- After careful vetting, CCHC identified 10 collaborating organizations to participate in the use case; however, some organizations needed to enroll in the Mass Hlway or upgrade their technology prior to participating.
- Ultimately the collaborating organizations went live in two separate waves, based on their readiness at the time of the initial evaluation.

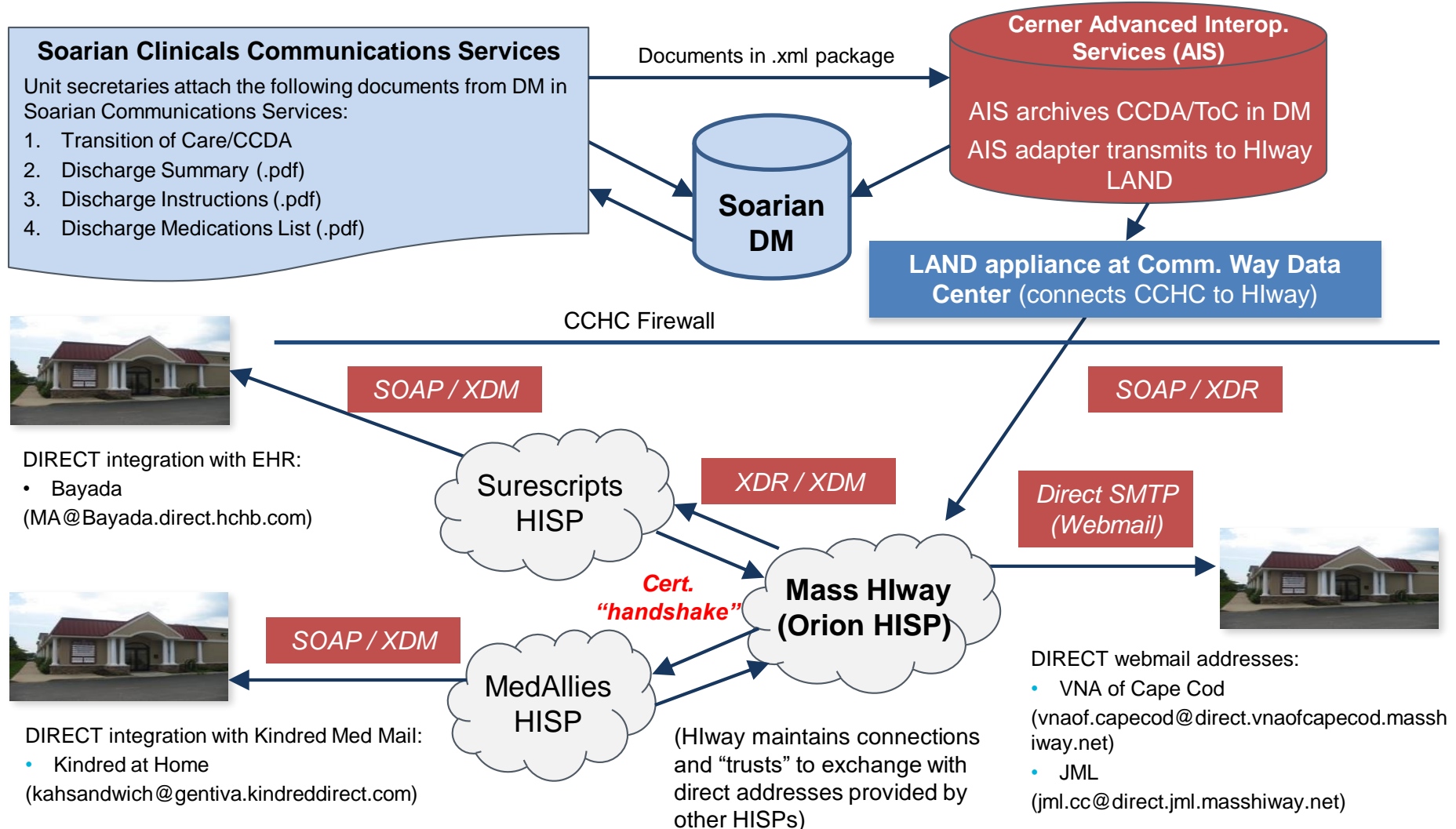
To ensure success, community organizations had to meet a set of criteria to participate as collaborating organizations, including:

- An active Mass Hlway address to exchange information.
- The use of EHR/webmail to send/receive information.
- Willingness to commit resources to testing, training, and go-live support.
- Demonstrated buy-in from providers and staff.

Use Case One: Wave One	Use Case One: Wave Two	Future
<ul style="list-style-type: none"> • JML Care Center • VNA of Cape Cod • BAYADA Home Health • Kindred at Home 	<ul style="list-style-type: none"> • Bourne Manor • Gosnold • Mayflower Place • Pavilion • Windsor 	<ul style="list-style-type: none"> • Royal Cape Cod Rehab & Nursing • Royal of Cotuit • Royal Megansett • Royal Falmouth • Seashore Point • Spaulding Rehab • Wingate at Brewster • Wingate at Harwich



Technical Overview



Outcomes

Organizations used paper-based processes to exchange clinical discharges, which prevented them from being able to track the receipt of exchanged information. Patients were often referred without accompanying discharge documents.

Preimplementation

No Data

	Success Rate
CCHC-Bayada	67%
FH-Bayada	53%
CCHC-JML	83%
FH-JML	76%
CCHC-Kindred	87%
FH-Kindred	88%

74% Discharges Include CCDA

Initial Go-Live

The initial go-live gives provides real-time access to discharge information in CCDA format and established a baseline for tracking how many CCDAs were successfully sent when a patient was discharged from the hospital to a collaborating organization.

CCHC could pinpoint issues preventing CCDAs from being sent successfully and made adjustments to workflows and system logic to increase the likelihood that a CCDA is successfully transmitted at the time of discharge.

Three Months after Go-Live

81% Discharges Include CCDA

100% Discharges Include CCDA

Future Objectives

CCHC will continue process-improvement efforts toward the goal of 100% of discharges that are sent to collaborating organizations having a corresponding CCDA. Efforts will also be made to increase the number of collaborating organizations that can receive electronic CCDAs.

CCHC developed a custom report to track what percentage of patients discharged from CCHC to a collaborating organization had a CCDA successfully sent in advance.



Feedback

- In general, the collaborating organizations understood the value of exchanging information electronically through the Mass Hlway but may not have appreciated the level of effort it takes to implement the automated workflows.
- Many organizations continued to print CCDAs for providers to quickly reference as a temporary step until the structured clinical data could interface directly into their EHRs and/or the providers felt more comfortable using EHRs.
- Limitations in EHR functionality proved to be one of the biggest barriers for all organizations.
- Networking with other similar types of organizations was beneficial, especially for those organizations that have not been heavily reliant on technology in the past.

Since incoming CCDAs through the Mass Hlway do not include the patient's name, staff must open up the documents to identify the patient; it would be nice to eliminate this extra step.

It took time for the providers to adjust to a new way of reviewing summaries.

