Commonwealth of Massachusetts
Executive Office of Health and Human Services

Health Information Technology Council Meeting

February 5, 2018

Agenda

1. **Welcome**
   Undersecretary Lauren Peters

2. **HIT Annual Report**
   Undersecretary Lauren Peters

3. **HIway 2.0 Update**
   Dave Bowditch, Ryan Thomas, Jeffrey Grant

4. **HIway Connection Requirement: Year 1 & Year 2 Updates**
   Michael Chin

5. **EOHHS Event Notification Service (ENS) Initiative Update**
   David Whitham

6. **Highway Adoption & Utilization Service (HAUS) Highlight**
   Julie Creamer, Padma Sastry, Shawn Howland, Michele Crehan

Appendix: HIway Operations Update

HIT Council Annual Report

Undersecretary Lauren Peters

New Mass HIway Direct Messaging System: "HIway 2.0"

Dave Bowditch

Ryan Thomas – Orion Health

Jeffrey Grant – Orion Health

Implementing the New Mass HIway Direct Messaging System: "HIway 2.0"

Contract Signed!

- EOHHS is pleased to announce that it has selected Orion Health to implement and operate a new Mass HIway Direct Messaging System, also known as "HIway 2.0"
- EOHHS and Orion Health executed a new contract effective January 1, 2018.

Benefits of HIway 2.0

- HIway 2.0 will use Orion Health's Communicate product, a SaaS solution.
  - Accredited by EHNAC for participation in DirectTrust – automatic, immediate connection to all DirectTrust HISPs
  - Supports current Direct standards, making it easier to connect to other systems
  - Improved Provider Directory (HPD)
  - Certified ONC Edge Protocol
  - Multiple Recipient Support
  - Maintained with regular enhancement releases and product support

Implementing “HIway 2.0” (continued)

Current Communicate Clients

- Alaska HIE
- Catholic Health Initiatives
- Greenville Health System
- Inland Empire HIE
- Keystone Health Information Exchange
- Louisiana HIE
- New Mexico HIE
- North Carolina HIE
- North Dakota HIE
- Oklahoma Department of Health
- Mary Washington HIE
- Western Connecticut HIE
- The Koble Group HIE
- St. Vincent HIE

Implementing "HIway 2.0" (continued)

HISP Organization	THE HIWAY	DirectTrust	ORION HEALTH Communicate	
Athenahealth, Inc.	X	X		Trusted
Care Accord	X	X		Trusted
Cerner	X	X		Trusted
Cerner MobileMD		X		Trusted
Covisint		X		Trusted
Cozeva - Applied Research Works		X		Trusted
DataMotion		X		Trusted
eClinicalDirect LLC (Plus)	X	X		Trusted
EMR Direct	X	X		Trusted
Glenwood Systems		X		Trusted
Health Companion, Inc.		X		Trusted
HealthUnity Corporation		X		Trusted
HIXNY		X		Trusted
Indian Health Service		X		Trusted
Informatics Corporation of America		X		Trusted
Inpriva, Inc.	X	X		Trusted
INTEGRIS Health, Inc.		X		Trusted
Intermountain Healthcare		X		Trusted
IOD Incorporated		X		Trusted
iShare Medical		X		Trusted
MaxMD	X	X		Trusted
MedAllies	X	X		Trusted
Medicity Inc.	X	X		Trusted
Medicsasoft		X		Trusted
MHIN		X		Trusted
Mirth LLC (NexGen Share)	X	X		Trusted
MRO Corporation		X		Trusted
New York eHealth Collaborative (NYeC)		X		Trusted
Nitor	X	X		Trusted
Orion Health Ltd	X	X		Trusted
Pulse Systems, Inc.		X		Trusted
Quest Diagnostics		X		Trusted
RelayHealth	X	X		Trusted
Rochester RHIO		X		Trusted
Secure Exchange Solutions	X	X		Trusted
Surescripts, LLC	X	X		Trusted
The Health Collaborative		X		Trusted
Truven Health Analytics		X		Trusted
Updox	X	X		Trusted
Wellport (Lumira)	X			Will add prior to participant cutover, agreements will transfer
MyHealthProvider	X			Will add prior to participant cutover, agreements will transfer
eLINC	X			Will add prior to participant cutover, agreements will transfer
Aprima	X			Will add prior to participant cutover, agreements will transfer
eClinicalDirect (non-Plus)	X			Will add prior to participant cutover, agreements will transfer

Implementing "HIway 2.0" (continued)

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**
- 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
- XDR/XPL to ***Communicate Direct XDR***
  - New certificate chain and personal certificate delivery
  - Participant installs certificates on their infrastructure

Implementing "HIway 2.0" (continued)

Set-up Activities Prior to Go-Live

- **Initial Setup & Install – January and February 2018**
  - Connection of EOHHS to Communicate, Orion Health's EHNAC Accredited platform
  - DirectTrust HISP-to-HISP setup for HIway 2.0 domains and services
- **Pilot Participant Coordination – March 2018**
  - Pilot Participant sites
    - Specific sites to be 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.
  - Begin initial Webmail migrations
    - Final timing depends on readiness and priorities

Implementing "HIway 2.0" (continued)

Implementation Timeline

The following are some of the key milestones.

- **April 2018**
  - HIway 2.0 goes live
  - Pilot Participant connections tested and moved to production
  - All new Participants will be onboarded to HIway 2.0 as they join
  - Existing Participants will start migrating from HIway 1.0 to HIway 2.0
  - HIway 1.0 will continue to operate in maintenance-only mode with no new enhancements or upgrades
- **January 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

HIway Connection Requirement: Year 1 & Year 2 Updates

Michael Chin

HIway Connection Requirement: Background

The *HIway connection requirement* is the requirement for providers to connect to the Mass HIway, as set forth in M.G.L. Chapter 118I (section 7) and as detailed in the Mass HIway Regulations (101 CMR 20.00).

- The Mass HIway Regulations went into effect in February 2017.
- The regulations implemented a phased-in approach for the HIway connection requirement:
  - The phased-in approach progressively encourages use of the Mass HIway for Provider-to-Provider communications and bi-directional exchange of health information.
  - The approach was phased-in by several different aspects, including:
    1. **Three types of Provider Organizations** (i.e., Acute Care Hospitals, Large & Medium Medical Ambulatory Practices, Community Health Centers) have connection dates that are specified in the Mass HIway Regulations.

       EOHHS anticipates that Provider Organizations which are not specified in the regulations will be required to connect at a future date, with future guidance providing at least one year notice for affected organizations to connect.

    2. **The initial date** by which an organization needs to connect to the HIway (i.e., the "Year 1 HIway connection requirement") is different for different types of provider organizations.
    3. **The specifics** of what organizations must do to meet the HIway connection requirement are different in Year 1 vs. Year 2 vs. Year 3 (see next slide for more details).

HIway Connection Requirement: Years 1 - 4

The HIway connection requirement follows a four-year phased-in approach that progressively encourages use of the Mass HIway for Provider-to-Provider communications and bi-directional exchange of health information.

How Provider Organizations connect:

- 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 must 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.

Year 1 Attestation Form: Who, When, How

In calendar year 2017: Acute Care Hospitals were the first group of provider organizations that had a HIway connection requirement

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

Provider Organization	Date of the "Year 1" HIway 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

- **Update:** EOHHS received Year 1 Attestation Forms from 100% of Acute Care Hospitals in the Commonwealth

Year 1 Attestation Form: Who, When, How

In calendar year 2018: There are two key milestones ….

(1) Large & Medium Medical Ambulatory Practices and Large Community Health Centers have a HIway connection requirement

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

Provider Organization	Date of the "Year 1" HIway 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 HIway by either:
  - *The preferred method:* the **on-line version** of the form (which is expected to be available in March 2018)
  - *The alternate method:* the **PDF version** of the form (which should be completed, printed, signed, scanned, and emailed to: MassHIwayAttestation@state.ma.us)
- **Where:** The Year 1 Attestation Form (updated Dec 2017, including instructions) is available on the HIway web page.

Year 2 Attestation Form: Who, When, How

In calendar year 2018, the second milestone is:

(2) Acute Care Hospitals enter Year 2 of the HIway connection requirement

Provider Organization	Date of the "Year 2" HIway connection requirement	Due date of the Year 2 Attestation Form
Acute Care Hospitals	January 1, 2018	July 1, 2018

- **The main difference between Year 1 and Year 2:** To meet the Year 2 HIway connection requirement, Provider Organizations need to send or receive HIway Direct Messages for at least one use case that is *within the Provider-to-Provider Communications category of use cases* (instead of sending or receiving for a use case *within any category of use cases*).
- Acute Care Hospitals that want to discuss implementation of Provider-to-Provider Communication use cases can contact their HIway Account Manager.
- **How:** Year 2 Attestation Forms should be submitted to the Mass HIway by either:
  - *The preferred method:* the **on-line version** of the form (which is expected to be available in March 2018)
  - *The alternate method:* the **PDF version** of the form (which should be completed, printed, signed, scanned, and emailed to: MassHIwayAttestation@state.ma.us)
- **Where:** The Year 2 Attestation Form (including instructions) is available on the Mass HIway web page.

