Slide title:

**Health Information Technology Council Meeting**

**August 1, 2022 Draft**

Slide title: **Agenda**

**Welcome**

*Undersecretary Lauren Peters*

* + Approval of May 2022 minutes (vote)

**Attestation Update**

*Julie Creamer*

**ADT/ENS Research Update**

*Liz Reardon*

**Program Updates - *BH Treatment and Referral Platform***

*Kevin Mullen*

**CCG API Update**

*Julie Creamer / Liz Reardon*

**Conclusion**

*Undersecretary Lauren Peters*

Slide Title: **Welcome**

Undersecretary Lauren Peters

Slide Title: **Vote: Approve minutes**

MOTION : That the Health Information Technology Council hereby approves the minutes of the council meeting held on May 2, 2022 as presented/amended

Slide title: **Attestation Update**

Julie Creamer

Slide title: **HIway attestation: HIway connection requirement overview**

The HIway connection requirement requires providers to engage in health information exchange via the Mass HIway\* as set forth in M.G.L. Chapter 118I, Section 7, and as detailed in the Mass HIway Regulations (101 CMR 20.00). Providers were required to attest.

**Provider organization** **First year requirement applied**

Acute care hospitals 2017

Large and medium medical ambulatory practices 2018

Large community health centers 2018

Small community health centers 2019

Year 1 Send or receive HIway Direct messages for at least one use case

Year 2 Send or receive HIway direct messages for at least one **provider-to-provider(P2P)** use case

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

Year4+ Meet year 3 requirement or be subject to penalties if requirement is not met

\*Through sub-regulatory guidance the Mass HIway will accept DirectTrust HISP-to-HISP exchange as an additional method to meet the HIway connection requirement

slide title: **HIway Attestation: Statistics for 2021 Reporting Year**

Although attestation submissions got off to a slow start, we saw an influx of submissions towards the end of 2021. Attestation submissions received in the 2021 reporting year surpassed submissions in previous years.

**Final Count for 2021:**

Total forms submitted: 193

Year 3/4 forms: 104

Year 5 forms: 53

Exception forms: 36

**Breakdown by Organization Type**

**Acute Care Hospitals** (n=67)

* 53 attestations submitted
* 14 exception forms submitted
* Submitted: 100%

**Community Health Centers** (n=41)

* 26 attestations submitted
* 10 exception forms submitted
* Submitted: 88%

**Medium/Large Medical**

**Ambulatory Practices** (n=442)

* Attestations: 314 practices
* Exception forms: 65 practices
* Total: 379 practices
* Submitted: 86%
* Slide title: HIway attestation: 2021 statistics
* More provider organizations are meeting the HIway connection requirement through DirectTrust HISP-to-HISP exchanges. As a result, more provider organizations submitted attestation forms and fewer organizations requested exceptions.
* Explain graphs\*

Slide title: **HIway Attestation Close-Out**

As of July 31st, 2022, the Mass HIway will no longer require regulated providers to submit an annual attestation.

* The timetable for the HIway connection requirement has been met for the regulated organizations (Acute care hospitals, Community health centers, Medical ambulatory practices)
* Over 550 Provider Organizations have completed the attestation process over the last five years and many providers have integrated direct messaging within their daily workflows
* It is expected that use of direct messaging will continue to persist for the foreseeable future as many providers rely upon it every day to coordinate patient care
* The HIway will continue to monitor and report on the utilization of direct messaging. Changes in transaction volume will be reviewed and any notable observations and findings will be reported to the HIT Council
* Any future regulations for new use cases or new provider type connection requirements will include a new attestation web-form and process

Slide title:**ADT/ENS Research Update**

Liz Reardon

Slide title: **ADT/ENS Landscape Research**

**The Mass HIway is continually looking for areas to improve and refine the quality and integrity of health information exchange in Massachusetts.**

* + As such, the HIway team has been engaging stakeholders, including MassHealth, ACOs, providers and ENS vendors on the reported challenges with the current ADT/ENS landscape in Massachusetts.
  + The Statewide ENS Framework works to increase access, streamline connection points, and improve timing for the flow of notification data. However, it does not solve for all the pain-points with the broader ENS/ADT exchange environment.
* Ven diagram shows :

Statewide ENS Framework

* + Increased Access
  + Streamlined Connections
  + Improved Timing of Notifications

ADT/ENS Landscape

* + Connection Gaps
  + Data Quality
  + Technical Workflows
  + CMS CoP

with nothing in overlap

Slide title: **ADT Landscape – Issues**

The Mass HIway has received feedback from MassHealth ACOs, providers and ENS vendors about challenges with the current ADT landscape in Massachusetts. Discussions have led to the following observations:

* + Discussions with providers and ENS vendors have identified a few key issues:
    - Duplicate ADTs
    - Missing diagnosis codes
    - Technical workflow issues
  + These issues are impacting the value and utility of ADT/ENS notifications overall and directly affect coordination of patient care.
  + The vendors are taking different approaches to many of these issues and may benefit from sharing and adopting best practices with one another.
  + There should be a concerted effort to understand and address these roadblocks
  + EOHSS is interested in exploring and understanding areas to improve the value and utility of ENS notifications which may impact coordination of care

Slide title: **Issue # 1: Duplicate ADTs**

Providers are often receiving multiple copies of the same ADT due to a lack of coordination among existing ENS solutions and services to meet the CMS CoP.

Issue # 1: Duplicate ADTs

* A single provider can receive three or more ADT notifications for the same patient encounter
  + This results in general alert fatigue amongst providers and creates workflow obstacles for case managers and others who use these alerts in their daily workflows
* Duplicate ADTs originate from several sources:
  + CMS CoP Solution: The CoP solution sends all ADT notifications to the identified primary care provider. The solution does not offer any ability to filter these ADTs by sending facility, diagnosis code, etc.
  + ENS vendor proprietary solution: If a provider is paying to participate in an ENS vendor solution, that provider may receive a duplicate ADT from the proprietary solution and the CMS CoP solution unless they opt out of the COP solution altogether.
  + Epic Care Everywhere sends additional notifications outside of the ENS vendors
  + Technical issues within a vendor solution: There have been episodic issues where a technical issue on the vendor side causes duplicate ADTs to be sent to providers. Research on the root cause of these issues is currently underway.

Slide title: **Issue #2: Missing diagnosis codes**

Diagnosis codes are often missing on ADT notifications. If there is no diagnosis code on the ADT, care managers and others must search for the reason behind the patient admission. This requires time and resources that providers don’t have. The reasons behind missing diagnosis codes include:

* CoP solution does not require diagnosis codes
  + Since the CoP solution does not require diagnosis codes, only one of the two state certified vendors are sending them. As a result, case managers and providers are left with ENS notifications that provide little value and they are ignored.
* Hospital/Provider source Data Issues:
  + Missing demographic data at the provider/hospital level
    - If social security number or zip code are missing, one of the certified vendors will not send diagnosis to subscribers (non-CoP solution)
  + ADT information is taken from separate platforms within hospital. Diagnosis code is captured in clinical EHR system and demographic information captured in separate registration system. Workflows do not always incorporate multiple platforms/systems and missing critical data is the result
  + Mental health diagnosis codes may be filtered out by hospital along with 42 CFR codes per hospital policy

Slide title: **Issue # 3: Technical workflow issues**

ADT notifications sent as Direct Messages do not always contain adequate metadata to enable EHRs to accurately identify and route messages appropriately to receiving provider EHRs.

There is no way for providers to identify these messages as distinct ADT messages. They are lumped in with all other direct messages.

There may be limited ability and/or motivation by EHR vendors to automate workflows for ENS notifications.

EHR vendors may be stripping critical data from the ENS notification.

As a result, ADT notifications are often ignored completely and not used by providers

Direct Trust is working on standards that could be implemented by EHR vendors to address this issue.

Slide title: **ADTs and Psychiatric Hospitals**

* Both certified ENS vendors have confirmed that freestanding psychiatric hospitals are not sending ADTs currently despite the CMS mandate to participate in CoP solution. The reasons for this lack of participation include:
  + The CoP requirement is limited to those hospitals, psychiatric hospitals, and critical access hospitals (CAH) that utilize electronic medical record systems or other electronic administrative systems that are conformant with the HL7 2.5.1 content exchange standard
  + Need for consent to exchange 42 CFR information and ambiguous state laws regarding the sharing of behavioral health information.
    - It is technically possible and legally feasible, but the issue is more cultural with concerns around privacy and security of that data.
  + Need for technical segregation/flagging of behavioral health/ 42 CFR data by EHR vendor.
  + Challenging for hospitals and EHR vendors to manage an electronic consent process
  + There are no financial incentives for psychiatric hospitals to participate and less than 20% of all psychiatric hospitals have an EHR. Many still rely on paper and fax workflows.

Slide title: **Other areas of interest**

EOHHS is reviewing healthcare system preparedness and capacity and assessing opportunities for improving connectivity and health information exchange to support these efforts.