It can be difficult for staff to adhere to different workflows for different referring organizations during this transitional period.



Key Takeaways/Recommendations

- Ensure there is adequate support/resources allocated to developing future-state design as well as testing, training, and supporting the changes.
- Consider an iterative process to decrease the disruption to operations and staff.
- Take advantage of resources such as MeHi and the Mass Hlway for guidance and as sources for connections.
- Organizations that have not previously been the focus of EHR incentive programs (e.g., MU, PQRS) may require additional effort to upgrade technology and implement IT-centric workflows.
- Ongoing performance improvement should be factored into all future-state designs; workflows should be designed to allow performance to be tracked and reported.
- Technology limitations are common, and organizations should be prepared to work closely with vendors to develop the necessary functionality to support the changes.





Conclusion

Undersecretary Lauren Peters



HIT Council - Meeting Schedule:

- Typically the 1st Monday of every third month
- Meetings are from 3:30 to 5:00 PM unless otherwise noted
- All meetings are at One Ashburton Place, 21st Floor, Boston
- Planned upcoming 2018 meetings:
 - Monday, August 6, 2018
 - Monday, November 5, 2018

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Thank you!



Appendix A: *Hiway Operations Update*



Customer Status Dashboard

(April 20, 2018)



Tier (As of April 2018)	Universe (Est.)	Actively Using	%Actively Using	Connected	%Connected	Enrolled	Tier Total
1a. Large hospitals/Health Systems	37	29	78%	1	3%	4	34
1b. Health plans	9	3	33%	2	22%		5
1c. Multi-entity HIE	11	6	55%	5	45%		11
1d. Commercial imaging centers & labs	5	5	100%	3	60%		8
2a. Small hospitals	51	38	75%	12	24%		50
2b. Large ambulatory practices (50+)	33	18	55%	12	36%		30
2c. Large LTCs (500+ licensed beds)	8	1	13%		0%		1
2d. Ambulatory Surgical Centers	63		0%	1	2%		1
2e. Ambulance and Emergency Response	39		0%		0%		0
2f. Business associate affiliates	5	1	20%	1	20%		2
2g. Local government/Public Health	8	1	13%	7	88%		8
3a. Small LTC (<500 licensed beds)	310	41	13%	37	12%		78
3b. Large behavioral health (10+ licensed providers)	14	3	21%	12	86%		15
3d. Large FQHCs (10-49)	30	18	60%	6	20%		24
3e. Medium ambulatory practices (10-49)	365	60	16%	22	6%		82
4a. Small behavioral health(<10 licensed providers)	90	8	9%	18	20%	1	27
4b. Home health, LTSS	149	29	19%	40	27%	4	73
4c. Small FQHCs (3-9)	29	5	17%	1	3%		6
4d. Small ambulatory practices (3-9)	1595	182	11%	119	7%	1	302
5a. Very Small ambulatory practices (1-2)	4010	282	7%	287	7%	4	573
Grand Total	6861	730	11%	586	9%	14	1330



HIway Participation

January 21-April 20, 2018



17 New Participation Agreements

BayPath Elder Services, Inc.
Boston Dermatology and Laser Center
Boston Home Health Aides, LLC
Boulevard Medical Group
Care Navigator
Frank X. Pedlow Jr, MD, PC
George H. Theodore, MD, PC
Greater Springfield Senior Services, Inc.
Heritage Dialysis Center, LLC
Joan R. Golub, MD
John Siliski, MD
Mark Vonnegut, MD, PC, dba MVPediatrics
Orthopedic Associates
Ralph Metson, MD
Shaila Associates Diagnostic



Hiway Connections

January 21-April 20, 2018



21 New Connections

A Quality Home Care, Inc.
Alternative Home Health Care, LLC
Amherst Pediatrics
Asthma & Allergy Affiliates, Inc.
BayPath Elder Services, Inc.
Boston Dermatology and Laser Center
Boston Home Health Aides, LLC
Frank X. Pedlow Jr, MD, PC
George H. Theodore, MD, PC
Joan R. Golub, MD
John M. Siliski, MD
Levinson Harris Medical Group
Mark Vonnegut, MD, PC, dba MVPediatrics
Orchard Healthcare
Orthopedic Associates
Ralph Metson, MD
SMART
Urology Consultants of the N. Shore, Inc.
West Cambridge Pediatric & Adolescent Medicine, PC
Weston Pediatric Physicians, PC
Women's Health Associates / Obstetrics-Gynecology
+ 6 Non-Participant Organizations