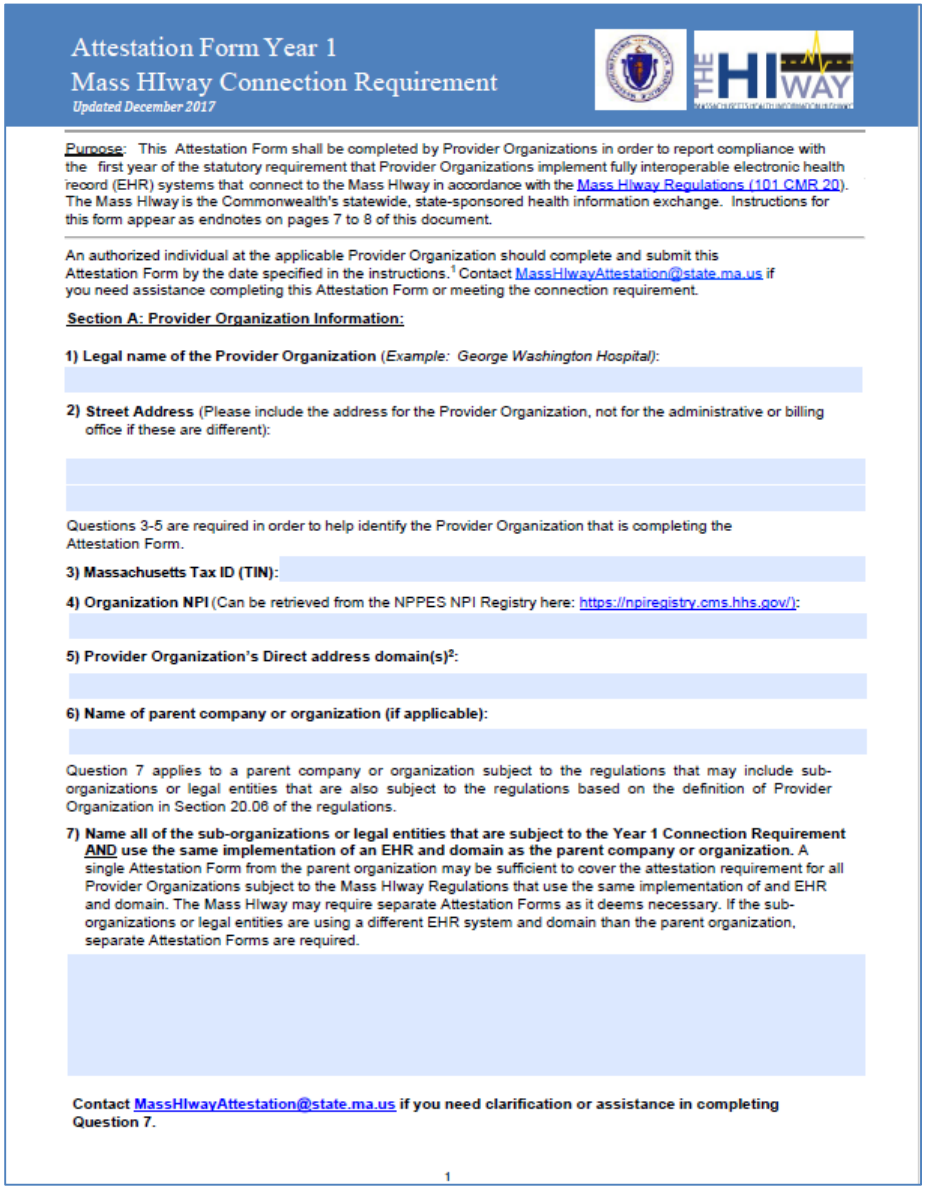
Next Steps

- **Mass HIway hosted a webinar on the Mass HIway connection requirement & attestation process on January 18, 2018.**
  - The webinar presentation is available on the "Events" page within the Mass HIway website: www.masshiway.net

- **Leading up to the July 2018 attestation form due date, EOHHS expects to receive questions about the HIway connection requirement and attestation process**

- **EOHHS encourages stakeholders to contact the HIway with questions and comments related to the HIway connection requirement**
  - EOHHS anticipates reviewing questions and updating the *Mass HIway Regulations FAQs* prior to the July 2018 attestation due date
  - Email address for general questions about the connection requirement & attestation process: MassHIway@state.ma.us
  - Email address to submit a completed attestation form: MassHIwayAttestation@state.ma.us

Attestation Forms: PDF Version



Attestation Form Year 1
Mass HIway Connection Requirement
Updated December 2017

Purpose: This Attestation Form shall be completed by Provider Organizations in order to report compliance with the first year of the statutory requirement that Provider Organizations implement fully interoperable electronic health record (EHR) systems that connect to the Mass HIway in accordance with the Mass HIway Regulations (101 CMR 20). The Mass HIway is the Commonwealth's statewide, state-sponsored health information exchange. Instructions for this form appear as endnotes on pages 7 to 8 of this document.

An authorized individual at the applicable Provider Organization should complete and submit this Attestation Form by the date specified in the instructions.[1] Contact MassHIwayAttestation@state.ma.us if you need assistance completing this Attestation Form or meeting the connection requirement.

Section A: Provider Organization Information:

1) Legal name of the Provider Organization (*Example: George Washington Hospital*):

2) Street Address (Please include the address for the Provider Organization, not for the administrative or billing office if these are different):

Questions 3-5 are required in order to help identify the Provider Organization that is completing the Attestation Form.

3) Massachusetts Tax ID (TIN):

4) Organization NPI (Can be retrieved from the NPPES NPI Registry here: https://npiregistry.cms.hhs.gov/):

5) Provider Organization's Direct address domain(s)[2]:

6) Name of parent company or organization (if applicable):

Question 7 applies to a parent company or organization subject to the regulations that may include sub-organizations or legal entities that are also subject to the regulations based on the definition of Provider Organization in Section 20.06 of the regulations.

7) Name all of the sub-organizations or legal entities that are subject to the Year 1 Connection Requirement AND use the same implementation of an EHR and domain as the parent company or organization. A single Attestation Form from the parent organization may be sufficient to cover the attestation requirement for all Provider Organizations subject to the Mass HIway Regulations that use the same implementation of and EHR and domain. The Mass HIway may require separate Attestation Forms as it deems necessary. If the sub-organizations or legal entities are using a different EHR system and domain than the parent organization, separate Attestation Forms are required.

Contact MassHIwayAttestation@state.ma.us if you need clarification or assistance in completing Question 7.

1

The preferred, on-line versions of the Year 1 and Year 2 Attestation forms are expected to be available on the HIway website (at www.masshiway.net) in March 2018, prior to the July 1, 2018 submission deadline.

EOHHS Event Notification Service (ENS) Initiative Update

David Whitham

Background Information: The EOHHS ENS Initiative

Mission Statement

EOHHS will facilitate event notification services statewide, with the goal of improving care coordination regarding transitions of care and health care events such as emergency room and hospital admission, discharges and transfers

Background

- At the previous HIT Council meetings, **EOHHS presented plans to implement the hybrid approach** (i.e., EOHHS collects and shares ADTs with private ENS vendors, and has the option of producing notifications to be sent to participants)
- **The EOHHS ENS Initiative may be implemented in two phases**
  - **Phase One: Implement a statewide ADT repository**
  - **Phase Two (optional): Implement a statewide ENS**

Overview of the EOHHS ENS Initiative

The ENS Initiative requires that the bidder must be able to do three things:

1. The selected vendor must implement the "core services"
   - Provide a centralized, statewide "ADT Repository"
   - Share ADTs with authorized ENS vendors
   - Provide and manage a centralized opt-out mechanism
   - Maintain patient identification and matching capabilities

   Note: *Producing ENS notifications is <u>not</u> included in the list of "core services"*
2. The selected vendor should be able to produce notifications
3. The selected vendor would provide Subject Matter Expertise to help deliver on #1, and to inform EOHHS' decision on #2

EOHHS ENS Initiative: anticipated timeline

Second Quarter of Calendar Year 2017:

- Release RFI, Review Responses, Meet with Selected Vendors **(completed)**

Third and Fourth Quarter of Calendar Year 2017:

- Prepare and Approve RFR **(completed)**

First and Second Quarter of Calendar Year 2018:

- Confirm CMS Approval of RFR
- Release RFR
- 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)

Highway Adoption & Utilization Services (HAUS) Highlight

Julie Creamer

Padma Sastry – Circle Health

Shawn Howland – Circle Health

Michele Crehan – Circle Health

HIway Adoption & Utilization Services

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 drivers 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 Support 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 will also develop a host of on-demand resources and events to support efforts to advance care coordination over the Mass HIway.

