Delivering on the NHIN & HISPC Initiatives:

NC's Involvement and Lessons Learned

Presented to:

4th National HIT Summit

March 29, 2007

"Improving Healthcare in North Carolina by Accelerating the Adoption of Information Technology"

NCHICA
North Carolina Healthcare Information and Communications Alliance, Inc.

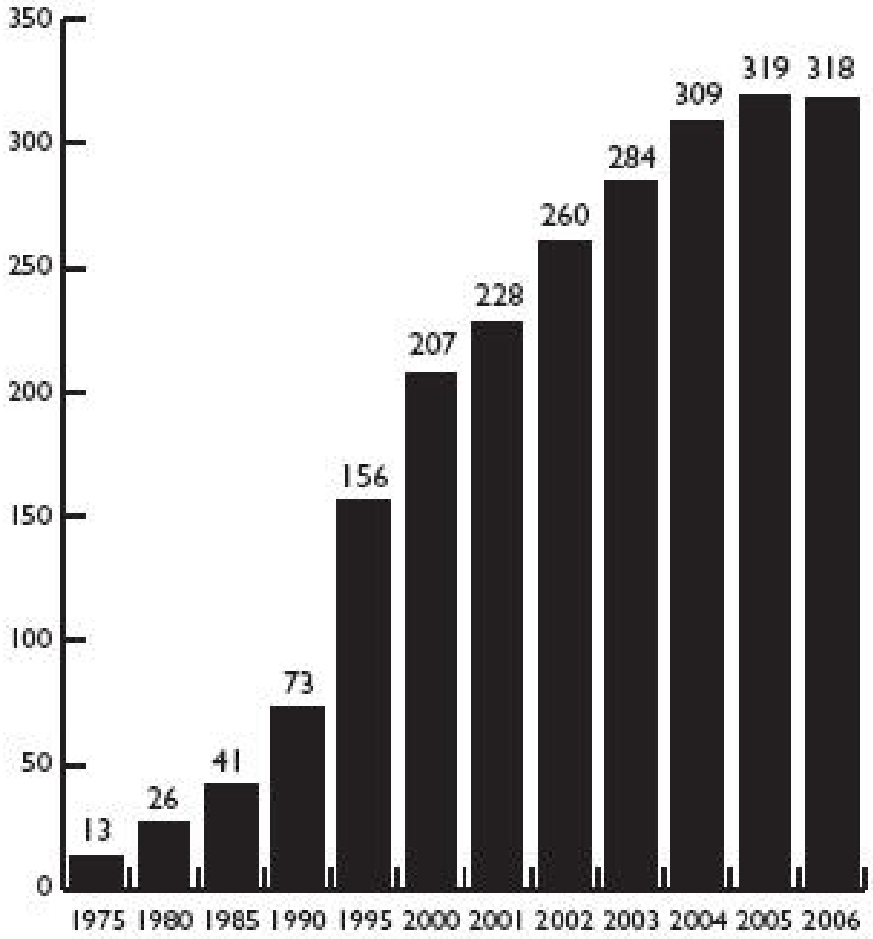
Presentation Elements

- NCHICA View of Transformation Drivers
- NCHICA Background
- NHIN Contract
- HISPC Contract
- What is next?
- Q & A

