

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Health Information Technology Council Meeting

May 8, 2017



1. **Welcome** – *Alice Moore*
2. **HIway Regulations Update** – *Michael Chin*
3. **HIway Strategy Update** – *David Whitham, John Gilbert, Gary Sing*
 - *Event Notification Service*
 - *HIway Adoption and Utilization Services (HAUS)*
 - *Implementing the new Mass HIway Direct Messaging System*
4. **Conclusion** – *Alice Moore*

Appendix A: *Supporting information for the HIway Strategy Update*

Appendix B: *HIway Operations Update*



Hiway Regulations Update

Michael Chin



Mass Hlway Regulations: Update



- At the February 6, 2017 HIT Council meeting, EOHHS provided an overview of the feedback and testimony from the public comment period and public hearing .
- **The Mass Hlway Regulations took effect on February 10, 2017**
- **In March 2017, EOHHS and the Mass Hlway released the following supporting documents related to the Mass Hlway Regulations:**
 - Mass Hlway Regulations Summary
 - Mass Hlway Regulations FAQs
 - Mass Hlway Fact Sheet for Patients
 - Mass Hlway Policies & Procedures (version 3)



Year 1 Attestation Form: Who, When, How



- **Who & When:** Provider organizations that have Hlway connection dates that are specified in the regulations are required to submit a Year 1 Attestation Form by July 1st after their initial Hlway connection requirement.

Provider Organization	Date of the “Year 1” Hlway connection requirement	Due date of the Year 1 Attestation Form
Acute Care Hospitals	February 10, 2017	July 1, 2017
Large and Medium Medical Ambulatory Practices	January 1, 2018	July 1, 2018
Large Community Health Centers	January 1, 2018	July 1, 2018
Small Community Health Centers	January 1, 2019	July 1, 2019

- **How:** Year 1 Attestation Forms should be submitted to the Mass Hlway (via email at: MassHlwayAttestation@state.ma.us)
- The Year 1 Attestation Form (and instructions) are available on the [Mass Hlway web page](#).



Year 1 Attestation Form: What



The Year 1 Attestation Form is two pages long, and will be used by provider organizations that have a Hlway connection requirement date. The form will provide information about how the organization met the requirement, their EHR (if they have one), and how they connect to the Mass Hlway.

The Year 1 Attestation Form collects the following information:

1. How the organization met the Year 1 Hlway connection requirement:

- **The Year 1 requirement:** To send or receive Hlway Direct Messages for at least one use case (The use case may be within any category of use cases)
- **Questions on the attestation form include:**
 - The use case is within what category of use cases?
Categories include: (1) Provider-to-Provider Communications, (2) Payer Case Management, (3) Quality Reporting, (4) Public Health Reporting, (5) Other
 - Describe the use case
 - Approximate # of Hlway Direct Messages per month for the use case

2. Describe whether or not the organization has an EHR (and if so, how does it connect to the Hlway):

- **Questions on the attestation form include:**
 - Name and version of the EHR?
 - Is the EHR an ONC Certified Health IT Product?
 - How is the organization connecting to the Hlway?
Options include: (1) EHR directly to Hlway, (2) EHR via a HISP, or (3) via Mass Hlway webmail



The Attestation Forms for Years 2, 3 and 4 are forthcoming and will collect information regarding the four-year phased-in HIway connection requirement that is described in the Mass HIway Regulations

How Provider Organizations connect:

There is a **four-year phased-in approach** for fulfilling the HIway connection requirement:

- Year 1: Send or receive HIway Direct Messages for **at least one use case**. The use case may be within **any category** of use cases.
- Year 2: Send or receive HIway Direct Messages for **at least one use case that is within the Provider-to-Provider Communications category** of use cases.
- Year 3: **Send** HIway Direct Messages for at least one use case, **and also receive** HIway Direct Messages for at least one use case. Both of these uses cases should be within the Provider-to-Provider communications category of use cases.
- Year 4: The provider organization may be **subject to penalties**, if that organization has not met the requirements established in this section. Penalties do not take effect until Year 4 of the connection requirement (i.e., in January 2020, at the earliest).

Acute Care Hospitals: In addition to using HIway Direct Messaging, Acute Care Hospitals are also required to send Admission Discharge Transfer notifications (ADTs) to the Mass HIway within 12 months of the ENS' launch as a part of the HIway connection requirement.



- **Additional outreach & education related to the Mass Hlway Regulations:**
 - Outreach to stakeholders
 - **Mass Hlway webinars:** (Thursdays, noon-1pm)
 - **April 27, 2017:** Mass Hlway Regulations Overview
 - **May 18, 2017:** Mass Hlway Connection Requirement & Attestation Overview
 - **June 8, 2017:** Improving Care Coordination by Leveraging Mass Hlway Direct Messaging
 - **June 22, 2017:** Mass Hlway 101
 - **June 29, 2017:** ENS Update for the community

Webinar content is posted after the webinar on the Mass Hlway website (in the “News & Events” section of the website)

- **To receive the updates related to the Mass Hlway Regulations, sign up to receive the Mass Hlway Newsletter on the Mass Hlway’s web page at: www.MassHlway.net**





Hlway Strategy Update

David Whitham, John Gilbert, Gary Sing



Three initiatives are the core of the Mass Hlway's strategy for 2017 and 2018:

- Hlway Event Notification Service (ENS)
- Hlway Adoption and Utilization Services (HAUS)
- Implementing the new Mass Hlway Direct Messaging System



- A HIway Event Notification Service (ENS) will facilitate real-time notifications to providers when a patient is admitted, discharged or transferred to or from an inpatient setting. This in turn allows clinicians to respond with information and/or clinical support and coordination of care.
- **Value of a Statewide ENS:**

Private ENS services currently are accessed by individual providers or systems, but none provide the scope to support payment reform and delivery system improvement efforts statewide
- **Approach:**

In Spring 2017, the HIway is doing the following:

 1. Gathering input from stakeholders including representatives from hospitals, individual clinicians, vendors, as well as healthcare organizations
 2. Publishing an Request for Information (RFI) from ENS. RFI release is expected in May 2017.



Stakeholders sessions have provided key feedback regarding how the forthcoming ENS may be designed and what the various needs are of different stakeholders

Data Quality and Integrity:

- Patient matching (i.e., uniquely identifying patients) is a challenge
- Patient and physician relationship management is vital to the successful operations of an ENS
- Avoiding alert fatigue will be important for a statewide ENS

Information Distribution:

- The most efficient scenario for an ENS is that the ADT (Admission, Discharge, Transfer) notification is sent EHR-to-EHR
- Other care providers besides the primary care provider for the patient should receive notifications as well
- Some stakeholders indicate that attachments to notifications (such as a discharge summaries) would be useful



Hiway Adoption and Utilization Services (HAUS): Overview



- **Goal:**

The HAUS initiative is aimed at increasing and streamlining care coordination and provider-to-provider communication through increased use of Hiway Direct Messaging.

- **Approach:**

Each engagement within the HAUS initiative may include the following components:

1. Engage both clinical, technical and business leadership from both organizations
2. Establish technical readiness with provider organization and trading partner(s)
3. Undertake one focused use case between two provider organizations
4. Address any barriers to exchange and work with both organizations to ensure end to end technical and business workflow integration
5. Report metrics/outcomes (details are forthcoming)
6. Share success stories and lessons learned to promote the benefits of care coordination via health information exchange in the Commonwealth



- Engagements within the HAUS initiative must support either:
 - Meaningful Use Eligible Providers (EPs) and Eligible Hospitals (EHs), or
 - Medicaid providers that EPs and EHs coordinate with
- The HAUS initiative, through one of its engagements, will support MassHealth restructuring efforts
- **Status update:**
 - An RFR is currently open for a vendor to assist in implementing the HAUS initiative, with contract expected to begin in summer 2017
 - 21 total engagements to date (2 completed, 9 implementing, 4 in pipeline, 6 on hold)
See Appendix A for list of engagements



The Mass Hlway has an active procurement in progress to implement a new Mass Hlway Direct Messaging System, with an expected go-live date of September 2017

Why Is This Necessary?