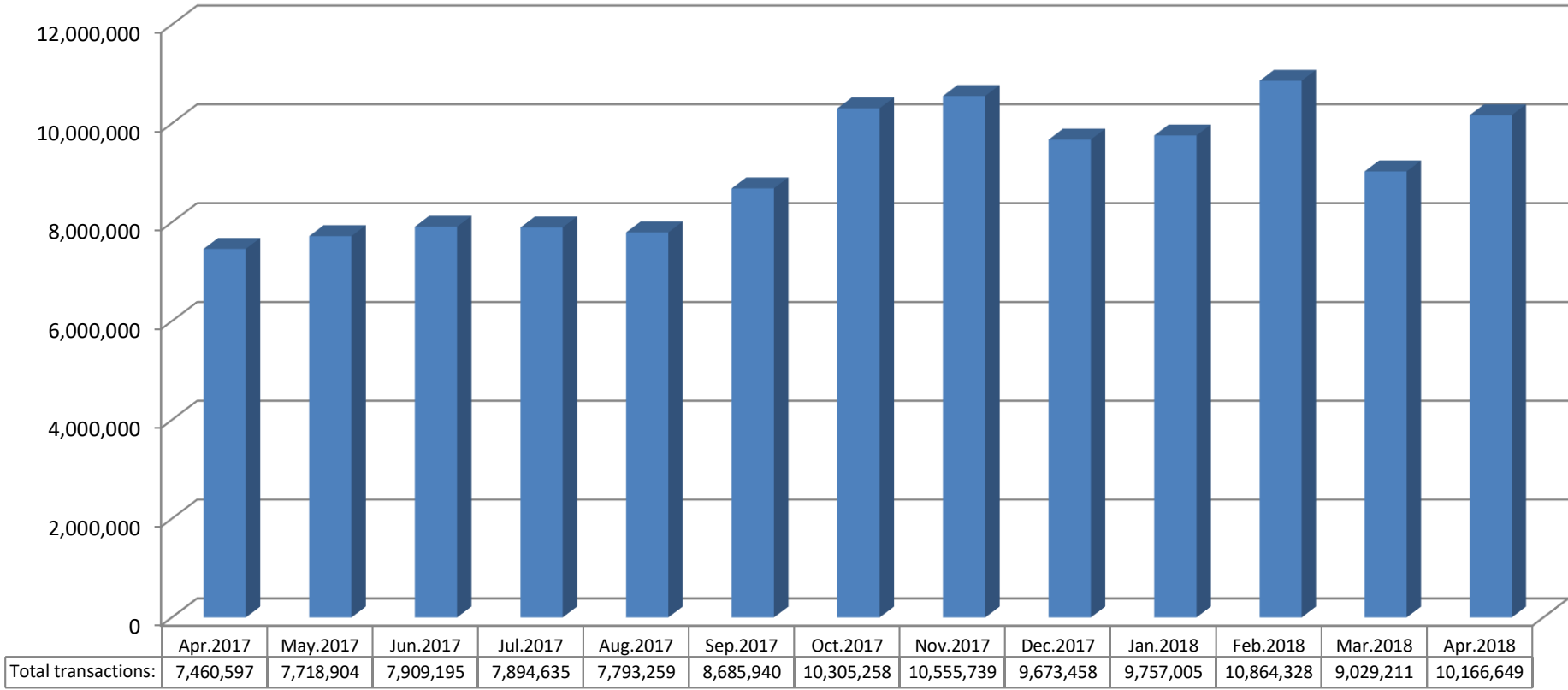
HIway Transaction Activity



13 Month HIway Transaction Activity

10,166,649 Transactions* exchanged in April (03/21/2017 to 04/20/2018**)

237,454,255 Total Transactions* exchanged inception to date



* Note: Includes all transactions over Mass HIway, both production and test

34 ** Note: Reporting cycle is through the 20th of each month.

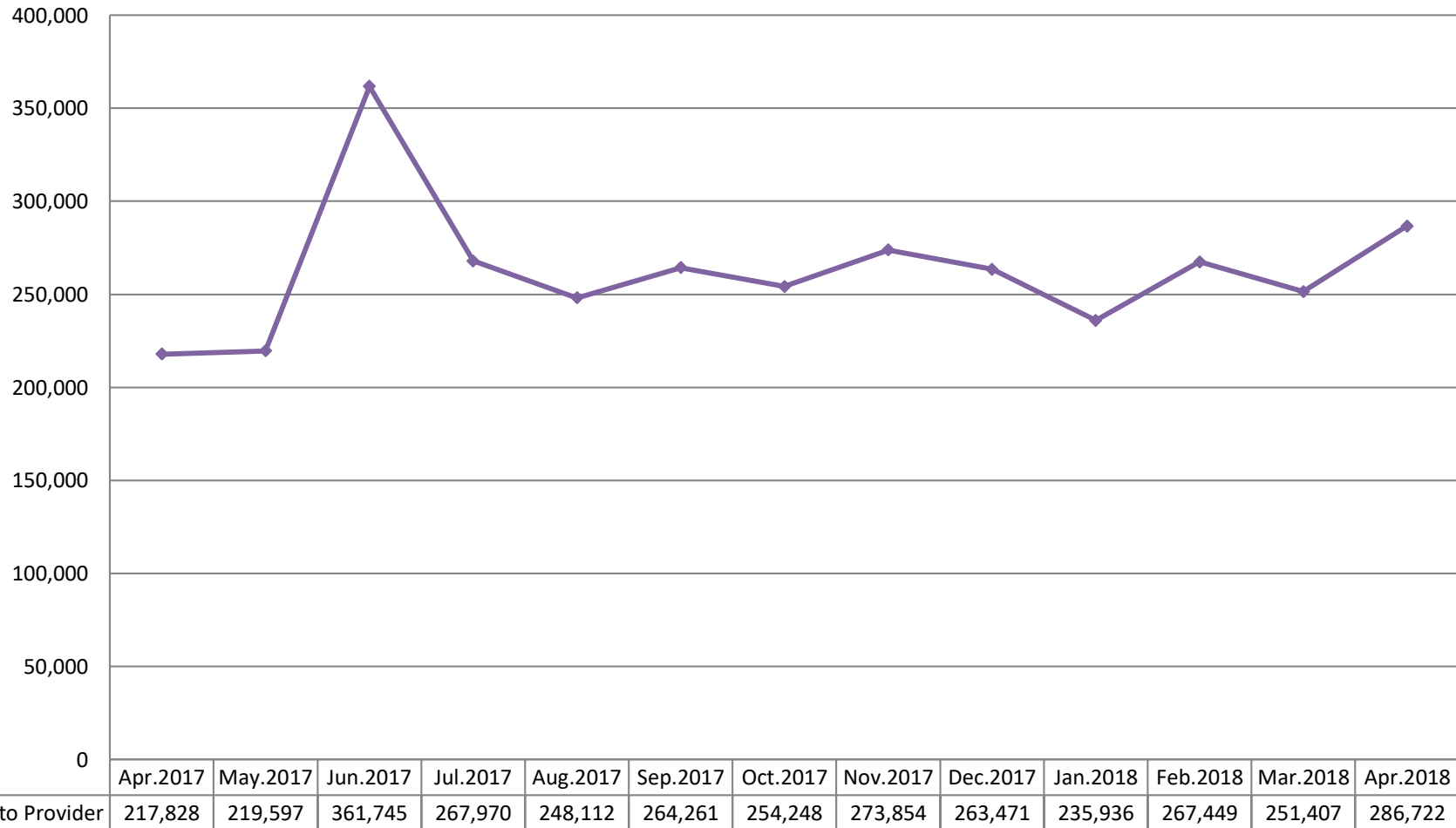


HIway Transaction Analysis



HIway Production Transaction Trends – Provider to Provider (Apr 2017 – Apr 2018)

3% of HIway activity in April* was for Provider to Provider transactions



* Note: Reporting cycle is through the 20th of each month.

