Commonwealth of Massachusetts

Executive Office of Health and Human Services



Health Information Technology Council Meeting

February 6, 2017





- **1. Welcome** *Alice Moore*
- **2. HIway Regulations Update** *Gary Sing & Kathleen Snyder*
- **3. Event Notification Service (ENS) Update** David Whitham & John Gilbert
- **4.** Conclusion Alice Moore

Appendix: *HIway Operations Update*





HIway Regulations Update

Gary Sing and Kathleen Snyder





EOHHS expects the final Mass HIway Regulations to be promulgated and take effect around February 10, 2017

- Mass HIway Regulations implement two main parts of M.G.L. Chapter 118I:
 - 1. The **opt-in / opt-out** mechanism for the HIway
 - 2. The statutory requirement for Providers to **connect to the Mass Hlway** by 2017

- The following slides provide:
 - 1. Review of key components of the regulations
 - 2. Overview of stakeholder input received during the November 2016 public comment period, including the public hearing





EOHHS received feedback and testimony during the public comment period and public hearing which was generally very supportive of the draft Mass HIway Regulations.

EOHHS made several minor but important changes and clarifications in the final regulations as a result of the feedback and testimony received. EOHHS did not make any major changes.

- 20 individuals / entities provided feedback and testimony during the public comment period, including representatives of a variety of stakeholders including provider organizations, advocates, and medical professional societies.
- The following slides contain key components of the Mass HIway Regulations:
 - The **grey boxes** provide a description of the draft Mass HIway Regulations, and were presented at the previous HIT Council meeting in November
 - The **purple boxes** describe feedback from the public comment period, and changes made to the regulations as a result, if any





The proposed regulations described the following regarding the use of HIway Direct Messaging:

- Mass HIway users may transmit information via HIway Direct Messaging in compliance with applicable federal and state privacy laws
- Mass HIway users may implement a local opt-in and/or opt-out process that applies to the use of HIway Direct Messaging by their organization, but are not required to do so.

Feedback from the public comment period:

• EOHHS received general support of the opt-in opt-out mechanism, including some strong support of the regulations' provisions regarding Direct Messaging.

<u>Result</u>: No change to the draft regulations





The proposed regulations described the following opt-in opt-out mechanism for the use of the *forthcoming* HIway-sponsored Services (such as a state-wide Event Notification Service):

- **Opt-in:** HIway Participants must provide **written notice** of how the organization uses HIway-sponsored Services
- **Opt-out:** The HIway or its designee will administer a **centralized opt-out system**
 - A HIway Participant that has an established relationship with a patient shall:
 - Notify the HIway if the patient decides to opt-out; *and/or*
 - Provide written instructions to a patient how to notify the Mass HIway if they want to opt-out
- <u>Supplemental local process</u>: HIway Participants may choose to implement an additional **local** opt-in and/or opt-out process that applies to the use of HIway-sponsored Services by their organization, but they are not required to do so.
 - If a participant exercises this choice, then the local process must supplement (and must not replace) the HIway opt-in opt-out mechanism





Feedback from the public comment period:

Opt-in:

• Written notice: EOHHS received feedback that certain forms of written notice may not provide sufficient notification for consumers. Two commenters were not supportive of opt-in by written notice.

<u>Result</u>: EOHHS removed 'visible posters' and 'banners on web portals' from the list of approved forms of written notice.

Non-English languages: EOHHS received feedback regarding : (a) the need for resources to help lowliteracy and non-English speakers, and (b) a recommendation to allow HIway participants to meet the regulations' written notice requirement by complying with applicable federal law .

<u>Result</u>: EOHHS made a minor modification to state that written notice must be available in the languages that will be specified by EOHHS in the Mass HIway Policies & Procedures.

Opt-out:

• One commenter's concerns about opt-out highlighted that it continues to be important to educate consumers and stakeholders that the HIway is not a clinical data repository at this time.

<u>Result</u>: EOHHS added language to the regulations and the HIway Policies & Procedures that details the services provided by the HIway, in order to make it clear that the HIway is not a clinical data repository at this time, and the HIway does not maintain or have access to a patient's electronic medical record.

• EOHHS received questions asking for additional details about how the centralized opt-out will work. <u>Result</u>: No change to the draft regulations; details will be forthcoming when the HIway-Sponsored Services (e.g., ENS) are closer to launch.





The proposed regulations described a phased-in approach whereby:

- Initially, only certain Provider Organizations are required to connect. These Provider Organizations have an initial "Year 1" connection date in 2017, 2018 or 2019 (see bottom of this slide)
- The connection requirements are phased in over 4 years
- HIway connection dates for other Provider Organizations will be provided in future guidance, will be no earlier than January 2018, and will be provided with at least one year notice

The proposed initial "Year 1" connection dates are as follows:

- 1. Acute Care Hospitals: The effective date of the HIway regulations
- 2. Medical Ambulatory Practices with 10 or more licensed providers*: January 1, 2018
- 3. Community Health Centers (CHCs):
 - January 1, 2018 for large CHCs (10+ providers)
 - January 1, 2019 for small CHCs (<10 providers)

* For purposes of the regulations, "licensed providers" are limited to include medical doctors, doctors of osteopathy, nurse practitioners, or physician assistants.





