# Agenda for June 10th

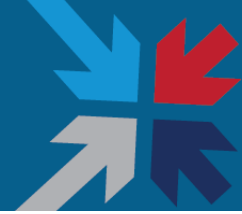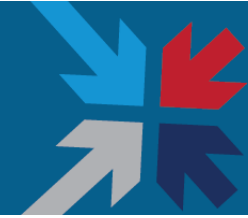| | | |
|---|---|---|
| » **Welcome and Introduction** | » Claudia Williams & Arien Malec | » 30 min |
| » **Concrete Implementation Presentations** | | |
| » **SMTP** | | » 20 min |
| » **IHE/SOAP** | | » 20 min |
| » **REST** | | » 20 min |
| » **XMPP** | | » 20 min |
| » **HITSC Review** | » Arien Malec | » 45 min |
| » **Wrap Up & Agenda for Next Day** | » Arien Malec | » 15 min |
| » **Happy Hour at Rock Bottom Brewery** | | |

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# Meeting Rules

» Schedule:
  - No breaks, bio-breaks as needed
» Roles:
  - Arien and Brian will facilitate
  - Jackie will take notes
  - Rich will play timekeeper & keep track of questions
» Questions:
  - *Remote:* Use Live Meeting Q&A function to ask questions
  - *Local:* Raise hand and Rich will keep the official comment queue
» Discussion:
  - Arien has authority to table items for later discussion, either by full group or at the WG level
» Consensus Process:
  - Assume consensus unless stated otherwise by participants (i.e. raise your hand if you don't like what is going on)

# 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 [Ask]

» **To vocalize a question**, please use the "raise your hand" function found in the upper right hand corner:

