Commonwealth of Massachusetts
Executive Office of Health and Human Services

THE HI WAY
MASSACHUSETTS HEALTH INFORMATION HIGHWAY

ADT Alerts: Understanding the Massachusetts ENS Landscape and Making the Most of ADT Alerts

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Objective

Provide an understanding of the Event Notification Services (ENS) landscape to empower organizations to utilize ENS to support their unique needs and provide high quality care to the Commonwealth's patients.

Mass HIway Overview

What are ADT Alerts?

Understanding the Massachusetts ENS Landscape

Statewide ENS Advantages

Common ADT Alert Utilization Barriers

Making the Most of ADT Alerts

Provider Organization Spotlight: Manet Community Health Center

Q&A

Mass HIway Overview

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
- HIway 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

Statewide ENS Framework

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

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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

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)

Facility	Practice	Provider	MRN	Source Facility	Source MRN	First Name	Middle Name	Last Name	Gender	Date of Birth	Address	City	State	Zip	Phone
ABC Medical Group	Practice 1	Dr. Jones	12345	Hospital 1	ABC12345	Joe	A	Test	Male	xx/xx/xxxx	123 Main Street	Philadelphia	PA	12345	xxx-xxx-xxxx
ABC Medical Group	Practice 2	Dr. Smith	87654	Hospital 1	XYZ87658	Mary		Test	Female	xx/xx/xxxx	456 Cherry St.	Cherry Hill	NJ	12345	xxx-xxx-xxxx
ABC Medical Group	Practice 1	Dr. Jones	91288	Skilled Nursing Facility 8	PQR81747	Pam	C	Test	Female	xx/xx/xxxx	934 Lion Cirlce	Havertown	PA	45678	xxx-xxx-xxxx
ABC Medical Group	Practice 4	Dr. Miller	837445	Hospital 3	KJD01384	William		Test	Male	xx/xx/xxxx	874 Ryans Way	Cape May	NJ	45678	xxx-xxx-xxxx
ABC Medical Group	Practice 5	Dr. Gonzalez	137894	Hospital 2	UID12374	Amy	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	S	Test	Female	xx/xx/xxxx	101 Hwy 1	Christiana	DE	12367	xxx-xxx-xxxx

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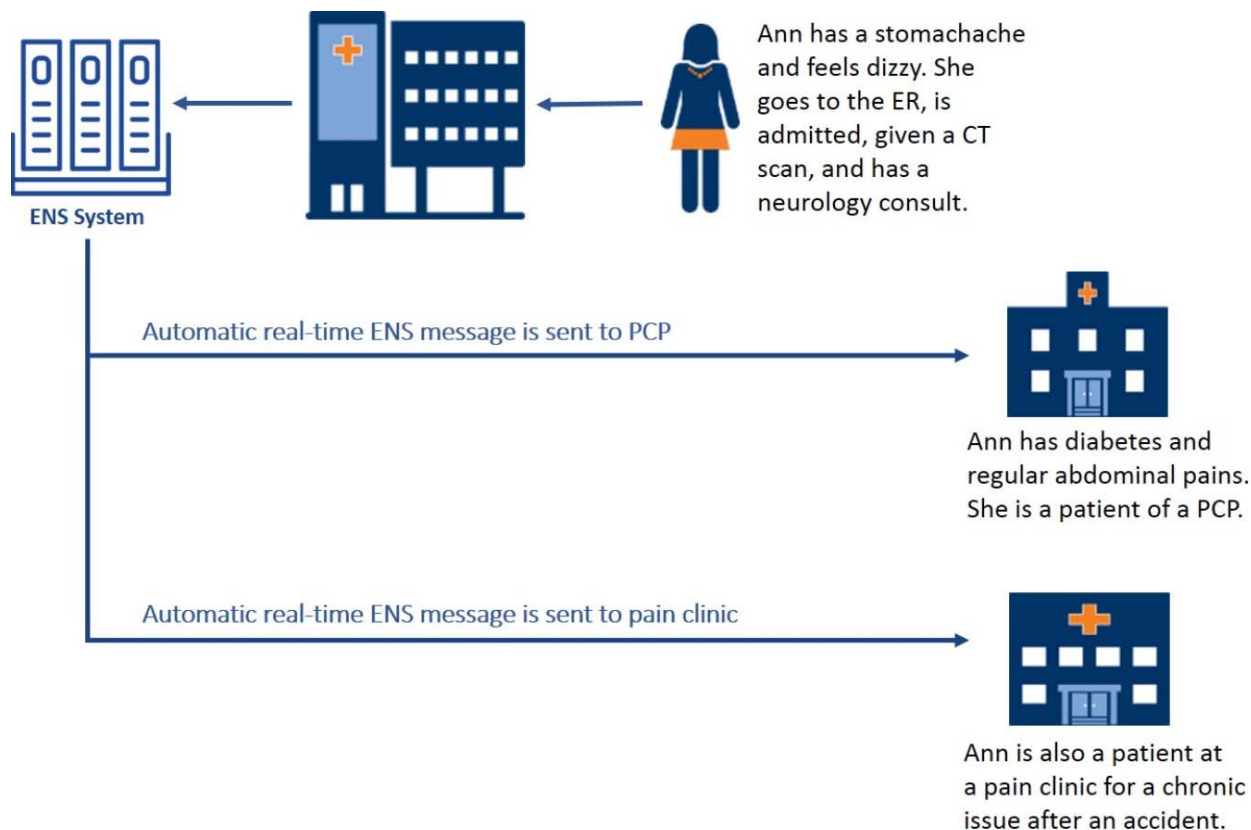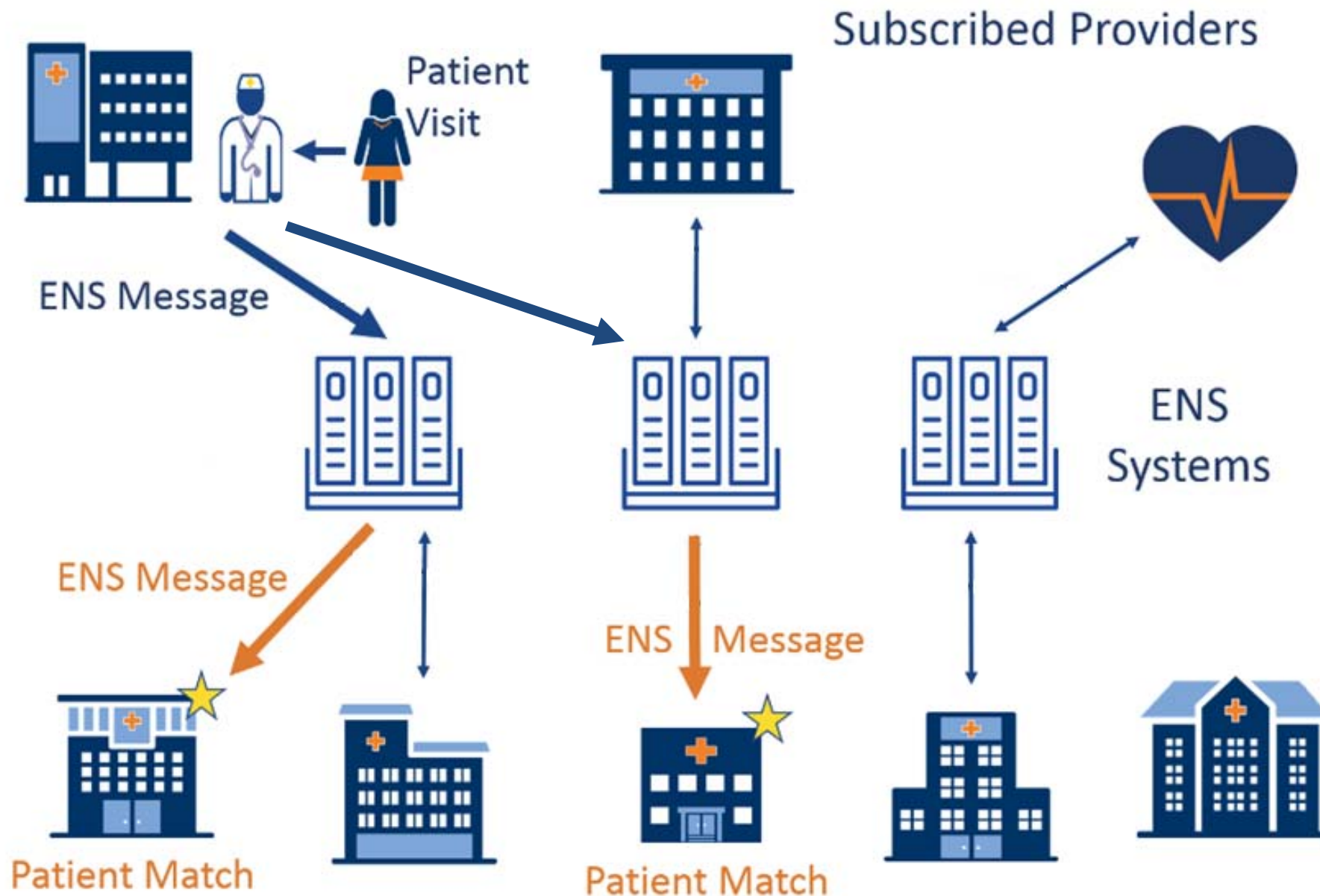
To enable utilization of ENS across the state, EOHHS and the Mass HIway developed the Statewide ENS Framework to create an interoperable ENS network.

