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Dispelling the Myth that all HIE's are Created Equal

January 25, 2012

Lee Barrett, Executive Director, EHNAC

Panelists

Laura Kolkman, President, Mosaica Partners

Kate Berry, CEO, NeHC

Jennifer Covich Bordenick, CEO eHi

Jan Root, President & CEO UHIN

William O'Byrne, Executive Director NJ HITEC



Agenda

- Introduction of Panel
- Lee Barrett: Setting the Stage and Defining HIE/HIO's
- Laura Kolkman: Quality, Performance and Addressing HIE Similarities
- Kate Berry: Secrets of HIE Success Revealed: Lessons from the Leaders
- Jennifer Covich: Sustainability & Data Exchange
- Jan Root: UHIN Case Study
- William O'Byrne: Regional Extension Centers and HIE's
- Q&A



Questions

- What exactly is an HIE?
- What are the different types of HIEs?
- Who are the key players?
- How does an HIE define “success”?
- What do other terms mean, such as HIO, RHIO, etc.?
- What is the NHIN/NwHIN, and what is its relevance?





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Challenges

- Trust
- Proven, measurable results
- Sustainability
- Privacy and security





Definitions

- HEALTH INFORMATION EXCHANGE
 - A critical component for the healthcare industry's success with ARRA, meaningful use, and health reform initiatives.
- HEALTH INFORMATION EXCHANGES (HIEs) -- *the VERB*
 - Provides interoperable data, infrastructure and technology for the exchange of clinical data between and among healthcare providers with quality and efficiency.
- HEALTH INFORMATION EXCHANGE (HIE) -- *the NOUN*
 - Those organizations formed as a corporate entity to provide focused on data exchange and sharing of patient data across disparate stakeholders at the local, state, regional and national level. Such organizations must provide a sustainable service offering that supports a broad range of stakeholder participation.

-- Source: HIMSS



Funding Models

- Not-for-Profit
 - Chartered to help the patients and the community
 - Tax-exempt status can help to reduce funding challenges
- Public Utility
 - Federal/state funding and governance
- Physician and Payer Collaborative
 - Created by physicians and payers within a geography
 - Key is collaboration/mutual benefit of the payers/providers
- For-Profit
 - Privately funded with firm ROI targets

-- source: Deloitte



Data Models

- Centralized Model
 - **Pros:** Performance; data analysis; easier management
 - **Cons:** Single point of failure; continual data duplication
- Decentralized (Federated) Model
 - **Pros:** Eliminates data ownership issue; no single point of failure
 - **Cons:** Third party systems must be authorized for connection; complexity of inter-provider patient data access controls
- Hybrid Model
 - **Pros:** Performance; More HIE support and less administrative/technological burden for participants
 - **Cons:** Potentially the most expensive option

-- Source: HealthLeaders Media



HIE Scope

- Statewide HIEs
 - Various states are making progress developing the organizational and technological infrastructure for sharing patient data statewide. This level of sharing will enable improved efficiency and coordination of care.
- Nationwide Health Information Network (NwHIN)
 - The ultimate goal of this data sharing infrastructure is that patient information be shared from anywhere in the U.S. The Nationwide Health Information Network will provide the structure and technology to meet that goal.



-- Source: HIMSS



Stakeholder Value (ROI)

- PROVIDERS
 - Improved quality of patient care
 - Improved competitive market position
 - Improved reimbursement rates
 - Improved customer service/patient loyalty
- PAYORS, PATIENTS, AND GOVERNMENT
 - Improved regional health quality
 - Reduced expense in delivering care
 - Improved quality in care delivery
 - Availability of data for various purposes

-- Source: Deloitte



Active HIEs

- 2010
 - Around 234
- 2011
 - Around 255

-- Sources: Deloitte and eHI



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Mosaica Partners

About Mosaica Partners

-  Mosaica Partners is a Nationally Recognized HIE Consulting Firm Established In 2005
-  Our clients include federal government, states, regions, communities, and firms who want to manage and share health information electronically.
-  Our employees and network of associates include clinicians, consultants and researchers.

Mission

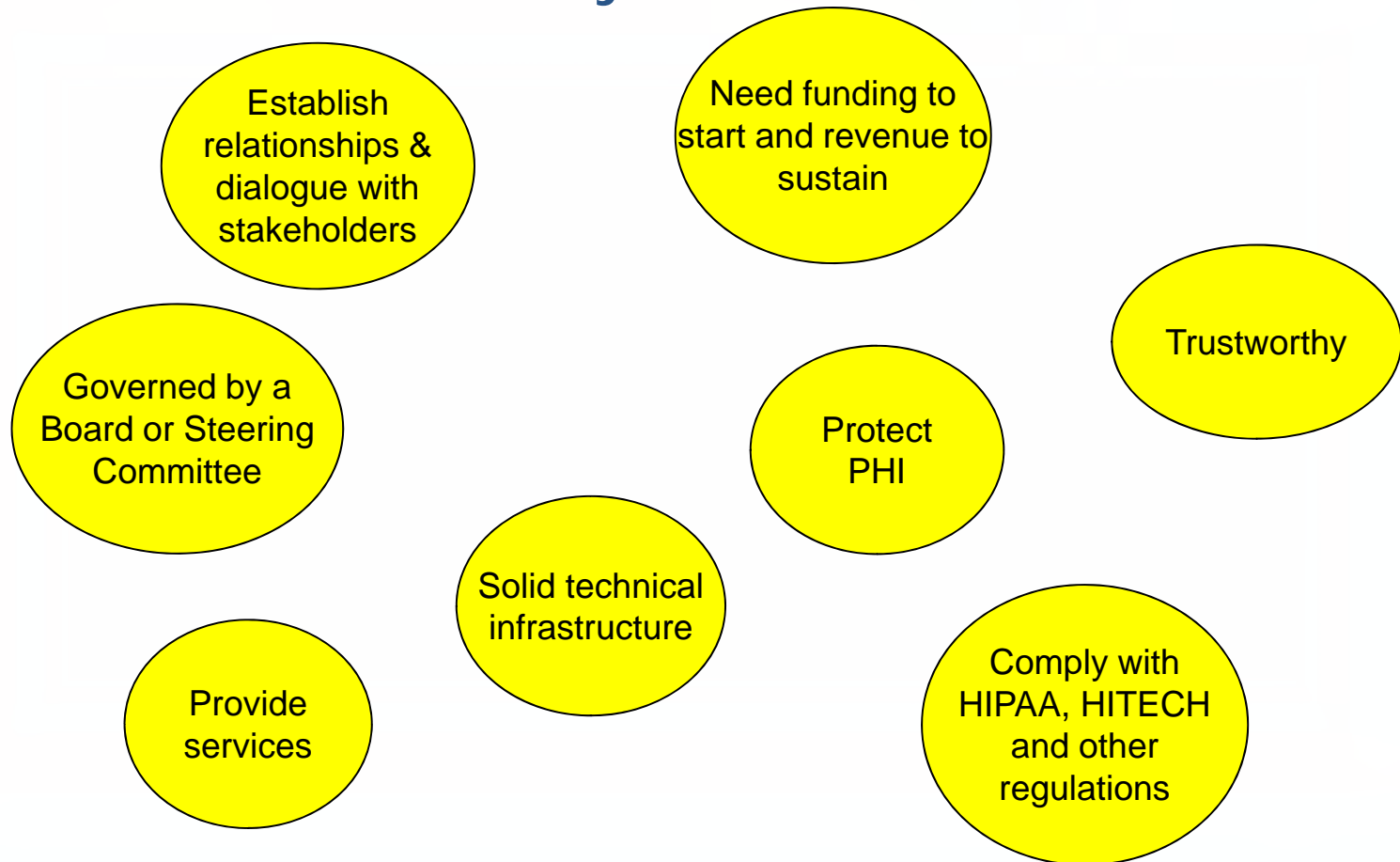
Our mission is to improve the quality of health care by enabling, improving and advancing health information exchange.

