



Interoperability in California

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Connecting California to Improve Patient Care in 2013
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What's influencing the work?

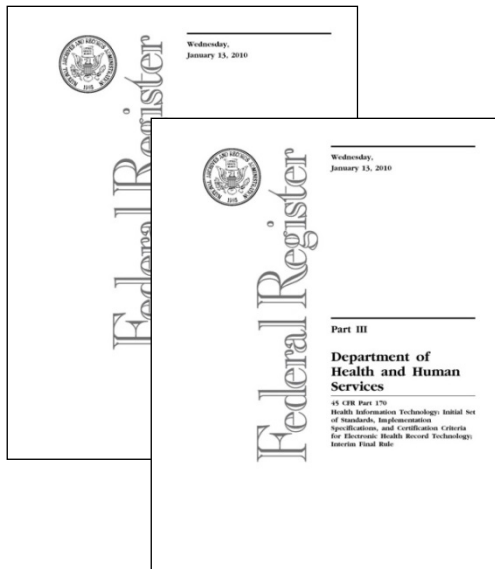


Drivers may be opportunities or constraints.

Don't forget to make lemonade.

Federal Programs

- Nationwide Health Information Network
- EHR incentive program and Meaningful Use
- Other ONC initiatives



“PIN” Priorities

- Instruction from ONC
- ✓ e-Prescribing
 - ✓ Electronic lab results delivery
 - ✓ Care summary exchange
- ...and for Public health reporting...*
- ✓ Immunizations
 - ✓ Reportable conditions
 - ✓ Syndromic surveillance
- As appropriate on a per-state basis...*

Statewide HIE under ARRA



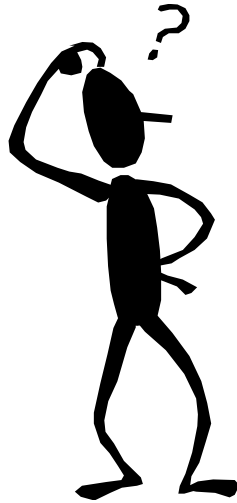
- Most states are creating a single statewide exchange.
 - Everyone is expected to participate.
 - It must meet everyone's needs.
 - It must be sustainable after HITECH money is gone.

That's not going to work in California.

Options!



What are we doing about it?



How does California fulfill PIN priorities, support meaningful use, and “get it done”?

California's strategy...



1. Accelerate regional initiatives.
2. Promote uniform standards.
3. Enable inter-organizational exchange.
Create a trusted environment for exchange.
4. Enable interstate exchange.
5. Increase public health capacity.

Expansion and Acceleration

Creating HIE options.



- Planning for emerging HIOs
- Expansion of existing HIE infrastructure
- New interfaces to labs, radiology, etc.
- Conversion of lab data to LOINC terminology
- Analytics to provide higher-value services
- New interfaces for public health reporting
- New services for rural providers

<http://www.ucdmc.ucdavis.edu/iphi/Programs/cheq/cheqfunding.html>

Promoting Standards

HIEREADY
Health information exchange from any system

Reducing unneeded variation.

- Promoting uniform standards among organizations and vendors in California
- Creating implementation guides where uniform guidance does not exist
- Exploring the need for accreditation
- Relying on market pressures rather than regulation

<http://www.ucdmc.ucdavis.edu/iphi/Programs/cheq/HIEready.html>

HIE Ready

Vendor or Organization <i>(Product name in italics)</i>	HIE READY Capabilities						Relative Cost
	ADT / Demo-graphics	Lab & Rad Results, Notes	Lab & Rad Orders	Referrals, Appointments	Care Summary (CCD)	Public Health Reporting	
AMBULATORY EHRs¹							
<i>4medica (Ambulatory Cloud iEHR 10.4)</i>	•	•••	•••	○	••	••••	\$0
<i>Data Strategies (MDSuite 6.1)</i>	••••	••••	••••	••••	•••	••••	\$0
<i>Med A-Z (Med A-Z)</i>	•••	••	••••	•	••••	••••	\$0
<i>MedStreaming (All inOne MR/PACS/PM)</i>	••••	••••	••••	••••	••••	••••	\$0
<i>Mitochon (Mitochon Systems 4.0)</i>	•	•••	•	•	•••	••••	\$0
<i>OfficeAlly (EHR 24/7)</i>	•	••	•••	•	•••	••••	\$\$
HEALTH INFORMATION ORGANIZATIONS							
<i>CVCA HIE (previously EKCITA)</i>	•	•	•	•	••••	••	\$\$\$
<i>Inland Empire HIE</i>	•	•	••	•	••	••	\$
<i>North Coast Health Information Network</i>	••	•••	○	•	○	○	NP
<i>Orange County Partnership RHIO</i>	•••	••••	•••	○	••••	••••	NP
<i>Redwood MedNet</i>	•••	•••	•••	•	••••	••••	\$\$\$
<i>San Diego Regional HIE</i>	•••	•••	○	•	••	•	NP
<i>Santa Cruz HIE</i>	•	•••	••••	•	••	•	\$\$

There are EHRs that are better prepared for interoperability and HIE.