Medicaid Trends

Figure 14

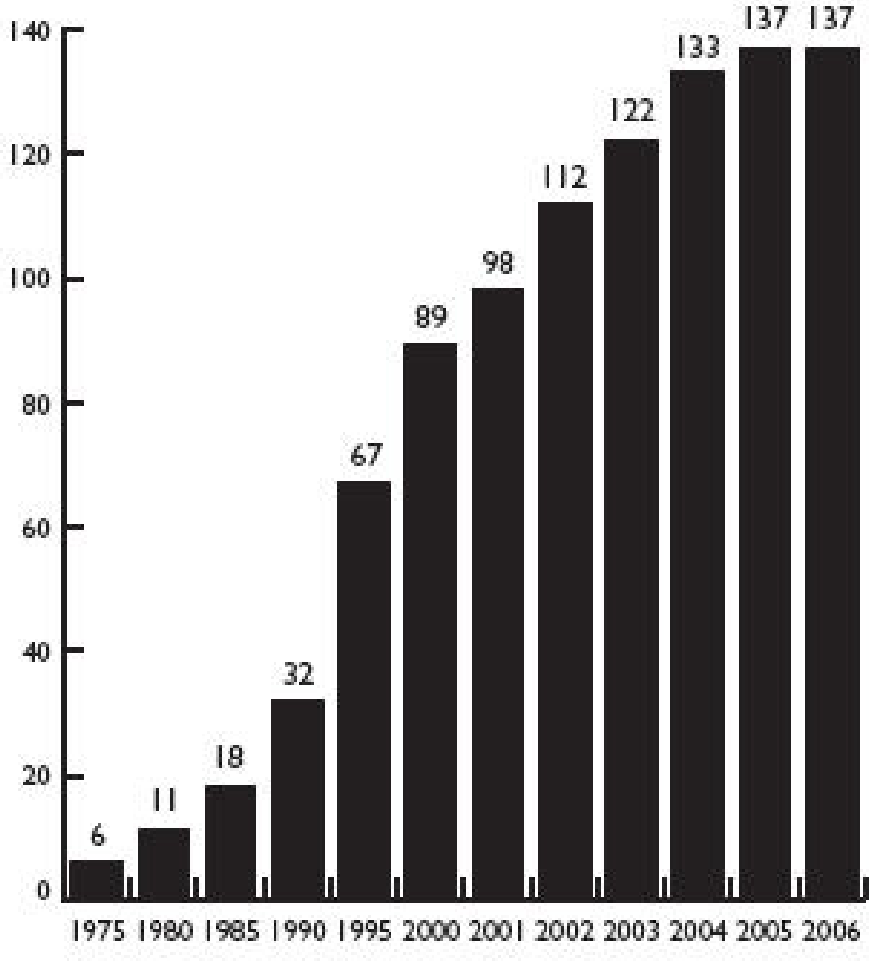
ACTUAL AND PROJECTED TOTAL MEDICAID SPENDING, 1975 TO 2006 (IN BILLIONS)



Source: Congressional Budget Office and Federal Funds Information for States

Figure 15

ACTUAL AND PROJECTED STATE MEDICAID SPENDING, 1975 TO 2006 (IN BILLIONS)



Source: Congressional Budget Office and Federal Funds Information for States

Medicaid Trends

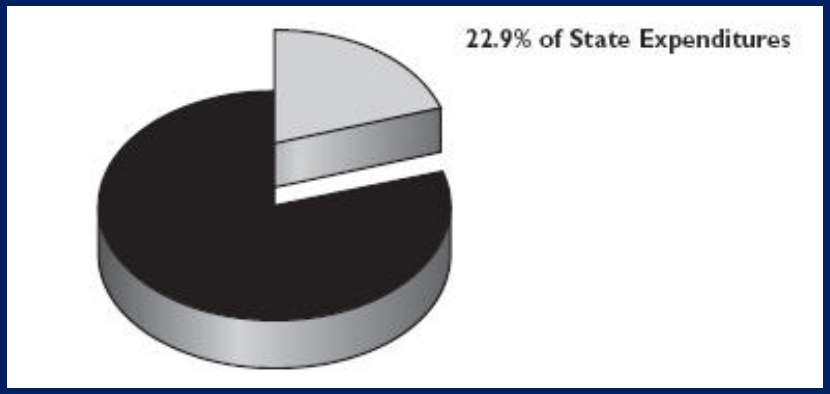
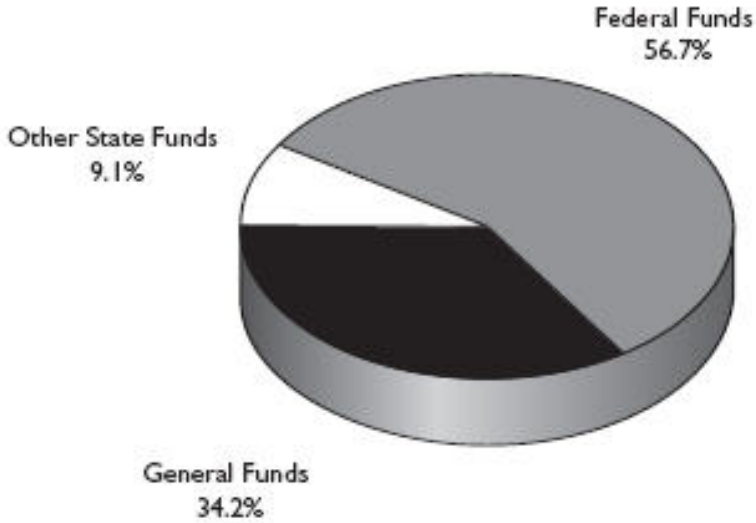


