Commonwealth of Massachusetts Executive Office of Health and Human Services



Improving Care Coordination by Leveraging Mass HIway Direct Messaging

June 2017



Today's presenters





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This presentation has been reviewed and approved by the Mass Hlway, and the presenters are acting as authorized representatives of the Mass Hlway.

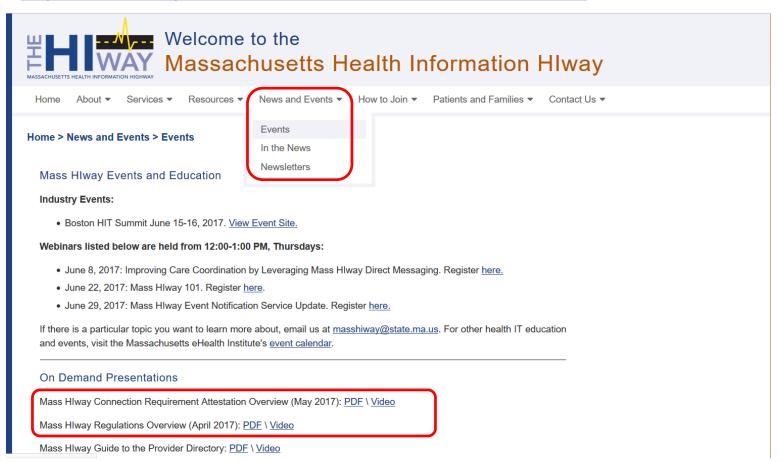
The information provided in this presentation is for general information purposes only, and in no way modifies or amends the statutes, regulations, and other official statements of policy and procedure that govern access to and use of the Mass Hlway.



Mass HIway webinars



- Past webinars and presentations are available on the HIway website under "News and Events" and then select "Events"
- <u>http://masshiway.net/HPP/NewsandEvents/Events/index.htm</u>





The Mass HIway is the statewide, state-sponsored Health Information Exchange (HIE) operated by the Executive Office of Health and Human Services (EOHHS).

- **Mission:** The mission of the Mass HIway is to enable health information exchange by health care providers and other Mass HIway Users regardless of affiliation, location or differences in technology.
- The Mass HIway has two core functions:
 - Function #1 HIway Direct Messaging:
 i.e., a secure method of sending a transmission from one Mass HIway User to another, where the HIway does not use, analyze or share information in the transmissions
 - Function #2 HIway-Sponsored Services:

 i.e., services such as the forthcoming state-wide Event Notification Service (ENS), where the
 HIway may use, analyze, and/or share the minimal amount of information necessary to conduct the service, on behalf of HIway Participants
- The Mass HIway does <u>not</u> currently function as a clinical data repository
- The Mass HIway provides health information exchange across the state:
 - Over 1,100 HIway Participants, including organizations across the care continuum (including hospitals from 60+ organizations, ambulatory providers, long-term care facilities)



In addition to improving care coordination with other healthcare providers, public health and quality reporting, the HIway can help your organization:

- ✓ Participate in various programs and initiatives:
 - Meaningful Use and Merit-based Incentive Payment System (MIPS) HIE, DPH
 - Accountable Care Organizations (ACO) Care Coordination
 - CMS Delivery System Transformation Initiatives (DSTI)
 - Community Hospital Acceleration, Revitalization and Transformation Grants (CHART)
 - Massachusetts Infrastructure and Capacity Building Grants (ICB)
 - Massachusetts Prevention and Wellness Trust Fund
 - Patient Centered Medical Home (PCMH)
- ✓ Comply with Massachusetts Law
 - Mass HIway connection attestation requirement
 - Connecting to the Mass HIway satisfies the Board of Registration in Medicine (BORIM) EHR proficiency requirement for license renewal (MGL Chapter 224) and requirement for connection to the statewide health information exchange (MGL Chapter 118I)



HIway Direct Messaging offers a secure method for transmitting messages between HIway Users for a wide variety of use cases