- It is easier to determine which EHRs support HIE.
- It is easier to “order” interoperability.

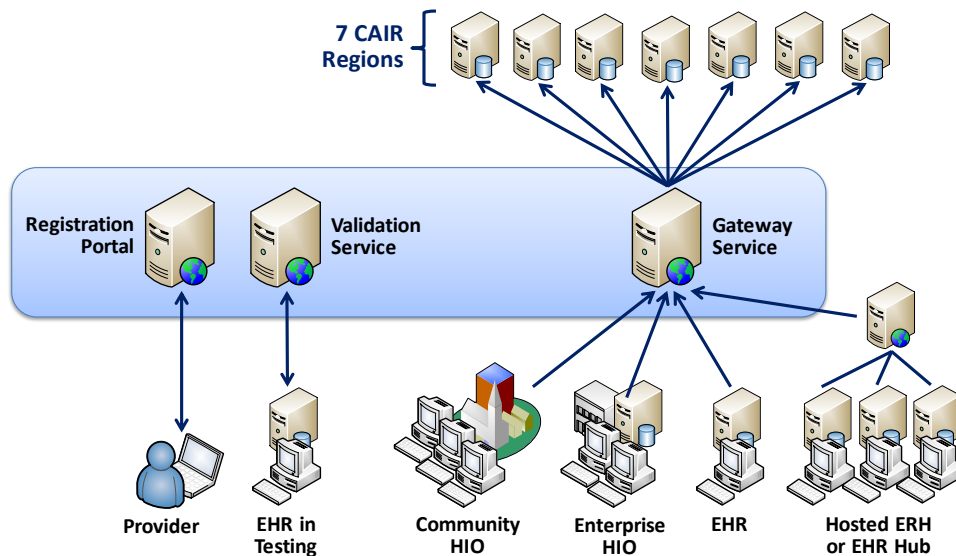
Increasing Public Health Capacity



Readying public health for Meaningful Use.
Making public health data accessible.
Improving population health.

- Creating gateways to register, validate, and submit public health data
- Creating a home for data on high-impact conditions, special populations

Immunization Gateway Service

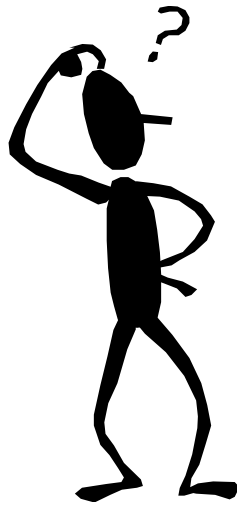


The California Immunization Registry is now ready to receive your data.

- You can now register and send data compliant with MU.
- Expanding to other public health reporting soon.

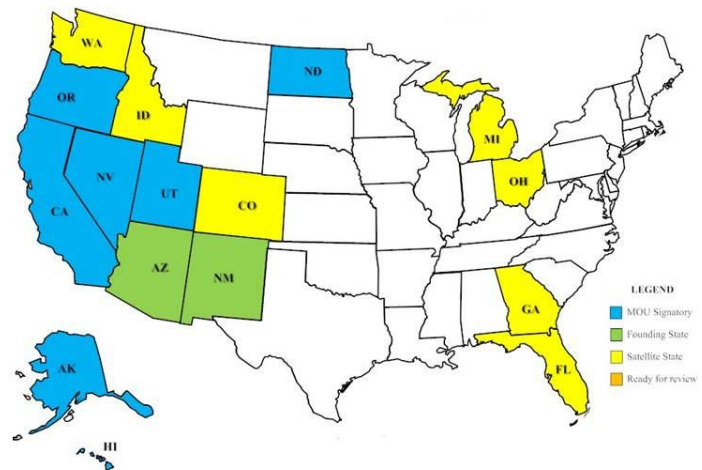
See <http://cairweb.org/imp/> for more information.

So what is this trust thing?