* + Example: One such improvement area centers on the connection and information exchange needs between **nursing homes** and **hospitals**.
  + *We are interested in any preliminary feedback on areas / ideas on how HIE can help improve patient throughput for these groups.*

Slide title: **For Discussion: Potential next steps**

1. State issued guidance on sharing behavioral health information via ADTs and other electronic means would be valuable.
2. Convene a roundtable to gather feedback and gain consensus on the sharing of behavioral health information via ADTs and other electronic means.
3. Educate providers on the various sources of ENS notifications and provide guidance on how to work with their ENS and EHR vendors to improve workflow and reduce duplicate notifications.
4. Work with providers and vendors to educate/advocate for vendors to adopt new ADT direct message standards
5. Educate hospitals on the importance of including demographic information such as SSN and/or zip code for all patients whenever possible.
6. Consider additional certification requirements for state certified ENS vendors such as reporting on missing demographic data by hospital
7. Explore whether hospitals can get a waiver from CMS allowing them to opt out of use of the CoP solution if they participate in the state ENS framework.

*Slide title:* **Program Update: BH Treatment & Referral Platform**

*Kevin Mullen*

Slide title: **BH Treatment & Referral Platform-RFR**

*New* Behavioral Health Treatment and Referral Platform procurement

[22EHSBHTRPSRFR: RFR for Behavioral Health Treatment Referral Platform Software](https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-22-1039-EHS01-EHS01-74235&external=true&parentUrl=close)

The Commonwealth is seeking a vendor to improve operational efficiencies among providers, carriers, and the Commonwealth by automation of the screening and referral process to move patients more quickly through the emergency department (ED) evaluation and referral process for those seeking behavioral health (BH) treatment, reducing the length of stay in EDs

The platform will enable hospitals, health plans, community-based crisis intervention teams, and state agencies to securely share required information and referral forms, including the transfer of admissions packets between stakeholders.

Slide title: **BH Treatment & Referral Platform-Detail**

The proposed *Behavioral Health Treatment and Referral Platform* will support:

Automation of the ED BH screening, evaluation, and referral process, including EPIA protocols

Enable the electronic transmission of standardized admissions information

Create a real-time, transparent view of patients seeking BH treatment for critical stakeholders (EDs, ESPs and behavioral health crisis intervention system providers, psychiatric units, freestanding psychiatric facilities, insurance carriers and state agencies)

Additionally, it is expected that the procured solution will:

Leverage and build upon existing vendor networks and exchanges

Integrate with the Statewide Event Notification Services (ENS) framework

Allow for future integration with technology partner(s) to enable search and identification of available psychiatric treatment beds (including inpatient and crisis stabilization) for expedited placement.

Slide title: **BH TRP Procurement – Timetable**

Event Date/Time

Solicitation Issued 5/24/22

Questions about Solicitation Due 6/1/22

Answers to questions Posted (estimate) 6/10/22

Proposals Due 7/1/22 5 p.m.

Oral Presentations (TBD/estimate) 7/25/22

Notification of Bidder Selection (estimate) 8/19/22

Contract Executed (estimate) 9/15/22

Slide title:**Clinical Gateway API Development-Update**

Julie Creamer & Liz Reardon

Slide title: **Clinical Gateway API Development**

The intent of this project is to develop a foundation for a common Application Programming Interface (API) and FHIR Integration infrastructure that can be used for multiple public health use cases.

The initial scope will focus on building the infrastructure, engaging early adopters and demonstrating use of the API for one or more public health use cases in a production exchange.

Slide title: **Clinical Gateway API Development**

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

Slide title: **Clinical Gateway API Development**

Key Project Updates

Development work for the RESTful APIs for CCG-1 & CCG 2 nodes has been completed

CCG-1 API completed 1/23/22: includes Syndromic, Children’s Behavioral Health Initiative (CBHI), and Mass Cancer Registry (MCR)

CCG-2 API completed 2/20/22: includes Massachusetts Immunization Information System (MIIS), Electronic Lab Reporting (ELR) and Intake, Enrollment, Assessment and Transfer Service System for BSAS (IEATS / OTP)

Development work for OAuth 2.0 completed 5/31/22

a prerequisite for FHIR standard

Completed development of provider engagement plan including key tasks and timeline

Creation of several provider facing documents including draft API Instructions, Implementation Guide and Test Plan

Slide title: **CCG API & FHIR Development Timeline**

* API Design 100% complete 7/21-8/21
* API Development 100% complete 7/21-11/21
* REST/SOAP API Testing 100% complete 11/21-12/21
* API Migration Planning 100% complete 10/21-12/21
* API Migration – CG1 100% complete 12/21-1/22
* API Migration – CG2 100 % complete 1/22-2/22
* Design & Develop OAuth Authentication Security 100% completed 1/22-4/22
* Publish Initial API IG and Specification Feb 2022
* Stakeholder Engagement (Providers & Registries) & BRD 50% complete 2/22-12/22
* Design & Develop FHIR Integration 20 % complete 5/22-9/22
* Publish Oauth Specification May 2022
* FHIR Integration Testing 8/22-10/22
* CG API Transition Project Team 50% completed 10/21-12/22
* Publish FHIR IG Dec 2022

Slide title: **Provider Feedback**

The HIway team has had conversations with five large hospital systems\* and leading EHR vendors regarding the transition to APIs for Syndromic Surveillance reporting

Provider organizations shared different perspectives regarding their readiness and approach in considering APIs

Some groups indicated they are ready to decommission their LAND/Connect devices and move toward newer technology for reporting public health data.