***“The Health Information Exchange Formation Guide:
The Authoritative Guide for Planning and Forming an HIE
in Your State, Region, or Community”***

Published by HIMSS February 2011.



Many people believe that all HIEs are equal Because they have similarities





The reality is that they can be different in many ways





What really matters is quality & performance

- Deliver stakeholder value
- Provide stable governance
- Comply with privacy requirements
- Ensure a sustainable financial model
- Implement a reliable technology infrastructure



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A proven approach to forming an HIE provides a path to success

Five Activity & Competency Domains

Stakeholder Engagement & Participation

Governance

Business & Finance

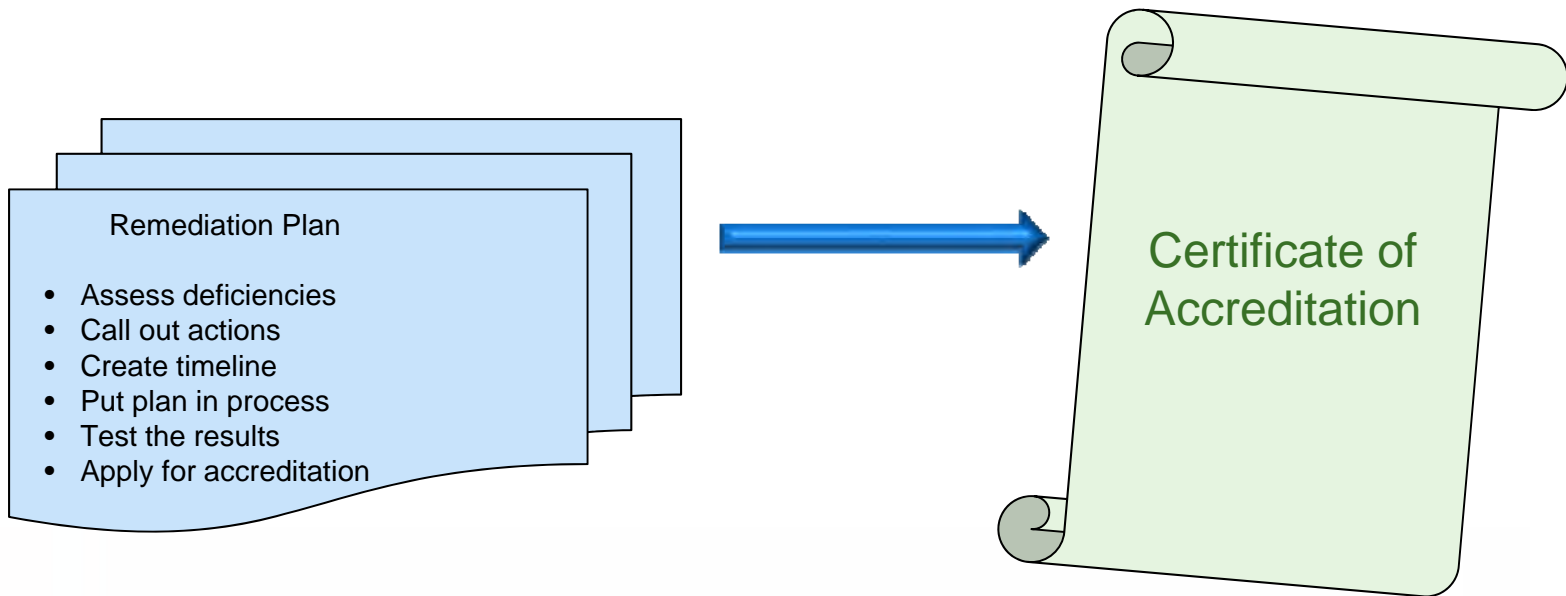
Privacy

Technology & Security

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Stakeholder Engagement & Participation	Project Kickoff	Workgroups Formed					
Governance		ID Wants & Needs Develop Communication Plan	Obtain Stakeholder LOIs		Develop User Training and Support Plan		
Business & Finance	Initial Org Vision & Mission	Develop Key Policies Create Workgroups	Hire Exec Dir. Develop Org Principles	Create By-Laws	Form Legal Entity		Create Operational Governance
Privacy			Obtain Early Funding	Create Strategic Plan	Create Business Plan Obtain Additional Funding	Develop Implementation Plan and Capabilities Define Service Offerings	Develop Implementation and Rollout Plan Conduct Pilot
Technology & Security			Understand Fed., State & Local Laws Relating to HIE	Create Privacy Policies	Develop Technical Architecture	Develop Security Policies & Procedures	Implement & Test Technology



The accreditation process validates that capabilities present meet or exceed industry standards





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“The Health Information Exchange Formation Guide”

To preview the book, please visit its companion website:

<http://www.himss.org/hieformationguide>



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Secrets of HIE Success
Revealed: Lessons
from the Leaders

Kate Berry, CEO
National eHealth
Collaborative





NeHC Mission, Vision and Strategy

VISION

A transformed U.S. healthcare system that ranks #1 worldwide in health and healthcare through innovative access, sharing and use of health information in every community and across the nation.