- 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, and other contributing care facilities, to coordinate care after ADT events.
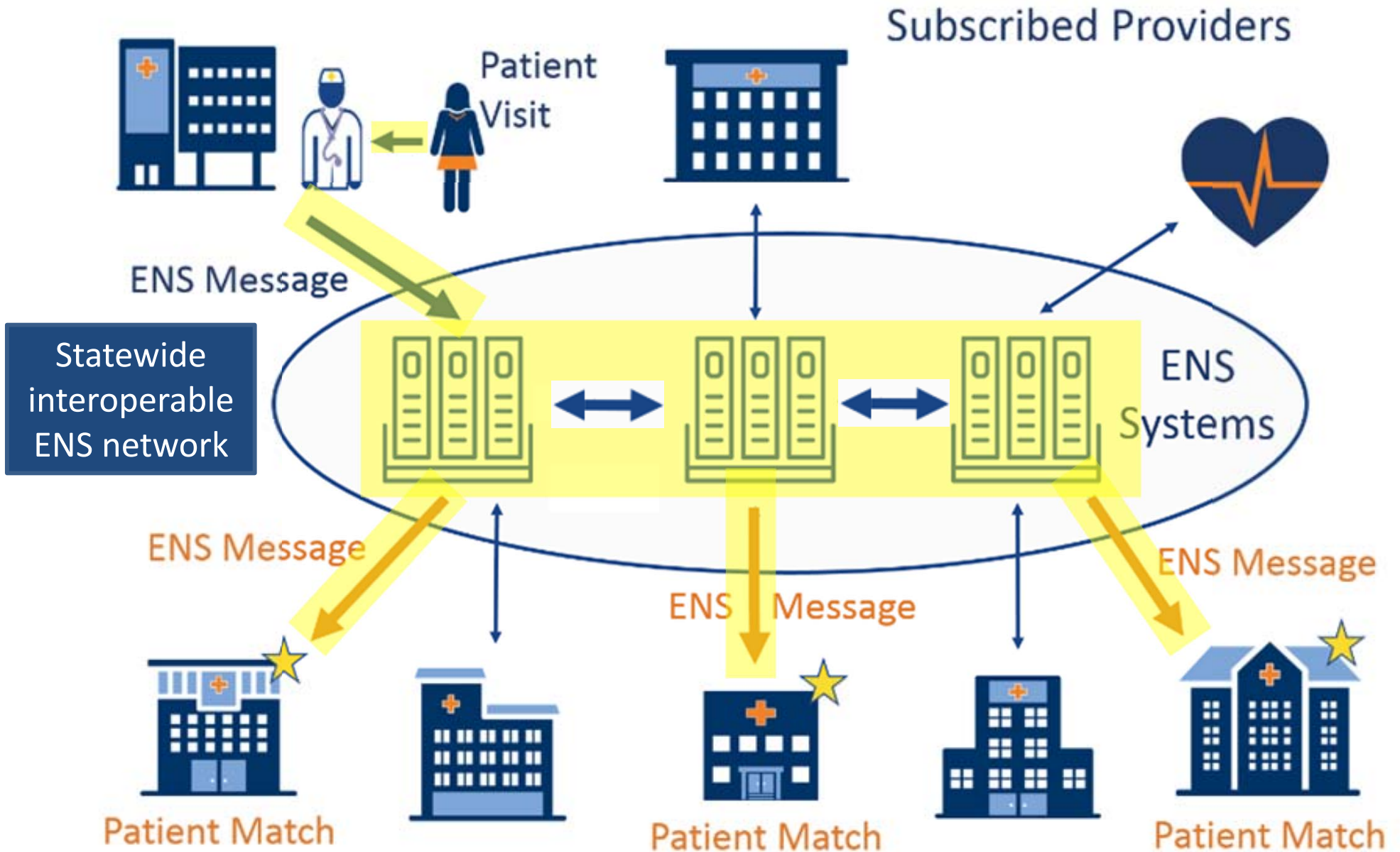
Website: bamboohealth.com
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   Email: ctufts@bamboohealth.com

