## **Commonwealth of Massachusetts**

**Executive Office of Health and Human Services** 



# Introduction to ENS and the Massachusetts Statewide ENS Framework







Angela Miller, PMP
Mass Hlway Account Manager
Massachusetts eHealth Institute (MeHI)
miller@masstech.org







**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

Managing Event Notifications



Massachusetts Health Information HIway (Mass HIway) promotes health information exchange (HIE) by healthcare providers and HIway participants through a variety of policy and technical levers.

# The Mass HIway is a program within the Massachusetts Executive Office of Health and Human Services

 The EOHHS and the HIway are advised by the Health Information Technology Council made up of consumer, provider, legal and policy, and technology stakeholders

# **EOHHS** contracts with two primary vendors to operate HIway Direct Messaging and offer technical assistance:

- Orion Health provides Direct Messaging implementation and technical support services
- MeHI, the Massachusetts eHealth Institute, supports providers with
  - Account management, consulting services, and outreach and education



# Enable health information exchange by HIway users and other healthcare providers regardless of affiliation, location, or differences in technology

#### **HIway Direct Messaging**

- Secure method of sending transmissions from one HIway user to another
- Connection for Massachusetts Public Health Reporting
- HIway does not use, analyze, or share information in the transmissions and does <u>not</u> currently function as a clinical data repository

#### **HIway Provider Directory 2.0**

- Provider Directory listing in-state and some out-of-state providers connected to HIE
- Contains information for 35,000+ HIway Users

#### **REST API Services**

 Synchronous communication with REST API services for Massachusetts Public Health Registry reporting

#### Statewide ENS Framework

Network of Event Notification Services (ENS) provided by ENS Vendors certified by the HIway





#### **ADT Alerts and Event Notification Services (ENS)**

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

Managing Event Notifications



#### What are ADT Alerts?



#### Admission, Discharge, and Transfer Alerts or ADT Alerts

 Alerts sent to care providers about their patients' admissions, discharges, and transfers to and from emergency departments, hospitals, and post-acute care facilities

#### **ADT Alert notifications include**

- Patient demographic information
- Event details including event type, facility, date/time
- Can contain clinical information like reason for visit and diagnosis
  - Clinical information included within ADT alerts is dependent upon what the sending organization chooses to pass along



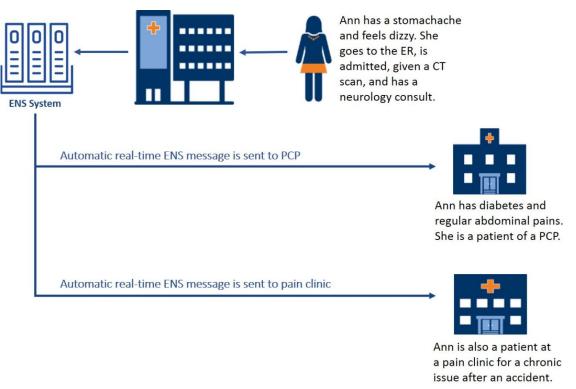


# **Event Notification Service (ENS)**



# ADT Alerts are the end-product of an Event Notification Service (ENS). ENS is a specific form of Health Information Exchange (HIE) that occurs after ADT Events.

- An ENS system automates the ADT alert distribution to efficiently and securely send patient information to care providers
- ENS vendors develop these ENS systems and offer services to providers through subscriptions





# **Event Notification Service (ENS)**



#### An ENS subscription allows care providers to decide:

- Who they want receive notifications for (patient roster)
- What they want to be notified about (e.g. admissions only, discharges only)
- How often they receive the notifications (e.g. real time, daily, twice a day)
- How to receive notification (e.g. direct secure message, ENS vendor portal)

Facility	Practice	Provider	MRN	Source racincy	Parce mine	11134 1401114	HILUUR Hallie	Last Hamile	GEINGEI	Dete of Dirti	Address	City	Jane	Lip	Phone
ABC Medical					1										
Group	Practice 1	Dr. Jones	12345	Hospital 1	ABC 2345	Joe	A	Test	Male	xx/xx/xxxx	123 Main Street	Philadelphia	PA	12345	XXX-XXX-XXXX
ABC Medical															
Group	Practice 2	Dr. Smith	8765	Hospital 1	XYZ87658	Mary		Test	Female	xx/xx/xxx	456 Cherry St.	Cherry Hill	NJ	12345	XXXX-XXXX-XXXX
ABC Medical				Skilled Nursing											
Group	Practice 1	Dr. Jones	91289	Facility 8	PQR8,747	Pam	C	Test	Female	xx/xx/xxxx	934 Lion Cirlce	Havertown	PA	45678	XXXX-XXXX-XXXX
ABC Medical															
Group	Practice 4	Dr. Miller	837465	Hospital 3	KJD0/384	William		Test	Male	xx/xx/xxxx	874 Ryans Way	Cape May	NJ	45678	XXXX-XXXX-XXXXX
ABC Medical															
Group	Practice 5	Dr. Gonzalez	137894	Hospital 2	UID 12374	Army	K	Test	Female	xx/xx/xxxx	109 Main Street	Langhorne	PA	98345	XXX-XXX-XXXX
ABC Medical					/										
Group	Practice 6	Dr. Orion	76345	Hospital 10	YHT7645	Karen	5	Test	Female	xx/xx/xxxx	101 Hwy 1	Christiana	DE	12367	XXX-XXX-XXXX
	•														