1. The Mass Hlway custom designed the current system while Direct Messaging standards were being developed. Some common standards now in use are not supported by the Mass Hlway.
 - As an example, the Mass Hlway uses a single private key certificate for both message signing and encryption. The HISP used by OCHIN no longer accepts this approach and requires the use of two separate certificates.
2. DirectTrust is now the primary facilitator of HISP-to-HISP communications across the nation. By procuring a new system that is part of the DirectTrust, the Mass Hlway will:
 - More easily connect to other HISPs
 - Be prepared to exchange messages with certain federal agencies including the Veteran's Administration



Benefits of Procuring a New System:

1. The Mass Hlway can procure a commercial product that is in use by other state and regional HIEs, and that is supported with regular enhancements to adapt and evolve with the industry.
 - **New features are expected to make the Mass Hlway easier to use, especially for Webmail users,** and most products are enhanced regularly with improvements for efficiency, security, and usability.
2. The Mass Hlway can procure a product that is already accredited by EHNAC (the Electronic Healthcare Network Accreditation Commission) for participation in DirectTrust.
3. **Connecting to the Mass Hlway will be easier, whether directly from an EHR system as a Mass Hlway Participant or through another HISP.**
 - EHR vendors may follow the prevalent standard for making an XDR Direct connection to the Mass Hlway.
 - HISPs that are members of DirectTrust will be automatically connected.



Conclusion

Alice Moore



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 2017 Meetings:
 - ✓ Monday, February 6, 2017
 - ✓ Monday, May 8, 2017
 - Monday, August 7, 2017
 - Monday, November 6, 2017

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Thank you!



Appendix A:

Supporting information for the HIway Strategy Update



- **Central Massachusetts, Westborough, March 8th**
- **Eastern Massachusetts, Boston, March 21st**
- **Southeastern Massachusetts, Brockton, March 28th**
- **Western Massachusetts, Holyoke, May 12th**
- **Sessions being scheduled:**
 - Mass Medical Society
 - Mass League of Community Health Centers
 - Accountable Care Organizations
 - Individual meetings with EHR Companies



HAUS Dashboard



#	Primary Organization	Trading Partner	Status
1	Southcoast Health	SSTAR	Completed
2	Maples Nursing & Rehab	Milford Regional Medical Center	Completed
3	Cambridge Health Alliance	Chelsea Jewish Lifecare (Nursing & Rehab)	Implementing
4	Child & Family Services	BID Plymouth	Implementing
5	Greater Lawrence Family Health Center	Pentucket Medical Associates	Implementing
6	Lawrence General Hospital	Greater Lawrence Family Health Center	Implementing
7	Lowell General Hospital	TUFTS Maternal Fetal Medicine	Implementing
8	Signature Healthcare - Brockton Hospital	Care Tenders	Implementing
9	Tufts Medical Center	Chelmsford Pediatrics @ Lowell General Hospital	Implementing
10	Cambridge Health Alliance	Sancta Maria Nursing Facility	Implementing
11	Child and Family Services	Greater New Bedford Health Center	Implementing
12	Signature Healthcare	TUFTS Medical Center	Pipeline
13	Franciscan Children’s Hospital / Wediko	TUFTS Medical Center	Pipeline
14	Cambridge Health Alliance	Eliot Community Human Services	Pipeline

Status Definitions

- Pipeline:** Account Manager proposing Deep Dive program to organization
- Initiated:** Organization agrees to undertake project, establishes a team, and sets a meeting schedule.
- Gathering Requirements:** Organization identifies a clinical use case and information trading partner(s)
- Implementing:** Organization engages trading partner(s), validates end-to-end connection, and designs new workflow for the clinical use case.
- Completed:** Organization successfully implements the clinical use case with personnel.



HAUS Dashboard



#	Primary Organization	Trading Partner	Status
15	Child & Family Services	Southcoast Health System	Pipeline
16	Edinburg Center	Newton Wellesley Hospital	On Hold
17	Franciscan Children’s Hospital	Wediko	On Hold
18	TUFTS Medical Center	Cambridge Health Alliance	On Hold
19	Harbor Health Services	Steward Health – Medical Assoc./Carney Hospital	On Hold
20	Holyoke Health Center	Mercy Medical Center	On Hold
21	Wediko	Cambridge Health Alliance	On Hold

Status Definitions

- Pipeline:** Account Manager proposing Deep Dive program to organization
- Initiated:** Organization agrees to undertake project, establishes a team, and sets a meeting schedule.
- Gathering Requirements:** Organization identifies a clinical use case and information trading partner(s)
- Implementing:** Organization engages trading partner(s), validates end-to-end connection, and designs new workflow for the clinical use case.
- Completed:** Organization successfully implements the clinical use case with personnel.



- **How the new Mass Hlway Direct Messaging system will support MassHealth restructuring efforts:**
 - The new system will retain the capability of **connecting to the Mass Hlway by different methods**, including via webmail. This will allow MassHealth ACO, their trading partners, and Community Partners (some of which may not have EHR systems) to communicate with each other via Mass Hlway Direct Messaging
 - **MassHealth ACOs:** EOHHS will require ACOs to develop plans to ensure that their providers consistently use the Hlway to send or receive, in accordance with the law, clinically appropriate information and support transitions of care. This may include leveraging the Hlway to allow providers utilizing different EHR systems within an ACO to communicate via Direct Messaging with each other immediately without needing to wait to establish direct EHR/EHR interoperability
 - **MassHealth Community Partners (CPs):** EOHHS will require CPs to:
 - Develop policies and procedures for Mass Hlway connection with their contracted ACOs and MCOs, helping to facilitate communication
 - Use the Mass Hlway for data exchange, including communication related to Comprehensive Assessments, Person-Centered Treatment Plans, and other information to support transitions of care



Implementing the new Mass Hlway Direct Messaging System (continued)



- **Timeline**

1. EOHHS expects to contract for a new system by June/July 2017.
2. Set-up and configuration to meet Mass Hlway requirements is expected to be completed by Fall of 2017.
3. Once the new system is ready, new Participants all will be connected to it and no additional connections will be made to the old system.
4. Migration of existing Mass Hlway Participants will be gradual, with both the new and old system operating during the transition period.
5. Old and new systems will co-exist so that Participants can continue to exchange messages with each other regardless of which system they use.
6. All migrations are expected to be completed in 9 to 12 months, with anticipated decommissioning of the old system by the Fall of 2018.



