

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Health Information Technology Council Meeting

November 2, 2015



Agenda



1. **Welcome** [5 minutes] – *Alice Moore, David Whitham*
 - Minutes Approval
 - State IT Recognition Award
2. **Consent Workgroup Update** [15 minutes] - *Mark Belanger*
3. **Overview of Strategic Hlway Initiatives** [5 minutes] – *David Whitham*
4. **Consent Initiative & Event Notification Service Initiative** [40 minutes]
 - Introduction – *Ipek Demirsoy*
 - Where we are today with Mass Hlway Phase 2 consent - *Mark Belanger*
 - Lessons learned from other states – *David Seltz*
 - Expansion of Query & Retrieve Services (Phase 2) with Event Notifications - *Ipek Demirsoy*
 - Discussion of consent model options - *Ipek Demirsoy*
5. **Fast Initiative** [10 minutes, if time permits] – *Dave Bowditch, Mark Belanger*
6. **Operations Update** [10 minutes, if time permits] – *Dave Bowditch*
7. **Conclusion** [5 minutes] – *Alice Moore*



Discussion Item 1: Welcome
Alice Moore, David Whitham



2015 State IT Recognition Award

Finalist

In the Category of
Digital Government: Government to Business

Commonwealth of Massachusetts
Enhancing the State's Healthcare Landscape through
Trusted Information Exchange

Bo Reese
NASCIO Awards Committee Co-Chair
Chief Information Officer
State of Oklahoma



James Collins
NASCIO Awards Committee Co-Chair
Chief Information Officer
State of Delaware



Discussion Item 2: Consent Subgroup Recommendations

Mark Belanger



Consent Workgroup update

- In late Spring the HIT Council identified consent as a barrier to Mass HIway adoption and use and asked that the multi-stakeholder consent workgroup reconvene to formulate recommendations for the HIT Council
- The consent workgroup met 5 times over the summer and early fall to discuss consent for Direct Messaging (phase 1), the MA HIV testing law, and electronic information disclosure generally
- The following 3 recommendations for HIT Council are a result of the discussions of the workgroup



Consent Work Group recommendations for HIT Council discussion:

1. Mass Hlway Direct Messaging should not have a consent requirement that goes above and beyond HIPAA
2. Mass Hlway should provide additional education, clarification, and guidance to providers about health information exchange generally as well key consent requirements related to the Hlway specifically
3. Mass Hlway should provide education and guidance to patients about the Hlway including a statewide education and outreach campaign



Recommendation 1: Mass Hlway Direct Messaging should not have a consent requirement that goes above and beyond HIPAA (please see inventory of existing protections for Personal Health Information on following pages)

Discussion:

- Protection of personal health information is already covered by HIPAA and sensitive information is already covered by other federal and state laws regardless of mode of exchange (e.g., Mail, fax, direct messaging)
- Direct Messaging is functionally equivalent to faxing or emailing but much more secure. The current Mass Hlway Consent requirement on Direct Messaging has the unintended consequence of keeping providers on less secure modes of exchange (i.e., when a patient does not provide consent for the Hlway, then their provider can still send the same information via fax without explicit consent).
- Mass Hlway consent requirement for Direct Messaging is inherently confusing
 - Consumers confuse consent to send over Hlway with consent to disclose their information
 - Out-of-step with other functionally equivalent and heavily used modes such as faxing
 - At odds with all known public and private direct messaging services in the country
- Consent is a barrier to provider adoption and use of Mass Hlway Direct Messaging services



Background - Inventory of privacy protections for personal health information in Massachusetts (1 of 2)



Topic (Law/Reg.)	Fed/ MA/ Private	Description	Applicability	Type of Consent	Frequency of Consent
PHI disclosure (HIPAA)	Fed	<ul style="list-style-type: none"> Broadly protects privacy and security of PHI and ePHI Establishes rules for disclosure for purposes of treatment, payment, and operations as well as public health reporting 	<ul style="list-style-type: none"> Defines PHI and regulates PHI exchange Self Pay disclosure to health plans 	<ul style="list-style-type: none"> No consent required for TPO Notification of Privacy Practices (NPP) required 	<ul style="list-style-type: none"> No set time limit on NPP though most are refreshed annually
Psych Notes (HIPAA)	Fed	<ul style="list-style-type: none"> Protects psychotherapy notes 	<ul style="list-style-type: none"> Only notes, not other parts of record 	<ul style="list-style-type: none"> Written consent to disclose psych notes for any reason (including TPO) 	?
Substance Abuse Treatment (CFR Title 42 Part 2)	Fed	<ul style="list-style-type: none"> Protects privacy of substance abuse treatment provided by federally funded facilities 	<ul style="list-style-type: none"> Any information in record 	<ul style="list-style-type: none"> Written consent to disclose 	<ul style="list-style-type: none"> At each disclosure At each redisclosure
HIV Testing (MA Ch. 111 Sec 70F)	MA	<ul style="list-style-type: none"> Protects privacy of HIV test results 	<ul style="list-style-type: none"> HIV test results 	<ul style="list-style-type: none"> Verbal consent to test Written consent to disclose 	<ul style="list-style-type: none"> One time to test At each disclosure



Background - Inventory of privacy protections for personal health information in Massachusetts (2 of 2)



Law/Reg.	Fed/MA/Private	Description	Applicability	Type of Consent	Frequency of Consent
Genetic Testing (MA Ch. 111 Sec 70G)	MA	<ul style="list-style-type: none"> Protects privacy of Genetic test results 	<ul style="list-style-type: none"> Genetic test results 	<ul style="list-style-type: none"> Written consent to test Written consent to disclose 	<ul style="list-style-type: none"> One time to test At each disclosure
MIIS (MA Ch. 111 Sec 24M and CMR 222.105)	MA	<ul style="list-style-type: none"> Protects privacy of immunization information 	<ul style="list-style-type: none"> Immunization reporting to DPH 	<ul style="list-style-type: none"> Written opt-out for sharing with other providers Opt-out form either to provider or DPH* 	<ul style="list-style-type: none"> Not defined
Age of majority (MA Ch. 231 Sec 85P)	MA	<ul style="list-style-type: none"> 18 is the age of majority in but MA does recognize mature minor rule 	<ul style="list-style-type: none"> Generally, for regular doctor visits, in non-emergency situations, a minor must obtain parental consent 	<ul style="list-style-type: none"> Informed consent may be verbal or written 	<ul style="list-style-type: none"> Once
Mass Hlway consent (Chapter 118i Sec 13)	MA	<ul style="list-style-type: none"> Provides patient choice to send information via Mass Hlway Provides patient choice to have data stored by Hlway 	<ul style="list-style-type: none"> Sending PHI via Mass Hlway Storing and sharing information in RLS 	<ul style="list-style-type: none"> Written consent Level of detail varies with type of HIE service 	<ul style="list-style-type: none"> One time with refresh at age of majority
Surescripts	Private	<ul style="list-style-type: none"> Protects access to med history information maintained by Surescripts 	<ul style="list-style-type: none"> Any provider access to med history 	<ul style="list-style-type: none"> Provider attestation of verbal consent 	<ul style="list-style-type: none"> Not defined

*Added considerations if bi-directional is enabled



Recommendation 2: Mass HIway should provide additional education, clarification, and guidance to providers about health information exchange generally as well key consent requirements related to the HIway specifically

Discussion:

- Though Mass HIway consent was originally cited as a major “barrier to exchange,” the Consent Advisory Group has discovered that the challenges are much broader
 - The HIway is the first significant entrée to electronic exchange for many providers, so they have to adjust all of their consent (and other) processes
 - HIway consent is one of many consents required in clinical practice and must be aligned with other consent processes
- Provider organizations must navigate a complex web of state and federal information disclosure laws when they modernize information exchange processes
 - this includes HIPAA as well as laws designed to protect sensitive information
- Navigation of PHI disclosure laws and regulation may be done more efficiently and effectively with additional clarification from the HIway and by organizations working together, sharing legal and policy expertise, and developing best practices conventions to share with all



Recommendation 3: Mass HIway should provide education and guidance to patients about the HIway including a statewide education and outreach campaign

Discussion:

- Patients are generally uninformed of or confused by the many laws and regulations governing release and disclosure of their health information
- Many patients do not understand how their information is collected, stored, exchanged, and used by healthcare organizations
- Patients can be a driver of adoption if they are included and engaged in the discussion – Misunderstanding and mistrust by patients can undermine the benefits Mass HIway is trying to bring to patients and providers
- By introducing patients to the Mass HIway through a broad outreach campaign, patient conversations with providers about information exchange can be better informed, more targeted, and more meaningful to patients
- Patient education may be done more consistently and efficiently by the state government than by thousands of individual provider organizations



Discussion Item 3: Overview of Strategic Hlway Initiatives

David Whitham



- The Cross-agency Workgroup reviewed findings from ongoing **stakeholder engagement efforts** at MeHI, HPC, and MassHealth
- The workgroup identified clear **areas of growth** for the HIway, specifically the ongoing increases in participation and transaction volume
- The workgroup also found that participants face **ongoing challenges**:
 - The **complexity of connecting** to the HIway can frustrate participants
 - Providers are struggling with **consent management**
 - Need for the HIway to facilitate **functionality to support reform**
- To address these challenges, we advance **three near-term initiatives**:
 - 1. Fast-track Initiative** to simplify the onboarding process
 - 2. Consent Initiative** to pursue consent workgroup recommendations
 - 3. Event Notifications Service** as a pilot for enhanced functionality
- Additional **long-term considerations** must be addressed in parallel, including infrastructure capacity and business planning



Key Challenge

Potential Near-Term Initiative

Complexity of Connection

Fast-Track Initiative

- Standardize available methods of connecting to the HIway
- Provide expected time-to-connection for each method
- Streamline connection process and ensure expected timelines are met

Consent Management

Consent Initiative

- Evaluate feasibility of consent workgroup recommendations and pursue potential policy and procedure improvements
- Educate providers and consumers about current consent requirements and potential changes

Functionality to Support Care Delivery Goals

Event Notification Service Initiative

- Identify, develop and launch new functionality to facilitate new or third-party tools that support care delivery goals
- Event Notifications Service (ENS) identified as a priority tool to facilitate in the near-term



**Discussion Item 3:
Consent Initiative & Event Notification Service Initiative**

Ipek Demirsoy, Mark Belanger, David Seltz



Consent Initiative and Event Notification Service Initiative

- Introduction: *Ipek Demirsoy*
- Where we are today with Mass Hlway Phase 2 consent: *Mark Belanger*
- Lessons learned from other states: *David Seltz*
- Expansion of Query & Retrieve Services with Event Notifications: *Ipek Demirsoy*
- Discussion of consent model options: *Ipek Demirsoy*



- **Hlway adoption and use has been steadily increasing since inception – yet consent has consistently been raised as a barrier to Hlway adoption and use**
- The Health Policy Commission has researched what is happening in other states for HIE and consent to bring in external perspective
- **The Consent workgroup has made recommendations to the HIT Council / EOHHS to simplify consent for Direct Messaging** and to provide education to help providers and patients better understand health information disclosure broadly
- Today, Hlway leadership would like input from the HIT Council regarding the consent policy for Mass Hlway services **above and beyond Direct Messaging** – this includes the current Relationship Listing Service (RLS) and new Event Notification Service (ENS)
- Compared to when the Hlway started, there now is an increased need for HIE adoption and Phase 2 services as a result of alternative payment methods.



