

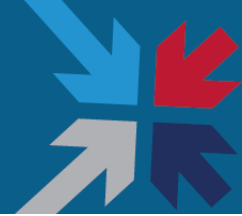


NHIN Direct Project Implementation Group Meeting

June 23, 2010



Agenda





- » Reminders

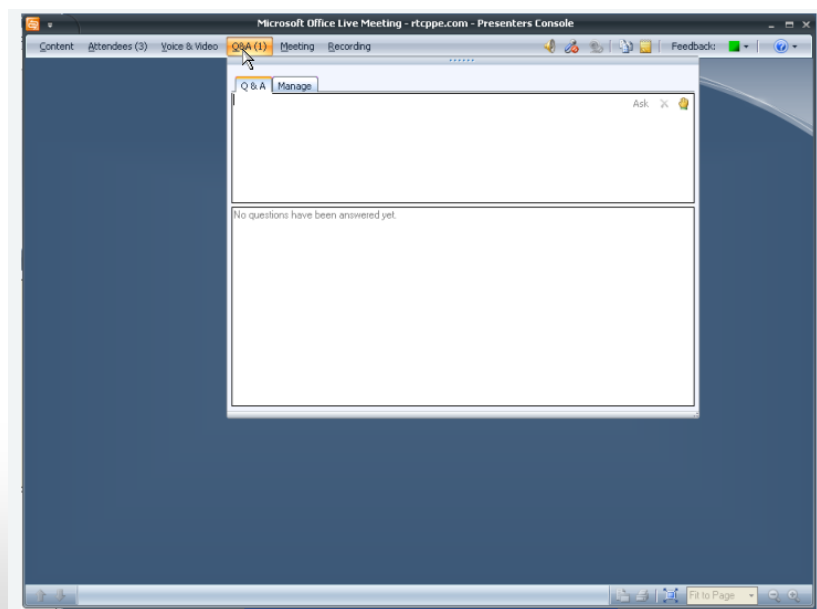
- » Recent Unified Proposal

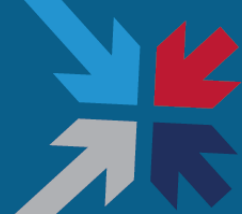
- » Calendar & Participation

Review of Participation



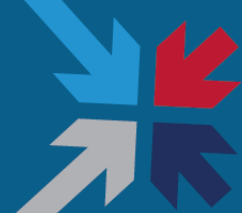
- » Use the Q&A text box function in the web conference to ask a question, or to signal an intent to speak
- » **To type a question**, please type questions into the Q&A text box and click 
- » **To vocalize a question**, please use the “raise your hand” function found in the upper right hand corner: 



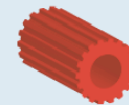


Reminders

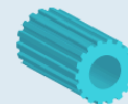
What is the NHIN Direct Project?



A project to create the set of **standards** and **services** that with a **policy** framework enable simple, directed, routed, scalable transport over the Internet to be used for secure and meaningful exchange between known participants in support of meaningful use



Services



Standards

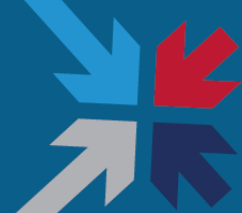


Policies



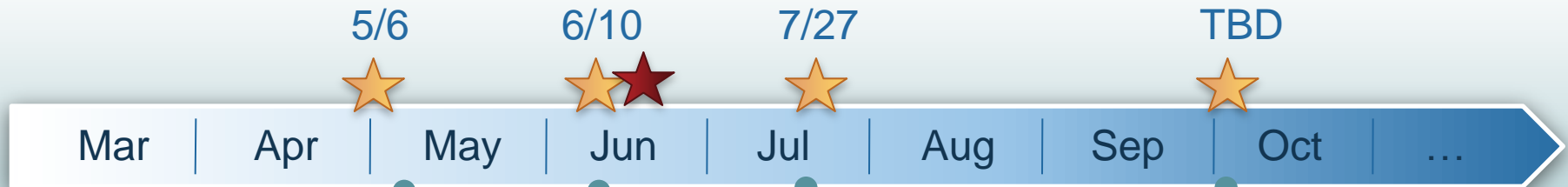
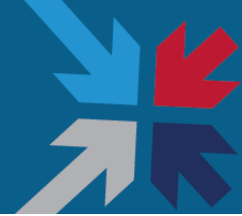
Trust Fabric

Review of Work Groups



- » **User Story Review WG:** Provide consistent, vetted set of user stories available on the Wiki
- » **Concrete Implementation WG:** Recommend a high level concrete implementation or set of concrete implementations mapping to the abstract model and meeting all Must User Stories
- » **Content Packaging WG:** Define a few workable alternatives, with pros/cons, for content packaging
- » **Security & Trust WG:** Provide alternatives and highlight issues relating to security and trust enablement via technology (e.g., certificates and signatures)
- » **Comprehensive HIE Interoperability WG:** Define how to mix and match direct transactions and Comprehensive HIE/NHIN specifications and services (patient discovery and information access) capabilities at scale
- » **Individual Involvement WG:** Clarify technology issues and policy implications for individual involvement in direct transport
- » **Implementation Geographies WG:** Provide a powerful demonstration of cross-state, cross organizational continuity of care
- » **Addressing & Directories WG:** Define an implementation neutral mechanism for addressing that enables provider/individual identification and enabling organization routing and also identify an directories specification
- » **Abstract Model Review WG:** Review and finalize a formal abstract model that all WGs can use to define common vocabulary

