Commonwealth of Massachusetts
Executive Office of Health and Human Services

New England HIMSS
MA HIway Update

Agenda

1. Introduction to the Mass HIway
2. HIway 2.0 Migration Overview and Update
3. Mass HIway Regulations Update
4. HIway Adoption and Utilization Support (HAUS) Services Update
5. Mass HIway Success Stories

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Mass HIway Mission & Core Services

Enable Health Information Exchange by healthcare providers and other HIway Users regardless of affiliation, location or differences in technology

- **HIway Direct Messaging**
  - Secure method of sending transmissions from one HIway User to another
  - HIway does not use, analyze or share information in the transmissions
  - HIway does not currently function as a clinical data repository
- **HIway Provider Directory** offers a searchable directory of healthcare providers operating statewide to support provider to provider communications. The directory contains information for 25,000+ providers.
- **HIE Adoption and Utilization Services (HAUS)** offers project management services to Medicaid providers to assist with the challenges of implementing provider to provider communications over the Mass HIway. Mass HIway is working with MassHealth to tailor these services to serve the Medicaid ACO pilot project.
- **HIway-Sponsored Services** represent state-wide resources, such as an Event Notification Service (ENS) which would be available to all Hiway participants.

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What type of documents can you send?

The HIway is 'content agnostic,' and does not restrict message types

Patient clinical information
- Summary of Care / Transition of Care Record (TOC)
- Request for Patient Care Summaries
- Discharge Summaries
- Referral Summary Information
- Specialist Consult Notes
- Progress Notes

Patient clinical alerts
- Emergency Department Notification
- Mortality Notification
- Transfer Notification
- Disposition Notification (admit/discharge)

Quality reporting
- Reporting of clinical quality measures (CQMs)

Public Health Reporting*
Securely comply with reporting regulations for the Massachusetts Department of Public Health (DPH)
- Massachusetts Immunization Information System (MIIS)
- Electronic Lab Reporting (ELR)
- Syndromic Surveillance (SS)
- Massachusetts Cancer Registry (MCR)
- Opioid Treatment Program (OTP)
- Childhood Lead Poisoning Prevention Program (CLPPP)
- Occupational Lead Poisoning Registry (Adult Lead)

* There is no cost for a HIway connection that is used exclusively for DPH reporting.

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HIway Participation and Usage Statistics

1400+ organizations and 25 health information services providers (HISPs) connected. Includes:

- 900+ small and very small ambulatory practices
- 36 large hospitals/health systems
- 44 behavioral health organizations
- 79 long term care facilities
- 5 health plans.

Find the map on the Mass HIway website: www.masshiway.net. Under the Resources drop-down menu, select Participant List. The map is maintained in partnership with MeHI, the Massachusetts eHealth Institute

752 Active Users send over 11 million secure transactions per month

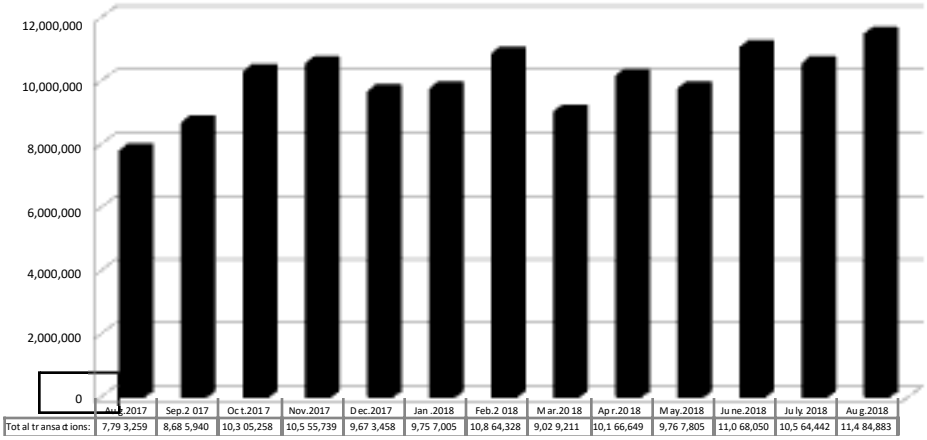
"active use" signifies that the Mass HIway is the primary mode of communication in use by the provider organization for a particular use case