Website: collectivemedical.com
Contact: Customer Support
    Tel: 801-285-0770
  Email: support@collectivemedical.com

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.
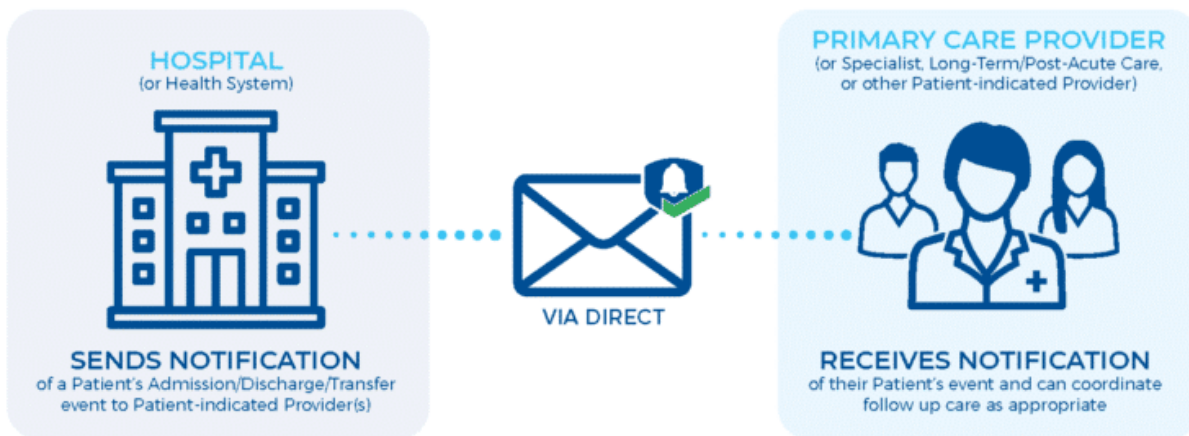
In response to the CMS requirement, a Consensus Body formed to identify a solution using Direct Secure Messaging for both senders and receivers of these notifications. Forty organizations and individuals representing the care continuum collaborated on an Implementation Guide for Event Notifications via the Direct Standard™.

EVENT NOTIFICATIONS VIA THE DIRECT STANDARD™

HOSPITAL
(or Health System)

VIA DIRECT

SENDS NOTIFICATION
of a Patient's Admission/Discharge/Transfer event to Patient-indicated Provider(s)

PRIMARY CARE PROVIDER
(or Specialist, Long-Term/Post-Acute Care, or other Patient-indicated Provider)

RECEIVES NOTIFICATION
of their Patient's event and can coordinate follow up care as appropriate

BENEFITS

- **Shortest path to compliance** with CMS ADT Conditions of Participation
- **Creates near real-time visibility** to status changes of patient's care
- **Improves communication between providers** about shared patients for a stronger continuum of care
- **Empowers care teams** to make informed decisions and positively impact patient care
- **Includes Context** to enable message routing to the appropriate person on the care team

To learn more about adopting or implementing Event Notifications via Direct, visit **bit.ly/ENviaDirect**
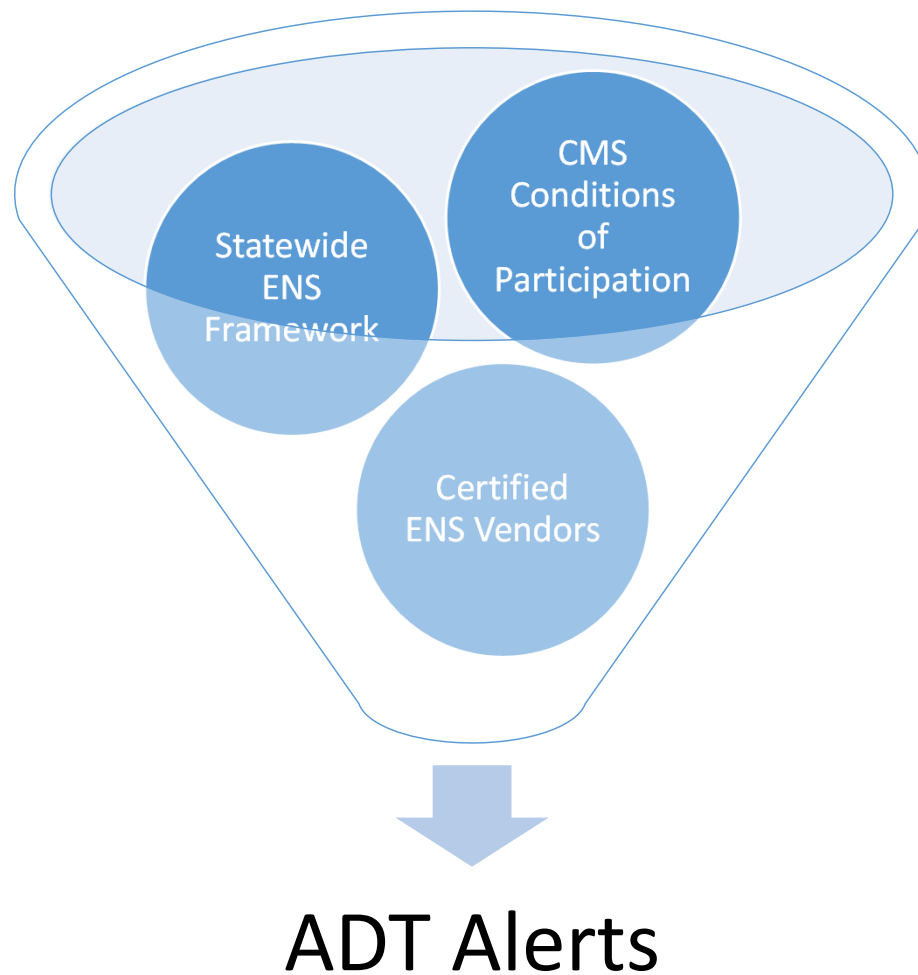
DirectTrust™