**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

**Managing Event Notifications** 



# Massachusetts Statewide ENS Framework



To enable utilization of ENS across the state, EOHHS and the Mass HIway developed the Statewide ENS Framework to create an interoperable ENS network.

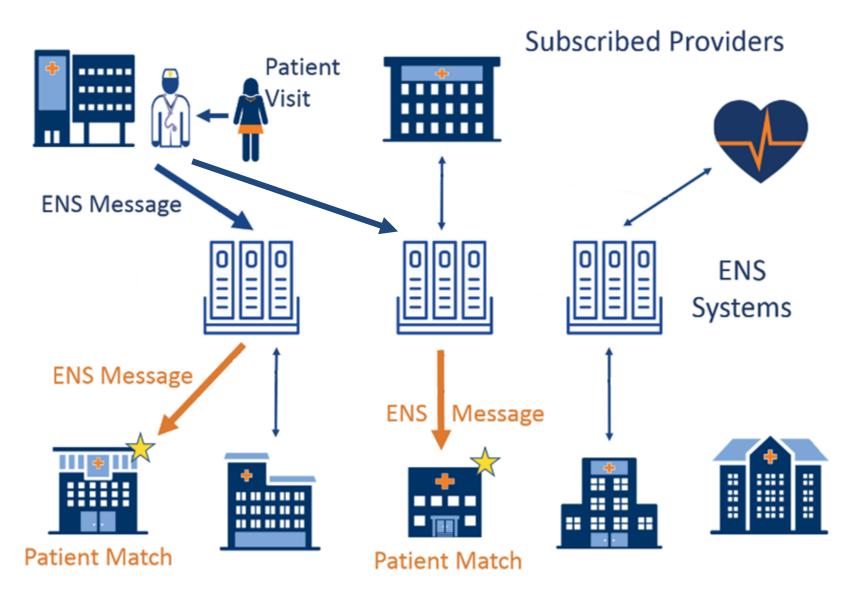
- Certified ENS Vendors have been certified by the Mass HIway to meet specific functional, data security, data sharing and business criteria
- These vendors have interconnected their ENS systems to serve all care providers in Massachusetts

This means that care providers in the Commonwealth only need to subscribe to a single certified ENS vendor to receive ADT alerts from all Massachusetts Acute Care Hospitals to coordinate care after ADT events.