Circle Health – Mass HIway Interoperability Use Cases

Presenters:

Padma Sastry – Senior Project Leader, Circle Health

Shawn Howland – Senior Application Analyst, Circle Health

Michele Crehan – Senior Application Analyst, Circle Health

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Complete connected care℠

Agenda

- Circle Health/Lowell General Hospital – Who we are
- Overview of Circle Health – Mass HIway Interoperability Use Cases
- Circle Health – Atrius Health integration:

  Enhanced communication between facilities, Better access to clinical information, Coordination of care between facilities

  - ADT integration
- Circle Health – Tufts Medical Center:

  Enhanced communication between facilities, Reduction of faxes, Better coordination of care

  - Tufts -> Circle Health Cerner practices ADT notifications
  - Circle Health OB/GYN and Woman Health practices <-> Tufts Maternal Fetal Medicine
  - Circle Health Mother and Child Unit <->Tufts Maternal Fetal Medicine

Who We Are

- Lowell General Hospital is a not-for-profit community hospital serving the Greater Lowell area and surrounding communities, with two primary campuses located in Lowell, Mass.
- Lowell General Hospital merged with Saints Medical Center in 2012 to form Circle Health
- 2 hospital campuses, multiple satellite locations
- Affiliated with several PCP and Specialty practices using multiple EMR platforms

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Our Promise - *Complete connected care*

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Growth timeline: 2012 – 2018

Circle Health Westford opens expanding urgent care, PCP, specialty and OB/GYN services

2014

Circle Health Billerica opens expanding urgent care, PCP, and patient service center services

2016

2012

Lowell General Hospital acquires Saints Medical Center to form Circle Health

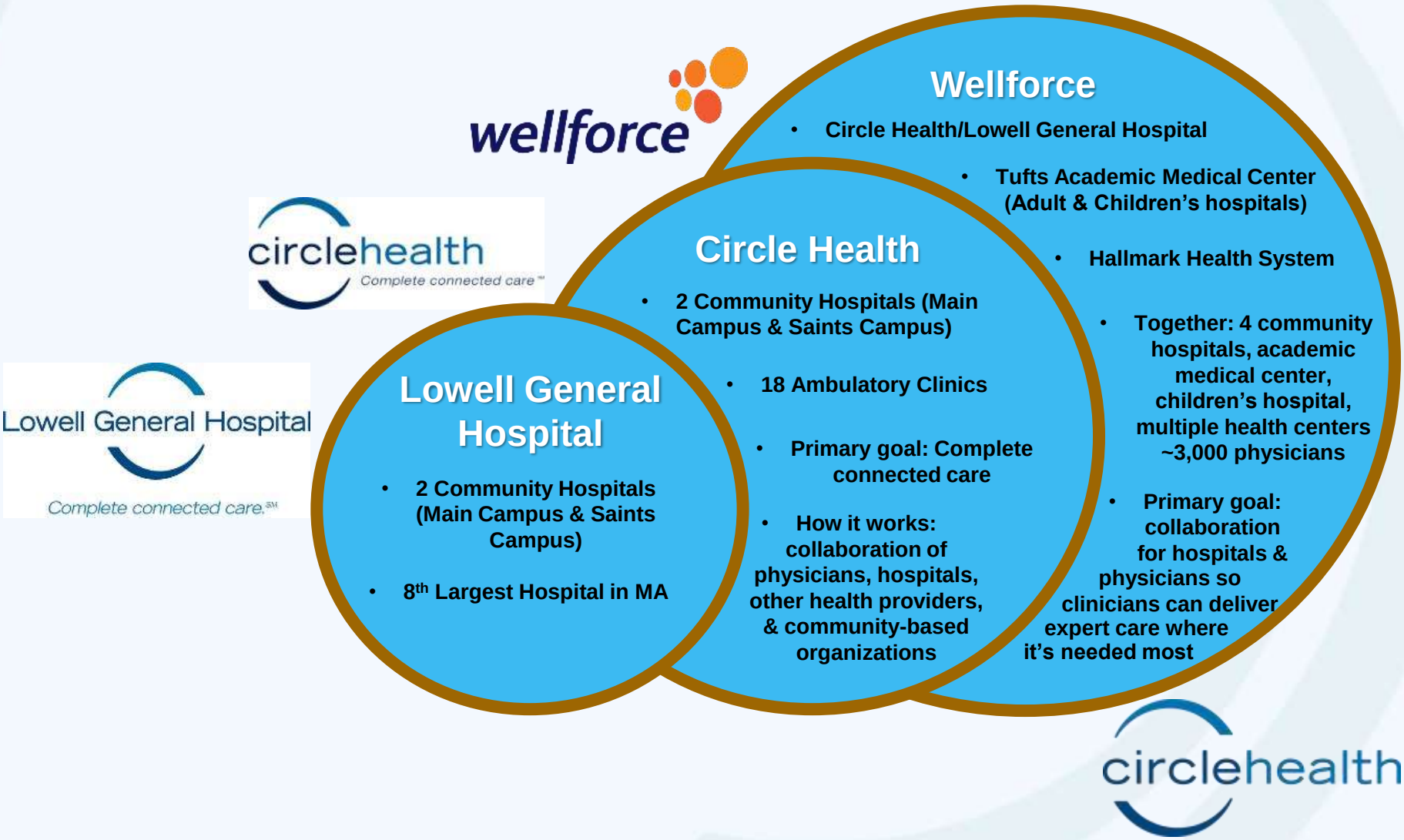
2015

Outpatient and physical therapy departments expand to space in Chelmsford

2018

Circle Health Dracut scheduled to open with urgent care, PCP and specialty care services

2012 – 2017


wellforce
Wellforce
• Circle Health/Lowell General Hospital
• Tufts Academic Medical Center (Adult & Children's hospitals)
• Hallmark Health System
• Together: 4 community hospitals, academic medical center, children's hospital, multiple health centers ~3,000 physicians
• Primary goal: collaboration for hospitals & physicians so clinicians can deliver expert care where it's needed most
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Complete connected care™
Circle Health
• 2 Community Hospitals (Main Campus & Saints Campus)
• 18 Ambulatory Clinics
• Primary goal: Complete connected care
• How it works: collaboration of physicians, hospitals, other health providers, & community-based organizations
Lowell General Hospital
Complete connected care.℠
Lowell General Hospital
• 2 Community Hospitals (Main Campus & Saints Campus)
• 8th Largest Hospital in MA
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Interoperability Use Cases

- Circle Health – Atrius Health integration (Status: Live)
  - Approximately 1000-1100 ADTs are sent per week from LGH to Atrius Health over the Mass HIway
  - Atrius Health creates admit/discharge encounters from the ADT feed in their EMR to notify the providers when their patients have been seen at LGH.
  - Reports are distributed to case management and nursing for post acute care workflows such as reaching out to the patients to make follow up appointments.

Interoperability Use Cases

- ADT notifications/CCDs from Tufts Medical Center to Lowell General PHO practices (Status : LIVE)
  - LIVE at 17 practices using Cerner EMR
    - Currently receive notifications as well as fax
    - Overall goal is to eliminate faxes (potentially during spring 2018)
    - Office staff matches the patient and forwards the Direct message to the provider
    - This saves the provider the time it takes to match the patient
    - This also helps the office staff make sure the patient comes in to see their PCP within the required amount of time per their insurance
  - Planning to roll-out to other Circle Health affiliated practices with capability to receive ADTs.

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Interoperability Use Cases

- Circle Health Mother Infant Unit – Tufts Maternal Fetal Medicine integration (Status: Testing)
  - Reports and other clinical documents sent to Tufts Specialists
    - Current process involves sending over 50 pages of faxes per patient for consults and transfers
    - NST reports, OB notes, consult documents
    - Future state workflow of utilizing Direct messaging from the EMR would help streamline workflow
    - End goal of project is to replace the current fax workflow with new electronic exchange workflow using Direct messaging

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Interoperability Use cases

- LGH Medical Group – Woman Health and OB/GYN Associates of Merrimack Valley – Tufts Maternal Fetal Medicine integration (Status: Testing)
  - Referrals for Level 2 Ultrasounds
    - Current process involves multiple pages of faxes per patient
    - Referral letter, Labs, Imaging results, OB notes
    - Future state process of utilizing Direct messaging would help streamline the workflow

Challenges

- Direct messaging workflow – multiple Direct addresses
- Practice workflow – Message Pool vs. Provider inbox
- Variation between EMRs
  - Standards (no “Direct” standards for non CCDA exchange)
  - Type of documents that can be exchanged
  - Workflow
- Transmission problems (certificate issues, various technical challenges related to exchange of information among as many as four different vendors)
- Data reconciliation (medication reconciliation, lack of consistency around data presented, SNOMED vs. ICD-10, clinical workflow)
- Organizational challenges – competing priorities, lack of resources to devote to interoperability projects

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Lessons Learned

- Achievable goals driven by use cases
  - Transitions of care
  - ADT notifications
  - Secure communication
  - Consult requests between physicians
- IT knowledge base
- Governance
- Emphasis on value
- Patients think we already have this capability

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Conclusion

Undersecretary Lauren Peters

2018 Schedule

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, May 7, 2018
  - Monday, August 6, 2018
  - Monday, November 5, 2018

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Thank you!

