Title slide

Health Information Technology Council Meeting

August 3, 2020

Slide 2: Agenda

Welcome

Undersecretary Lauren Peters

-Approval of the Feb. 3, 2020 minutes (vote)

Updates from last meeting

Bert Ng

Clinical Gateway nodes

David Whitham

HIway strategic plan

Undersecretary Lauren Peters & Bert Ng

HIway budget

Bert Ng & David Whitham

HIway connection requirement & 2020 attestation

Chris Stuck-Girard

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 February 3, 2020 as presented/amended

Slide 5: Updates from last meeting

*Lauren Peters & Bert Ng*

Slide 6: Slide title: Update: EHR market share by provider organization type

Top box: The top three EHRs of each provider organization type represent more than two-thirds of the market share

Left pie chart (Hospital):

38% Meditech

38% Epic

15% Cerner

9% Other

N: 74

Middle pie chart (CHC):

32% Epic

26% Other

24% eClinicalWorks

18% NextGen

N: 38

Right pie chart (Practices):

30% Other

28% Epic

24% Athenahealth

18% eClinicalWorks

N: 592

Bottom box:

Epic has the largest market share among the attestation submitters   
(about one-third of all markets)

All named vendors are Query HIE capable and have FHIR-based APIs   
(albeit older release of FHIR)

Source: Mass HIway CRM Data Extract Mar 2020;

Mass HIway Attestation Data CY 2019

Slide 7: Slide title: Update: Major provider systems shift to Epic

Top box: In 2018, Epic was the market leader with a market share of approximately 28%. Since our last meeting, Epic announced two major provider systems shifting to them.

2nd box:

AdventHealth

Multistate – Florida (HQ); 37 hospitals – 1,200 outpatient clinics

2/11/20: Cerner ⇒ Epic

3rd box:

Atrium Health

Multistate – North Carolina (HQ); 40 hospitals – 900 outpatient clinics

2/20/20: Cerner ⇒ Epic

Source: https://www.beckershospitalreview.com/ehrs/11-hospitals-health-systems-that-replaced-cerner-with-epic-in-the-past-5-years.html

Slide 8: **Clinical Gateway nodes**

*David Whitham*

Slide 9: Slide title: CCG: Mass HIway Consolidated Clinical Gateway Project

Clinical Gateway nodes enable providers to submit messages through the Mass HIway to EOHHS applications, mostly supporting the DPH 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)

This project will re-implement the current suite of Clinical Gateway nodes as a Consolidated Clinical Gateway (CCG) application running in the AWS cloud that offers submitters a choice of interface options while reducing EOHHS maintenance, operational complexity, and costs.

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

Slide 10: Slide title: CCG: Business requirements

Program Business Requirements

Flowchart

Phase 1: Migrate to AWS

Phase 2: Consolidate CG Nodes

Phase 3: Enhance Functionality

Slide 11: Slide title: CCG: Migrating to AWS

Design Features:

Develop, test, and deploy Consolidated CCG in AWS

Establish EOHHS support, maintenance, and release management procedures for AWS

Eliminate need for LW VG4 environments for current   
CG nodes

Benefits:

Reduces infrastructure overhead & cost

Creates easily scalable infrastructure

Easy to manage

Reduces or eliminates downtime

Supports EOHHS IT enterprise-wide move towards AWS

Risks:

Learning curve

Architecture adjustments for optimized returns

Staffing impacts as new processes evolve for support, maintenance, and release management

Unknown dependencies on EOTSS team

Slide 12: Slide title: CCG: Consolidating CG nodes

Design Features:

Consolidates from current 7 separate nodes

Reduces infrastructure requirements

Implements context-based routing component for clinical nodes

Benefits:

Maintaining CCG will be more manageable and can be included in the general downtime windows

Deployment from Development to consolidated environments (QA, Cert, and Prod) as opposed to 3 deployments for each of 7 applications