Appendix B: *Hiway Operations Update*



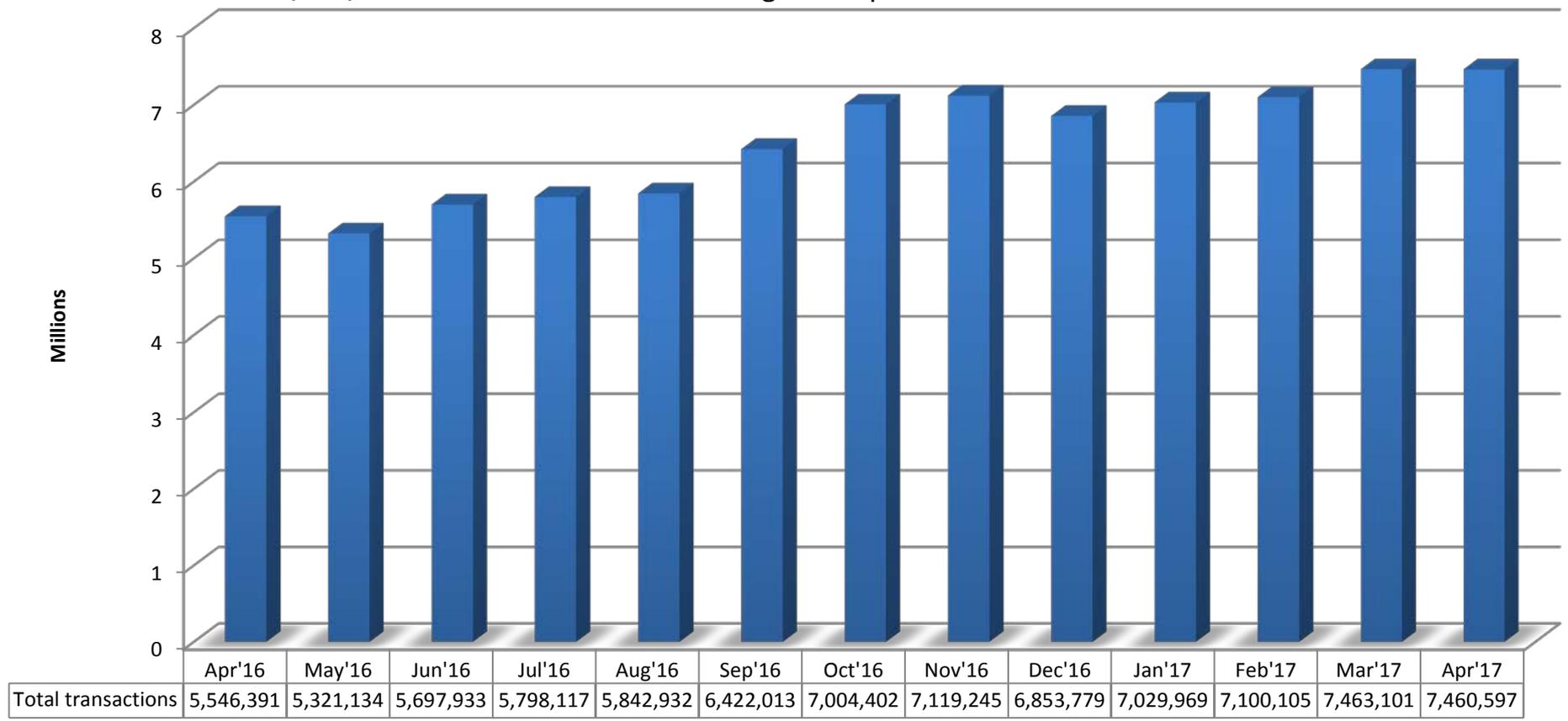
Hiway Transaction Activity



13 Month Hiway Transaction Activity

7,460,597 Transactions* exchanged in April (03/21/2017 to 04/20/2017**)

134,819,578 Total Transactions* exchanged inception to date



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

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

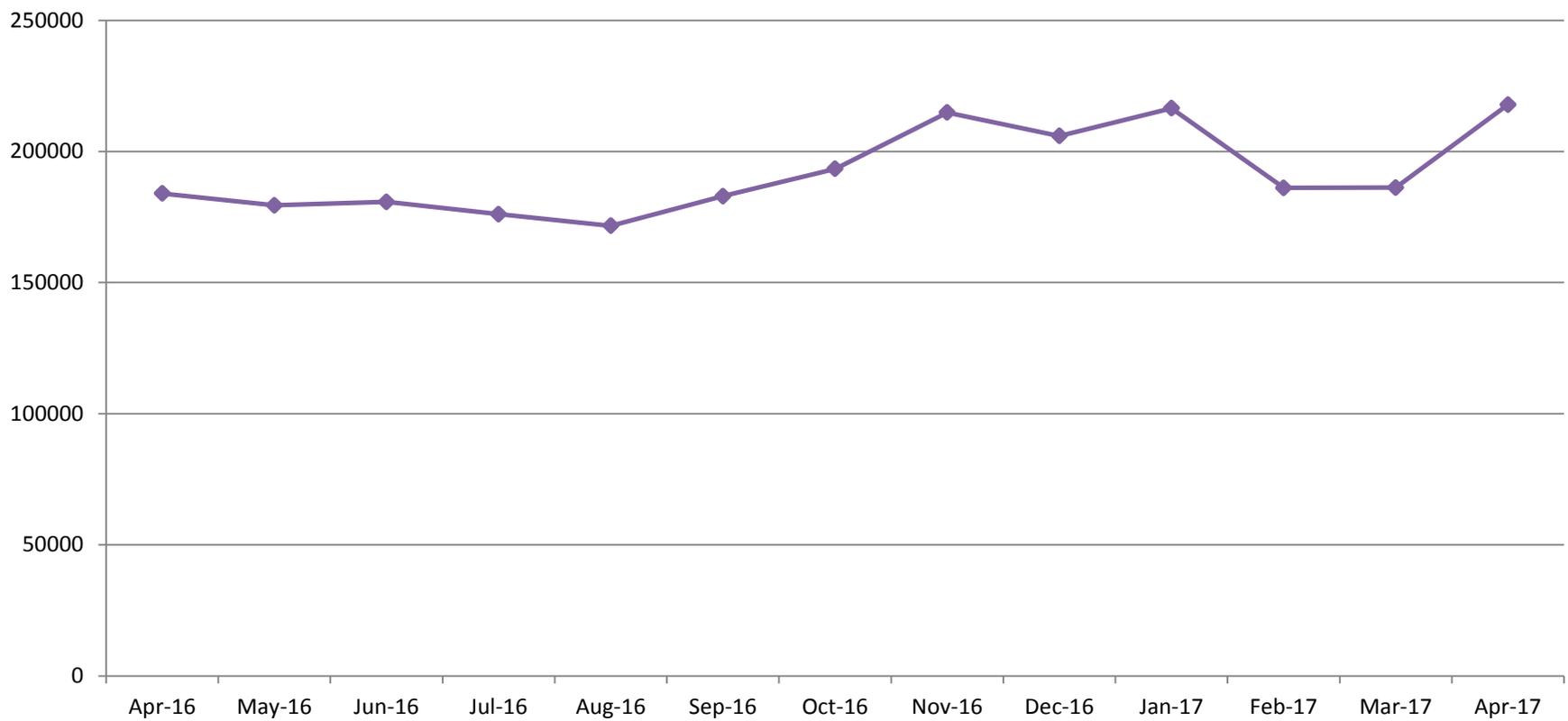


Hiway Transaction Analysis



Hiway Production Transaction Trends – Provider to Provider (Apr 2016 – Apr 2017)

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



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Provider to Provider	183980	179483	180788	176069	171657	182934	193363	214852	205901	216487	186118	186244	217828