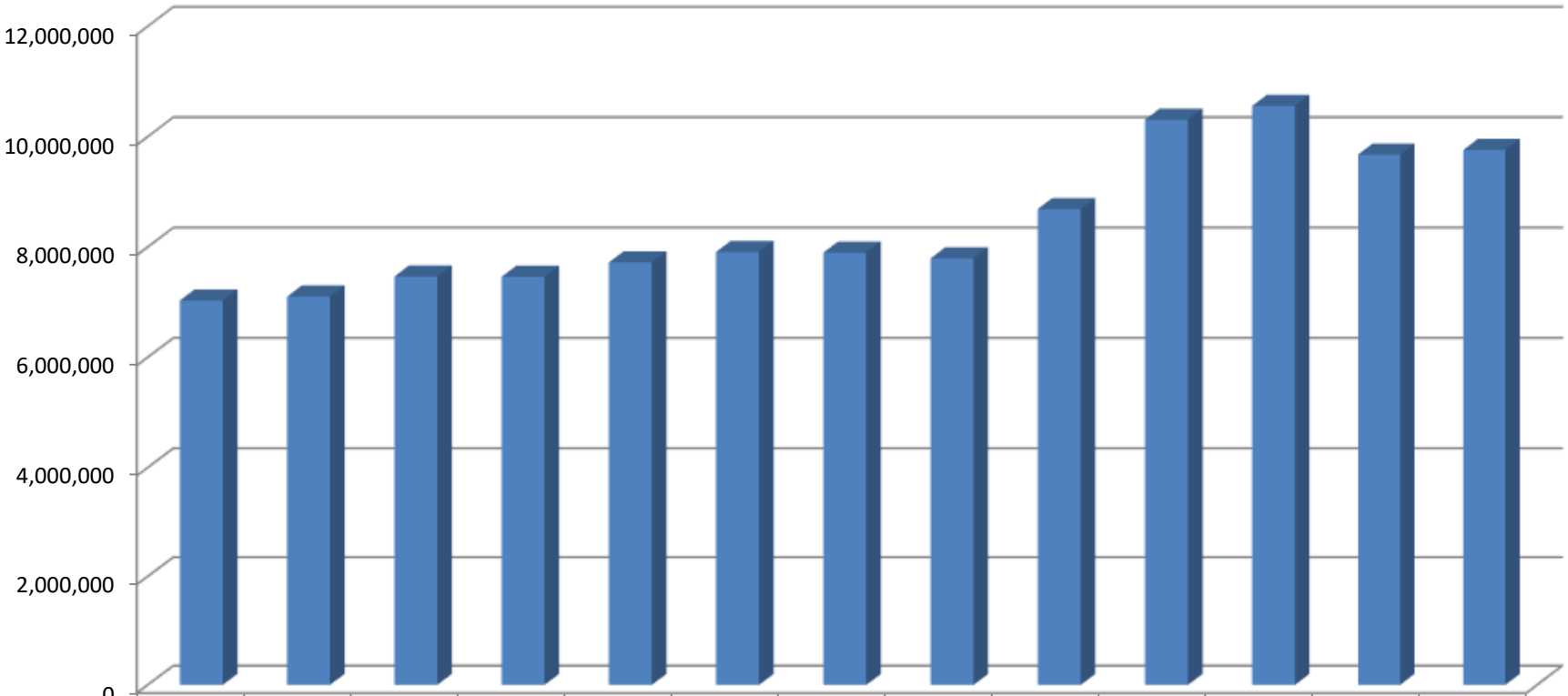
Appendix: *HIway Operations Update*

HIway Transaction Activity

13 Month HIway Transaction Activity

9,757,005 Transactions* exchanged in January (12/21/2017 to 01/20/2018**)

207,394,067 Total Transactions* exchanged inception to date



	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Total transactions:	7,029,969	7,100,105	7,463,101	7,460,597	7,718,904	7,909,195	7,894,635	7,793,259	8,685,940	10,305,258	10,555,739	9,673,458	9,757,005

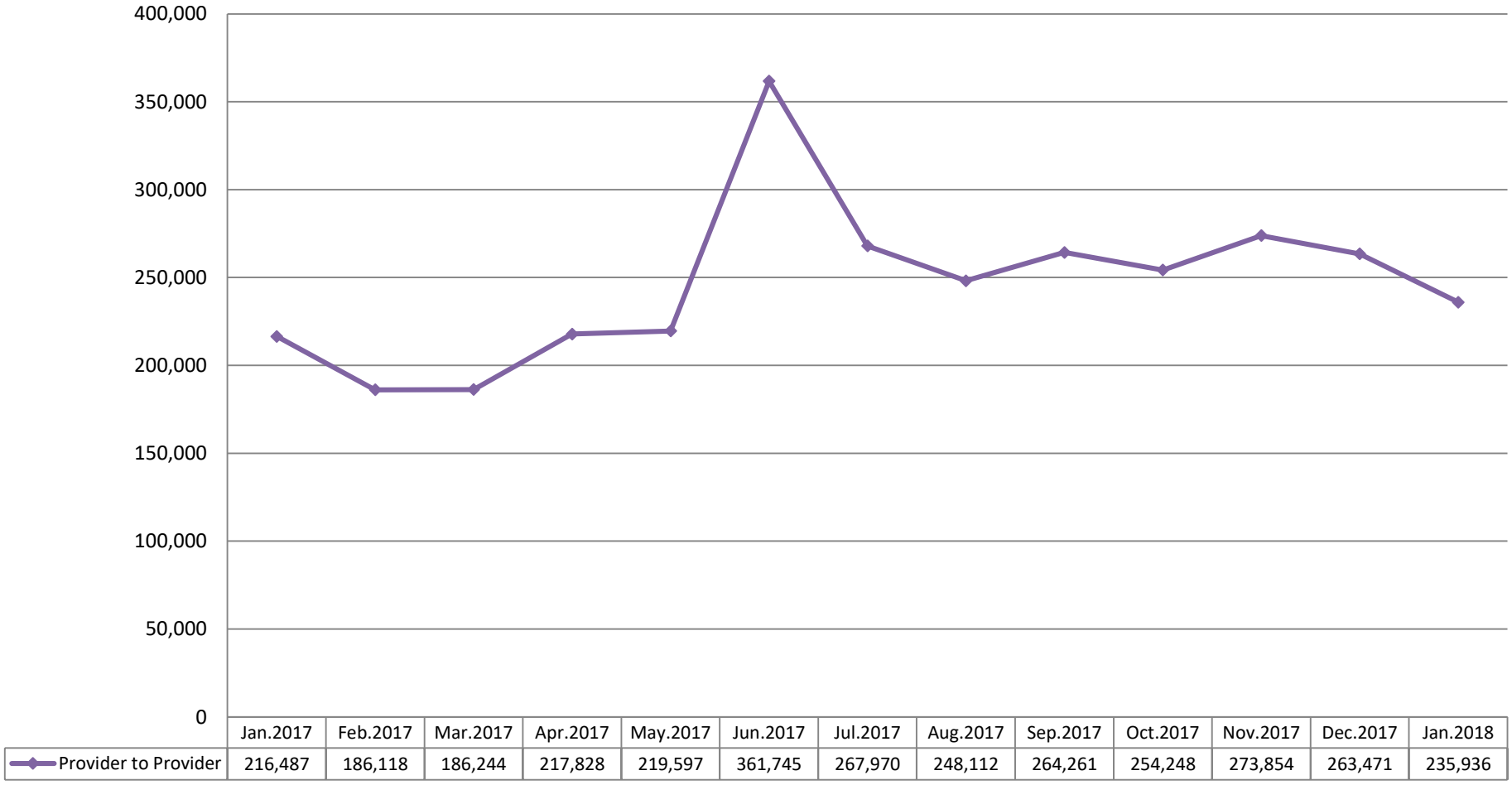
** Note: Includes all transactions over Mass HIway, both production and test*

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

HIway Transaction Analysis

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

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



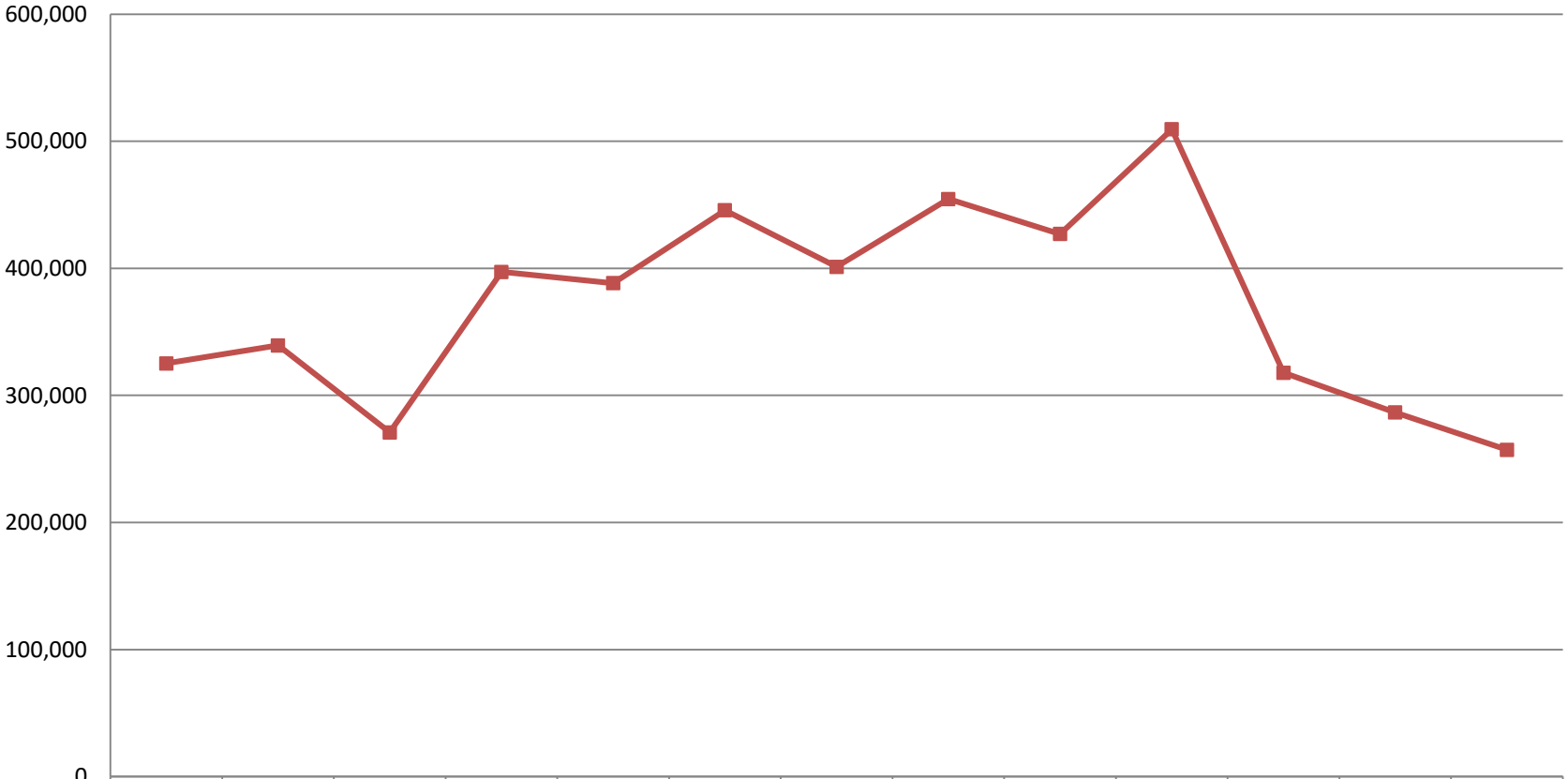
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Provider to Provider	216,487	186,118	186,244	217,828	219,597	361,745	267,970	248,112	264,261	254,248	273,854	263,471	235,936