ADT Alerts

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Statewide ENS Framework Advantages

Benefits of utilizing ENS and the Statewide ENS Framework

- Improves Continuity of Care
- Enhances Care Coordination
- Enhances Patient Engagement
- Supports Medication Education and Reconciliation
- Decreases Repeat Hospitalizations
- Reduces Long-Term Hospital Costs
- Provides Library of Submitted ADTs
- Improved Performance in Value-Based Care Programs
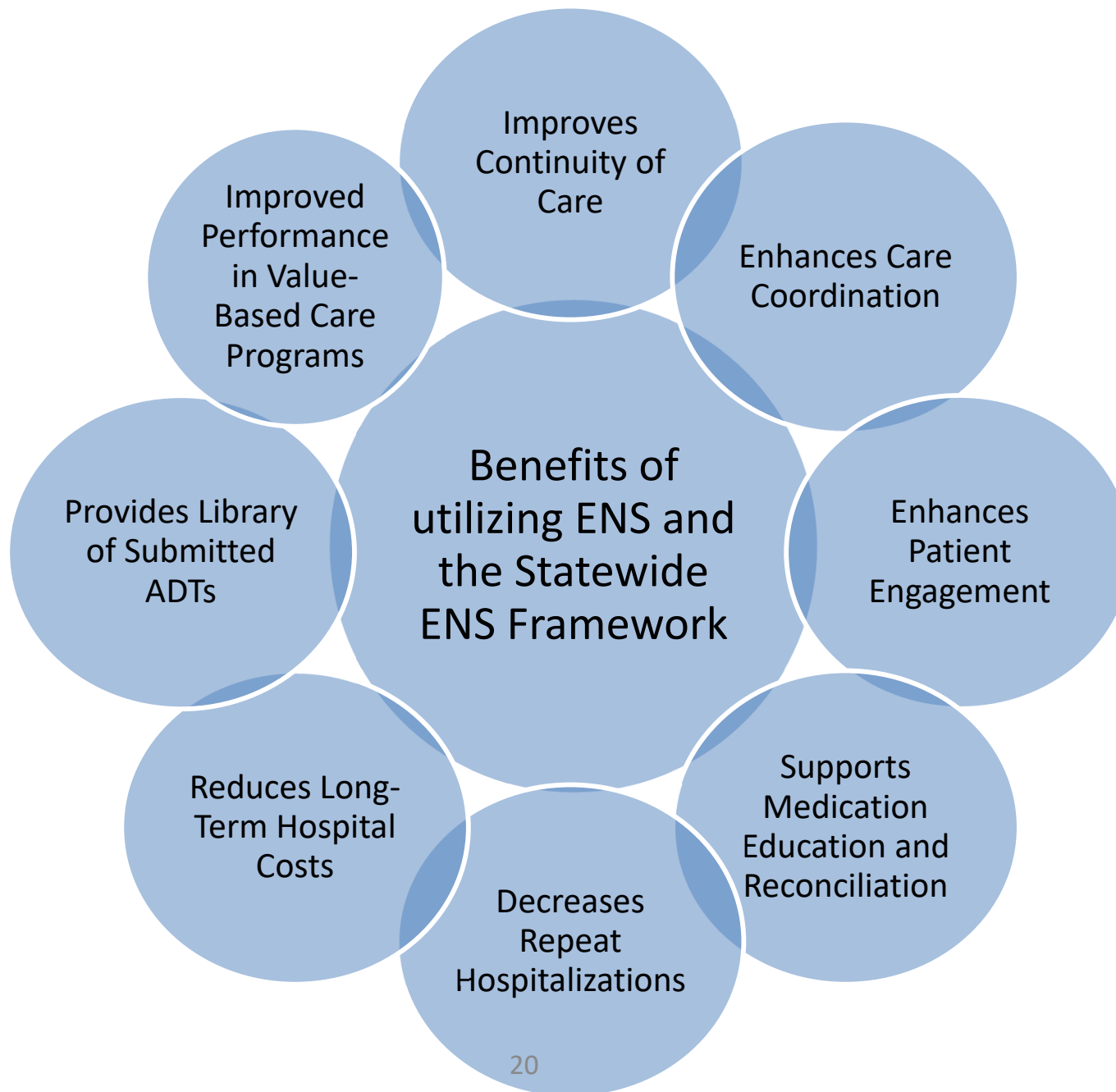
Utilization of ENS and the Statewide ENS Framework will improve timely provider notification when their patients are admitted or discharged from hospitals, EDs, or other care facilities. Utilization will improve care coordination.

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 creates the opportunity to identify 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 patients 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**.

Helps Improve Performance/Compliance in Quality Programs

Examples include:

- NCQA PCMH Standards and Guidelines
  - Care Coordination and Care Transition Competencies
- Value Based Care Program Hospital Utilization Measures
  - Readmission rate measures
  - Measures the require follow-up within a certain timeframe after an ED/Admission for certain diagnoses
  - Measures on Unplanned Admissions for Chronic Conditions
- Patient Experience Surveys
  - Proactive ADT follow-up can help improve patients' care experiences
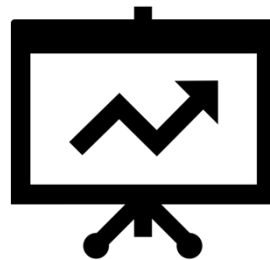
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This past winter, the Mass HIway partnered with the Massachusetts League of Community Health Center to survey Massachusetts Federally Qualified Health Centers (FQHCs) about their ADT workflow challenges. Our specific survey goals included:

- Gain a better understanding how FQHCs are using ADT alerts to support care coordination
- Identify workflow gaps that are prohibiting FQHCs from fully leveraging ADT alerts
- Develop best practice documentation that can be shared to support other FQHCs and provider organizations

FQHC Survey Summary

- Most FQHCs are receiving ADT alerts

- EHRs and ENS Vendor Portals are the most common ways that staff are accessing ADT alerts

- Half of FQHCs are receiving ADT Alerts via >1 method

- Half of FQHCs use criteria to prioritize their ADT follow-up. The ones that do, rely on clinical information.