Feedback from the public comment period:

- **Phased-in approach:** EOHHS received feedback that was generally very supportive of the phased-in approach. Representatives of a variety of stakeholders, including behavioral health, dental and podiatry professional societies provided supportive testimony.
- **Definition of Medical Ambulatory Practice:** EOHHS received feedback asking to change the definition of a *Small* Medical Ambulatory Practice from less than 10 licensed providers to less than 15 providers (in order to align with MACRA).

<u>Result</u>: No change to the draft regulations; maintaining the 10 licensed provider threshold is anticipated to increase the number of practices connecting to the Mass HIway.





The proposed regulations described a 4-year phased-in approach to connecting to the HIway, with the goal of progressively encouraging Provider-to-Provider communications

- Year 1: send or receive HIway Direct Messages for at least one Use Case within any category
- Year 2: send or receive HIway Direct Messages for at least one Use Case within the category of Provider-to-Provider (P2P) communications
- Year 3: send HIway Direct Messages for at least one P2P Use Case; and receive HIway Direct Messages for at least one P2P Use Case
- Year 4: Provider Organizations may be subject to **penalties** if they have not met the HIway connection requirements
- **ADT submissions by Acute Care Hospitals:** The proposed regulations describe that part of the HIway connection requirement is for Acute Care Hospitals to submit ADTs to the state-sponsored ENS within one year after this forthcoming service is launched

Feedback from the public comment period:

- EOHHS received general support of the phased-in approach, and did not receive any requested modifications.
- <u>Result</u>: No change to the draft regulations





The proposed regulations described the following regarding the M.G.L. Chapter 118I's requirement *"to implement a <u>fully interoperable electronic health record</u> system that connects to the statewide HIE":*

- Provider Organizations that have dates in the regulation for connecting to the HIway shall establish interoperability by implementing HIway Direct Messaging.
- These Provider Organizations shall submit information regarding their EHR to the Mass HIway by their initial HIway connection date.

Feedback from the public comment period:

• Several stakeholders recommended flexibility in how providers could connect to the Mass HIway, such as through using HIway webmail.

<u>Result</u>: This is consistent with what the regulations had intended, so EOHHS made a minor edit to the regulations and the Mass HIway Policies & Procedures in order to make it more clear that there are several different ways to connect to the Mass HIway (including an EMR's Direct XDR connection, a Local Access for Network Distribution (LAND) appliance connection, or a Webmail connection).

The Mass HIway Policies & Procedures will also provide the attestation form that Provider Organizations will use to provide information to the HIway regarding how they connect to the HIway.





Other feedback received from the public comment period:

Penalties:

 One commenter recommended that EOHHS have flexibility in determining the penalty amounts for not complying with the HIway connection requirement (i.e., instead of fixed dollar amounts, penalties could be "up to" a certain dollar amount).

<u>Result</u>: No change to the draft regulations; fixed penalty amounts will allow for a clear and efficient penalty determination process

Patient privacy & access:

- EOHHS received feedback regarding the importance of patient privacy and security. <u>Result</u>: EOHHS made edits to clarify that unauthorized access or disclosure of identifiable PHI is prohibited and may be subject to penalties established under state or federal law.
- One commenter recommended allowing patient access to their information on the HIway (e.g., relationship locations)

<u>Result</u>: No change to the draft regulations; potential functionalities regarding patient access to the Mass HIway can be considered as HIway-Sponsored Services are under consideration



Staying informed



- EOHHS anticipates making the following documents available on the Mass HIway website (<u>www.masshiway.net</u>) once the final HIway Regulations are promulgated:
 - The final Mass HIway Regulations
 - Mass HIway Regulations Summary
 - Mass HIway Regulations FAQs
 - Mass HIway Fact Sheet for Patients
 - Mass HIway Policies & Procedures (version 3)
 - This document provides the detailed rules that govern access to and use of the Mass HIway
 - The changes in version 3 are being made to align with the Mass HIway Regulations, to streamline Mass HIway documentation and contracts, and to update procedures and practices to reflect changes in the healthcare information technology environment
- To receive updates regarding the Mass HIway and the Mass HIway Regulations, stakeholders can sign up on the Mass HIway's website to receive the HIway's newsletters via email.
- Notices via email will be sent to all recipients of the Mass HIway newsletters once the documents mentioned above are available.





Event Notification Service (ENS) Update

David Whitham and John Gilbert





- In summer 2015, the Cross-Agency Workgroup considered multiple programs, services, and initiatives to improve eHealth in the state.
- A statewide Event Notification Service (ENS) was identified as one of the top priorities that providers in the state were looking for the HIway to provide
- **Private ENS services** are already being used and introduced, but none of them provide the statewide scope that is needed to support payment reform and delivery system improvements





• ENS can improve care coordination:

 Event Notification Service (ENS) would provide real-time notifications to providers when a patient is admitted, discharged or transferred to, from, or within a hospital. This in turn would allow clinicians to respond with information and/or clinical support.

