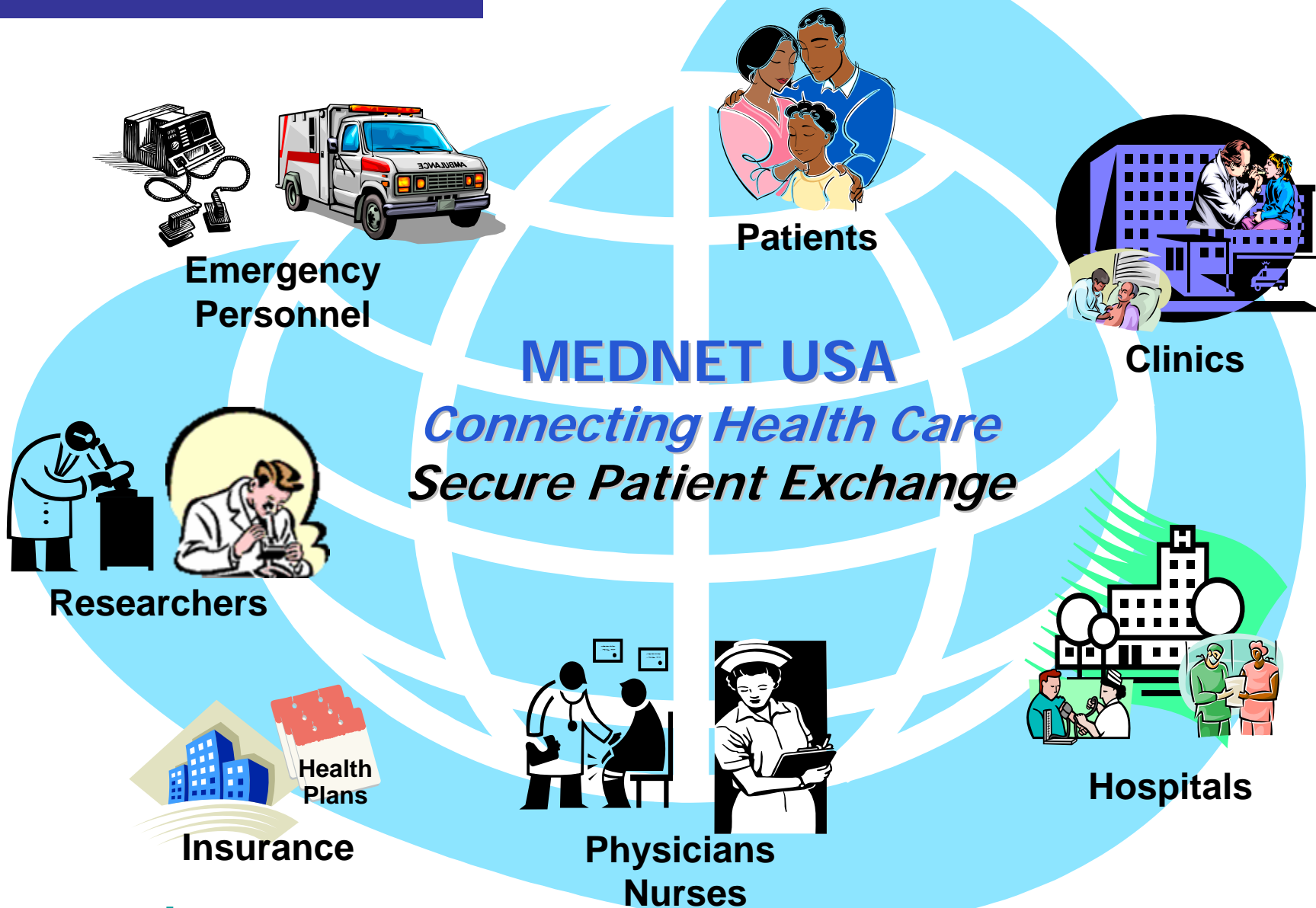
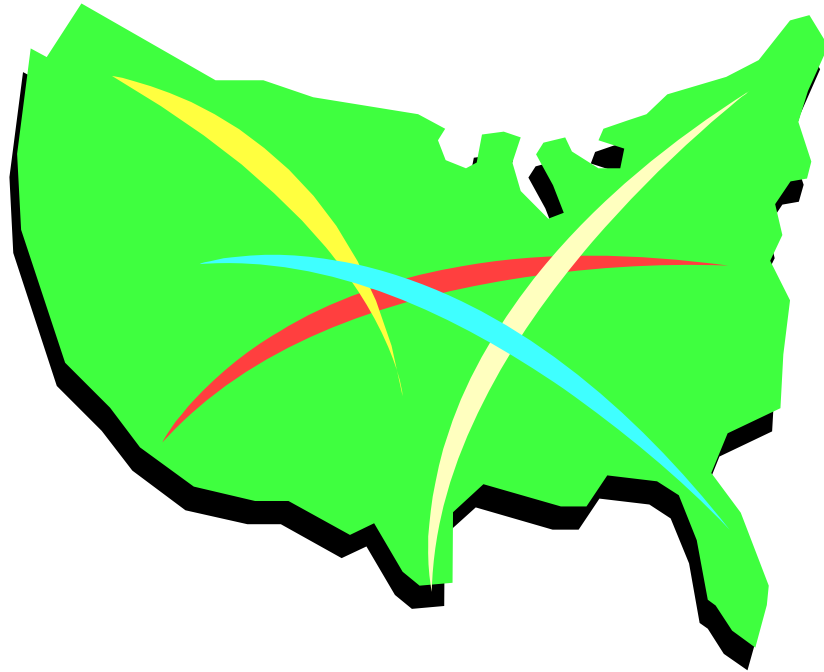