- Staffing capacity and ADT alert format are two major barriers to ADT alert utilization and follow-up

- Consistently available clinical information from the ADT would help FQHCs optimize their follow-up workflow

FQHCs' confidence in their ADT alert follow-up workflows

Respondents were asked to rate their confidence in their ADT follow-up workflow from a scale of 1 – 5 (1 being not confident at all and 5 being very confident).

■ IT Lead Response (17) ■ QI/Nurse Manager Response* (7)

27   *Data from April 2023 Mass League QI Forum Zoom poll
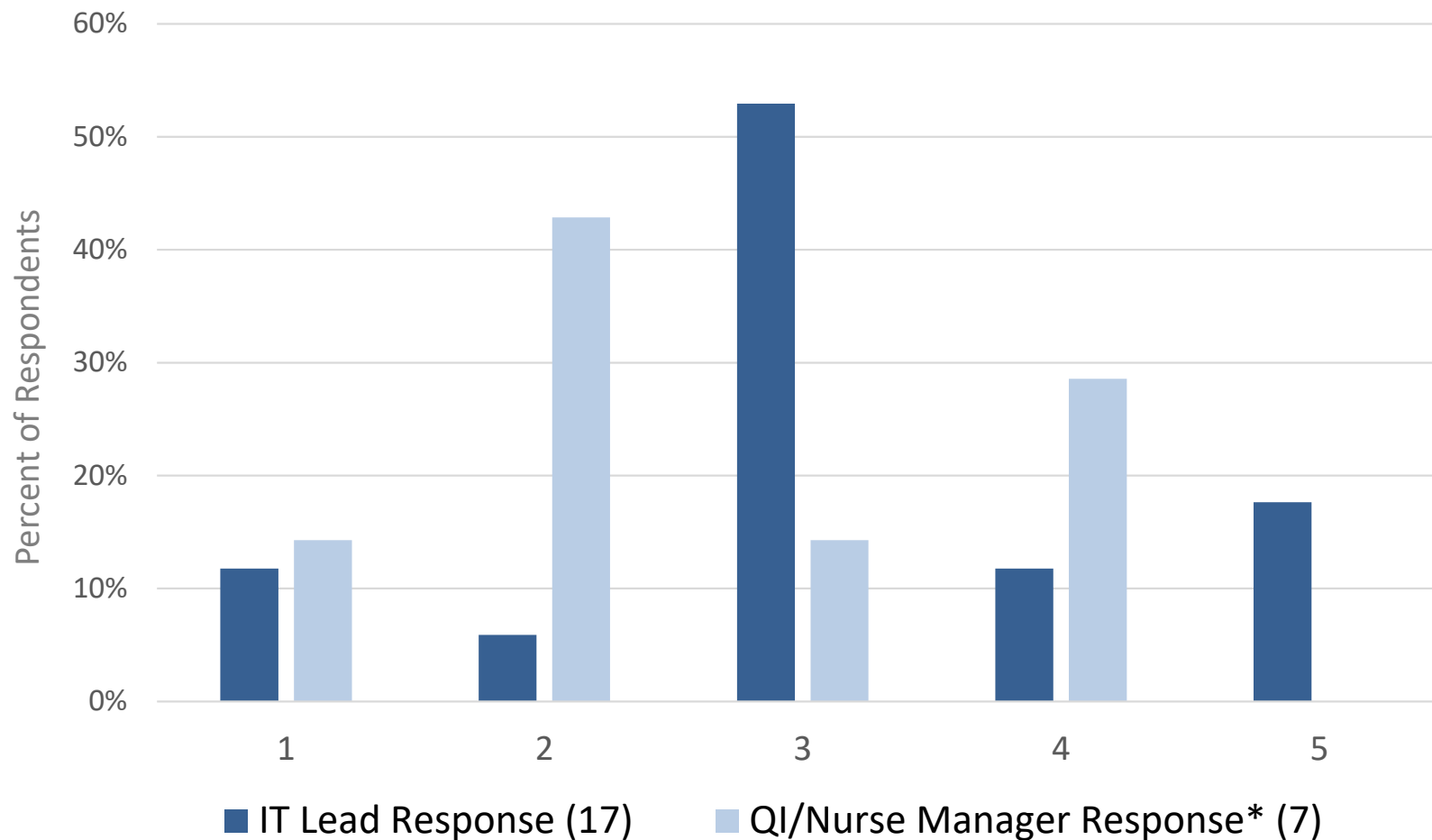
Barriers:

- Staffing capacity impacts most FQHCs' ability to utilize and follow-up on ADT alerts
- Second to staffing capacity, formatting of ADT alerts was also reported as a barrier
- Other barriers submitted by respondents included:
    - "Most alerts lack diagnosis"
    - "ACO patients only; ADT data not super useful for determining what happened with patient"
    - "Too many and polluted ADT with no priority"
    - "Lack of phones for patients"

What barriers impact ADT alert utilization at your health center? Please select all that apply.

Barrier	Count
Staffing Capacity	15
Format of ADT alerts	9
Method of receipt of ADT alerts	7
Other (please specify)	6
None	2

