**Title slide**

Health Information Technology Council Meeting

Aug 2, 2021

CONFIDENTIAL DRAFT POLICY IN DEVELOPMENT

**Slide: 2**

Agenda

**Welcome**

Undersecretary Lauren Peters

* + Approval of May 2021 minutes (vote)

**Attestation update**

Chris Stuck-Girard

**Consolidated Clinical Gateway & AWS update**

David Whitham

**Federal revenue reduction update**

Bert Ng & Kevin Mullen

**Future of public health reporting**

Kevin Mullen

**Conclusion**

Undersecretary Lauren Peters

**Slide 3: Welcome**

Undersecretary Lauren Peters

**Slide 4: Vote: Approve minutes**

MOTION: That the Health Information Technology Council hereby approves the minutes of the council meeting held on May 3,2021 as presented/amended

**Slide 5: Attestation update**

Chris Stuck-Girard

**Slide 6: HIway attestation: 2021 overview**

The 2021 attestation window is condensed due to extended 2020 deadline; the 2021 forms went live on August 2,2021 and are due October 31, 2021

2021 attestation:

Because the 2020 attestation deadline was extended due to COVID-19, there is a shorter turnaround for 2021 attestation.

The 2021 attestation forms just went live on the HIway’s website on August 2, 2021

This year, the submission deadline is Oct. 31.

Provider Organizations (POs) are attesting to calendar year 2020 use cases.

As with 2020 attestation, 2021 attestation features three forms:

Year 3/4 form (medium/large medical ambulatory practices, small/large community health centers)

Year 5 form (acute care hospitals): hospitals will attest to ADT submission

HIE Exception Form (POs that did not meet connection requirement)

**Slide7: HIway attestation: 2021 timeline**

The annual attestation webforms are live for all provider organizations to submit their attestation information.

Attestation 2021 timeline:

Dec. 31, 2020: Use case implementation deadline for 2021 attestation

May-July 2021: HIway outreach and education regarding 2021 connection requirement and attestation process leading up to webform launch (email outreach, updated website material, webinars, direct PO contact)

July: HIway attestation webform testing

Aug. 2 (today): 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 8: HIway attestation: Adjusting connection requirement for HISP-to-HISP exchange**

The Mass HIway has added 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 our last meeting, the Council was supportive of DirectTrust HISP-to-HISP Direct Message exchange as it leverages existing infrastructure

Technical Advantage

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

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 9: HIway attestation: Adjusting connection requirement for HISP-to-HISP exchange**

* The HIway has used its communication channels to notify provider organizations (POs) of this change to the connection requirement
* The HIway has communicated this update to POs via a dedicated email and an item in our monthly newsletter
* The HIway has updated its educational materials, including webinars and webpages, to reflect this change
* The HIway expects that this adjustment to the connection requirement will allow a substantial number of POs (that were required to submit HIE Exception Forms in years past) to submit attestation forms this year
* The HIway continues to consider the connection requirement an evolving process for interoperability: the POs that must meet it, and the substance of the requirement itself, are subject to change

**Slide10: Clinical Gateway & AWS update**

David Whitham

**Slide 11: 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)

We successfully migrated the Clinical Gateway nodes to the AWS cloud!

CCG Phase 1:

Live Dates

* MCR 3/22/21
* CBHI 3/24/21
* CLPPP 3/27/21
* Syndromic 4/1/21

CCG Phase 2:

Live Dates

* ELR 5/22/21
* IEATS 5/26/21
* MIIS 5/29/21

**Slide 12: Continued Clinical Gateway work in the Cloud: Synchronous API Services**

With the Direct Standards almost 10 years old the Mass HIway team is researching the Application Programming Interface services that can be developed for the provider community message transport. The HIway team sees the growth of these services in the overall health information exchange industry and those services’ applicability to the Clinical Gateway Nodes.

