**Title slide**

Health Information Technology Council Meeting

May 3, 2021

**Slide Title: Agenda**

**Welcome**

Undersecretary Lauren Peters

* + - Approval of February 2021 minutes (vote)

**Statewide ENS Framework**

Bert Ng

**Clinical Gateway & AWS update**

David Whitham

**Attestation/connection requirement update**

Chris Stuck-Girard

**ePOLST update**

Daniel Danon

**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 February 1, 2021 as presented/amended

**Slide Title: Statewide ENS Framework**

Bert Ng

**Slide Title: ENS Overview**

**EOHHS ENS Initiative goal:**

* Supporting timely statewide Event Notification Services (ENS) across the Commonwealth in order to improve health care delivery, quality, and coordination

**EOHHS guiding principles:**

* Universal access - Promoting data sharing within an ENS framework to increase accessibility to ENS for providers of all sizes
* Streamline provider experience - Crafting ENS framework to allow single point of submission and single point of reception of ADT data
* Improve notification timing - Improving timing for flow of data (real/near-real time)

**Slide Title: ENS Timeline**

The Statewide ENS Framework was implemented in April 2021

Design: Regulatory and RFA components completed

Development: Certification and Connecting completed

Implementation: Go Live completed

**Slide Title: Certified ENS Vendors**

Collective Medical Technologies

ADT-Based Care Collaboration Network

Collective Medical offers a cost-effective solution that ensures hospitals, psychiatric hospitals, and critical access hospitals are completely compliant, without the need for any additional intermediary service providers

Collective Medical combines data from sources spanning the care continuum, including ADT, continuity of care documents (CCD), claims data, prescription drug histories (PDMP/PMP), imaging, and more, to give insights into patients’ activities

Collective Medical also supports the [Interoperability and Patient Access - Final Rule (CMS-9115-F)](https://www.cms.gov/files/document/cms-9115-f.pdf)

ADT alert requirements

Website: https://collectivemedical.com/

**Slide Title: Certified ENS Vendors**

PatientPing

Advanced E-Notifications System

PatientPing delivers real-time notifications whenever your patients experience care events, whether they are at a hospital, ED, or post-acute (SNF, LTACH, HHA, IRF, hospice)

Pings (alerts) allow you to scale how you manage your patient populations. Pings can be embedded within your existing workflow systems or used natively through our web and mobile user experience

PatientPing also supports the [Interoperability and Patient Access - Final Rule (CMS-9115-F)](https://www.cms.gov/files/document/cms-9115-f.pdf)

ADT alert requirements

Website: https://patientping.com/

**Slide Title: ENS Next Steps**

Attestation

* Acute care hospitals will attest to ADT submission through the annual connection requirement attestation process

Long Term Items to Explore

* **Increase ENS access** – Assess other entities’ access to the Statewide ENS Framework as either submitters or receivers.
* **Expand ADT use cases** – Review other use cases related to ADTs
  + Ex. Bed finding/bed availability
* **# of vendors** – After stabilization, explore expanding the number of vendors participating in the ENS Framework

**Slide Title: Clinical Gateway & AWS update**

David Whitham

**Slide title: Recap: Consolidated Clinical Gateway (CCG) Project Overview.**

* + This project will migrate the current suite of Clinical Gateway nodes to the AWS cloud.
  + Key project objectives include
  + Migrate to AWS to reduce infrastructure costs and address scalability
  + Provide future alternatives to Direct messaging for public health reporting
  + Support Query & Retrieve functionality to align with TEFCA
  + Implement a FHIR interface to support enhanced the business functionality
  + Diagram shows the high-level architecture of the Consolidated Clinical Gateway
  + Web service and Direct Messaging connections to the CCG will process messages to backend applications.
  + Currently there are seven (7) applications:
  + -Massachusetts Cancer Registry (MCR)
  + -Childhood Lead Poison Prevention Program (CLPPP)
  + -Children’s Behavioral Health Initiative (CBHI)
  + -Electronic Lab Reporting (ELR)
  + -Immunization (MIIS)
  + -Intake Enrolment Assessment and Transfer Service (OTP&TB)
  + -Syndromic Surveillance (SYNDROMIC)