Review of Timeline



First Draft Specifications:



- Key User Stories
- Content Container Spec
- Security & Trust Spec
- Comprehensive HIE Service Descrp.
- Individual Involvement Service Descrp.
- Addressing Spec
- Abstract Model
- Edge Spec
- Deliverable: HISP-HISP & Source/Destination-HISP Service Description

•2nd Draft Specs

- June
 - Early Ref Implementation
 - Core Specifications and Service Descriptions
 - Interaction Model/Service Orchestration Model
- July
 - Ref Implementation
 - Testing Framework
 - Conformance Testing Scripts and Conformance Service
 - Ref Implementation Guides

- Ops/prod Draft Cert.
- Conformance Testing
- Core Messaging
- Policy Recommendation
- Process Recommendations

Weekly teleconferences

-  Face to face meetings
-  We Are Here

Review of Deliverables for July



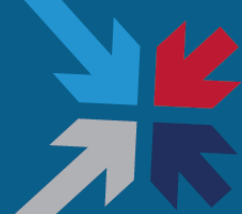
New Deliverables:

- » **Reference Implementations:** Provide a high quality open source reference implementation of the recommended specification
- » **Reference Implementation Guides:** Provide reference implementation guides for edge systems and routing systems (including sample code, testing and conformance documentation, legal and policy documentation, etc...)
- » **Conformance Testing Scripts and Services:** Provide conformance UATs and an automated conformance service for each concrete implementation
- » **Key Implementation Geographies:** The Implementation Geographies WG will finalize a set of key geographies for early real-world implementation
- » **Interaction Model/Service Orchestration Model:** The Abstract Model WG and the Concrete Implementation WG will provide an Interaction Model and Service Orchestration Model



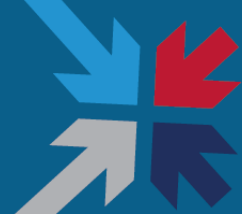
Updates to Existing Deliverables:

- » **HISP-HISP (Backbone) and Source/Destination-HISP (Edge) Specifications:** The Concrete Implementation WG will provide specifications for HISP-HISP (backbone) and Source/Destination-HISP
- » **Abstract Model:** The Abstract Model WG will provide an updated diagram and specification of an Abstract Model that all WGs can use to determine core architectural components, assumptions and terminology
- » **Key User Stories:** The User Story WG will provide a consistent, vetted set of User Stories
- » **Content Container Specifications:** The Content Packaging WG will define a few workable alternatives for content packaging so that patient data of mixed types can be packaged and sent
- » **Individual Involvement Recommendations:** The Individual Involvement WG will provide recommendations of how individuals can participate in NHIN Direct Project Services
- » **Security & Trust Specifications:** The Security & Trust WG will provide alternatives and issue relating to security and trust enablement via technology

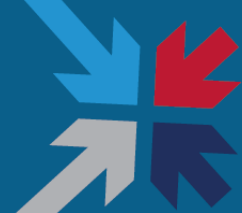


Recent Unified Proposal

Consensus around a Unified Proposal



- » Verbal consensus achieved within Concrete Implementation WG for a single unified approach going forward.
- » Proposed Approach: <http://nhindirect.org/DRAFT+Final+Proposal>
 - 1) SMTP backbone carrying S/MIME signed and encrypted messages.
 - 2) Integrated XDR interface/gateway for out-of-the-box integration with existing XDR implementations.
 - 3) Simple REST interface at edge.
 - 4) Client interface provided by exposure of standard POP/IMAP email services.
- » SMTP as minimum backbone protocol.
 - If better mechanism for communication exists (ex. XDR → XDR), an alternative protocol may be used as long as it supports SMTP.
- » For NHIN Exchange nodes, recommend use of NHIN Exchange native document submission (XDR)

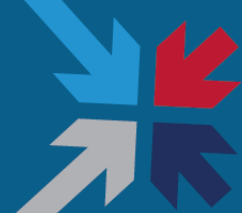


» **Backbone:** Requires SMTP

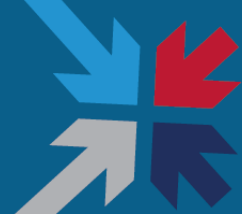
- Preserves NHIN Exchange Document Submission backbone for current & future participants in NHIN Exchange.
- Recognizes value of HISPs mutually agreeing on SOAP, REST, or other backbones, if can fulfill functional requirements for Source & Destination.