STRATEGIC GOALS

Promote Nationwide HIE	Engage with Stakeholders on HIE	Ensure NeHC's Vitality and Relevance	Achieve Sustainability for NeHC to Accomplish Our Goals
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MAJOR INITIATIVES

- Convene Consumer Consortium on eHealth
- Operate NeHC University
- Support Nationwide Health Information Network Exchange
- Develop and Disseminate HIE Leader Profiles
- Accelerate HIE Progress Through Collaborative Forum and Programs
- Create Online Communities and Knowledge Base
- Develop and Communicate a National HIE Roadmap

MISSION

NeHC is a public-private partnership that enables secure and interoperable nationwide health information exchange to advance health and improve healthcare.



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12 Leading HIEs Profiled in the Report





Portfolio of Services

- All offer basic HIE services:
 - Collecting, managing, and distributing patient health information
 - Delivery of patient clinical summaries
 - Connectivity to EHRs
- Most are helping hospitals and physicians to achieve meaningful use by filling gaps in EMR capabilities, including:
 - Patient/disease registries
 - Medication reconciliation
 - Population health management
- Many moving from data interchange businesses to application solutions providers



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Critical Success Factors

- **Aligning stakeholders** with HIE priorities is an ongoing and intensive effort
- Establishing a brand that conveys their role as a trusted, **neutral entity** protecting the interests of participants
- Consistently focusing on **value proposition** and business case for key activities
- **Market structure** and dynamics, especially in early stages, are important determinants of success
- Understanding clinical workflows and **managing change** must be core competencies



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Barriers

- Complexity of patient **privacy** and consent
- Gaps in and variable use of interoperability **standards**
- Limited quantitative **evidence of benefits**
- **Competition**
- **Trust**



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Business Models

- Hospitals, physicians and other providers pay fees (usually subscription fees)
- Health plans and other data suppliers, such as labs, pay fees typically based on size and volume
- In some cases, payers contribute most of operating expenses with additional revenue coming from data suppliers
- Very strong focus on business case when considering new services
- Grant funds are segregated from operations and used to finance new strategic initiatives



Connectivity Strategies

- Most of the 12 leaders have multiple approaches to connectivity
- Five of the HIEs are currently connected to the Nationwide Health Information Network Exchange and three more plan to connect
 - Enables exchange with VA, SSA, CMS, Beacons, other HIEs, etc.
- The same eight HIEs are implementing Direct standards and services
 - Improves care coordination among providers
 - Some concern that Direct may fragment progress toward more robust HIE



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Strategies to Create Value

- Assist providers in achieving meaningful use
- Analytics
 - Collect and analyze quality and outcomes data
 - Population health management
 - Robust clinical decision support
- Support provider engagement with patients
 - Secure patient portal
 - Enable access to data
 - Support communications
 - PHR interoperability
- Tools to help providers and patients manage chronic conditions
- Support ACOs and PCMHs



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Future Outlook

- Growth through geographic expansion, new services
- Increase payer and employer engagement
- Focus on demonstrating value
- Increasingly challenging and complex governance
- Increase role in care transformation
- Raising capital to grow is key to long-term sustainability



NeHC University: HIE Leadership and Innovation

- In-depth case studies
 - September 7 – Rochester RHIO, THINC
 - September 22 – Availity, Sandlot
 - October 5 -- VA, Inland Northwest Health Services
 - October 20 – HealthBridge, Big Bend RHIO
 - November 29 – Quality Health Network, MedVirginia
 - December 5 – HealthInfoNet, SMRTNET
- Roundtable discussions with HIE leaders and subject matter experts
 - September 28 -- Connectivity strategies
 - November 3 -- Governance and stakeholder engagement
 - November 14 -- Privacy and patient consent
 - December 14 -- Consumer engagement

Recordings available at www.nationalehealth.org



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Secrets of HIE Success Revealed: Lessons from the Leaders

on the NeHC website:

[http://nationalehealth.org/
SecretsofHIESuccessRevealed.pdf](http://nationalehealth.org/SecretsofHIESuccessRevealed.pdf)



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Sustainability & Data Exchange

Jennifer Covich Bordenick
Chief Executive Officer, eHealth
Initiative

January 25, 2012



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Our Mission

- Since 2001, national, non-partisan, non-profit
- Promote use of information and technology to improve quality, safety and efficiency in healthcare
- Research, educate, and advocate
- 200 members





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Sample List of eHI Members

- AARP
- Aetna
- American Medical Association
- American Cancer Society
- American Hospital Association
- CVS Caremark
- Faster Cures
- General Electric
- HealthBridge
- Ingenix
- Mayo Clinic
- Mended Hearts
- McKesson
- National Quality Forum (NQF)
- Partners Health System
- Pfizer
- Surescripts
- United Healthcare
- Walgreens
- WebMD



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Sample of HIE Resources

The following is a list of sample resources available to members which can be accessed with your username and password:

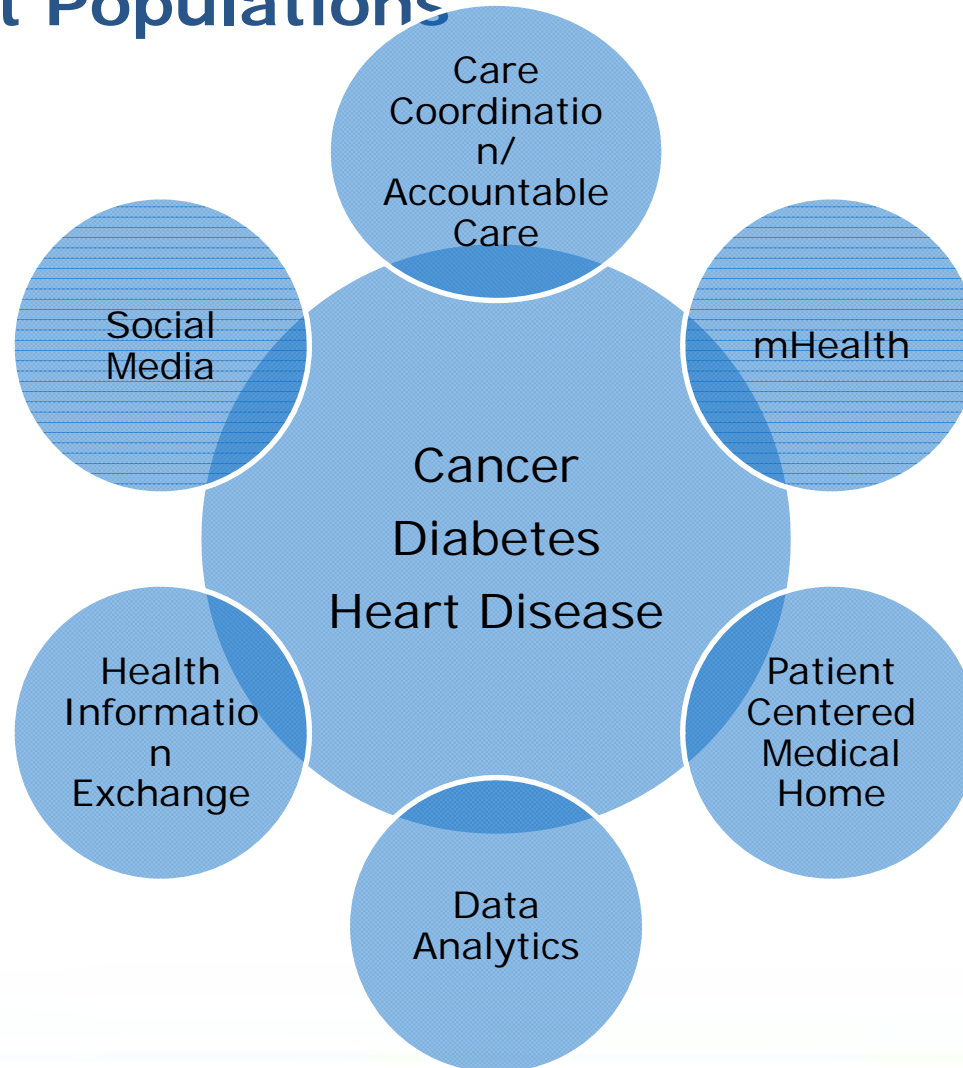
- HIE Survey Report
- HIE Market Report Analytics & Trends
- HIE Sustainability Report
- HIE Workforce Development Report
- HIE Vendor Report
- HIE Governance Models
- Survey Report on Regional Extension Centers
- Care Coordination Report
- HIE Toolkit
- Meaningful Use Reports
- HIE nationwide Map