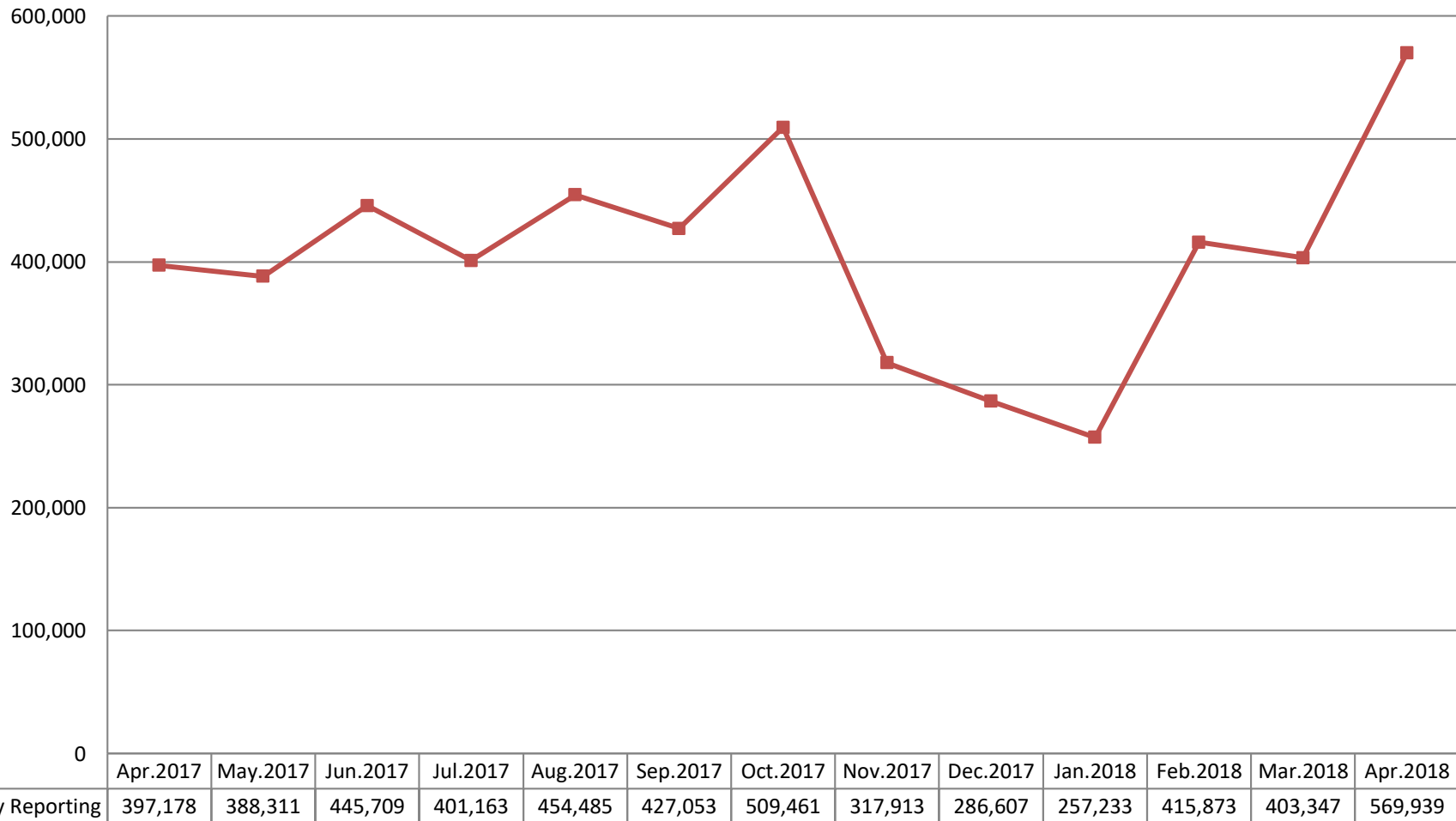


HIway Transaction Analysis



HIway Production Transaction Trends – Quality Reporting (Apr 2017 – Apr 2018)

5% of HIway activity in April* was for Quality Reporting transactions



* Note: Reporting cycle is through the 20th of each month.

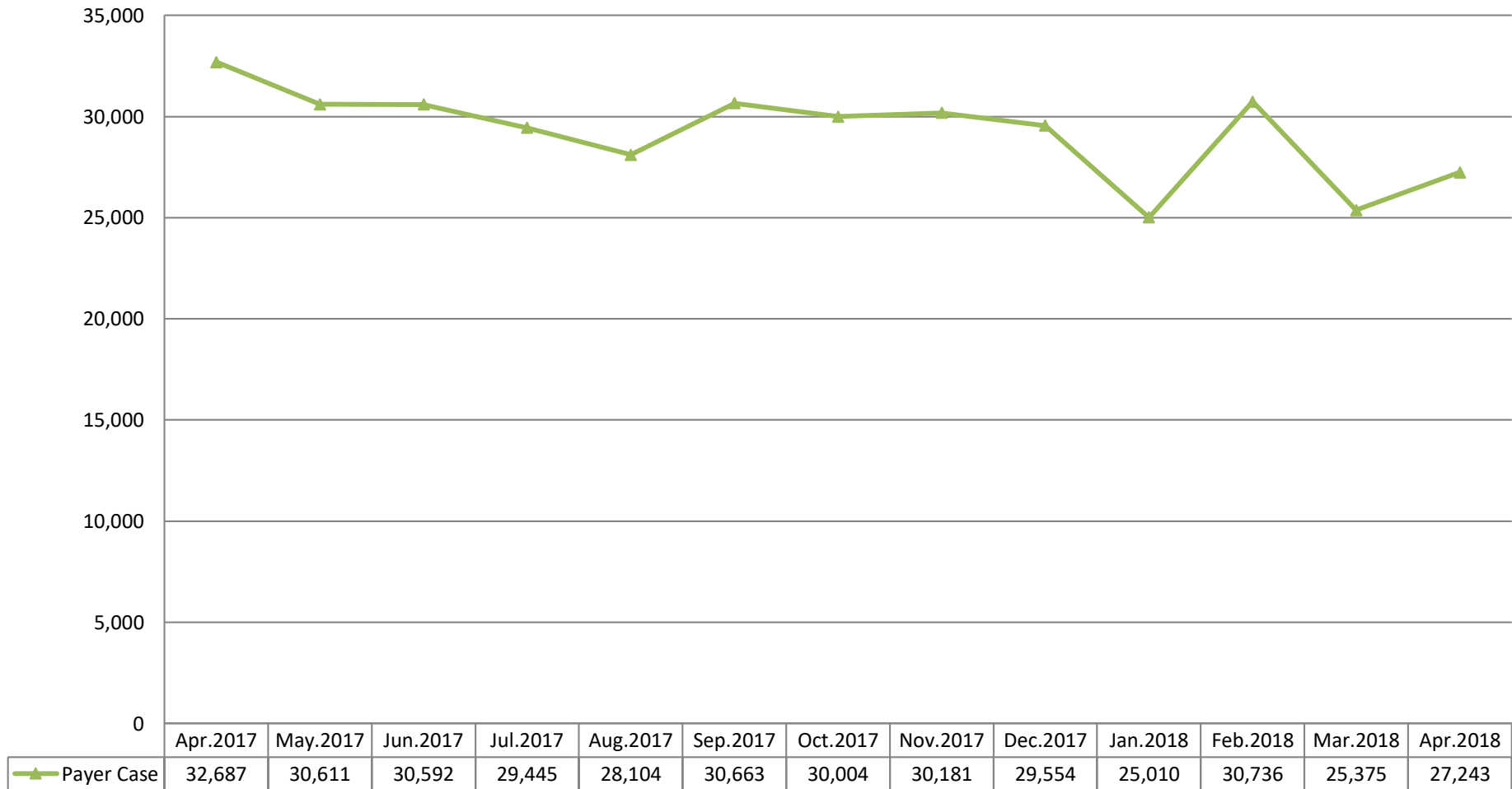


HIway Transaction Analysis



HIway Production Transaction Trends – Payer Case Management (Apr 2017 – Apr 2018)

