



Mass Hiway 101

An overview of the Massachusetts Health Information Highway



Introduction to the Mass Hlway

Hlway Direct Messaging

Example of Mass Hlway Success

Hlway Provider Directory 2.0

Clinical Gateway API

Massachusetts Statewide ENS Framework

Mass Hlway Account Management Team



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 Hlway users and other healthcare providers regardless of affiliation, location, or differences in technology

Hiway Direct Messaging

- Secure method of sending transmissions from one Hlway user to another
- Hlway connection for Massachusetts Public Health Reporting
- *Hlway does not use, analyze, or share information in the transmissions and does not 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 65,000+ Hlway Users

Statewide ENS Framework

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



Introduction to the Mass HIway

HIway Direct Messaging

Example of Mass HIway Success

HIway Provider Directory 2.0

Clinical Gateway API

Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



Secure method for transmitting messages between providers for wide variety of use cases

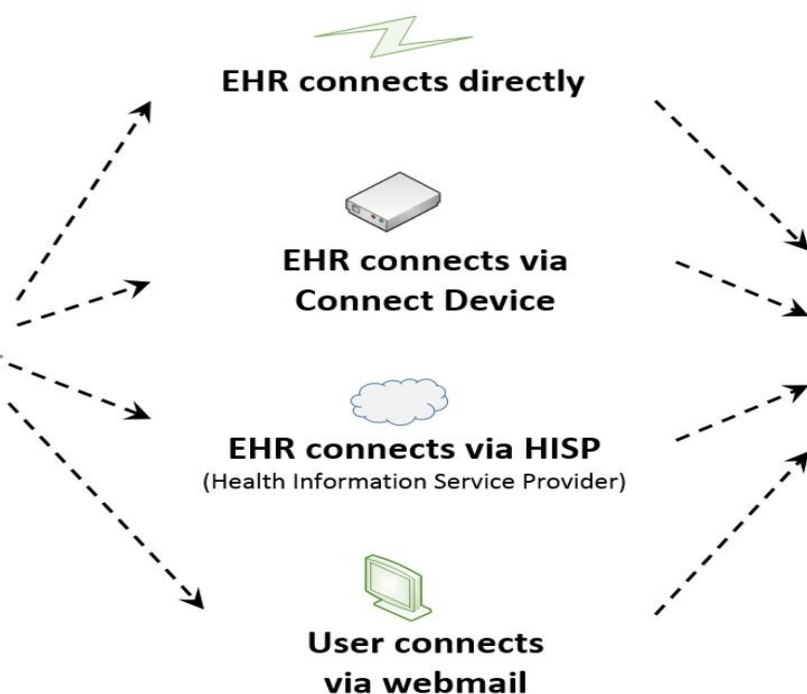
Supported Use Case Categories

- Public Health Reporting
- Provider-to-Provider Communications
- Payer Case Management
- Quality Reporting (as per the Mass Hiway Policies & Procedures)

User types



Connectivity options



HIE services





Mass Hlway 2.0



Mass Hlway 2.0 is a member of DirectTrust and is connected to all DirectTrust member HISPs. This offers a rich network for Hlway Direct Messaging to MA providers.





What type of documents can you send?



The HIway is “content agnostic,” and does not restrict message types

Patient Clinical Information

- Summary of Care / transition of Care record (TOC)
- Request for patient care summaries
- Discharge summaries
- Referral summary information
- Specialist consult notes
- Progress notes
- Care plans
- Treatment plans

Patient Clinical Alerts

- Emergency department notification
- Mortality notification
- Transfer notification
- Disposition notification (admit/discharge)

Quality Reporting

- Reporting of clinical quality measures (CQMs)

Public Health Reporting*

Securely comply with reporting regulations for the Massachusetts Department of Public Health (DPH)

- Massachusetts Immunization Information System (MIIS)
- Electronic Lab Reporting (ELR)
- Syndromic Surveillance (SS)
- Massachusetts Cancer Registry (MCR)
- Children’s Behavioral Health Initiative (CBHI)
- Intake Enrollment Assessment and Transfer Service (IEATS)
- Childhood Lead Poisoning Prevention Program (CLPPP)

* There is no cost for a HIway connection that is used exclusively for DPH reporting.