Some of the benefits and features of this project include:

* Provide synchronous response services to increase query responses time
* Provide foundation for FHIR transported over Restful APIs
* APIs will be able to support the growth of messages traversing to the CG nodes
* Restful and SOAP services will be built, with a preference for Restful services
* A Clinical Gateway API is already in place with MIIS CDC WSDLs

**Slide13: Federal revenue reduction update**

Bert Ng & Kevin Mullen

**Slide 14: Federal revenue reduction: Overview**

* In July of 2020, CMS issued notice of change informing states that cost allocation for Medicaid Enterprise Systems (MES) activities will shift from a provider-based methodology to a patient-based methodology.
  + Provider-based Methodology: % of HIway providers accepting MassHealth (~91%)
  + Patient-based Methodology: % of MA population covered by MassHealth (~27%)
* This policy change will compound with the sunsetting of the federal HITECH funding source and reduced FFP rates, resulting in a revenue gap of $3.1M for the HIway in SFY22 and approximately $3.9M for future years
* The following provides the Mass HIway’s proposal to manage its budget to the federal revenue reduction including significant programmatic changes

**Slide 15: Federal revenue reduction: CMS policy implementation timeline**

* CMS issued updates to its cost allocation method for MES that resulted in a significant reduction in federal funding, effective October 2020.
* Remaining HITECH activities will shift to MES with new FFP rates beginning in October 2021.
* After October 2021, Mass HIway faces a double reduction in federal funding due to FFP rate changes compounded with cost allocation.
* FFY 20
* CMS Notice of change
* 7/8/20
* CMS states MES cost allocation policy is too costly to keep at provider-based methodology and future will be patient-based or   
  transaction-based
* FFY21
* Cost allocation changes
* 10/1/20
* Cost allocation for MES activities shifts from provider-based (91%) to patient-based (27%)
* FFY22
* Activity FFP rate changes
* 10/1/21
* HITECH activities shift to MES with new some FFP rates
* Outreach: FFP reduces from 90% (HITECH) to 50% (MES)
* MES cost allocation applies to all

**Slide 16: Federal revenue reduction: Baseline HIway spending SFY18 – SFY22**

* Despite a projected decrease in total HIway spending between SFY21 and SFY22, a $4.7M reduction in federal funds will result in a state match shortfall of $3.1M for SFY22.
* A lesser, but still significant, state shortfall of $0.6M is projected for SFY21 as a result of the decreased federal match.
* SFY18 (Act.) total spend 16.1M Fed match 11.8M State need 4.3M Projected Trust Fund 4.3M
* SFY19(Act.) total spend 15.0M Fed match 12.9M State need 2.1M Projected Trust Fund 2.1M
* SFY20 (Act.) total spend 13.2M Fed match 11.3M State need 1.9M Projected Trust Fund 1.9M
* SFY21 (Est.) total spend 14.2M Fed match 9.6M State need 4.6M Projected Trust Fund 4.0M **SHORTFALL 0.6M**
* SFY22 (Est.) total spend 13.4 M Fed match 9.6M State need 7.1M Projected Trust Fund 4.0M **SHORTFALL 3.1M**

**Slide 17: Federal revenue reduction: Proposal background**

Once CMS completes full transition away from HITECH Act funding, federal revenues for the HIway program will have decreased by $6.4M per annum after both CMS policies are in place

Outreach activities will take a significant reduction where the federal matching rate drops more than 70 percentage points. (90% --> 14%)

To manage the federal revenue reduction, it requires a choice between continuing technological or programmatic activities, but not both

* The Mass HIway will manage this shortfall by reducing programmatic activities (outreach levels specifically) in the short term and transition Direct Messaging as part of a longer-term strategy
* The strategy to transition Direct Messaging will enable the Mass HIway to invest in programmatic initiatives, cross-agency SME support, and increase outreach activities in the future

Short term proposal reduce technology Long term proposal Programmatic reductions

**Slide 18: Federal revenue reduction: Proposal to solve reduction**

To programmatically **manage the impacts of the federal reduction,** the HIway will execute on the following 3 strategies **over a multi-year timeline**

**Strategy 1 :** *Transition* Direct Messaging Services

* + Evaluate options and set strategy immediately for a transition of the HIway Direct Messaging System   
    by SFY24

**Strategy 2:** *Accelerate* Clinical Gateway Development

* + Fast track planned API development to enable provider alternatives for public health exchanges   
    by SFY23

**Strategy 3:** *Reduce* Program Outreach Activity

* + Reduce near-term Program & Outreach activities immediately (Oct. 21) with potential to restore activity in SFY24