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

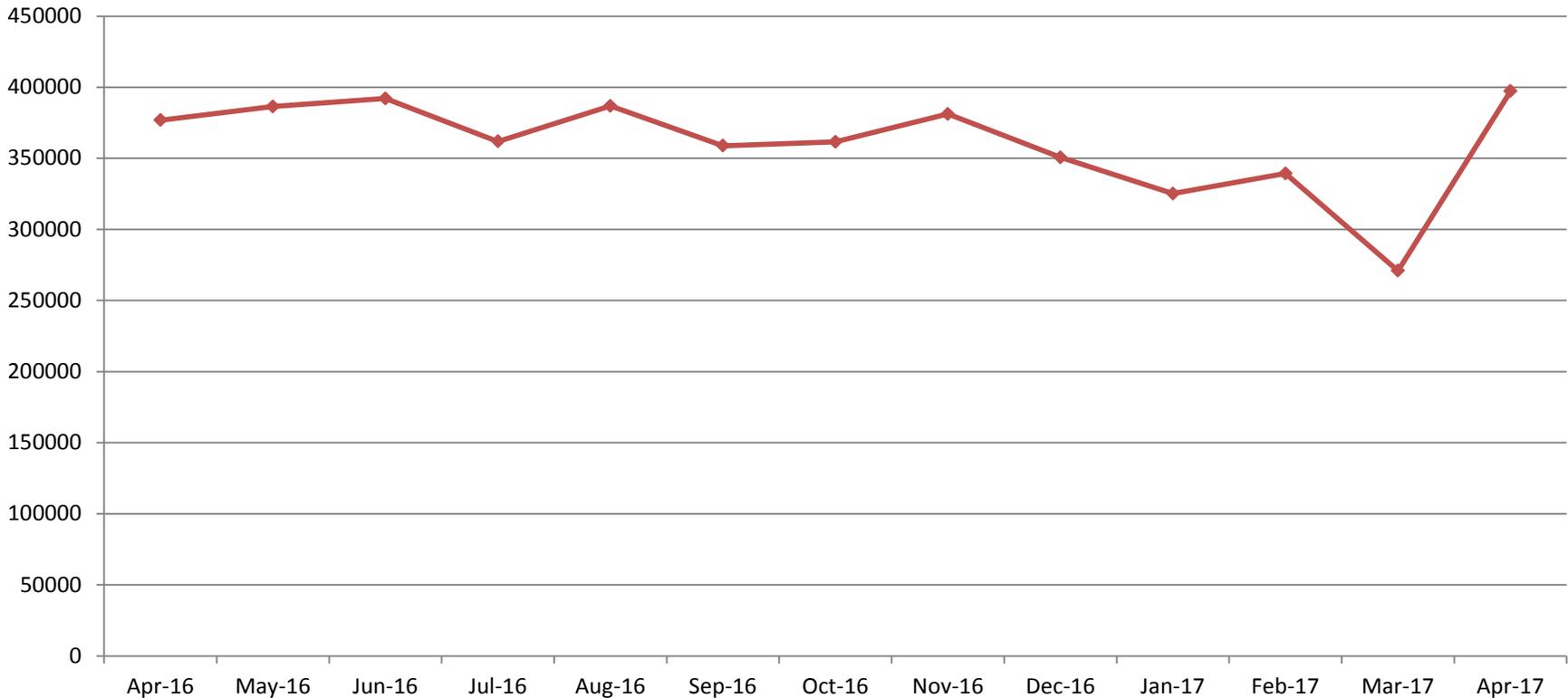


HIway Transaction Analysis



HIway Production Transaction Trends – Quality Reporting (Apr 2016 – Apr 2017)

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



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Quality Reporting	376828	386426	392037	361916	386838	358863	361605	381174	350651	325166	339380	270903	397178

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

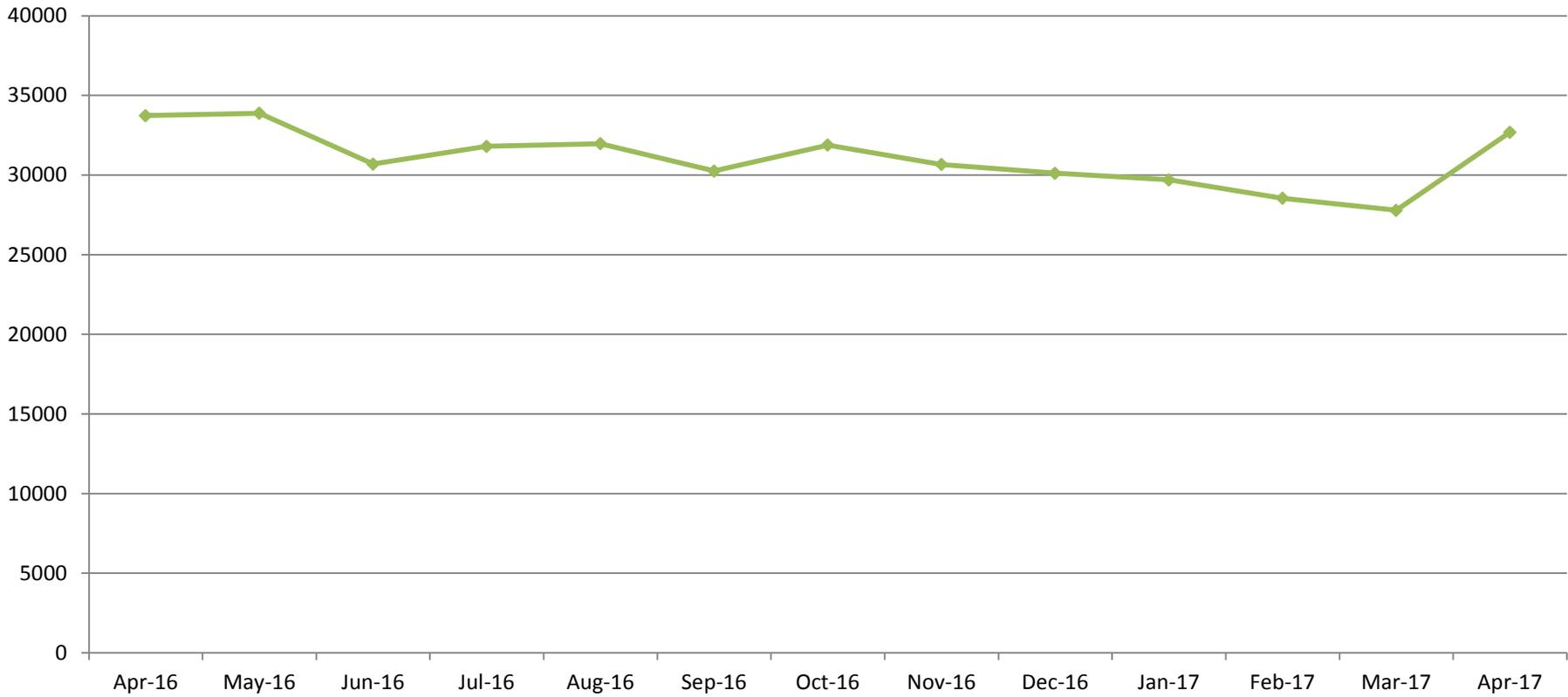


HIway Transaction Analysis



HIway Production Transaction Trends – Payer Case Management (Apr 2016 – Apr 2017)

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



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Payer Case	33734	33879	30692	31805	31967	30251	31878	30667	30112	29700	28538	27786	32687