- In April 2017, over 7 million HIway Direct Messages were transmitted per month
 - This included over 200,000 Provider-to-Provider transmissions (an 18% increase from April 2016)
- Mass HIway Direct Messaging allows secure transmission of information to support a wide variety of use cases, within several categories.
 - Use case categories include: Public Health Reporting, Provider-to-Provider Communications,
 Payer Case Management, Quality Reporting (as per the Mass HIway Policies & Procedures)
- HIway Users can connect to the Mass HIway by one of several connectivity options. This has supported broad participation in the Mass HIway.
 - HIway Participants can connect to the Mass HIway by several methods:
 - Direct EHR connection
 - a Local Access for Network Distribution (LAND) appliance connection
 - a HIway Trusted Health Information Service Provider (HISP)
 - a Webmail connection, which does not require an EHR
 - As a result of the multiple connectivity options the Mass HIway currently works with more than 44
 EHR vendors, 23 HISPs, and 7 integration engines, through 13 deployment variations.



The Mass HIway Regulations



The main purpose of the Mass HIway Regulations is to:

- Establish requirements for organizations that use the Mass HIway
- Implement the state statutory requirement for providers to connect to the Mass HIway (which is referred to in this presentation as the HIway connection requirement)
- Establish the mechanism to allow patients to opt-in and opt-out of the Mass HIway
- Under the regulations (101 CMR 20.07(1)) Mass HIway Users may transmit information via HIway Direct Messaging in compliance with applicable federal privacy laws and regulations (such as HIPAA and 42 CFR Part 2) and state privacy laws and regulations (such as M.G.L. Chapter 93H), similar to sending such information via fax message.
- The Mass HIway Regulations went into effect on February 10, 2017.
- In March 2017, EOHHS and the Mass HIway released supporting documents related to the Mass HIway Regulations:
 - Mass HIway Regulations Summary
 - Mass HIway Regulations FAQs
 - Mass HIway Policies & Procedures (version 3)
 - Mass HIway Fact Sheet for Patients
- In April 2017, the HIway hosted a *Mass HIway Regulations Overview* webinar. Slides and a recording can be accessed anytime under "News and Events" at www.masshiway.net





The HIway is 'content agnostic,' and does not restrict message types.

Patient clinical information:

- Summary of Care at transition
- Request for Patient Care Summaries
- Discharge Summaries
- Referral Summary Information
- Specialist Consult Notes
- Progress Notes
- Behavioral Health Assessments

Patient clinical alerts:

- Emergency Department Notification
- Mortality Notification
- Transfer Notification
- Disposition Notification (admit/discharge)

Quality reporting:

 Information for calculation and reporting of clinical quality measures

Public Health Reporting:

- Securely comply with reporting regulations for the Mass. Department of Public Health
- Massachusetts Immunization Information System (MIIS)
- Electronic Lab Reporting (ELR)
- Syndromic Surveillance (SS)
- Massachusetts Cancer Registry (MCR)
- Opioid Treatment Program (OTP)
- Childhood Lead Poisoning Prevention Program (CLPPP)
- Occupational Lead Poisoning Registry (Adult Lead)
- E-Referral

Note: What makes DPH submissions different: There is <u>no cost</u> for a HIway connection that is <u>used exclusively</u> for DPH reporting.