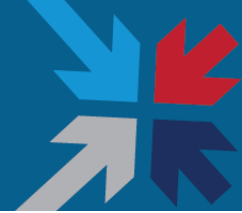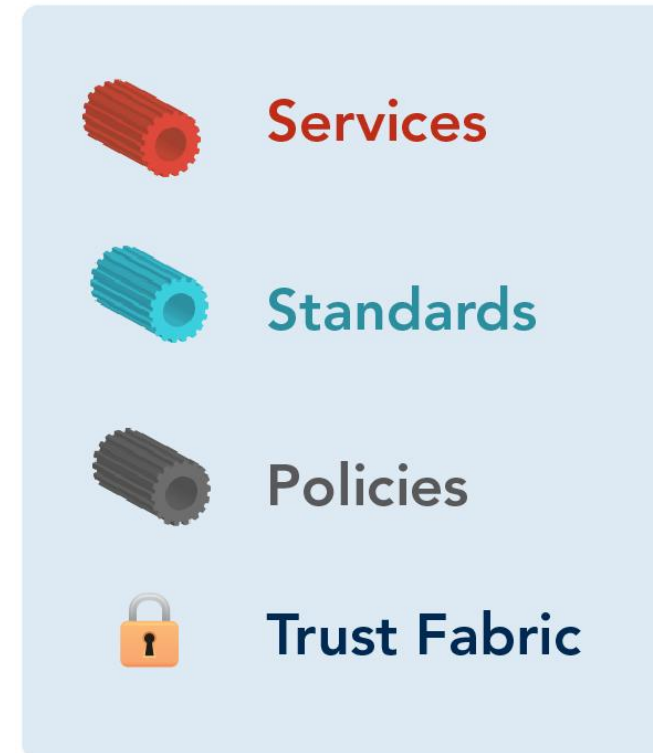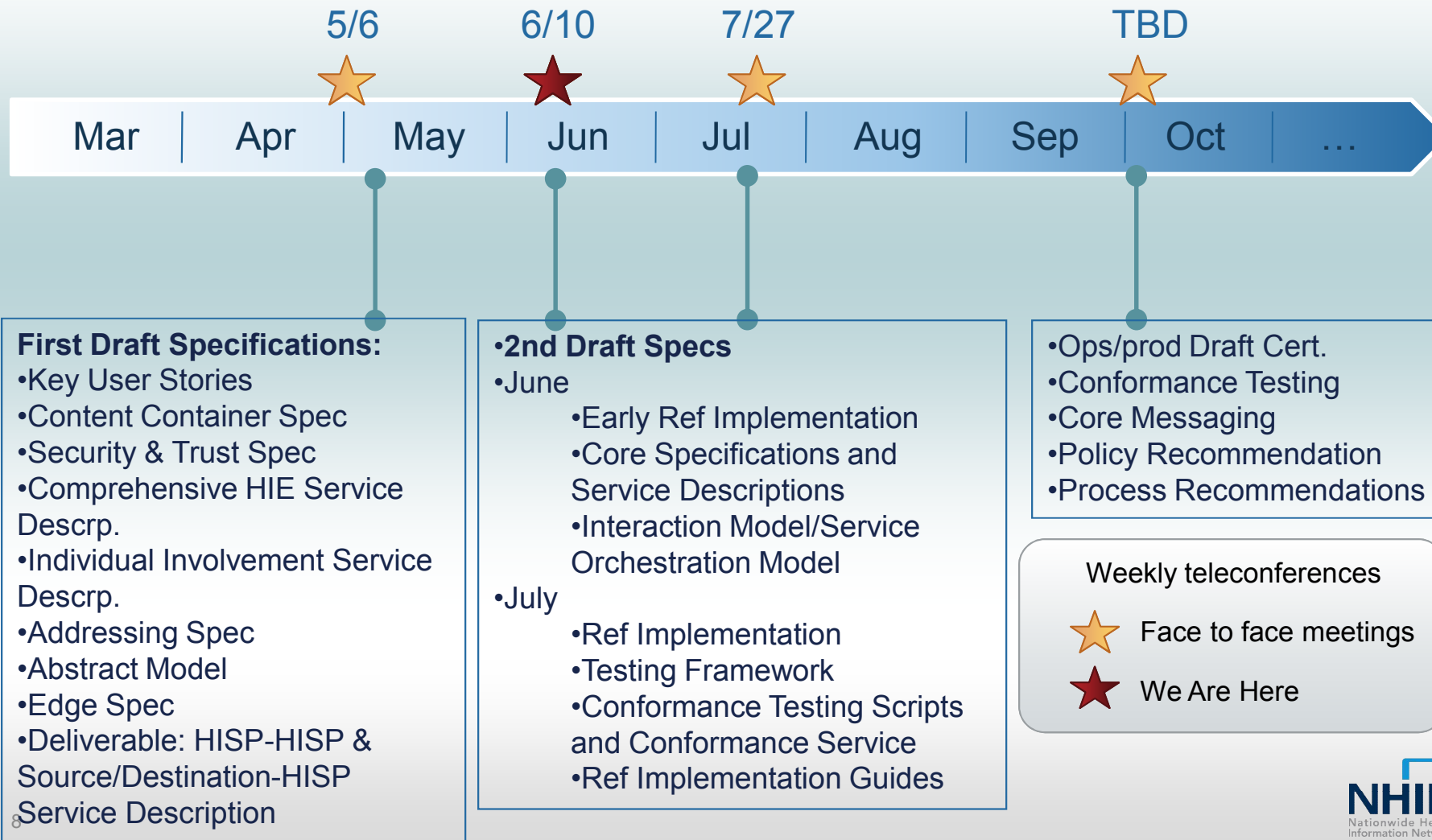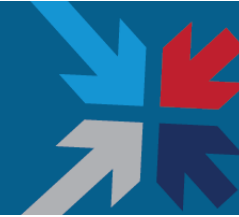Welcome – provided by Claudia Williams

Introduction

# 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 Timeline

| Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | ... |

5/6 ★ 6/10 ★ 7/27 ★ TBD ★

**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
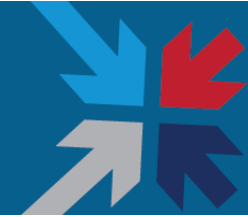★ We Are Here

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# 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

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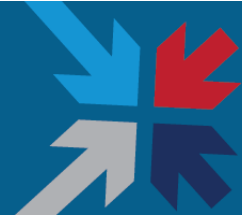Information Network