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2012 Strategy for eHI Activities: Improve Care for Key Patient Populations





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Our Strategic Goals

- Strengthen partnerships with groups focused on improving outcomes
- Serve as a leader and a resource in identifying best practices in quality, safety, efficiency and cost effectiveness for high cost chronic diseases
- Convene multi-stakeholder groups to guide health IT community and organizations
 - Connecting Communities through Health Information Exchange
 - Tools and solutions for cancer, diabetes, and heart disease
 - HIT Infrastructure for Accountable Care
 - Data Analytics and Research
- Promote federal policies, payment reform and healthcare delivery redesign that supports use of eHealth



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Health Information Exchange





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Sustainability Defined

- Sustainability can best be defined as: when the HIE is funded and maintained through sources that are directly attributable to the services rendered by the HIE, rather than through outside sources, such as federal or state grants.
- The 2011 HIE survey defines sustainable initiatives as:
 - Advanced (stages 5, 6, 7) – Transmitting clinical data
 - Not dependent on federal funding in the last fiscal year
 - Broke even through operational revenue alone



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What Makes Sustainability a Challenge?

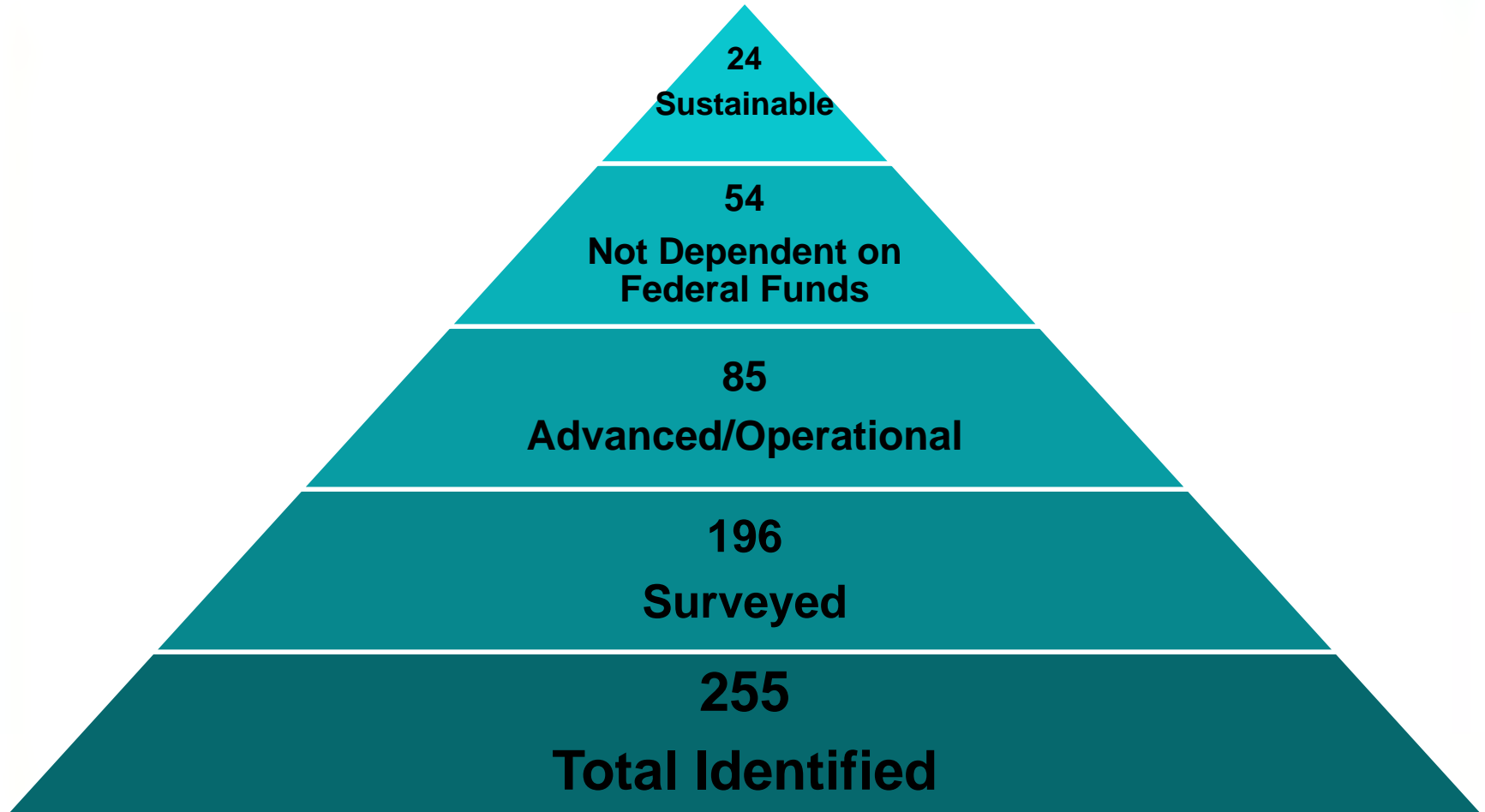
- Sustainability is challenging because it is difficult to calculate a clear, measureable return on investment (ROI) for providers, which makes them less inclined to participate and share clinical data through the exchange
 - Most of the benefits relate to risk avoidance, which are very difficult to measure.
- Large initial start-up and administrative costs which must usually come from a disparate set of hospitals, health plans, physicians and others.
 - Requires buy-in, commitment, and coordination



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State of the Field





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Sustainability Takes Time

- 9 of the 24 became “operational” and began transmitting data by the end of the first year.
- Only half (12) reported that it took them three years or less to become sustainable
 - Only 7 reported becoming sustainable within a year



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Who is Involved?