**Slide 19: Federal revenue reduction: Proposal discussion**

Subsidization of HIway Direct Messaging System is unsustainable long-term due to the reduction in federal revenues for HIT

Strategy 1: The Mass HIway is evaluating transition options for the future of HIway Direct Messaging Services

Option 1:

Retire DM Services

* + Transition to viable market alternatives for HISP-DM services
  + Promote DirectTrust as interoperability solution
  + Establish 2-year glide path for providers to transition
  + Update policy and regulations

Option 2:

Develop Sustainability Plan

* + Evaluate feasibility of participant fee increase (~7x)
  + Initiate vendor contract negotiations
  + Explore new participant growth (payers, labs) and additional funding streams
  + Build stakeholder consensus   
    and commitment

Beginning Sept 2021 1. Finalize DM Strategy 2. Planning and communication 3. Policy Alignment 4. Transition activity support

**Slide 20: Federal revenue reduction: Stakeholder feedback on HIway DM**

**Utilization Perspectives**

* + Groups are using HIway DM because it is required, easy, and affordable
  + HIway DM is heavily integrated into quality reporting and clinical workflows
  + Changing DM service would cause significant disruption and have an adverse impact on providers
  + Use of HIway DM affords provider groups the agility to manage unique HIE scenarios

**Rate Increase Reaction**

* + Strong reaction, some shock to potential cost increase
  + Groups may be receptive and able to tolerate an increase of **1.5-2x**, but not **7-10x**
  + Multiple groups have or would consider Surescripts as an alternative HISP for provider-to-provider exchanges
  + Comparable HISP-DM costs need to be quantified and compared to potential rate increase

**Provider Comments**

* + *“DM has become a utility type service that is important for all and should be subsidized”*
  + *“We are using it for certain exchanges because of regulations”*
  + *“If DM is a vital tool for Interoperability goals and objectives, then investments needed”*
  + *“Need to consider impact to smaller provider groups, ensure there is planning and communication to minimize disruption and support transition”*
  + **Next Steps**
  + Soliciting stakeholder feedback to address CMS and State funding, other funding options, participant expansion, and vendor contract renegotiations
  + Mass HIway to convene round-table discussions to build consensus and commitment on rate increase and/or transition planning

**Slide 21: Federal revenue reduction: Proposal timeline**

SFY 22

* July ‘21: Begin CCG API development (existing part of AWS Migration)
* Aug. ’21: Strategic Planning & Stakeholder Engagement
* Oct. ‘21: HITECH Act funding ends
  + Activity reductions (including outreach)
* Oct. ‘21: Announce HIway Direct Messaging *Strategy*
  + Activities focus on dev-ops and transition work

SFY 23

* Jan. ‘22: Regulatory amendments to conform with state technology changes
* July ‘22: API pathways to CCG live
  + Providers to begin transition to CCG APIs pathways

SFY24:

* Sep. ‘23: HIway Direct Messaging transition complete (~24 months lead time)
* Oct. ‘23: Programmatic work expands
  + Restore outreach via technology transition savings
* Slide 22: Future of public health reporting
* *Kevin Mullen*

**Slide 23: The HIway recognizes the industry will be moving to the new federal interoperability standards**

* Recent regulations and FHIR accelerators are removing barriers to clinical data & creating demand through Value-Based Care
* The Mass HIway can position itself to capitalize on these trends and become aligned with leading FHIR interoperability platforms

Regulations:

Starting in March 2020 and extending through 2023, ONC & CMS Regulations to prevent information blocking, mandate FHIR APIs for providers and payers and to empower consumers as data owners

FHIR Momentum: Since 2010, FHIR standards have matured. Industry is now coalescing around HL7 FHIR standard with adoption accelerating

Mass HIway April 2021 Survey indicates 70% of respondents are interested in a FHIR API to the Clinical Gateway for Public Health Reporting

Shift to Value-Based Care:

Since 2008, there has been an ongoing shift from FFS to VBC, which incentivizes stakeholders to share more data to improve outcomes and lower costs

**Slide 24: HL7 FHIR and API Standards**

HL7 FHIR

* + Defines resources (e.g., allergy info) and APIs to access them
  + Resources can be bundled into documents/messages
  + Logically compatible with HL7 v2 and C-CDAs
  + Enables app integration using SMART on FHIR standard
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**Slide 25: Mass HIway FHIR API Survey: April 2021**