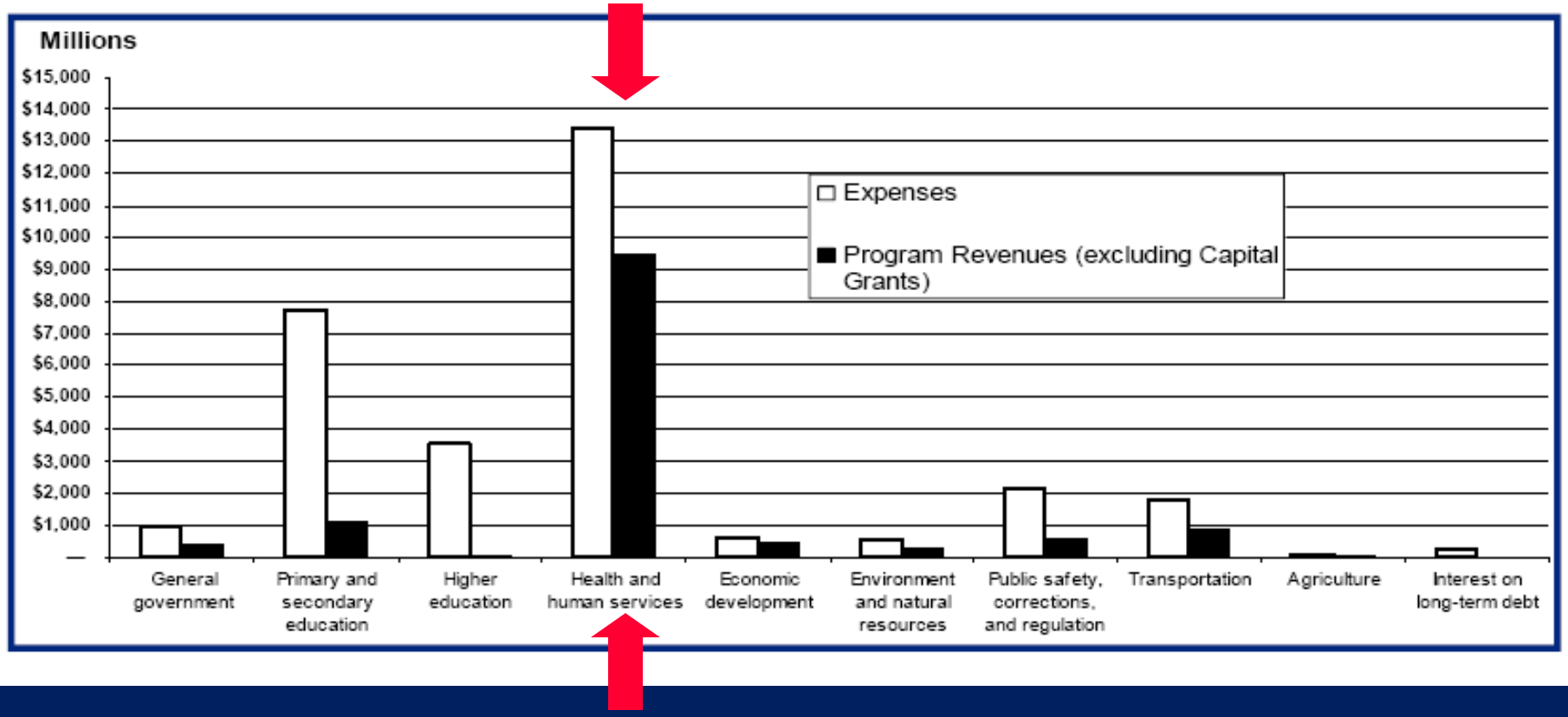
Figure 16

STATE EXPENDITURES FOR MEDICAID BY FUND SOURCE, FISCAL 2005



North Carolina Budget

Expenses—Governmental Activities
Fiscal Year Ended June 30, 2005

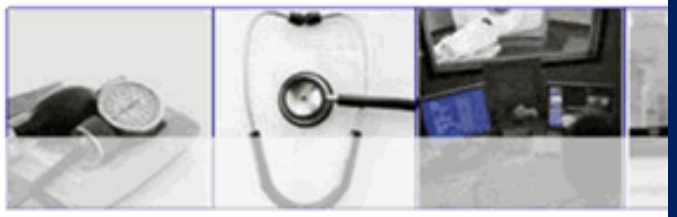


HHS Initiatives

U.S. Department of **Health & Human Services**

Value-Driven Health Care

Transparency: Better Care Lower Cost



- Value-Driven Health Care Home
- Four Cornerstones
  - Health IT Standards
  - Quality Standards
  - Price Standards
  - Incentives
- Communities
  - Community Leaders

Value-Driven Health Care Home

Consumers deserve to know the quality and cost of their health care. Health care transparency provides consumers with the information necessary, and the incentive, to choose health care providers based on value.

Providing reliable cost and quality information empowers consumer choice. Consumer choice creates incentives at all levels, and motivates the entire system to provide better care for less money. Improvements will come as providers can see how their practice compares to others.