Introduction to the Mass HIway

HIway Direct Messaging

Example of Mass HIway Success

HIway Provider Directory 2.0

Clinical Gateway API

Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



Lowell Community Health Center uses Direct Messaging to Send and Receive Referrals and Consult Notes with Trading Partners

Lowell Community Health Center (LCHC) serves the greater Lowell communities by offering comprehensive primary healthcare as well as dental, eye care, and specialty services. It aims to provide culturally-competent health services regardless of a patient's financial status in order to reduce health disparities and empower each individual to maximize their overall well-being.

Challenge

- Referrals and consult notes were sent between LCHC and its clinical partners via paper fax and phone calls
- Manual processes resulted in significant delays in closing the referral loop and a months-long backlog of paperwork to be scanned into LCHC's EHR system



Solution

- LCHC leveraged its eClinicalWorks (eCW) EHR system to send referrals via P2P, eCW's Direct messaging HISP integrated with the Mass Hlway
- Now, when a patient needs to see a specialist, the clinician sends the referral and appointment request to the receiving organization via P2P Direct Messaging
- Text communications to patients reminding them of their appointments are sent directly through the EHR via eCW Messenger
- Once the patient has been seen, the specialist sends their clinical notes back to LCHC via Direct Messaging directly into LCHC's eCW EHR

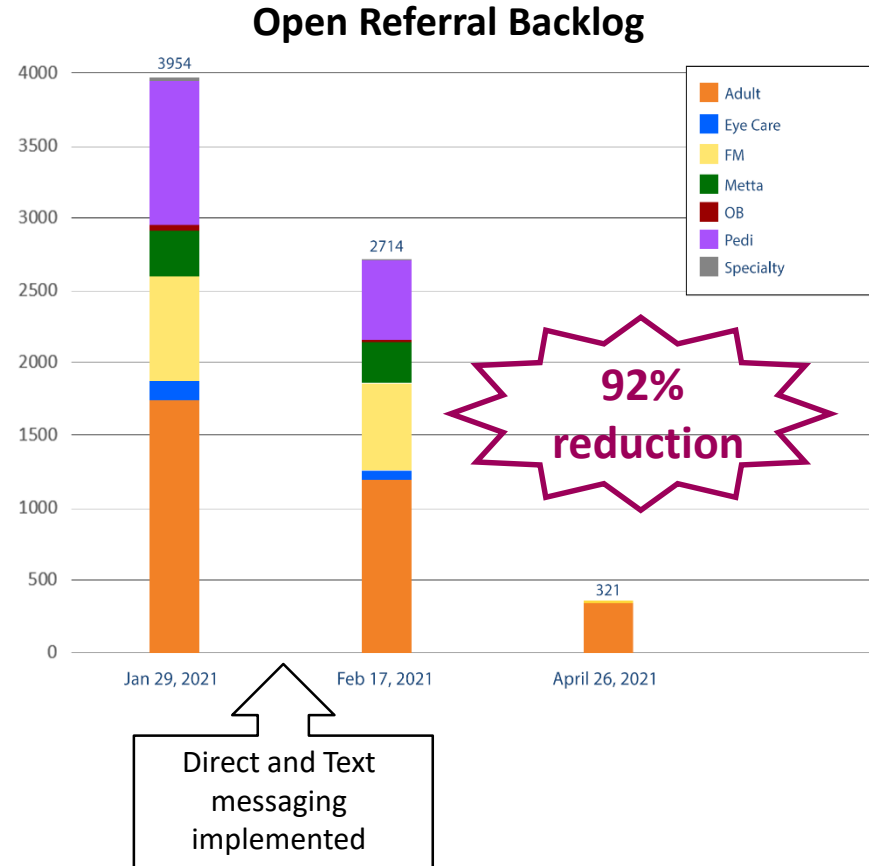
Support from Mass Hlway

- A Hlway Account Manager facilitated calls and correspondence with the trading partners, worked with eCW and trading partners' EHR vendors to resolve technical issues, and documented feedback to keep the project on track



Impact

- With the new workflow, LCHC was able to close the gaps in its processes and now consistently meets its referral targets, ensuring that patients with stat or urgent needs can be seen by a specialist in a timely manner
- 1,500 texts are sent monthly, resulting in fewer phone calls and mailings to patients
- Once the specialist's consult notes are received, these are added to the patient's electronic record within 24 hours





Introduction to the Mass HIway

HIway Direct Messaging

Example of Mass HIway Success

HIway Provider Directory 2.0

Clinical Gateway API

Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



The HIway Provider Directory (PD) is a searchable directory of individual and organizational Direct Addresses. This includes published addresses of Mass HIway participants and users of other DirectTrust Member HISPs.