1. Accelerate regional initiatives.
2. Promote uniform standards.
3. Enable inter-organizational exchange.
Create a trusted environment for exchange.
4. Enable interstate exchange.
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The players...



The players...



<http://www.ohii.ca.gov/calohi/PrivacySecurity/CAHIE.aspx>

What do you need for trusted exchange?

- Know your conversation is not overheard.
- Know who you are talking to.
- Know who you are talking about.
- Know there is consent for your conversation.

Context: *Supporting and promoting interstate and inter-organizational exchange.*

You are not overheard...

1. Create usable agreements.

- Model Modular Participation Agreements
<http://cheq.wikispaces.com/Model+Modular+Participants+Agreement>
- Eligibility Criteria for Trust Communities
<http://wsctrust.org/products.html>
- Multiparty data use agreements

You are not overheard...

2. Create “Trust Communities”.

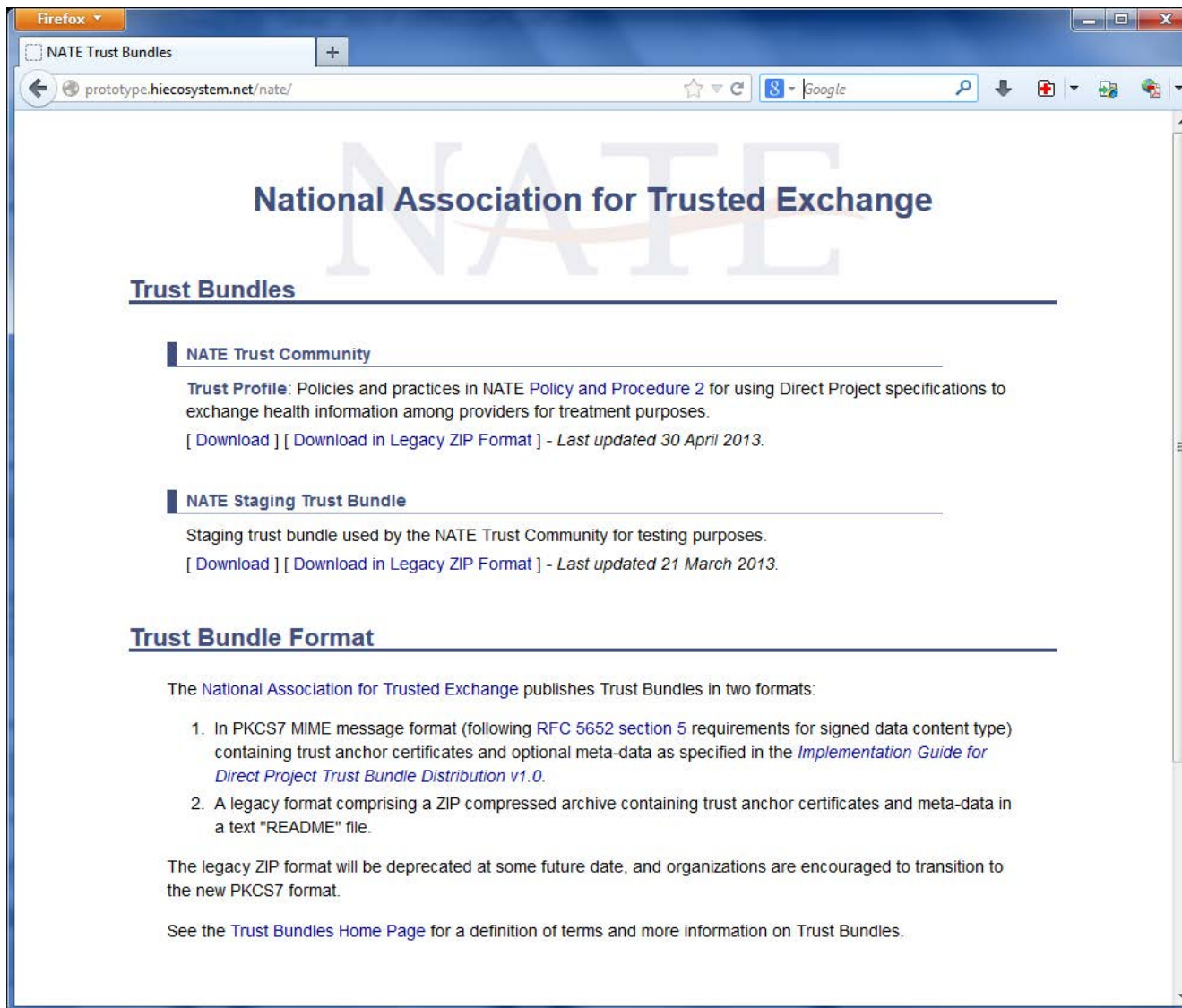
- Trust Community – A collection of organizations that elect to adopt a common set of policies and practices in regard to health information exchange.
- Trust Profile – A set of policies and practices corresponding to a specific health information exchange purpose or use.
- Trust Bundle – The Trust Anchor certificates for members of a Trust Community for a specific Trust Profile.

