



State of New Hampshire

Health Information Exchange Planning and Implementation Project

Summit 2 / Phase 3 “Converging on Solutions”  
Discussion document for Technical Infrastructure Workgroup

July 22, 2010

# Agenda

Opening remarks, review of work to date, review of initial consensus areas

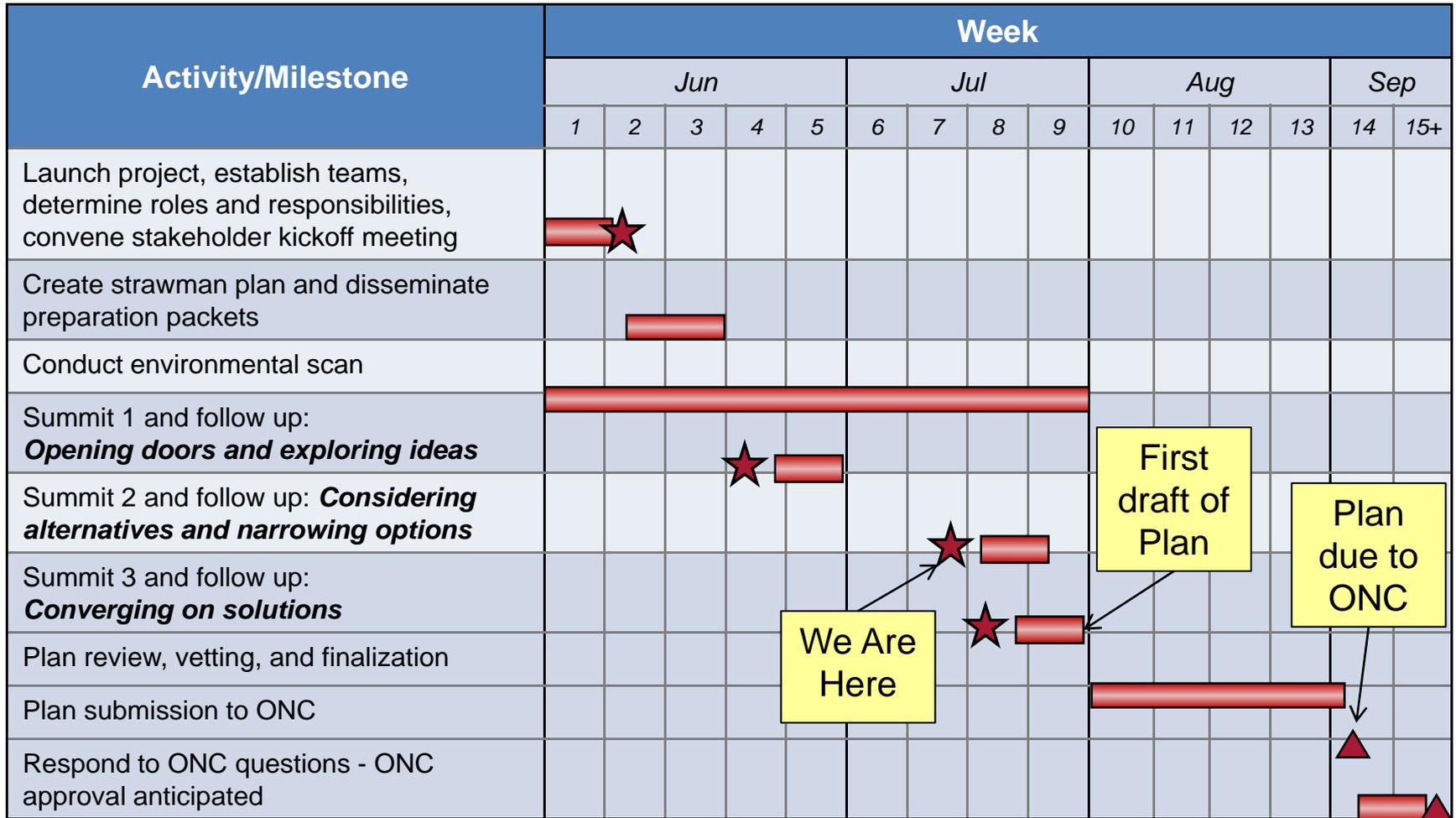
Converging on Solutions – Generating content for the strategic and operational plans

Wrap up and next steps

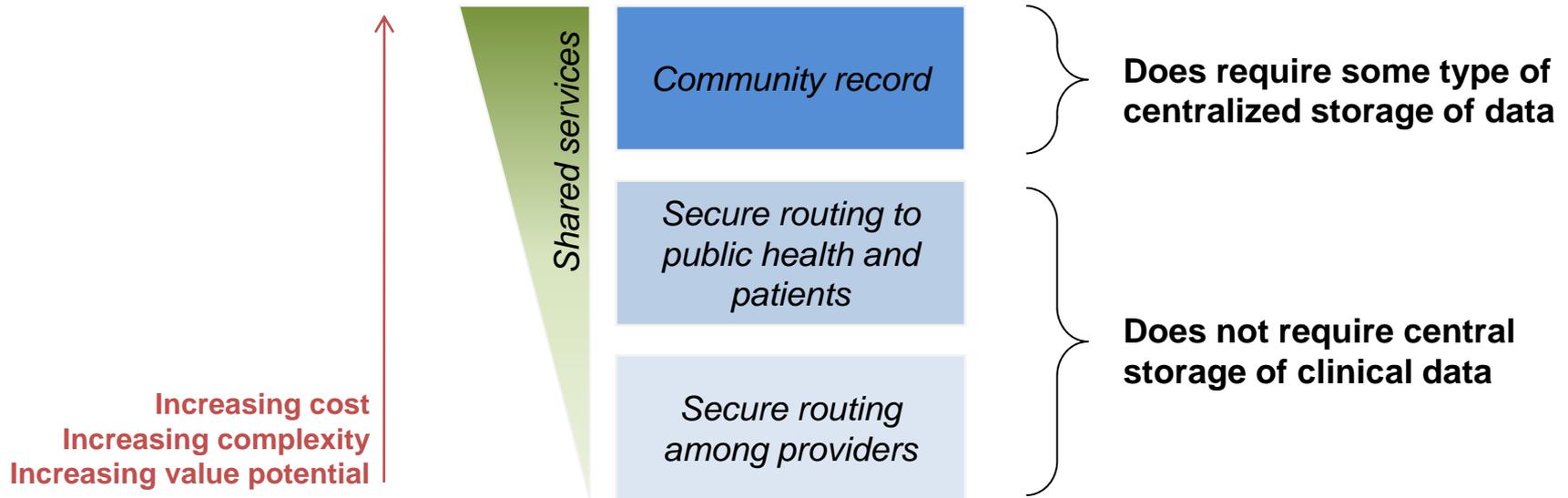
Appendix

# HIEPI - MAeHC Project Schedule

## Segment 1 Timeline: June 1 – October 31



# Review – Building blocks



# Review - Strawman phasing

- Is the transaction legal under current NH law?
- Are the technology, business, or legal complexities manageable given a short lead time?
- Can it be developed and launched within the ONC HIE funding budget?
- Is there an immediate market need for the transaction?
- Is there a lack of a clear substitute in the market today?

↓ No

- If it's illegal today, do we expect that it could be made legal in 2011 (e.g., is the transaction otherwise required in the market or by law, e.g., public health)?
- Is there expected to be an important market need for the transaction?
- Can technology, business, or legal complexities be resolved in parallel with Phase 1 implementations?
- Is there a continued lack of a clear substitute in the market today?

↓ No

- If it's illegal today, do we expect that it could be made legal in 2011 or beyond?
- Is there expected to be an important market need for the transaction?
- Can technology, business, or legal complexities be resolved in parallel with Phase 1 and 2 implementations?
- Is there a continued lack of a clear substitute in the market today?

Yes →

Phase 1

Yes →

Phase 2

Yes →

Phase 3

# Review - Strawman phasing (pending further input and environmental scan data)

## Phase 1



- A “push” network that allows secure, standardized, low-cost sending and receiving of clinical documents among providers for treatment purposes
  - Across hospital networks (discharge summaries, labs, etc)
  - Manual record location across provider organizations
  - Within hospital networks for those hospitals who opt for it
  - Outside of hospital networks for offices and clinics who are not part of hospital networks today
- A standing, multi-stakeholder governance process to guide decision-making going forward
- A development program to build Phase 2 capabilities

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## Phase 2



- Extend “push” network to include public health and other healthcare entities (e.g., long-term care, etc)
- A “pull” network to allow electronic queries of CCD-standardized patient information through a Record Locator Service
- Development program to build Phase 3 capabilities
- Business development to build shared services capabilities

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## Phase 3



- Extend “push” network to include patients, other entities
- Extend “pull” network to allow centrally orchestrated merging of records across clinical entities
- Advanced shared services capabilities

# Review - Use case prioritization

HIE Building Block	What	From whom	To whom	Legality	Difficulty	Demand for service	Current market availability	Phasing
Secure routing to providers	Consult note -- Summary of care record	Specialist	PCP	1	1	1	2	1
Secure routing to providers	Hospital admission notification	Hospital	Referring physician and/or PCP	1	1	1	2	1
Secure routing to providers	Hospital admission notification	Hospital	Referring Hospital	1	1	1	3	1
Secure routing to providers	Hospital discharge summary	Hospital	Referring physician and/or PCP	1	1	1	2	1
Secure routing to providers	Hospital discharge summary	Hospital	Hospital	1	1	1	3	1
Secure routing to providers	Hospital ED visit summary	Hospital	Referring physician and/or PCP	1	1	1	2	1
Secure routing to providers	Imaging reports	Hospital	PCP or specialist	1	1	1	2	1
Secure routing to providers	Key clinical information summary	Hospital	Hospital	1	1	1	3	1
Secure routing to providers	Key clinical information summary	PCP or specialist	Hospital	1	1	1	2	1
Secure routing to providers	Lab results	Hospital	PCP or specialist	1	1	1	2	1
Secure routing to providers	Referral -- Summary of care record	PCP	Specialist	1	1	1	2	1
Secure routing to providers	Referral -- Summary of care record	PCP or specialist	Hospital	1	1	1	2	1
Secure routing to providers	Request for key clinical information	Hospital	Hospital	1	1	1	3	1
Secure routing to providers	Request for key clinical information	Hospital	PCP or specialist	1	1	1	2	1