Use Cases for HIway Direct Messaging



Use Case Categories	Example Use Cases				
Provider-to- Provider Communications	 Hospital sends a discharge summary to a Skilled Nursing Facility (SNF) or Long Term/Post Acute Care (LTPAC) facility Primary Care Provider (PCP) sends a referral notice to a specialist – Clinical or BH Specialist sends consult notes & updated medications list to patient's PCP Hospital ED requests a patient's medical record from a PCP PCP sends a CCD or C-CDA with Problems, Allergies, Medications, and Immunizations (PAMI) to a Hospital caring for their patient Care Coordination across ACO participants 				
Payer Case Management	 ACO sends quality metrics to a payer Provider sends lab results to a payer Provider sends claims data to payer 				
Quality Reporting	 Provider sends clinical data to Business Associate for quality metrics analysis Provider sends quality metrics to Business Associate for report preparation 				
Public Health Reporting	 Provider sends to DPH: Massachusetts Immunization Information System (MIIS) Syndromic Surveillance (SS) Opioid Treatment Program (OTP) Childhood Lead Paint Poison Prevention Program (CLPPP) Provider sends to other agencies: Occupational Lead Poisoning Registry (Adult Lead) Children's Behavioral Health Initiative (CBHI) 				



Who can I trade with?



Care Continuum

more than 1,100 Participants

more than 1,100 Participants					
Hospitals	Ambulatory	Long-Term & Post-Acute			
Approximately 63 organizations Mix of large networks and	More than 881 organizations/providers Primary care providers and	Approximately 70 organizations Range of services and			
medical centers to single- site community hospitals	specialists across a broad range of medical services Health centers and clinics providing medical, emotional, behavioral, and additional social services	organization types including but not limited to: Area Agency on Aging (AAA) Aging Service Access Point (ASAP), Skilled Nursing Facilities (SNF), nursing homes, Inpatient			
	Urgent care and minute clinics	Rehabilitation Facilities (IRF), home health, palliative care, and hospice			

Note: 10+ orgs such as Labs, Payers, Imaging Centers, business associates etc.



Transition vs Summary of Care (CMS)



Event - Transition of Care (TOC) and Referrals

- TOC is the movement of a patient from one setting of care (hospital, ambulatory primary care practice, ambulatory specialty care practice, longterm care, home health, rehabilitation facility) to another.
- Referrals are cases where one provider refers a patient to another, but the referring provider maintains their care of the patient as well.

Content- Summary of Care is the key clinical information shared at a TOC

- from Certified Electronic Health Record Technology (CEHRT)
- C-CDA Consolidated Clinical Document Architecture is human and machine readable, e.g. CCD).

Transport must be HIPPA compliant/Machine readable. Examples include:

- Direct Protocol Mass HIway, 3rd party HISP
- Secure email, Query based exchange



Care Coordination Drivers



Meaningful Use

 Specified transaction level targets and did not specifically include Behavioral Health (BH), Long Term Care, SUD programs or Long Term Support Services (LTSS)

Quality Payment Program – Value Based Payment

- Merit-based Incentive Program (MIPS)
- Advanced Alternative Payment Models (APM)

MA 1115 Waiver

- Focuses on integrating behavioral health (mental health, substance use disorder treatment), community supports focused on social determinants of health, and Accountable Care Organizations
- Community Partners include LTSS and BH which use non C-CDA documents (e.g. PDF assessments) and often do not have electronic exchange capability.



Why focus on TOC Summaries?



Improved Care Coordination

- Problems, Allergies, Medication Reconciliations, Med Allergies & Social History
- Care plans, Discharge instructions and Assessments

Improved Patient Experience

- Patients/families should not have to chase down their records
- Avoid unnecessary or duplicative tests and other adverse situations
- Reduce readmission rates

Increased Efficiency, Reduced Costs, Security

- ~3.2 M avoided fax pages to process (800,000 discharges per year * avg. 4 page discharge summary and ~213 trees in paper when printed)
- Having the right information at the right time for the right patient
- Secure

Significant Opportunities still exist to achieve these goals

- Improved quality of data in summary of care documents
- Improved compatibility across vendors to accept all documents
- Improve/streamline workflows to increase and facilitate electronic exchange



Example: Patient admitted to Hospital / Emergency Department



Transition of Care from PCP to Hospital/ED

Patient Scenario:

- 1. Patient sent to Emergency Department of hospital
- 2. CCDA document is sent via Mass HIway
- 3. Emergency staff has access to Meds, problems, allergies and other relevant clinical information