Simpler deployment of upgrades, patches, and enhancements

Reduced number of VMs and overhead will lower the operating costs

Fewer Rhapsody instances required

Simpler routing of messages with single endpoint

Easier maintenance of XML gateway

Easier to add “modules” for new use-cases than building additional nodes

Risks:

New development requires significant testing and validation with each backend application

Slide 13: Slide title: CCG: Aligning with FHIR APIs

Enhance Functionality

Design Features:

Implement a WSDL-based web service interface solution to support synchronous operations

Support FHIR and other alternative interfaces

Design to operate in parallel with Direct messaging

Benefits:

Supports synchronous Query & Retrieve in alignment with direction of TEFCA

Provides alternative to Direct messaging for public health reporting with possible native HL7 from EHRs

Provides alternative to Connect Devices; can begin program to eliminate devices and their heavy   
support requirements

Fewer Connect Devices and their Direct connections will reduce costs

Easy to implement – already in place for MIIS

Risks:

Details of technology and schedule for TEFCA   
remain unspecified

Slide 14: Slide title: CCG: High Level Architecture

Far left box (arrows pointing to and from upper and lower middle left boxes): Providers

Upper middle left box (arrows pointing to/from center box): Web Service (New)

* Synchronous
* SOAP / REST API  
  HL7 / FHIR / Other Payload

Lower middle left box (arrows pointing to/from center box): Direct (Orion Communicate)

* Asynchronous
* XDR / SMIME
* HL7 / Other Payload

Center box (arrows pointing to/from right box): AWS Consolidated Clinical Gateway

* Gateway
* Processing & Routing
* CCG1
  + CBHI
  + CLPPP
  + Syndromic
  + MCR
* CCG2
  + IEATS
  + ELR
  + MIIS
* Standardized enhanced format FHIR /HL7 / Other

Right box: Application backend

* MCR
* CLPPP
* CDC BioSense
* MIIS
* ELR
* CBHI
* EIM/ESM

Slide 15: Slide Title: CCG: AWS migration timeline

Timeline

* Design & Dev
* Internal Apps (Live – Sep ‘20)
  + Attestation Forms
  + Masshiway.net
  + Sugar CRM
  + Operations Tools
* CCG Phase 1 (Live – Nov ‘20)
  + PROD Go Live (by Order)
    - MCR
    - CBHI
    - CLPPP
    - Syndromic
* CCG Phase 2 (Live – Jan ‘21)
  + Prod Go Live (by Order)
    - IEATS
    - ELR
    - MIIS
* FHIR & Others (Live – Jun ‘21)
  + Enhancements: FHIR Proof of Concept

Migration Notes:

* CG nodes in VG4 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 done on weekend nights to make sure the message flow is not interrupted during processing hours
* For CCG Phase 1, the lower volume nodes will be cutover to PROD first and Syndromic will be last
* 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 16: Slide title: Clinical Gateway nodes: COVID-19

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 and discharges 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 17: **HIway strategic plan**

*Undersecretary Lauren Peters & Bert Ng*

Slide 18: Slide title: HIway Strategic Plan – Overview

Top box: The Mass HIway is the EOHHS program tasked with the promotion and increasing adoption of Health Information Exchange (HIE) throughout the Commonwealth

Left side top box: Current frameworks

Left side first title box: Direct Messaging

Left side first info box: Direct Trust HISP, Implementation team

Left side second title box: HIway-sponsored Service

Left side second info box: State-operated systems

Left side third title box: HIway-facilitated Service

Left side third info box: Regulatory framework for market-based systems

Line divides left side and right side

Right side top box: New initiatives

Right side second box: eMOLST

Arrow connects eMOLST graphic to HIway-sponsored Service graphic

Right side third box: FHIR API Ecosystem

Arrow connects FHIR API Ecosystem graphic to HIway-facilitated Service graphic

Slide 19: Slide title: eMOLST: History of MOLST in Massachusetts

Top box: Medical Order for Life Sustaining Treatment (MOLST) is the state’s recognized advance planning document for end of life choices.