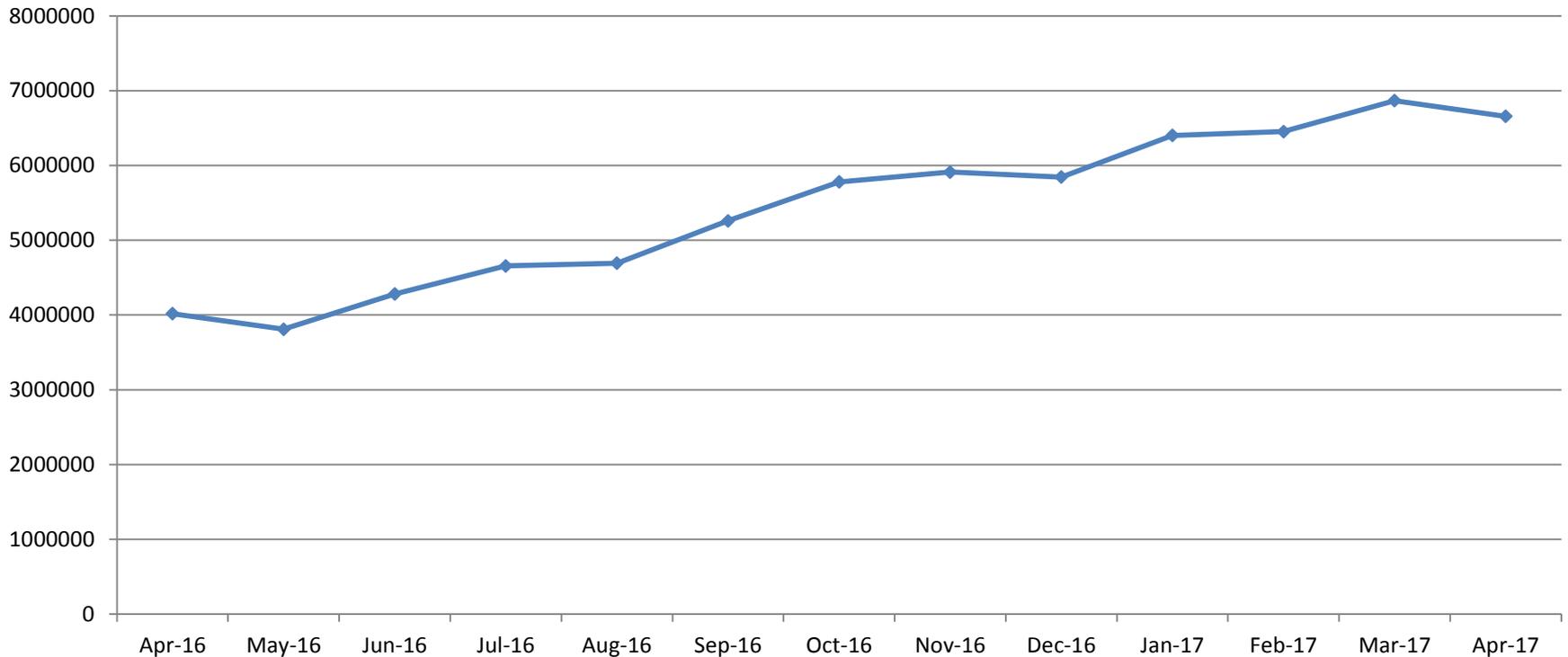
* Note: Reporting cycle is through the 20th of each month.



Hlway Production Transaction Trends – Public Health Reporting (Apr 2016 – Apr 2017)

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

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



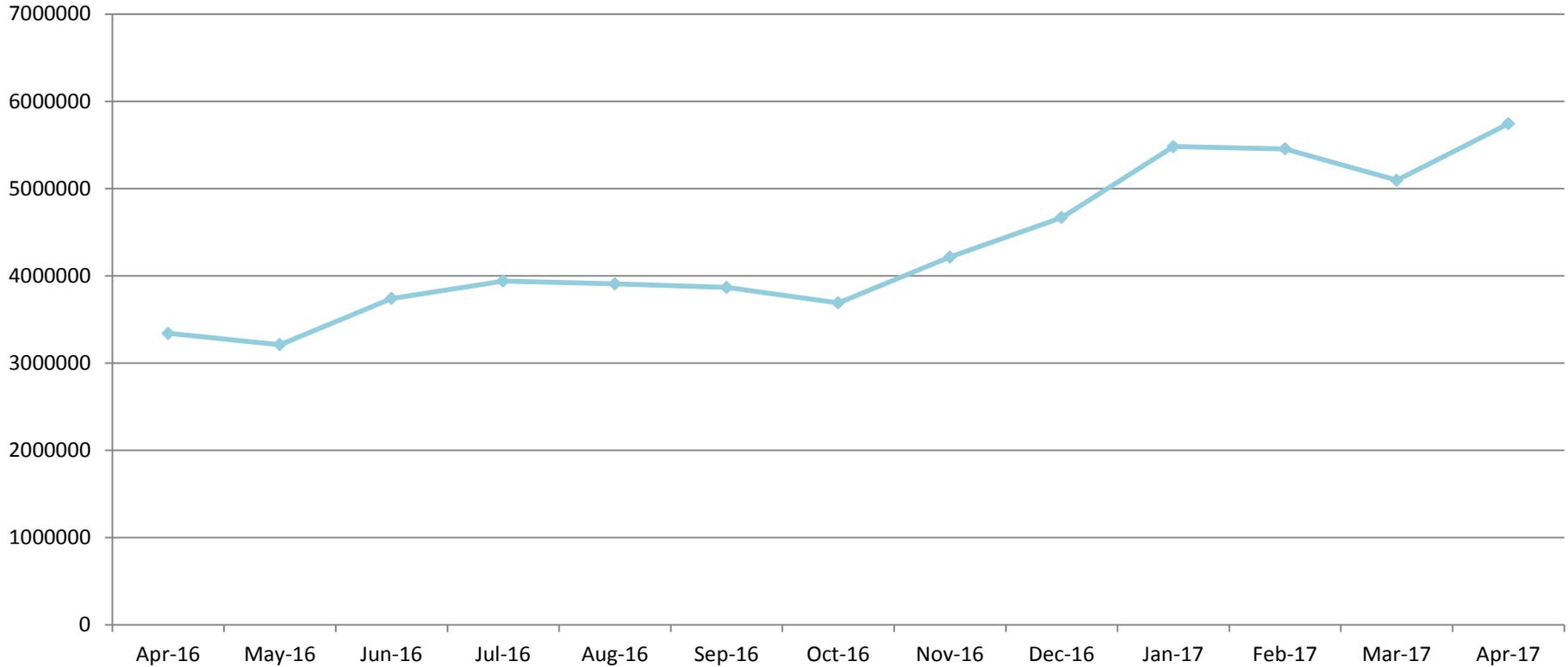
	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
DPH Transactions	4017260	3810471	4281210	4655963	4692690	5258400	5779091	5911329	5843908	6401741	6452225	6867272	6656846

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



Public Health Reporting – Analysis by Application (Apr 2016 – Apr 2017)

Syndromic Surveillance Transactions



	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Syndromic	3339839	3210337	3740508	3941092	3906947	3867053	3690015	4214062	4667528	5480332	5454437	5094559	5742681