- Top stakeholders **involved in governance**: Hospitals, physicians, payers, and community and/or public health clinics
- Top stakeholders **receiving data**: Physicians, hospitals, and community and/or public health clinics
- Top stakeholders **providing data**: Physicians, hospitals, and independent laboratories
 - Compared to the all initiatives, a large number of independent laboratories, outpatient/ambulatory surgery centers, and independent radiology centers are providing data to sustainable HIEs



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Close-Up of the Sustainable Initiatives: How Do They Do It?





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Sustainability Comes from a Variety of Sources

- Hospitals, provider practices, and payers are most commonly cited sources of funding for sustainable initiatives
- Those HIEs receiving funding from a single source report the lowest revenues (under \$1 million)



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Sustainable Initiatives Share Common Revenue Models

- Most sustainable HIEs reported receiving funds from stakeholders through multiple different revenue models
- The use of **membership fees** was the most common revenue model, followed closely by fees for HIE services beyond basic services, e.g. PHR portal, analytics, or quality reporting



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	Total Revenue Models
Membership fees	10
Fees for HIE services	9
Federal funds	4
Assessment fees	3
State appropriations/ grants	2
Usage/transaction fees	2
Taxation	1



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Data Exchanged by Sustainable Initiatives

Stage 1 Meaningful Use Items

Laboratory Results	23
Care Summaries (demographics, encounter history, medications, etc.)	21
Emergency Department episodes/discharge summaries	21
Medication data (including outpatient prescriptions)	20
Allergy info	19
Outpatient episodes	17
Retail pharmacy	10



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Most Commonly Offered Functionalities

- **Connectivity to electronic health records**
- **Care summaries**
- **Master patient index**
- **Results delivery (lab and/or diagnostic study results)**



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Common Factors for Sustainability

- **Robust and mature**, in existence for 6-13 years
- **Non-profit organizations** acting as neutral third party with the ability to convene competing organizations
- **Started in response to a community need** – either clinical or administrative
- **Providing diverse service offerings and data** sources to physicians and hospitals to help them achieve meaningful use and improve workflow processes
- **Making participation affordable** by keeping operating costs as low as possible, leveraging resources, and expanding revenue streams



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MentalHealthHumor.com **CARTOON-A-THON** by: Chris B. Stewart



Final Thoughts



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UHIN

- UHIN has been operating as a clearinghouse since 1993
 - Non-profit
 - Mission: reduce cost, improve quality
 - 2004: EHNAC Accredited
- In 2004 UHIN began exploring becoming an HIE
- Created a business case
- Now: bringing up the cHIE
 - State-wide



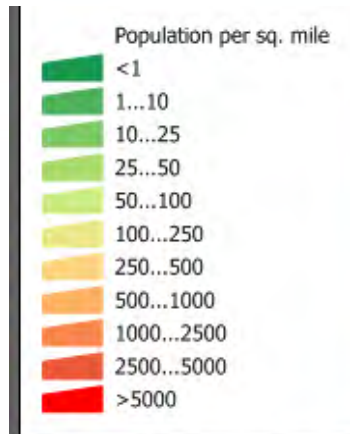
cHIE

THE POWER OF SHARING.

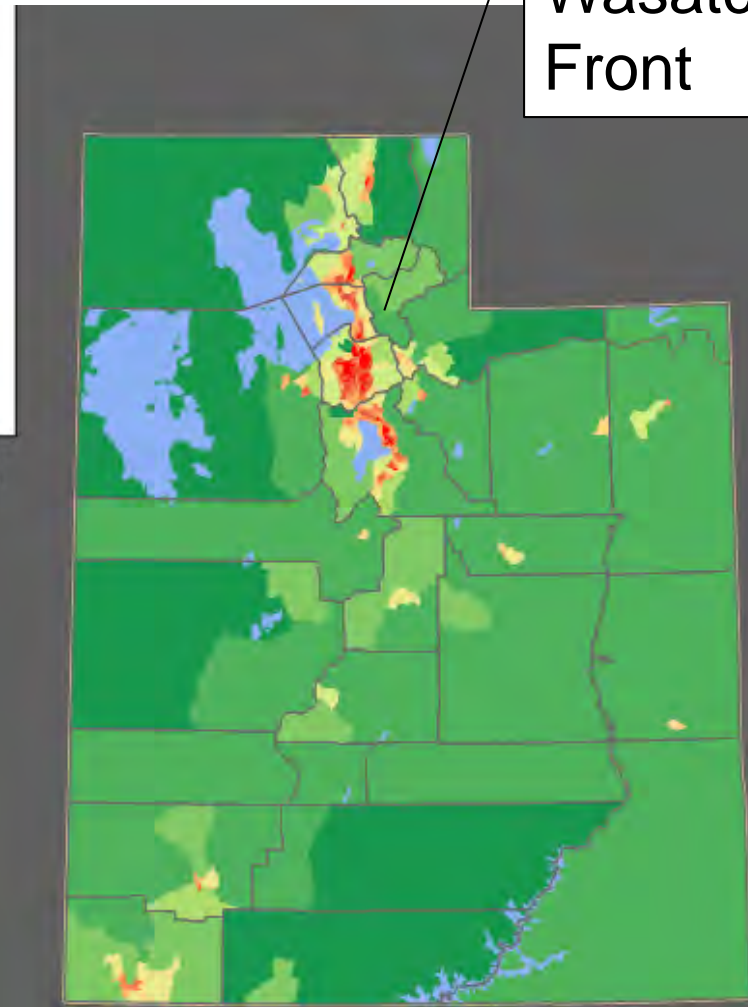


ABOUT UTAH

- 2.7 million people
 - 23% increase (from 2000)
- 13th largest state
- 10th least densely populated
- Huge outdoor recreation industry
- ~6000 physicians
- 54 hospitals (20+ are rural)