FQHC ADT Comments and Concerns
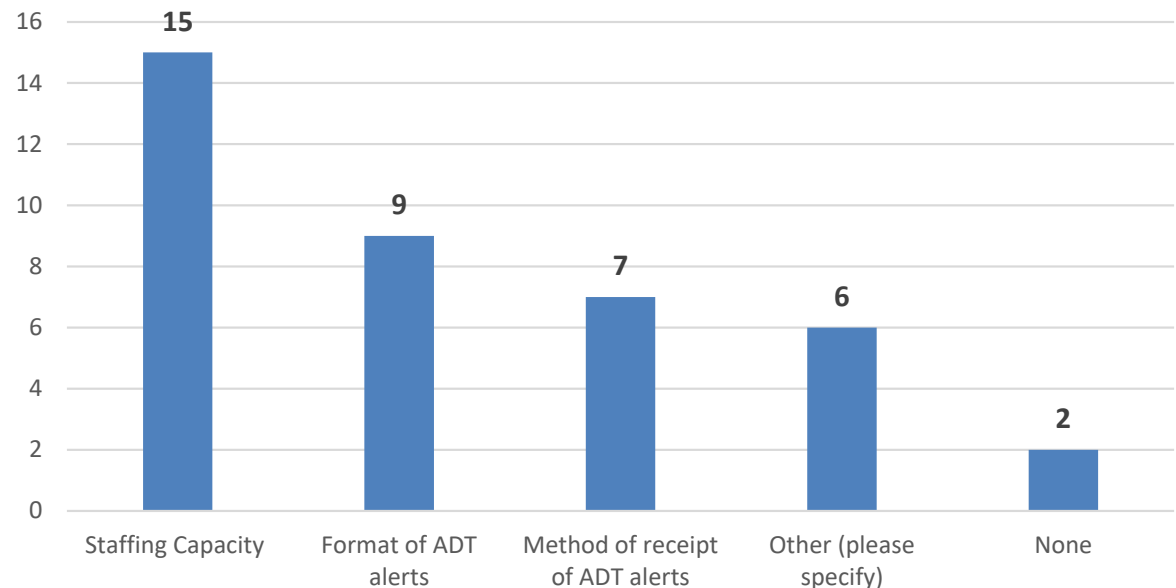
All respondents were invited to share comments or concerns they had related to ADT alerts, regardless of whether their FQHC receives ADT Alerts:

- "ADT alerts are outside the EMR. We receive hospital and ED info inside Epic via Care Everywhere, but this info is incomplete (only comes from other Epic sites) and difficult to manage and distribute the work."

- "ADT alerts are only for ACO patients. ADT alerts are timely but do not contain all information necessary to respond. Given the next ACO waiver, we have to also re-evaluate our ADT alert vendor, and likely implement a different technology that will support all patient ADT messages."

- "[Population health management tool] is inconsistent with timeliness and content"

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Inventory the ENS Alerts coming into your organization

- What types of alerts are you already receiving?
- What is the source of these alerts?
- Which patients are included in these alerts?
- Where are these alerts coming into your organization?

Identify a "primary feed"

- Which ENS alert feed best represents the patient population you want to be tracking?
  - Are there any improvements that need to be made to this feed to make it more inclusive of the patients you need to be tracking?
- Once a primary feed has been identified, this feed can be relied on as your ADT monitoring feed.
  - Other ENS alerts may contain helpful information that can be referenced in tandem to the primary feed, however, the prompt to follow-up with patients can be based on your primary feed

Types of Alerts You May be Receiving

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

Optimizing ADT 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

Certified ENS Vendor subscriptions give provider organizations access to historical ADT data through a library of submitted ADTs.

Analyzing historical ADT data can help provider organizations understand trends in their patient populations' ED and hospital utilization and anticipate the needs of their patients.
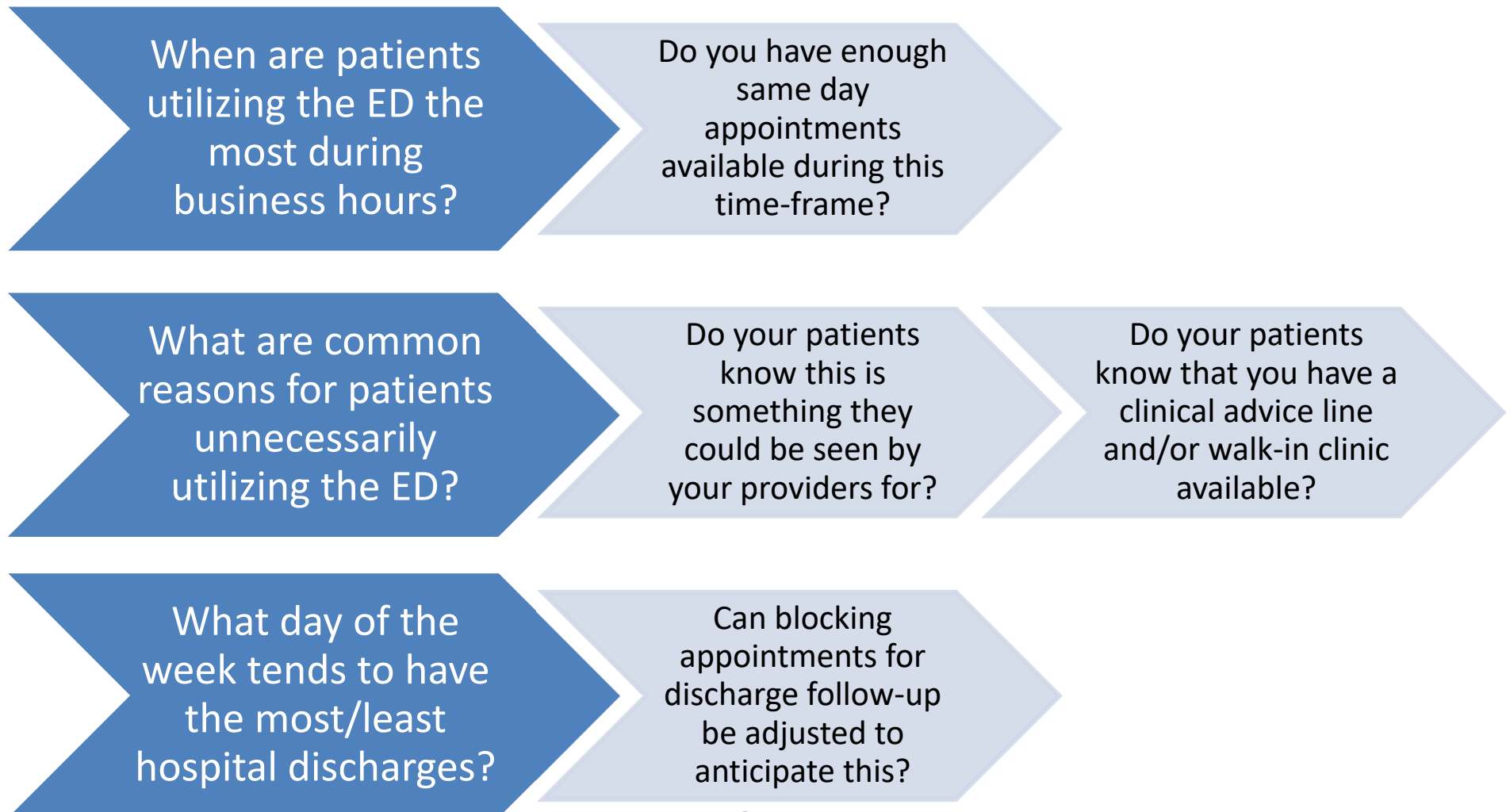
- Scheduling and operational adjustments can be made based on utilization trend data, to better support patients and reduce unnecessary utilization.