Early conversations with stakeholders (including the Consent Workgroup and Advisory Group) have highlighted a few **key considerations for a possible change to a centralized opt-out model**:

- We should address stakeholders' concerns that the current consent model has been a barrier to adoption.
- We recognize that stakeholders have participated in past conversations about the HIE consent models since at least 2010.
- The state and national HIE landscape has changed in recent years (e.g., increased alternative payment methods), and **across the nation momentum is building around opt-out consent models**.
- Stakeholders have identified **reduced administrative burden, faster adoption of innovative technologies, and simplified patient control over consent preferences** as potential benefits of an opt-out model.
- Stakeholders have raised **questions about operational details of a potential centralized opt-out model** (e.g., how would identity proofing be implemented?).
- Some stakeholders have raised the **potential need for varied approaches** on how to address opt-in/opt-out .



Consent Initiative and Event Notification Service Initiative

- Introduction: *Ipek Demirsoy*
- Where we are today with Mass Hlway Phase 2 consent: *Mark Belanger*
- Lessons learned from other states: *David Seltz*
- Expansion of Query & Retrieve Services with Event Notifications: *Ipek Demirsoy*
- Discussion of consent model options: *Ipek Demirsoy*

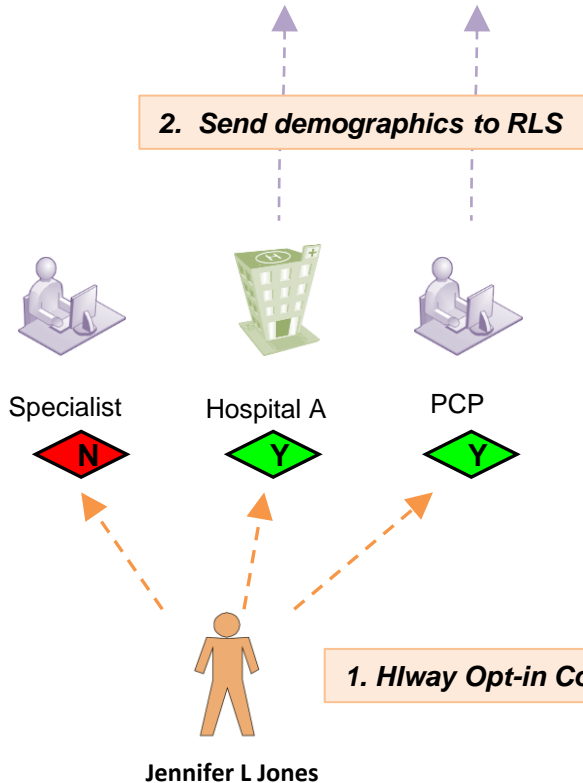


Disclosure of information to RLS is controlled by participant and enforced by HIway

Relationship Listing Service



<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12



- Information Sent by Participant to Mass HIway RLS**
- Consent attestation (Yes or No)
 - Patient Identifier (e.g., Organization specific Medical Record Number (MRN))
 - Patient Name
 - Patient Gender
 - Patient Date of Birth
 - Patient Address
 - Patient Email
 - Patient Phone Number
 - Participant sending the information and the Participant's Direct address
 - Date message received



Current phase 2 consent (continued)

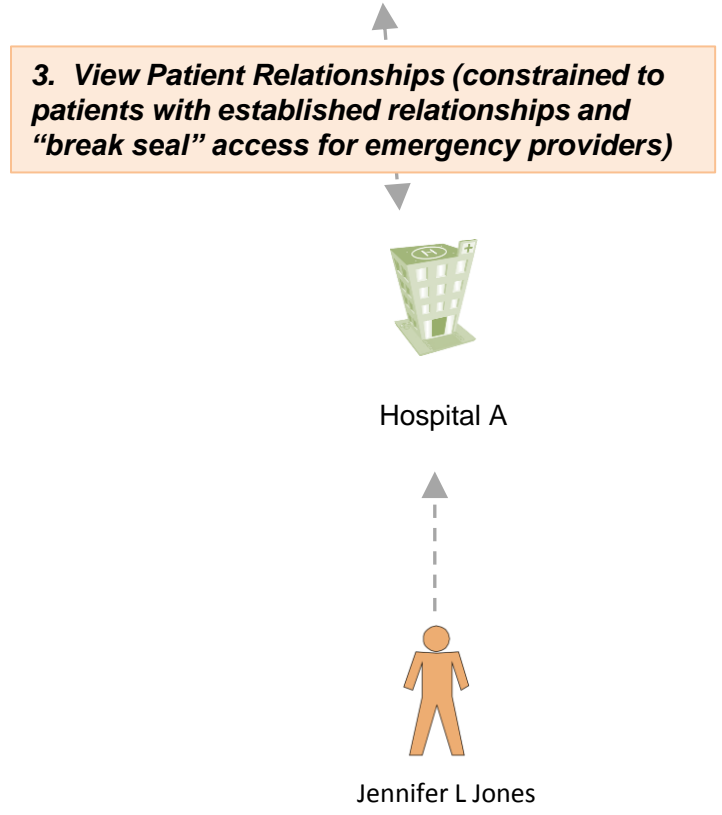
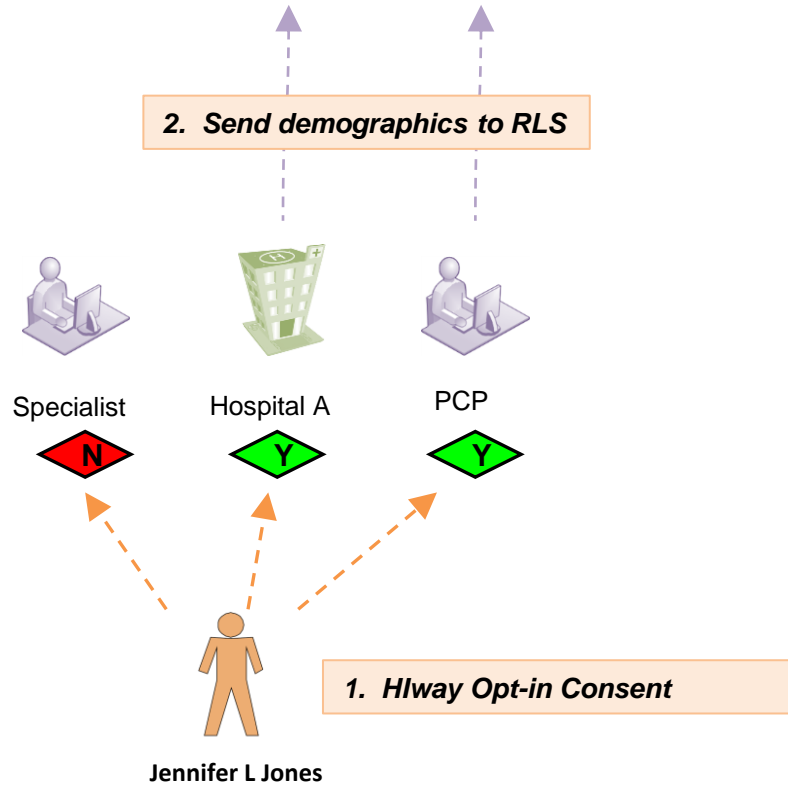


View of RLS is constrained to those with declared patient relationship.
“Break the seal” access is permitted for emergency providers

Relationship Listing Service



<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12





Current phase 2 consent (continued)