HIE Building Block	What	From whom	To whom	Legality	Difficulty	Demand for service	Current market availability	Phasing
Secure routing to providers	Hospital discharge summary	Hospital	Other care settings	1	2	1	3	2
Secure routing to providers	lab order	PCP or specialist	Hospital	1	2	2	3	2
Secure routing to providers	lab results	Public health lab	Hospital	1	2	3	3	2
Secure routing to providers	lab results	Public health lab	PCP or specialist	1	2	3	3	2
Expanded secure routing	Immunization record	Hospital	Public health	3	1	1	3	2
Expanded secure routing	Immunization record	PCP or specialist	Public health	3	1	1	3	2
Expanded secure routing	laboratory ordering decision support	Payers	PCP or specialist and hospitals	3	3	1	2	2
Expanded secure routing	Reportable lab results	Hospital	Public health	3	1	2	3	2
Expanded secure routing	Syndromic surveillance data	Hospital	Public health	3	1	2	3	2
Expanded secure routing	Syndromic surveillance data	PCP or specialist	Public health	3	2	2	3	2
Expanded secure routing	Reportable conditions	PCP or specialist	Public health	3	2	2	3	2
Expanded secure routing	Reportable conditions	Hospital	Public health	3	1	2	3	2
Community record	Community record	Multiple sources	Hospital	1	3	2	3	2
Community record	Community record	Multiple sources	PCP or specialist	1	3	2	3	2
Community record	Medication history	Other clinical sources	Hospital	1	3	1	3	2
Community record	Medication history	Other clinical sources	PCP or specialist	1	3	1	3	2

# Review - Use case prioritization (continued)

HIE Building Block	What	From whom	To whom	Legality	Difficulty	Demand for service	Current market availability	Phasing
Secure routing to providers	eRX	PCP or specialist	Pharmacy	1	3	1	1	3
Secure routing to providers	Images	Hospital	PCP or specialist	1	3	2	2	3
Secure routing to providers	Images	Imaging center	PCP or specialist	1	3	3	3	3
Secure routing to providers	Imaging order	PCP or specialist	Imaging center	1	3	3	3	3
Secure routing to providers	Imaging reports	Imaging center	PCP or specialist	1	2	3	3	3
Secure routing to providers	Lab order	PCP or specialist	National lab	1	3	2	1	3
Secure routing to providers	Lab results	National lab	PCP or specialist	1	3	2	1	3
Secure routing to providers	Medication history	Pharmacy	Hospital	1	3	1	1	3
Secure routing to providers	Medication history	Pharmacy	PCP or specialist	1	3	1	1	3
Expanded secure routing	Claims submission & eligibility checking	Hospital	Health plan	3	3	3	1	3
Expanded secure routing	Claims submission & eligibility checking	PCP or specialist	Health plan	3	3	1	1	3
Expanded secure routing	Discharge instructions	Hospital	Patient	3	3	1	1	3
Expanded secure routing	General medical summary	PCP or specialist	Patient	3	3	1	1	3
Expanded secure routing	Post-visit summary	PCP or specialist	Patient	3	3	1	1	3
Expanded secure routing	Public health alerts	Public health	Hospital	3	3	2	3	3
Expanded secure routing	Public health alerts	Public health	PCP or specialist	3	3	2	3	3
Expanded secure routing	Quality measures	Hospital	CMS and/or NH Medicaid	3	3	3	2	3
Expanded secure routing	Quality measures	PCP or specialist	CMS and/or NH Medicaid	3	3	3	3	3
Expanded secure routing	Radiation exposure report	Hospital	Radiation exposure registry	3	3	3	3	3
Expanded secure routing	Radiation exposure report	Imaging center	Radiation exposure registry	3	3	3	3	3
Community record	Public health case investigation	Hospital	Public health	3	3	3	3	3
Community record	Public health case investigation	PCP or specialist	Public health	3	3	3	3	3

## Initial consensus areas from each workgroup

### **Governance Workgroup Consensus Areas**

- Considering “Public Instrumentality” as organizational form modeled after NH Healthy Kids (independent 501(c)3 with explicit link to State government)
- Inclusive stakeholder governance body to undertake governance functions of policy setting, financial oversight and control, and operational oversight
- Equal governance representation (as opposed to differential representation based on financial contribution)
- Representation by stakeholder group (as opposed to individual)

### **Finance Workgroup Consensus Areas**

- Federal grant to be treated as one-time startup investment with no expectation for ongoing operational revenue
- Project to proceed incrementally, seeking to generate value at each step
- Entity to be treated as a going concern with a diverse Federal match and ongoing revenue model that includes state funding and membership contributions from all stakeholders

## Initial consensus areas from each workgroup (continued)

### **Business and Technical Operations Workgroup Consensus Areas**

- Identified and vetted “use cases” that describe health information transactions (including stakeholders involved and information exchanged)
- Mapped use cases to building blocks to facilitate discussions and decisions of all other workgroups
- Prioritized use cases based on legality, Legality, Difficulty (Technical, Business/Governance, Legal complexity), Demand (Stakeholder interest; federal/state requirements), and Current market availability
- Began initial discussions regarding operations of HIE

### **Legal and Policy Workgroup Consensus Areas**

- Currently defining Consent, Audit, Authorization, Authentication, Access, and Contracts considerations for phase 1 health information transactions (transactions that are within current NH State and Federal law)
- Identifying areas where the HIE could improve privacy and security of health information exchange over current practice
- Identifying areas where public health reporting is both required by NH law and prohibited from the HIE

## Initial consensus areas from each workgroup (continued)

### **Public Health Workgroup Consensus Areas**

- ❑ Recognition that exchange of public health information using the HIE is currently prohibited by NH State law
- ❑ Identification of information that could be gathered via the HIE in the future that is of high value to public health including elements required by the ONC (Immunization information, Biosurveillance, Reportable Conditions)
- ❑ Consensus on approach that provides minimal exposure of personal health information (PHI) – (For example, public health may receive the number of H1N1 diagnoses for a given region and may go through an exception process to identify the provider and patient for follow-up action)
- ❑ Identifying areas where the HIE could improve privacy and security of public health information reporting over current practice as well as efficiency and cost of information gathering

# Initial consensus areas from each workgroup (continued)

## Technical Infrastructure Workgroup Consensus Areas

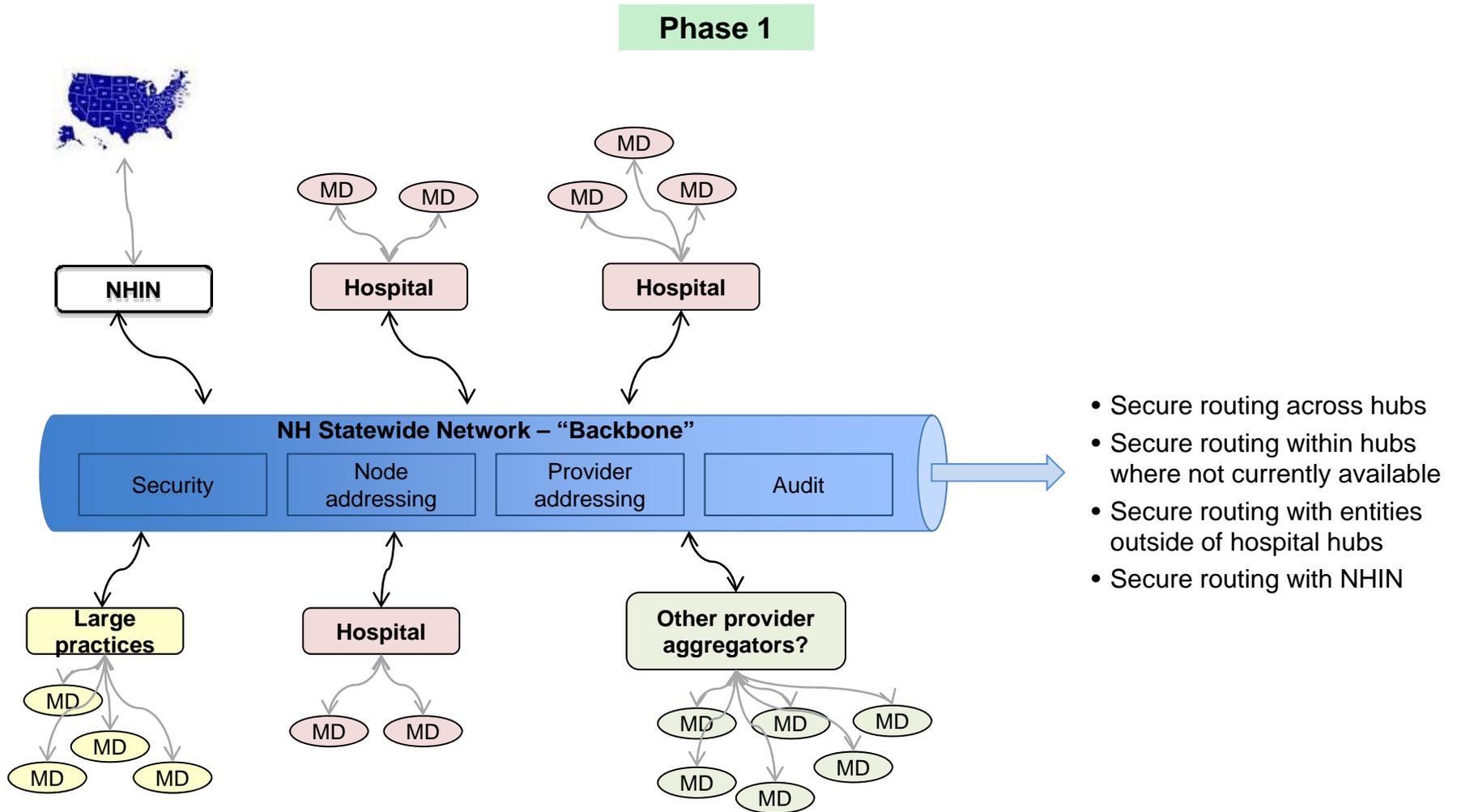
### ❑ Incremental approach

- Begin with legal transactions that are feasible and affordable and that can help NH's eligible providers and hospitals achieve meaningful use
- Build upon foundation as allowed by NH law and in line with financial model