Identifying Trends in Utilization through ADT data

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?

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Manet Community Health Center is a Federally Qualified Health Center (FQHC) dedicated to providing preventive, primary and non-emergent urgent care to all, regardless of financial circumstance or health insurance coverage status. Manet has been serving the community since 1979 and has three locations in Quincy, one in Hull and one in Taunton.

In addition to primary care, we offer integrated behavioral health and Medication-Assisted Treatment, MAT, access to nutrition and **care management** services, and on-site access to specialties including vision and cardiology.
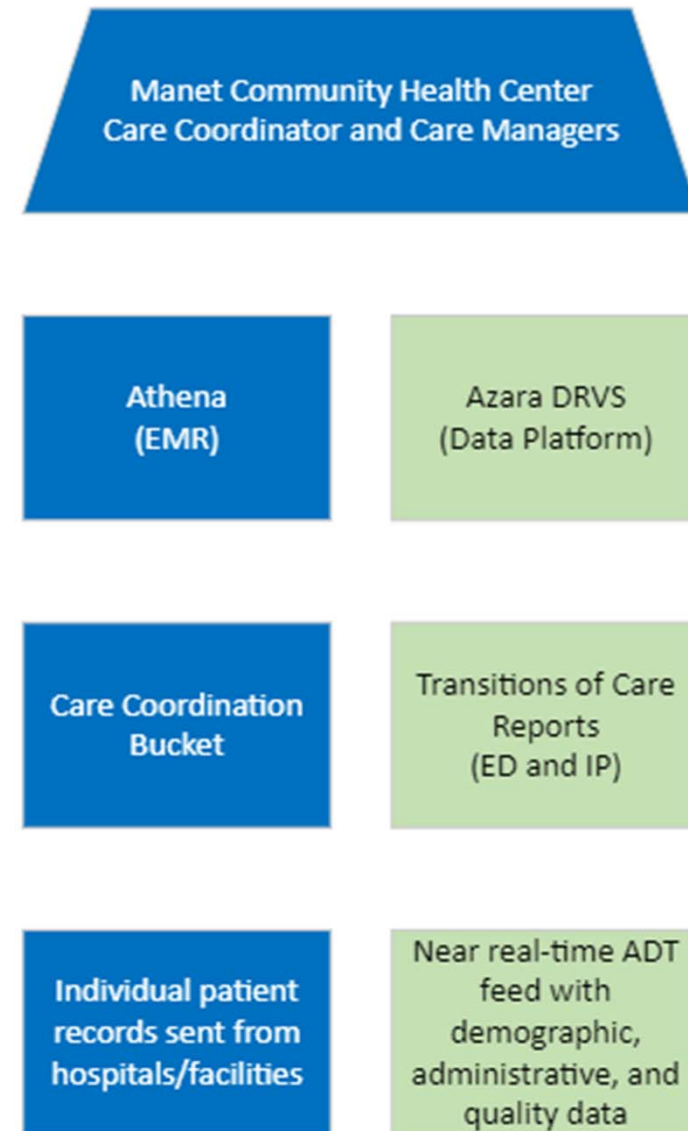
- **Care Coordinator reviews EHR discharge bucket daily (5 days/week)**
  - Triages discharges and other documents as appropriate out
  - Care Managers receive in site-specific buckets
- **Care Managers review bucket**
  - Often have to call for more complete records
  - No ability to download, filter, or prioritize

Manet Community Health Center Care Coordinator and Care Managers

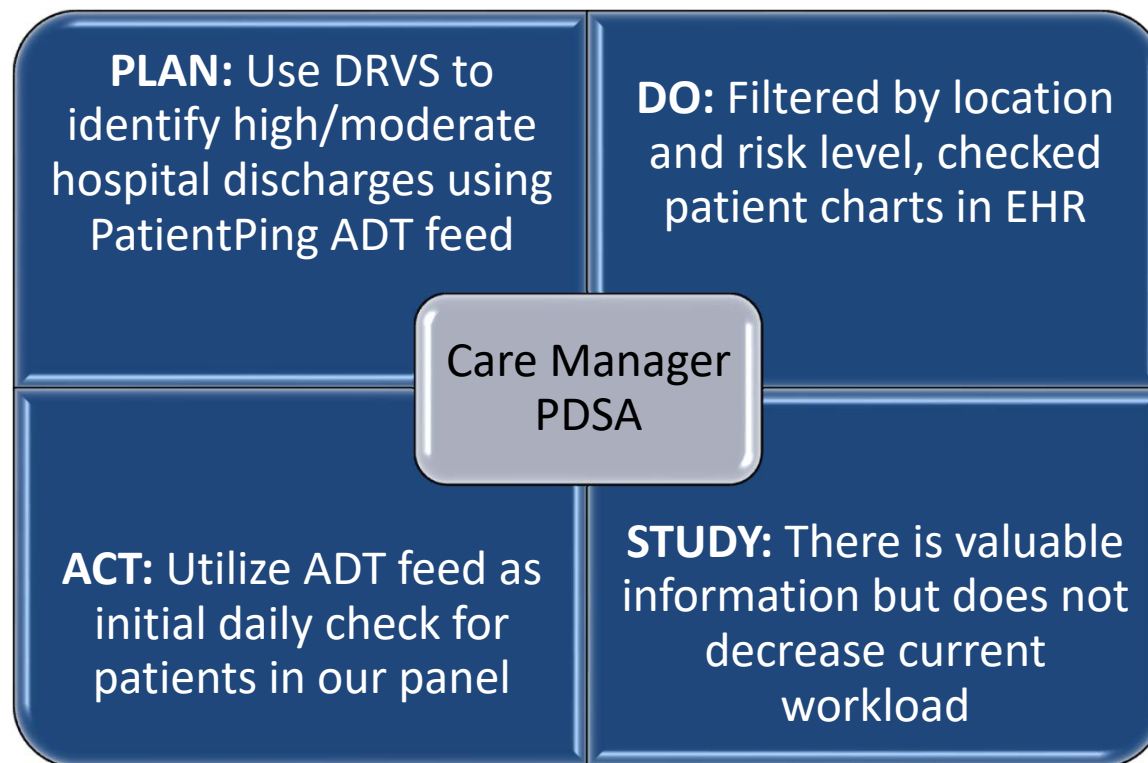|	
Athena (EMR)	Azara DRVS (Data Platform)
Care Coordination Bucket	Transitions of Care Reports (ED and IP)
Individual patient records sent from hospitals/facilities	Near real-time ADT feed with demographic, administrative, and quality data