HIway Transaction Activity

13 Month HIway Transaction Activity

11,484,883 Transactions* exchanged in August (07/21/2017 to 08/20/2018**)

280,339,435 Total Transactions * exchanged inception to date



	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018	Feb.2018	Mar.2018	Apr.2018	May.2018	June.2018	July.2018	Aug.2018
Total transactions:	7,793,259	8,685,940	10,305,258	10,555,739	9,673,458	9,757,005	10,864,328	9,029,211	10,166,649	9,767,805	11,068,050	10,564,442	11,484,883

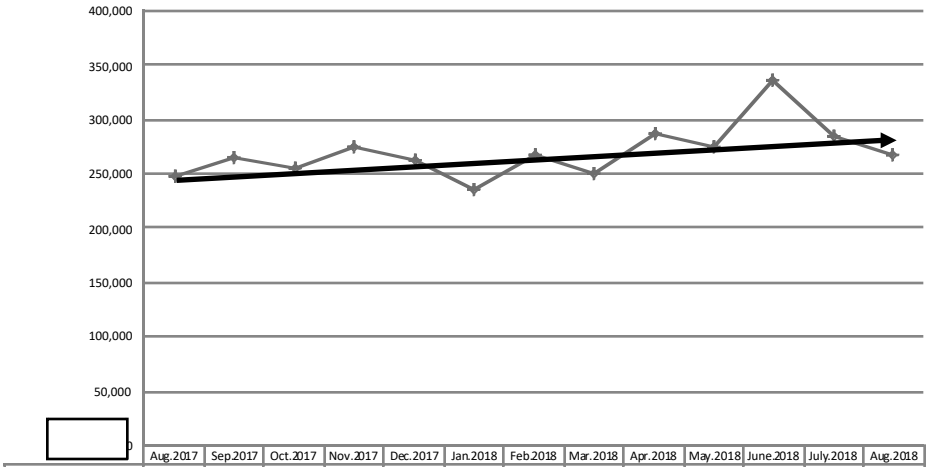
** Note: Includes all transactions over Mass HIway, both production and test*

 *** Note: Reporting cycle is through the 20th of each month.*

HIway Transaction Analysis

HIway Production Transaction Trends – Provider to Provider (Aug 2017 – Aug 2018)

3% of HIway activity in August* was for Provider to Provider transactions



	Aug.2017	Sep.2017	Oct.2017	Nov.2017	Dec.2017	Jan.2018	Feb.2018	Mar.2018	Apr.2018	May.2018	June.2018	July.2018	Aug.2018
Provider to Provider	248,112	264,261	254,248	273,854	263,471	235,936	267,449	251,407	286,722	274,321	335,319	283,610	268,296

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** Note: Reporting cycle is through the 20th of each month.*

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HIway 2.0 Migration

HIway 2.0 Background

- The HIway team at EOHHS is working closely with Orion Health to implement and operate a new Mass HIway Direct Messaging System, also known as "HIway 2.0"
- The upgrade to HIway 2.0 was necessary to leverage the national standards for Direct Messaging that didn't exist when the HIway was launched in 2012, and to make it easier for organizations to connect to the Mass HIway and to other health care organizations via the Mass HIway

Our Commitment

- No interruption in service as a result of the migration
- A fully transparent process
- Minimal downtime and superior customer service, with migration scheduling done in coordination with the Participant
- HIway 1.0 is in maintenance-only mode with no new enhancements or upgrades
- HIway 1.0 will sunset after all Participant migrations have completed (anticipated October 2019)