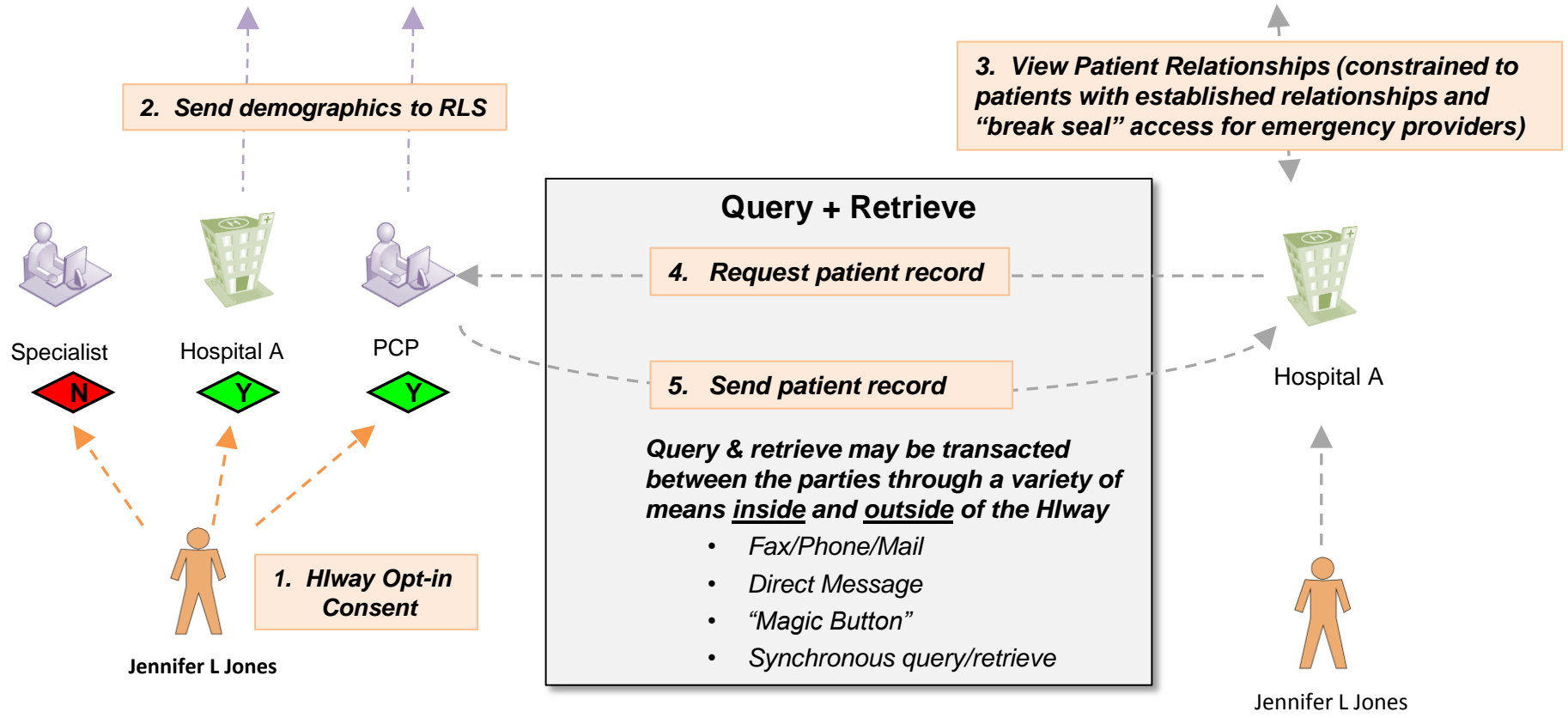


Hlway imposes no additional consent requirement on query & retrieve

Relationship Listing Service



<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12





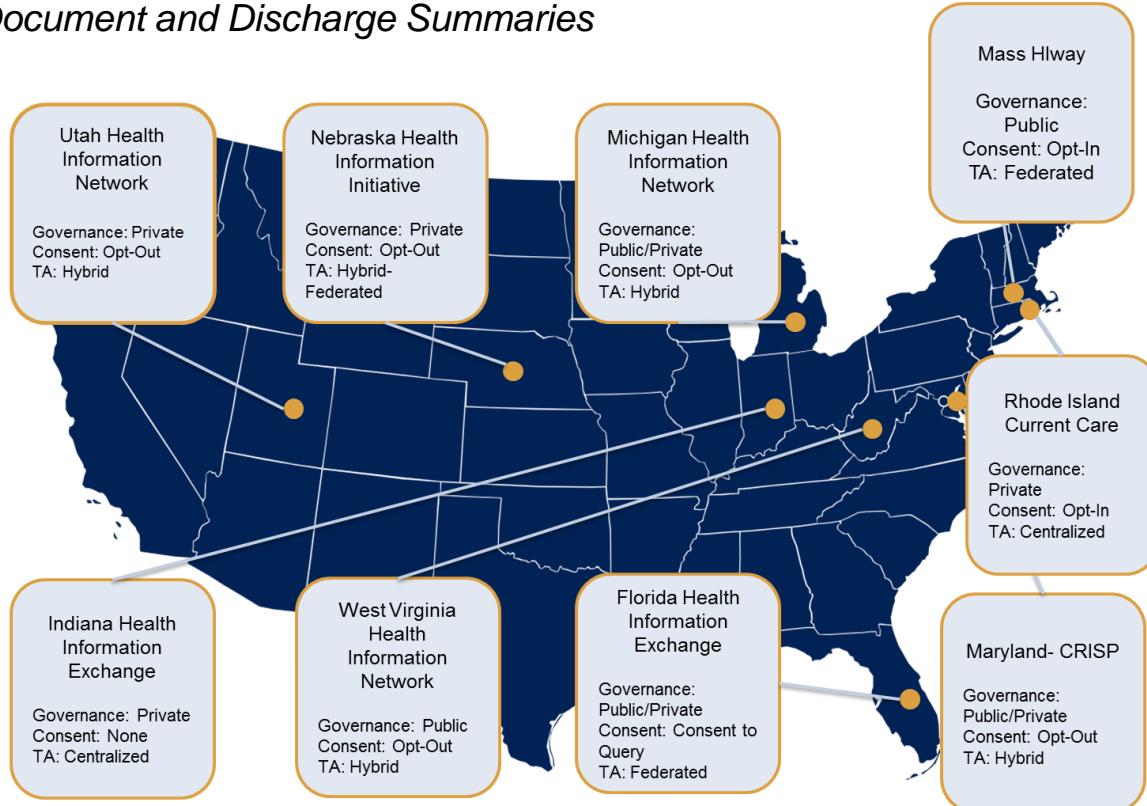
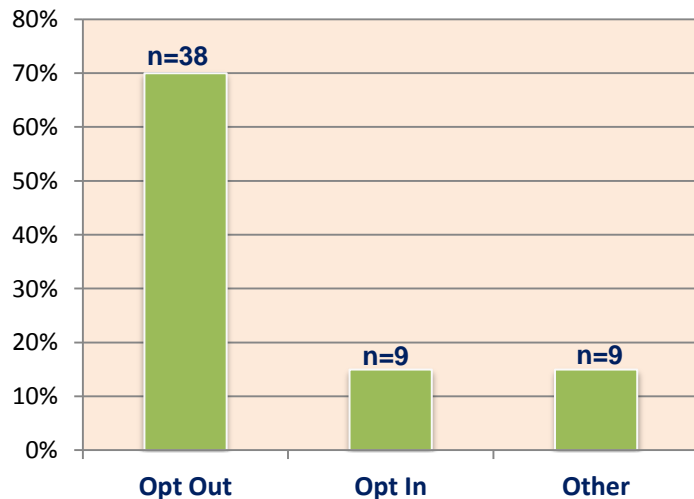
Consent Initiative and Event Notification Service Initiative

- Introduction: *Ipek Demirsoy*
- Where we are today with Mass Hlway Phase 2 consent: *Mark Belanger*
- Lessons learned from other states: *David Seltz*
- Expansion of Query & Retrieve Services with Event Notifications: *Ipek Demirsoy*
- Discussion of consent model options: *Ipek Demirsoy*

Multi-state Scan: In order to better understand field-tested approaches to statewide HIE / ADT implementation, the HPC conducted a scan of 8 HIEs

- **8 state HIEs** were interviewed from July 21 to August 25, 2015.
- Use cases were selected through **HPC stakeholder engagement, input of MassHealth and MeHI, and priorities seen in the State eHealth Plan**. The interviews contributed to understanding the value and relevance of key use cases, and highlighted strengths and weaknesses from interviewed states.
- Selection criteria were based on these states' established HIE efforts in defined use cases of interest: **Event Notification Services; Advance Directives; Consent Management and Centralized Patient Portals; Continuity of Care Document and Discharge Summaries**

Consent Model Selected by HIEs for Query-Based Exchange



TA = Technical Architecture

Levels of Consent Seen Across States



Opt-In

In Rhode Island, the RHIO has prescribed three levels of consent; patient choice-driven:

- Current and future providers who are participants of the HIE to be authorized access
- Only named healthcare provider organizations have access
- Healthcare providers that may care for the patient in emergencies – temporary access

25 percent of RI physicians have signed up for the HIE (2014); 14 percent of these never used the HIE. Opt-in policies were cited as the primary barrier to participation and use.

Consent to Query

In Florida, providers need authorization to query a patient's health care information. This approach allows the patient to specify the provider accessing their health information. The HIE covers 23 percent of hospitals beds in the state.

Opt-Out

Five surveyed states (MD, MI, NE, UT, WV) are opt-out. The general consensus was that there was no significant challenge or issues with their consent policy. Fewer than 3 percent of patients have opted out in each state – some states have had no reported opt-outs. Future considerations to improve consent management for privacy and patient engagement was mentioned. All states rely on HIPAA as the standard for their HIE.

No Consent

In Indiana consent has not been explicitly regulated; Indiana HIE authorities reported that they believe opt-in consent would have been a barrier to the HIE flourishing. Patients must be granted permission by their health care providers to opt-out of the exchange. The number of opt-outs are very low. Indiana authorities note that a more robust opt-out policy would be unlikely to have a detrimental impact on participation.

Consent lessons learned from other states

1

Most state HIEs – regardless of consent model – have **challenges with their consent management** for patient information subject to **enhanced protections**. Specifically, most state HIEs have not found a practical strategy to manage 42 CFR Part 2 information or HIV / other transmittable disease data subject to increased protections.

2

Many states see the **opt-in model as an impediment** to an HIE's development. As a result, the opt-out approach now dominates the state-based HIE market.

In Rhode Island, an opt-in HIE, providers are able to get **basic ENS alerts under HIPAA** (functioning as opt-out relative to the HIE); authorizing treatment equates to authorizing view of record to properly treat. Opting-in to the HIE means that the nurse or care manager can access information beyond a basic ADT alert.

Utah was initially an **opt-in state but later moved to an opt-out model**. For Utah, the opt-in model impeded efforts to develop a centralized data repository. In 2013, the state passed legislation to include Medicaid, Medicare, CHIP, and Public Employees Health Program beneficiaries automatically in the HIE (subject to an opt-out provision). The HIE now follows HIPAA as its privacy standard and is **fully opt-out**.

3

For an opt-in HIE to be successful, many report that a **comprehensive education plan** is essential to support and educate healthcare providers and patients about the value of HIEs.

4

A **single, blanket consent policy may not be the optimal solution** for Massachusetts. For example, Direct (because of the trust-fabric of known users at both ends) may be optimally subject to HIPAA without additional consent, while services such as ENS may be more appropriate under an opt-out consent.



Consent Initiative and Event Notification Service Initiative

- Introduction: *Ipek Demirsoy*
- Where we are today with Mass Hlway Phase 2 consent: *Mark Belanger*
- Lessons learned from other states: *David Seltz*
- Expansion of Query & Retrieve Services with Event Notifications: *Ipek Demirsoy*
- Discussion of consent model options: *Ipek Demirsoy*



Reasons that the HIway is planning an Event Notification Service (ENS)



- **ENS can improve care coordination:**
 - Event Notification Service (ENS) would provide real-time notifications to providers when a patient is admitted, discharged or transferred to, from, or within a hospital. This in turn would allow clinicians to respond with information and/or clinical support.
- **ENS has been identified as a need in MA:**
 - The need and the demand for ENS from providers is increasing as a result of payment and care delivery reform
 - Other state-wide HIEs have already successfully implemented an ENS, and several providers have inquired about the possibility of HIway offering an ENS
 - Some providers are piloting ENS through private vendors; however, overall penetration is limited.
 - Several providers stated that providing a robust public option with an ENS through the HIway ensures that all providers (and patients) could benefit.



Key Considerations for ENS



Key considerations:

1. ENS could be built upon the current demographic data that is collected through Admit Discharge Transfer (ADT) messages, which get sent to the HIway for the Relationship Listing Service (RLS).
2. To implement an ENS, the HIway would begin utilizing information that is contained in ADTs but previously has not been used (e.g., the “message type” information that conveys if the ADT is related to an admission vs. transfer vs. discharge).
3. Current HIway consent policies and procedures may need to be updated for the HIway to implement the ENS.