- A. PCP sends critical information to Hospital ED via the Mass HIway
- B. Hospital develops workflow to make information available to emergency staff and caregivers





Example - Hospital Discharge



Transition of Care – Hospital Discharge

Patient Scenario:

- 1. Patient discharged from Hospital
- Discharge C-CDA is sent via Mass HIway to PCP and/or other providers involved in follow up care
- 3. Patient sees PCP and other providers for follow up

- A. Hospital identifies patient's PCP and other care team members
- B. Hospital sends Discharge Summary to patient's PCP and other care team members at discharge (may be automated or manual)
- C. PCP receives information about the patient's hospital visit that is critical to follow up care





Example – Specialist Referral

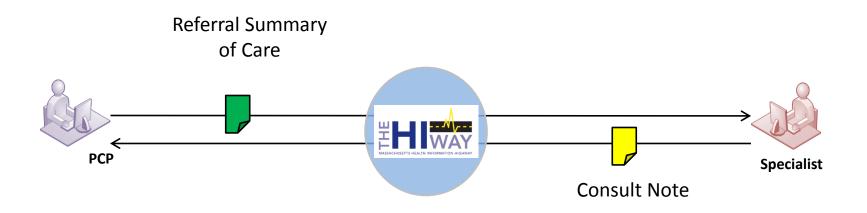


Transition of Care – Specialist Referral and Consult

Patient Scenario:

- 1. Patient sees PCP
- 2. PCP refers patient to a specialist
- 3. Patient sees specialist
- 4. Patient sees PCP for follow up care

- A. PCP sends Specialist a summary of care document via the Mass HIway
- B. Specialist sends PCP a consult note via the Mass HIway





Example – Skilled Nursing Facility (SNF)

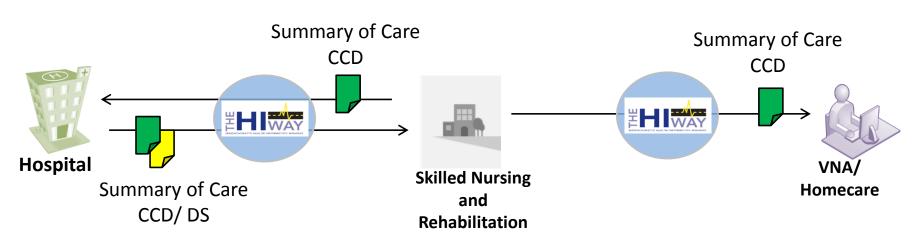


Transition of Care – SNF to Hospital, Hospital to SNF, SNF to Homecare

Patient Scenario:

- Patient discharged from Hospital to SNF. C-CDA and Discharge Summary (DS) sent to SNF.
- 2. Patient is sent home for homecare. SNF sends -CDA to VNA or Homecare
- Patient is readmitted to hospital. SNF sends C-CDA to hospital

- A. Hospital identifies SNF and other care team members
- B. Hospital sends Discharge Summary and C-CDA to patient's SNF and other care team members (PCP) at
- C. SNF receives information about the patient's hospital visit that is critical to follow up care
- D. Patient leaves SNF for Homecare. C-CDA is sent to VNA or Homecare





Emergency Room, Inpatient & BH Exchange

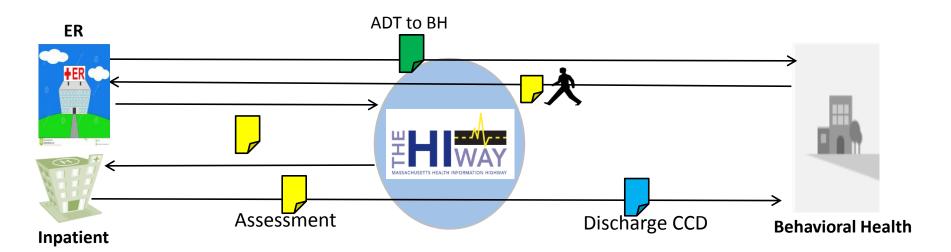


Emergency Behavioral Health Assessment

Patient Scenario:

- 1. Patient arrives at hospital ED
- Patient requires Behavioral Health assessment
- 3. Behavioral Health provider comes to ED and performs assessment
- 4. Patient admitted

- A. A behavioral health provider completes assessment (PDF) while the patient is in ER
- B. BH health provider sends the assessment to the inpatient behavioral health unit
- A. Upon discharge, Inpatient unit sends final assessment and discharge CCD to BH facility for follow-up





Creating a Useful Summary of Care



Does the summary of care have the data that the next provider of care needs?