## **Traditional Event Notification Services**

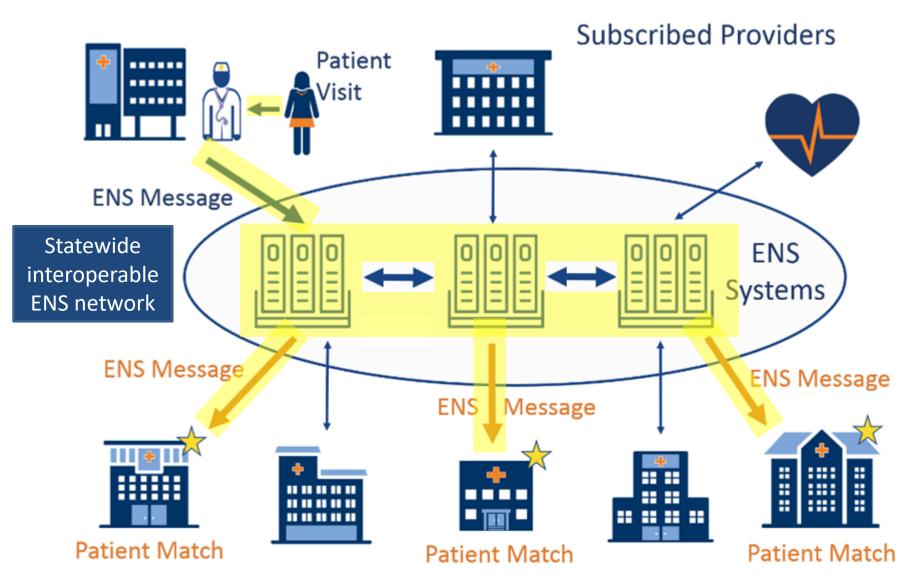






# Massachusetts Statewide ENS Framework







#### Certified ENS Vendors



# Bamboo Health

Website: bamboohealth.com

**Contact:** Bamboo Health Business

Development

Tel: 603-833-8231

Email: growthopportunities@bamboo

health.com

# **PointClickCare®**

Website: <a href="mailto:pointclickcare.com">pointclickcare.com</a>
Contact: Customer Support

**Tel:** 801-285-0770

**Request a Demo:** Please complete the interest form and select product "other"

https://pointclickcare.com/request-a-demo/





**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

**Understanding the Massachusetts ENS Landscape** 

**ENS Ambulatory Practice Survey Results** 

**Managing Event Notifications** 



# Massachusetts ENS Landscape



#### **Sources of Event Notifications:**



**ENS SUBSCRIPTION** 



CMS CONDITIONS OF PARTICIPATION NOTIFICATIONS



**DIRECTLY FROM HOSPITALS** 



## **CMS Conditions of Participation Notifications**





#### Interoperability and Patient Access Rule (CMS-9115F)

CMS-9115-F requires hospitals, including psychiatric hospitals and Critical Access Hospitals (CAH), to send electronic patient event notifications of a patient's Admission, Discharge, and/or Transfer (ADT) to another healthcare facility or to another community provider or practitioner. The ADT obligation became applicable in spring 2021

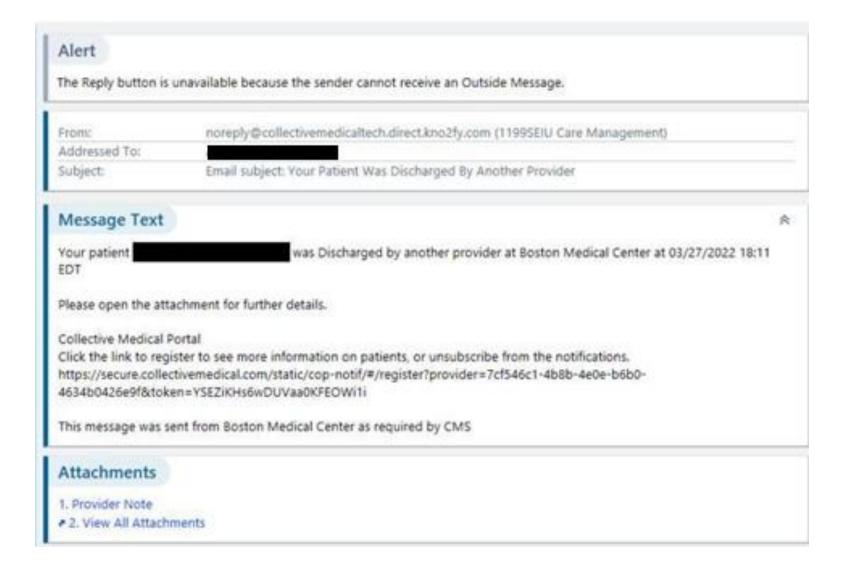
#### **CMS Conditions of Participation (CoP) Notifications**

These ADT alerts are sent to providers via Direct message, regardless of whether they are subscribed to an ENS vendor or not, and provider organizations have little control over how these ADT alerts are received.



# Sample CoP Message







# **Hospital Notifications**



- Each organization has unique trading partner relationships with the hospitals that their patients utilize
- Hospitals must be aware of the care relationship the patient has with your organization to send patient information. Often this means the hospital relies on the patient to name their PCP during an event.
- Each hospital will handle the sending of patient information differently
  - The format of the information can vary: ADT Alert, CCDA, Discharge Summary,
     ED Report
  - The method of sending also varies: Fax, Direct message in the EHR, Portal access
- If you need help connecting with the appropriate contacts at a trading partner organization to better coordinate health information exchange, please reach out!