Timeline graphic:

2008 –  MA legislature enacts Chapter 305 of the Acts of 2008, Sections 41–43 to “establish a pilot program to test the implementation of the physician order for life-sustaining treatment paradigm program.”

2010 – In April, the MOLST Demonstration program is implemented involving two acute care hospitals; five skilled nursing facilities, home health, and hospice providers; one primary care home-visiting program; and regional emergency medical services.

2011 –  MOLST Demonstration Report recommends statewide expansion of MOLST.

2012 – MOLST statewide expansion announced in MA DPH Circular Letter: DHCQ 12-3-560 and statewide expansion of MOLST use begins.

2014 – MOLST form in use in clinical care institutions statewide.

2017 – Multiple efforts led by the Coalition on Serious Illness Care, DPH Palliative Care Advisory Committee, and Massachusetts eHealth Institute begin to scope out the transition of MOLST from paper to electronic format, including RFI for technical specifications and lessons learned from other states.

2017 – BCBS Massachusetts commits $500,0001 to fund electronic MOLST/POLST contingent upon state match.

2018 – DPH Palliative Care Advisory Committee discusses implementation, receives input from providers, and continues to explore the transition to the National POLST Paradigm.

1The exact amount available is $492,500 given fees paid by BCBS MA when transferring funding.

End of timeline

<https://www.molst-ma.org/basic-informaton-about-molst-0>

Slide 20: Slide title: eMOLST: Project background

Top box: EOHHS is exploring a multi-agency project to digitize the MOLST into a centralized electronic format (eMOLST).

Middle title box: Project objectives:

Middle info box:

* Update the state’s MOLST form
* Explore creation of a single source of truth for MOLSTs
* Integrate eMOLST as practicable

Lower left title box: E.O. Elder Affairs, Dept. Public Health

Lower left info box:

* Update current MOLST to match POLST paradigm
* Develop educational materials for patients and providers

Lower middle title box: MassHealth

Lower middle info box:

* Provide educational materials to beneficiaries and providers

Lower right title box: Mass HIway

Lower right info box:

* Design single source of truth repository
* Explore Integration with provider EHRs

Slide 21: Slide title: FHIR API: Overview

Top box text: Mass HIway is the EOHHS program responsible for promoting and improving HIE throughout the commonwealth

Middle box title: Federal ecosystem overview

Middle box text:

* Federal government recently released rules setting technical standards for providers and payers to improve interoperability
* The rules center around access to provider and payer data by Third-party apps at the direction of a patient

Bottom box title: Discussion

Bottom box text:

* Discussion on whether the state should pursue improving interoperability in the Commonwealth by leveraging the federal ecosystem to meet state goals

Slide 22: Slide title: FHIR API: Finalized federal interoperability rules overview

Top box: CMS and ONC published companion final rules on May 1, 2020 to improve national interoperability.1 Together, these rules govern information exchange from organizations to patients.

First title box: Applicability

First info box top half: CMS: “CMS-regulated payers” – MA, MassHealth, Federal Exchange Plans

First info box bottom half: ONC: “Actors” – Providers, vendors, HIEs

Second title box: Data standards

Second info box:

Data transport: APIs (Application Programming Interface)

Data structure: FHIR Release 4

Data elements: USCDI (U.S. Core Data for Interoperability

Third title box: Information Blocking (ONC final rule)

Third info box:

Providers, vendors, HIEs cannot block transfer of EHI

* + Date of Publication – 6mo: voluntary compliance
  + 6mo – 24mo: required compliance – USCDI only
  + 24mo+: required compliance – all EHI data

Fourth title box: Required transactions

Fourth info box:

1. Payers and providers must be able to send a single patient’s EHI
2. EHRs must be able to transfer all EHI to another EHR

1 CMS Interoperability and Patient Access final rule (CMS-9115-F); ONC 21st Century Cures Act final rule (45 CFR Parts 170 and 171 RIN 0955-AA01).