Purpose of PD 2.0

- Allows providers to increase Direct Messaging use for care coordination by having access to other Providers' Direct Addresses
- Provides destination addresses for Direct Messaging (i.e. Direct Addresses)
- Provides identification details to search for the Direct Address of specific providers, such as organization name, provider name, contact info, and NPI

What's new with PD 2.0

- Expands list of clinicians and other providers who participate in HIE
- Enhances features for easier searching of providers and their Direct Addresses, such as: provider type, specialties, credentials, demographics, service locations

Account Manager will assist you in operationalizing PD 2.0

- Identifies which of your trading partners are in the Mass HIway community
- Advises how to engage additional trading partners to exchange on the HIway



Within PD 2.0 there are two distinct data sets

Massachusetts DirectTrust Addresses (PD 2.0 Extract)

- Maintained by DirectTrust
- Compilation of Massachusetts Direct Addresses submitted by HISPs that participate in DirectTrust, including the Mass Hlway
- Updated extract is distributed to Hlway Participants monthly

Mass Hlway Direct Addresses (Hlway Participant Extract)

- Maintained by the Mass Hlway
- The Hlway submits this data set to DirectTrust for incorporation into PD 2.0
- Provided upon request to obtain the Direct Addresses of all Hlway participants



The DirectTrust is a standards body, a policy-supported trust framework, and an accreditor for exchange within the DirectTrust network.

The DirectTrust Directory Workgroup

- Works to evolve and maintain use and usability of the DirectTrust Directory through appropriate policy and innovation.
- Workgroup participants dedicate their time to the evolution of the nation's largest directory of digital contact information for providers.

Forthcoming changes to the Provider Directory

- The DirectTrust Directory Workgroup has developed changes to the Provider Directory to allow for more thorough validation of the data and thus increasing the reliability of use. Including, but not limited to:
 - NPI validation against NPPES
 - Physical Address validation against NPPES and an address validation service
 - Requiring Specialty Code (Taxonomy) - validated against [NUCC](#)
 - Clarifying organizational addresses from individual provider addresses



Introduction to the Mass HIway

HIway Direct Messaging

Example of Mass HIway Success

HIway Provider Directory 2.0

Clinical Gateway API

Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



Key Objectives

Build an alternative pathway to current public health reporting via Direct Messaging

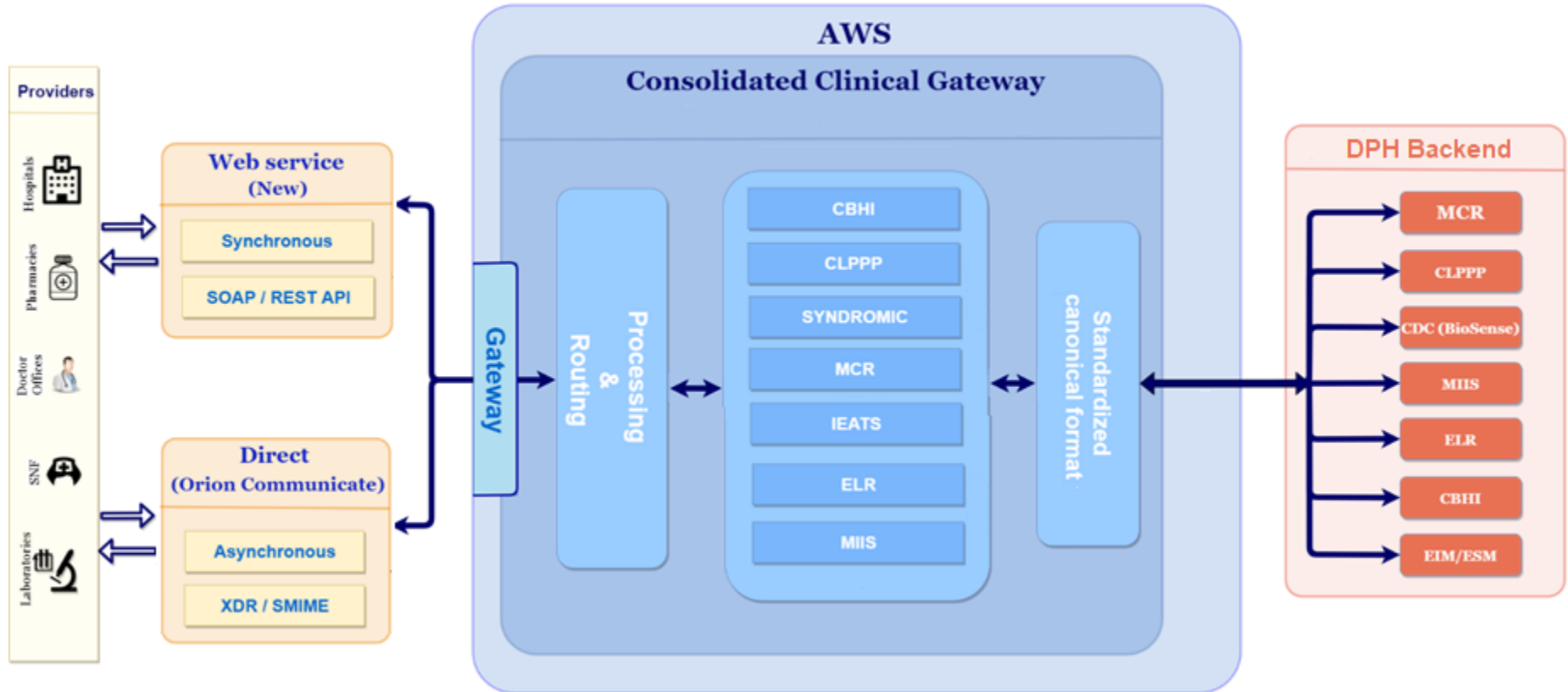
Add support for multiple channels to send and receive data via RESTful & SOAP Services