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HIway 2.0 Benefits

- **HIway 2.0 uses Orion Health Communicate, a cloud-based, multi-tenant, Software as a Service solution that includes:**
  - **DirectTrust Certification:** Using DigiCert secure certificates, HIway 2.0 has been accredited by the Electronic Healthcare Network Accreditation Commission (EHNAC) to join Direct Trust certified HISPs.
  - **ONC 2015 Edge Protocol Certification:** This certification supports compliance with advance stages of Meaningful Use.
  - **Federal Bridge Certification Authority (FBCA) compliance:** HIway 2.0 will now allow message exchange with federal agencies that require FBCA compliance.
  - **Standardized XDR Direct Messaging:** HIway 2.0 will more easily integrate with existing EHR systems to handle messaging directly from systems providers are already using.
  - **Native support for multi-recipient messaging** is included with LAND and the new Connect Device software to improve ease of use.
  - **Single-use certificate support** for all connection types improves security and increases interoperability with other HISPs.
  - **New Provider Directory:** The HIway 2.0 provider directory follows Healthcare Provider Directory (HPD) recommendations. This standardizes and simplifies the upload format to create a more seamless process to exchange health data to maintain and expand the directory.

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HIway 2.0 to HISP Connections

HIway 2.0 is a member of DirectTrust and connects with 25+ In-State and 120+ Out-of-State HISPs. This offers a rich network for HIway Direct Messaging to MA providers.

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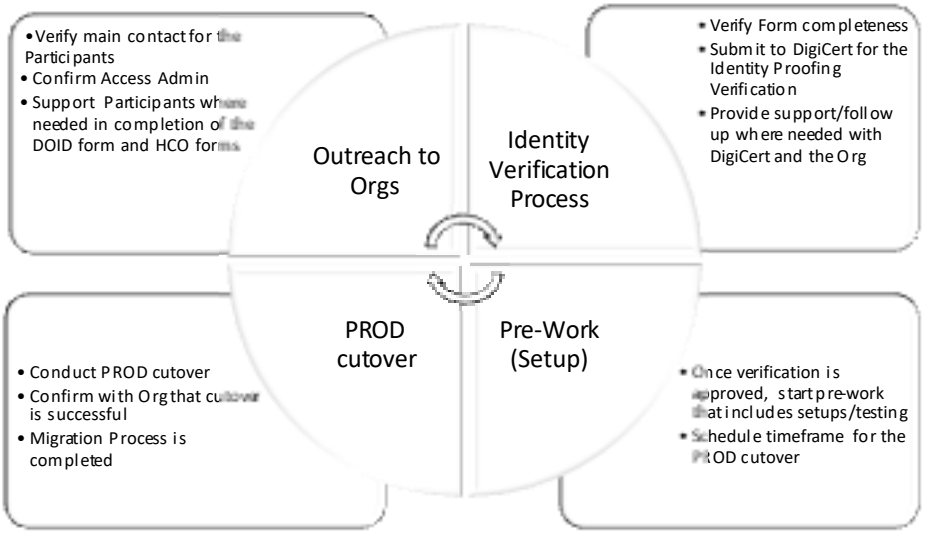
Steps for Migrating Participants



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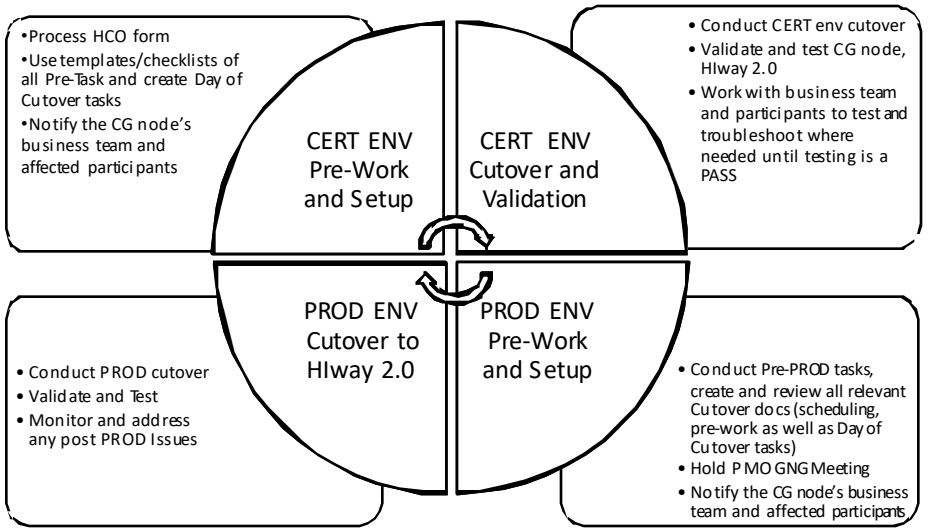
Steps for Migrating Clinical Nodes(CG) to HIway 2.0