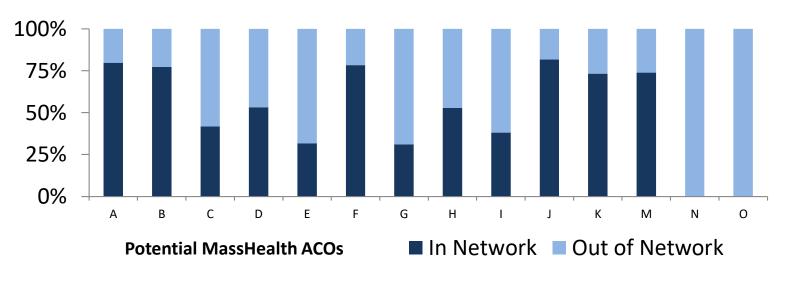
• ENS has been identified as a need in MA:

- The need and the demand for ENS from providers is increasing as a result of payment and care delivery reform
- Other statewide HIEs have already successfully implemented an ENS, and several providers have inquired about the possibility of the HIway offering an ENS
- Some providers are piloting ENS through private vendors; however, overall penetration is limited.
- Several providers stated that providing a robust public option with an ENS through the HIway ensures that all providers (and patients) could benefit.





- Analysis by MassHealth shows that without a statewide ENS, potential MassHealth ACOs will receive only part of the information needed to effectively manage utilization.
- Among potential MassHealth ACOs, an average of ~50% of acute inpatient hospital spending is out-of-network.



Acute Inpatient Hospital Spending (Calculated from claims)

Source: HIT Council 12/2015





Key considerations:

- 1. ENS could be built upon the current demographic data that is collected through Admit Discharge Transfer (ADT) messages.
- 2. To implement an ENS, the HIway would begin utilizing information that is contained in ADTs (e.g., the "message type" information that conveys if the ADT is related to an admission vs. transfer vs. discharge). Once the ENS is implemented, acute care hospitals will be required via HIway regulations to send the ADTs for populating the ENS within 1yr of ENS establishment.
- 3. HIway regulations will require providers to inform their patients through written notice about their ENS participation (i.e. Opt-In through written notice). If patients decide to Opt-Out, then their decision will be managed by a centralized opt-out mechanism managed by the HIway.

Topics that EOHHS is seeking feedback on include:

- Inclusion of clinical information in notifications
 - Some stakeholders have mentioned that notifications could be more useful if they included clinical information (e.g., reason for visit and diagnosis)
 - However, not all stakeholders agree that this added information should be included, given the sensitivity of the data, among other considerations





- ENS Analyst on-board December 2016
 - Scanning the regional landscape of HIE and ENS
 - On-going consultation with the Office of the National Coordinator for Health Information Technology
 - On-going consultation with the Massachusetts eHealth Institute and Massachusetts eHealth Collaborative
 - Requirements Gathering:
 - Scheduling statewide stakeholder sessions
 - Researching functionality and feature-sets of products in use
 - Documenting Use-Cases





State	ENS	Clinical Data Included?	Lessons Learned
Vermont	Patient-Ping	No	 Opt-In was a challenge. Data quality is a concern. Encourage diversifying among HIE and ENS vendors.
New Hampshire	Promoting CMT PreManage ED as an ENS	No (recommends including clinical data with ENS however)	 HIE and ENS are constrained due to strong concerns around privacy and security. Recommends peer learning and user groups and training for HIE and ENS. Experienced some resistance from Hospital IT departments regarding devices such as LANDs being installed as they viewed it as extra hardware to maintain.
New York	Initiate	Clinical data is exchanged	 Opt-In was challenging at first but participation rates are improving. Seek public and private input and install governance. While the HIE/ENS mechanisms are in place, the data quality is of concern.





Purpose of interviews: to understand data sharing and analytic capabilities of Pilot ACOs

Pilot ACO Interviewed	Date Interviewed	Pilot ACO Departments Interviewed
Community Care Collaborative	12/6/2016	 Finance, Quality Reporting
Children's Hospital Integrated Care Organization	12/8/2016	 Reporting and Analytics
Partners HealthCare Accountable Care Organization	12/9/2016	 Reporting and Analytics, Quality, Population Health, Data Warehouse
Steward Integrated Care Network	12/13/2016	 Reporting and Analytics, EHR
UMass Memorial Health Center	12/14/2016	 Analytics, Practice Improvement, Operations, Population Health
Boston Accountable Care Network	12/15/2016	 Quality, Strategy





Overall Tech Capabilities	 5 ACOs have internal IT departments; 1 ACO contracts out IT functions to a vendor All have some connectivity to Mass HIway, but have differing levels of use even amongst sites within an individual ACO All use multiple EHRs within their ACO with varying degrees of interoperability; 2 ACOs moving exclusively to one EMR within next 2 years
Current ENS Systems	 1 ACO uses HIway Direct Messaging to notify PCPs of hospital discharge 1 ACO receives daily ADTs from the main hospital in their system 2 ACOs alert PCPs of hospital discharges through their EMR or fax if the hospital is in their ACO 2 ACOs have no ENS system
	 1 of these ACOs relies on data warehouse clinical data updated daily 2 ACOs are currently using PatientPing to receive info on hospital encounters from hospitals outside their ACO; 1 ACO considering using PatientPing 2 ACOs are looking into a future ENS system through the Mass HIway 3 ACOs noted frustration on obtaining notification of hospital encounters outside their system