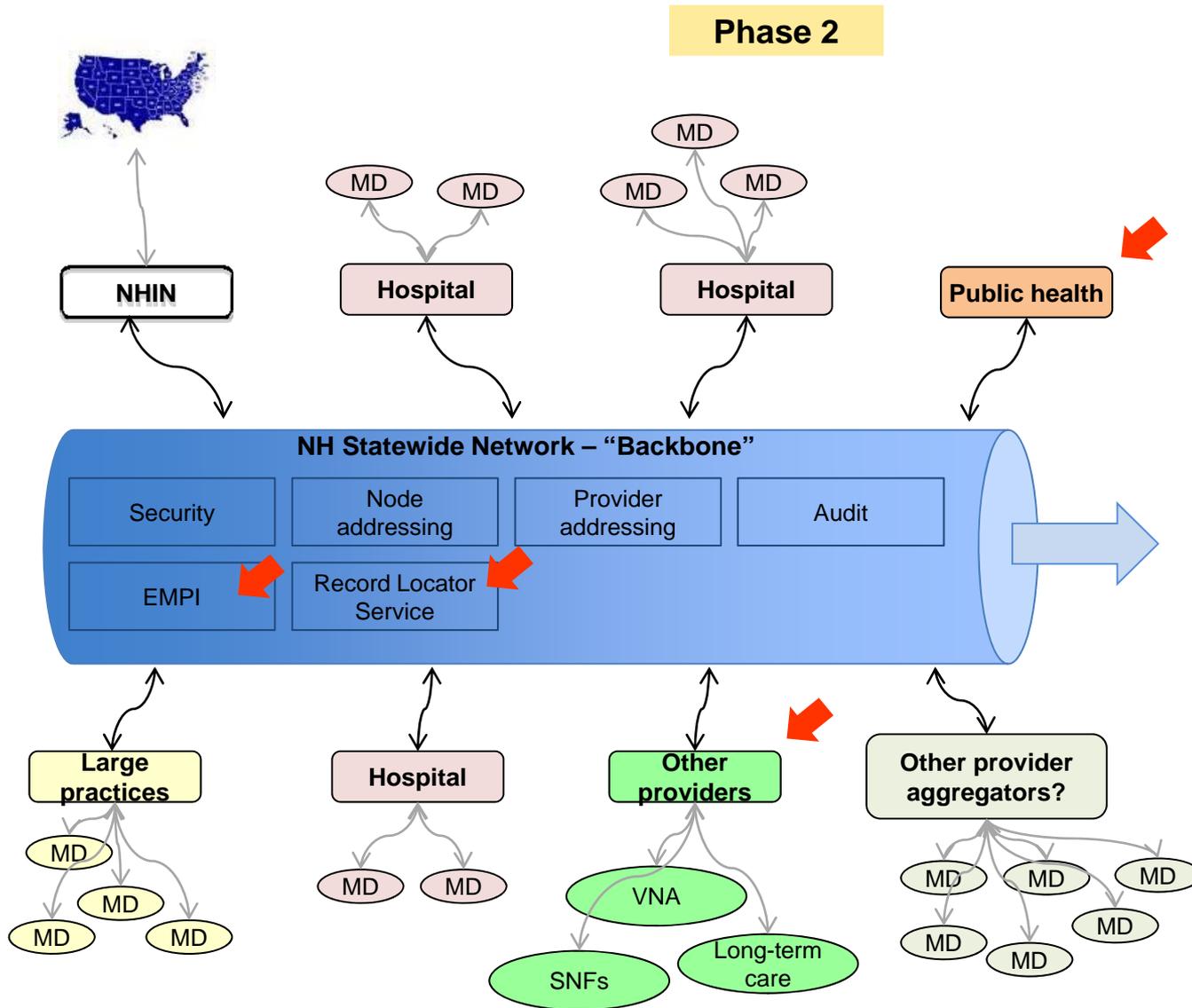
### ❑ Initial consensus areas for phase 1 foundation – to be confirmed this week

- Hospital and other healthcare systems as brokers for transactions
- Statewide HIE Narrowly Facilitates Exchange (Lean infrastructure)
- Use NHIN Direct as Protocol for Central Exchange
- Allow local and global addressing of endpoints
- Protected Health Information not exposed to central HIE
- Trust relationships are brokered by HIE and/or local networks
- Transport Layer Security is used as a baseline of transaction encryption - other encryption can be layered on
- Transactions are unsolicited and unidirectional
- No Consent Representation required for transaction (consent management responsibility federated to brokers and not enforced by HIE)
- Acknowledgement of successful transactions sent to initiator
- Local transactions happen according to local architectural and policy frameworks

# Emerging approach is to create “Hub of Hubs” tying together existing institutions (emerging Phase 1 consensus)

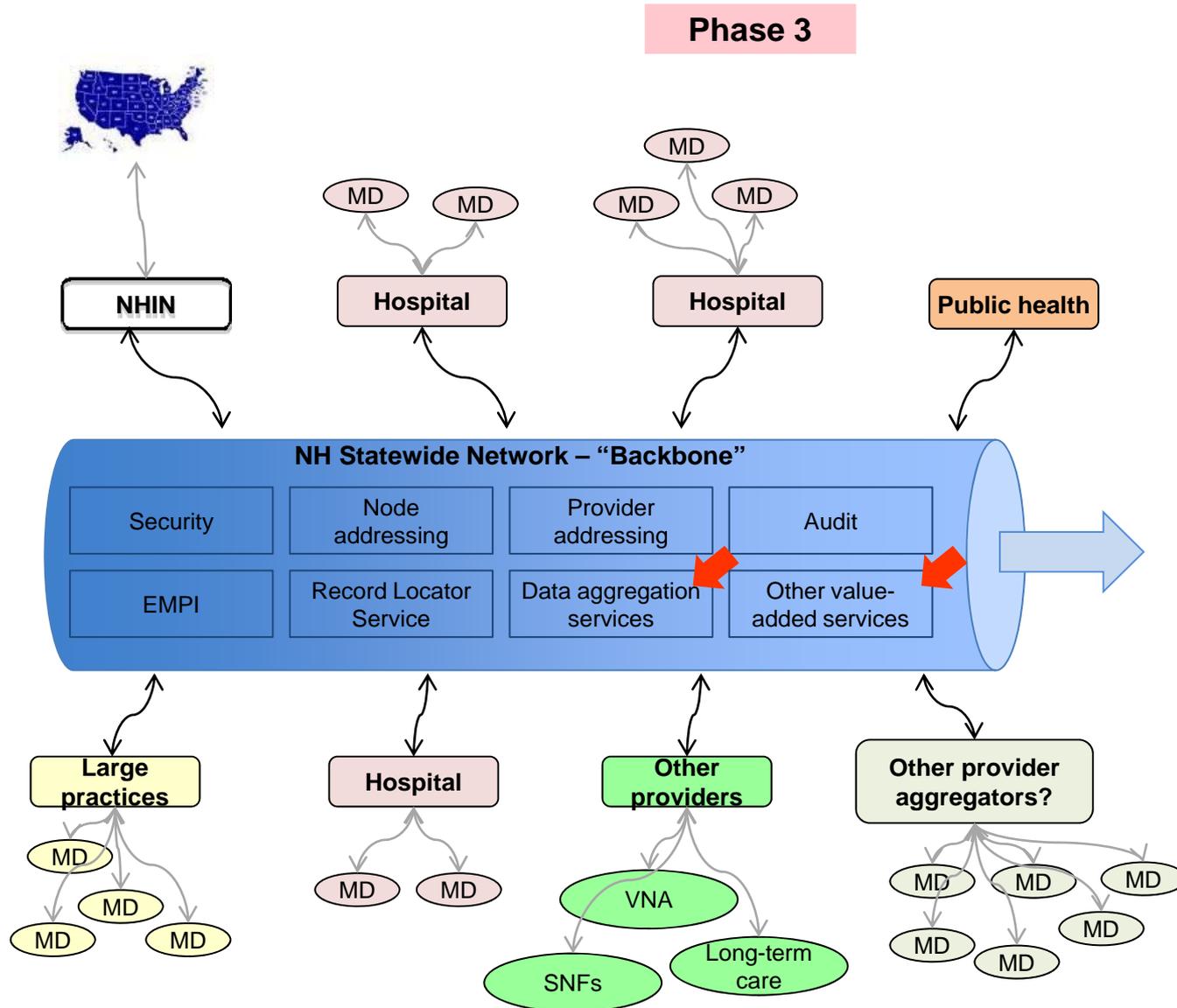


# Emerging approach is to create “Hub of Hubs” tying together existing institutions (Phase 2 strawman – still to be vetted with WGs)



- Secure routing across hubs
- Secure routing within hubs where not currently available
- Secure routing with entities outside of hospital hubs
- Secure routing with NHIN
- **Secure routing to public health**
- **Secure routing to other clinical entities**
- **Record locator service for patient information queries**

# Emerging approach is to create “Hub of Hubs” tying together existing institutions (Phase 3 strawman – still to be vetted with WGs)



- Secure routing across hubs
- Secure routing within hubs where not currently available
- Secure routing with entities outside of hospital hubs
- Secure routing with NHIN
- Secure routing to public health
- Secure routing to other clinical entities
- Record locator service for patient information queries
- Centrally orchestrated merging of records across clinical entities
- Quality registries
- Other...

# Agenda

Opening remarks, review of work to date, review of initial consensus areas

Converging on Solutions – Generating content for the strategic and operational plans