Source: U.S. Census Bureau
Census 2010 Summary File 1
population by census tract

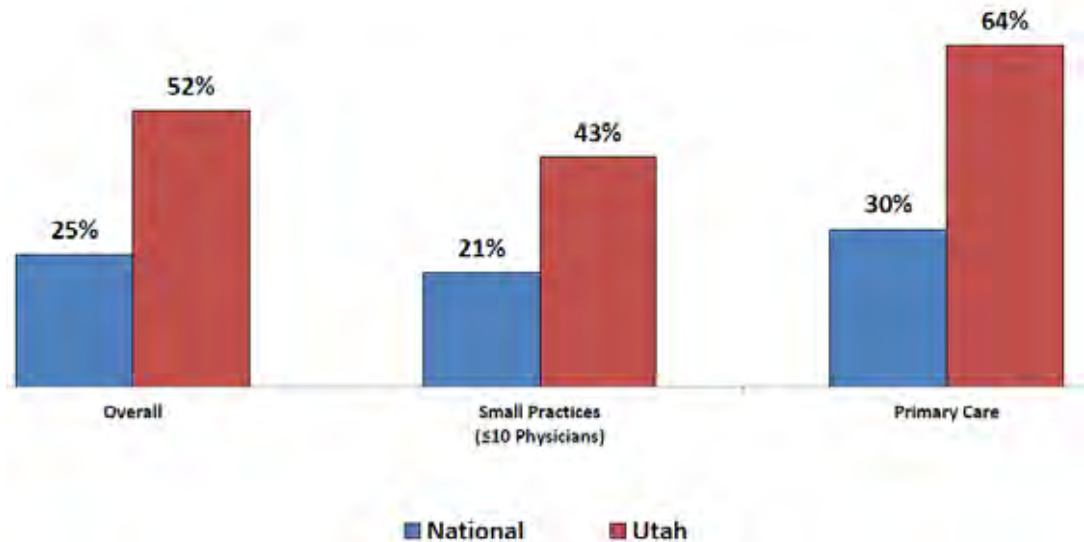




About Utah

- High percentage of clinics have adopted EHRs
- Intermountain Healthcare: Leader in longitudinal healthcare records
- Nationally renowned MPI Expertise

Proportion of Office-Based Physicians that have Adopted a 'Basic' EHR





About the cHIE

- Services

- Results Delivery
- e-Prescribing
- Certified EHR
- Virtual Health Record
- Referrals
- Consent Management
- Master Person Index (MPI)
- Connection to the VA
- **Direct** Services

- Future Services:

- Secondary Use Data Marts
- Secondary Data Analyses
- Public Health Reporting
- Meaningful Use Registry
- Diabetic Worksheet
- Pediatric Patient Summary
- State-wide Radiology Solution



Why EHNAC Accreditation?

- **Building and Maintaining Trust**
 - UHIN first EHNAC accredited on clearinghouse (administrative transactions) services in 2004
 - Solid basis for answering concerns about privacy, security and performance
 - Every two years
- **Example:**
 - One UHIN Member: top-to-bottom security audit
 - Accepted EHNAC results
 - Saved UHIN many hours and dollars in unnecessary work
 - Increased UHIN's creditability with members



Why HIE Accreditation?

- **Build and Maintain Trust**
 - Very important for HIEs as they are new (and not highly trusted)
- **How important is this? VERY!**
 - UHIN collaborated with about 13 other HIEs to create the first EHNAC HIE Accreditation
 - UHIN is working to expand EHNAC HIE Accreditation further to include:
 - Master Person Index: best practices for operating an MPI
 - Consent Management
 - Access Auditing



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NJ-HITEC Milestone Dashboard

As of 1/18/12

NJ-HITEC Members (M1)



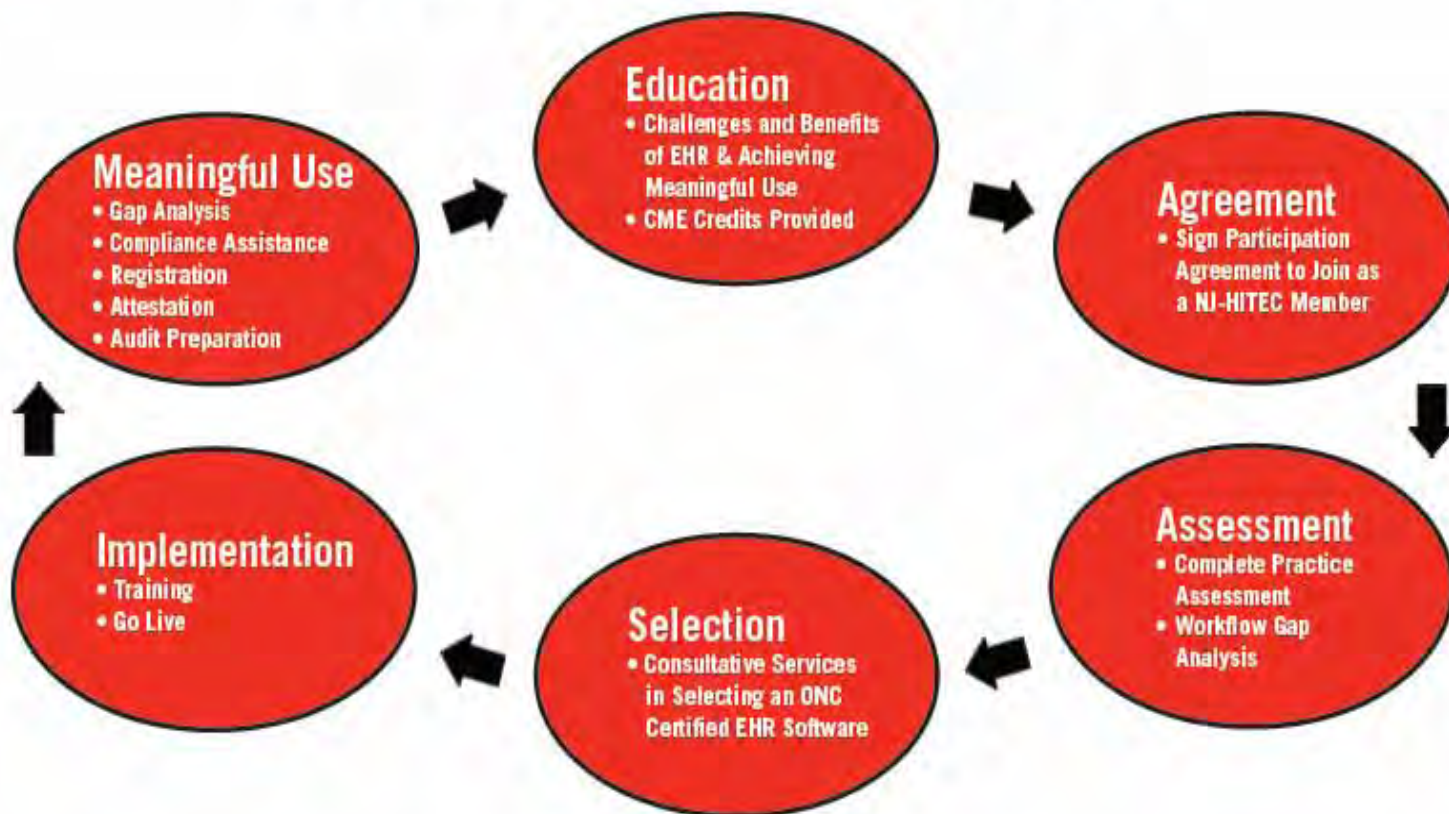
Live on EHR (M2)