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HIway 2.0 Migration Milestones

- ✓ Initial Setup and Install of HIway 2.0 SaaS solution
- ✓ Clinical Gateway (CG-DPH) Node Testing
- ✓ Pilot Participant Coordination
  - Thank you to: Cape & Islands Plastic Surgery, Boston Medical Center, Holyoke Medical Center, Massachusetts eHealth Collaborative, Tufts Medical Center, Cape Cod Health Care, Emerson PHO, Milford Regional Medical Center
- ✓ Migration of 7 CG-DPH nodes to Production, 2 nodes on the way
- ✓ Migration of pilot participants for Webmail and LAND Connections
- ✓ Participant awareness campaign began in June
  - Emails and personal calls advising about the HIway 2.0 and the call to action
  - www.masshiway.net details the migration process and includes forms and tutorials
  - Dedicated email created
  - Webinars with details on HIway 2.0 held for participants on 7/31/18 and 8/24/18
  - Webinar recordings are available on website

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Mass HIway Regulations

Mass HIway Regulations (101 CMR 20.00) implement the statutory requirement that Provider Organizations implement "interoperable EHR systems" that connect to the Mass HIway (M.G.L. Chapter 118I section 7). The HIway Connection Requirement will be fulfilled by implementing HIway Direct Messaging.

How organizations must fulfill the HIway connection requirement will phase in over 4 years

1. **The interoperability requirements get progressively stricter in each year of implementation**
2. **Organizations must submit an attestation form each year illustrating how they have met the requirement**
3. **Penalties for not meeting the HIway requirement will begin in Year 4 of implementation**
4. **The 4 year phase-in period is based on when the Provider Organizations must be connected**

Organization Type	Year 1	Year 4
Acute Care Hospital	2017	2020
Large and Medium Medical Ambulatory Practices	2018	2021
Large Community Health Centers	2018	2021
Small Community Health Centers	2019	2022

Provider types not yet specified in the regulations are anticipated to be required to connect at a future date. Guidance to the affected providers will be provided with at least one year notice.

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Interoperability Requirements Phase in over 4 Years

The 4 year phase-in approach progressively encourages providers to use the Mass HIway for Provider-to-Provider communications via bi-directional exchange of health information

Progressive Interoperability Requirements

Year 1 **Send or receive** HIway Direct Messages for at least one use case
- Can be from **any use case category** listed below

Year 2 **Send or receive** HIway Direct Messages for at least one use case
- Must be a **Provider-to-Provider Communications** use case

Year 3 **Send** HIway Direct Messages for at least one use case, **and Receive** HIway Direct Messages for at least one use case
- Both must be **Provider-to-Provider Communications** use cases

Year 4 Meet Year 3 requirement, **or** be subject to penalties if requirement isn't met
- Penalties go into effect in the applicable Year 4 (E.g.: In Jan 2020 for Acute Care Hospitals)

2018

Future

Additional ENS Requirement for Acute Care Hospitals Only

Send Admission Discharge Transfer notifications (**ADTs**) to HIway within 12 months of ENS launch

Use Case Categories:
1. Public Health Reporting
2. Provider-to-Provider Communications
3. Quality Reporting
4. Payer Case Management

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HIway Adoption & Utilization Support (HAUS) Services