Issues that EOHHS is seeking feedback on:

1. Some stakeholders have mentioned that notifications could become more useful if they include clinical information (e.g., “chief complaint”), although not all stakeholders agree that this added information should be included.
2. Since the usefulness of an ENS increases as the volume of ADTs increases, some stakeholders have suggested that EOHHS should encourage or require all acute-care hospitals in the state to send ADTs to the HIway to ensure a robust, state-wide "ADT repository".



Consent Initiative and Event Notification Service Initiative

- Introduction: *Ipek Demirsoy*
- Where we are today with Mass Hlway Phase 2 consent: *Mark Belanger*
- Lessons learned from other states: *David Seltz*
- Expansion of Query & Retrieve Services with Event Notifications: *Ipek Demirsoy*
- Discussion of consent model options: *Ipek Demirsoy*



Recap: Drivers for reconsidering HIway consent model for Phase 2



To briefly review, **discussions of Phase 2 services and feedback from stakeholders have brought the consent model back into the forefront:**

- The Consent workgroup has met and reviewed a range of opt-in and opt-out models.
- Each model has a range of considerations. We have heard from a range of providers/stakeholders who favor a centralized opt-out model, though other providers/stakeholders have expressed differing views.
- The majority of HIEs in other states have adopted opt-out consent models, and several states have shared their belief that an opt-in model would have slowed their progress.
- Today, we aim to review and receive input from the HIT Council on options for consent, how a centralized opt-out model could work, and other considerations that should be evaluated.
- We will evaluate next steps after today's meeting.

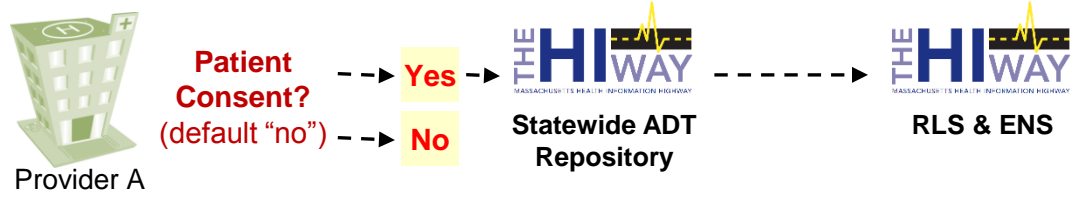


Consent options under consideration



1. Opt-in to disclose to the Hlway (This is the current model)

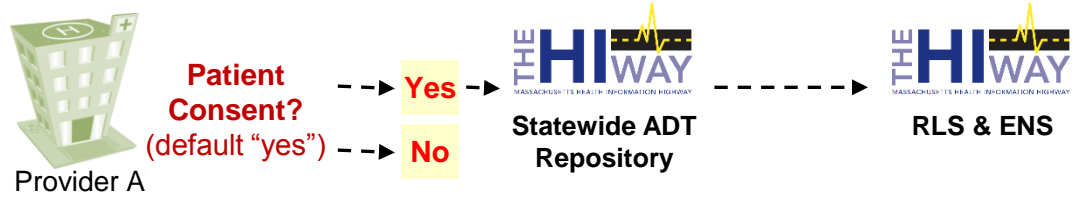
Consent is managed by Participant



Consent is required to disclose any data, and is collected separately at each Participant that a person interacts with.

2. Opt-out to disclose to the Hlway

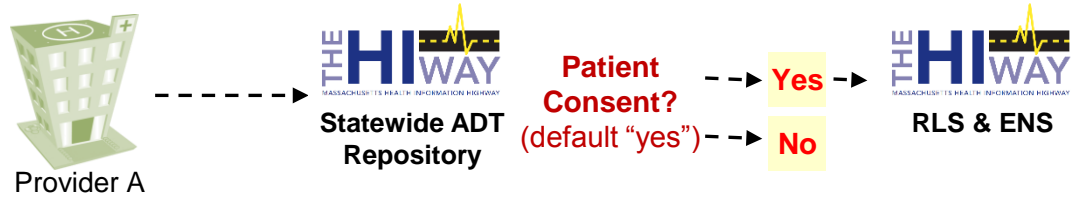
Consent is managed by Participant



Consent is assumed, but any opt-out choices are collected separately at each Participant that a person interacts with.

3. Opt-out to share with the RLS & ENS (i.e., "Centralized Opt-out")

Consent is managed by the Hlway



Consent is assumed, but an opt-out choice is collected by the Hlway once and applies to all Participants. If a person opts-out, then they are "invisible" to any Participant viewing the RLS.



Current model: Opt-in for Phase 2 services

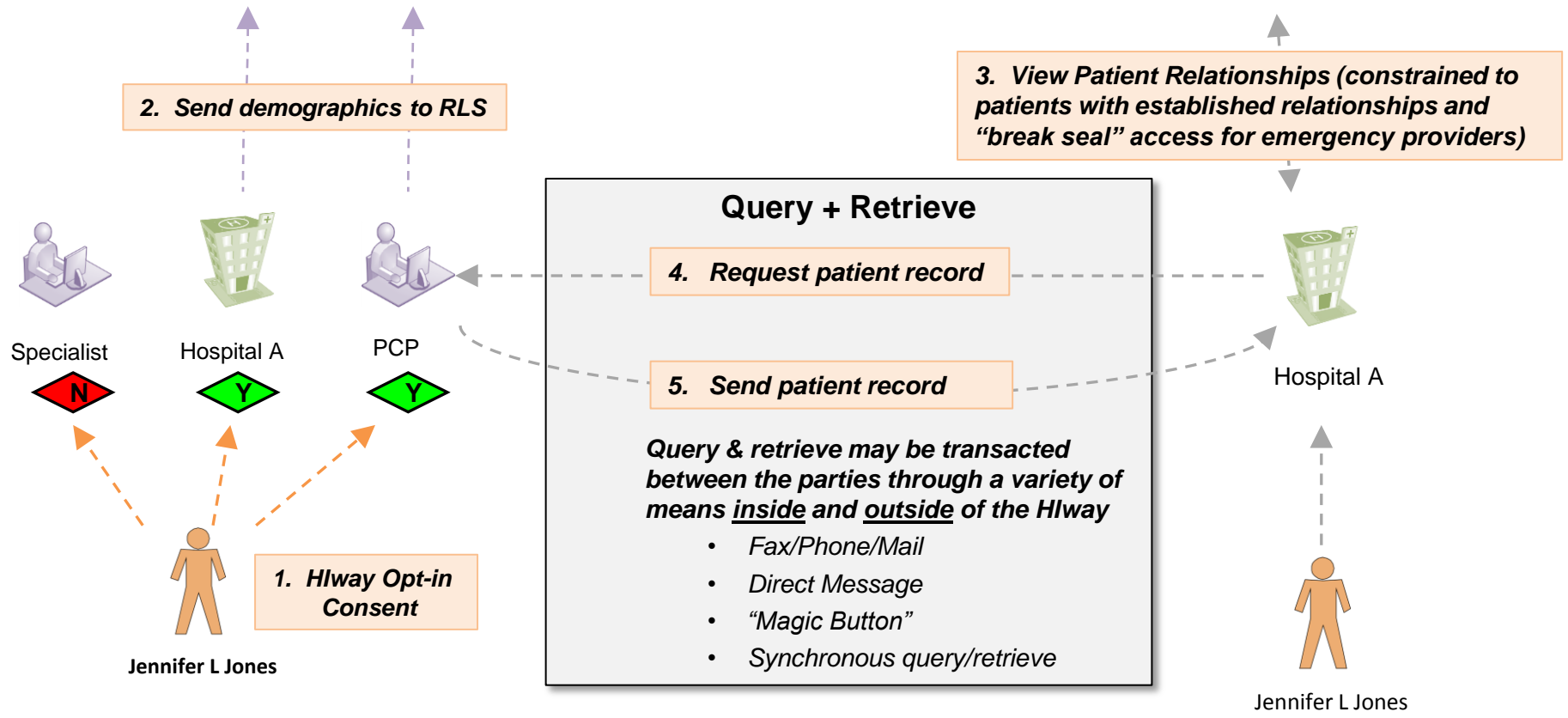


As a reminder, the current opt-in model for Phase 2 services requires significant investment and engagement at each provider.

Relationship Listing Service



<u>Patient name</u>	<u>Local name</u>	<u>Institution</u>	<u>MRN</u>	<u>Last event date</u>	<u># events</u>
Jones, Jennifer L	Jones, Jennifer	Hospital A	1234	Dec 3, 2012	3
Jones, Jennifer L	Jones, Jenny	PCP	5678	Jul 8, 2010	12

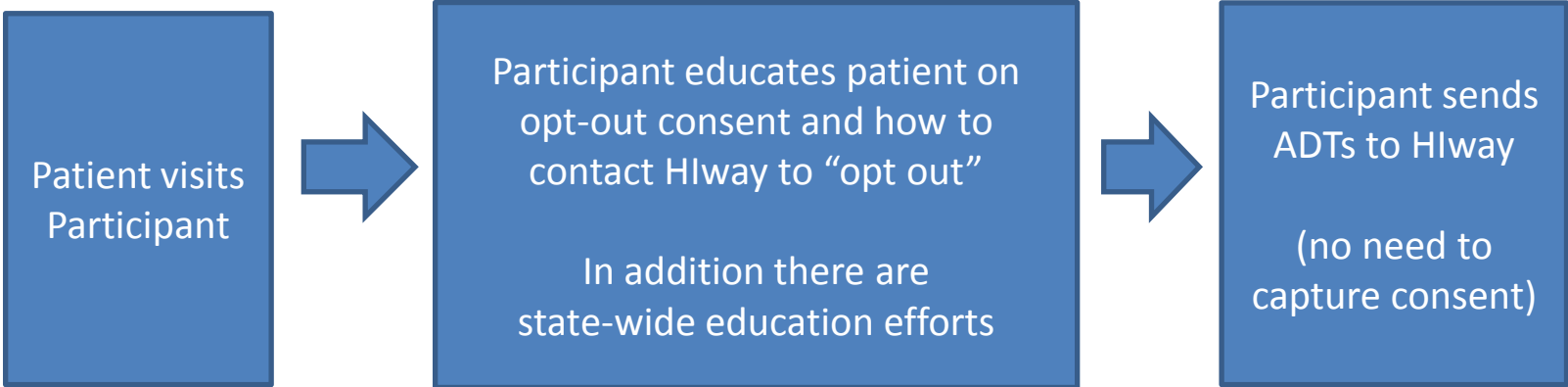




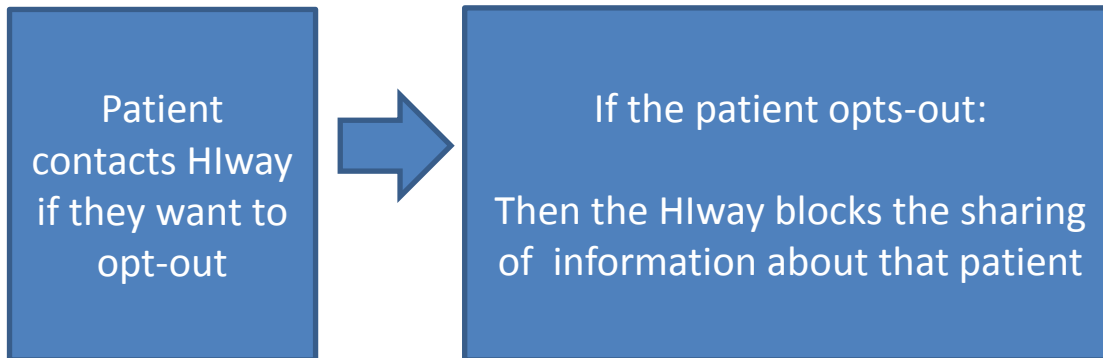
Option 3: Overview of Participant and Patient workflow