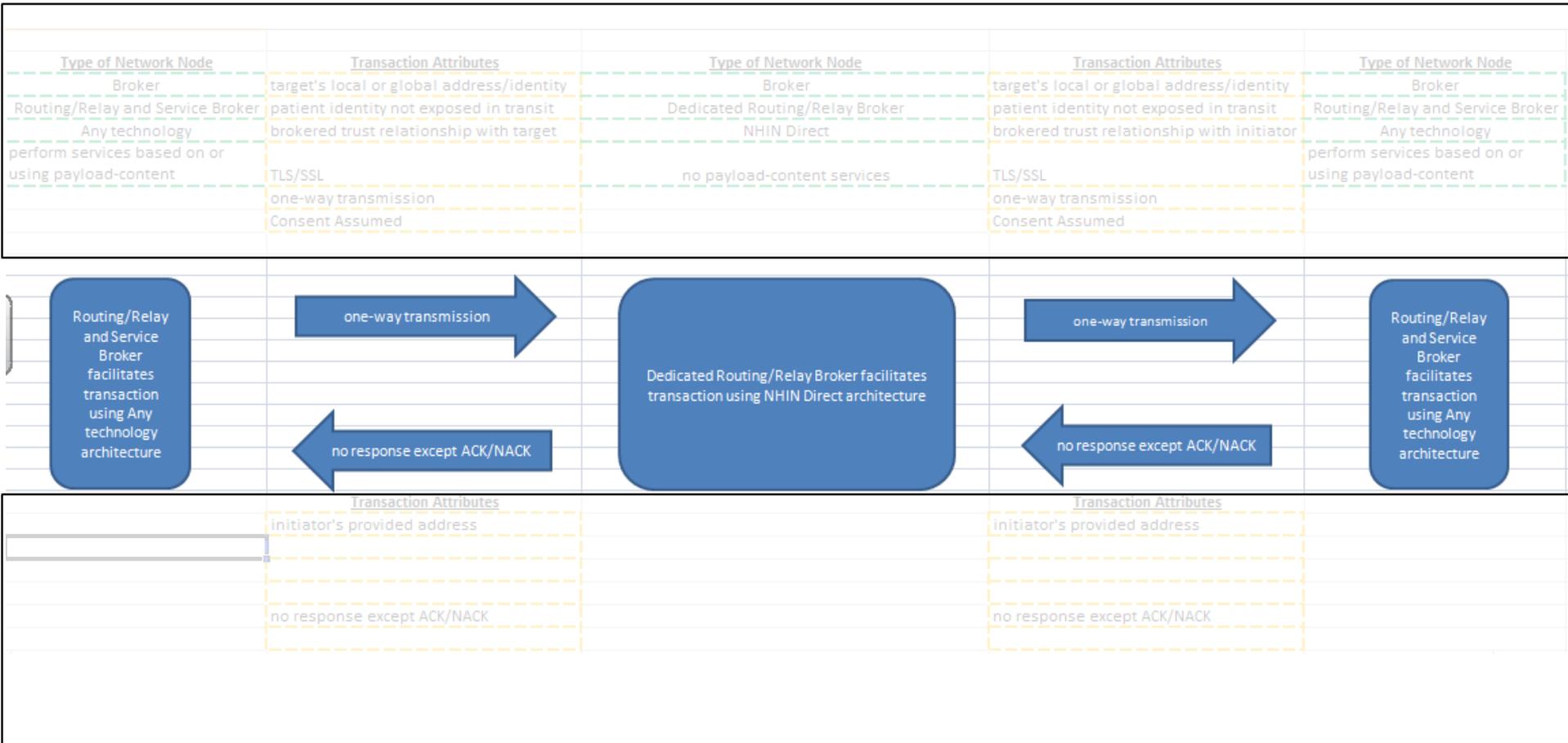
Wrap up and next steps

Appendix

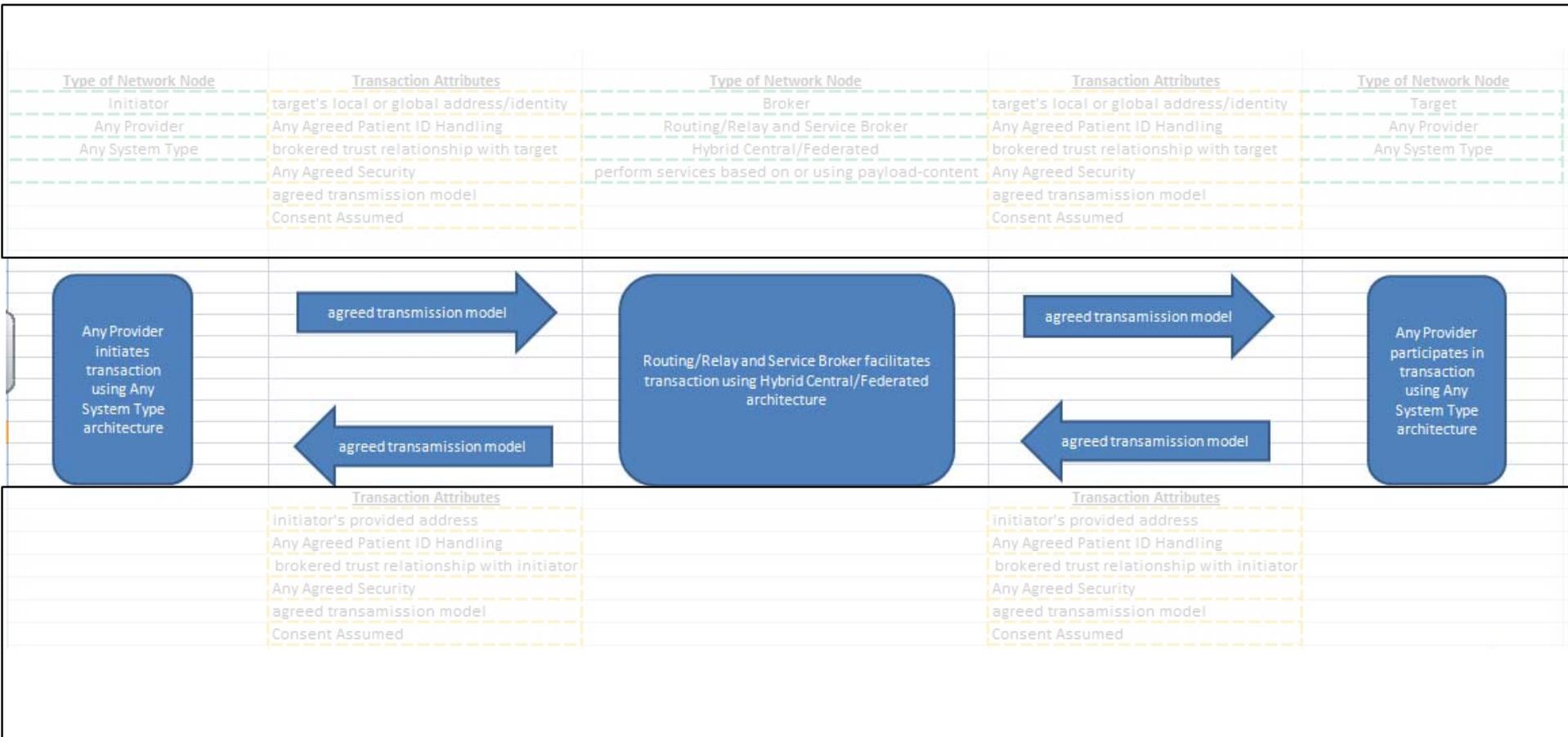
## Technical Infrastructure Workgroup – Topics for Convergence

1. Hospital and other healthcare systems as brokers for transactions
2. Statewide HIE Narrowly Facilitates Exchange (Lean infrastructure)
3. Use NHIN Direct as Protocol for Central Exchange
4. Allow local and global addressing of endpoints
5. Protected Health Information not exposed to central HIE
6. Trust relationships are brokered by HIE and/or local networks
7. Transport Layer Security is used as a baseline of transaction encryption - other encryption can be layered on
8. Transactions are unsolicited and unidirectional
9. No Consent Representation required for transaction (consent management responsibility federated to brokers and not enforced by HIE)
10. Acknowledgement of successful transactions sent to initiator
11. Local transactions happen according to local architectural and policy frameworks

# Discussion Diagram #1: Transaction Brokering



# Discussion Diagram #2: Local Edge Delivery



# Decision #1: Secure Routing (Brokered Directed Point-to-Point Transactions)

HIE Building Block	What	From whom	To whom	Phasing
Secure routing to providers	Consult note -- Summary of care record	Specialist	PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring Hospital	1
Secure routing to providers	Hospital discharge summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital discharge summary	Hospital	Hospital	1
Secure routing to providers	Hospital ED visit summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Imaging reports	Hospital	PCP or specialist	1
Secure routing to providers	Key clinical information summary	Hospital	Hospital	1
Secure routing to providers	Key clinical information summary	PCP or specialist	Hospital	1
Secure routing to providers	Lab results	Hospital	PCP or specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP	Specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP or specialist	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	PCP or specialist	1

## Decision #2: Structured Data (Payloads with discrete data elements using industry standards)

HIE Building Block	What	From whom	To whom	Phasing
Secure routing to providers	Consult note -- Summary of care record	Specialist	PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring Hospital	1
Secure routing to providers	Hospital discharge summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital discharge summary	Hospital	Hospital	1
Secure routing to providers	Hospital ED visit summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Imaging reports	Hospital	PCP or specialist	1
Secure routing to providers	Key clinical information summary	Hospital	Hospital	1
Secure routing to providers	Key clinical information summary	PCP or specialist	Hospital	1
Secure routing to providers	Lab results	Hospital	PCP or specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP	Specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP or specialist	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	PCP or specialist	1

Continuity of Care Document  
(CCD),

Continuity of Care Record  
(CCR?)

## Decision #3: Provider Network, but Agnostic to Provider Type

HIE Building Block	What	From whom	To whom	Phasing
Secure routing to providers	Consult note -- Summary of care record	Specialist	PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital admission notification	Hospital	Referring Hospital	1
Secure routing to providers	Hospital discharge summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Hospital discharge summary	Hospital	Hospital	1
Secure routing to providers	Hospital ED visit summary	Hospital	Referring physician and/or PCP	1
Secure routing to providers	Imaging reports	Hospital	PCP or specialist	1
Secure routing to providers	Key clinical information summary	Hospital	Hospital	1
Secure routing to providers	Key clinical information summary	PCP or specialist	Hospital	1
Secure routing to providers	Lab results	Hospital	PCP or specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP	Specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP or specialist	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	Hospital	1
Secure routing to providers	Request for key clinical information	Hospital	PCP or specialist	1

No technical implications to architecture based on type of provider organization, nor type of system used at edge (e.g. – EHR, HIS, etc.)

# Consensus Effort: Architecture of Transaction

HIE Building Block	What	From whom		To whom	Phasing
Secure routing to providers	Consult note -- Summary of care record	Specialist		PCP	1
Secure routing to providers	Hospital admission notification	Hospital		Referring physician and/or PCP	1
Secure routing to providers	Hospital admission notification	Hospital		Referring Hospital	1
Secure routing to providers	Hospital discharge summary	Hospital		Referring physician and/or PCP	1
Secure routing to providers	Hospital discharge summary	Hospital		Hospital	1
Secure routing to providers	Hospital ED visit summary	Hospital		Referring physician and/or PCP	1
Secure routing to providers	Imaging reports	Hospital		PCP or specialist	1
Secure routing to providers	Key clinical information summary	Hospital		Hospital	1
Secure routing to providers	Key clinical information summary	PCP or specialist		Hospital	1
Secure routing to providers	Lab results	Hospital		PCP or specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP		Specialist	1
Secure routing to providers	Referral -- Summary of care record	PCP or specialist		Hospital	1
Secure routing to providers	Request for key clinical information	Hospital		Hospital	1
Secure routing to providers	Request for key clinical information	Hospital		PCP or specialist	1

How are transactions conducted across the state, among disparate entities in a standard manner?

# Consensus Point #1: Hospital Systems as Edge System Brokers

**A central statewide HIE exists to facilitate exchange between local networks with established infrastructure**

**Open question: Is there a default network for the disenfranchised?**

State HIE

Routing/Relay and Service Broker facilitates transaction using Any technology architecture

one-way transmission

Dedicated Routing/Relay Broker facilitates transaction using NHIN Direct architecture

one-way transmission

Routing/Relay and Service Broker facilitates transaction using Any technology architecture

no response except ACK/NACK

no response except ACK/NACK

**Implication:**

- All local ambulatory providers are, or will eventually become, a part of a local network, likely facilitated by a hospital/hospital-system (or possibly the state)

Provider Aggregator (e.g. Hospital System)

Provider Aggregator (e.g. Hospital System)

## Consensus Point #2: State HIE Narrowly Facilitates Exchange

**The HIE is minimal infrastructure to support routing of transactions, logging of transactions (without payload details), and security / trust brokering**

Routing/Relay and Service Broker facilitates transaction using Any technology architecture



Transaction Attributes

initiator's provided address

no response except ACK/NACK

Type of Network Node

Broker

Dedicated Routing/Relay Broker

NHIN Direct

no payload-content services

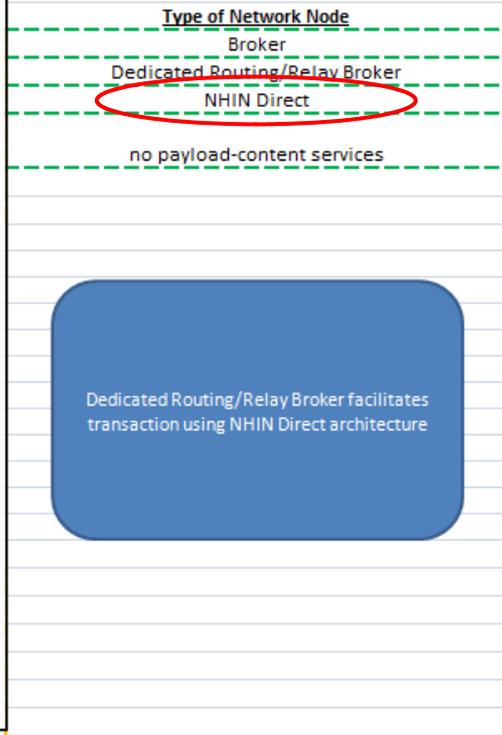
Dedicated Routing/Relay Broker facilitates transaction using NHIN Direct architecture