**Slide Title: Consolidated Clinical Gateway (CCG) – AWS migration timeline update**

Timeline graphic shows target Go-Live dates for 4 categories of applications

* Internal Apps – Live Now!
* CCG Phase 1 – Live Now!
* CCG Phase 2 – Live May 2021
* FHIR & Others – Live September 2021

Migration notes:

* CG nodes in current VG4 environment are retained until the AWS system is stabilized. In case of any issues this allows for a quick rollback to the VG4 environment
* Migrations will be scheduled to make sure the message flow is not interrupted during peak processing hours
* For CCG Phase 2, the lower volume nodes will be cutover to PROD first and MIIS will be last
* Each production cutover will have in-depth pre-production cutover activities

**Slide title: COVID-19 update: MIIS CG node**

* + The Massachusetts Immunization Information System (MIIS) Clinical Gateway (CG) node receives immunization reports and database queries via the Mass HIway, using both Direct Messaging and synchronous API from providers across the Commonwealth.
  + In February and March, the Mass HIway team worked closely with the MIIS team and DPH leadership to quickly implement an additional Consolidated Clinical Gateway (CCG) instance in AWS, dedicated to MIIS, to support COVID-19 Vaccination Status queries from commercial health insurance companies for their members, as authorized by a DPH emergency order.
  + This new CCG went live on schedule and in April 2021 supported more than 470,000 queries per day from a variety of insurers, with additional insurers expected.
  + The Mass HIway will continue to work with MIIS to determine future needs.

**Slide title: COVID-19 recap: Syndromic and ELR CG nodes**

As part of the daily COVID-19 reporting cycle, the Clinical Gateway (CG) nodes receive messages via the Mass HIway’s Direct Messaging System from hospital emergency departments and laboratories, transform them, and deliver them to the Massachusetts Department of Public Health’s Syndromic Surveillance and Electronic Lab Reporting applications for processing and analysis.

Syndromic Surveillance:

* All Massachusetts hospital emergency departments participate.
* Highest message volume of all CG nodes with an average of 8.5 million messages per month.
* ED records of admissions, discharges, and transfers of patients are processed by the Syndromic Surveillance CG node, which feeds the National Syndromic Surveillance Program’s BioSense Platform at the CDC.
* BioSense data is used by the Commonwealth’s Syndromic Surveillance program at the DPH Bureau of Infectious Disease and Laboratory Sciences for analysis of trends pertaining to COVID-19.

Electronic Lab Reporting:

* CG node handles reports of test results from about 40% of hospital labs.
* Averages about 1,500 messages per month.
* Test results from other labs reported directly to the DPH Electronic Lab Reporting program.

**Slide Title: Attestation/connection requirement update**

*Chris Stuck-Girard*

**Slide Title: HIway attestation: 2020 statistics so far**

* Due to COVID-19 and the deferral of the submission deadline, HIway attestation submissions are low so far this year.

Left column:

* As of Oct. 26:
* 31 forms submitted
* Year 3/4 forms: 16
* Exception forms: 15

Right column:

* Acute Care Hospitals (n=66)
* 7 attestations submitted
* 0 exception forms submitted
* 11% attested

Community Health Centers (n=38)

* 3 attestations submitted
* 2 exception forms submitted
* 8% attested
* 5% exception forms

Medium/Large Medical Ambulatory Practices (n=528)

* Attestations submitted for 9 practices
* Exception forms submitted for 22 practices
* 2% attested
* 4% exception forms