Participant Workflow



Patient Workflow



A key component of a move to centralized opt-out would be a state-wide patient awareness and education campaign so that any patient decision is informed



Option 3: Centralized opt-out – Considerations



1. May require a legislative change to move Hlway consent to **centralized opt-out** for Phase 2 services
 - The centralized global opt-out consent policy could apply to both the RLS and ENS since the RLS is a foundational element of an ENS.
 - Patients could contact Hlway directly at any time to change consent preference.
 - *Potential enhancement after initial launch: could allow a Participant to communicate a patient's opt-out preference to the Hlway (to save a patient the step of contacting Hlway).*
2. **Information protected by 42 CFR Part 2 could be excluded from the RLS and ENS.**
 - Provider organizations could be responsible for filtering this information out of ADTs sent to the Hlway.
 - The Hlway would not accept ADTs from stand-alone substance use disorder treatment facilities.
3. **Initially, centralized opt-out would be “Global” (instead of “Participant-Specific”)** If a patient chooses to opt-out, this could be recorded by the Hlway and apply to all Participants.
 - *Potential enhancement after initial launch: could allow patients to opt-out for specific Participants.*
4. Phase 2 services, accelerated by a centralized opt-out model, could allow the Hlway **to more effectively facilitate the sharing of clinical information between providers to improve care coordination.** Clinical information could be shared in two ways:
 - a) Following an ENS with information shared via Direct Messaging, or Query & Retrieve
 - b) Including some clinical information (e.g., primary complaint) in an ADT



Option 3: Several 2nd-order design details to consider



Design details for future consideration

Thus far, stakeholders have highlighted the following implementation and operational areas for more detailed consideration:

- 1. Identity proofing:** How will the Hlway verify the identify of consumers contacting the Hlway to opt out?
- 2. Patient matching:** How will the Hlway match consent preferences to the ADTs for that patient?
- 3. Discovery service / synchronization:** How will the patient's consent preference be shared between the Hlway and a Participant? What information do Participants need to receive from the Hlway about consent preferences?
- 4. Promotion of a robust ADT repository:** Should EOHHS encourage or require all acute-care hospitals to send ADTs to the Hlway?



- 1. Decreased administrative burden on Participants**
 - a) Consent is managed by HIway instead of by the Participants
 - b) Participants may not need to implement a workflow to capture consent in patient portals, EHR systems, billing systems
- 2. Less costly for Participants to implement than decentralized opt-in**
- 3. Easier and less confusing for most patients**
 - a) Patients only need to contact HIway once to opt-out for all sharing, instead of contacting multiple organizations.
 - b) HIway consent process would be very similar to the MIIS consent process for vaccines which has been working well.
- 4. Improvements in care coordination for all clinicians & patients through robust public option for phase 2 services**



1. **Some Participants have concerns about sending information to the HIway without first getting a patient's expressed consent.**
2. **Some patients who want to opt-in for one Participant but opt-out for a different Participant, would need to wait for HIway enhancements** since this would not be an initial feature of centralized opt-out.
3. **Some patients may be concerned that under an opt-out model, less time will be spent with patients to help them make an educated decision regarding consent.**

To address this potential challenge, would need to consider:

- a) A comprehensive state-wide education and outreach campaign
 - b) Staff training at Participant sites
4. **Some Participants have successfully implemented opt-in consent management and prefer to share best practices rather than change the model**
 - However, most Participants in the state do not use the HIway for care transitions, and consider consent management a significant barrier to adoption, even with assistance on best practices.



Discussion Questions for the HIT Council:

1. Are there additional potential pros & cons for centralized opt-out?

Next Steps:

1. We will evaluate next steps after today's meeting.



Discussion Item 4: Fast Initiative
David Bowditch, Mark Belanger

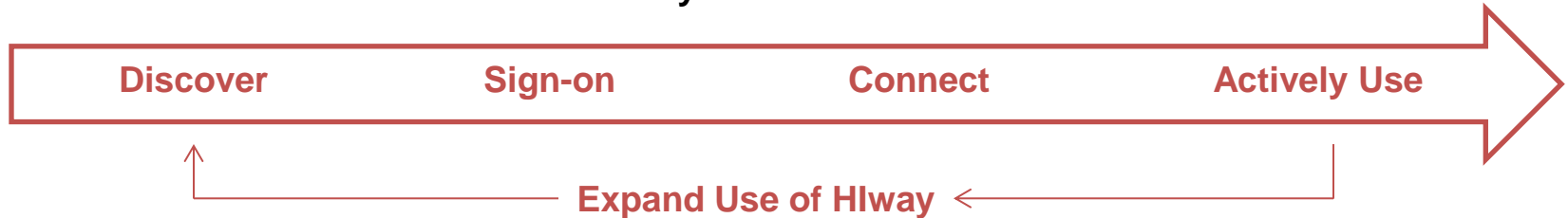


Why focus resources and time to the FAST Initiative?

- Rapid on-boarding is key to Hlway success
- On-boarding is a complex process with multiple dependencies and interdependencies
- Though on-boarding time has improved dramatically since the inception of the Hlway there are still areas with ample opportunity for improvement
- Some improvements are under direct control of Hlway but most require collaboration with multiple parties (e.g., Customers, vendors, HISPs, integrators)



Customer Lifecycle – Customer Point of View



- **Discover:** Customer determines needs for services, price, and seeks answers to their questions
- **Sign-On:** Customer makes decision to join Hlway and executes agreements
- **Connect:** Customer connects their health information system(s) to Mass Hlway
- **Actively Use:** Customer completes process changes and begins using Mass Hlway for initial use case
- **Expand Use:** Customer begins using Mass Hlway for additional use cases. Customer may sign up for additional Mass Hlway services



Delay drivers to be addressed as part of FAST Initiative



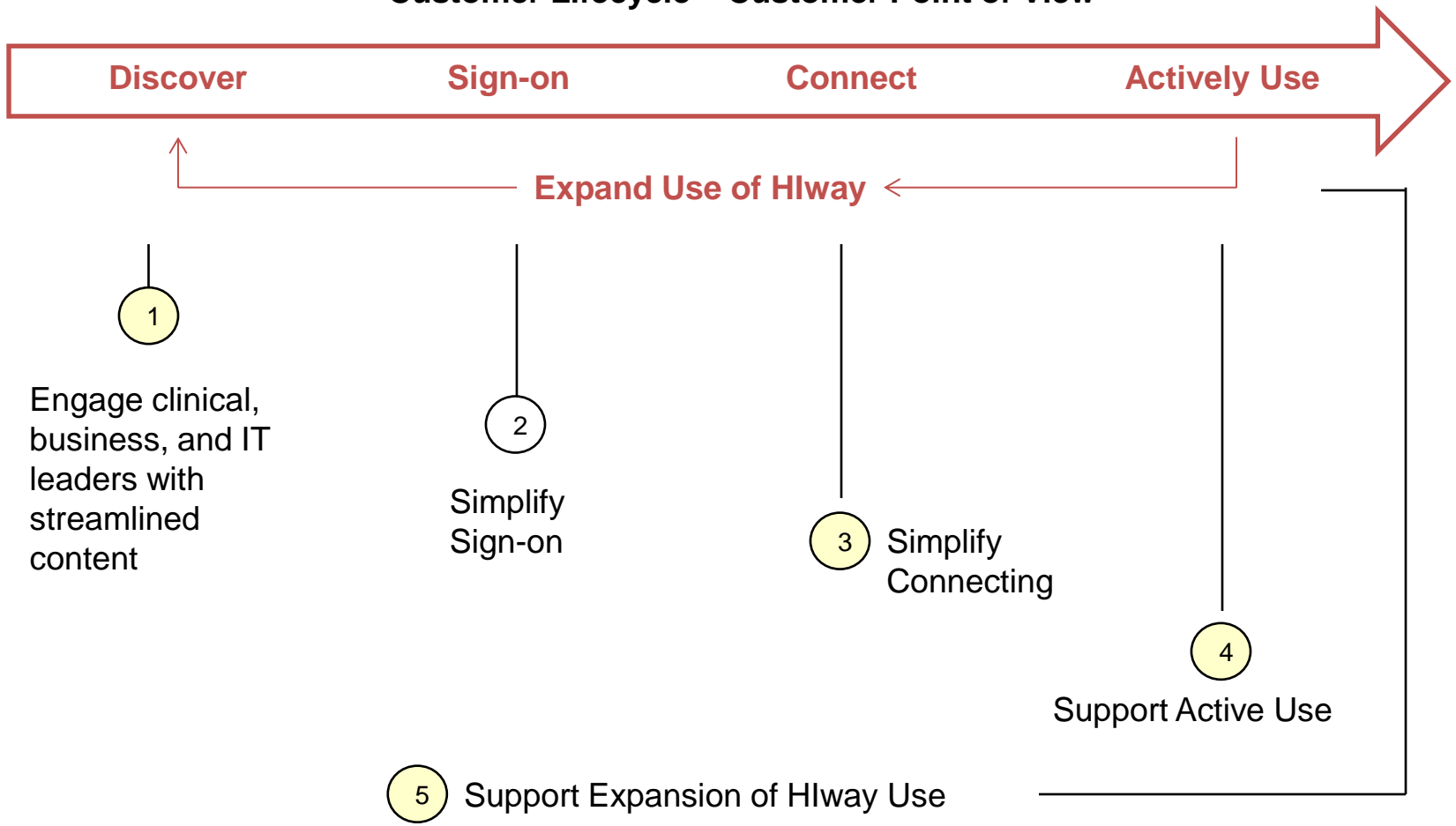
- **Discover phase issues and sources of delay:**
 - Participant time for IT leadership to “sell” HIway to clinical and business leadership
 - Complexity and overhead of programs linked to HIway implementation (e.g., MU, grants)
 - Confusion about who runs HIway, where to look for information, and who to contact
- **Sign-on phase issues and sources of delay:**
 - Sign on decision requires multi-lateral discussions to determine connection type
 - Multiple leaders are required to make sign-on decision
 - Participation Agreements are complex - Up to 10 forms to navigate and sign
 - There is confusion about the MA law with absence of Chapter 118i regulations
- **Connect phase issues and sources of delay:**
 - Connecting to EHR vendors that are immature and still figuring out direct messaging
 - Standards optionality and variability
 - Addressing and Provider Directory
- **Actively Use phase issues and sources of delay :**
 - Along with technology changes, new processes need to be defined and implemented with clinical and administrative staff and in collaboration with vendor
 - Processes are cross-organizational and require ongoing collaborative planning among organizations to solve for multiple cruxes
- **Expand Use of HIway phase issues and sources of delay:**
 - Public Health reporting is often the first use case and not extensible to Transition of Care
 - RLS has 2 known issues to resolve before customers proceed