**Implication:**

- HIE could maintain trust relationships with proxies (i.e. hospital networks), or facilitate initial credential exchange. Probably better to let HIE maintain trust to proxies for flexibility in logging evolution, etc.
- Can federate logging of patient identity out to proxies who can keep it or push to edges

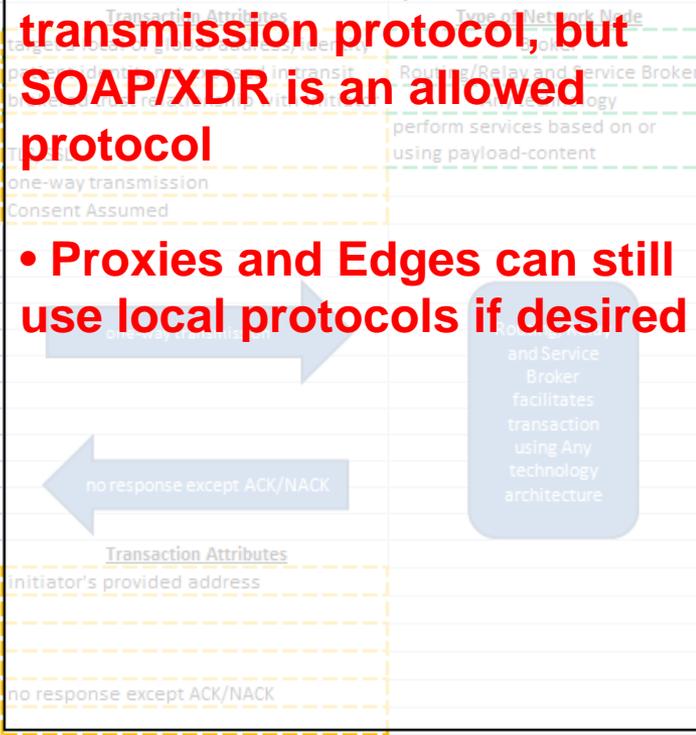
# Consensus Point #3: Use NHIN Direct as Protocol for Central Exchange

**NHIN Direct is the emerging standard for point-to-point exchange, and will have reference pilots (which the state can participate in), addressing standards, open source code and functional modules, and a list of vendors that support the protocol at the edge and as intermediaries**



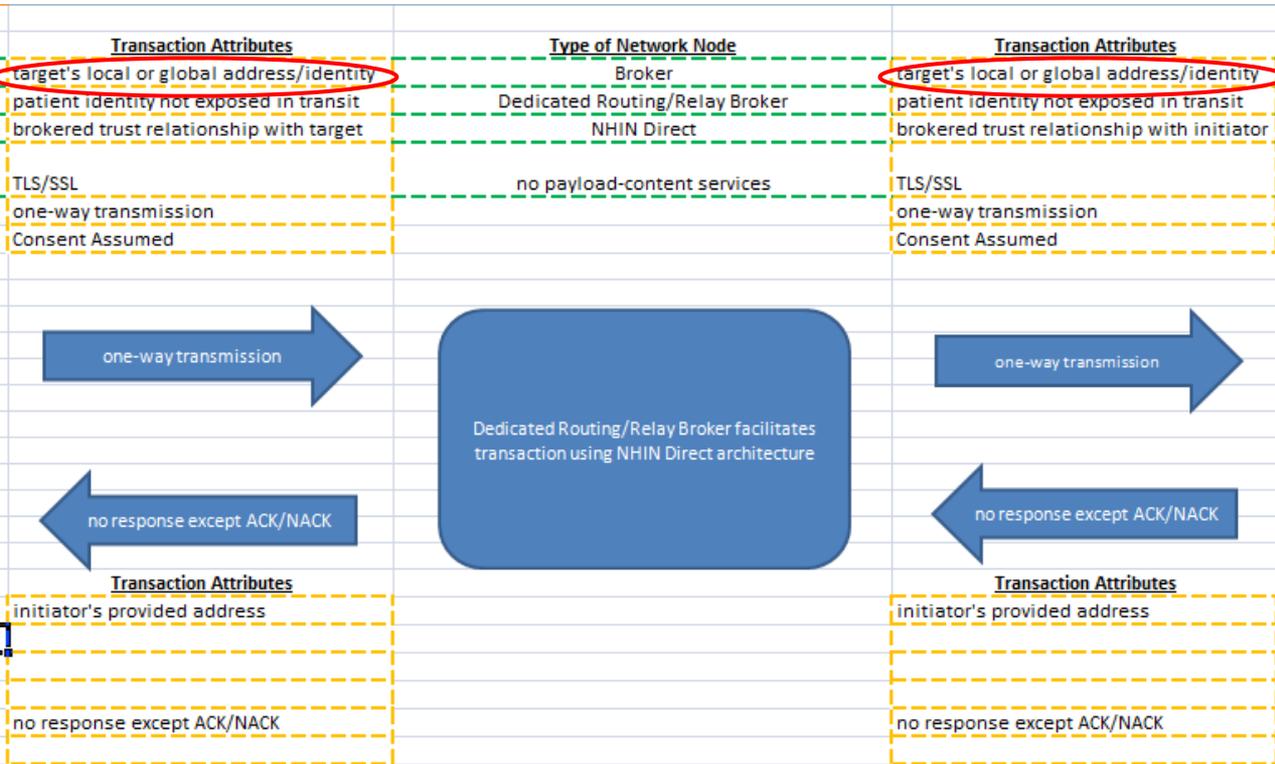
**Implication:**

- SMTP is primary transmission protocol, but SOAP/XDR is an allowed protocol
- Proxies and Edges can still use local protocols if desired



# Consensus Point #4: Allow local and global addressing of endpoints

**We can have all proxies deal with precise addressing, or allow central HIE resolve addresses**

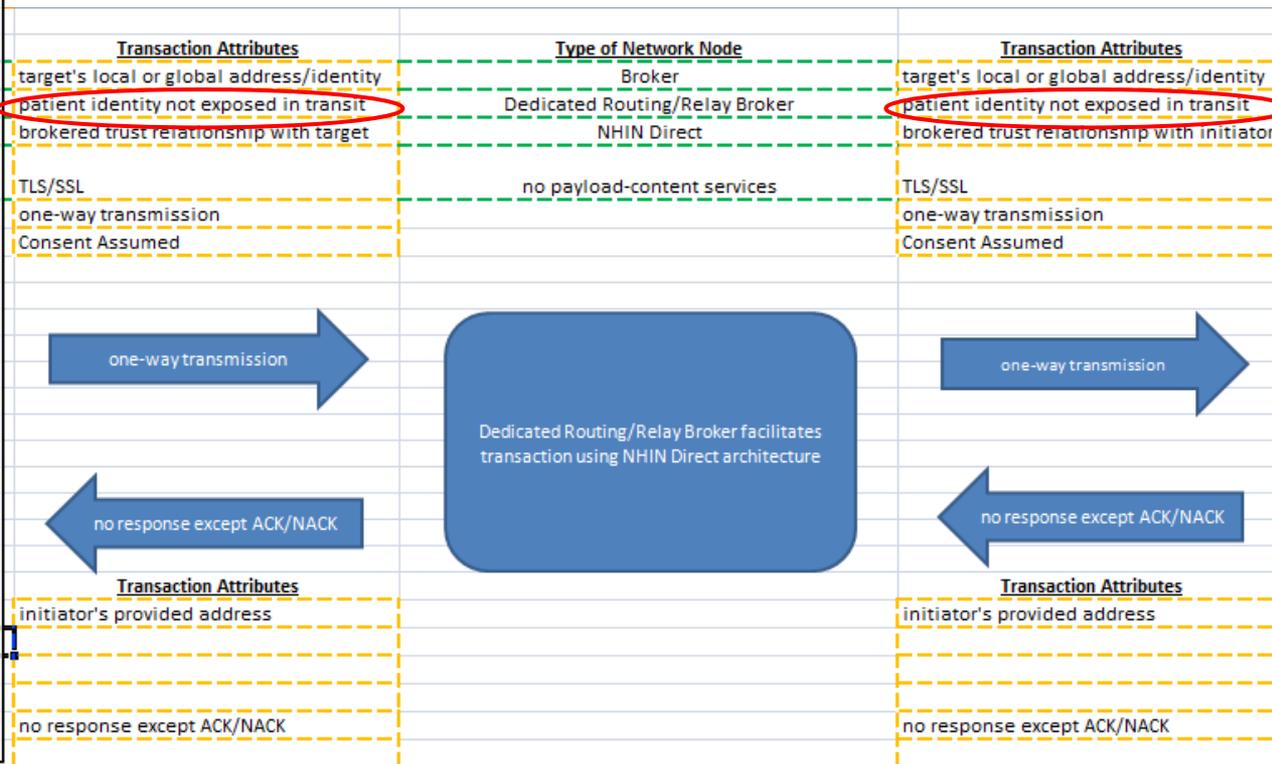


**Implication:**

- Directory service needed centrally
- MPI for providers, and provider locator service needed centrally

# Consensus Point #5: Protected Health Information not exposed to central HIE

**NHIN Direct has this as a tenet, but in general, the privacy leanings make it prudent to be a "conduit" that just knows addressing details**