**Slide Title: Attestation: Improvements to process**

* Top box: For the 2020 attestation cycle, the HIway made improvements to streamline the process for providers and collect data regarding new program requirements.
* New this year:
* -HIway unique ID (HID): Each provider organization/sub-organization has been assigned a HID. Submitters will use HIDs on their forms (instead of the full name/location of each sub-org). This should streamline the process, especially for practices with many sub-organizations.
* -New section to record ADT submission by Acute Care Hospitals
* -Clarified language in use case transmission methods section
* -New questions on attestation/exception forms, including taking a deeper dive into details of use cases

**Slide title: HIway attestation: 2021 timeline**

* Top box: Outreach regarding the 2021 attestation process is underway. At this point, all submitting provider organizations should be familiar with the submission process, but a significant volume of ad hoc questions arise each year.
* Attestation 2021 timeline:
* Dec. 31, 2020: Use case deadline for 2021 attestation
* May-July 2021: HIway outreach and education regarding 2021 connection requirement and attestation process continues (email outreach, updated website material, webinars, direct PO contact)
* July: HIway attestation webform testing
* August: HIway attestation/exception webforms go live and start accepting submissions
* Oct. 31: Deadline for attestation/exception submissions
* November: HIway reaches out to POs that have not submitted
* Winter 2022: When it seems that submissions have stopped, HIway   
  closes webform

**Slide Title: HIway attestation: Expanding connection requirement for HISP-to-HISP exchange**

The Mass HIway will add DirectTrust HISP-to-HISP exchange to meet the HIway connection requirement through sub-regulatory guidance.

Background

* Mass HIway converted to HIway 2.0 (a HISP) in order to connect to DirectTrust, a national framework for Direct Message
* During the Feb. 2020 meeting, the Council was supportive of DirectTrust HISP-to-HISP Direct Message exchange as it leverages existing infrastructure

Technical Advantage

* DirectTrust replaces 1:1 contracting for security/privacy and replaces it with a common agreement for security/privacy for HISP users and DirectTrust users
* A user of a DirectTrust HISP can securely send messages to a user of any other DirectTrust HISP without any additional contracting

Business Advantage

* Providers will have additional opportunities to meet the connection requirement with DirectTrust Direct Messaging
* Providers may use EHR-native Direct Message capabilities instead adding an extra connection to the HIway Direct Message System

**Slide Title: Attestation: Improvements to process**

* Top box: For the 2020 attestation cycle, the HIway made improvements to streamline the process for providers and collect data regarding new program requirements.
* New this year:
* -HIway unique ID (HID): Each provider organization/sub-organization has been assigned a HID. Submitters will use HIDs on their forms (instead of the full name/location of each sub-org). This should streamline the process, especially for practices with many sub-organizations.
* -New section to record ADT submission by Acute Care Hospitals
* -Clarified language in use case transmission methods section
* -New questions on attestation/exception forms, including taking a deeper dive into details of use cases

**Slide Title: ePOLST update**

Daniel Danon

**Slide Title: ePolst: Design TimeLine**

Approximately 2 months

**Assess the Current State &** **Conduct Stakeholder Engagement**

* Conduct interviews and focus groups
* Conduct benchmarking against   
  e-registries in other states
* Prepare a Current State Assessment presentation

Approximately 2 months

**Prepare a** **Future State Blueprint**

* Draft a future state blueprint
* Develop IT system technical and functional requirements

Approximately 5-6 months

* **Draft RFP**
* **Support bidders’ Q&A and any presentations or follow-up**
* **Draft recommendation memo**
* **Provide bidder selection support**

**Slide Title: ePOLST assessment: Interviews and focus groups**

Interviews

**MA State Government**

* EOEA
* EOHHS
* DPH OEMS
* MeHI

**MA Process Owners**

* Coalition for Serious Illness Care
* HPCFM
* Honoring Choices
* Beth Israel Deaconess
* Ariadne Labs
* Massachusetts Hospital Association