- Conducted initial pilot using a Plan-Do-Study-Act (PDSA) cycle to determine if risk score was better prioritization of discharges

- If successful with prioritization, can add tiers for triage, decreasing workload of care managers and using Community Health Workers (CHWs) and Medical Assistants (MAs) more

- Five full-time care managers utilized DRVS, a population health management tool, prior to Athena EHR for 2 weeks

  - Manet has an ADT feed integrated into their population health management tool, which offers patient risk scores based on diagnosis information within the EHR

- DRVS training conducted and on-call assistance offered

Plan-Do-Study-Act Cycle

PLAN: Use DRVS to identify high/moderate hospital discharges using PatientPing ADT feed

DO: Filtered by location and risk level, checked patient charts in EHR

Care Manager PDSA

ACT: Utilize ADT feed as initial daily check for patients in our panel

STUDY: There is valuable information but does not decrease current workload

Notes

There were a few high-risk patients that would not have been ID'd as quickly if not for ADT feed.

Had to track down discharges ID'd in DRVS before documents hit the EHR discharge bucket

Would be more useful if tools were combined; i.e. in Athena, not DRVS

Can see potential for additional use if increase use of registries in DRVS

Takeaways

Successes	Challenges
- Provides a comprehensive list of patients who need follow-up - Provides last seen/next appointment - Easy to reorganize for optimal dissemination - Allows tracking for patients who left without being seen and Against Medical Advice (AMA) - Provides "reality check": who was discharged and we did not receive paperwork	- No ADT feed available from psychiatric facilities/rehabs - Diagnosis information from visit not always available/up-to-date - Risk score in DRVS is diagnosis-dependent not visit-dependent - Athena > DRVS is one-way communication - Internal issues with adoption/on-boarding

Takeaways

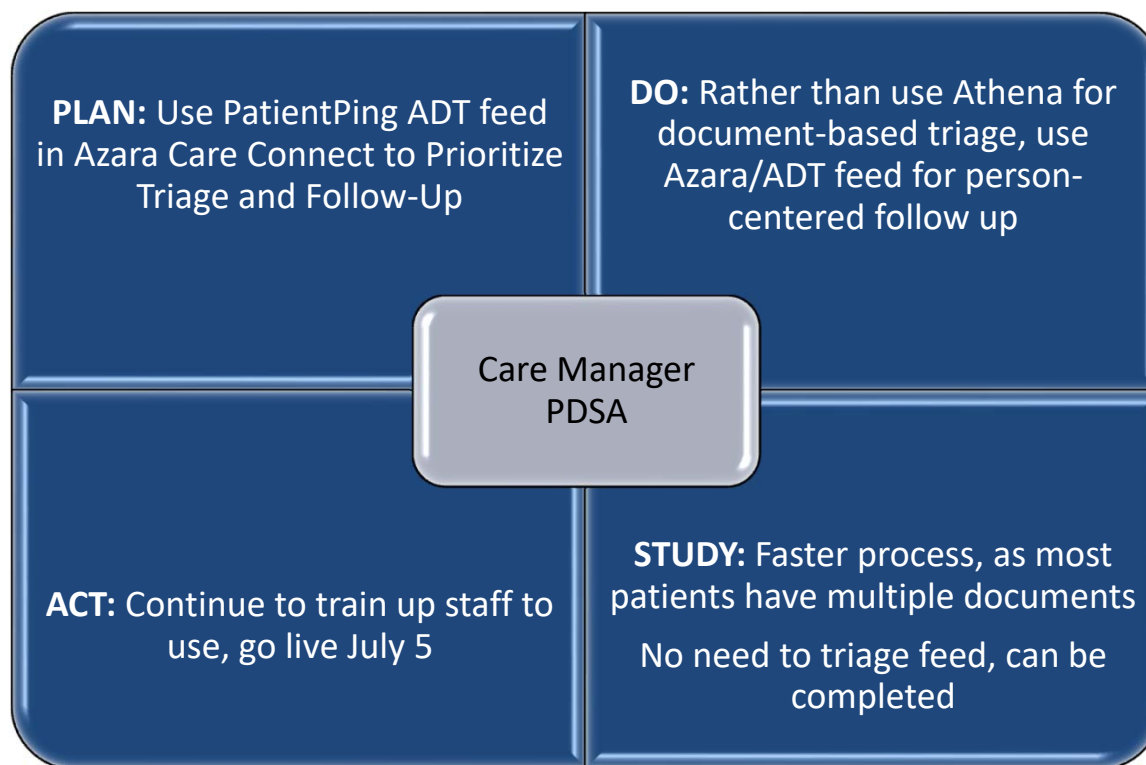|	
No feed from Psychiatric Inpatient	• Still the case • Behavioral Health staff trained
Missing diagnosis codes/info	• Still the case • Raised issue with Azara
Risk-score not diagnosis dependent	• Still the case • Re-education and training helped
Athena > DRVS is one-way communication	• Still the case • EMR Plug-In: much easier access
Internal Issues with Adoption/Onboarding	• Practice and re-education • More investment in full roll-out

PLAN: Use PatientPing ADT feed in Azara Care Connect to Prioritize Triage and Follow-Up

DO: Rather than use Athena for document-based triage, use Azara/ADT feed for person-centered follow up

Care Manager PDSA

ACT: Continue to train up staff to use, go live July 5

STUDY: Faster process, as most patients have multiple documents

No need to triage feed, can be completed

Notes

Process took a little getting used to, but moves far quicker

System to assign tasks to others is faster than the buckets were

Still some issue with getting the right patients, and what to do when patients are out of the 14-day window

Still not getting the discharge paperwork from some facilities automatically

- Increasing usage of DRVS with additional modules and internal promotion of population health applications

- Targeting Left Without Being Seen (LWBS) and Against Medical Advice (AMA) populations

- Using PatientPing risk scores to develop/update registries for care managers and coordinators

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