Enable real time, synchronous message exchange between providers and public health registries

Implement FHIR integration and authentication protocols to support enhanced security and business functionality



Consolidate Clinical Gateway High Level Architecture





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HIway Direct Messaging

Example of Mass HIway Success

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Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



The purpose of an Event Notification Service (ENS) is to alert subscribing care providers about their patients' Admissions, Discharges, and Transfers (ADT) to and from emergency departments, hospitals, and post-acute care facilities

Admissions, discharges, and transfers trigger an alert notification

- Sent to any subscribed care provider with an existing relationship with the patient
- Can include clinical data, such as reason for visit and diagnosis

ADT alert notifications are delivered as

- Real-time per patient messages, or
- Scheduled multi-patient summary lists

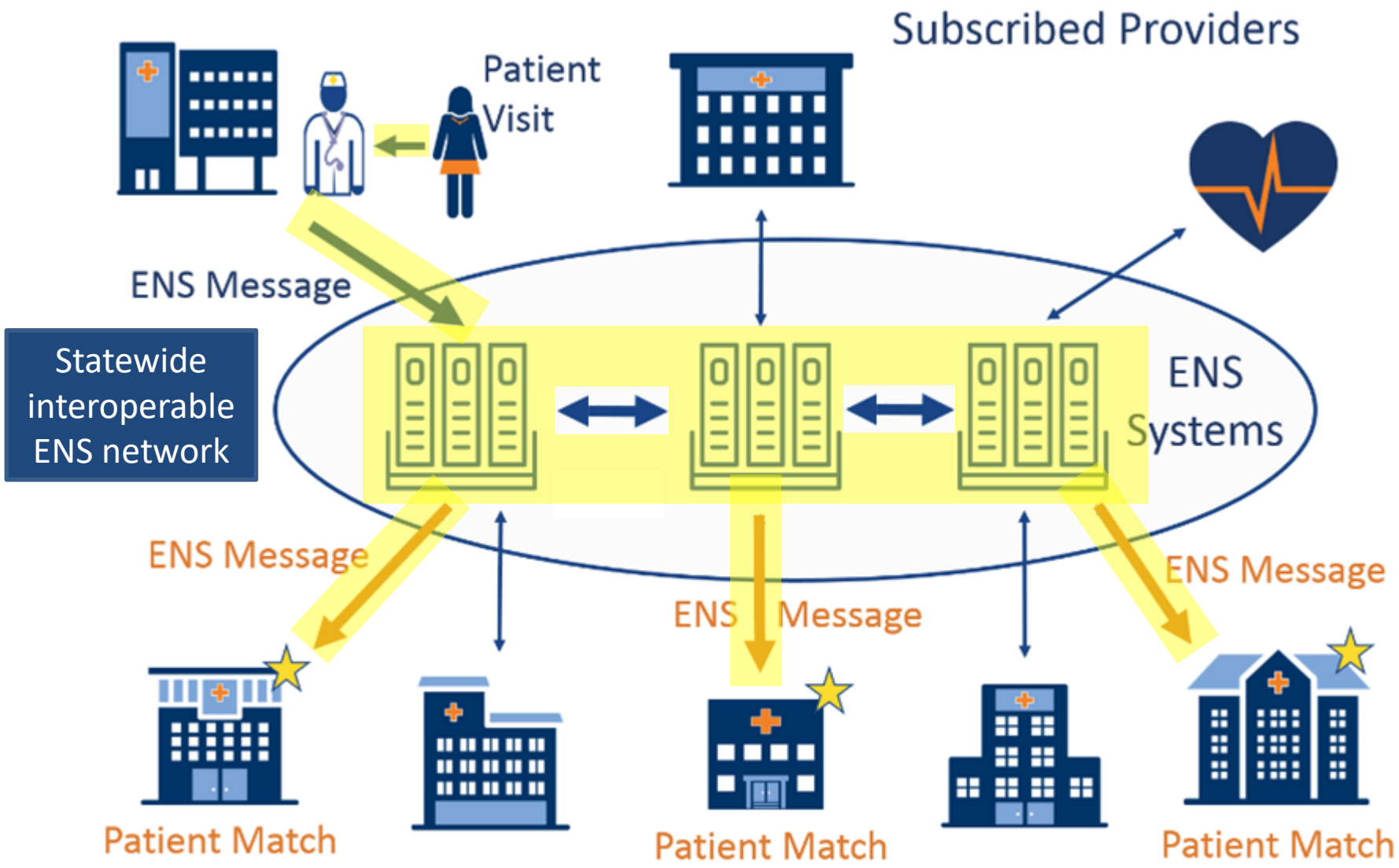
Subscribing care providers can choose

- 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, sFTP)

Event Notification Services (ENS) are also called Encounter Notification Services



Massachusetts Statewide ENS Framework





Utilization of ENS and the Statewide ENS Framework improves timely provider-notification when their patients are admitted or discharged from hospitals, EDs, or other care facilities, improving care coordination.

Interoperable Statewide ENS Solution

- The Statewide ENS Framework enables all care providers in the Commonwealth to **subscribe to a single interoperable ENS vendor to receive ADT alerts from all Massachusetts's Acute Care Hospitals, in addition to other contributing care facilities, to coordinate care after ADT events.**

Improves Continuity of Care

- **ADT notifications will help patients transition between care providers, especially in emergencies.** Patients don't need to remember to contact their PCPs concerning treatment received at other facilities, as the information is sent automatically, enabling the PCPs to follow up directly.

Enhances Care Coordination

- Clinicians, care managers, and others in the healthcare community **receive real-time ADT notifications so they can quickly assess their patients' medical and social needs**, implement support where necessary, and direct patients to the most appropriate care settings.