(Continuity of Care Documents, Discharge Summaries and referrals are C-CDA templates that can be changed to incorporate additional data sections.)

- What information is needed by who and when?
- Can the recipient find what they need? Too much history?
- Are the workflows and triggers for data capture and sending well understood?
- Are receiving organizations ready to consume summary of care?
- Have all the required document types been tested for consumption?

<u>Important Note</u>: Participants must use active Mass HIway addresses and verify that the intended recipient is ready to receive the type of message the Participant is sending over the Mass HIway. If the Participant is made aware that the intended recipient is not ready to receive that message type over the Mass HIway, the Participant shall find an alternative means to send the information.



Improving Care Coordination through Interoperability



- Focus on providing actionable health information at the point of care
- This is **NOT** just an IT Project. Engage clinical & business operations
- Collaborate with trading partners to encourage electronic exchange
- Optimize access to patient information across multiple/redundant systems
- Ensure published Direct addresses are active and the owners of those accounts have been trained to use them
- Engage the Mass HIway Account Management Team



How Can Mass HIway Help?



- Enroll, connect, and active use of HIE
- Assess HIE opportunities and barriers for your organization and providers
- Identify viable exchange trading partners and relevant use cases
- Engage, facilitate and manage electronic exchange across trading partners
- Operationalize mutually agreed upon, testing protocols, workflows and processes to get the right information to the right provider at the right time
- Streamline/Optimize workflows internal & external
- Assess and facilitate usable content updates
- HIE Educational services to all levels of the organization
- Share lessons learned among the various HIE participants
- Facilitate issue/problem resolution and ongoing support



The Mass HIway Provider Directory is a searchable directory of individual and organizational healthcare providers.

What PD is for:

- Provides destination addresses for Direct messaging (i.e. Direct email address)
- Stores the specific details such as organization name, provider first name, last name, specialty, contact information, NPI and personal/organizational email address along with the Direct email address

The Provider Directory contains <u>over 20,000</u> Direct addresses (department and individual level addresses included)

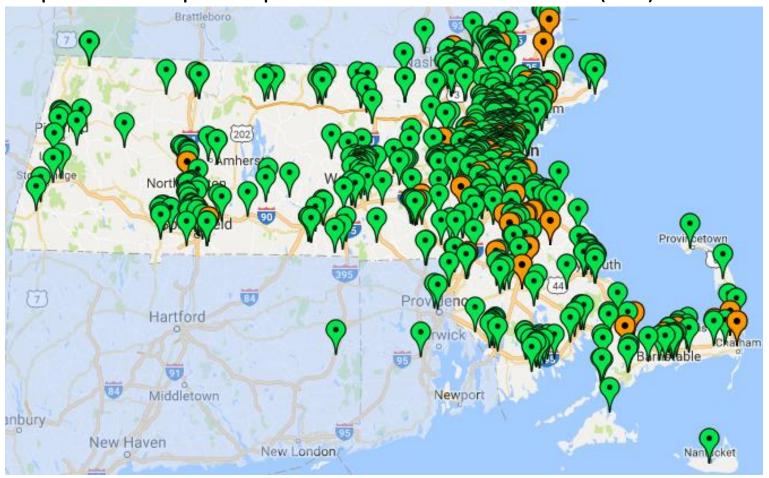
Your Account Manager will assist you in operationalizing the Provider Directory, identifying who of your trading partners are in the Mass HIway Community today and how to engage additional trading partners to exchange on the HIway.