# MEDNET USA



# National Health Information Network - NHIN



# NHIN Overview – Who's Who

- National Health Information Network (NHIN)
- Developed by the federal department of Health and Human Services (DHHS)
- Inside DHHS, by the Office of the National Coordinator for Health IT. (ONC)  
<http://www.hhs.gov/healthit/>

# NHIN Overview – Who's Who

- American Health Information Community (AHIC)
  - a federal advisory body, chartered in 2005 to make recommendations to the Secretary of the U.S. Department of Health and Human Services on how to accelerate the development and adoption of health information technology.
  - In transition – a “Public-Private Partnership” being developed for fall, 2008
- Certification Commission for Healthcare Information Technology (CCHIT)  
<http://www.cchit.org/>
  - Certifies health care IT products

# NHIN Overview – Who's Who

- Integrating the Healthcare Enterprise (IHE)
  - Started by HIMSS to develop interoperability standards for healthcare
  - <http://www.ihe.net/>
  - IHE promotes established standards such as DICOM and HL7 to address clinical needs



# NHIN Overview – Who's Who

- Healthcare Information Technology Standards Panel (HITSP) <http://www.hitsp.org>
  - The Panel is sponsored by the American National Standards Institute (ANSI) in cooperation with HIMSS, ATI and Booz Allen Hamilton. Funding is provided via a contract from the U.S. Department of Health and Human Services
  - Use many of the IHE standards



Providing core standards and profiles for NHIN backbone implementation!

# NHIN Overview – Who's Who

## Health Information Security and Privacy Collaboration (HISPC)

- RTI International has subcontracted with 33 states and 1 territory to create the Health Information Security and Privacy Collaboration (HISPC).
- assess the variations in privacy and security practices and policies



**Health Information  
Privacy and Security Collaboration**



# NHIN Overview – Who's Who

HISPC's goals are to:

1. identify both best practices and challenges
2. develop consensus-based solutions for interoperable electronic health information exchange (HIE) that protect the privacy and security of health information, and
3. to develop detailed implementation plans to implement solutions.



**Health Information  
Privacy and Security Collaboration**



# NHIN Overview – Who's Who

- Or – we need DHHS working with ONC to develop the RHIOs and HIEs ASAP, not forgetting to follow AHIC, HITSP and HISPC recommendations and buy products certified by CCHIT.



# NHIN Backbone Overview

- 18 participants
- Federal involvement (VA, DoD, SSA)
- Backbone technologies:
  - Web Services (SOAP) Communications
  - SAML security (IHE XUA / other profiles)
  - IHE profiles for most part
  - Following HITSP standards and profiles

# NHIN Backbone History

- Prototype Architectures – 2006/2007
  1. IBM
  2. Northrup Grumman
  3. Accenture
  4. CSC

# NHIN Backbone History

- Trial Implementations – Oct, 2007 - 2008
  1. CareSpark -- Tricities region of Eastern Tennessee and Southwestern Virginia
  2. Delaware Health Information Network -- Delaware
  3. Indiana University -- Indianapolis metroplex
  4. Long Beach Network for Health -- Long Beach and Los Angeles, California
  5. Lovelace Clinic Foundation -- New Mexico
  6. MedVirginia -- Central Virginia
  7. New York eHealth Collaborative -- New York
  8. North Carolina Healthcare Information and Communications Alliance, Inc. -- North Carolina
  9. West Virginia Health Information Network -- West Virginia

# NHIN Backbone History

- Expansion of Trial Implementations – April 2008 – Dec 2008
  1. HealthLINC/Bloomington Hospital
  2. Cleveland Clinic
  3. Community Health Information Collaborative (CHIC / MEDNET USA)
  4. HealthBridge
  5. Kaiser Permanente
  6. Wright State University