FAST Initiative – Discrete projects to address issues



Customer Lifecycle – Customer Point of View





FAST Initiative Projects



1. Engage clinical, business, and IT leaders with streamlined content	2. Simplify sign-on	3. Simplify connecting	4. Support Active Use	5. Support Expansion of Hlway Use
<ul style="list-style-type: none">• Core content refresh• Website update and consolidation• Sales packet refresh• Outreach campaign	<ul style="list-style-type: none">• Connection type decision tree• Outreach meeting improvement• Contractual Agreement streamline• Regulations promulgation	<ul style="list-style-type: none">• Vendor relationship management• EHNAC certification• Provider Directory 2.0• Connection type simplification	<ul style="list-style-type: none">• Trading Partner matchmaking• Post and maintain trading partners and their readiness• Technical support for clinical workflow improvement?	<ul style="list-style-type: none">• RLS Search fix• eMPI – Matching configuration change - Tuning in production• RLS Early Adopter Recruitment



Discussion Item 5: Operations Update

David Bowditch



New Participation Agreements (Sep - Oct)

- Behavioral Health Network Inc.
- Chelmsford Dermatology, P.C.
- Edgewood Retirement Community, Inc.
- Michael C Zaslow, MD PC
- Northborough Pediatrics
- Pediatric & Adolescent Medicine
- Pediatric Associates of Northwood
- Sanphy Podiatry Group (Partner's Affiliate)
- South Shore Dermatology Physicians PC
- University Skin Oncologist (Partner's Affiliate)
- William A. Mitchell Jr, MD PC



New Connection Activity (Sep - Oct)

- Adams Street Dermatology Associates P.C.
- Care at Hand, Inc.
- CareWell Urgent Care
- Dr. Committo
- Gogstetter, Darin S MD
- Haines, James MD
- Kenneth M Reed MD, PC (Derm ASAP)
- Marino Center at Mount Auburn
- Mercy Medical Center
- Needham Wellesley Family Medicine
- Northborough Pediatrics
- Pediatric Associates of Northwood
- Pleasant Hill Pediatrics
- Sanphy Podiatry Group (Partner's Affiliate)
- South Coast Physician Group
- University Skin Oncologist (Partner's Affiliate)
- Whittier Street Health Center
- William A. Mitchell Jr, MD PC



Customer Status Dashboard



Tier	SubTier	Universe (est)	Mass HIway HISP			Via another HISP		Total		
			# Signed on	# Connected	# Actively Using	# Connected	# Actively Using	# Connected	# Actively Using	% Actively Using
Tier 1	Large Hospitals / Health Systems	29	25	20	16		-	20	16	55%
	Health Plans	9	4	4	3		-	4	3	33%
	Multi-entity HIE	5	3	1	1		-	1	1	20%
	Commercial Imaging Centers & Labs	1	1	1				1	-	0%
Tier 2	Small Hospitals	40	37	35	28	2	-	37	28	70%
	Large ambulatory practices (50+)	25	12	10	6	11	5	21	11	44%
	Large LTCs	8	2	2	2		-	2	2	25%
	ASCs	63						-	-	0%
	Ambulance/Emergency Response	39	1	1				1	-	0%
	Business Associate Affiliates	5	2	1	1		-	1	1	20%
	Local government, publichealth	TBD	1	1	1		-	1	1	0%
Tier 3	Small LTC	310	23	21	12	1	-	22	12	4%
	Large behavioral health	10	2	2				2	-	0%
	Large FQHCs (10-49)	30	19	12	6	6	2	18	8	27%
	Medium ambulatory practices (10-49)	365	19	14	8	16	9	30	17	5%
Tier 4	Small behavioral health	90	17	14	5	-	-	14	5	6%
	Home Health, LTSS	149	28	24	12	5	2	29	14	9%
	Small FQHCs	29	5	1	1	2	-	3	1	3%
	Small ambulatory practices (3-9)	1595	56	59	19	38	13	97	32	2%
Tier 5	Small ambulatory practices (1-2)	4010	197	159	35	105	16	264	51	1%
Grand Total		6812	454	382	156	186	47	568	203	2%



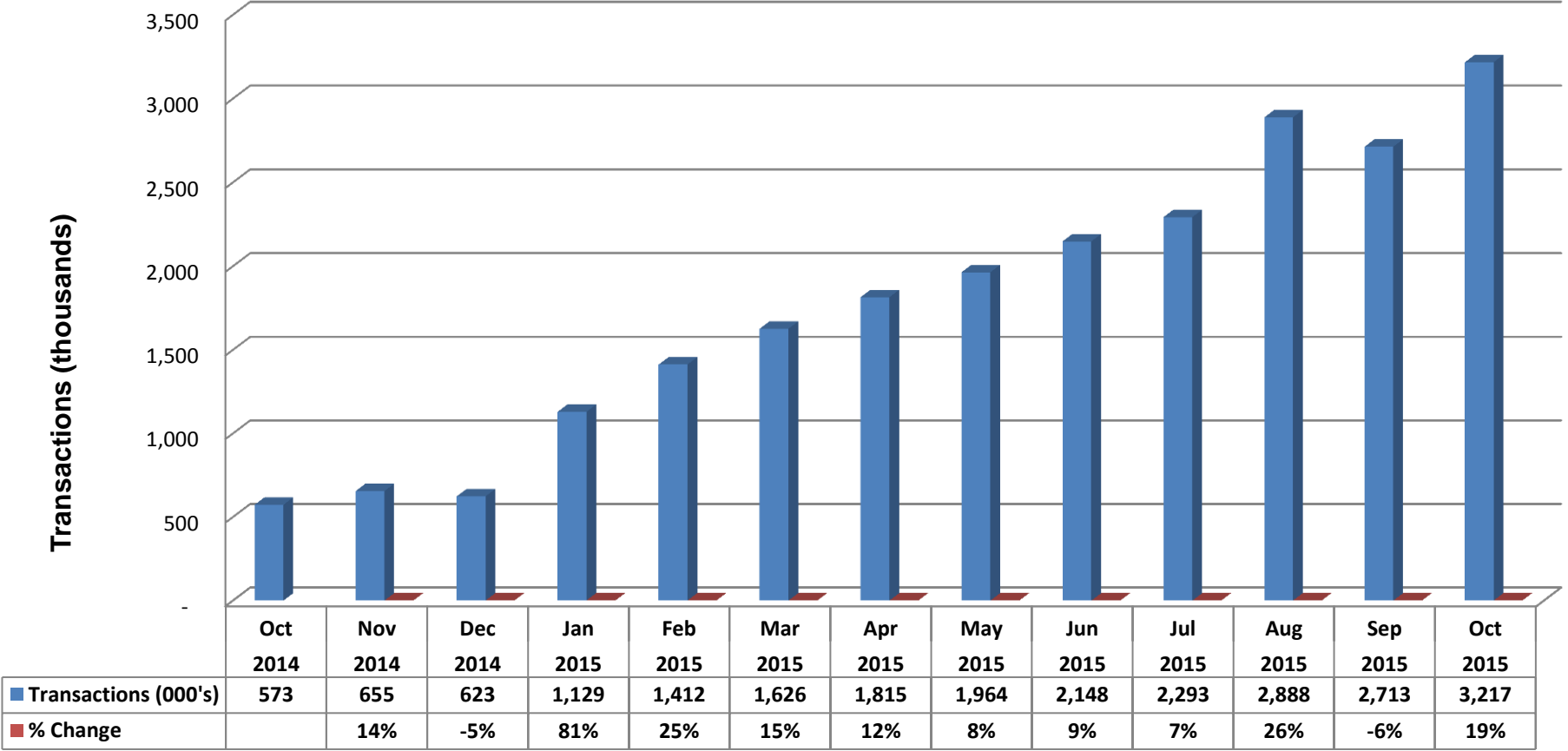
Hiway Transaction Activity



13 Month Hiway Transaction Activity

3,217,192 Transactions* exchanged in October (9/21 to 10/20/2015**)

27,358,907 Total Transactions* exchanged inception to date



* Note: Includes all transactions over Mass Hiway, both production and test
 ** Note: Starting 12/20/2014, reporting cycle is through the 20th of each month.