» **Content:** Requires MIME

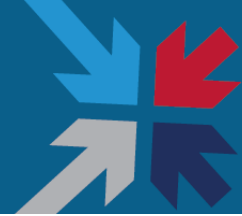
- Recommends use of rich content metadata using IHE XDM content package.



- » **Edge Connectivity:** Allows for variability at the edge. Allows for:
 - **Proprietary Edge:** Supports providers with enterprise EHRs, Software as a Service EHRs, or other systems that combine EHR and directed exchange capabilities.
 - **SOAP:** Supports providers who use full-featured EHRs or EHR Modules using IHE/SOAP web services
 - **REST:** Supports providers with EHRs or EHR modules who have not implemented a SOAP stack who wish to take advantage of direct messaging. Can be used to create novel integration points, such as web-based portals, for secure message-handling.
 - We propose to create a reference implementation of a simple web-based portal, as part of the pilot deliverables
 - **Email:** Supports providers without EHRs or EHR modules who still wish to participate in information exchange.

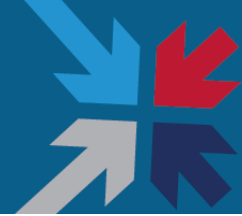


- » **Security:** Requires the use of S/MIME encrypted and signed content packages to preserve PHI confidentiality and security
 - Allows for message senders to ensure that only authorized recipients can view the PHI
 - Allows for message receivers to verify that only authorized senders sent the message.
 - Combined with S/MIME encrypted and signed Message Disposition Notification, allows for end-to-end non-repudiation of message delivery and receipt.
 - Requires TLS encrypted channels and authentication of all edge systems.



Calendar & Participation

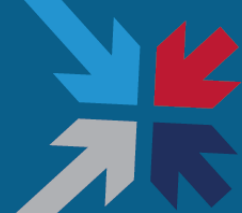
WG Schedule



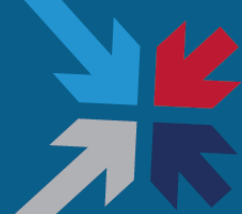
- » WGs adhere to the below schedule, meeting via teleconference on a weekly basis

WG	Meeting Time
User Story Review WG	Mondays 11am-12pm EST
Content Packaging WG	Wednesdays 1pm-2pm EST
Security & Trust WG	Thursdays 2pm-3pm EST
Comprehensive HIE Interop WG	Tuesdays 2pm-3pm EST
Individual Involvement WG	Thursdays 1pm-2pm EST
Implementation Geographies WG	Wednesdays 12 pm-1pm EST
Addressing & Directories WG	Wednesdays 3:30pm-4:30pm EST
Abstract Model Review WG	Wednesdays 11am-12pm EST
Concrete Implementation WG	Tuesdays 12pm-1pm EST

Close to 200 Implementation Group Participants



- » **PHR**
 - Microsoft (HV/Amalga)
 - Google
 - Relay Health
- » **EHR**
 - Allscripts
 - Cerner
 - eClinicalWorks
 - Epic
 - GE
 - McKesson (through RelayHealth)
 - Siemens
 - Greenway Medical Technologies
- » **HIT Association**
 - Clinical Groupware Collaborative
- » **Medical Associations**
 - American Academy of Family Physicians
- » **IDN**
 - Kaiser
 - BIDMC/CareGroup
- » **National Network**
 - SureScripts
 - Medplus/Quest
 - MedPATH Secure Networks
- » **State/Regional HIO**
 - CA (CAL eConnect)
 - CA (HHS)
 - CA (Redwood MedNet)
 - CO (CO State HIE)
 - FL (FL State HIE)
 - OR (Oregon HIT Oversight Council)
 - MA (NEHEN-CSC)
 - WA (Community Choice PHCO)
 - MAeHC
 - NY (HIXNY)
 - NY (Hudson Valley) (through MedAllies)
 - RIQI (Rhode Island Quality Institute)
 - TN (TN State HIE)
 - Carespark
 - HealthBridge
 - Community Choice Healthcare Network
- » **Federal**
 - Veteran's Administration
 - Social Security Administration
 - National Institutes of Health
 - VLER
 - Department of Defense
 - Centers for Medicare and Medicaid
 - MITA
- » **Consulting**
 - Gartner
 - Carespark/CGI Federal
 - Carespark/Serendipity Health
 - HLN Consulting, LLC
- » **HIE Technology**
 - RelayHealth (also PHR & EHR)
 - Axolotl
 - Mirth
 - VisionShare
 - GE
 - MedAllies
 - CSC
 - Medicity
 - Kryptiq
 - IBM/Open Health Tools
 - Secure Exchange Solutions
 - Informatics Corporation of America
 - Microsoft (HV/Amalga)
 - Oracle Health Sciences
 - Carespark/Anakam
 - Carespark/Mobile MD
 - MEDNET
 - EHR Doctors
 - FEI.com
 - Misys Open Source Solutions
 - Atlas Development
 - Argonne National Laboratory
 - Emdeon
 - Harris
 - High Pine Associates
 - Inpriva
 - Intel
 - Techsant Technologies



Q&A