# Current NHIN Participants

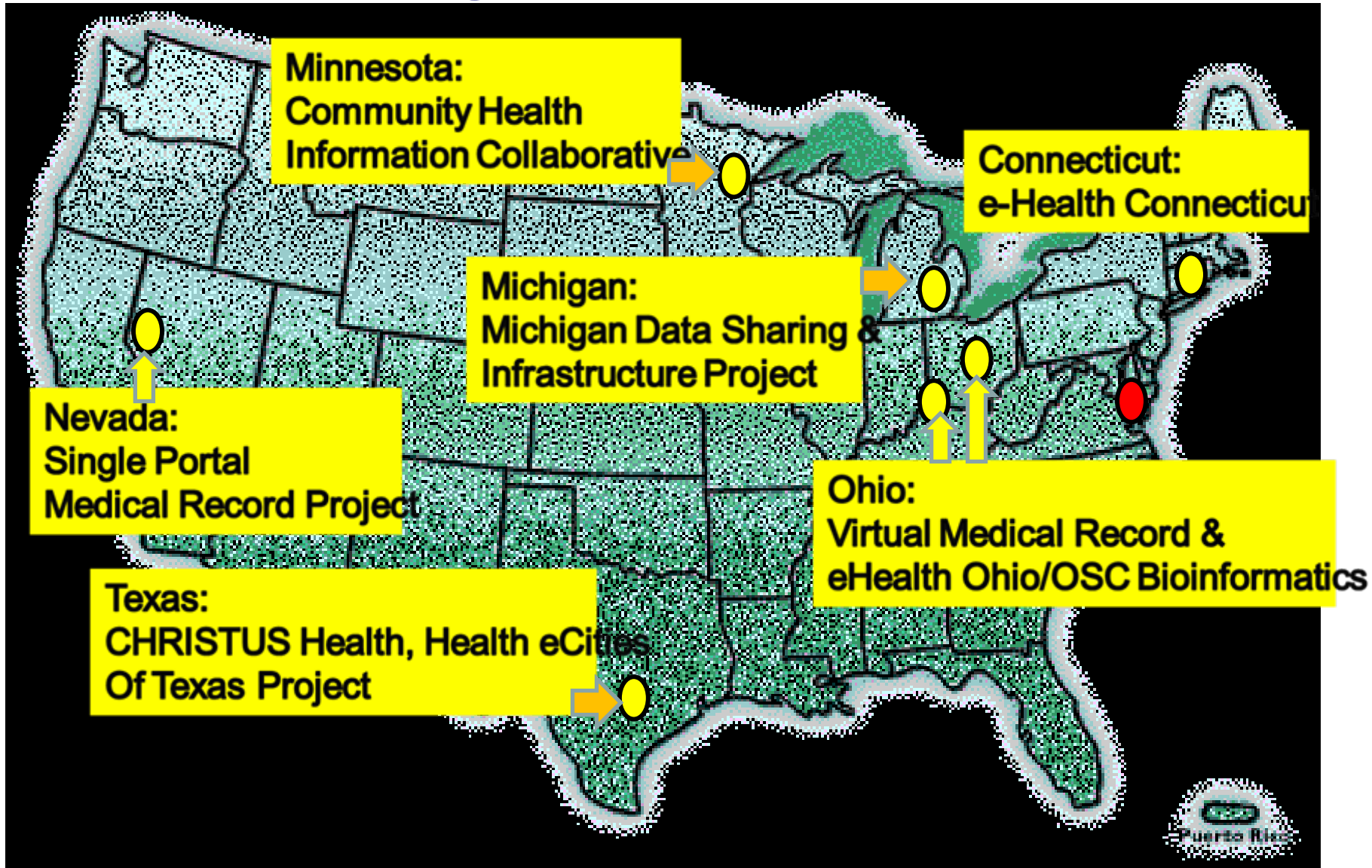
HIE	State	Example Use Cases
Bloomington Hospital	IN	
CareSpark	TN	- Medication Management - PHR Registration and Medication History
CHIC + MEDNET	MN	- Record Locator Service - Emergency Responder - Immunization
Cleveland Clinic	OH	
Delaware	DE	- Biosurveillance - e-HR Lab Results Reporting
Federal - DoD		
Federal - SSA		
Federal - VA		
Healthbridge	OH	
Indiana	IN	- Medication Management - Quality
Kaiser		
Long Beach	CA	- e-HR Lab Results Reporting - Quality
Lovelace	NM	- e-HR Lab Results Reporting - Emergency Responder e-HR
MedVA	VA	- e-HR Lab Results Reporting - Medication Management
NCHICA	NC	- e-HR Lab Results Reporting - Consumer Access to Clinical Information
NYeC	NY	- Medication Management - Quality
West VA	WV	- e-HR Lab Results Reporting - PHR Registration and Medication History
Wright State	OH	