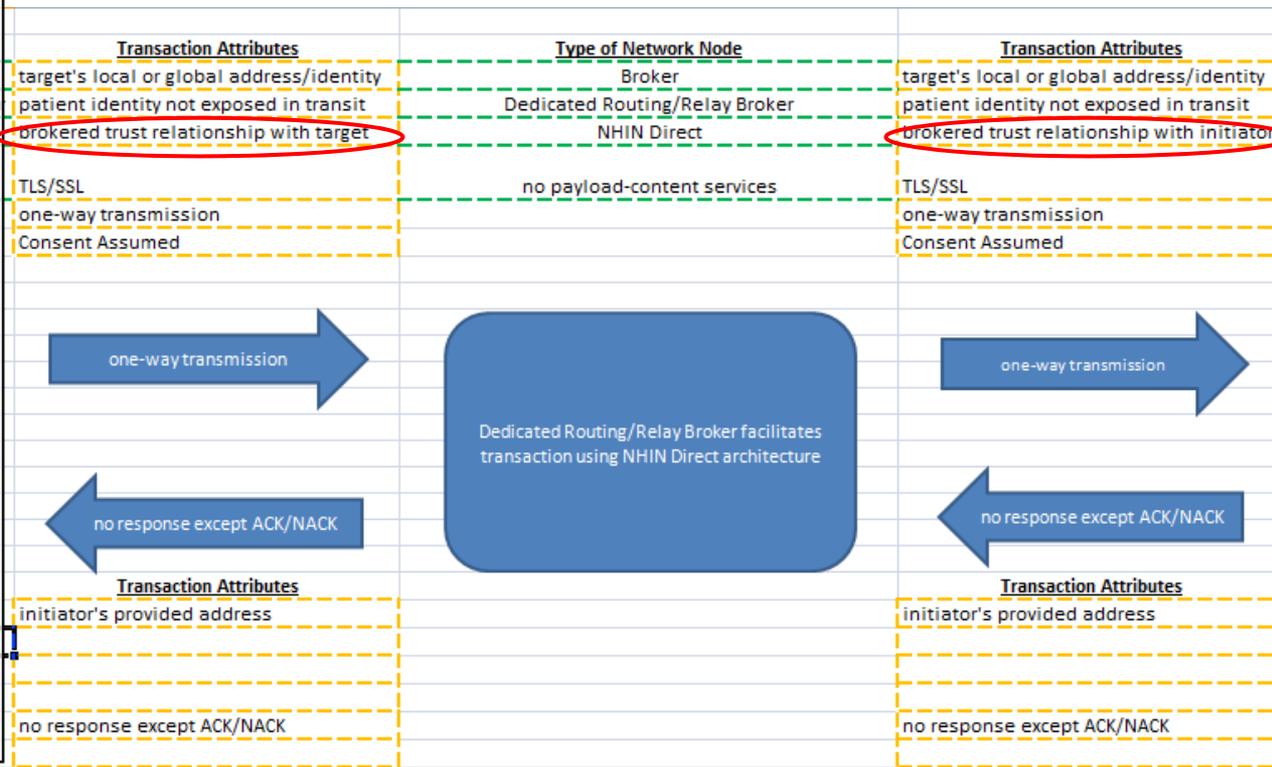


**Implication:**

- NH logging requirement for patient identity is federated to local networks to handle

# Consensus Point #6: Trust relationships are brokered by HIE and/or local networks

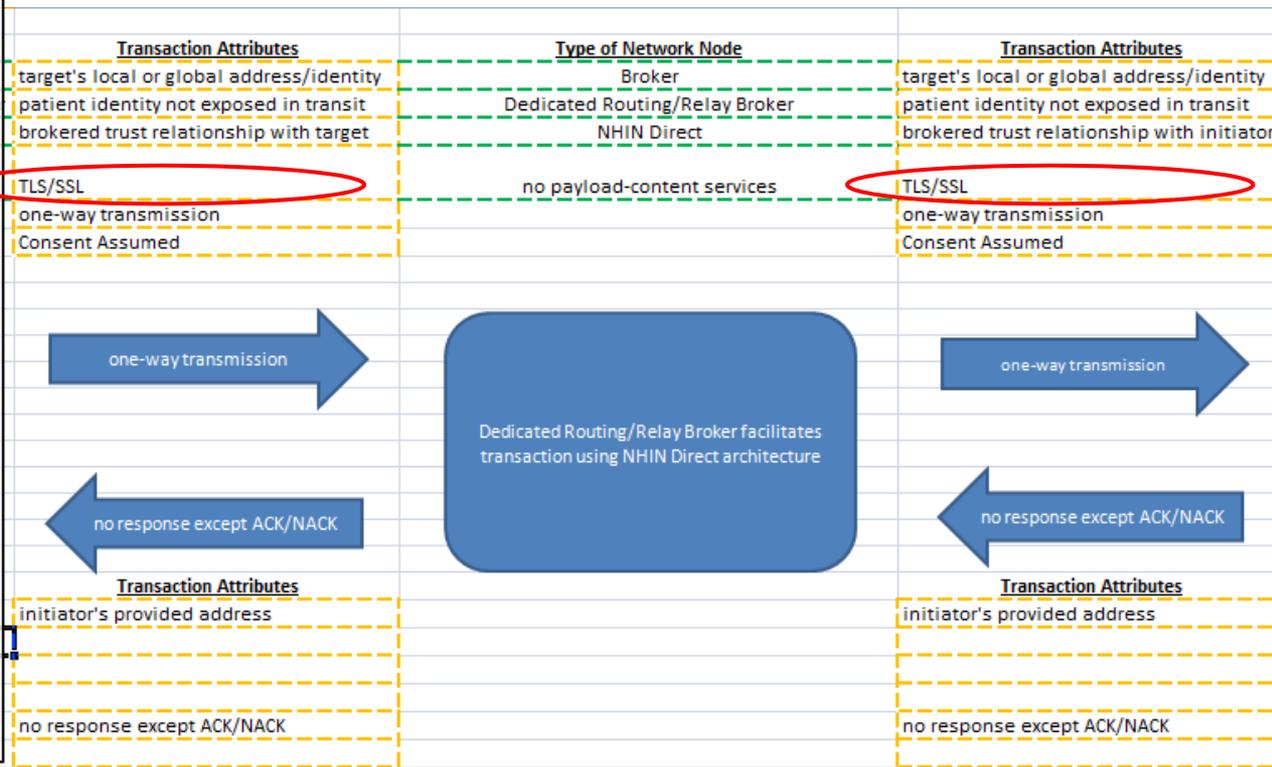
**The HIE can trust networks, who in turn can trust edge systems. The local networks would in turn trust the central HIE**



**Implication:**  
 • **Central HIE can hold keys, certs, etc., for local networks without edges or local networks having to maintain those for all network nodes**

# Consensus Point #7: Transport Layer Security is used as a baseline of transaction encryption, and other encryption can be layered on

**The HIE can trust networks, who in turn can trust edge systems. The local networks would in turn trust the central HIE**

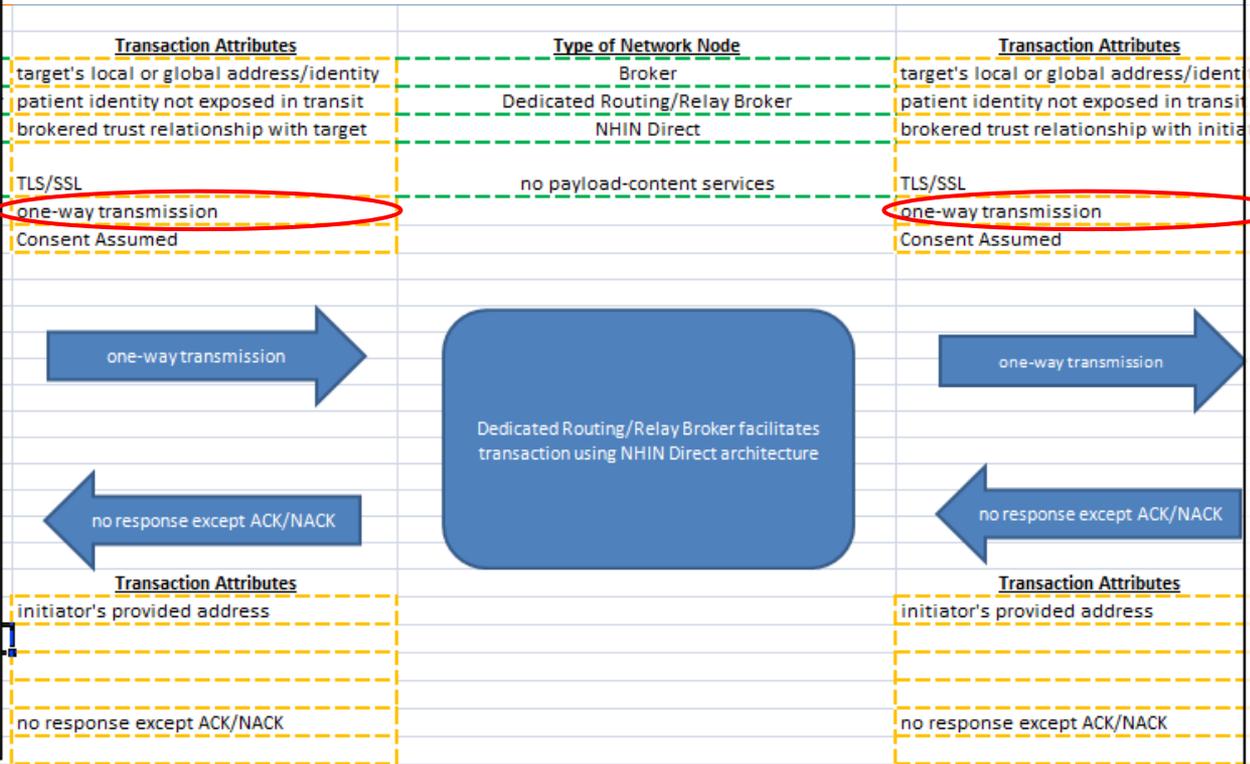


**Implication:**

- **Certificate authority needed, or paradigm for accepting certificates into local trust stores**

# Consensus Point #8: Transactions are unsolicited, unidirectional (excluding ACK/NACK)

**NHIN Direct supports this paradigm, and it seems to be a line of demarcation for additional privacy controls around consent**

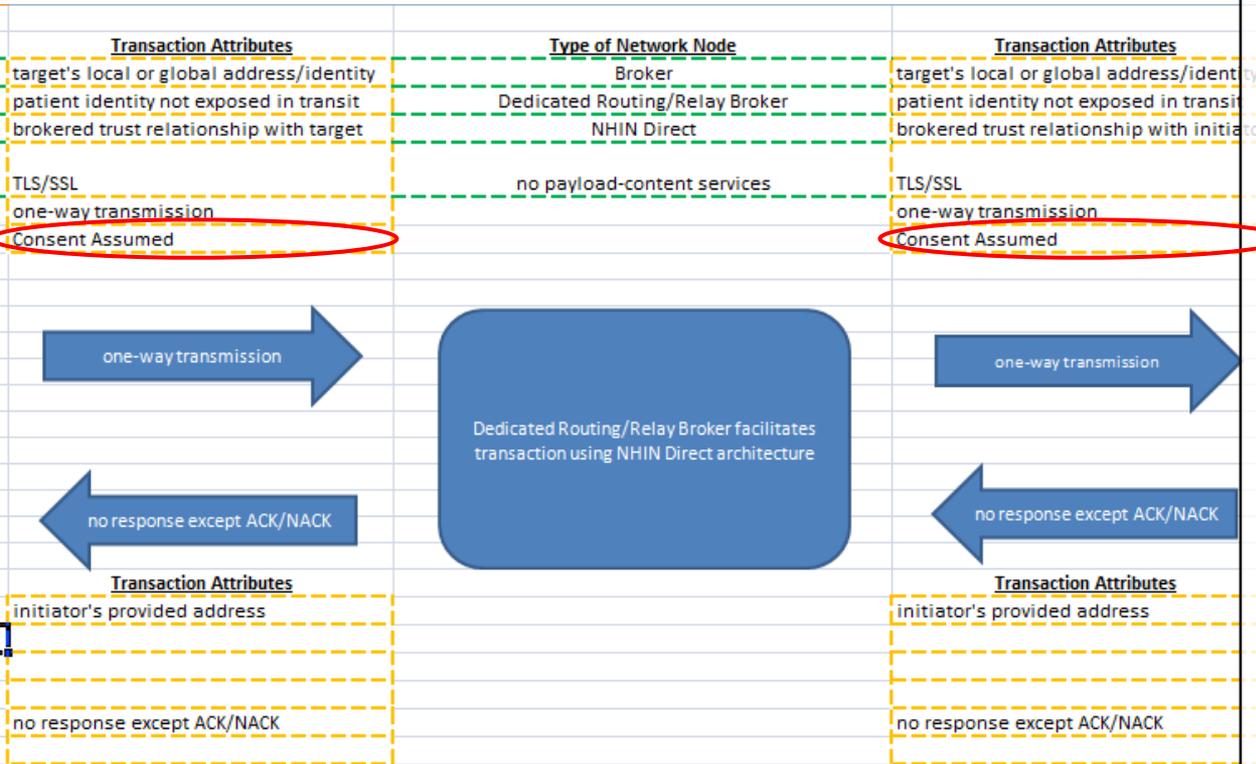


**Implication:**

- Local networks need to listen for asynchronous transactions coming from HIE

# Consensus Point #9: No Consent Representation required for transaction

**While this could be embedded in the payload, the main point is that management of consent is federated to the edges, and HIE doesn't record, enforce, etc.**