- **Good data quality is essential:** Even if the Mass HIway ENS is functional, the data need to be accurate to be useful. The HIway will need to work closely with providers to clearly define ADT and notification formats and standards.
- Need successful implementation of Opt-In/Opt-Out: Multiple states cited challenges with Opt-In; the HIway will need to ensure smooth rollout of its Opt-In/Opt-Out mechanisms, including providing a sample of Opt-In written notice, as well as a robust centralized Opt-Out mechanism
- Variety of event notification systems in place in MA: Mass HIway ENS development will need to account for both providers with and without existing ENS





- January February 2017: Gather input and requirements from stakeholders, and subject matter experts
- February May 2017: Prepare and review Request for Responses
- June October 2017: Review responses, select Vendor, negotiate and sign contract
- October 2017 March 2018: Set up ENS, establish business processes, testing and defect remediation
- April 2018: ENS Go-Live





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, from 2:30 to 4:00 PM <u>Note</u>: This meeting is on the 2nd Monday of the month and is starting at 2:30 instead of 3:30 PM
 - Monday, August 7, 2017
 - Monday, November 6, 2017

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Thank you!





Appendix: *HIway Operations Update*

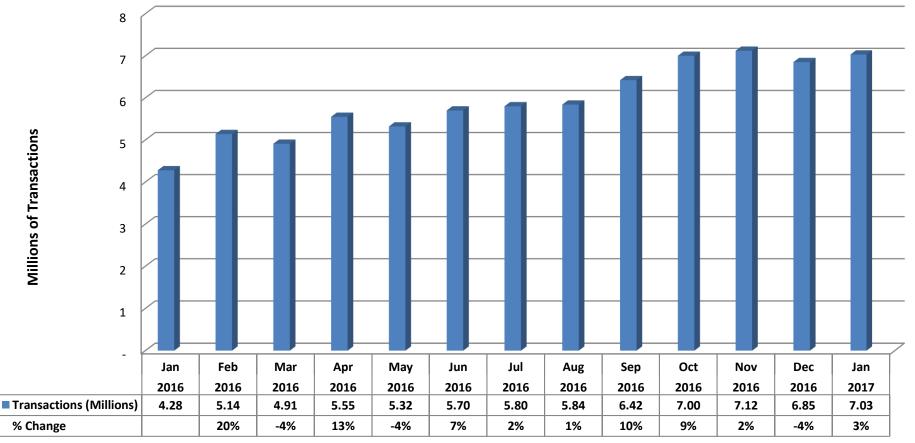




13 Month Hlway Transaction Activity

7,029,969 Transactions* exchanged in January (12/21/2016 to 01/20/2017**)

112,795,775 Total Transactions* exchanged inception to date



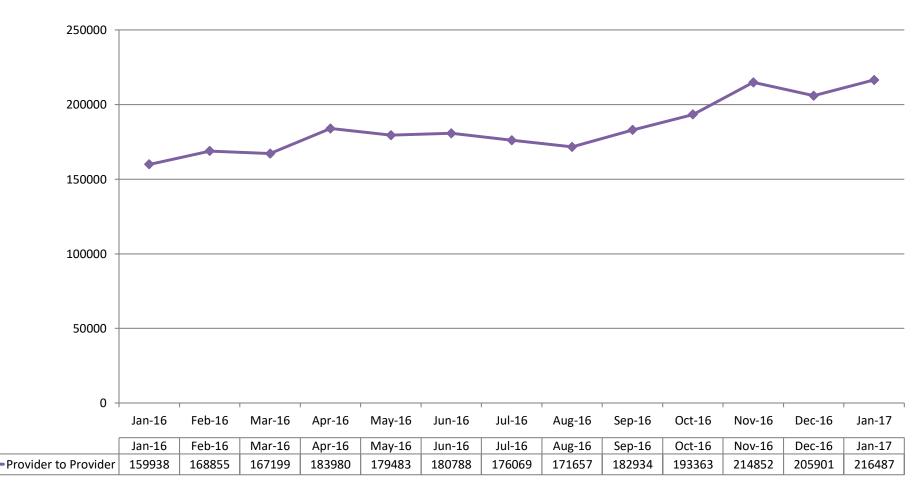
* Note: Includes all transactions over Mass HIway, both production and test
 ** Note: Reporting cycle is through the 20th of each month.