# CHIC/MEDNET History



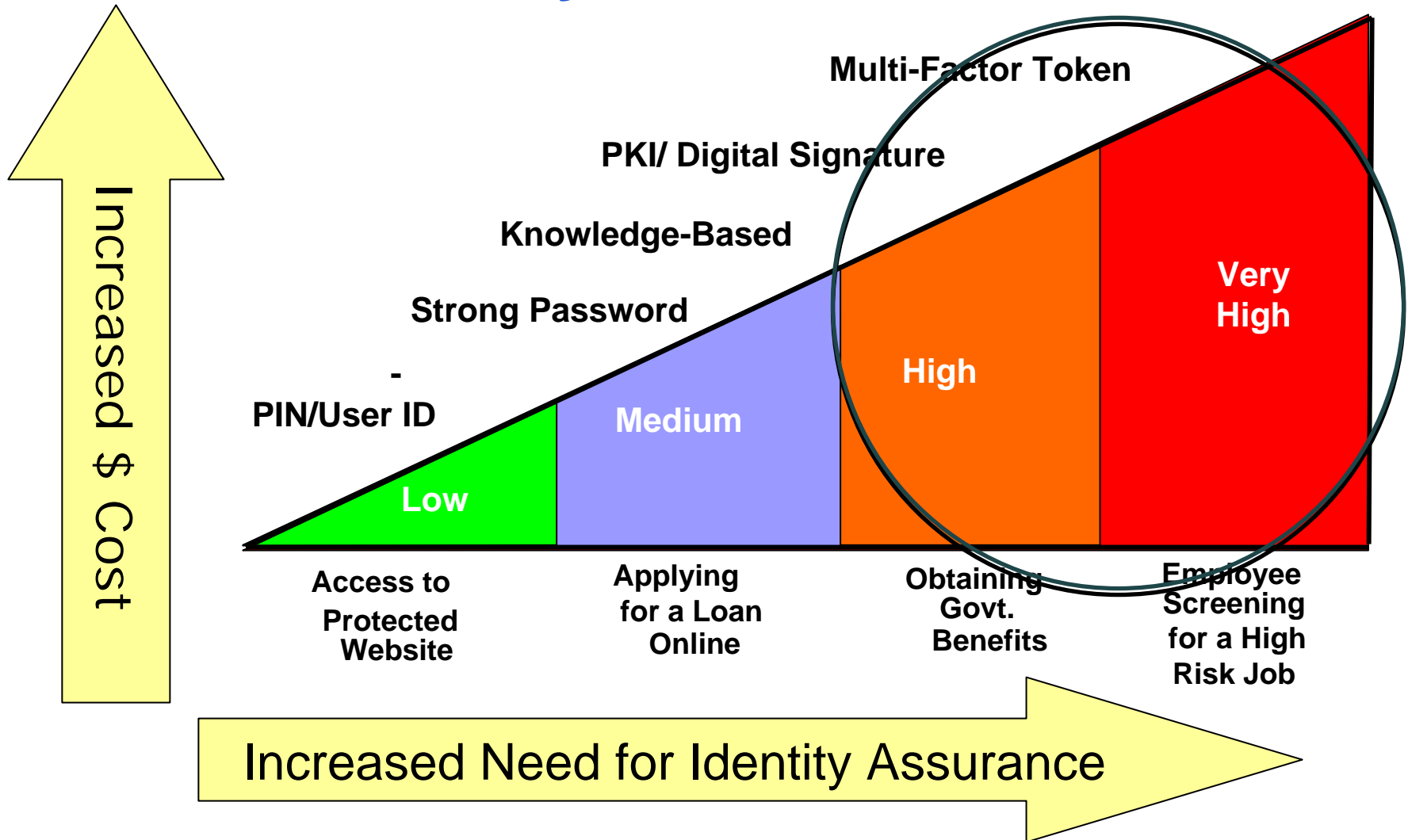
# HIMSS/GSA eAuthentication Project

~ Testing PKI in Healthcare ~



# Minnesota NHIN Project

## Two Identity Assurance Levels



# Liberty Alliance – Healthcare SIG

John Fraser, MEDNET USA

Pete Palmer, WellsFargo

- Co-chairs of the Liberty Alliance's Health Identity Management - Special Interest Group

The screenshot shows the Liberty Alliance Project website. The header includes the logo and a search bar. The left sidebar contains a navigation menu with categories like About, News & Events, Strategic Initiatives, Adoption, Membership, Specifications, Resource Center, and Public Community. The main content area is titled 'HEALTHCARE' and contains text about Liberty's federated identity standards, a section for 'Additional eHealth Resources', and links to various documents and presentations.

**LIBERTY ALLIANCE PROJECT**

Search:  [Advanced Search](#)

**About**

**News & Events**

**Strategic Initiatives**

- Requirements
- Identity Assurance
- Client Devices
- Identity Governance
- ID Theft
- Healthcare
- eGovernment
- Telecommunications
- User Empowerment
- Federation
- Web Services
- Strong Authentication
- Legal & Policy
- Privacy, Trust & Security

**Adoption**

**Membership**

**Specifications**

**Resource Center**

**Public Community**

**HEALTHCARE**

Liberty's federated identity standards, along with its privacy and business guidelines, offer a holistic approach on Identity Management. Security, confidentiality, and interoperability are three key aspects being addressed, and are all necessary components for deployments in a distributed healthcare environment. Our specifications have been built to support secure participation across multiple platforms, and are based on requirements gathered by organizations representing several vertical industries. Open to the public, our **Health Identity Management Special Interest Group** is focused on providing a forum for interested members to discuss healthcare trends, challenges and solutions.

**Additional eHealth Resources**

Liberty's **Health Identity Management Special Interest Group** has been active in the eHealth scene globally. Several resources are available here for you to better understand our interest in this space:

In early 2005, we participated in a response to a request for information from the US Liberty Healthcare Department of Health and Human Services, submitting a **Liberty response** as well as a **collaborative response**.

Our work with HIMSS and other healthcare organizations has been ongoing, and is marked by presentations such as this: **Liberty Presentation at HIMSS Feb 2006**.

**eHealth Workshops** help us to collaborate with other organizations and provide an opportunity for us to introduce and encourage Liberty Federation in Healthcare.