# Review of Today's Deliverables

**Key 6/10 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

» **Updated 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

» **Comprehensive HIE Service Description:** The Comprehensive HIE WG will provide Service Description of how to mix and match direct transactions and Comprehensive HIE/NHIN specifications and services capabilities at scale

» **Updated 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

» **Updated 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
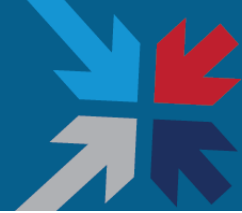
**Non-Key 6/10 Deliverables**

» **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 Interaction Model and Service Orchestration Model for:1) REST Implementation 2) SMTP Implementation 3) IHE Implementation

# Decisional Style: Pragmatic Consensus

» Each organization will actively state agreement/disagreement with the proposal:

- Actively support
- Willing to support
- Veto (with suggestions)

» If all votes are for active or willing support, the group has reached consensus

» If there are one or more vetoes, the group will proceed by identifying and addressing any concerns

- Reasonable vetoes should encourage us to fix any underlying issues
- Vetoes must be accompanied by concrete suggestions for fixes accommodating known interests

» If we truly can't reach consensus, we will adopt the approach that lets the most participants make progress – this should be a rare to non-existent recourse
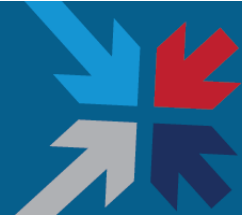
# Rules of the Road

» Every team gets to use their full presentation time however they'd like, but are welcome to use less than that if they run out of material and there are no further questions. Teams should leave plenty of time for questions, but questions should be held until the team is ready. Keep questions and answers concise.

» Leave the marketing speak at home. We aren't competing vendors pitching to win a business contract; we're trying to find a solution everyone can get behind.

» Be direct - if you disagree on technical or mission merits, say so openly, directly, and without rancor.

» Be charitable; assume the best of intentions and remember that many gaps in functionality or approach can be addressed as we go on.

» It is perfectly alright to suggest that any missing functionality is a "simple" matter to address; but if you do, be prepared to volunteer to make it so.

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Concrete Implementation  Team Presentations

# Concrete Implementation Workgroup

» **Purpose is to recommend one+ high level concrete implementation mapping to the abstract model for further development and use in the pilots**

» Key June 10th Deliverable:
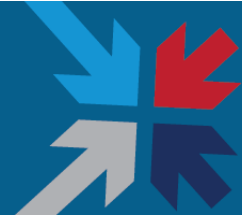   » HISP-HISP (backbone) & Source/Destination-HISP Specifications and Reference Implementations

» Leaders: Brian Behlendorf & Sean Nolan

» Four implementation teams:
   – SMTP: http://nhindirect.org/SMTP+Implementation+Development+Team
   – IHE / SOAP: http://nhindirect.org/IHE+Implementation+Development+Team
   – REST: http://nhindirect.org/REST+Implementation+Development+Team
   – XMPP: http://nhindirect.org/XMPP+Implementation+Development+Team

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HITSC Review and Feedback

# HIT Standards Committee Review

» In the Concrete Implementation Workgroup on May 25th, there was verbal support for a targeted set of reviews from well-known external reviewers

> http://nhindirect.org/Concrete+Implementation+Agenda+%26+Notes+from+05252010+Meeting
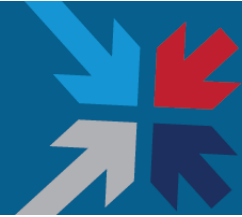
» At the HIT Standards Committee (HITSC) meeting on May 26th, I invited the HITSC to form a small review committee

» The final reviewers selected by HITSC were:

- Dixie Baker
- Ashley Corbin
- Carol Diamond
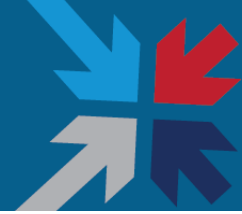- John Halamka
- Stan Huff
- Ken Mandl