HIway Production Transaction Trends – Provider to Provider (Jan 2016 – Jan 2017)

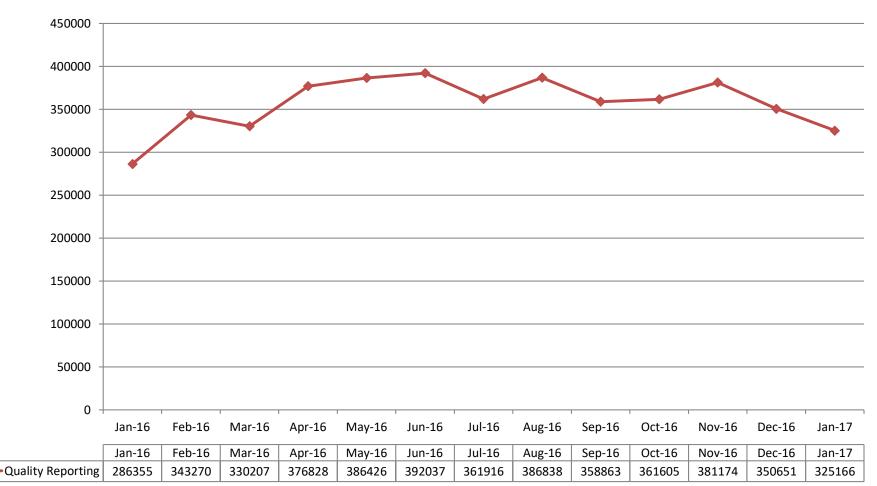
3% of HIway activity in January* was for Provider to Provider transactions







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

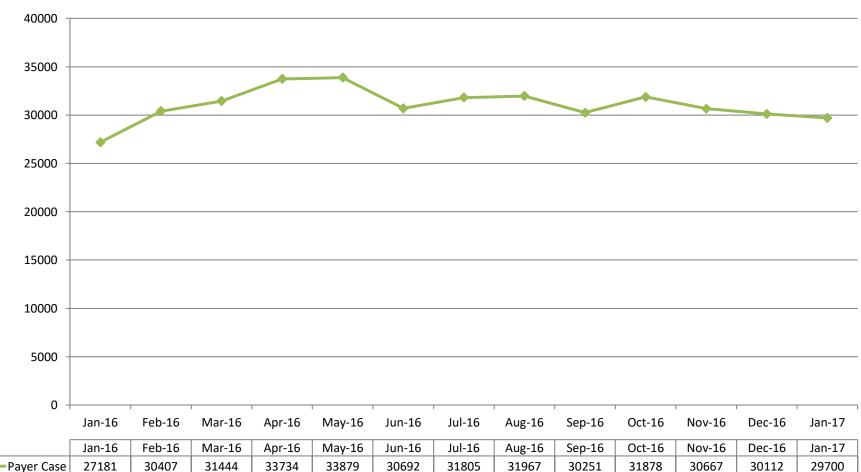


5% of HIway activity in January^{*} was for Quality Reporting transactions





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



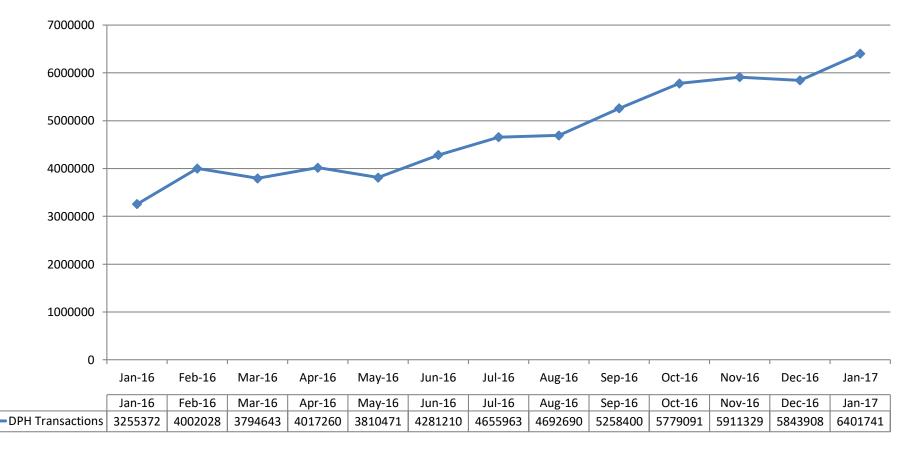
< 1% of HIway activity in January^{*} was for Payer Case Management transactions





HIway Production Transaction Trends – Public Health Reporting (Jan 2016 – Jan 2017)

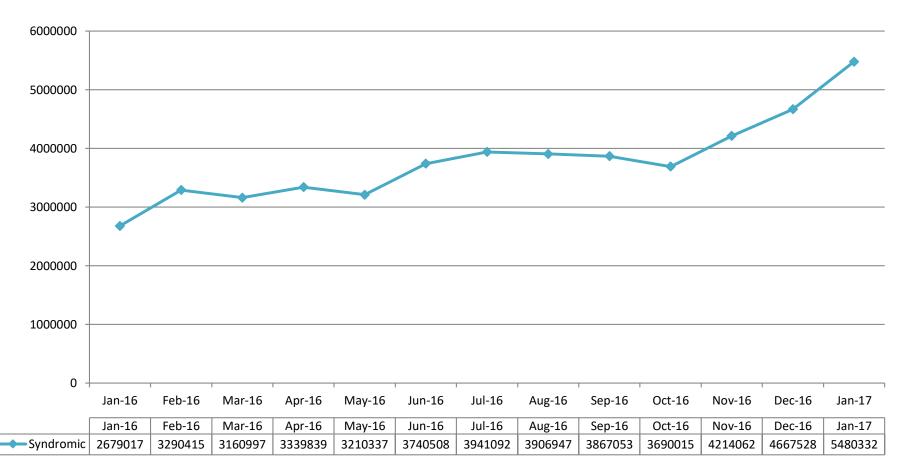
92% of HIway activity in January* was for Public Health Reporting transactions. These Public Health transactions are analyzed by application on the following slides.