The Trust Bundle is a scalable means for identifying entities that have agreed to a standard of good behavior.

Scalable Trust



<http://bundles.hiecosystem.net/>



Who you are talking to...

3. Find the right provider.

- Federated provider directories

 - ...based on emerging HPD standards

 - <http://cheq.wikispaces.com/Directory+Services>

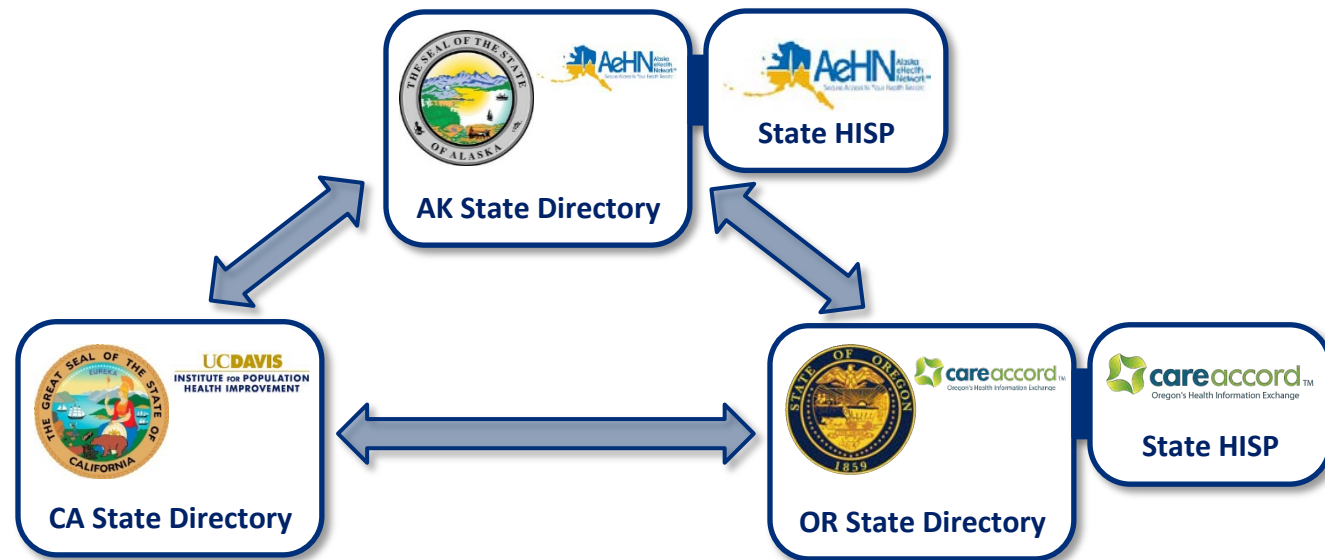
 - <http://modularspecs.siframework.org/Provider+Directories+Homepage>

 - ...managed by the organizations that know the right information

 - ...so the data is accurate.