# HITSC Review Process

» The review process and overview was published on June 1st

http://nhindirect.org/HITSC+Review

» "As we evaluate the concrete implementations, it would be helpful to get strong, independent review of the options. As part of that review, we are looking for the following:

- Feedback on strong and weak aspects of each concrete implementation proposal with respect to the suggested evaluation criteria

- Feedback on the decisional criteria themselves (including suggestions of additional evaluation criteria)

- Evaluation of suitability of each concrete implementation to meet the overall project goals

- Recommendation to the full NHIN Direct Implementation Group (including recommendations on implementation as well as overall process recommendations)"

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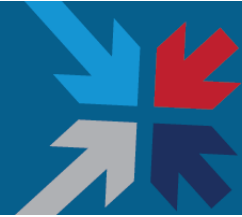Nationwide Health
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# HITSC Review Process

"The review team's evaluations will be provided to the NHIN Direct Implementation Group as part of a set of decisions we are making on June 10th and 11th; the full Implementation Group will take the review comments into strong consideration when making the final decision on a final specification or set of interoperable specifications"

# HITSC Review Summary Recommendation

» 1.  We recommend further development and piloting of the REST implementation, with SMTP email provided by the HISP as an option

- • Verbal comments by Dixie: SMTP option should be under end-to-end security control of the HISP

» 2.  We recommend that no implementation move forward to a pilot until the policy framework, and associated security requirements, being developed by the Privacy and Security Tiger Team are in place
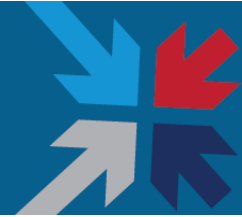
# HITSC: Detailed Feedback

» IHE

- May be overly complex as "simple" interoperability
- XDR designed for point-to-point exchange of patient-specific XDS documents; not well suited for exchanges of MU quality reports
- Minimizing disclosure of PHI should be a fundamental policy [reference to inclusion of patient data in XDS metadata package that contains address information]
- Also, unnecessarily exposes and manipulates PHI [reference to metadata extraction], presenting both confidentiality and integrity risks

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# HITSC: Detailed Feedback

» REST
- Simple
- Establishment of TLS link between source/destination end users and source/destination HISPs is not well defined
- Accommodates asymmetric encryption only; symmetric encryption may be needed for high-bandwidth exchanges

» SMTP
- May be too "simple"
- I believe this implementation leaves too much to the discretion of the individual user
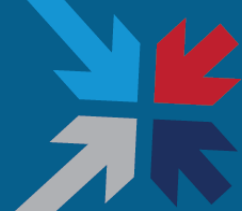- Difficult to integrate with NHIN Exchange

» XMPP
- Uses an arbitrary set of authentication schemes, none of which use X.509 certificates
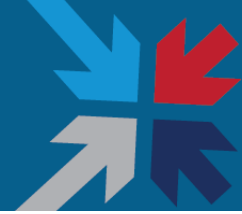- Eliminate from further consideration

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Wrap Up & Agenda for Next Day

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# Agenda for June 11ᵗʰ

| | | | | | |
|---|---|---|---|---|---|
| » | **Welcome** | » | Arien Malec | » | 15 min |
| » | **Security & Trust WG Update** | » | Brian Behlendorf | » | 35 min |
| » | **Concrete Implementation Team Presentations on Security & Trust** | | | » | 40 min |
| » | **Comprehensive HIE WG Update** | » | Vassil Peytchev | » | 35 min |
| » | **Concrete Implementation Team Presentations on Comprehensive HIE** | | | » | 40 min |
| » | **Lunch** | | | » | 70 min |
| » | **Concrete Implementation Discussion and Decision** | | | » | 90 min |
| » | **Overview of Next Phase and Implementation Geographies WG Update** | » | Arien Malec and Paul Tuten | » | 75 min |
| » | **Wrap Up** | » | Arien Malec | » | 15 min |

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# Happy Hour

» **Please join us for happy hour at Rock Bottom Brewery at 6:30 tonight!**

» Reservation is under the name "NHIN Direct"

» Rock Bottom Brewery Address:

550 106th Avenue Northeast
Bellevue, WA 98004-5084
(425) 462-9300