< 1% of HIway activity in April* was for Payer Case Management transactions

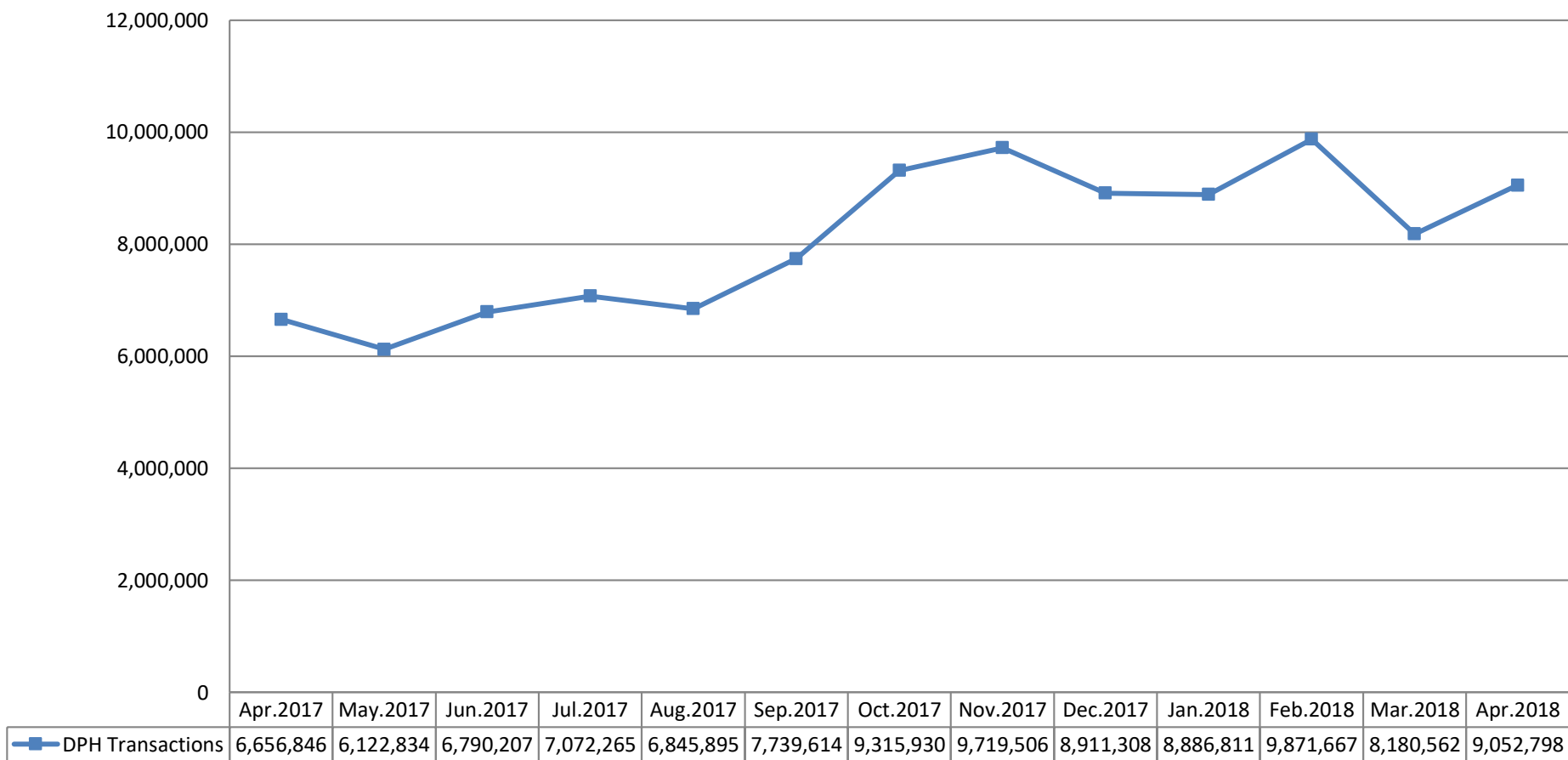




HIway Production Transaction Trends – Public Health Reporting (Apr 2017 – Apr 2018)

91% of HIway activity in April* was for Public Health Reporting transactions.

These Public Health transactions are analyzed by application on the following slides.



* Note: Reporting cycle is through the 20th of each month.

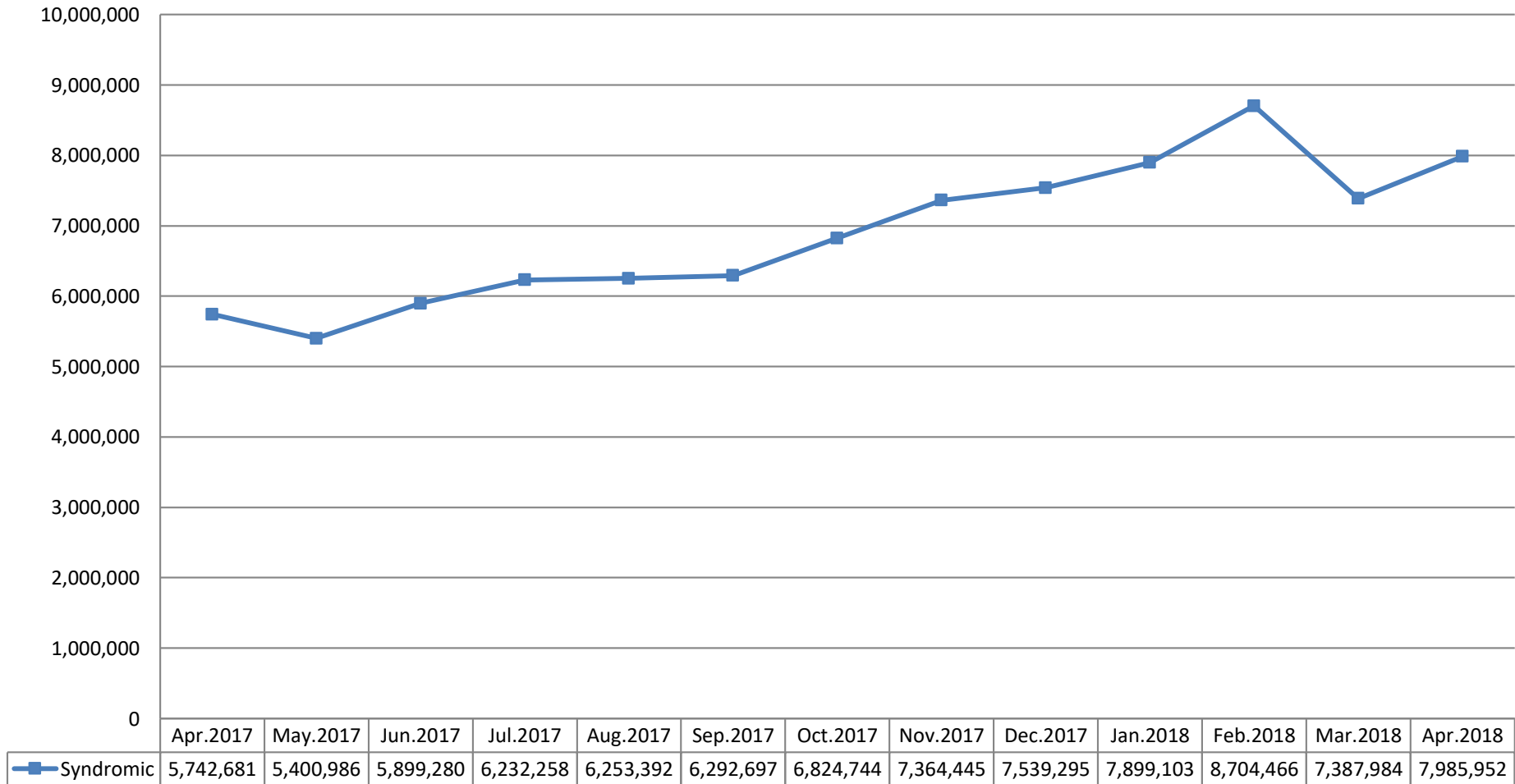


Transaction Analysis – Detail



Public Health Reporting – Analysis by Application (Apr 2017 – Apr 2018)