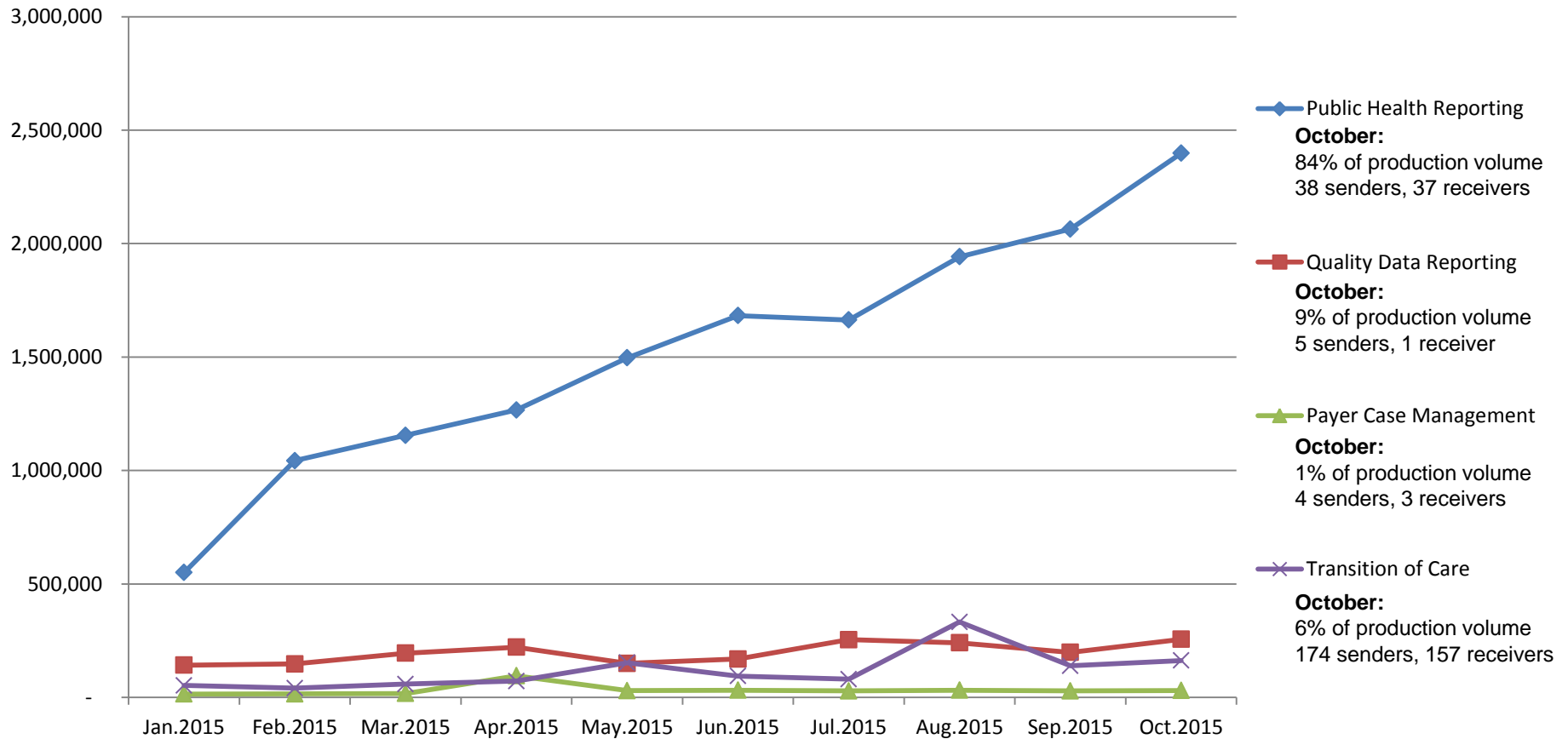
HIway Transaction Analysis



2015 HIway Production Transaction Trends by Use Case Type

88% of HIway activity year-to-date* was for production transactions

89% of HIway activity in October* was for production transactions

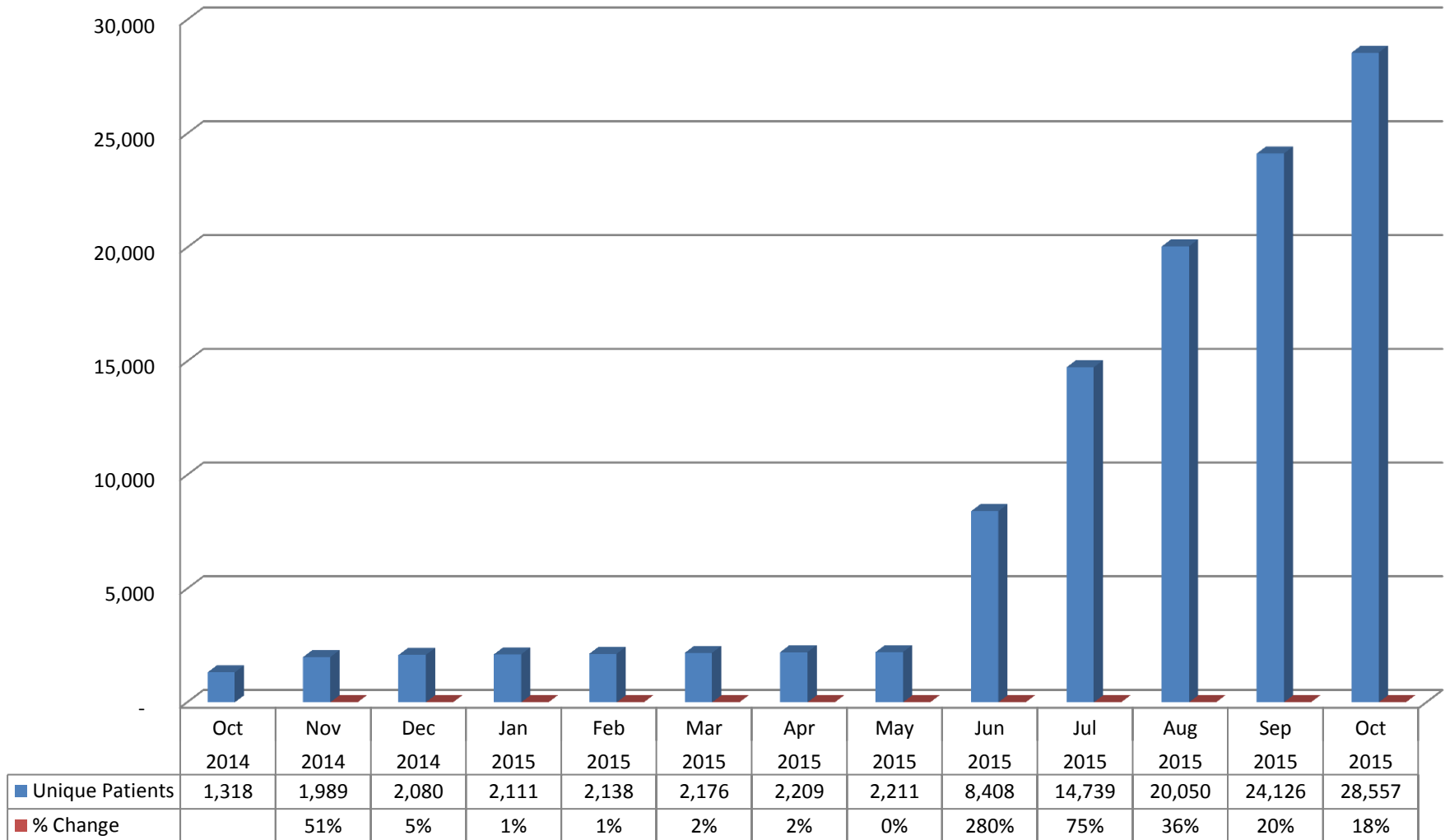


- ◆ Public Health Reporting
October:
 84% of production volume
 38 senders, 37 receivers
- Quality Data Reporting
October:
 9% of production volume
 5 senders, 1 receiver
- ▲ Payer Case Management
October:
 1% of production volume
 4 senders, 3 receivers
- × Transition of Care
October:
 6% of production volume
 174 senders, 157 receivers

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



13 Month RLS Growth – Cumulative Unique Patients Count





HISP to HISP Connectivity



#	HISP Vendor	Kickoff	Onboarding	Testing	Hiway Prod Readiness	Live/Target Date
1	eLINC					✓ 2014-May
2	DataMotion					✓ 2014-Jun
3	Wellport (By Lumira)					✓ 2014-Jul
4	Inpriva					✓ 2014-Aug
5	Surescripts					✓ 2014-Oct
6	eClinicalWorks					✓ 2014-Oct
7	McKesson(RelayHealth)					✓ 2014-Dec
8	Allscripts(MedAllies)					✓ 2014-Jan
9	EMR Direct					✓ 2015-Mar
10	SES					✓ 2015-Mar
11	Medicity					✓ 2015-Apr
12	NHHIO					✓ 2015-May
13	MyHealthProvider(Mercy Hospital)					✓ 2015-May
14	NextGen Share					✓ 2015-Jun
15	Athenahealth					✓ 2015-Jun
16	Aprima					✓ 2015-Jun
17	Cerner					✓ 2015-Jun
18	Medicity					✓ 2015-Aug
19	CareConnect (NetSmart HISP)					✓ 2015-Oct
20	eClinicalWorks Plus					2015-Nov
21	UpDox					2015-Nov
22	MaxMD					2015-Nov



DPH Connection Status



Registry	Status	Acceptable Message Types
Massachusetts Immunization Information System (MIIS)	Connected	HL7
Electronic Lab Reporting (ELR)	Connected	HL7
Syndromic Surveillance (SS)	Connected	HL7
Massachusetts Cancer Registry (MCR)	Connected	CDA HL7 R2
Specialized registry - Disease surveillance and case management system (MAVEN)	Connected	HL7 XML from ESP (or other) via Web service
Opioid Treatment Program (OTP)	Connected	XML Enrollment, HL7
Childhood Lead Poisoning Prevention Program (CLPPP)	Connected	.CSV, .TXT (All txt files are fixed length files)
E-Referral	Connected	HL7, XML
Adult Lead	Connected	HL7
PMP	Testing	HL7