* Q15: Do you have any interest in a Fast Healthcare Interoperability Resources (FHIR) API to the Mass HIway Clinical Gateway (public health reporting)?
* No: 29%
* Yes: 71%
* Questions from targeted Mass HIway April 2021 PD & FHIR API Survey
* Q16: If yes, which Clinical Gateway node would you be interested in?
* MIIS Mass. Immunization Info. System: 100%
* Syndromic: Syndromic Surveillance Program: 81.82%
* ELR : Electronic Lab Reporting: 54.55%
* CLPPP: Childhood Lead Poisoning Prevention Program: 27.27%
* MCR: Massachusetts Cancer Registry: 18.18%
* I-EATS Includes the Opioid Treatment and TB Reporting Programs: 9.09%
* CBHI: Children’s Behavioral Health Iniative: 9.09%
* N:17
* QUICK STAT: In Massachusetts, the top EHR vendors in the state have FHIR API capability and represent approximately 85% of the provider market and 100% of the hospital EHR market in the state.

**Slide 26: API & FHIR Development**

Develop Application Programming Interface (API) and FHIR Integration to the Clinical Gateway

Key project objectives include:

* + Build an alternative pathway to current Direct Messaging reporting
  + Maintain processing and routing of existing registry messages (HL7 & Other Payloads)
  + Create an environment to enable providers to send and receive messages in real time (Synchronous method)
  + Add support for multiple channels to send and receive data (RESTFUL Web Services and SOAP Services)
  + Implement FHIR integration and authentication protocols to support enhanced security and business functionality
  + Publish specifications for the provider and developer community

**Slide 27: CCG-API & FHIR Services**

* 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 28: CCG API & FHIR Development Timeline**

Sept 2021

Architecture and Design

* Complete Architecture & Design
* Build Proof of Concept (POC) for the APIs

Sept 2021-Dec 2021

API Development & Deployment

* Develop the REST & SOAP APIs
* Publish API Specifications
* Deploy changes (Live)

Jan 2022-June2023

FHIR Development & Onboarding

* Develop FHIR Integration
* Authentication Protocols
* Onboarding to APIs

Sept 2023

Transition from Direct Messaging

Complete Transitions from Direct Messaging

**Slide 29: Conclusion**

Undersecretary Lauren Peters

**Slide 30: Next HITC meeting**

Next HITC meeting

November 1, 2021

3:30 – 5 p.m.

**Slide 31: Appendix A: HIway operations update**

Slide 32: HIway participation   
April 21, 2021 – July 20, 2021

7 New Participation Agreements:

* AccentCare - Steward Home Care and Hospice
* Beth Israel Deaconess Family Medicine – Waltham
* Epion Health
* Harvard University Health Services
* Lexington Pediatric Associates
* Ready Responders Inc.
* One Medical Group PC

**Slide 33: HIway participation**   
April 21, 2021 – July 20, 2021

4 New Connections:

* Epion Health\*
* Heywood Hospital
* Lexington Pediatric Associates\*
* Ready Responders Inc.\*

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

**Slide 34: HIway transactions**

HIway transaction volume update

* The Mass HIway processed 28.9 million production transactions during the July 2021 reporting period (June 21 through July 20) with continued volume increases due to the COVID-19 queries to the MIIS. From June 2020 through July 2021, the average increased to 18.1 million production transactions per month for a total of 254 million over the past year.
* In July, Public Health Reporting accounted for 27.6 million transactions, or 95% of total production volume. This included 9.4 million Syndromic Surveillance transactions and 18 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 268,000 per month for the past year, with new use cases added regularly. For July, the total was 211,327.
* Quality Reporting volume has been irregular, but is now averaging over 690,000 transactions per month for the past year.
* 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 35: HIway availability review

Graph show HIway availability at 100% every month from Aug 2020 through May 2021, except June 2021 at 99.65% and July 2021 at 99.74%.

**Metric Targets:**

* “Total Monthly Availability” – no lower than 99.65% (downtime for 1hour and 58 minutes )

**Slide 36: Thank you!**