"Every American should have access to a full range of information about the quality and cost of their health care options."

- HHS Secretary Mike Leavitt

http://www.hhs.gov/transparency/

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Value-Driven Health Care

Four Cornerstones

- **Connecting the System:** Every medical provider has some system for health records. Increasingly, those systems are electronic. Standards need to be identified so all health information systems can quickly and securely communicate and exchange data.
- **Measure and Publish Quality:** Every case, every procedure, has an outcome. Some are better than others. To measure quality, we must work with doctors and hospitals to define benchmarks for what constitutes quality care.

www.hhs.gov/transparency

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Value-Driven Health Care

Four Cornerstones

- **Measure and Publish Price:** Price information is useless unless cost is calculated for identical services. Agreement is needed on what procedures and services are covered in each "episode of care."
- **Create Positive Incentives:** All parties - providers, patients, insurance plans, and payers - should participate in arrangements that reward both those who offer and those who purchase high-quality, competitively-price health care.

www.hhs.gov/transparency

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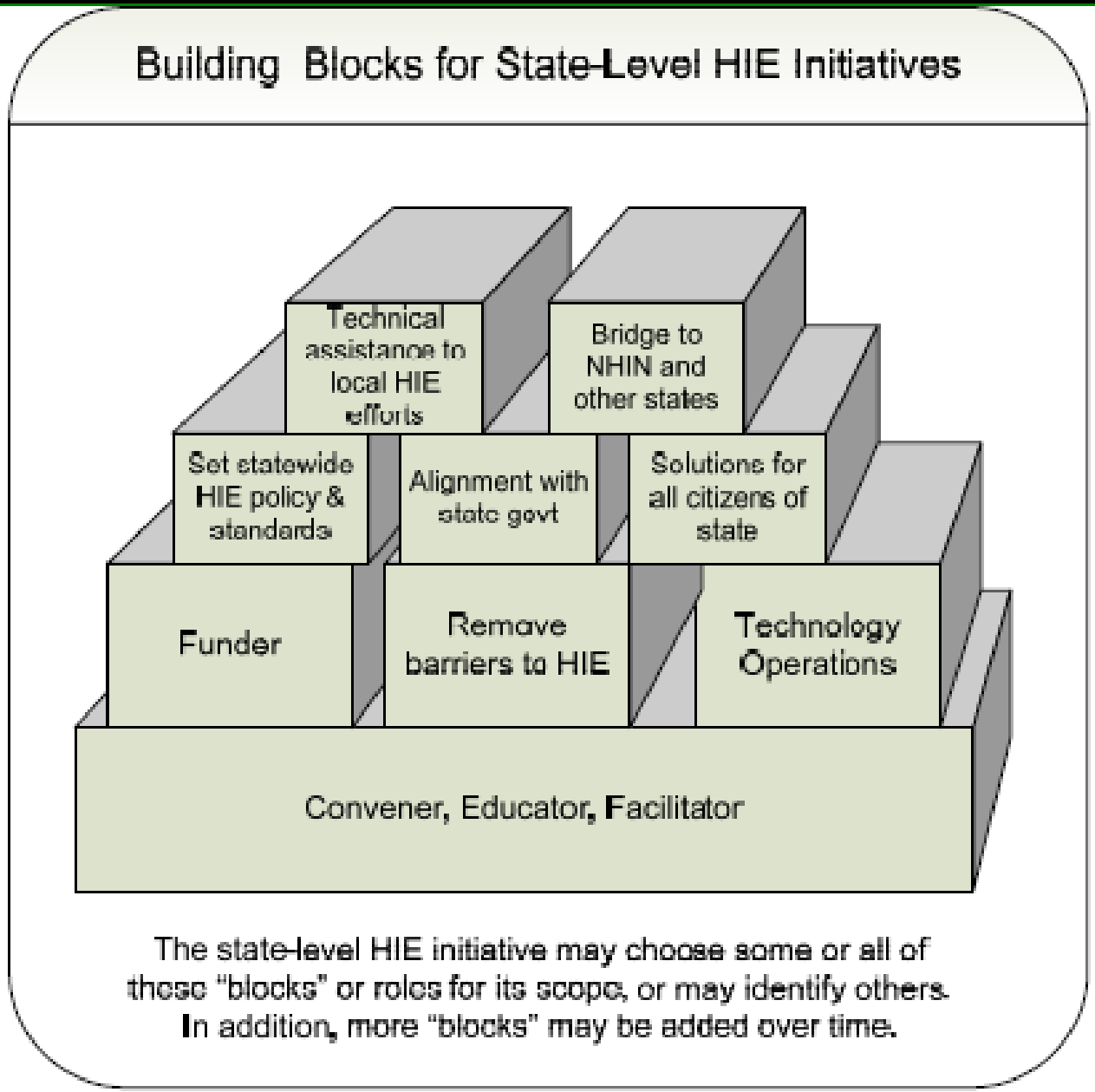
State-level Health Information Exchange