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

HIway Transaction Analysis

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

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



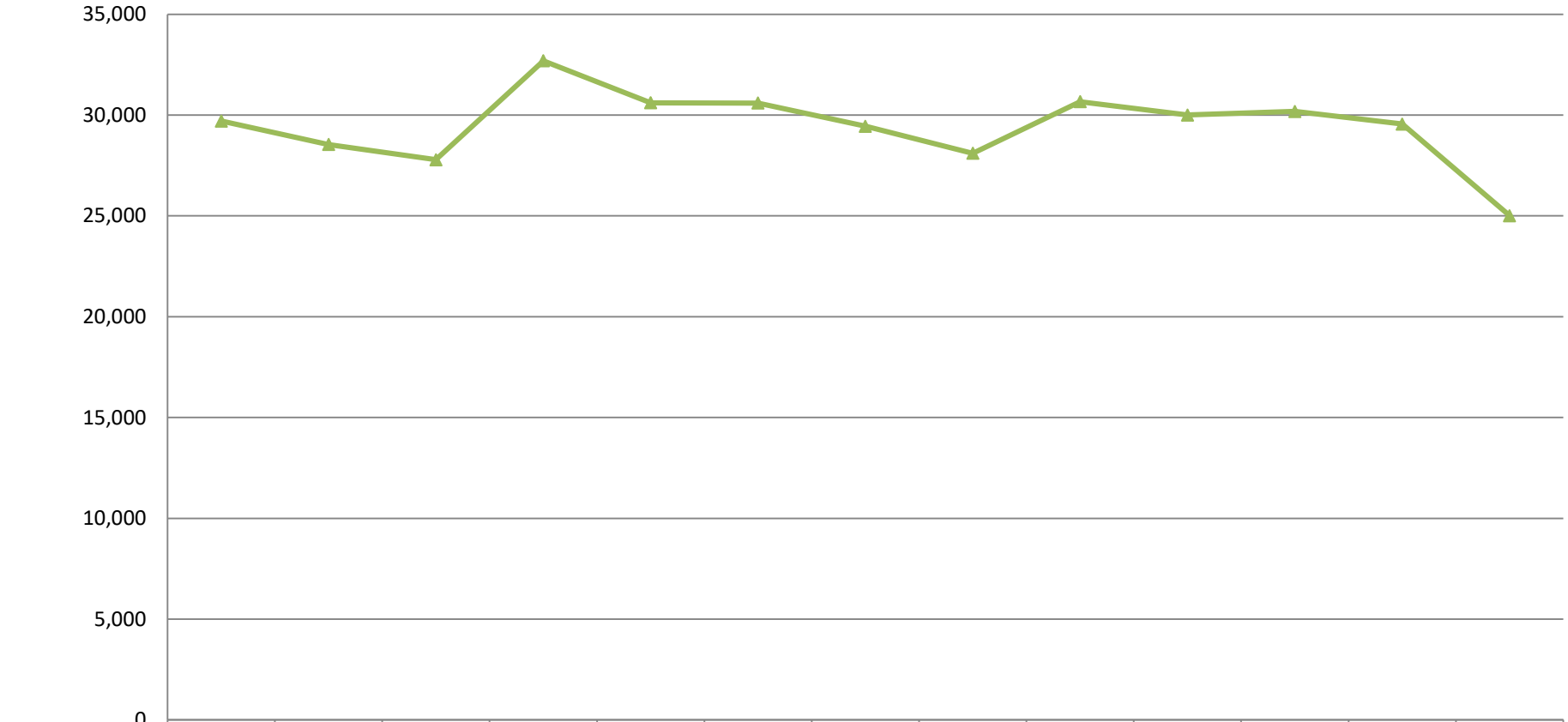
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Quality Reporting	325,166	339,380	270,903	397,178	388,311	445,709	401,163	454,485	427,053	509,461	317,913	286,607	257,233

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

HIway Transaction Analysis

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

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



	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Payer Case	29,700	28,538	27,786	32,687	30,611	30,592	29,445	28,104	30,663	30,004	30,181	29,554	25,010

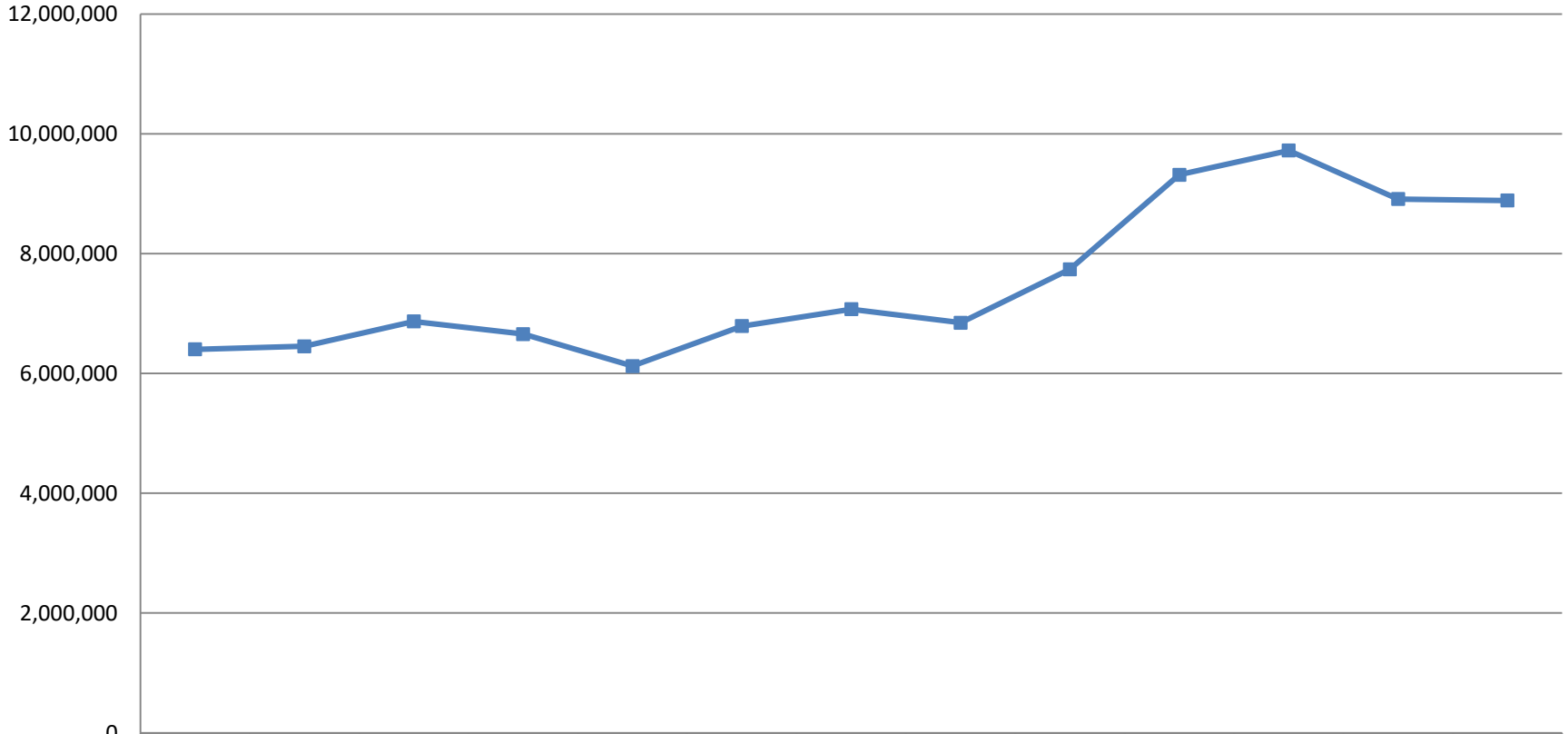
** Note: Reporting cycle is through the 20th of each month.*