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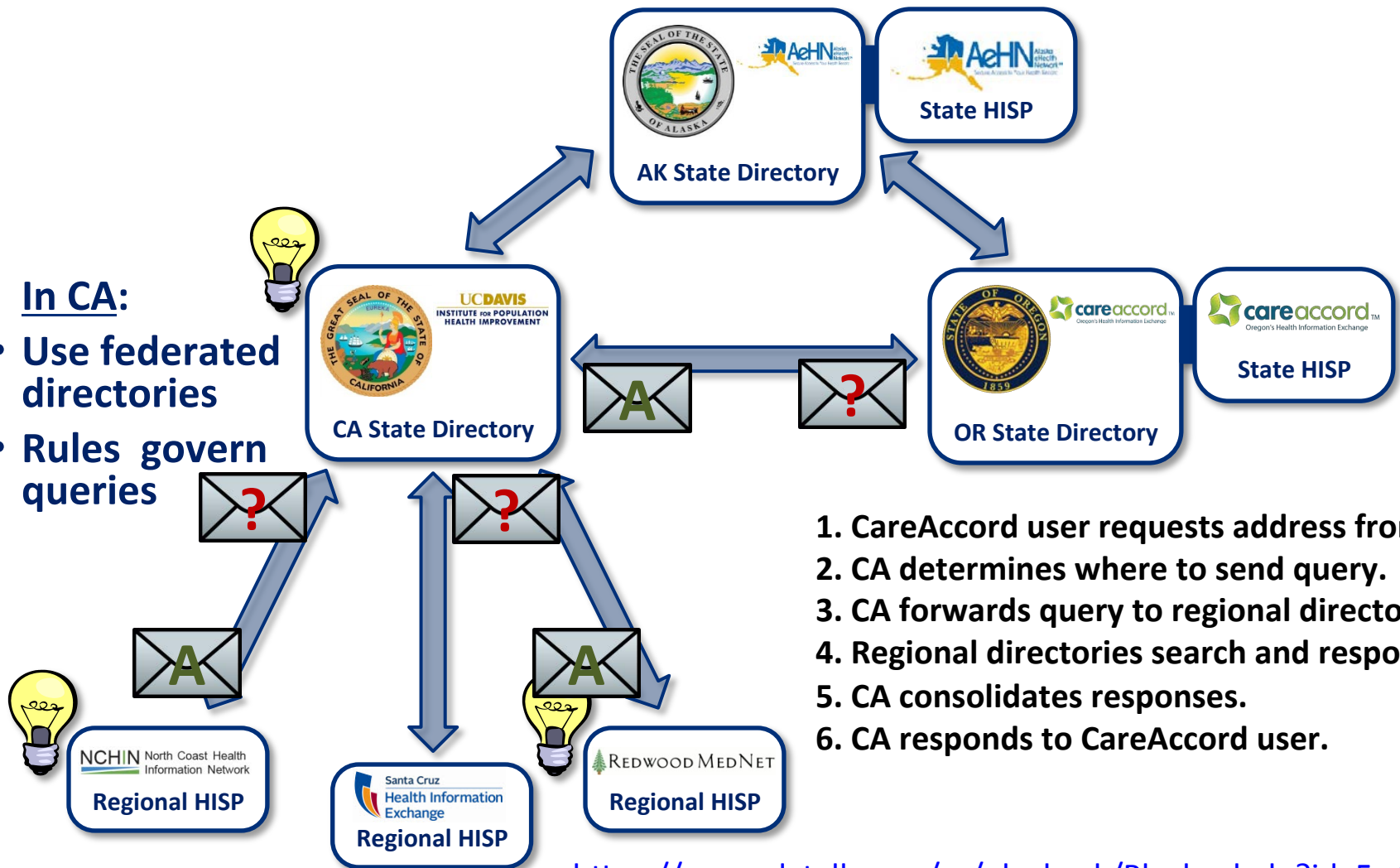


1. CareAccord user requests address from CA.
2. CA determines where to send query.
3. CA forwards query to regional directories.
4. Regional directories search and respond.
5. CA consolidates responses.
6. CA responds to CareAccord user.

<https://cc.readytalk.com/cc/playback/Playback.do?id=5o4mmb>

<http://www.youtube.com/watch?v=ttAfI6ZYDJK>

- In CA:**
- Use federated directories
 - Rules govern queries



1. CareAccord user requests address from CA.
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<https://cc.readytalk.com/cc/playback/Playback.do?id=5o4mmb>
<http://www.youtube.com/watch?v=ttAf16ZYDJK>

Who you are talking to...

4. Find the right consumer.

- NATE is just launching a pilot of bidirectional exchange between providers and patients using Direct and PHRs.

How do you establish trust in this environment?

What's next?



We are not done yet!

Trust Framework Pilot

- **Participants:** Inland Empire HIE, OCPRHIO, RAIN, Santa Cruz HIE, Sujansky & Associates, UC Davis Health System (plus two more)
- **Components**
 - Trust communities for Direct (5+2) and Exchange (4)
 - Address discovery for Direct and Exchange
 - Interactions with DirectTrust, NATE, and Healthēway

Informing the policies and practices that establish trust, and the technologies that help reinforce it.

<http://cheq.wikispaces.com/Trust+Framework>

Who you are talking to...

Is there value in shared provider identities among organizations?

Are assertions good enough? Or even valuable?

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Who you are talking about...

*Do we need better methods for patient discovery
and patient identification?*

There is consent...

Can we assume everyone is doing the right thing?

What about sensitive information with special regulatory requirements?

What about retransmission?

Contact Information

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w <http://www.ucdmc.ucdavis.edu/iphi/Programs/cheq/>

Questions