www.staterhio.org



NCHICA – the Organization

- **Established in 1994 by Executive Order of the Governor**
  - Improve healthcare in NC by accelerating the adoption of information technology
  - Created as a self-funded organization
- **Organized as:**
  - Neutral convener / facilitator
  - Marketplace enabler via demonstration projects
  - Leader of clinical initiatives
  - Developer of effective policies and procedures by consensus

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Membership Profile

Professional Associations

Providers

State & Federal Govt

Health Plans / Employers

Clinical Labs

Health IT / Consulting

Pharmaceutical / Research

NCHICA's Board of Directors Represent:

NCHICA Provider Members

Government, Boards & Professional Association Members

NCHICA's Health Plan Members

North Carolina State Health Plan
Teachers' and State Employees' Comprehensive Major Medical Plan

north carolina medicaid

CIGNA

BlueCross BlueShield of North Carolina

CMS Centers for Medicare & Medicaid Services

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Corporate Vendor and Consultant Members

Major National Initiatives Include:

- **HIPAA Regulations** – 1996-Present
- **Nationwide Health Information Network Architecture (NHIN)** - 2005-2007
- **Health Information Security and Privacy Policies** – 2006-2007
- **NC response(s) to FCC Rural Healthcare Connectivity RFA** – Due May 7th
- **NC response to NHIN Phase 2 RFP** - Future

Major State Initiatives Include:

- Statewide Patient Information Locator (MPI) – 1994-1995
- NC Model Privacy Legislation – 1995-1999
- NC Immunization Database – 1998-2005
- Emergency Dept. data for public health surveillance – 1999-Present
- Technology in Local Health Departments Study – 2005-2007
- NC Consumer Advisory Council on Health Information Technology – 2006-Present

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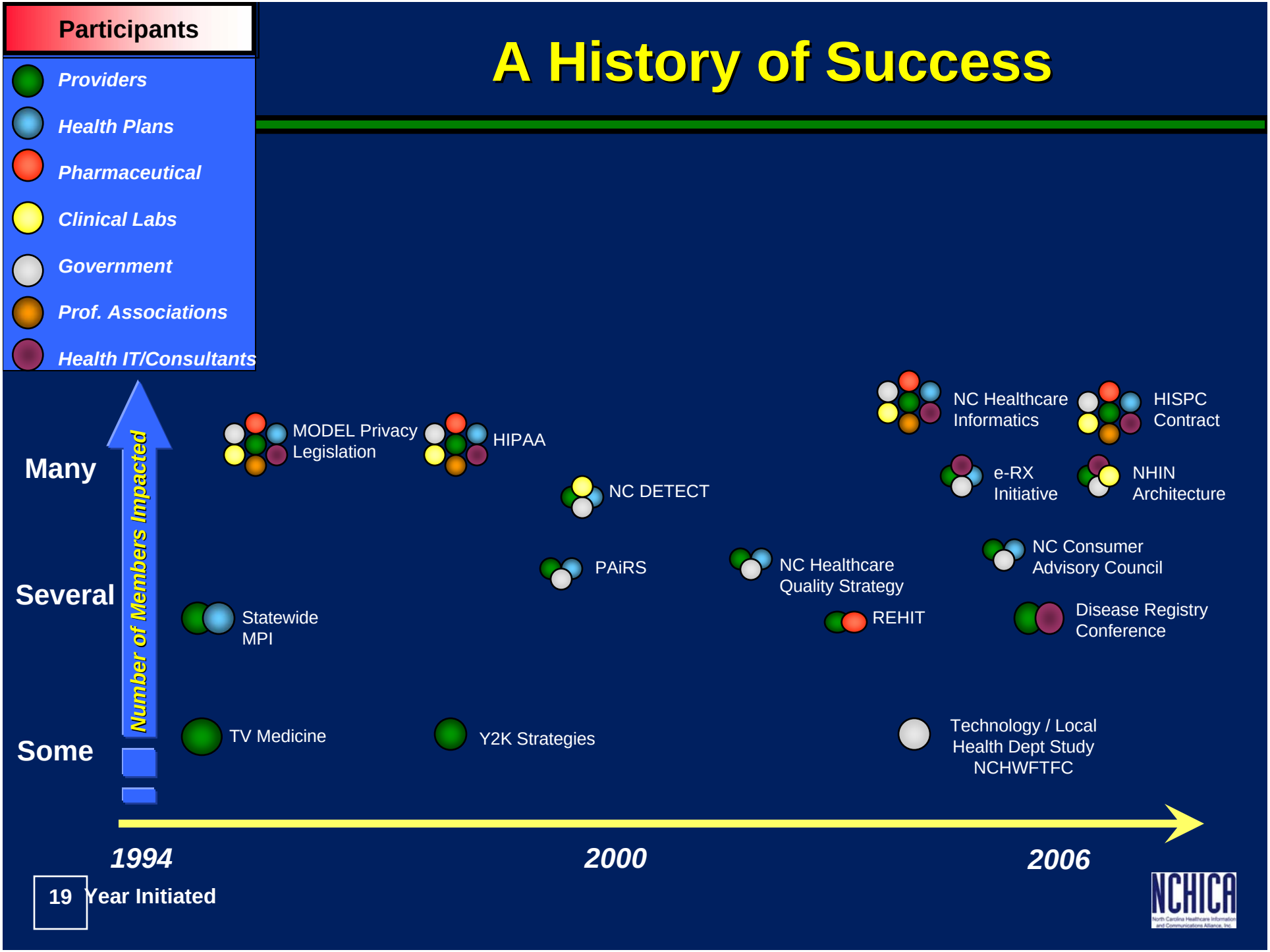
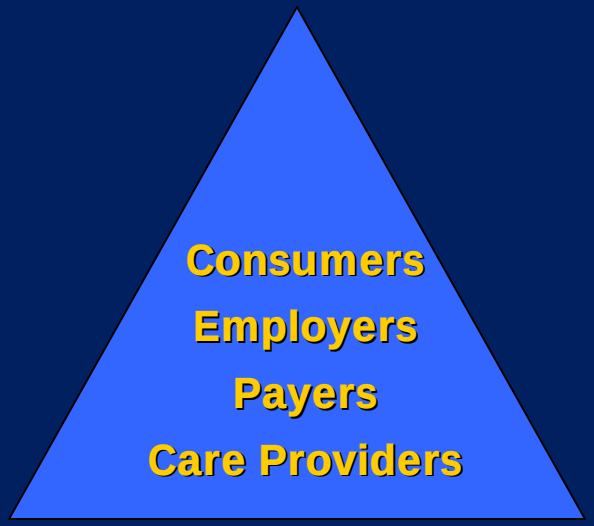
A History of Success