Meaningful Users (M3)



CORE SERVICES

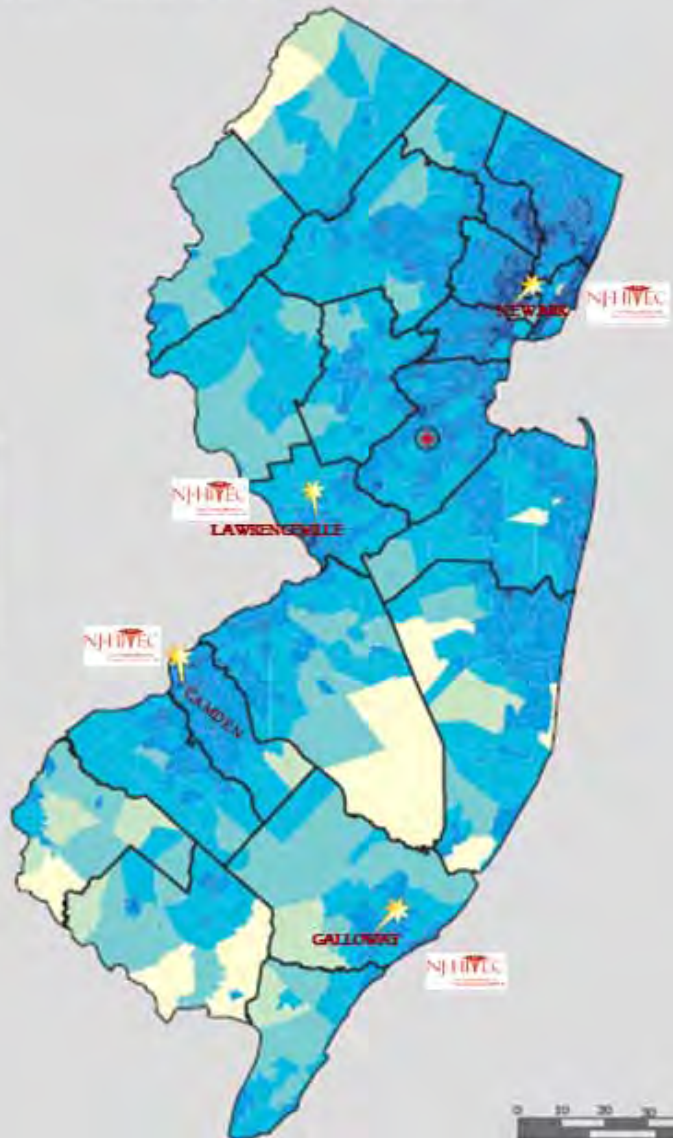


ELIGIBLE NJ-HITEC PRIMARY CARE PROVIDERS

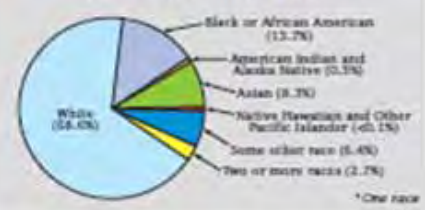
Internal Medicine • Family Practice • OB/GYN (Obstetrics & Gynecology) • Pediatrics • Gerontology • Nurse Practitioners • Physicians Assistants

2010 Census: New Jersey Profile

Population Density by Census Tract



State Race* Breakdown

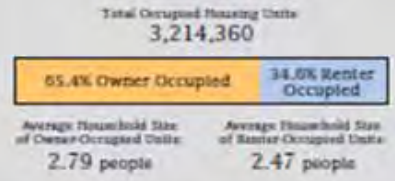


Hispanic or Latino (of any race) makes up **17.7%** of the state population.