HIway Transaction Analysis

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

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

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



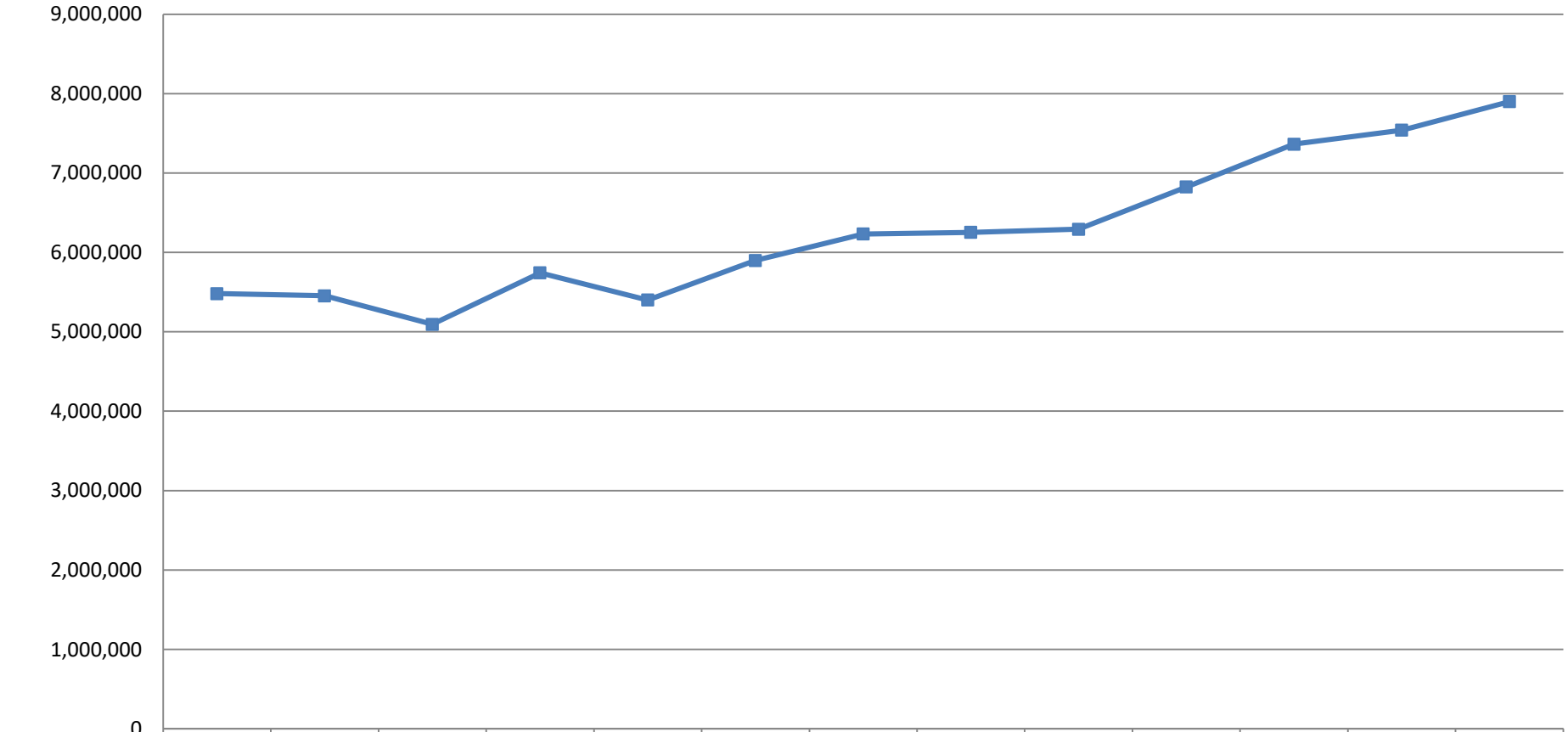
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
DPH Transactions	6,401,741	6,452,225	6,867,272	6,656,846	6,122,834	6,790,207	7,072,265	6,845,895	7,739,614	9,315,930	9,719,506	8,911,308	8,886,811

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

Transaction Analysis – Detail

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

Syndromic Surveillance Transactions



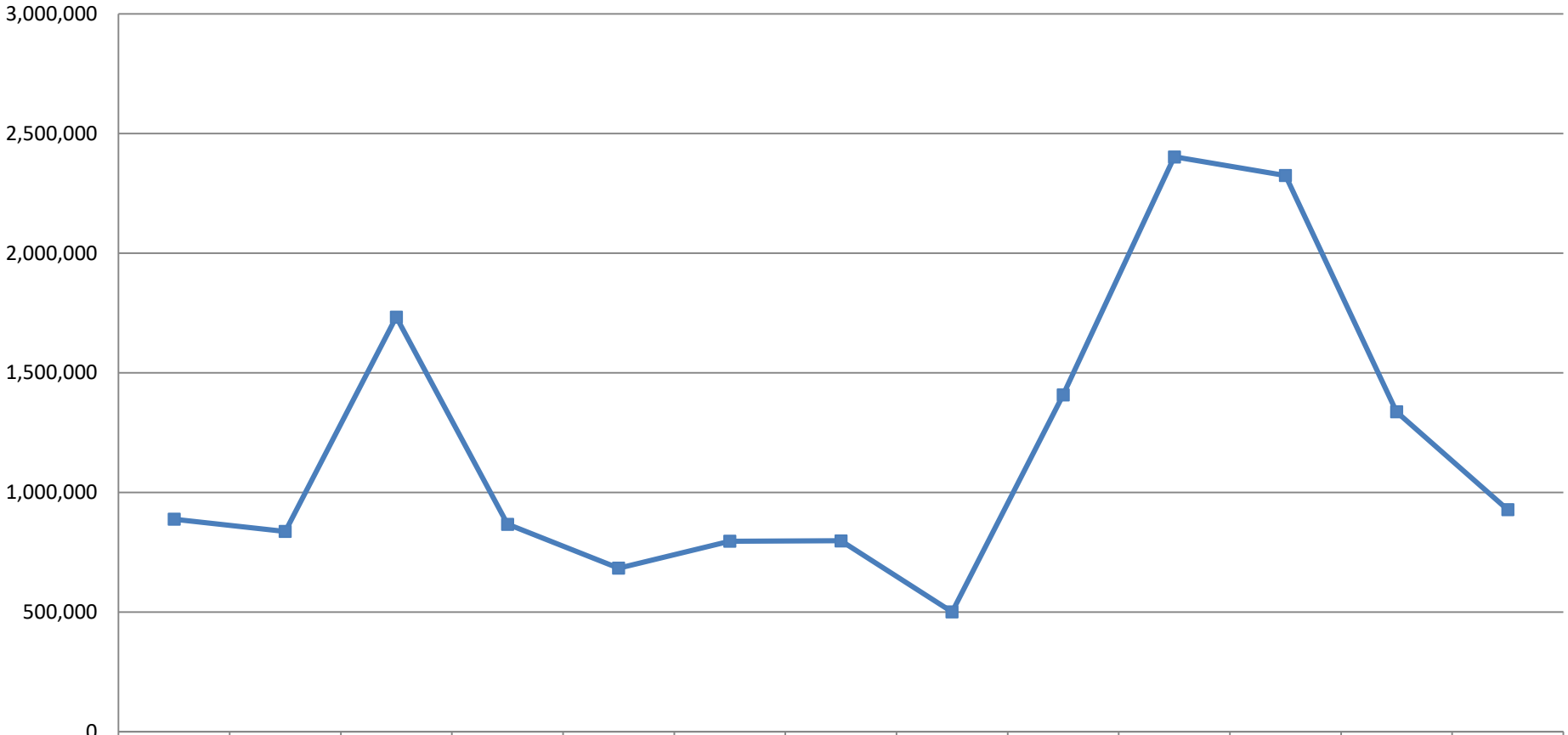
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Syndromic	5,480,332	5,454,437	5,094,559	5,742,681	5,400,986	5,899,280	6,232,258	6,253,392	6,292,697	6,824,744	7,364,445	7,539,295	7,899,103

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

Transaction Analysis – Detail

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

Immunization (MIIS) Transactions



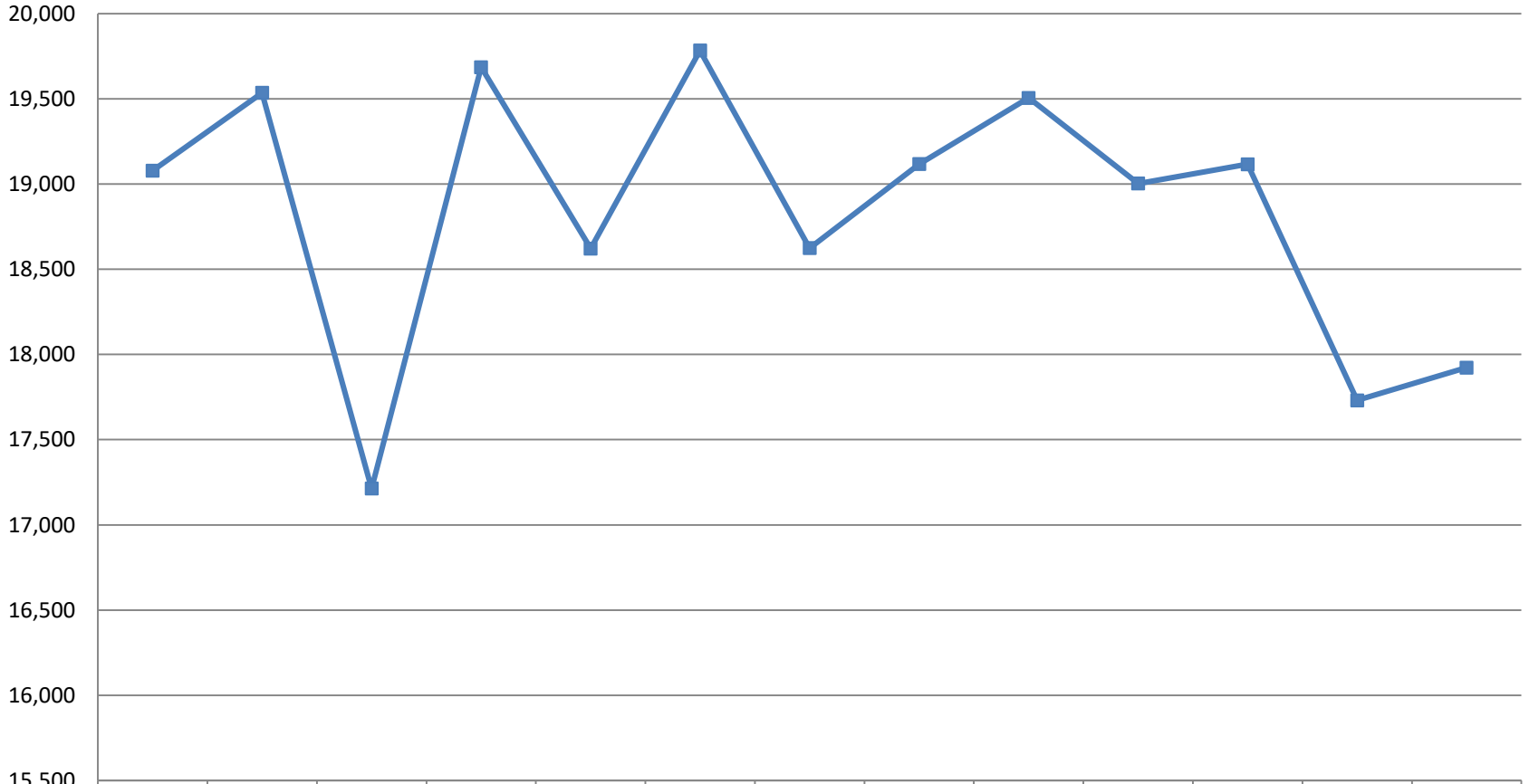
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
MIIS	888,367	837,521	1,733,218	867,478	683,917	796,230	798,267	500,981	1,407,977	2,402,660	2,324,526	1,337,427	928,058