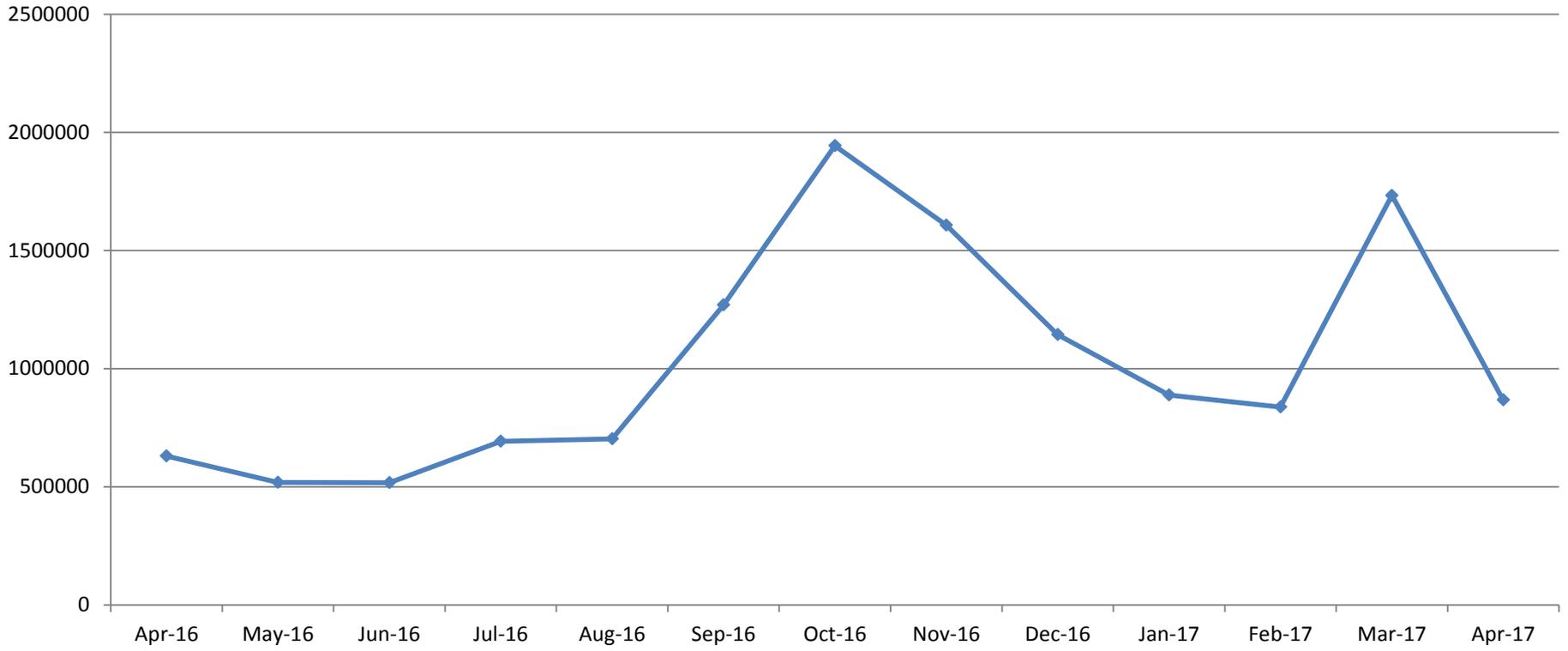


Transaction Analysis – Detail



Public Health Reporting – Analysis by Application (Apr 2016 – Apr 2017)

Immunization (MIIS) Transactions



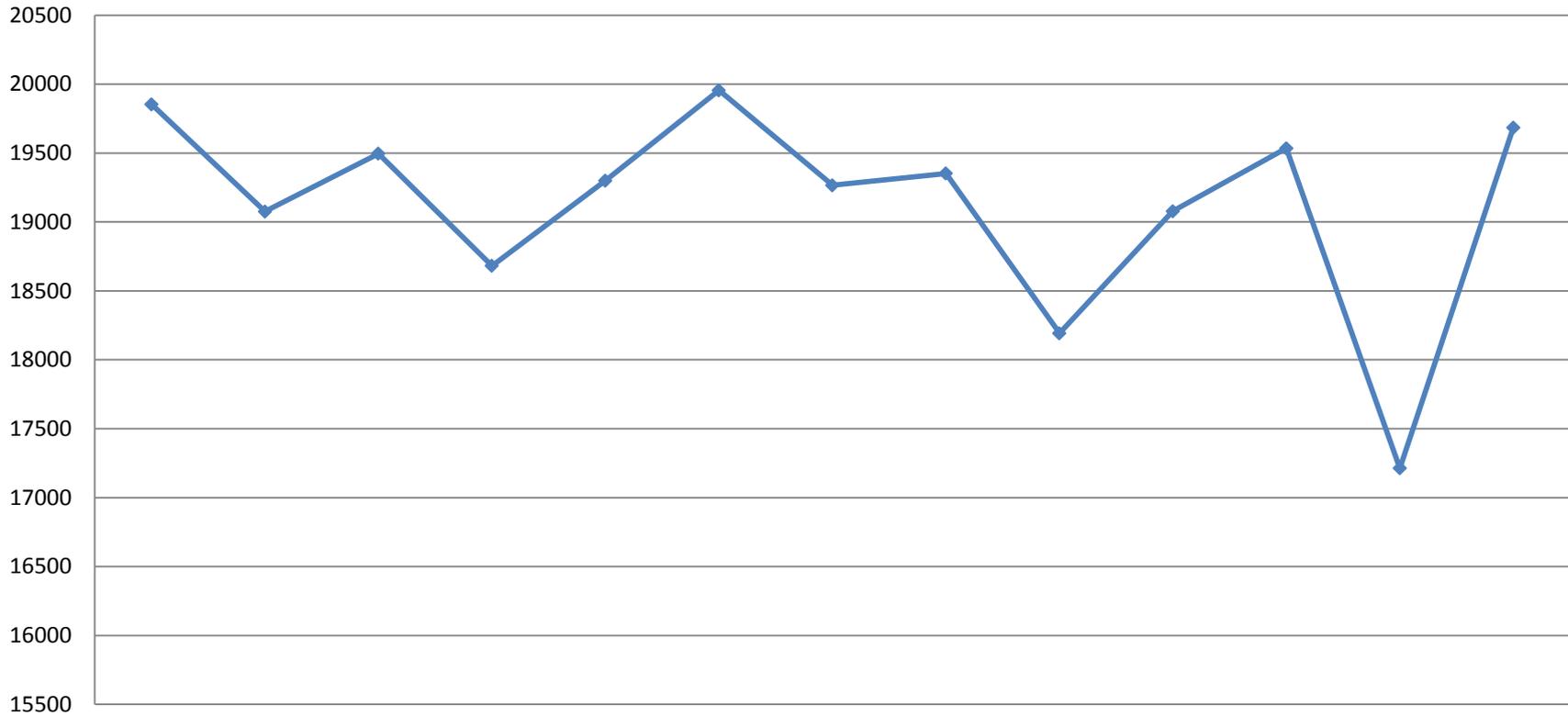
	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
MIIS	630649	518751	517318	692856	702715	1269445	1943323	1606817	1143928	888367	837521	1733218	867478

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



Public Health Reporting – Analysis by Application (Apr 2016 – Apr 2017)