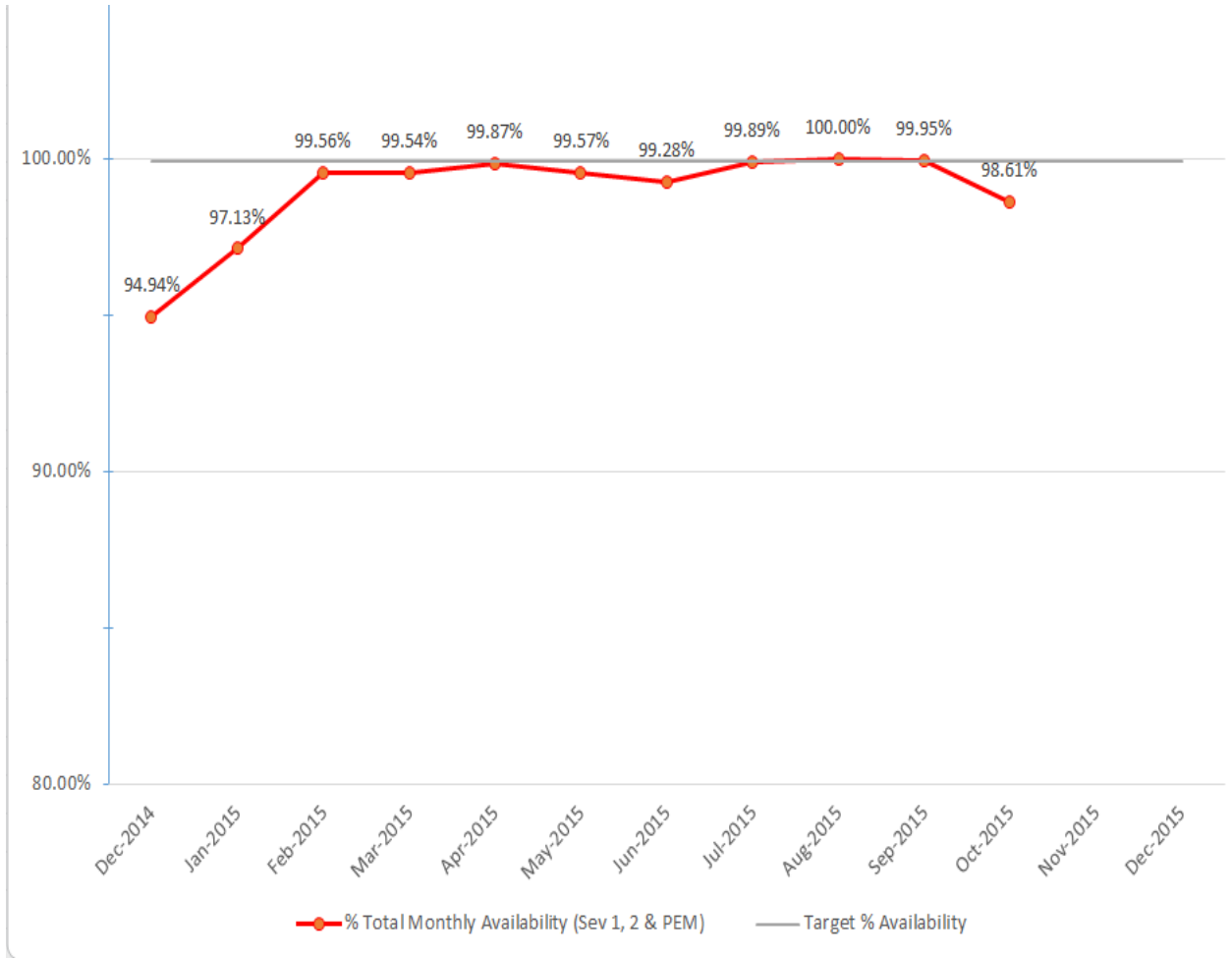
DPH Connection Status By Vendor



EHR Vendor	MIIS	Opioid Treatment Prg.	E-Referral	Syndromic Surveillance	Cancer Registry
SMART		Live			
Netsmart		Live			
eClinicalWorks	Live		Live		
GE Qvera	Live				
Cerner	Live			Live	
Allscripts	Live				
athenahealth	Live				Testing
Aprima					Initiated
Surescripts	Live				



HIway Availability Trends



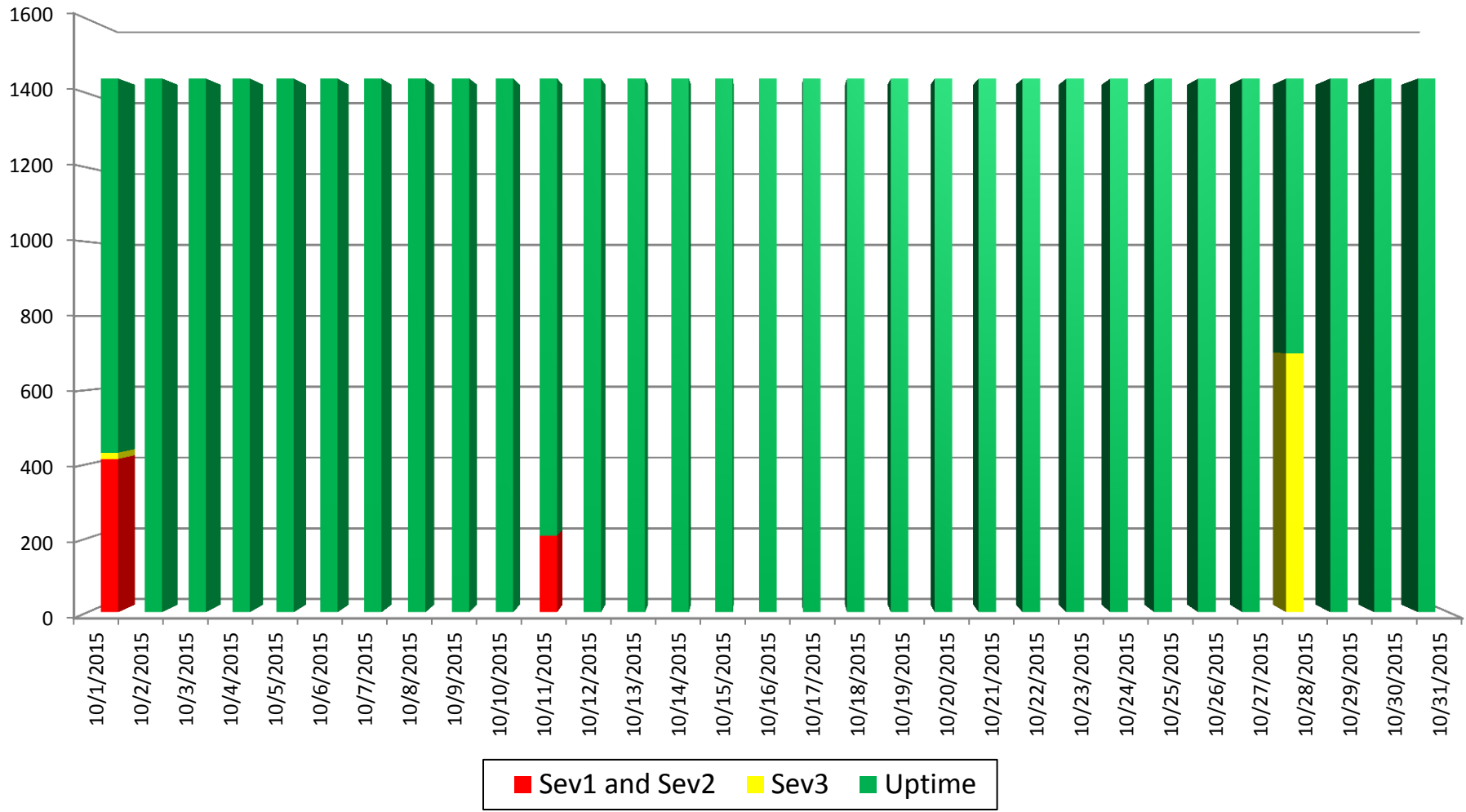
Metric Targets:

- “Total Monthly Availability” – no lower than 99.9% (downtime no more than ~44 minutes/month)
- In the month of October, we had 2 days when Severity 1 incidents occurred and 2 days when Severity 3 incidents occurred.
- Please see the appendix slides for additional details.



2015 Mass Hlway Incident Summary Dashboard

October 2015



Sev 1 - All / Most Mass Hlway components impacted as a result of outage. For example: LAND, Webmail, Direct XDR, and DPH nodes are all down

Sev 2 - Multiple Mass Hlway components impacted as a result of outage in one of the shared service. For example: LAND and Webmail are down but Direct XDR and DPH nodes are up.

Sev3 - One Mass Hlway component impacted as a result of outage. For example: Webmail is down but all other services are up and running.



2015 Mass Hlway Incident Summary Dashboard

October 2015 Details



Date	Time frame	Downtime in Minutes	Severity	Incident Overview	Areas addressed or impacted
10/1/2015	5:18 pm to 5:35 pm	17	Sev 3	Prod MIIS Com point "MIISWebserviceClient" stopped	MIIS CG Node
10/1/2015	4:59 pm to 11:53 pm	414	Sev 1	DB Service Disruption issue	DB Storage/Restart Webmail Restart Tomcat/Trust GW Restart James Restart
10/11/2015	8:47 am to 12:14 pm	207	Sev 1	DB Service Disruption issue	DB Storage/Restart Webmail Restart Tomcat/Trust GW Restart James Restart
10/28/2015	7:51 am to 7:30 pm	699	Sev 3	MIIS and OTP com point down to send messages to backend due to state wide issue affecting backend applications for HIway	OTP CG Node MIIS CG Node

Sev 1 - All / Most Mass Hlway components impacted as a result of outage. For example: LAND, Webmail, Direct XDR, and DPH nodes are all down

Sev 2 - Multiple Mass Hlway components impacted as a result of outage in one of the shared service. For example: LAND and Webmail are down but Direct XDR and DPH nodes are up.

Sev3 - One Mass Hlway component impacted as a result of outage. For example: Webmail is down but all other services are up and running.



Discussion Item 6: Conclusion

Alice Moore



HIT Council - Meeting Schedule:*

- December 7, 2015
- 2016: TBD

Advisory Group Schedule:

- January 12, 2016
- April 12, 2016

Consent Workgroup Schedule:

- TBD

**All HIT Council meetings to be held from 3:30-5:00 pm at One Ashburton Place, 21st floor, Boston*

Commonwealth of Massachusetts
Executive Office of Health and Human Services



Thank you!



Appendix



Definition of a “Participant” from the HIway Policies and Procedures:

- An organization that signs a Participation Agreement and uses Mass HIway services is a *Participant*.
- Participants may be single-legal entity organizations (e.g., Physician Practice, Hospital, Health Plan) or multi-entity organizations (e.g., Physician Hospital Organization (PHO), Independent Physician Association (IPA), Accountable Care Organization (ACO)).



Mass Hlway Policies and Procedures December 1, 2014

- **6.3.1 Consent Requirements If Participant is enabling Query & Retrieve functionality:**
 - Participant must get Patient permission to use the Mass Hlway to transmit Patient health information. (*note – same as phase 1 consent*)
 - Participant must identify the Mass Hlway as a mode of exchange. (*note – same as phase 1 consent*)
 - Participant must get Patient permission to transmit specified Patient demographic information (See Section 4.3.1 Data Collection, Use, and Disclosure – Query & Retrieve) to the Mass Hlway RLS, which stores the Patient demographic information and discloses the Participant’s relationship with the Patient to other authorized RLS users.
 - As part of obtaining this permission, Participant must describe the Mass Hlway Query & Retrieve functionality to the Patient.
- **6.3.2 Consent – Changes**
 - Participants are required to allow Patients to change their Mass Hlway consent preferences. Participants are responsible for updating consent preferences with the Mass Hlway