**Implication:**

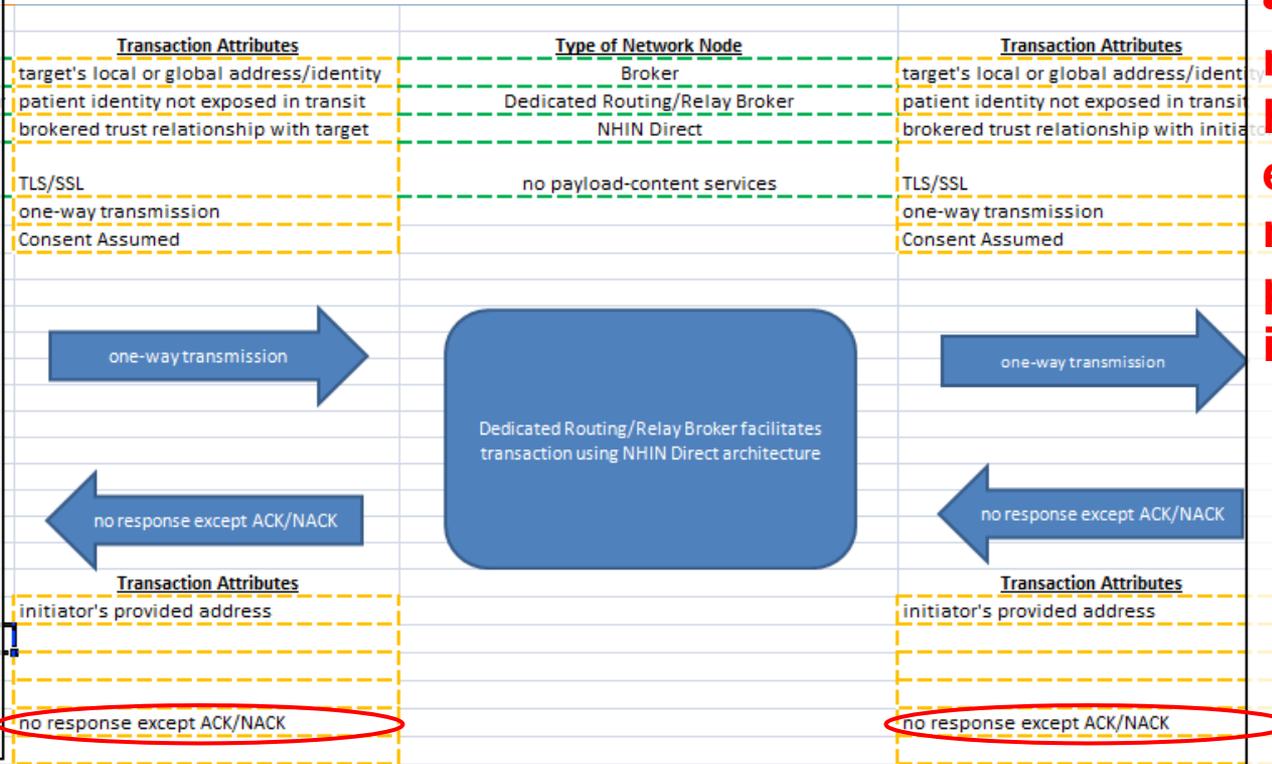
- local models for consented transactions will control access

Routing/Relay and Service Broker facilitates transaction using Any technology architecture

# Consensus Point #10: Acknowledgement of successful transactions sent to initiator

**Last meeting, it was noted that this is expected for valid transactions**

Routing/Relay and Service Broker facilitates transaction using Any technology architecture

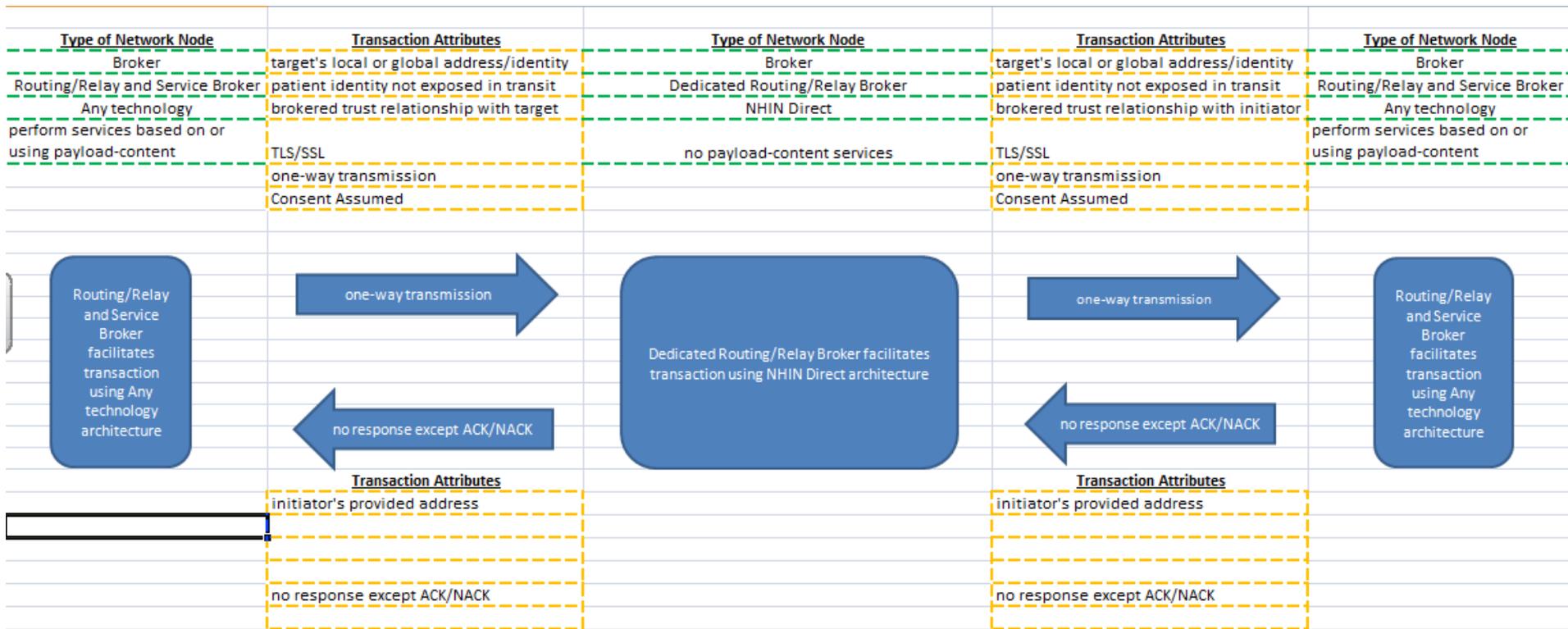


**Implication:**

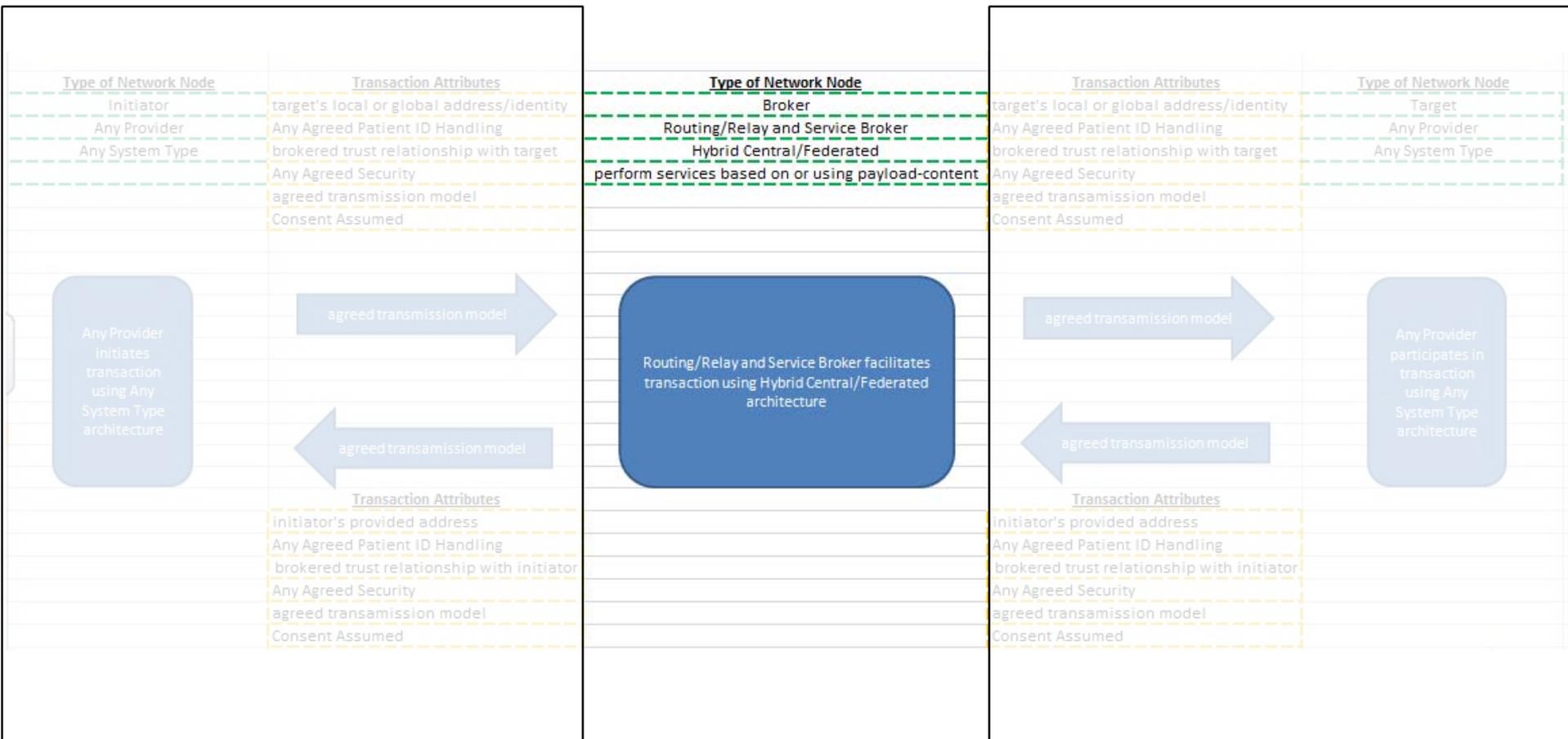
- Local networks will have to engineer the method to provide this indicator

Relay and Service Broker facilitates transaction using Any technology architecture

Now, all of this gets compressed into one logical broker to discuss edge transactions...