Boston Public Health Commission Transactions

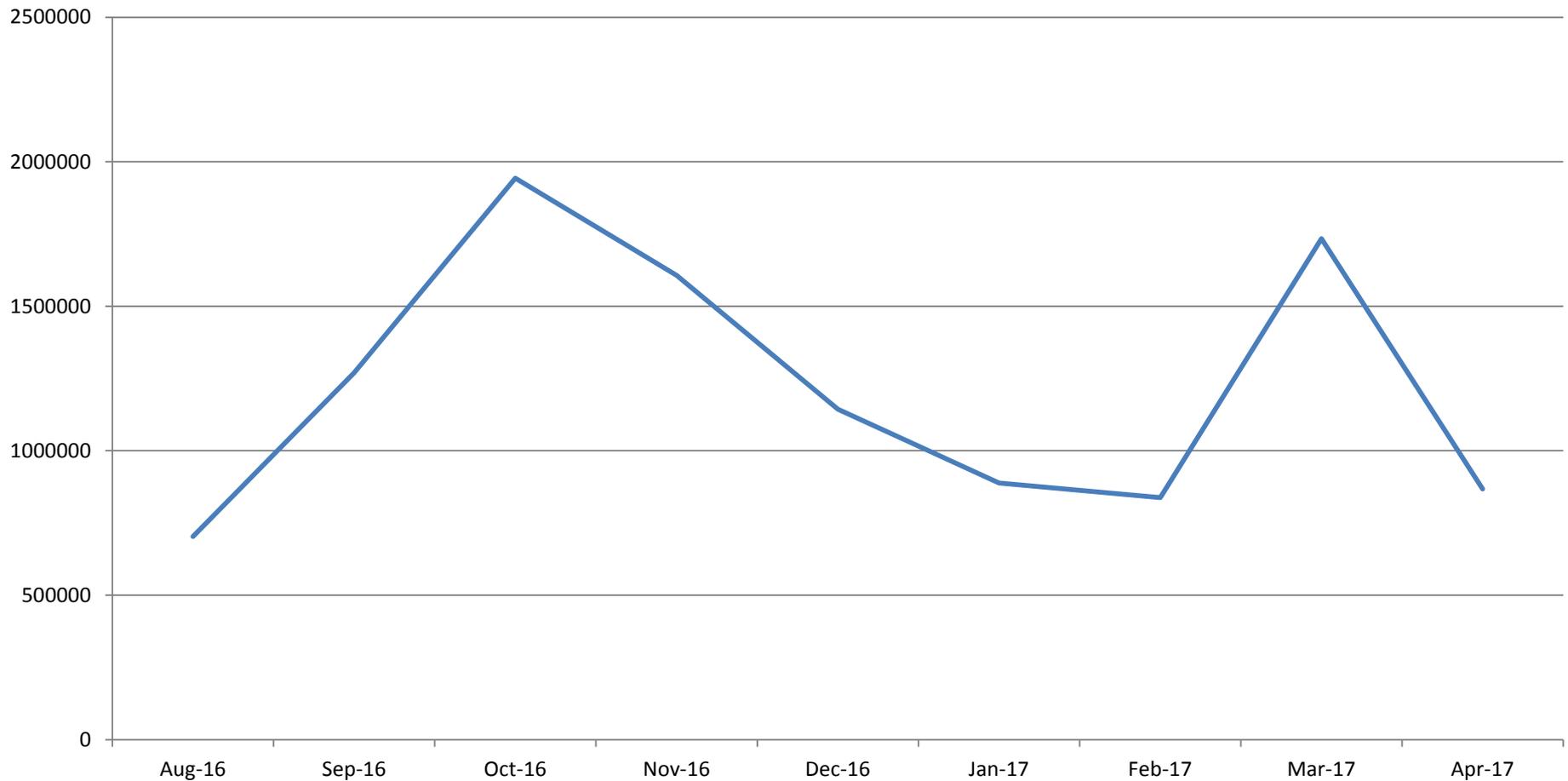


	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
— Boston Health	19854	19076	19496	18682	19300	19955	19266	19352	18193	19078	19535	17213	19685



Public Health Reporting – Analysis by Application (Aug 2016 – Apr 2017)

Opioid Treatment Program (OTP) Transactions **



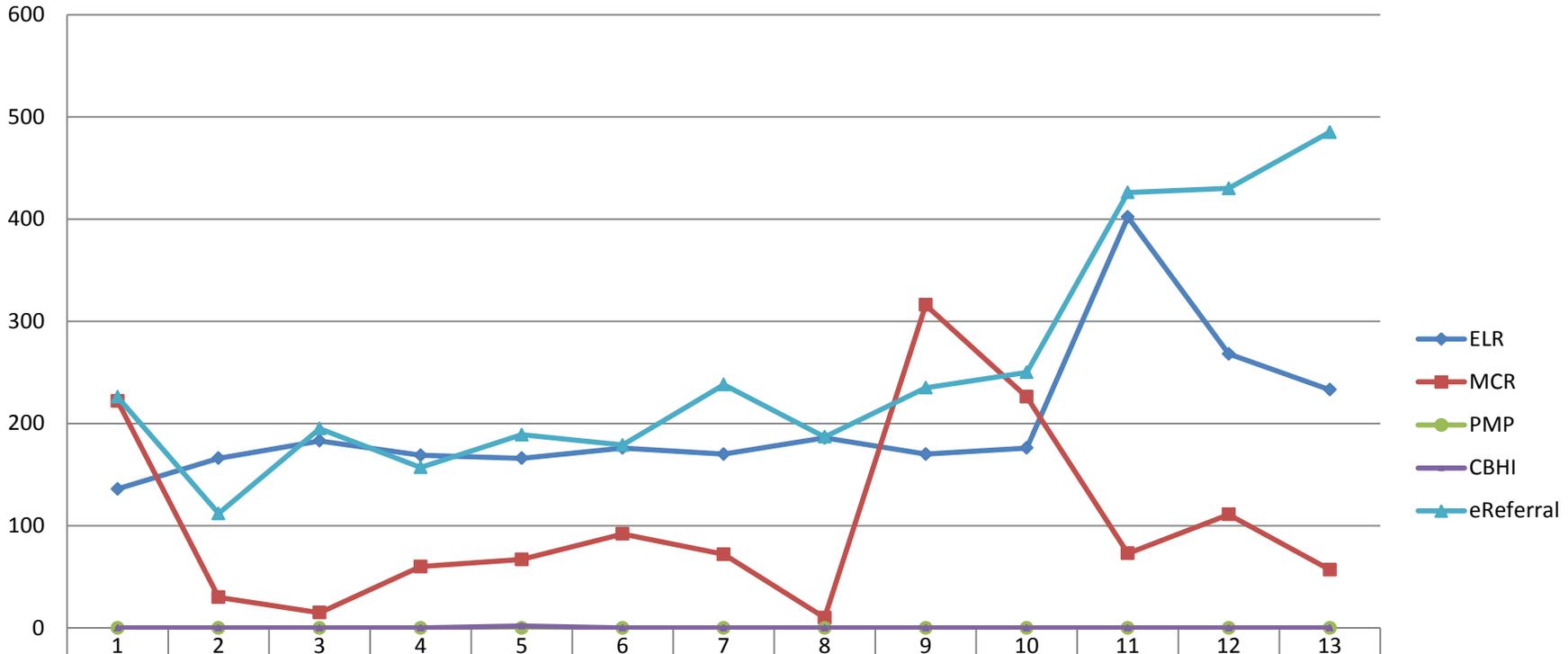
* Note: Reporting cycle is through the 20th of each month.

** Note: OTP data available starting August 2016.



Public Health Reporting – Analysis by Application (Apr 2016 – Apr 2017)

Other Public Health Transactions



	1	2	3	4	5	6	7	8	9	10	11	12	13
ELR	136	166	183	169	166	176	170	186	170	176	402	268	233
MCR	222	30	15	60	67	92	72	10	316	226	73	111	57
PMP	0	0	0	0	0	0	0	0	0	0	0	0	0
CBHI	0	0	0	0	2	0	0	0	0	0	0	0	0
eReferral	226	112	195	157	189	179	238	187	235	250	426	430	485



Customer Status Dashboard (April 2017)



Tier (As of Apr 20 2017)	Universe (Est.)	Actively Using	%ActivelyUsing	Connected	%Connected	Enrolled	Tier Total
1a. Large hospitals/Health Systems	37	27	73%	5	14%	5	37
1b. Health plans	9	3	33%	2	22%		5
1c. Multi-entity HIE	12	4	33%	6	50%	2	12
1d. Commercial imaging centers & labs	5	3	60%	2	40%		5
2a. Small hospitals	46	35	76%	11	24%		46
2b. Large ambulatory practices (50+)	33	18	55%	15	45%		33
2c. Large LTCs (500+ licensed beds)	8	2	25%		0%		2
2d. Ambulatory Surgical Centers	63		0%	1	2%		1
2e. Ambulance and Emergency Response	39		0%	1	3%		1
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	23	7%	42	14%		65
3b. Large behavioral health (10+ licensed providers)	10	1	10%	8	80%		9
3d. Large FQHCs (10-49)	30	14	47%	11	37%		25
3e. Medium ambulatory practices (10-49)	365	46	13%	24	7%		70
4a. Small behavioral health(<10 licensed providers)	90	5	6%	13	14%		18
4b. Home health, LTSS	149	23	15%	35	23%	4	62
4c. Small FQHCs (3-9)	29	4	14%	1	3%	1	6
4d. Small ambulatory practices (3-9)	1595	124	8%	119	7%	1	244
5a. Very Small ambulatory practices (1-2)	4010	154	4%	353	9%	6	513
Grand Total	6853	488	7%	657	10%	19	1164