An interactive participant map is updated monthly available at www.masshiway.net Resources Participant List

The map is maintained in partnership with the Massachusetts eHealth Institute (MeHI)





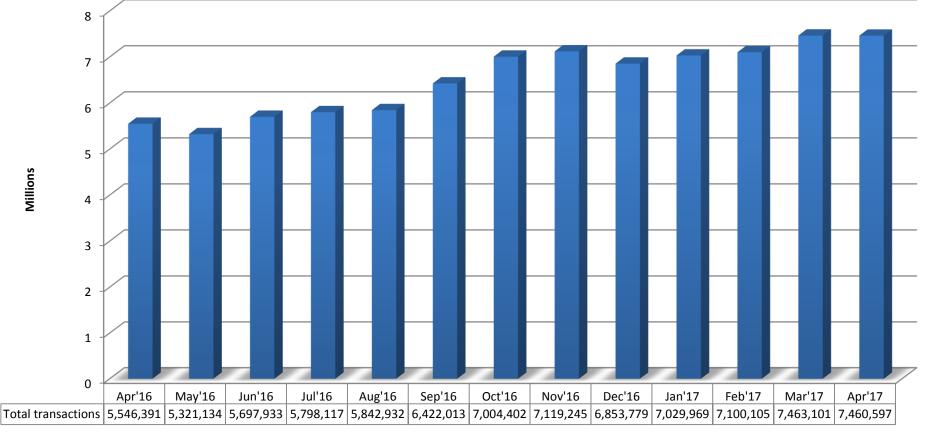
HIway Transaction Activity



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

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

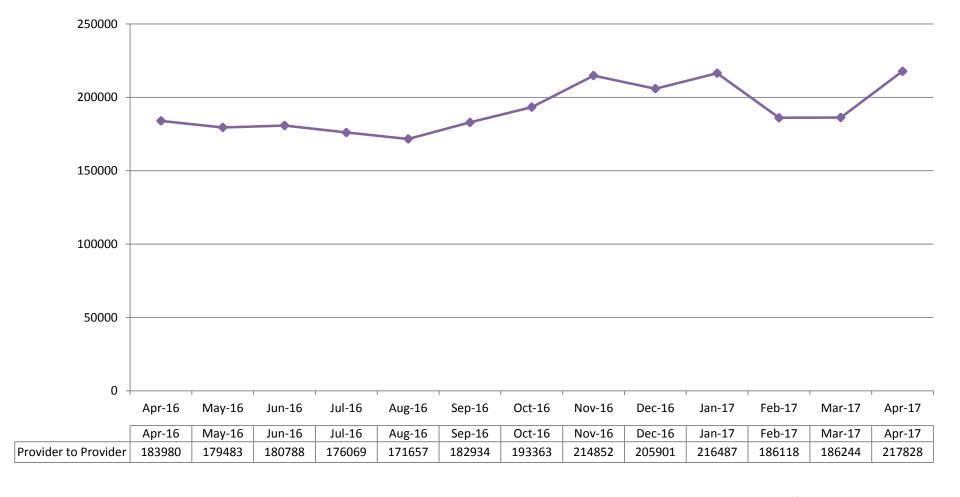


HIway Transaction Analysis



<u>HIway Production Transaction Trends – Provider to Provider (Apr 2016 – Apr 2017)</u>