# Voila... three boxes into one



# Consensus Point #11: Local transactions happen according to local architectural and policy frameworks



**The same infrastructure in place today persists, with only accommodations added for interaction with state HIE, and listed implications**

## Converging on Solutions – Moving to the Strategic and Ops Plan

- ❑ Address all elements of strawman strategic and operational plans for which workgroup is responsible
- ❑ Try to come to workgroup consensus on all key decisions – note where consensus is not reached and a plan forward
- ❑ MAeHC team will be creating strategic and operational plan content from each point of consensus

# Workgroup is responsible for 2 sections of the plan – Environmental Scan to be handled by UNH

Deliverable	Governance WG	Finance WG	Technical Infrastructure WG	Bus and Tech Ops WG	Legal Policy WG	Core Team
<b>Strategic Plan</b>						
<b>Executive Summary</b>	C	C	C	C	C	AR
<b>SP-1 Environmental Scan</b>	I	I	R	C	I	A
<b>SP-2 HIE Development and Adoption Summary</b>	C	C	C	R	C	A
<b>SP-3 HIT Adoption Summary</b>	C	C	C	R	I	A
<b>SP-4 Medicaid Coordination Summary</b>	R	C	C	C	C	A
<b>SP-5.1 Coordination of Medicare and Federally Funded, State Based Programs Summary</b>	R	I	I	I	I	A
<b>SP-5.2 Participation with Federal Care Delivery Organizations Summary</b>	R	I	I	I	I	A
<b>SP-6 Coordination of Other ARRA Programs</b>	R	I	C	I	I	A
<b>SP-7 Coordination with Public Health Programs</b>	C	I	C	R	C	A
<b>SP-8.1 HIE Governance Summary</b>	R	I	I	I	I	A
<b>SP-8.2 HIE Finance Summary</b>	I	R	I	I	I	A
<b>SP-8.3 HIE Technical Infrastructure Summary</b>	I	I	R	I	I	A
<b>SP-8.4 HIE Business and Technical Operations</b>	I	I	I	R	I	A
<b>SP-8.5 HIE Legal/policy Summary</b>	I	I	I	I	R	A
<b>SP-9 HIE Strategic Plan</b>	C	C	C	C	C	AR
<b>Operational Plan</b>						
<b>OP-1 Coordinate with ARRA Programs Summary</b>	R	I	I	I	I	A
<b>OP-2 Coordinate with Other States Summary</b>	R	I	C	C	C	A
<b>OP-3.1 HIE Governance Summary</b>	R	I	I	I	I	A
<b>OP-3.2 HIE Finance Summary</b>	I	R	I	I	I	A
<b>OP-3.3 HIE Technical Infrastructure Summary</b>	I	I	R	I	I	A
<b>OP-3.4 HIE Business and Technical Operations Summary</b>	I	I	I	R	I	A
<b>OP-3.5 HIE Legal &amp; Policy Summary</b>	I	I	I	I	R	A
<b>OP-4 HIE Operational Plan</b>	C	C	C	C	C	AR
<b>Accountable (Approval Authority)</b>	A					
<b>Responsible for Content</b>	R					
<b>Consulted</b>	C					
<b>Informed</b>	I					

## SP-8.3 HIE Technical Infrastructure

### ***Topic Guidance from ONC***

- ❑ **Interoperability** - The plan must indicate whether the HIE services will include participation in the NHIN. The plan shall include the appropriate HHS adopted standards and certifications for health information exchange, especially planning and accounting for meaningful use criteria to be established by the Secretary through the rulemaking process.
- ❑ **Technical Architecture/Approach** (*encouraged but not required*)– Because the state or SDE may or may not implement HIE, the Strategic Plan may include an outline of the data and technical architectures and describe the approach to be used, including the HIE services to be offered as appropriate for the state’s HIE capacity development.

## OP-3.3 HIE Technical Infrastructure Summary

### ***Topic Guidance from ONC***

- ❑ **Standards and Certifications** –The Operational Plan shall describe efforts to become consistent with HHS adopted interoperability standards and any certification requirements, for projects that are just starting; demonstrated compliance, or plans toward becoming consistent with HHS adopted interoperability standards and certifications if applicable, for those projects that are already implemented or under implementation.
- ❑ **Technical Architecture** – The Operational Plan must describe how the technical architecture will accommodate the requirements to ensure statewide availability of HIE among healthcare providers, public health and those offering service for patient engagement and data access. The technical architecture must include plans for the protection of health data. This needs to reflect the business and clinical requirements determined via the multi-stakeholder planning process. If a state plans to exchange information with federal health care providers including but not limited to VA, DoD, IHS, their plans must specify how the architecture will align with NHIN core services and specifications.
- ❑ **Technology Deployment** – The Operational Plan must describe the technical solutions that will be used to develop HIE capacity within the state and particularly the solutions that will enable meaningful use criteria established by the Secretary for 2011, and indicate efforts for nationwide health information exchange. If a state plans to participate in the Nationwide Health Information Network (NHIN), their plans must specify how they will be complaint with HHS adopted standards and implementation specifications. (For up-to-date publicly available information on meaningful use, see: <http://healthit.hhs.gov/meaningfuluse>).

# Agenda

Opening remarks, review of work to date, review of initial consensus areas

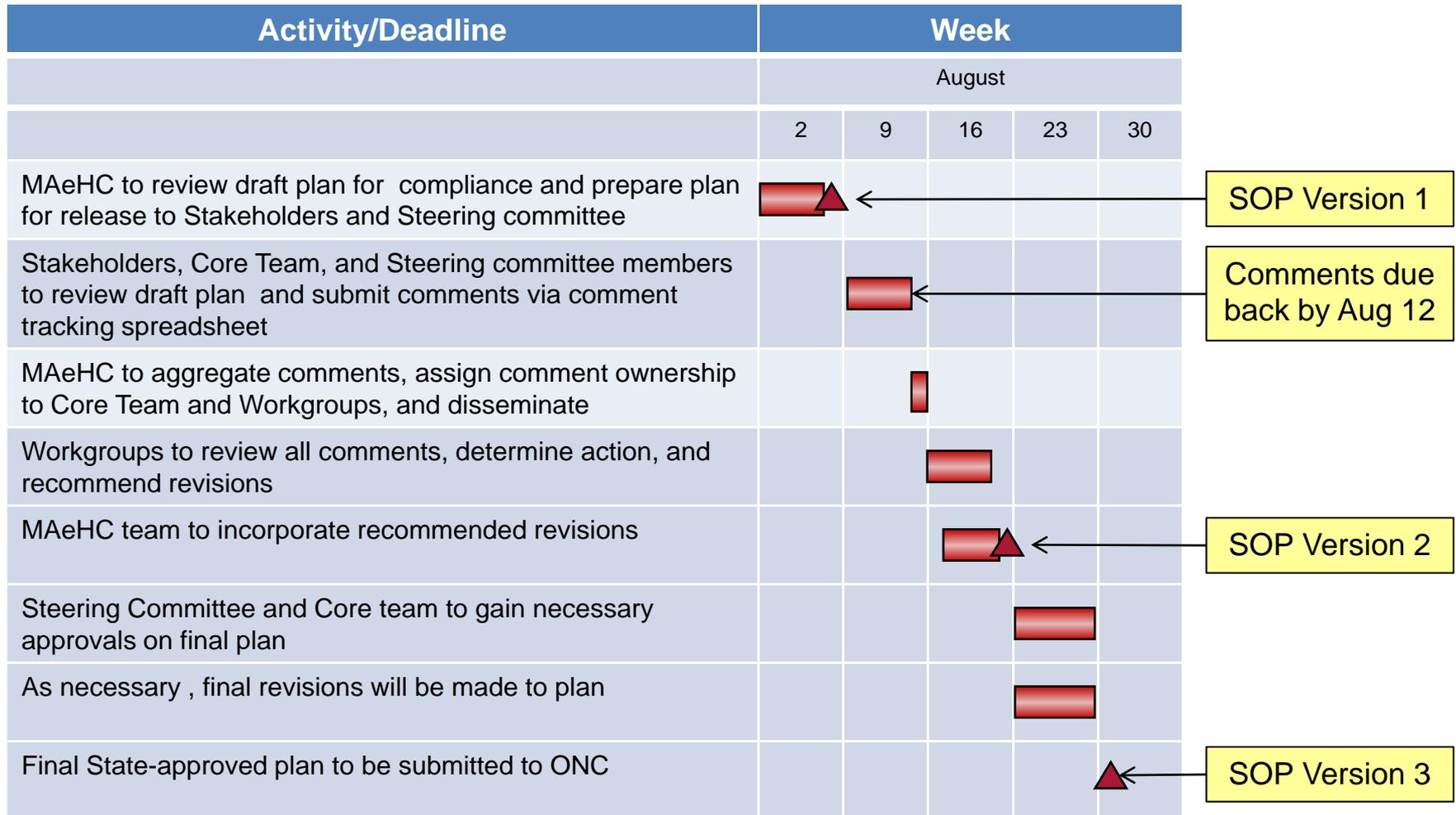
Converging on Solutions – Generating content for the strategic and operational plans

Wrap up and next steps

Appendix

# Looking ahead to the review and finalization of the plan

## Segment 1 Timeline: June 1 – October 31





## Wrap up and next steps

- ❑ Next Conference Call: Wednesday, July 28, 2010 10:00 -12:00 Conference Line: (877) 449-6558; Conference Code: 735 291 4860
- ❑ Next Summit: Tuesday, August 03, 2010 8:00 - 12:00
- ❑ Feedback review session to be scheduled for between Aug 16 and 18
- ❑ Meeting summary to be distributed to all workgroups

# Agenda

Opening remarks, review of work to date, review of initial consensus areas

Converging on Solutions – Generating content for the strategic and operational plans

Wrap up and next steps

Appendix