Slide 23: Slide title: FHIR API: ONC certification timeline

Timeline Graphic from the Office of the National Coordinator for Health Information Technology

Graphic title: Highlighted Regulatory Dates

Publication Date 05/10/20

Dates above the timeline: Certification

60 days after publication: General Effective Date, including Cures Update Certification Criteria, Certain Conditions of Certification

Health IT developers now prohibited from restricting certain communications

Six Months After Publication: Specific Compliance Requirements Start for Several Conditions of Certification, Including Info Blocking, Assurances, APIs

12/15/2020 Deadline for First Real-World Testing Plans Due

4/1/2021 First Attestation to Conditions of Certification Required

By No Later Than 24 Months After Publication: New HL7® FHIR®API Capability and Other Cures Update Criteria Must Be Rolled Out

By No Later Than 36 Months After Publication: EHI Export Capability Must be Rolled Out

Dates below the timeline: Information Blocking

Six Month Preparation Period, Compliance Encouraged

Marker at 6 Months After Publication: Compliance Starts for Information Blocking Rules Part 171

Months 6 to 24 After Publication Date: Compliance with Exceptions Required,

EHI Definition Limited to USCDI

Marker at 24 Months after Publication

Month 24 Onward After Publication Date: Compliance with Exceptions Required, Full EHI Definition in Effect

EHI = Electronic Health Information

USCDI = United States Core Data for Interoperability

Slide 24: Slide Title: FHIR API: Standards (API + FHIR)

Top box title: Open API

Top box text:

* **Webservice**: communication technology
  + Used to communicate between systems and mobile devices
  + Widely adopted by leading internet sites including social media
* **Open API**: Technical standards to communicate with API is published to allow third-parties to access
  + Note: APIs can require security and authentication

Bottom box title: FHIR

Bottom box text:

* **Data Structure**: Set of rules regarding how data is entered or stored (*e.g.*, numbers, letters, free text)
* **Native transferability**: Resources do not necessarily need special packaging for transport
  + Compare: HL7 data needs to be packaged into C-CDA

Slide 25: Slide title: FHIR API: Standards (USCDI data elements)

Left side of slide:

* USCDI requires certain data to be made available:
  + **Data Class:** An aggregation of various Data Elements by a common theme or use case
  + **Data Element:** The most granular level at which a piece of data is represented in the USCDI for exchange.
* Use of national standards for Data Elements: (Examples)
  + Logical Observation Identifiers Names and Codes (LOINC®)
  + SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)

Right of slide:

Graphical list from ONC

Allergies and Intolerances

• Substance (Medication)

• Substance (Drug Class)

• Reaction

Assessment and Plan of Treatment

• Assessment and Plan of Treatment

Care Team Members

• Care Team Members

Clinical Notes

• Consultation Note

• Discharge Summary Note

• History & Physical

• Imaging Narrative

• Laboratory Report Narrative

• Pathology Report Narrative

• Procedure Note

• Progress Note

Goals

• Patient Goals

Health Concerns

• Health Concerns

Immunizations

• Immunizations

Laboratory

• Tests

• Values/Results

Medications

• Medications

Patient Demographics

• First Name

• Last Name

• Previous Name

• Middle Name (incl Middle Initial)

• Suffix

• Birth Sex

• Date of Birth

• Race

• Ethnicity

• Preferred Language

• Current Address

• Previous Address

• Phone Number

• Phone Number Type

• Email Address Problems

• Problems

Procedures

• Procedures

Provenance

• Author Time Stamp

• Author Organization

Smoking Status

• Smoking Status

Unique Device Identifier(s) for a Patient’s Implantable Device(s)

• Unique Device Identifier(s) for a Patient’s Implantable Device(s)

Vital Signs

• Diastolic Blood Pressure

• Systolic Blood Pressure

• Body Height

• Body Weight

• Heart Rate

• Respiratory Rate

• Body Temperature

• Pulse Oximetry

• Inhaled Oxygen Concentration

• BMI Percentile (2 - 20 Years)