**Benchmarking States**

* Oregon Center for Ethics in Health Care
* Maine POLST
* NY MOLST

**Additional Subject Matter Experts**

* National POLST
* UMass Boston
* Reliant Medical Group Physician Group
* Archdiocese of Boston

Focus Groups

**14 Focus Groups representing 5 care settings:** Hospitals, PCP, SNF, Hospices, and EMS (128 participants)

# Audience Date Attendees

1 HPCFM 1 March 21 8

2 South Shore 1 March 21 4

3 EMS 1 March 21 5

4 EMS 2 March 21 8

5 South Shore 2 March 21 4

6 MA Senior Care April 21 11

7 MHA April 21 12

8 HPCFM 2 April 21 5

9 MGH 1 April 21 9

10 Hebrew Life April 21 5

11 MGH 2 April 21 24

12 Bay State April 21 19

13 Beth Israel Lahey April 21 10

14 Dignity Alliance April 21 4

**Slide Title: ePOLST assessment: Stakeholder feedback paradigm**

3 entities which must work together: People-Technology-Process

**Slide Title: ePOLST assessment: Stakeholder feedback on people**

* **MOLST is just one component in a multi-party, long-term relationship**
  + Physician-patient; Goals of Care focus
  + Social workers, nurses, aides, EMT/paramedics
  + Patient relatives, agents, guardians
* “Often, it is the social worker who is having the conversation and filling out the form.”
* “It is not only about talking to the patient, but also about talking to the family, proxy, guardian…”
* **Goals of care conversations difficult to conduct**
  + Clinicians typically not trained in these topics
  + Patients have little background on MOLST (or any end-of-life-related topic) 🡪 cultural challenge
  + PCPs have very limited time
  + “The MOLST conversation takes years to master.”
  + “The public and clinicians need to be educated so patients and families understand the form.”
  + “Goals of Care conversations cannot be conducted as part of an annual; we don’t have time.”
* **Current approach challenging for all stakeholders, particularly EMS**
  + Form issues
  + Issues related to honoring the form
* “Our frustration is with incomplete forms or not having the form readily available.”
* “Sometimes families do not understand the form and tells us to revoke it.”

Source: Stakeholder Focus Groups

**Slide Title: ePOLST assessment: Stakeholder feedback on process**

* **Current process 100% paper-based and manual**
  + Patient wishes not honored accurately, consistently
* **Current process does not result in trustworthy forms**
* **Care setting workflows around MOLST are inconsistent**
* **Lack of alignment with National POLST**
* **Current process does not fully support health equity**
  + Languages
  + Level of literacy
* “I still cannot believe that most MOLST forms exist on an 11x8.5 piece of paper…”
* “We have a ton of patients with 10 MOLST forms.”
* “What constitutes a complete MOLST form varies from care setting to care setting.”
* “We would love to be aligned with the National Form.”
* “It’s very hard to explain the MOLST form with its current wording, patients do not understand it… The words scare them…”

Source: Stakeholder Focus Groups

**Slide Title: ePOLST assessment: Stakeholder feedback on technology**

* Some interoperability with EMRs
* No form validation capability
* No audit or update capability
* No reporting capability
* No interoperability with ambulance systems
* No interoperability across care settings
* No transferability state-to-state
* “The new registry has to be interoperable with our EMR systems… we need one source of truth…”
* “We try to manually check our forms… it’s not perfect.”
* “We have the ability to upload MOLST forms into our EMR but we don’t because we are concerned about version control.”
* “We would love to leverage MOLST data if it was available. It would also be helpful for comparison purposes, across states and within states.”
* “The MOLST form has to be transferable across states and health care settings.”

Source: Stakeholder Focus Groups

**Slide Title:** **ePOLST blueprint: Current state MOLST process**

In a straight chain with no error correction feed -back loop there are short comings-

The current system:

Conduct multiple goals of care with clinicians and social workers (details of conversations are generally not captured)

Clinicians, patients/proxy complete MOLST which are signed or authorized by verbal consent (the definition of a valid form varies from setting to setting.