“Actively Using” means connected and actively using; “Connected” means connected but not yet actively using; and “Enrolled” means an agreement has been signed but not yet connected



25 New Participation Agreements

- 24 Hours Care
- Advocates Inc.
- Dermatology Consultants at Newton Wellesley, P.C.
- Eliot Community Human Services (Formerly MA Society for the Prevention of Cruelty to Children)
- Inner Balance Integrative Medicine
- Laura McCann, MD
- Lowell Oral Surgery <dba Chelmsford Oral Surgery / Nashua Oral Surgery>
- Martin Richler, MD
- Maura F. McGrane, MD, PC
- Mayflower Place Nursing and Rehabilitation Center
- Minuteman Senior Services
- Miriam Dougherty, MD
- Newton Wellesley Eye Associates PC
- Newton Wellesley Neurology Associates PC
- North Shore Center for Orthopedics
- Old Colony Elder Services
- Orthopedics New England
- Paul Birnbaum, MD
- Paul Levy, DDS
- Ralph Talbot, MD
- Riverside Community Care
- Somerville-Cambridge Elder Services
- Steven Smith, MD
- The Pediatric Physicians' Organization at Children's Hospital (PPOC) for EPIC
- Wellesley Women's Care, PC



29 New Connections

- Bureau of Public Health Facilities
- Coastline Elderly Services, Inc.
- Dermatology Consultants at Newton Wellesley, PC
- Eliot Community Human Services (Formerly MA Society for the Prevention of Cruelty to Children (MSPCC))
- Hebrew Senior Life
- Inner Balance Integrative Medicine
- Joseph Spinali DMD
- KidsWell Pediatrics and Urgent Care
- Lowell Oral Surgery <dba Chelmsford Oral Surgery / Nashua Oral Surgery>
- Maura F. McGrane, MD, PC
- Mayflower Place Nursing and Rehabilitation Center
- Minuteman Senior Services
- Miriam Dougherty, MD
- Montachusett Home Care
- Mount Auburn Hospital
- Newton Wellesley Eye Associates, PC
- Newton Wellesley Neurology Associates, PC
- North Shore Center for Orthopedics
- Old Colony Elder Services
- Orthopedics New England
- Paul Birnbaum, MD
- Peter Drob DMD, PC
- Ralph Talbot, MD
- Somerville-Cambridge Elder Services
- Southwest Boston Senior Services, Inc. DBA Ethos
- Springwell, Inc
- Steven Smith, M.D.
- The Pediatric Physician's Organization at Children's Hospital (PPOC)
- Wellesley Women's Care, PC
- **Plus Non-Participant Orgs - 21**



23 HISPs Connected to Mass Hlway

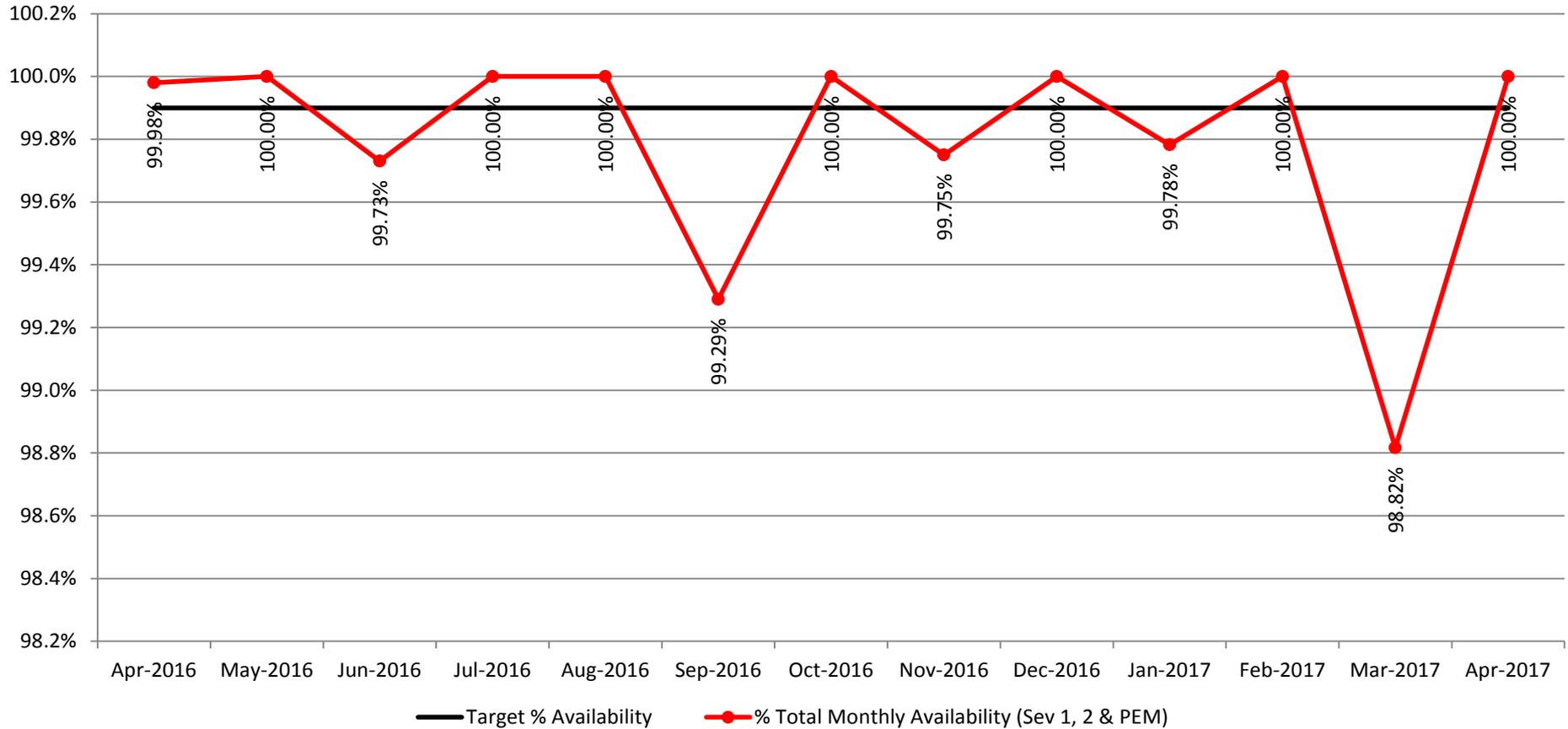
1. Allscripts (MedAllies HISP)
2. Aprima
3. Athenahealth
4. CareAccord
5. CareConnect (NetSmart HISP)
6. Cerner
7. DataMotion
8. eClinicalWorks
9. eClinicalWorks Plus
10. eLINC
11. EMR Direct
12. Inpriva
13. MaxMD
14. MatrixCare
15. McKesson (RelayHealth)
16. Medicity
17. MyHealthProvider (Mercy Hospital)
18. NextGen Share
19. NHHIO
20. SES
21. Surescripts
22. UpDox
23. Wellport (Lumira HISP)

3 HISPs In Process of Connecting to Mass Hlway

HISP Vendor	Kickoff	Onboarding	Testing	Hlway Prod Readiness	Live/Target Date
PCE Systems					Jun
ASP.md					TBD
Care 360					TBD
IICA-Direct					TBD



13 Month HIway Availability Trends



Metric Targets:

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