We've demonstrated interoperability across multiple vendors to show federation and identity web services solutions in the healthcare market. More information can be found in these documents:

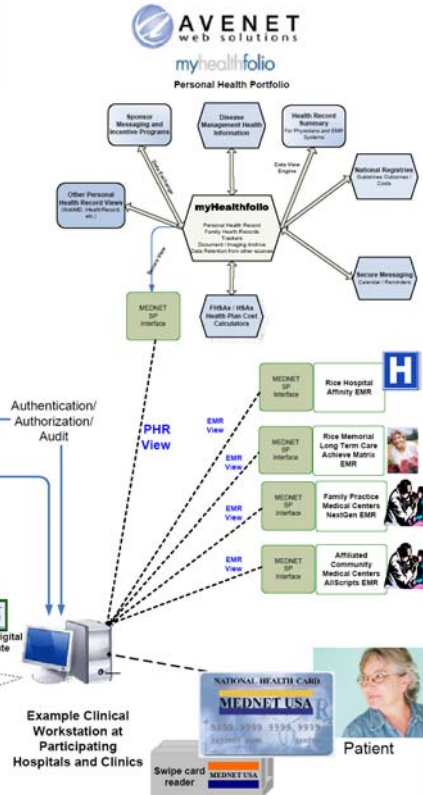
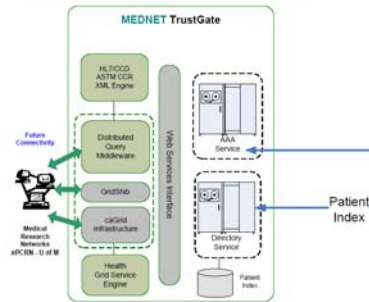
- Liberty Federated ID in Healthcare Handout**
- Liberty Federation and Identity Enabled WS in Healthcare**

Connecting Health Care Organizations in a Rural Community

Using a Personal Health Record (PHR) System and Grid Technologies to Improve Communication, Health Information Exchange, and Health Care

MEDNET USA and Avenet are partnering to implement a personal e-health record system (PHR), myHealthfolio, with MEDNET USA's Security Grid architecture through a Minnesota eHealth Grant to demonstrate the ability of the PHR to act as the mechanism to securely view health information between diverse electronic medical records.

MEDNET USA



Example Clinical Workstation at Participating Hospitals and Clinics

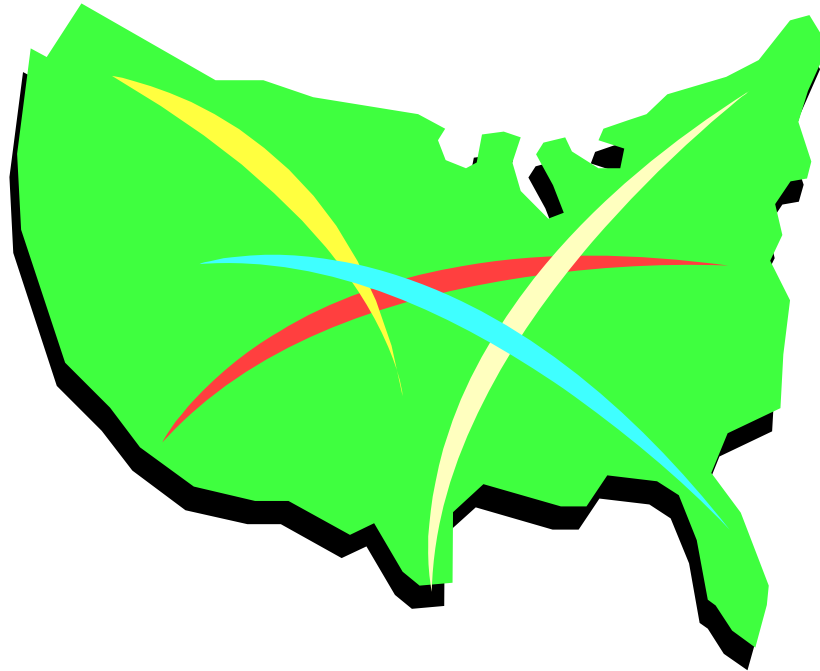


**What is myHealthfolio?**  
 myHealthfolio embodies the model of a secure portal, enabling consumers to organize existing electronic PHRs and EMRs. myHealthfolio provides data views of existing systems, as well as read/write capabilities to the central database. In exchanging data with systems such as employer human resource systems, myHealthfolio facilitates communication with employees while maintaining the security and privacy of their medical records. The myHealthfolio database is not hosted by the employer, and allows the employer access to aggregate data only, in accordance with HIPAA requirements.

**Who is Using myHealthfolio?**  
 myHealthfolio is scheduled for company wide deployment at Carlson Companies in January 2008, and is being used in demonstration projects from the Willmar eHealth grant to a phased pilot at the Minnesota State Colleges and University System (MnSCU).