NCHICA Foundation for Collaboration



Health

Clinical Care
Public Health
Research

Policy

Laws / Regulations
Business Practices

Technology

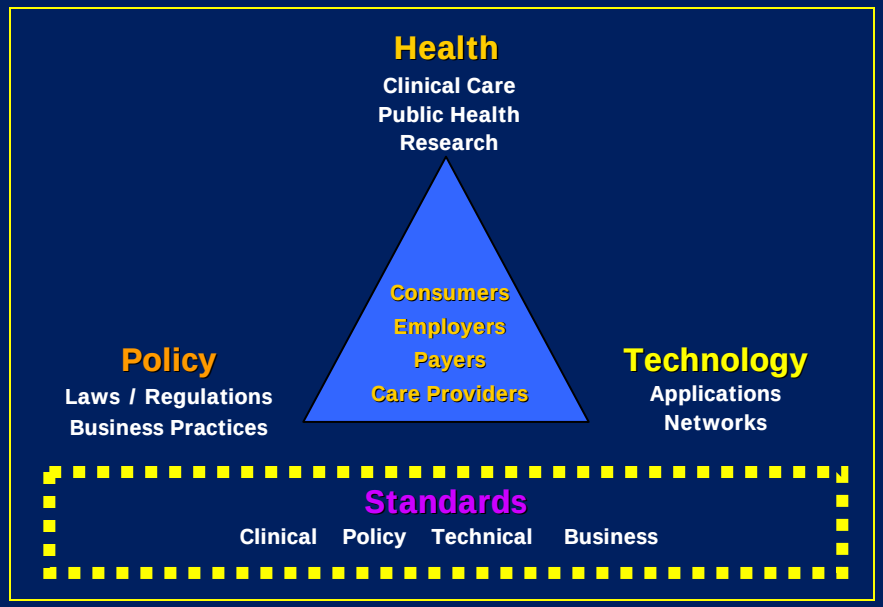
Applications
Networks

Standards

Clinical Policy Technical Business

Education

Building on the NCHICA Foundation



Activities in Collaboration with our Members:

- Education / Training
- Policy Development
- Proposal Development
- Demonstration Projects
- Facilitation