# Massachusetts ENS Landscape Recap



Type of Notification	Type of Messages	Method of Receipt	Patients Included	Things to Consider
ADT Feeds (Subscribed)	ADT Alerts	Certified ENS Vendor Portal, Direct message in EHR, Population Health Management Tool	Dependent on roster being sent to certified ENS Vendor (ACO patients, high risk patients, etc.)	Does your organization have more than 1 ADT feed based on different patient rosters?
CMS Conditions of Participation Messages (Unsolicited)	ADT Alerts	Direct message in EHR	Patients who identify their PCP during their hospital or ED encounter	These alerts will go directly to the provider named as the patient's PCP (therefore not all inclusive)
Directly from Hospital (Organization specific)	ADT alerts, ED and Discharge Reports	Fax, EHR, or portal login	Most likely will only receive from hospitals that your organization has an existing relationship with, and for patients who identify their PCP during their encounter.	These reports will contain all pertinent clinical information, including medication information and discharge instructions
		20		





**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

**Managing Event Notifications** 



# **Ambulatory Practice Survey**



This past summer, the Mass HIway team sent out a survey to Massachusetts ambulatory practice staff to get their feedback on ENS. Our specific survey goals included:

- Gain a better understanding of ambulatory practice utilization of ENS and ADT Alerts
- Identify barriers ambulatory practices may face in obtaining and using ENS and ADT Alerts





### **Ambulatory Practice Survey Results**



- 54% of respondents indicated that their practice receives ADT alerts
  - Only 7% indicated that their practice has its own Certified ENS Vendor subscription
- 29% of respondents shared a comment that expressed confusion or lack of awareness about ENS
- Of respondents who do not receive ADT alerts, barriers included cost, lack of IT resources, implementation and training, and lack of awareness about ENS







**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

**Managing Event Notifications** 



## **ADT Alert Volume**



Many practices and health systems are juggling event notifications from multiple sources. Managing these ADT Alerts and other notifications can be overwhelming! It can also result in duplicate notifications and alert fatigue for staff.





## Managing ADT Alerts



- In response to feedback from provider organizations, the Mass HIway published ADT Alert Best Practice Documentation in February 2024 that can be leveraged to optimize and streamline the receipt of ADT Alerts and ADT Alert Follow-up workflows
- The Best Practice Documentation covers:
  - Inventorying your ENS Alert Current State
  - Selecting a primary ADT Alert feed
  - Optimizing/customizing your ADT alert feed to meet your organization's unique needs and goals
  - Using historical ADT data to inform operations



## ADT Alert Best Practice Resources



#### Provider Organization ENS Alert Inventory Template

List all types of notifications about patient admission, discharge and transfer events that your organization is currently receiving in the "Type of Notification" column. Then, fill in the subsequent columns with information about each of the notification sources. Consider notifications you are receiving from ENS Vendors, ACOs, directly from hospitals, etc. You can reference the "Types of ENS Alerts You May Already be Receiving" table on page 11 to help you begin your inventory.

Type of Notification	Type of Messages	Method of Receipt	Patients Included	Things to Consider/Missing Elements
Example Row: ACO ADT Feed	ADT Alerts	Population Health Tool	MassHealth ACO Patients	Does not include non- ACO patients     Staff would prefer to receive alerts in EHR



## **ADT Alert Best Practice Resources**



## **Optimizing ADT Alert Feeds**

# Who

Which patients do you want included in your ADT roster?

# What

- What types of ADT alerts do you want notifications for? (e.g. discharges only)
- Do you want to receive unsolicited CoP ADT alerts?

# Where

 Where do you want staff to review ADT alerts? (e.g. ENS Vendor portal, EHR, population health management tool)

# When

 When and how often do you want to receive ADT alerts? (real-time per patient messages, or scheduled multi-patient summary lists)

# How

 Customizations and filtering of ADT feeds can be done through a Certified ENS Vendor or in a population health management tool



## **ADT Alert Best Practice Resources**



#### **Using historical ADT Data to Inform Operations**

Select a time-range (of at least 1 week) and review ADT utilization from several points in the year for this period to help identify population level utilization trends. Since ADT data is available in real-time, you can monitor success of any improvement initiatives in real-time.

When are patients utilizing the ED the most during business hours?

Do you have enough same day appointments available during this time-frame?

What are common reasons for patients unnecessarily utilizing the ED?

Do your patients know this is something they could be seen by your providers for? Do your patients know that you have a clinical advice line and/or walk-in clinic available?

What day of the week tends to have the most/least hospital discharges?

Can blocking appointments for discharge follow-up be adjusted to anticipate this?





**ADT Alerts and Event Notification Services (ENS)** 

The Massachusetts Statewide ENS Framework

Understanding the Massachusetts ENS Landscape

**ENS Ambulatory Practice Survey Results** 

**Managing Event Notifications** 







Angela Miller, PMP

Mass HIway Account Manager

Massachusetts eHealth Institute (MeHI)

miller@masstech.org