Syndromic Surveillance Transactions



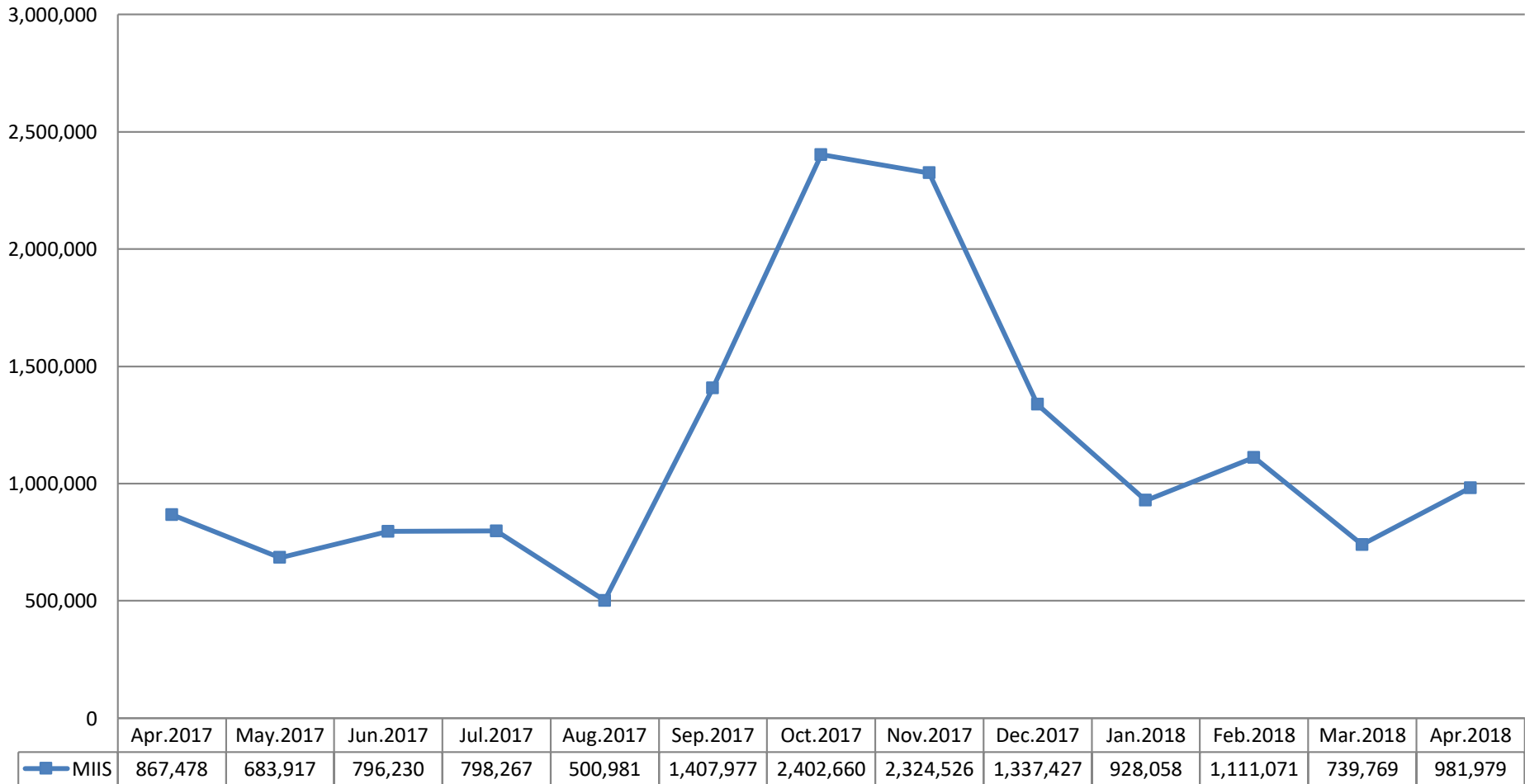


Transaction Analysis – Detail



Public Health Reporting – Analysis by Application (Apr 2017 – Apr 2018)