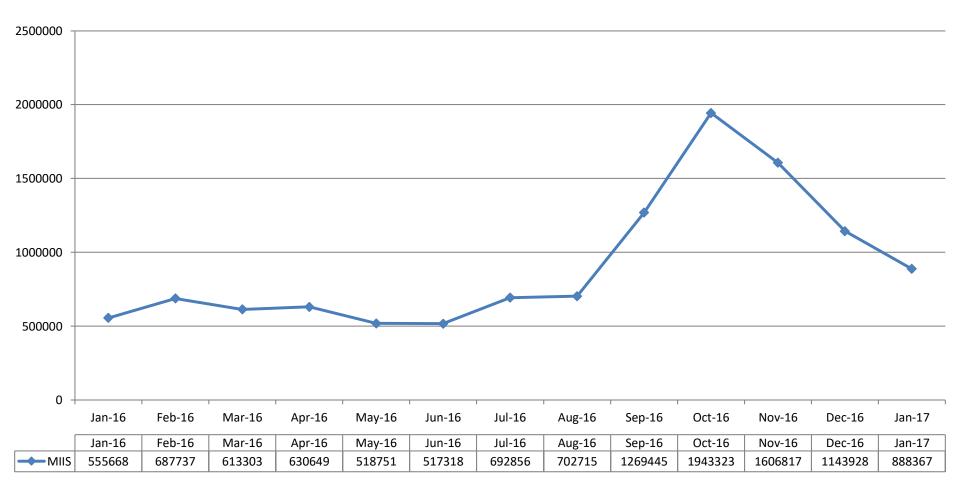
Syndromic Surveillance Transactions





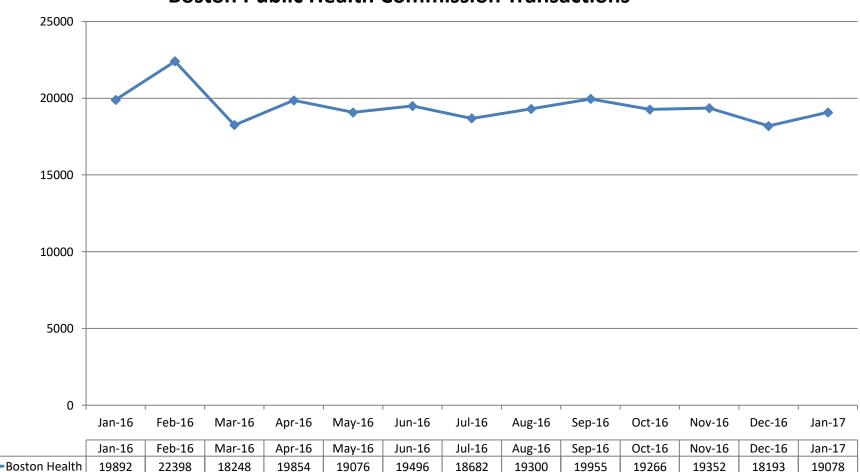


Immunization (MIIS) Transactions





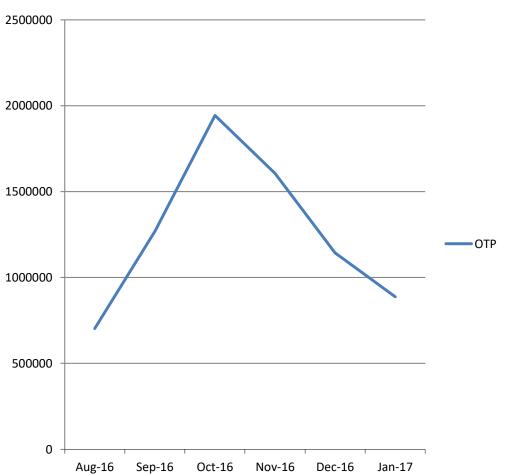




Boston Public Health Commission Transactions







Opioid Treatment Program (OTP) Transactions **

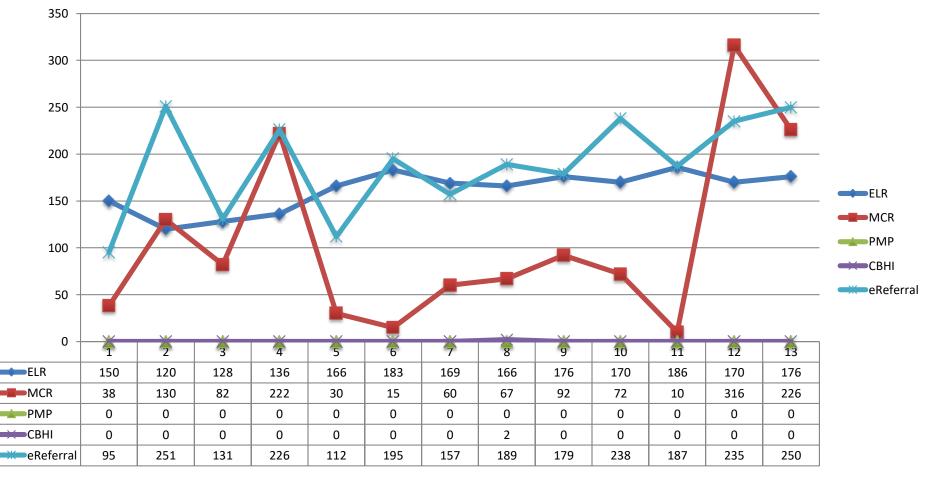
* Note: Reporting cycle is through the 20th of each month.