• Weight-for-length Percentile (Birth - 36 Months)

• Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

Slide 26: Slide title: FHIR API: Federal ecosystem aims at provider-to-patient communication

Top title box: Federal interoperability principally focuses on patient retrieving data

Top info box:

1. Patient submits request for her data via third-party app
2. Third-party app sends request to patient’s providers and payers for data
3. Providers and payers send data to third-party app

Graphic showing the operational flow of the info box

On the left, a triangle representing the patient, a box in the middle representing the third-party app, and rounded-edge rectangles on the far right representing providers and payers. In addition, the rounded-edge rectangles have a smaller rectangle attached to the left border representing FHIR APIs.

Slide 27: Slide title: FHIR API: Ecosystem expanded view

Graphic to represent ecosystem

Four provider boxes at the top

Third-party app box in the middle

Four payer boxes on at the bottom

Bidirectional arrows between the provider boxes and the third-party app box

Bidirectional arrows between the payer boxes and the third-party app box

Bottom box with text

* Open API eases the ability of FHIR to flow to third-party apps
* USCDI creates uniform FHIR data that allows more third-party app to use it
* The ecosystem allows standardized data to flow more easily in between

Slide 28: Slide title: FHIR API: Recap & Discussion

Top box title: Federal infrastructure benefits

Top box text:

* **Improve data availability:** Providers and payers are making uniform data (USCDI) available 24/7 on demand via FHIR APIs
* **Centralize patient data:** Patients can gather their data from various sources through the Third-party app
* **Promote third-party apps to develop patient tools:** Third-party apps can better support patients through access to all data

Bottom box title: State level decisions

Bottom box text:

* Is it enough that patient data on a third-party app be acceptable to be transferred to another provider?
* Should the state expand provider to provider use by leveraging the federal infrastructure?
  + Ex. State providers education/support services to FHIR API adoption
  + Ex. State creates HIway-facilitated Services that allow third-party apps for provider to provider activities

Ex. Connection requirement for provider to provider FHIR API transactions

Slide 29: **HIway budget**

*Bert Ng & David Whitham*

Slide 30: Slide Title: HIway budget: Payment programs

Blue box: HIway budget is a combination of many funding sources including federal programs

Table of funding programs, with columns of funding programs, federal match, use of funds

First row: HITECH, 90%, DDI for meaningful use infrastructure, on-boarding to HIE

Second row: Medicaid Enterprise Systems (MES), 90%, DDI of HIE modules benefiting MassHealth (MH), 75%, Ops of HIE modules benefiting MH

Third row: Medicaid General Administration (GA)\*, 50%, General operations of MH and HIE modules

\*Cost allocation: States must allocate matching percentage based on Medicaid provider and non-Medicaid provider HIE usage

Notes: DDI: Design, Development, and Implementation, Ops: Formerly known as Operations and Maintenance

Slide 31: Slide title: HIway budget: Federal funding overview

Top box: The HITECH and MES programs provide federal funding for specific HIE activities that support the policy goals of each respective program

Left box title: HITECH

Left box info: Authorization: ARRA (2009 stimulus package), Initial implementation of HIT and development of HIE, Pays for DDI for HIE that supports Meaningful Use, No payment for HIE operations

Left box date: Statutory end date 9/31/2021\*

\*End Date extensions for last MU payments, audits and final SMHP/Landscape scan into FFY22

Right box title: MES

Right box info: Authorization: Medicaid inclusive of MITA and 1115 waivers, IT system made up of modules that benefits Medicaid, Pays for DDI of HIE modules for MES, Pays enhanced rate for Operations of HIE modules for MES

Right box date: No specific end date

Slide 32: Slide Title: HIway budget: State Fiscal Year (SFY) 2018 – 2020

Top box: The HIway budget aims for efficiency in federal match. It has been shifting match toward the Medicaid Enterprise System (MES) program.