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

Transaction Analysis – Detail

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

Boston Public Health Commission Transactions



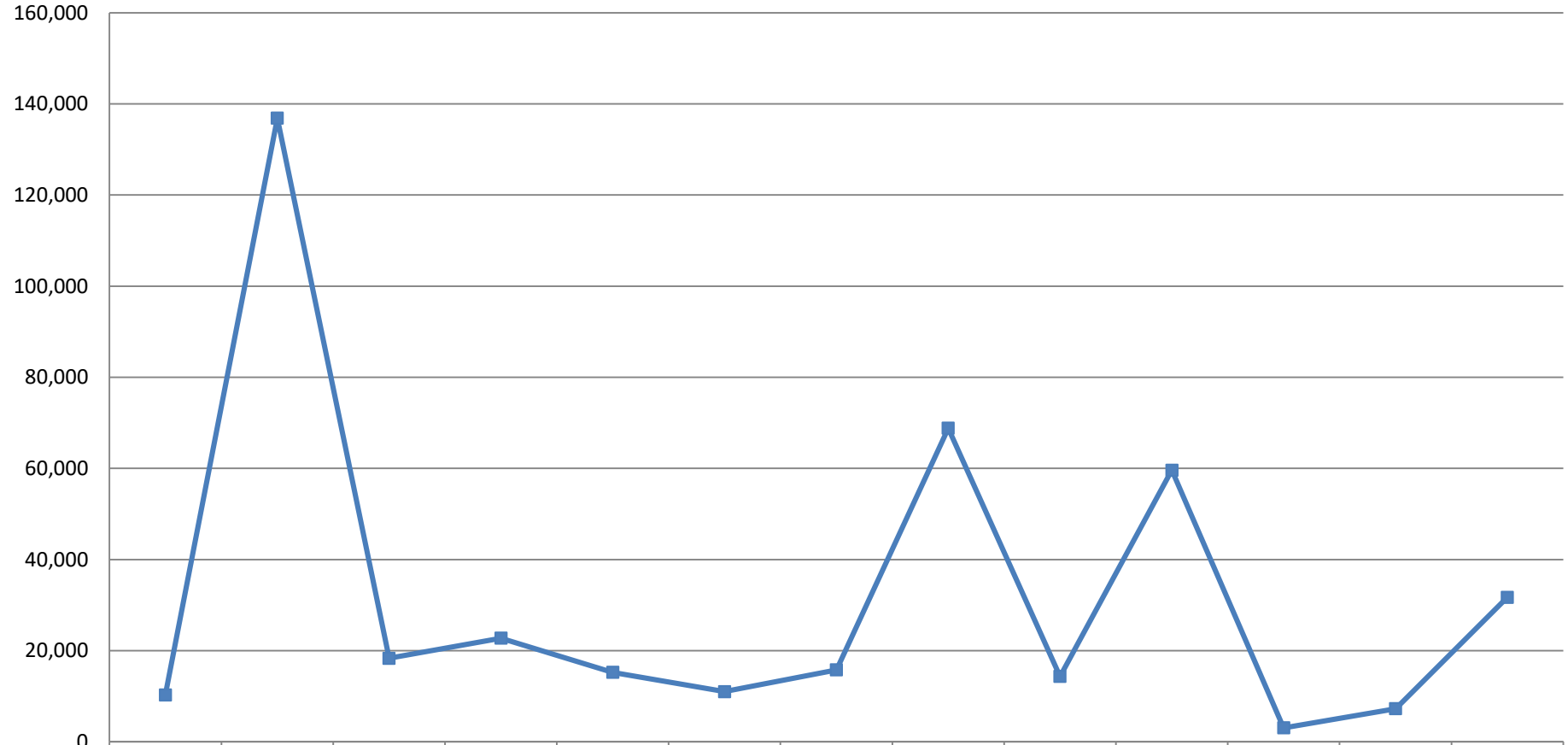
	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
Boston Health	19,078	19,535	17,213	19,685	18,621	19,783	18,624	19,117	19,505	19,003	19,116	17,731	17,923

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

Transaction Analysis – Detail

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

Opioid Treatment Program (OTP) Transactions **



	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
OTP	10,266	136,844	18,324	22,727	15,244	10,992	15,763	68,811	14,332	59,607	3,060	7,266	31,704

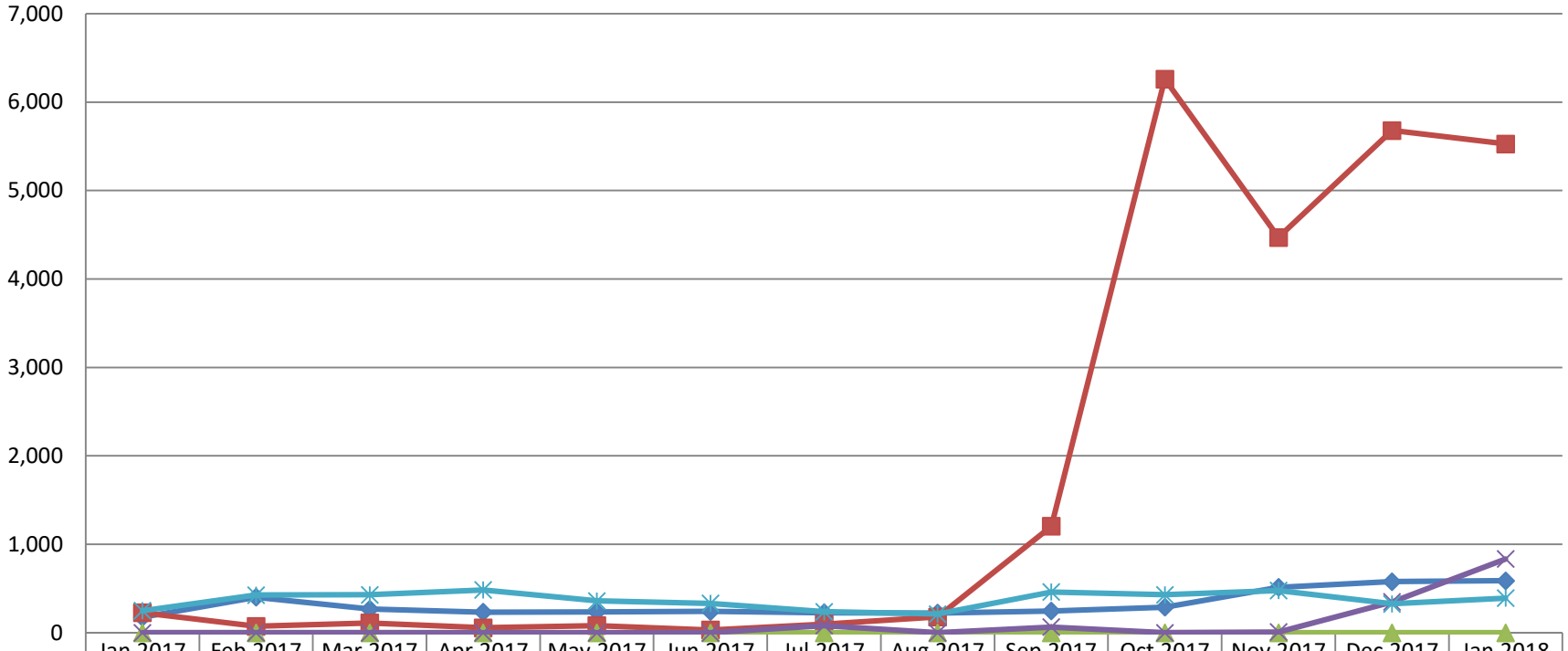
* *Note: Reporting cycle is through the 20th of each month.*

** *Note: OTP data available starting August 2017.*

Transaction Analysis – Detail

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

Other Public Health Transactions



	Jan.2017	Feb.2017	Mar.2017	Apr.2017	May.2017	Jun.2017	Jul.2017	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018
ELR	176	402	268	233	236	242	227	223	246	289	514	579	589
MCR	226	73	111	57	82	32	98	179	1,204	6,261	4,469	5,679	5,527
PMP	0	0	0	0	0	0	0	0	0	0	0	0	0
CBHI	0	0	0	0	0	0	82	0	65	0	8	349	834
eReferral	250	426	430	485	360	333	238	212	461	430	478	327	391

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

Customer Status Dashboard (Jan 20, 2018)