** Note: OTP data available starting August 2016.





Other Public Health Transactions







The Mass HIway has implemented a new Customer Relationship Management (CRM) system to replace a combination of spreadsheets and specialized databases for tracking and managing operations data

- History for Participants and other Mass HIway users was migrated
- Current data available real-time to all HIway team members Account Management, Service Management, Operations, Support, and Leadership
- Customer interactions, agreements, connection complexities, and trading partner engagements with specific exchange needs are all actively tracked
- Team members track and clarify organizational relationships and connections as they are established
- Team uses the CRM to actively track and monitor progress of Provider-to-Provider use case implementation
- In Development: New Dashboard and expanded operational reporting capabilities with real-time tracking





Data as of November 30, 2016 – Dashboard Reporting from new Mass HIway CRM in development

			and Active	ns Connected ly Using via HIway	Organizations Connected and Actively Using via another HISP		Total Organizations Connected to and Actively Using Mass HIway			
		Universe	#	# Actively	#	#	#	%	#	% Actively
Tier	SubTier	(est)	Connected	Using	Connected	Actively Using			Actively Using	Using
Tier 1	1a. Large hospitals/Health Systems	29	20	17	1	1	21	72%	18	62%
	1b. Health plans	9	4	3	-	-	4	44%	3	33%
	1c. Multi-entity HIE	5	3	3	2	-	5	100%	3	60 %
	1d. Commercial Imaging Centers & Labs	5	5	2	-	-	5	100%	2	40%
Tier 2	2a. Small hospitals	40	35	29	2	2	37	93 %	31	78 %
	2b. Large ambulatory practices (50+)	28	13	9	15	8	28	100%	17	61%
	2c. Large LTCs (500+ licensed beds)	8	2	2	-	-	2	25%	2	25%
	2d. Ambulatory Surgical Centers	63	1		-		1	2%		0%
	2e. Ambulance and Emergency Response	39	1		-		1	3%		0%
	2f. Business associate affiliates	5	2	1	-	-	2	40%	1	20%
	2g. Local government/Public Health	1	1	1	-	-	1	100%	1	100%
Tier 3	3a. Small LTC (< 500 licensed beds)	310	24	18	1	-	25	8%	18	6%
	3b. Large behavioral health (10+ licensed provid	10	2		2		4	40 %		0%
	3d. Large FQHCs (10-49)	30	15	9	8	3	23	77%	12	40 %
	3e. Medium ambulatory practices (10-49)	365	26	18	29	19	55	15%	37	10 %
Tier 4	4a. Small behavioral health(< 10 licensed provid	90	17	6	2	1	19	21%	7	8%
	4b. Home health, LTSS	149	28	14	15	4	43	29 %	18	12%
	4c. Small FQHCs (3-9)	29	3	3	-	-	3	10 %	3	10%
	4d. Small ambulatory practices (3-9)	1595	83	46	111	41	194	12%	87	5%
Tier 5	5a. Very Small ambulatory practices (1-2)	4010	169	59	251	29	420	10%	88	2%
Tier TBD				-	133	131	133		131	
Grand Total		6,820	454	240	572	239	1,026	15%	479	7%





22 New Participation Agreements

- Aesthetic Plastic
- Barry S. Paul, MD
- Boston Spots Medicine
- Coastline Elderly Services
- Dr. Paul Levy, DDS
- Elizabeth Handel
- Howard S. Goldberg, MD
- KidsWell Pediatrics and Urgent Care
- Leon Remis, MD
- Massachusetts Eye Associates
- Mayflower Place Nursing and Rehabilitation Center
- Montachusett Home Care
- North Shore Eye Care
- Pain and Spine Center North Shore
- Peter Drob, DMD PC
- Plantation Street Pediatrics
- Robert C. Goodman, DPM
- Sancta Maria Nursing Facility
- Senior Care Inc.
- Southwest Boston Senior Services Inc. (Ethos)
- Springwell, Inc.
- Well Crest

18 New Connections

- Cape & Islands Plastic Surgery
- Dana Farber Community Cancer Care
- DentaQuest Institute
- Dr. Bill Adams / William J Adams Dentistry, Inc.
- Dr. Paul Levy, DDS
- Francis Holistic Medical Center
- Hebrew Senior Life Homecare
- Howard M. Zolot, DMD
- Joseph G. Maloney, DMD
- KidsWell Pediatrics and Urgent Care
- Lab USA, Inc.
- LifePath, Inc.
- Massachusetts Eye Associates
- Plantation Street Pediatrics
- Rubin Dental Associates Inc: Eli J. Rubin, D.D.S.
- Sandwich Physical Therapy, Inc.
- Wakefield Physical Therapy Associates
- Western Massachusetts Physical Therapy, PC
- Plus Non-Participant Organizations 36