Forms are manually validated by administrative staff (in some cases hospitals still write a corresponding medical order, forms are not validated consistently)

Forms are added to patient charts and or uploaded to EMRs by administrative staff (in most settings lack of version control leads to lack of trust in forms, patients may have numerous MOLST forms)

Patients and Providers can at this point retrieve MOLST forms.

**Slide Title: ePOLST blueprint: Future state ePOLST process**

In this flow chart the end goal is for Providers and Patients to be able to electronically retrieve ePolst forms via portals as needed. Forms and portals will be interoperable with EMRs and portal access is for all users (patient, proxy, providers, etc.).

Information will be fed by clinicians and patients/proxy goals of care conversations can be captured and a POLST form can be created and submitted electronically via multiple input methods (fax, e mail etc.) the system will be able to flag whether a health care proxy is present and activated.

The system and administrative staff will automatically review the form and validate it. If the form is valid it will meet the goal and be available electronically as needed.

If the form is invalid it will be sent back to the clinician so that issues can be fixed- it will then be fed back into the system at the form validation site where, the system and administrative staff will automatically review the form and validate it. If the form is valid it will meet the goal and be available electronically as needed. If it is invalid it will again be sent back to the clinician to be corrected- forms will continue in the correction loop until they are valid and have met the goal of availability.

**Slide Title: ePOLST blueprint: Future state ePOLST system map**

Central Cloud based ePolst registry with automatic validation, feeding and receiving EHRs and EMRs, RVRS Death records and EMS MATRIS with system interoperability

POLST Signors: Hospitals, Hospices, PCPs, Skilled Nursing, Assisted Living all exchanging back and forth with the Central Cloud based ePolst registry with automatic validation

Polst Users: EMS, Patients, Families, Proxy feeding the Central Cloud based ePolst registry with automatic validation

Slide Title: ePOLST: Next steps

* Draft RFR (incl. business requirements)
* Secure CMS approval
* Post RFR on Commbuys
* Award contract

**Slide Title: Conclusion**

* Undersecretary Lauren Peters

**Slide Title: Next HITC meeting**

* Next HITC meeting
* August 2, 2021
* 3:30 – 5 p.m.

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

**Slide Title: HIway participation, January 21, 2021 – April 20, 2021**

6 New participation agreements

* Arcadia (Massachusetts eHealth Collaborative acquired by Arcadia)
* Fellsway Pediatrics PC
* KBI Services Inc. (Kindbody)
* Orb Health
* Plymouth Pediatric Associates
* WeInfuse, LLC

**Slide Title: HIway participation, January 21, 2021 – April 20, 2021**

6 New connections

* Fellsway Pediatrics PC
* Cape Cod Orthopaedics and Sports Medicine, P.C.
* KBI Services Inc. (Kindbody)
* Orb Health
* Plymouth Pediatric Associates
* WeInfuse, LLC

**Slide title: HIway transactions**

HIway Transaction volume update

* The Mass HIway processed a record 25.1 million production transactions during the April 2021 reporting period (March 21 through April 20) with the significant increase due to the COVID-19 queries to the MIIS. From May 2020 through April 2021, the average was 15.1 million production transactions per month for a total of 181 million over the past year.
* In April, Public Health Reporting accounted for 24.6 million transactions, or 98% of total production volume. This included 8.5 million Syndromic Surveillance transactions and 16.1 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 now average over 250,000 per month for the past year, with new use cases added regularly. For April, the total was 290,608.
* 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.

**Slide title: HIway availability review**

Graph shows HIway availability at 100% every month from May 2020 through April 2021, except November 2020 at 99.95%.

* Target: Total monthly availability – no lower than 99.9% (downtime no more than about 44 minutes/month)

**Slide Title: Thank you!**