Immunization (MIIS) Transactions



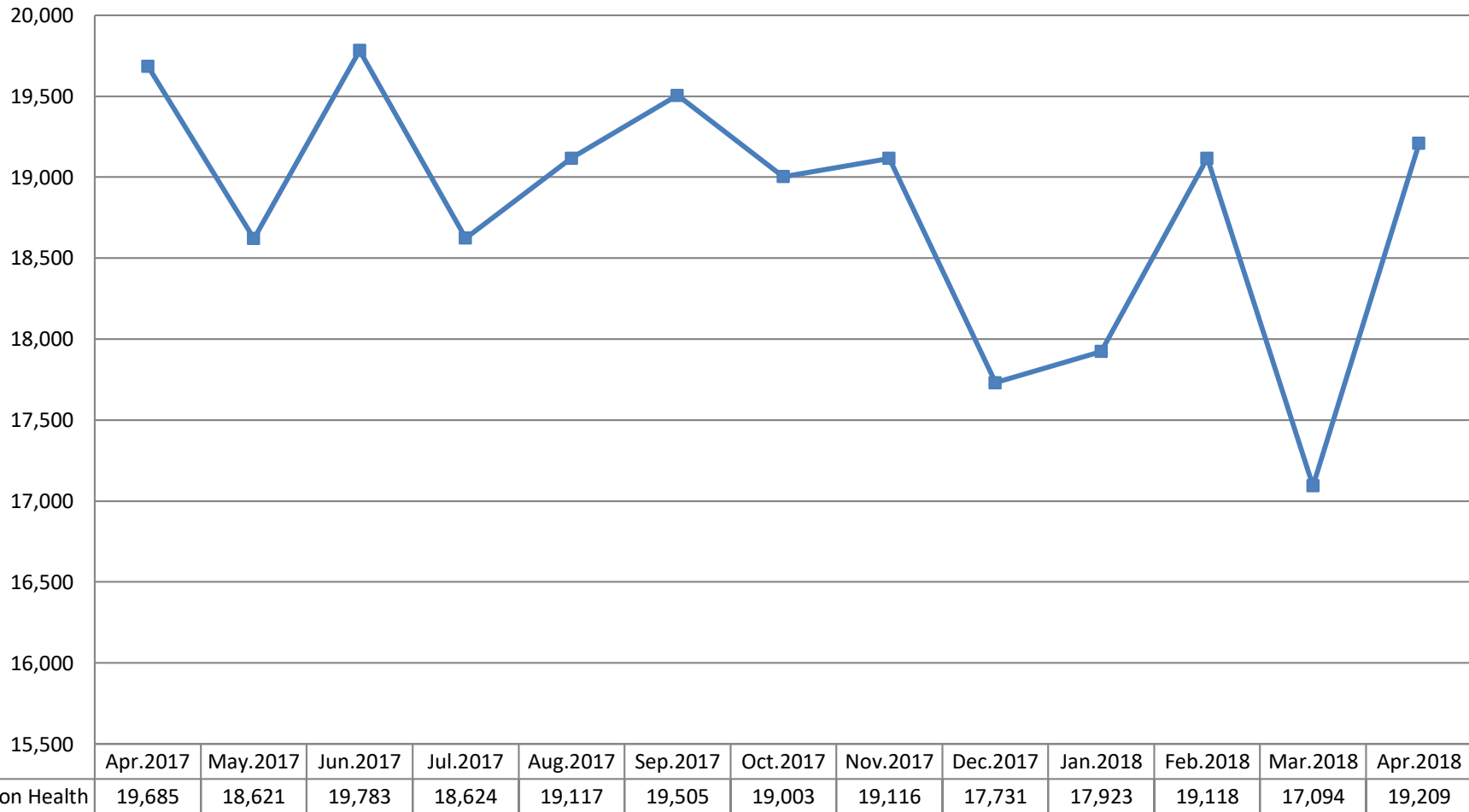


Transaction Analysis – Detail



Public Health Reporting – Analysis by Application (Apr 2017 – Apr 2018)

Boston Public Health Commission Transactions



* Note: Reporting cycle is through the 20th of each month.

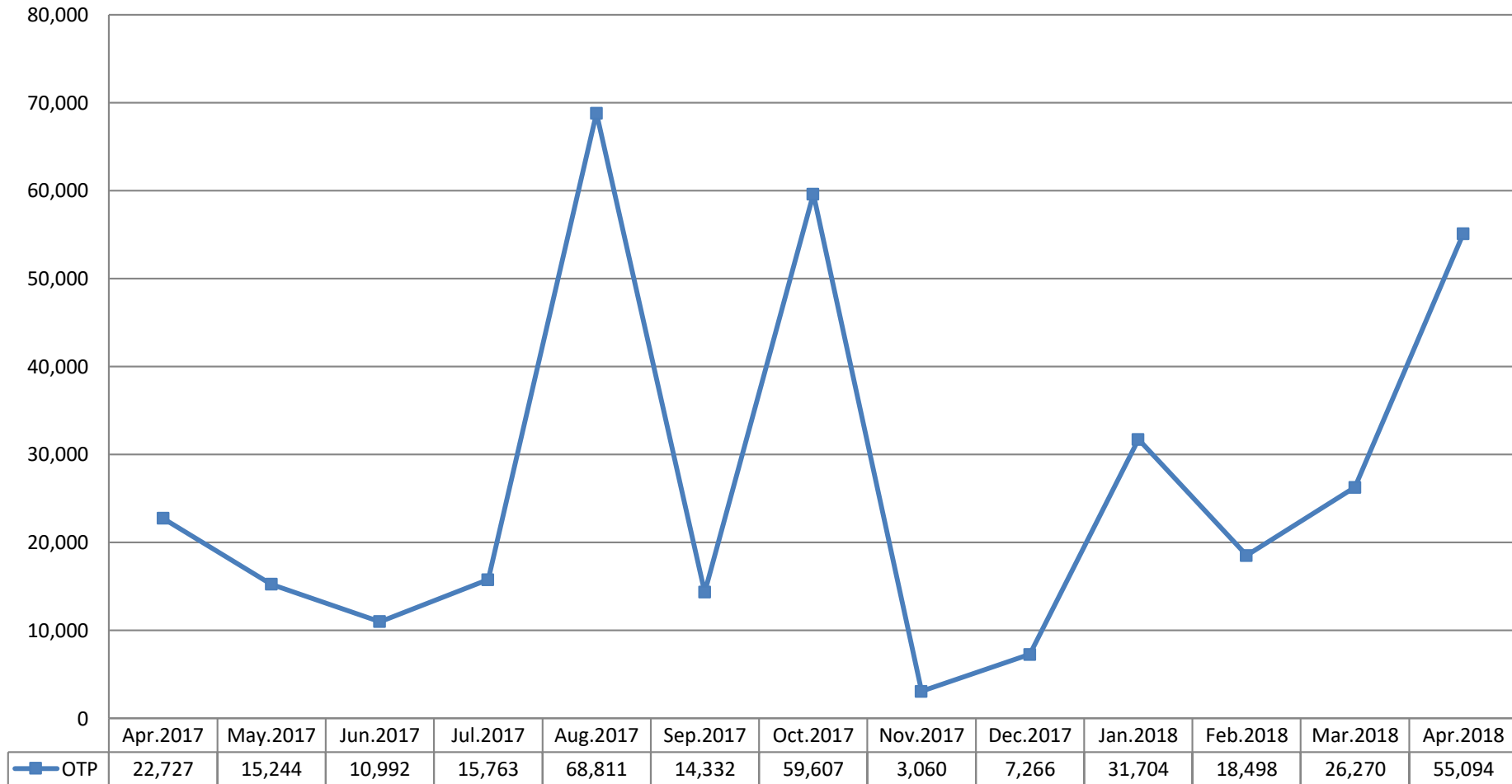


Transaction Analysis – Detail



Public Health Reporting – Analysis by Application (Apr 2017 – Apr 2018)

Opioid Treatment Program (OTP) Transactions



* Note: Reporting cycle is through the 20th of each month.