23 HISPs Connected to Mass HIway

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

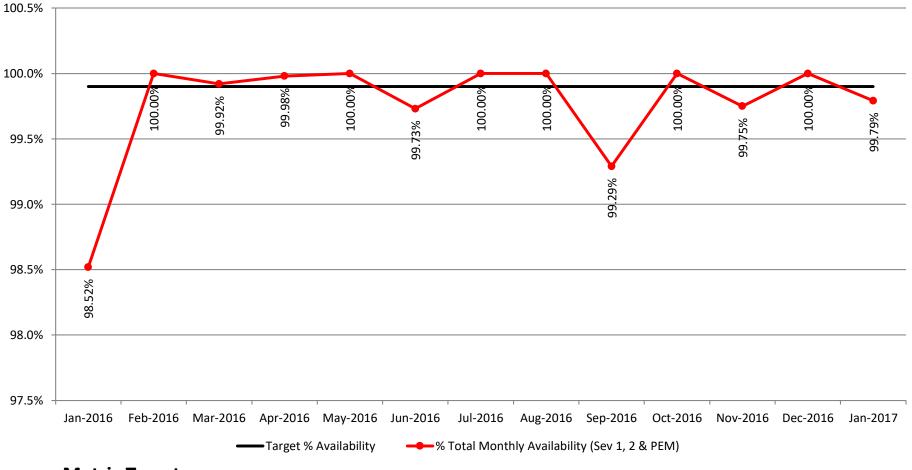
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<u>3 HISPs In Process of Connecting to Mass HIway</u>

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



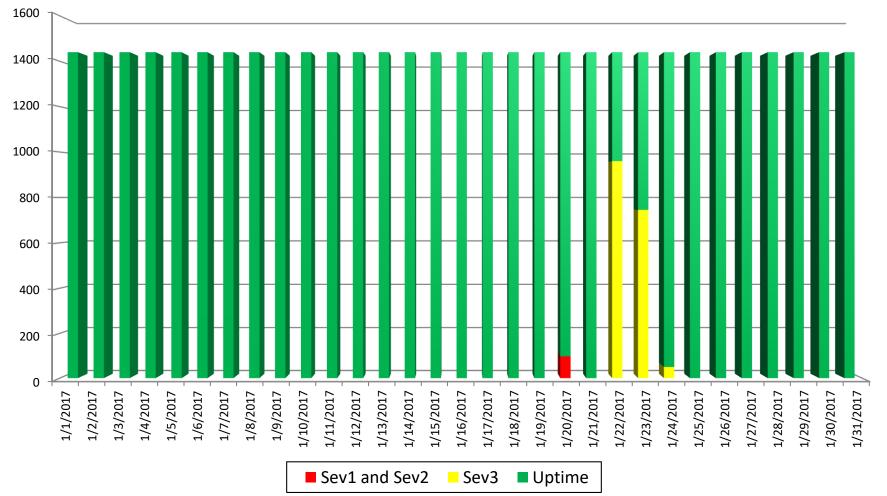




- <u>Metric Targets:</u>
- "Total Monthly Availability" no lower than 99.9% (downtime no more than ~44 minutes/month)







Severity Level 1 (Sev 1) – All or most Mass HIway components impacted as a result of an outage.

(Sev 1 example: LAND, Webmail, Direct XDR, and DPH nodes are all down.)

Severity Level 2 (Sev 2) – Multiple Mass HIway components impacted as a result of an outage in one of the shared services.

(Sev 2 example: LAND and Webmail are down but Direct XDR and DPH nodes are up.)

Severity Level 3 (Sev3) - One Mass HIway component impacted as a result of outage.

(Sev 3 example: Webmail is down but all other services are up and running.)



2017 Mass Hlway Incident Summary Dashboard January 2017 Details

Date	Time frame	Downtime in Minutes	Severity	Incident Overview	Areas addressed or impacted	
1/20/2017	12:03 pm to 1:40 pm	97	Nev /	DG Service Degradation due to Trust Validation Com Points	All HIway	
1/22 to 1/23	8:00 am to 12:25 pm	1705	Sev 3	Webmail unable to send to XDR/LAND/CG node	Webmail	
1/24/2017	12:50 am to 1:40 am	50	Sev 3	Due to large batch files, OTP node ran out of disk space	OTP Node	

Severity Level 1 (Sev 1) – All or most Mass Hlway components impacted as a result of an outage.

(Sev 1 example: LAND, Webmail, Direct XDR, and DPH nodes are all down.)

Severity Level 2 (Sev 2) – Multiple Mass HIway components impacted as a result of an outage in one of the shared services.

(Sev 2 example: LAND and Webmail are down but Direct XDR and DPH nodes are up.)

Severity Level 3 (Sev3) – One Mass HIway component impacted as a result of outage.

(Sev 3 example: Webmail is down but all other services are up and running.)