Others indicated less willingness, and are of the “if it isn’t broke don’t fix it…” mindset

Some differences stem from the organization’s resource availability. Those provider organizations with appropriate resources and bandwidth are more willing to invest the time and money to change the current workflow

Epic customers in particular have API implementation experience through Epic’s App Orchard and all have technical support resources through their EHR contracts.

There was overall consensus that a public health client application made available through the Epic App Orchard would be a preferred approach, simplify onboarding and speed-up adoption

\* Boston Medical Center, Cambridge Health Alliance, Cape Cod Healthcare, Mass General Brigham, and Tufts Medicine

Slide title: **Provider Feedback – Considerations**

Stakeholder feedback indicates there is little incentive for providers to move in the direction of FHIR using our original RESTful API destination only approach. The development and resource costs for providers would be too high

Based on this feedback, the Mass HIway is considering the value and need to develop a *middleware solution* to provide integration between the CG APIs and the EHR client applications

Developing this type of solution would lower the bar for what providers need to do to move to an API and could make widespread adoption more likely

It will also better align providers with EOHHS’ direction towards establishing a FHIR foundation for public health and significantly increase the likelihood that provider organizations will move to sending FHIR-based messages

Slide title: **Current v. Potential API Development**

The HIway team is exploring the feasibility of a middleware integration solution for sending and receiving public health data.

RESTful API – *Current CCG API Development*

**Benefits**: Moves providers away from LAND devices, existing development team has completed the development work and is ready to implement this approach

**Risks**: Potential for little to no adoption, unlikely to obtain FHIR data from providers

Middleware Integration – *Potential New Development*

**Benefits:** LAND savings; scalable, easier implementation for providers, higher adoption and lower outreach and onboarding costs; providers more likely to send FHIR

**Risks**: Unspecified funding, greater initial investment for team to acquire skills and/or consultant(s), very difficult in current market to hire resources with appropriate skill set, unknown ongoing support risks

Slide Title: **Next HITC meeting**

**Next HITC meeting**

November 7, 2022

3:30 – 5 p.m.

Slide Title: **Appendix A: HIway operations update**

Slide title: **HIway participation   
April 21, 2022 – July 20, 2022**

0ne new connection

Community Technology Cooperative / C3

*\*Participants that were enrolled and connected in the same period.*

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Slide title: **HIway participation   
April 21, 2022 – July 20, 2022**

2 new participation agreements

* Dr. Bolívar A. Villacís-Bermeo
* Senscio Systems

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Slide title: **HIway transactions**

HIway transaction volume update

* The Mass HIway processed 36.9 million production transactions during the July 2022 reporting period (6/21/21 through 7/20/22) with consistent volume attributed to the COVID-19 queries to the MIIS. From Aug 2021 through Jul 2022, the average increased to 35.6 million production transactions per month for a total of 427 million over the past year.
* In July, Public Health Reporting accounted for 36.4 million transactions, or 99% of total production volume. This included 12.2 million Syndromic Surveillance transactions and 24 million Immunization transactions.
  + Note: Immunization queries from commercial insurance companies for COVID-19 vaccination updates that processed through the new, high-volume “MIIS QBP” Clinical Gateway node are included in the Immunization total.
* Provider-to-provider transactions average over 376,000 per month for the past year, and support a number of use cases. For July, the total was 365,736.
* Quality Reporting volume has normalized over the last year and is currently averaging around 166,000 transactions per month for the past 12 months.
* The Mass HIway team continuously monitors transaction levels, both to support operations and to identify data that provide additional insight into HIway trends and progress.

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Slide title: **Mass HIway Incident Summary Dashboard**

**July 2022**

Graph indicates all dates for 7/1/22 through 7/31/22 in uptime

Slide title**: HIway Availability Trends – July 2022**

**Metric Targets:**

* “Total Monthly Availability” – no lower than 99.9% (downtime no more than ~44 minutes/month)

100% availability from Aug 2021 through July 2022

Slide Title: **Thank you!**