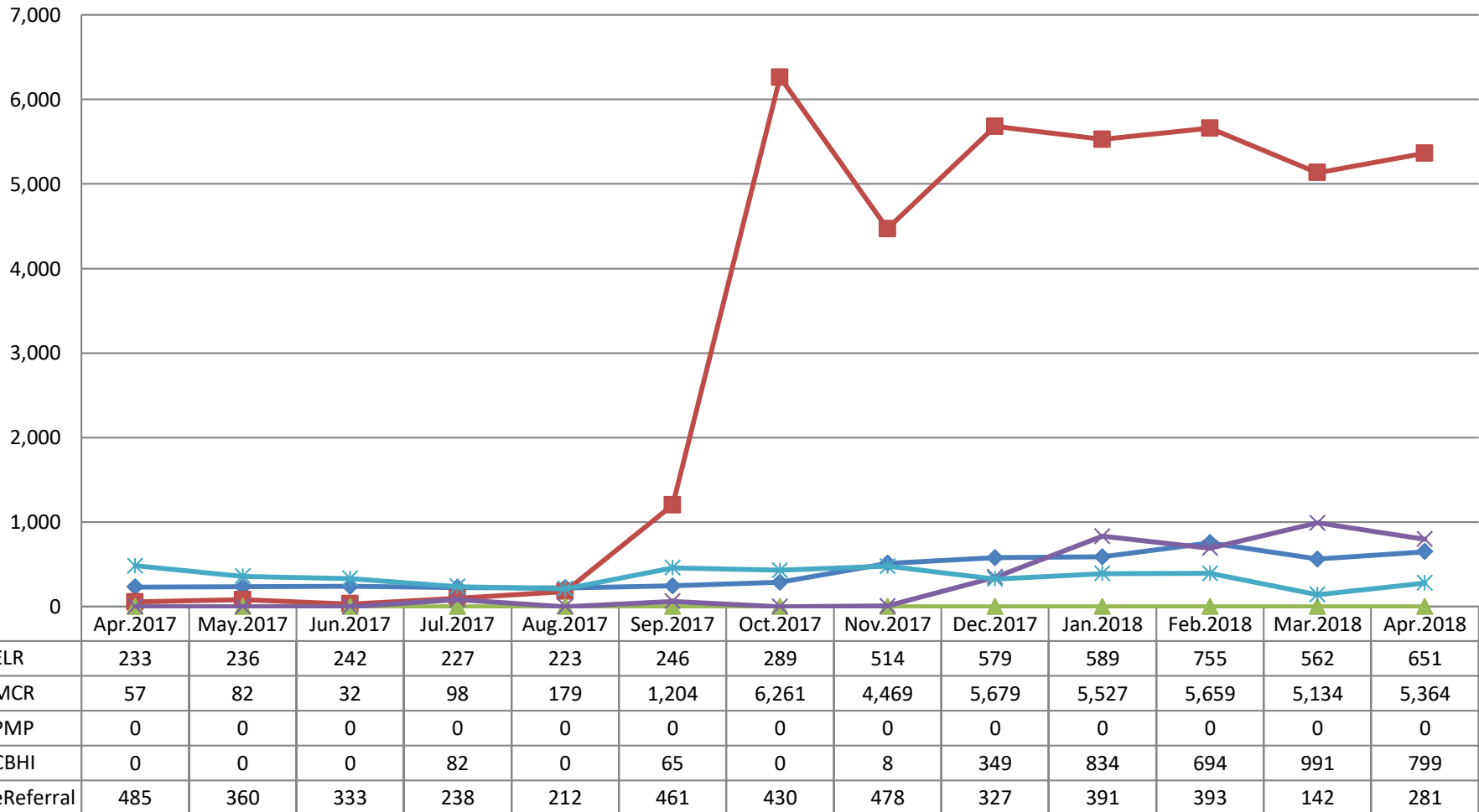


Transaction Analysis – Detail



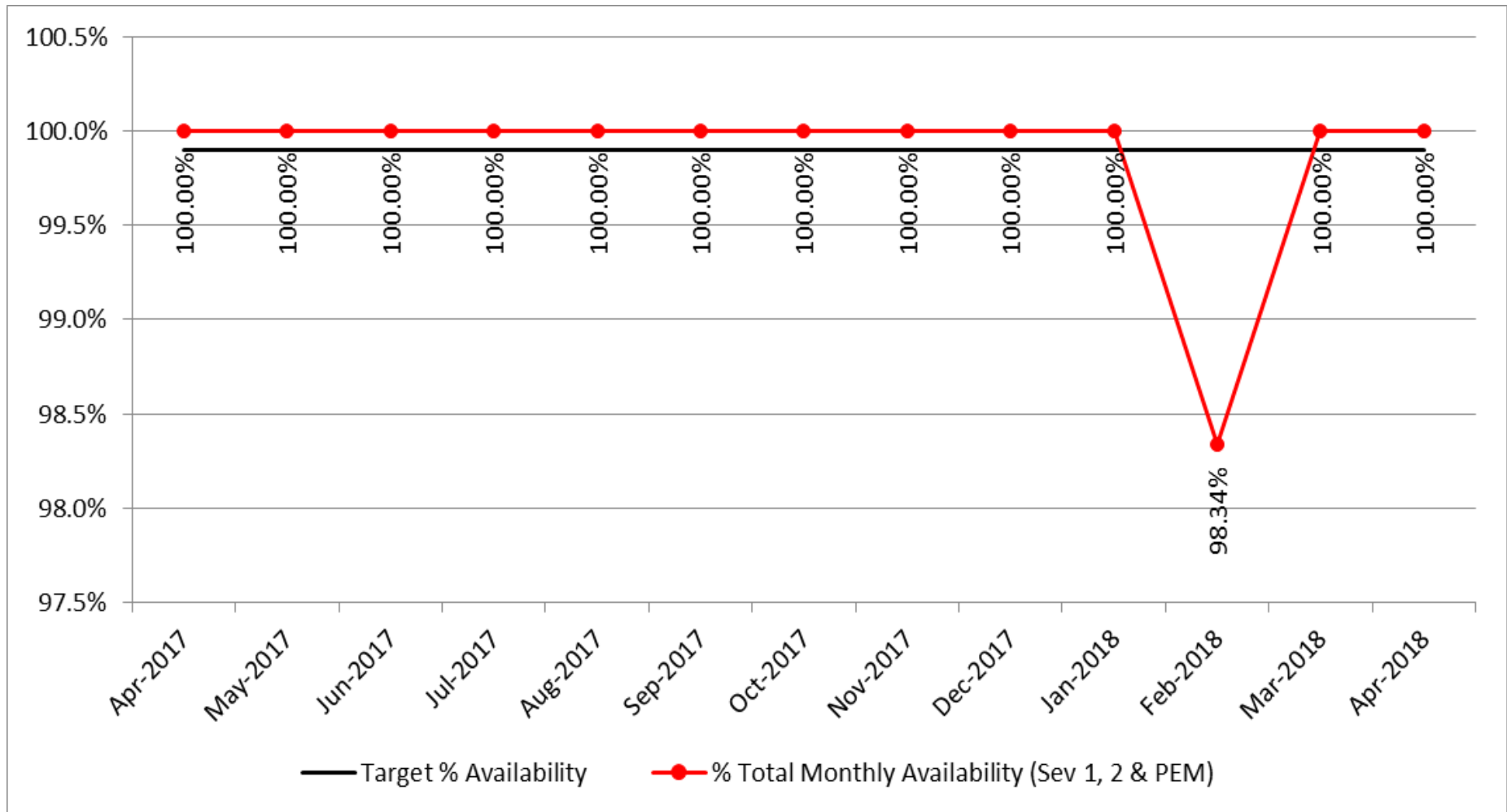
Public Health Reporting – Analysis by Application (Apr 2017 – Apr 2018)

Other Public Health Transactions





13 Month HIway Availability Trends



Metric Targets:

- “Total Monthly Availability” – no lower than 99.9% (downtime no more than ~44 minutes/month)