Table for spending, table columns Spending Category, SFY 2018, SFY 2019, SFY 2020 (Est.)

Row 1: Meaningful Use $3.3 million, $2.8 million, $3.1 million

Row 2: Federal match HITECH, HITECH, HITECH

Row 3: HIway development $3.8 million, $5.6 million, $0.7 million

Row 4: Federal match HITECH & MES, HITECH & MES, HITECH & MES

Row 5: HIway operations $6.0 million, $4.2 million, $5.4 million

Row 6: Federal match GA, MES, MES

Row 7: HIway outreach\* $3.0 million, $2.3 million, $3.3 million

Row 8: Federal match HITECH, HITECH, HITECH

Row 9: Total $16.1 million, $15.0 million, $12.4 million

Row 10: Federal match HITECH & MES, HITECH & MES, HITECH & MES

\*Federal guidance defined Outreach as HITECH implementation, but will likely become MES operations

Slide 33: **HIway connection requirement & 2020 attestation**

*Chris Stuck-Girard*

Slide 34: Slide Title Attestation: HIway connection requirement overview

The HIway connection requirement requires providers to engage in HIE 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).

Slide 35: Slide title: Attestation: 2020 timeline

Top box: The HIway started planning for the 2020 attestation cycle last fall. Early this spring, outreach and education ramped up. After delaying the attestation deadline to account for COVID-19, as of Aug. 1, the HIway is accepting attestation/exception forms.

Attestation timeline:

Dec. 31, 2019: Deadline to implement use cases for 2020 attestation cycle

May 2020:

-HIway extends attestation/ADT deadlines

-First attestation webinar

-PDF version of attestation/exception forms online (publicly available for submitters to prepare answers in advance)

August 1: Attestation/exception webforms go live and start accepting submissions

Dec. 31, 2020: Deadline for attestation/exception submissions

Jan. 1, 2021: Deadline for Acute Care Hospitals to submit ADTs to the Statewide   
ENS Framework

January 2021: HIway reaches out to POs that have not submitted

Winter 2021: When it seems that submissions have stopped, HIway   
closes webform

Slide 36: 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 37: Conclusion

*Undersecretary Lauren Peters*

Slide 38: Slide title: Next HITC meeting

Fall HITC meeting

November 2nd, 2020

3:30 – 5 p.m.

Slide 39: Appendix A: HIway operations update

Slide 40: HIway participation   
January 21, 2020 – July 20, 2020

6 New participation agreements

Auburn Primary Care and Aesthetics

Cedar Hill Pediatrics

Family Continuity Program

Harrington Physician Services

PatriotDirect Family Medicine

Walden Pond Pediatrics

Slide 41: HIway participation   
January 21, 2020 – July 20, 2020

14 New connections

Auburn Primary Care and Aesthetics\*

Cape Cod Healthcare

Cedar Hill Pediatrics\*

Family Continuity Program\*

Fenway Community Health Center

Harrington Hospital

Harrington Physician Services\*

Lawrence General Hospital

Merrimack Valley ACO

Milford Regional Medical Center

PatriotDirect Family Medicine\*

Signature Healthcare

Spectrum Health Systems

Walden Pond Pediatrics\*

*\* Participants that were enrolled and connected in the same period. All others are new connections for existing clients.*

Slide 42: HIway Transactions

HIway transaction volume update

The Mass HIway processed a total of 14.4 million production transactions during the July reporting period, from June 21 through July 20, 2020. From August 2019 through July 2020 the average was 15.2 million production transactions/month.

Public Health Reporting in July accounted for 12.3 million transactions, or 86% of the total production volume. This included 7.9 million Syndromic Surveillance transactions and 4.3 million Immunization transactions.

Provider to Provider transactions totaled 211,271 for July and averaged 170,475 per month over 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 43: HIway availability review

Graph showing August 2019 to July 2020 at 100%

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

Slide 44: Thank You!