Highlights

- The HIway Adoption & Utilization Support (HAUS) Services initiative (formerly known as the Deep Dive initiative) has re-aligned its services in the spring of 2018 to support MassHealth's transition to Accountable Care Organizations
- The goal of the initiative is to increase use of Direct Messaging for care coordination purposes and to more closely align these services with the real driver of change in the Health IT space – payment reform
- Mass HIway is working closely with MassHealth to understand the health information exchange needs of its ACO participants, Behavioral Health and Long Term Services and Supports Community Partners (CPs), and Community Service Agencies (CSAs)
- Services provided will include technical assessments, end-to-end management of health information exchange projects among multiple trading partners, workflow support, and overall change management
- Mass HIway also will develop on-demand resources and host events to support efforts to advance care coordination using the Mass HIway
- MassHealth Technical Assistance Services kick off is September 21, 2018

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HAUS Services

More about HAUS Services

- HAUS Services will be provided free of charge to Mass Health Accountable Care Organizations (ACOs), Community Partners (CPs), and Community Service Agencies (CSAs), and organizations needing assistance with a care coordination use case.
- Utilization of HAUS Services will not impact the ACO and CP Technical Assistance Card funding available through MassHealth. Organizations may participate in both.
- The HIway Account Manager will assist organizations with incorporation or improvement of HIE utilization for care coordination purposes by:
  - Developing a **Use Case Planning Form** to identify the goals and stakeholders.
  - Assessing technical connectivity and completing a **HAUS Capabilities Evaluation** to illustrate readiness and identify gaps.
  - Development and co-managing a **HIE Technology and Workflow Project Plan** to track and complete all critical steps from concept to reality.

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For Information About HAUS Services

Visit www.masshiway.net under Services Tab, click HAUS Services

The website includes:

- Full description of services and related documentation
- Step by step enrollment
- Outline of HAUS Implementation
- Information for Mass Health ACOs, CPs, and CSAs

The website will be updated to include:

- Resources, such as webinars and other educational guides
- FAQs
- Success stories from HAUS Services Implementations

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Use Case: Cape Cod Healthcare Center

Develop a consistently reliable way to track and manage the process of sending clinical information to outside care providers when a patient is discharged

Milestone 1
Resolve connectivity issues, develop clinical documentation standards, test direct messaging, and finalize the standards

Milestone 2
Develop care coordination prototypes

Milestone 3
Streamline process improvement plans, develop reports to track performance, and correct process breakdowns

Milestone 4
Expand workflows with two collaborating orgs to create foundation for sustainability and expansion plans

Challenges

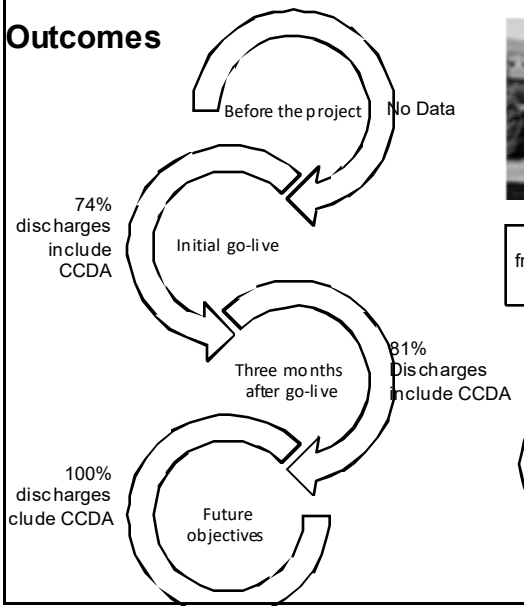
- Coordinating activities between so many different stakeholders and organizations with varying levels of sophistication
- Needing to update the system to transmit CCDAs electronically
- Collaborating organizations continuing to print CCDAs

Feedback

- Option to add data to the CCDA
- Ability to see a patient identifier in the transaction list before opening a file
- Capability to separate organizations that use the Mass HIway from those that do not

Use Case: Cape Cod Healthcare Center

Outcomes



New workflows resulted in major improvement from previous methods of manual communication, accelerating exchange of messages between providers