# Willmar, MN RHIO Project

# CHIC/MEDNET



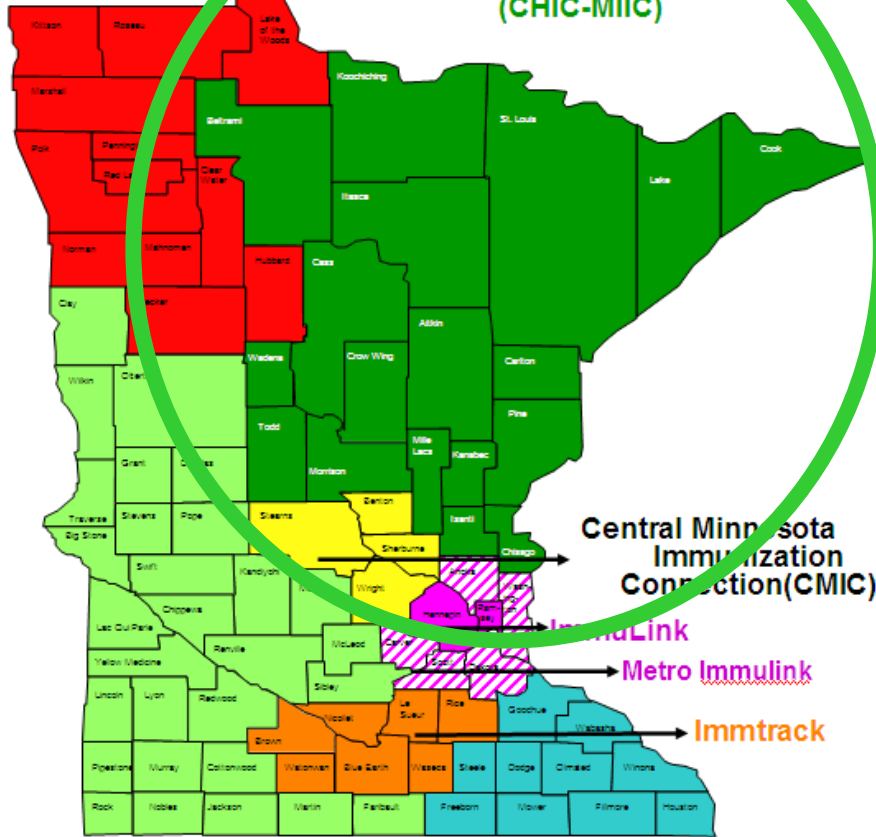
Building the NHIN Backbone !!

# CHIC NHIN Project

## 24x7 Medical Record Access!

Communities Caring  
for Children (CCC)

Community Health  
Information Collaborative  
(CHIC-MIIC)



Southwest Minnesota  
Immunization Information  
Connection (SW-MIIC)

Southeast Minnesota  
Immunization Connection  
(SEMIC)

## Project Overview:

1. 32 hospitals
2. 110 clinics

## Features:

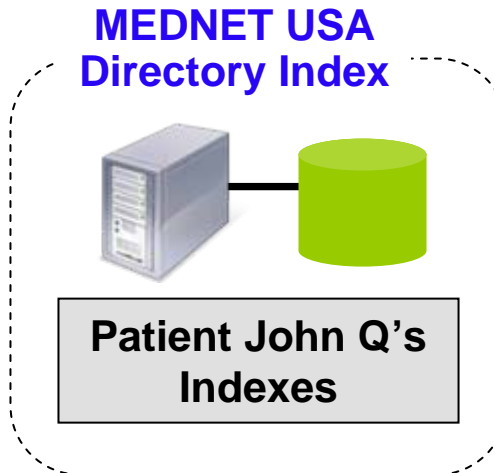
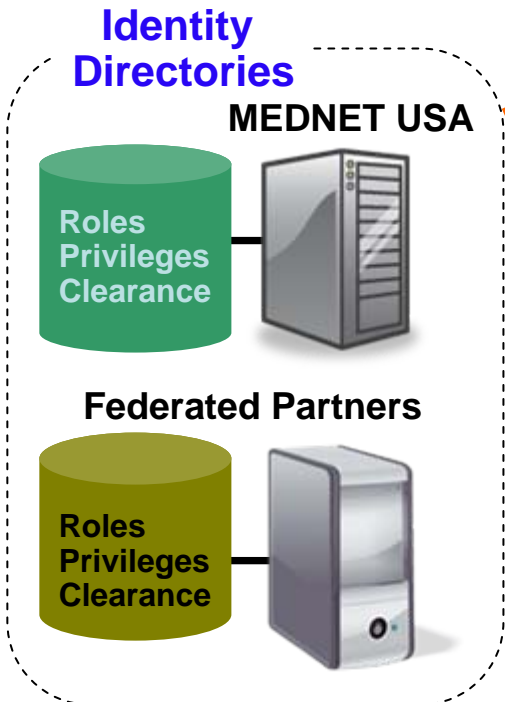
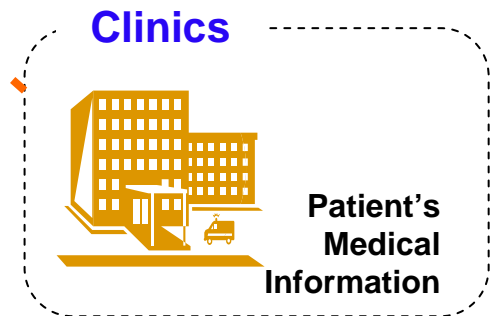
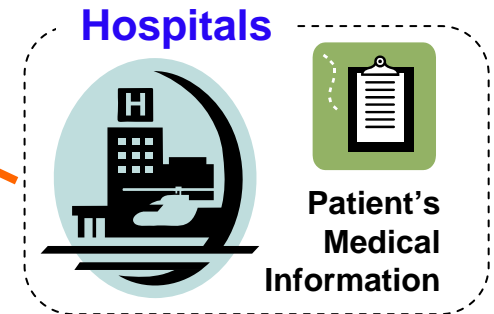
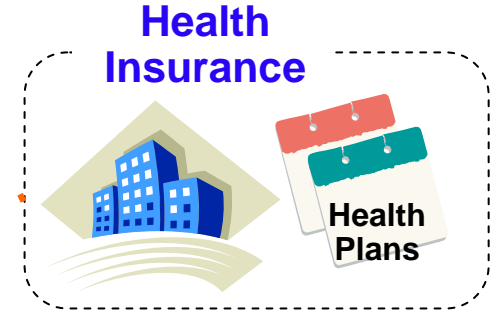
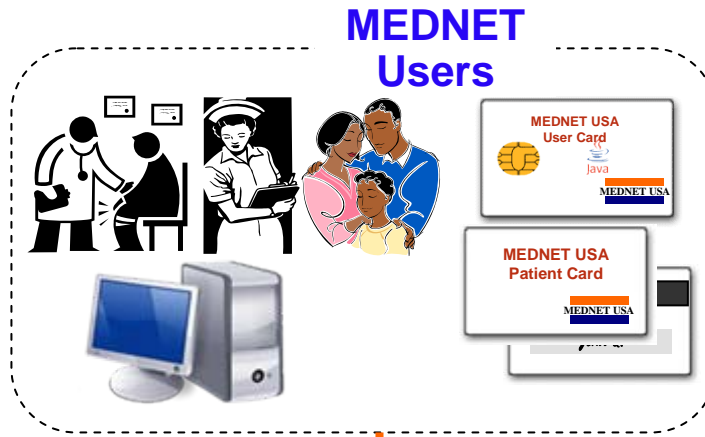
- Federated Identity Management System
- Patient Lookup Service
- Ambulance connectivity
- Immunization connectivity