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



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

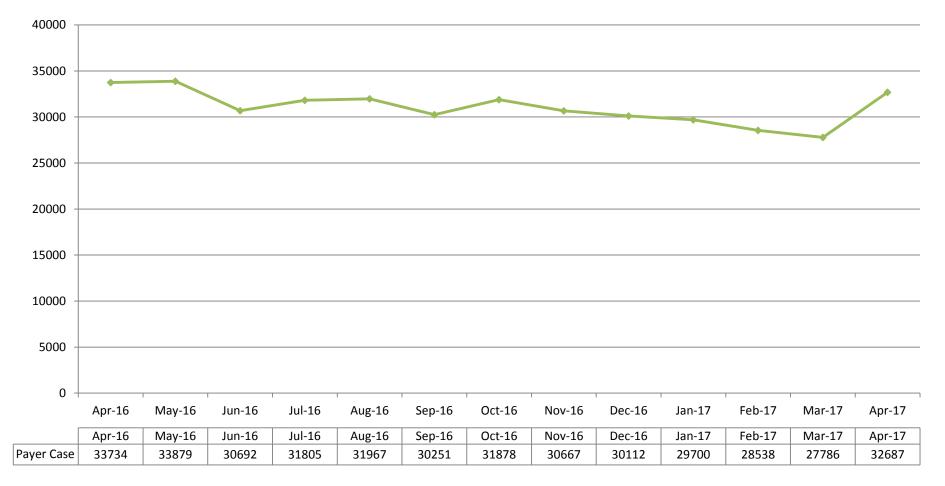


HIway Transaction Analysis



<u>HIway Production Transaction Trends – Payer Case Management (Apr 2016 – Apr 2017)</u>

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



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





The HIway is currently connected to, or in the process of connecting to, the following vendors:

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Advanced Data Systems	Eaglesoft Clinician	LMR	SEE		
Allscripts	eClinicalWorks	Lytec MD (McKesson)	Siemens		
Amazing Charts	eHana	Matrix	SMART		
AMS	EMA Modernizing Medicine	MatrixCare	Soarian (Cerner)		
Aprima	E-MDs	Mckesson	Spring Charts		
ASPMD	Encite	Medflow	STC		
Athenahealth	Epic	Meditech	Suncoast Solutions		
Axxess	Flatiron	MediTouch	Surescripts		
BayCIS	GE	Mednet Medical (EMR4MD)	Unitcare		
Care At Hand	gEHRiMed	Netsmart	Vista		
Care360 (Quest)	Greenway	Nextech	WebOMR		
Carelogic	НСНВ	NextGen	Zoll		
Cerner	HealthWyse	Office Practicum			
ComChart	HermesIQ	Physician's Computer Company			
Compulink	HomeCare	Point Click Care			
CPSI	Homecare Homebase	Point N Click			
Credible	Homegrown	Practice Fusion			
Delta (Encore product)	icanotes	Practice Partners			
Dentrix	Impreva	Practice Perfect			
Docutat	Kantime	Prospect			



HISP to HISP Connectivity



23 HISPs Connected to Mass Hiway

- 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 HIway

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



Mass HIway Rates



Mass HIway Rate Card (Effective Date – October 25, 2016)

	Category	Description	One-time set-up fee (per node)	Direct Messaging Service		
Tier				Annual Services Fee (per node)	Annual Services Fee + LAND (per node)	Annual Services Fee Webmail (per mailbox)
	1a	Large hospitals/Health Systems		\$15,000	\$27,500	\$60
T: 4	1b	Health plans	\$2,500			
Tier 1	1c	Multi-entity HIE				
	1d	Commercial imaging centers & labs				
	2a	Small hospitals		\$10,000	\$15,000	\$60
	2b	Large ambulatory practices (50+ licensed provider	\$1,000			
Tion 2	2c	Large LTCs (500+ licensed beds)				
Tier 2	2d	Ambulatory Surgery Centers				
	2e	Ambulance and Emergency Response				
	2f	Business associate affiliates				
	2g	Local government/Public Health				
	3a	Small LTC (< 500 licensed beds)		\$2,500	\$4,500	\$60
Tier 3	3b	Large behavioral health (10+ licensed providers)	\$500			
Her 5	3d	Large FQHCs (10+ licensed providers)	9300			
	3e	Medium ambulatory practices (10-49 licensed pro				
	4a	Small behavioral health (< 10 licensed providers)		\$175	\$250	\$60
Tier 4	4b	Home health, LTSS	\$25			
	4c	Small FQHCs (< 10 licensed providers)	4-2			
	4d	Small ambulatory practices (3-9)				
T: 5	-	Mana Carallia anhada ann ann athara (d. 2)	0.05	050	050	0.50
Tier 5	5a	Very Small ambulatory practices (1-2)	\$25	\$60	\$60	\$60