Enhances Patient Engagement

- Timely ADT alerts and notifications allow care providers to **connect more meaningfully with patients, provide better patient education**, and guide them to the right care at the right time.



Supports Medication Education and Reconciliation

- Information about patients taking many different medications can be lost in transitions of care, and introducing new medications increases patient risk. **ENS can identify and alert for drug-drug interactions and ensure the patient gets the education they need to safely manage their meds.**

Decreases Repeat Hospitalizations

- Clinicians have more information related to patient hospital utilization patterns, which enables them to direct patients to a care system that better meets their long-term needs than repeat hospital visits.

Reduces Long-Term Medical Costs

- As disease states progress and a patient is left untreated, the odds of them visiting the emergency room and requiring hospitalization and other expensive interventions increases. **Improving care coordination with their care providers reduces avoidable utilization, lowering overall costs of care.**

Provides Library of Submitted ADTs

- ADT alerts submitted by Acute Care Hospitals will be **archived and available for viewing by any authorized party that may need the information in the future to provide care to the same patients.**



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 requirement adds to the list of Conditions of Participation (CoP) that hospitals must fulfill to maintain their CMS provider agreement, so they can get CMS reimbursements
- The ADT obligation became applicable in spring 2021
- The purpose is to improve care coordination by allowing a receiving provider, practitioner, or facility to reach out to the patient and deliver appropriate follow-up care in a timely manner

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.



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HIway Direct Messaging

Example of Mass HIway Success

HIway Provider Directory 2.0

Massachusetts Statewide ENS Framework

Mass HIway Account Management Team



Front-line Mass Hlway support to get you enrolled, connected, and using Direct Messaging

- ✓ Enrollment
- ✓ Use case identification
- ✓ Trading partner identification
- ✓ Onboarding support
- ✓ Training and workflow implementation
- ✓ HIE best practices



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