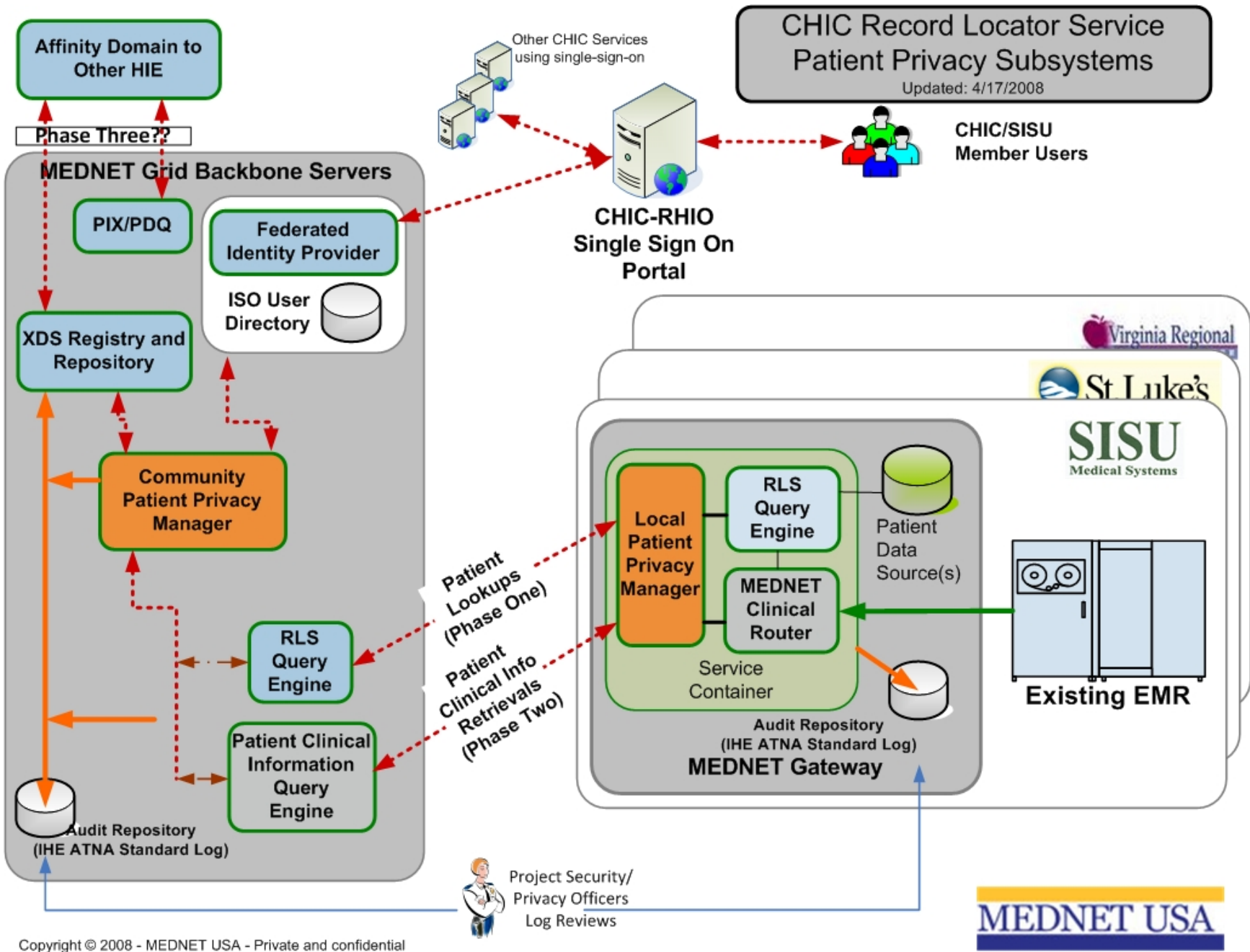
**NOW NHIN Connectivity !!**

# CHIC NHIN Overview

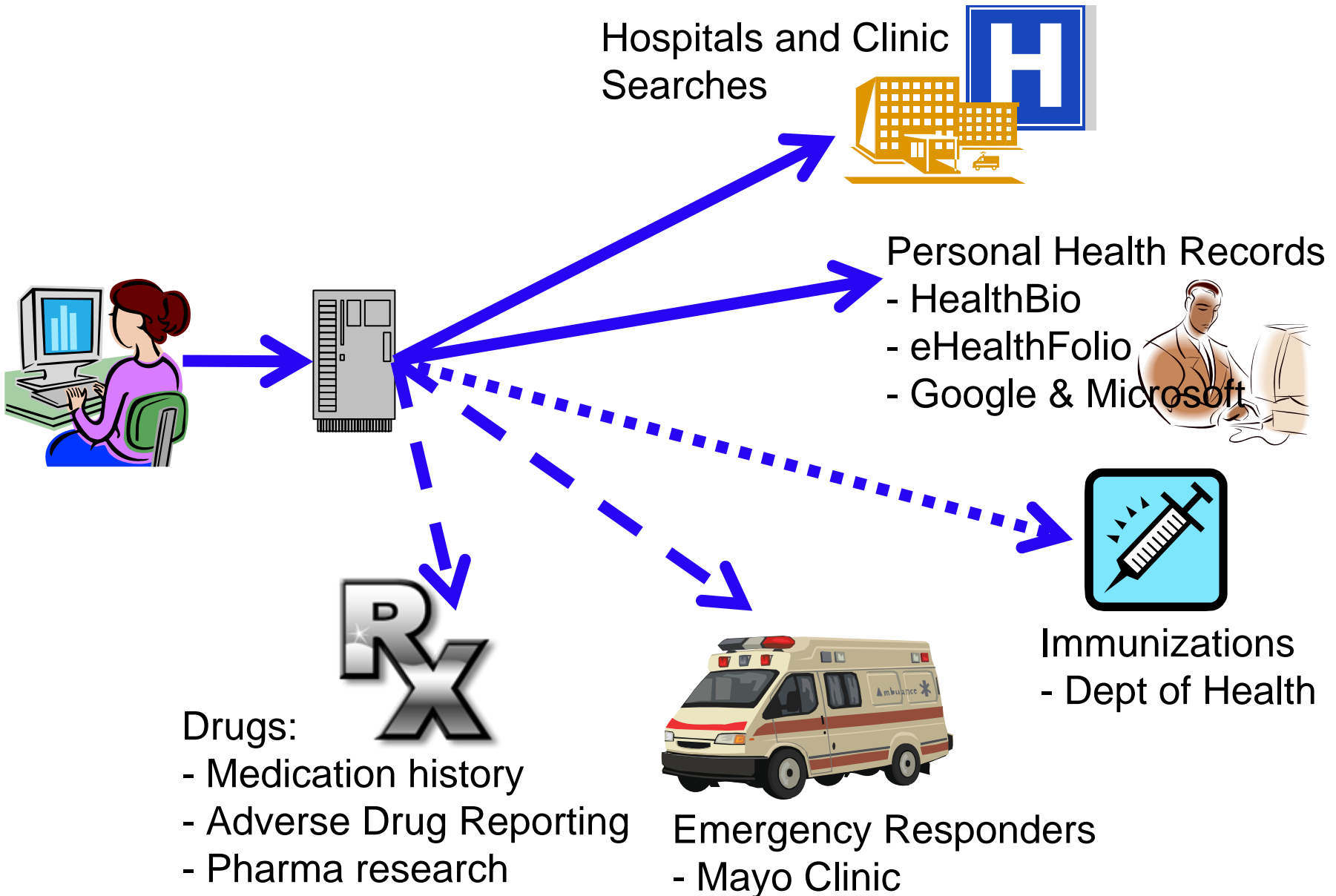
- Promised to test with NHIN participants
  - North Carolina and others..
- Multiple weekly conference calls
- Record Locator Service connectivity
- Personal Health Record connectivity
- Immunization connection

# MEDNET USA Health Grid Architecture





# Record Locator Services (RLS)



# Lessons Learned

- Patient Privacy – Number One!
- Must move beyond username/passwords
- Community must be engaged
- Legal agreements – required
- MEDNET must act as neutral third party – treat all users and applications equally

# Conclusion

Minnesota:

Where the Security is Strong and the  
Networks Good Looking 😊

(sorry Garrison!)



# THANK YOU !

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