Tier (As of January 20, 2018)	Universe (Est.)	Actively Using	%ActivelyUsing	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	5	45%	5	45%		10
1d. Commercial imaging centers & labs	5	5	100%	2	40%		7
2a. Small hospitals	51	39	76%	11	22%		50
2b. Large ambulatory practices (50+)	33	18	55%	12	36%		30
2c. Large LTCs (500+ licensed beds)	8		0%	1	13%		1
2d. Ambulatory Surgical Centers	63		0%	1	2%		1
2e. Ambulance and Emergency Response	39	1	3%	3	8%		4
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	42	14%	37	12%		79
3b. Large behavioral health (10+ licensed providers)	14	3	21%	13	93%		16
3d. Large FQHCs (10-49)	30	18	60%	8	27%		26
3e. Medium ambulatory practices (10-49)	365	58	16%	20	5%		78
4a. Small behavioral health(<10 licensed providers)	90	8	9%	19	21%	1	28
4b. Home health, LTSS	149	28	19%	41	28%	4	73
4c. Small FQHCs (3-9)	29	5	17%	1	3%		6
4d. Small ambulatory practices (3-9)	1595	179	11%	107	7%	1	287
5a. Very Small ambulatory practices (1-2)	4010	272	7%	285	7%	4	561
Grand Total	6861	715	10%	577	8%	14	1306

HIway Participation
Oct 21, 2017 – Jan 20, 2018

19 New Participation Agreements

Alternative Home Health Care, LLC
Boston Home Health Aides LLC
Essex Neurological Associates. PC
Greater Lynn Senior Services, Inc. (GLSS)
Haffey Center for Attention & Memory
Heritage Dialysis Center, LLC
Hill Eye Associates P.C.
Mudrock, John MD
North Shore Elder Services (Senior Care)
North Shore Shoulder, LLC
One Medical Group PC
Pediatric Specialists
Redwood Pediatric and Adolescent Medicine
SeniorCare Inc
Shaila Associates Diagnostic
SMART
South Cove Manor Nursing & Rehabilitation Center
The Brien Center (Northern Berkshire Counseling Center)
WestMass ElderCare

HIway Participation
Oct 21, 2017 – Jan 20, 2018

91 New Connections (page 1 of 2)

Alan Ertel, MD
Anna Jaques Hospital
Baystate VNA
Beth Israel Deaconess Hospital - Plymouth
Beth R. Hardiman, MD
Betsy Sherry, MD
Boston Medical Center
Boston Medical Center
Boston Urogynecology Associates
Breast and Endocrine Surgical Specialties
Burton Rabinowitz, MD
Cambridge Neurosurgical SpineCare, LLC
Center for Women
Chelsea Center
Crimson foot and ankle
David Disimone, MD
Davis Square family Practice
East Boston Neighborhood Health Center
East Boston Neighborhood Health Center
ENT Surgery Associates, LLC
Essex Neurological Associates. PC
Fitchburg Family Practice
Franklin Segall, MD
Fresh Pond Women's Health
Gary P. Gurka, MD
Geriatric Outreach Services- Quimbley Center
Guy Rochman, MD
Haffey Center for Attention & Memory
Heritage Nursing Center
Heywood Hospital
Integrated Health and Fitmess
James F. Conner, Jr., MD
John Chobanian, MD
Julio C. Ayala, MD
Kinnari R. Kher, Md
Lawrence General Hospital
Leominster Family Practice
Leominster Pediatrics
Lexington Ob/gyn Association
Longfellow Primary Care
Martha Martents, MD
Mount Auburn Anticoagulation Services
Mount Auburn Cardiology Associates, Inc.
Mount Auburn Cardiothoracic Surgery
Mount Auburn Diabetes Education

HIway Participation
Oct 21, 2017 – Jan 20, 2018

91 New Connections (page 2 of 2)

Mount Auburn Cardiology Associates, Inc.
Mount Auburn Cardiothoracic Surgery
Mount Auburn Diabetes Education
Mount Auburn Endocrinology Waltham
Mount Auburn Gastrointestinal Consultants
Mount Auburn Healthcare at Arlington
Mount Auburn Healthcare at Cambridge
Mount Auburn Healthcare at Lexington
Mount Auburn Healthcare at Union Square
Mount Auburn Healthcare at Waltham
Mount Auburn Hospital Nutrition
Mount Auburn Hospital-Maternal Fetal Medicine
Mount Auburn Infectious Disease Department
Mount Auburn Medical Associates
Mount Auburn Occupational Health Services MAH
Mount Auburn Occupational Therapy
Mount Auburn Physical Therapy
Mount Auburn Practice for Women
Mount Auburn Prenatal diagnosis Center
Mount Auburn Pulmonary Consultants
Mount Auburn Pulmonary Rehabilitation
Mount Auburn Rheumatology
Mount Auburn Sleep Disorders Center
Mount Auburn Speech Therapy
Mount Auburn Surgical Associates
Mount Auburn Travel Medicine Center
Mount Auburn Walk-In Center
Mount Auburn Weight Management and Bariatric Surgery
New England Physiatry, LLC
North Shore Ear, Nose & Throat Assoc., PC
Palm skilled Nursing Center
PAMA Cardiology
Pediatric Specialists
Primary Care Center
Qualifacts
Richard J. Kerbal, MD
Russell Nauta, MD
Shaila Associates Diagnostic
Somerville Family Practice
South Shore Hospital
Taylor and Sullivan Plastic Surgery
Torey Morgan, M
University Skin Oncologist
Watertown Primary Care
Waverley Primary Care
WestMass ElderCare
Willow Manor
Women's Healthcare at Arlington
Women's Healthcare at Waltham

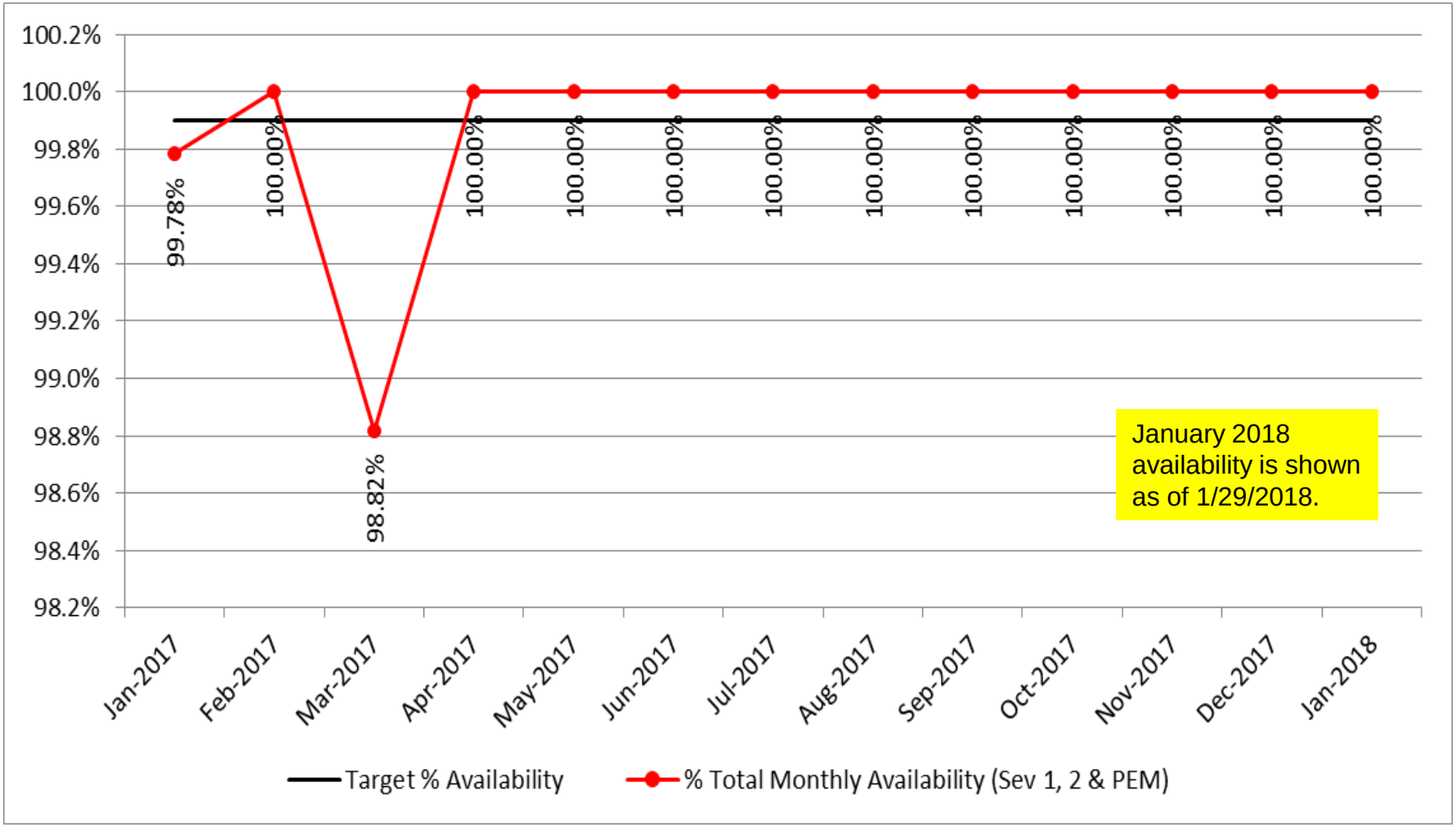
+4 Non-Participant connections

HISP to HISP Connectivity

25 HISPs Connected to Mass HIway

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

13 Month HIway Availability Trends



Metric Targets:

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