Desired Outcomes:

- Improved health of all North Carolinians
- A safer and more efficient and effective healthcare system
- Focused and integrated solutions across all systems
- North Carolina known for being *"First in Health"*

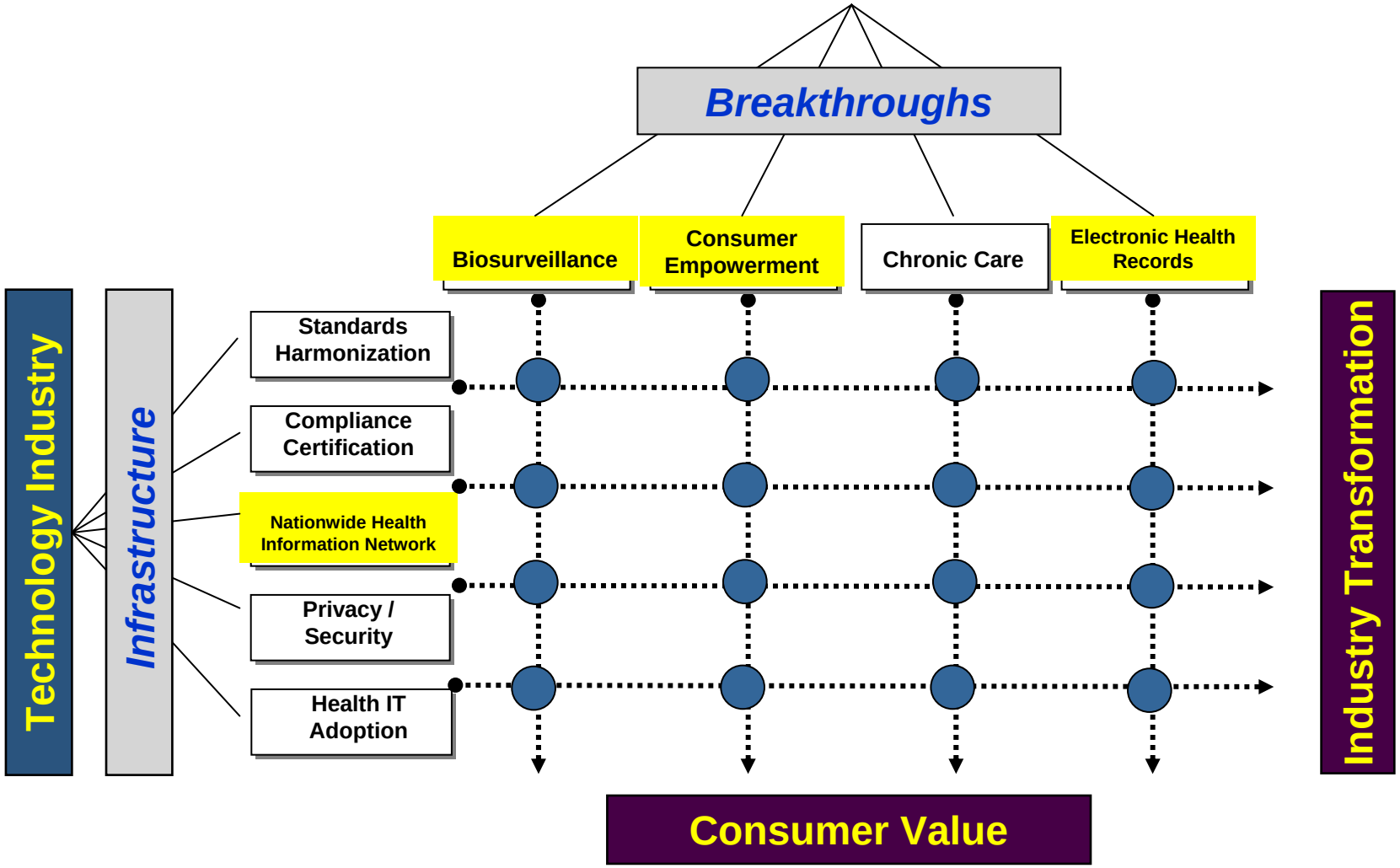
Nationwide Health Information Network

NHIN Phase 1

[Architecture Prototype]

Health Information Technology Deployment Coordination

"Health Care Industry" – American Health Information Community



NHIN Phase 1 Overview

Vision: A nationwide, standards-based network that will allow connectivity of existing and future systems for providers and affiliated stakeholders

Goal: Develop and evaluate prototypes of an NHIN architecture that maximize use of existing resources to achieve interoperability among healthcare applications – particularly EHRs

NHIN Criteria: Architect a standards-based, scalable, reliable, secure, self-sustaining "network of networks"