Next Steps

Expanding the process to other organizations throughout Cape Cod

This will allow CCHC access to real-time medical information for all patients immediately upon admission

Use Case: Brockton Neighborhood Health Center

Develop care coordination improvements for

- Patients with behavioral health needs
- Patients in detox or inpatient SUD treatment who experience medical emergency
- Patients requiring Section 12 emergency psychiatric evaluation

Consent to release information

- Most time consuming issue
- Required revisions to release forms at multiple orgs
- Ultimately developed an eConsent module in EHR
  - Block transmission if consent is denied
  - Release form available in languages for the 1st time

Use Case: Brockton Neighborhood Health Center

Accomplishments

- Established ability to exchange CCDs and electronic referrals between trade partners
- Developed streamlined workflows to better coordinate care and eliminate paper document exchange
- Implemented new Authorization to release info form via eConsent module
- Smaller volumes of CCDs/electronic referrals exchanged

Outcomes

- **Measure:** Repeat ED visits for all BH diagnoses
  - Baseline: 20.4%
  - Target: 18.4%
  - **Actual: 19.9%**
- **Measure:** Readmissions for all BH diagnoses
  - Baseline: 11%
  - Target: 9%
  - **Actual: 5.3%**

Lessons Learned

- Collaboration is key
- Evaluating consent to release information is extremely important
- Clinicians like being able to send info electronically
- Working with EHR and HISP vendors can be a challenge
- Competing IT priorities can hinder implementation
- Implementing new workflows is challenging in emergency situations

Next Steps

BNHC hopes to continue its work with Brockton Hospital's psychiatric unit

Connect directly with CCBC Crisis team via similar workflow

Connect with Gosnold Treatment Center

Continue community-wide efforts to coordinate care for behavioral health patients

Multiple Use Cases: Circle Health

Live	Live	Testing	Live
Integration **Circle Health to Atrius Health**	**CCDs and ADT notifications** **Tufts Medical Center to Lowell General PHO Practices**	**Integration** **Circle Health Mother Infant Unit and Tufts L&D Dept**	**Integration** **LGH Medical Group, Women Health and Tufts Maternal Fetal Medicine**
• Approximately 1000-1100 ADTs sent per week from LGH over the Mass HIway • Atrius Health creates admit/discharge encounters from the ADT feed in their EMR to notify the providers when their patients have been seen at LGH • Reports distributed to case management and nursing for post acute care workflows	• LIVE at 17 practices • Currently receive both notifications and faxes • Goal is to eliminate fax • Office staff matches the patient and forwards Direct message to the provider (saves time) • Helps staff in making sure patients come in timely to see their PCP • Plan is to roll-out to other Circle Health affiliated practices with ability to receive ADTs	• Reports and clinical documents sent to Tufts Specialists • Old process involves sending 50 pages by fax per patient for consults and transfers • NST reports, Consult documents, OB notes • Future of utilizing Direct messaging will streamline workflows • Goal is to replace fax workflows with HIE-based workflows	• Referrals for Level 2 Ultrasounds • Current process involves multi-page fax per patient • Referral letter, Labs, Imaging results, OB notes • Future state process of utilizing Direct messaging would help streamline the workflow

Use Case: Circle Health

Challenges

- Direct messaging workflow – multiple Direct addresses
- Practice workflow – Message Pool vs. Provider inbox
- Variation between EMRs and workflows
  - Standards (no "Direct" standards from non CCDA exchange)
  - Type of documents that can be exchanged
- Transmission problems (certificate issues, technical challenges to exchange info among up to 4 vendors
- Data reconciliation (meds reconciliation, lack of data consistency, SNOMED vs. ICD-10, clinical workflow)
- Organizational challenges – competing priorities, lack of resources to devote to interoperability projects

Lessons Learned

- Achievable goals driven by use cases
  - Transitions of care
  - ADT notifications
  - Secure communication
  - Consult requests between physicians
- IT knowledge base
- Governance
- Emphasis on value
- Patients think we already have this capability


Commonwealth of Massachusetts
Executive Office of Health and Human Services
THE HI WAY
Thank you!