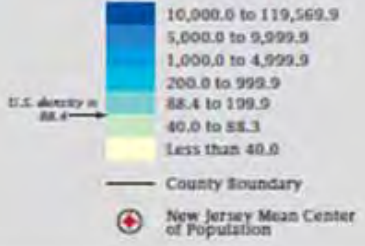
Population by Sex and Age



Housing Tenure



People per Square Mile by Census Tract

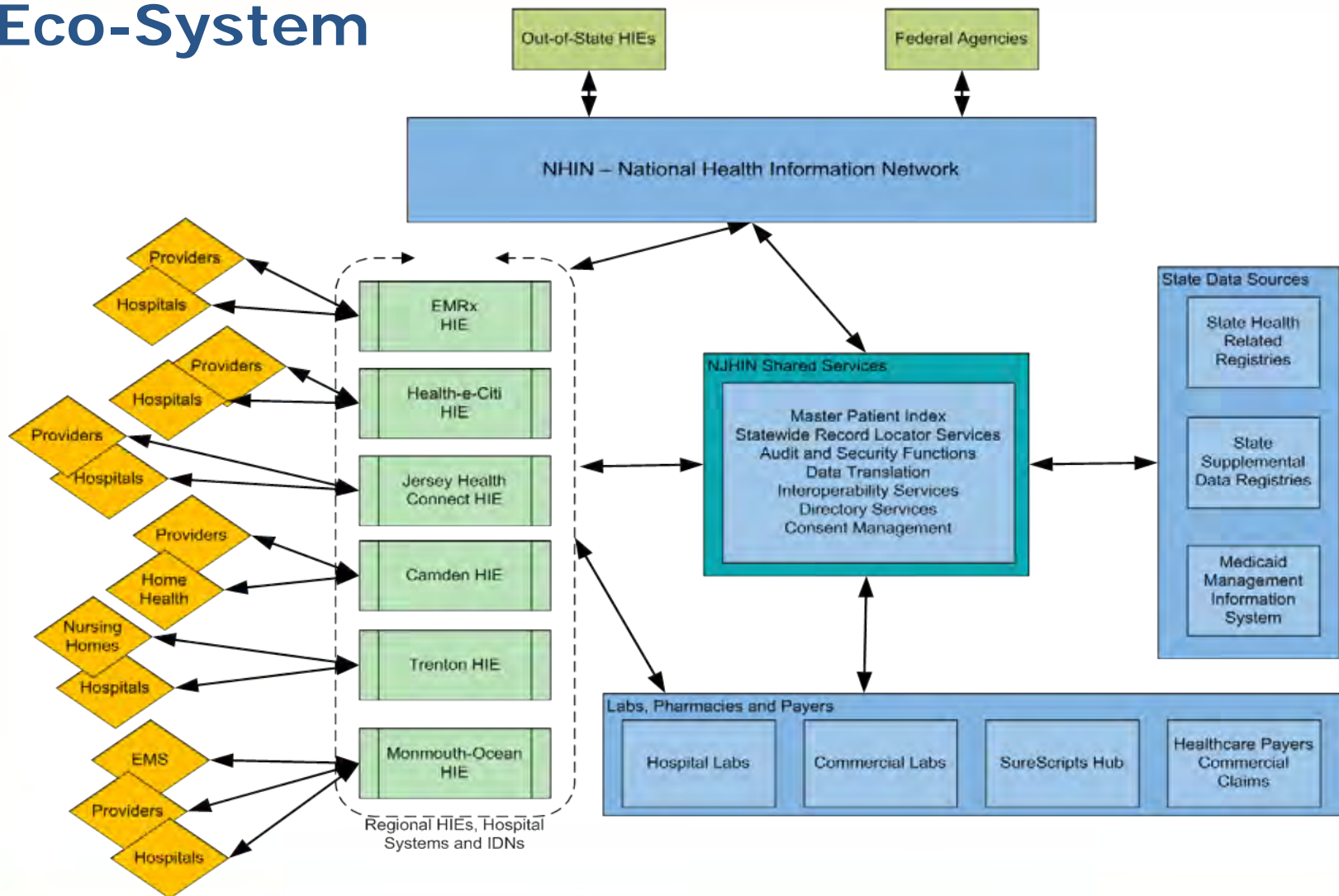




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NJ Statewide Health Exchange Eco-System



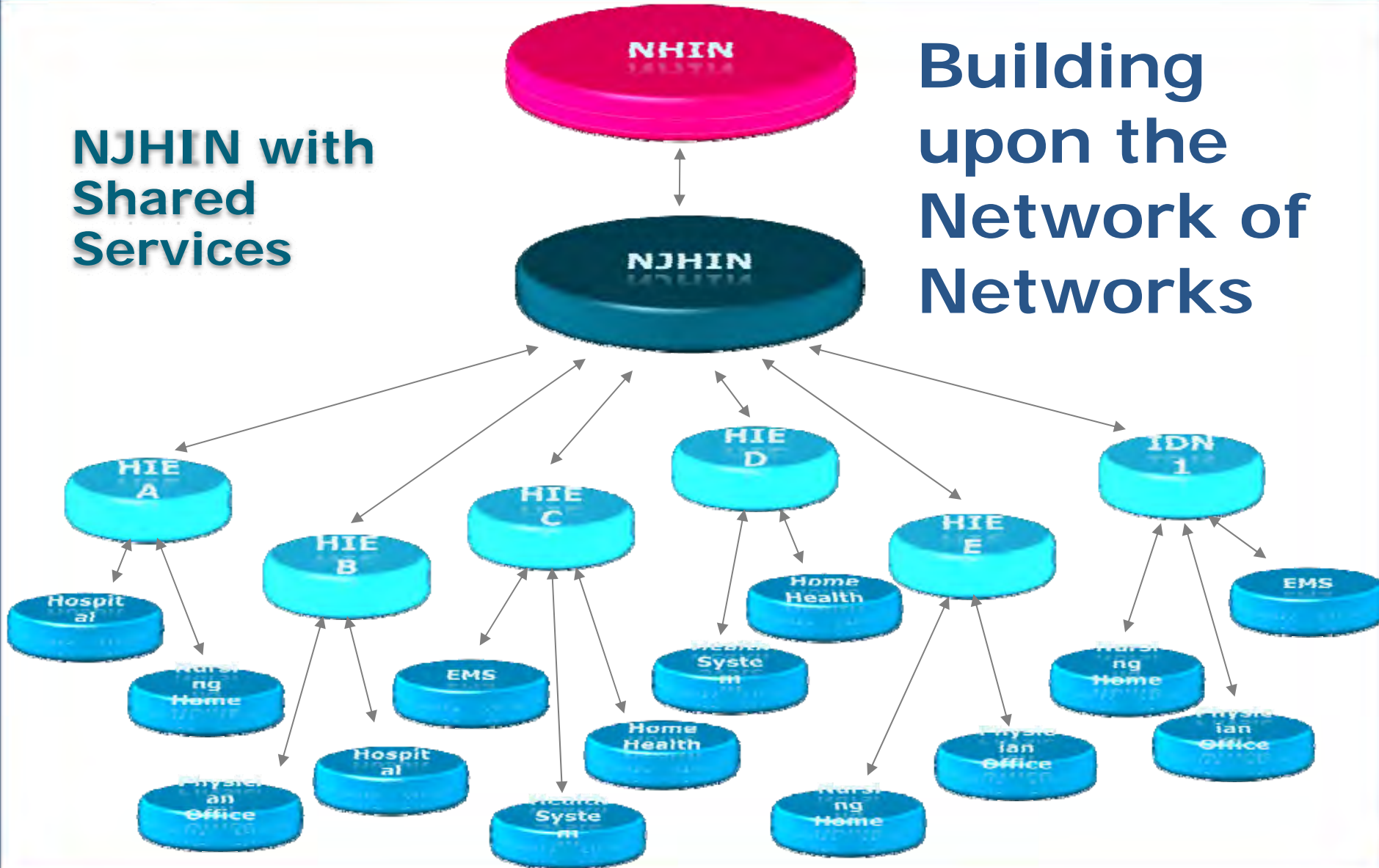


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NJHIN with Shared Services

Building upon the Network of Networks





NJ-HITEC Business Development Model

- Health Care Delivery is a business.
- Go where the business is being conducted.
- State Leaders, State Planning, State Solutions, State Medicaid and Health Departments.
- FQHCs.
- Hospitals – CIOs.
- Trade Associations – HIMSS, NJHA, MSNJ, NJAFP



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NJ-HITEC Business Development Model cont.

- Field Representatives – Consultants
- Partners – make everyone your partner
- Share the Wealth
- Don't Compete – cooperate, find solutions
- Say "Yes" whenever possible.
- Be everywhere – build collaboration.





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New Jersey's Regional Extension Center

at New Jersey Institute of Technology

www.njhitec.org

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Pamela Kathuria
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Questions