Mass HIway Account Management Team



This presentation was developed by staff from EOHHS, Mass HIway, and the Mass HIway Account Management Team

About the MA HIway Account Management Team:

- Massachusetts eHealth Collaborative (MAeHC) was selected by EOHHS through an open bid process to serve as the Mass Hlway's Account Management team.
- Working in partnership with the Mass HIway, our team delivers outreach, education, and on site user support services to the provider community and participants, with a goal of increasing adoption and effective utilization of the Mass HIway across the Commonwealth.
- The Mass HIway Account Management Team includes:
 - Mark Belanger
 - Murali Athuluri
 - Len Levine
 - Jennifer Monahan
 - Kelly Luchini





If your organization is interested in connecting to the Mass HIway contact any member of the Mass HIway Account Management Team:

- ✓ Fnrollment
- ✓ Onboarding
- ✓ Addressing
- ✓ Connection steps
- ✓ Use case identification
- ✓ Exchanging with your trading partners



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Using the Mass HIway is as easy as 1-2-3!

- **1. Ask your vendor** if they are connected to, or able to connect to the HIway.
- **2. Contact us.** We will connect you with a Mass Hlway Account Manager to get your organizations enrolled and connected.
- **3. Exchange** with your trading partners!

The Massachusetts Health Information Highway (Mass Hlway)

Phone: 1.855.MA-HIWAY (1.855.624.4929)

Email for General Inquires: MassHIway@state.ma.us

Email for Technical Support: <u>MassHlwaySupport@state.ma.us</u>

Website: www.MassHlway.net



Visit <u>www.masshiway.net</u> for the information, resources like on-demand webinars, and to sign up for our newsletter!







Past HIway webinars are available on the Mass HIway website:

- Go to the Mass HIway website at <u>www.masshiway.net</u>
- Then, go to "News & Events" and next select "Events"

Upcoming Mass HIway events and webinars:

- Mass Hlway Webinars: (all webinars are Thursdays, noon-1pm)
 - o June 22, 2017: Mass HIway 101
 - June 29, 2017: ENS Update for the community



Mass HIway contact information



Thank you!

The Massachusetts Health Information Highway (Mass HIway)

Phone: 1.855.MA-HIWAY (1.855.624.4929)

Email for General Inquires: MassHlway@state.ma.us

Email for Technical Support: <u>MassHlwaySupport@state.ma.us</u>

Website: www.MassHlway.net





Appendix A:



- The Mass HIway offers a single channel intended for use by <u>all providers in the</u>
 <u>Commonwealth</u> regardless of affiliation, location, or differences in technology.
 Many EHR vendors offer direct messaging services for their users that connect to the Mass HIway.
- Current Mass HIway participants represent a variety of providers and care settings, ranging from practices to hospitals, covering primary, ambulatory, acute, longterm, post-acute, behavioral health, home health and other facilities.
- New Mass HIway participants enroll daily, and participants produce millions of HIway transactions each month.



Connectivity Options



User types



Physician practice



Hospital



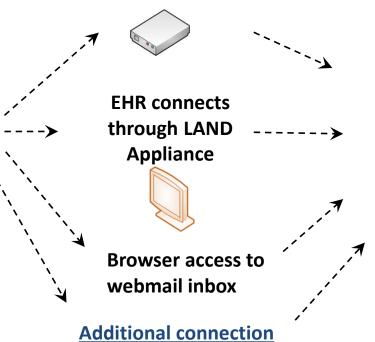
Long-term care Other providers Public health Health plans



Connectivity options



EHR connects directly



HIE Services



Vendor HISP