NHIN Critical Success Factors:

- Industry adoption of clinical information technologies
- Development of a health information exchange market

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NHIN Phase 1 Contracts

- Awards to Four Consortia
  - **Accenture**
  - **CSC**
  - **IBM**
  - **Northrop Grumman**
- Approach - cooperative and collaborative
  - **Between Four Awarded Consortia**
  - **With Other HHS Partners & Contract Awardees**
    - Health Information Technology Standards Panel (established by ANSI)
    - Certification Commission for Health Information Technology (CCHIT)
    - Health Information Security and Privacy Collaboration (established by RTI and National Governor's Assoc)
    - American Health Information Community (AHIC)

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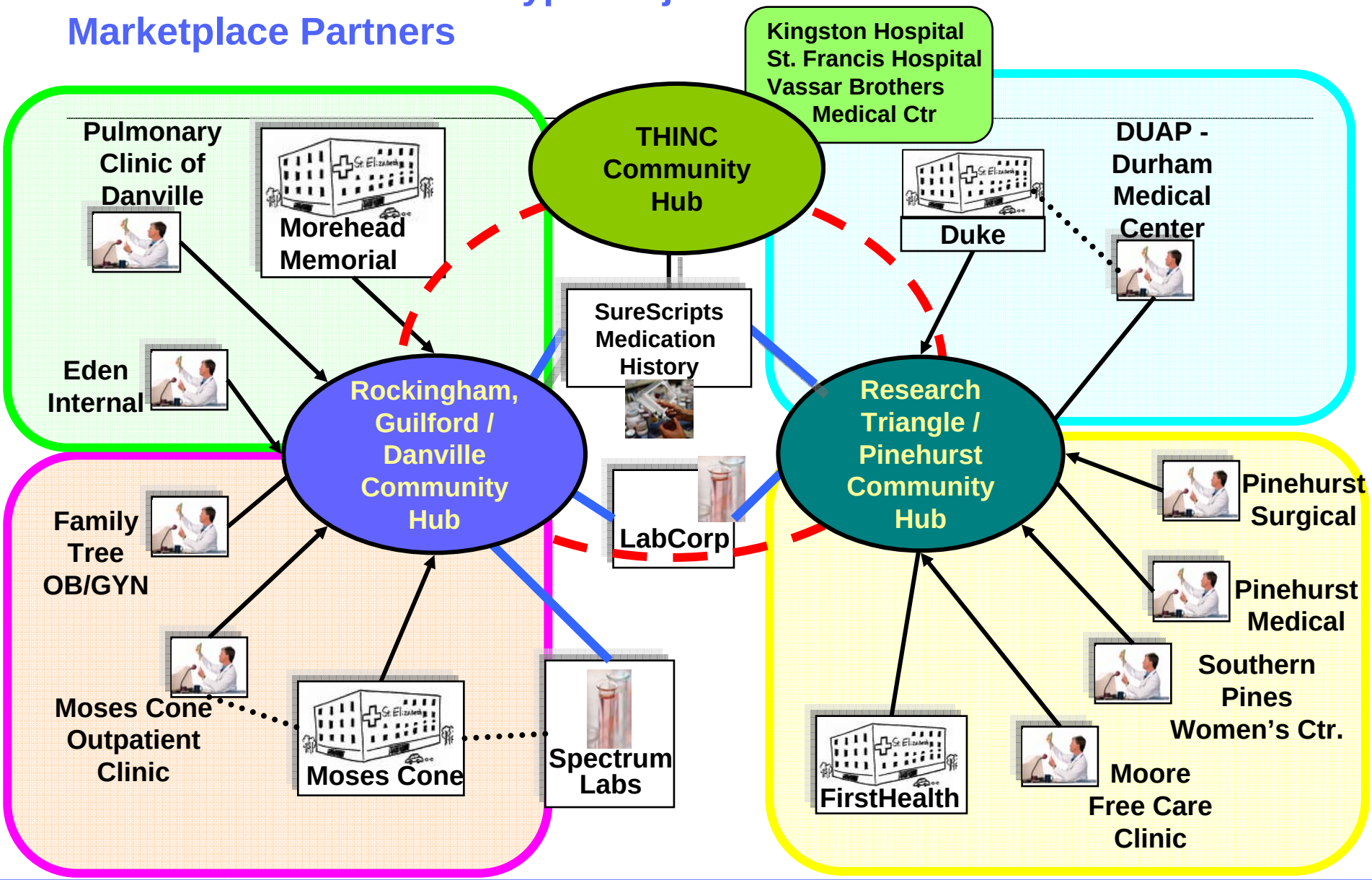
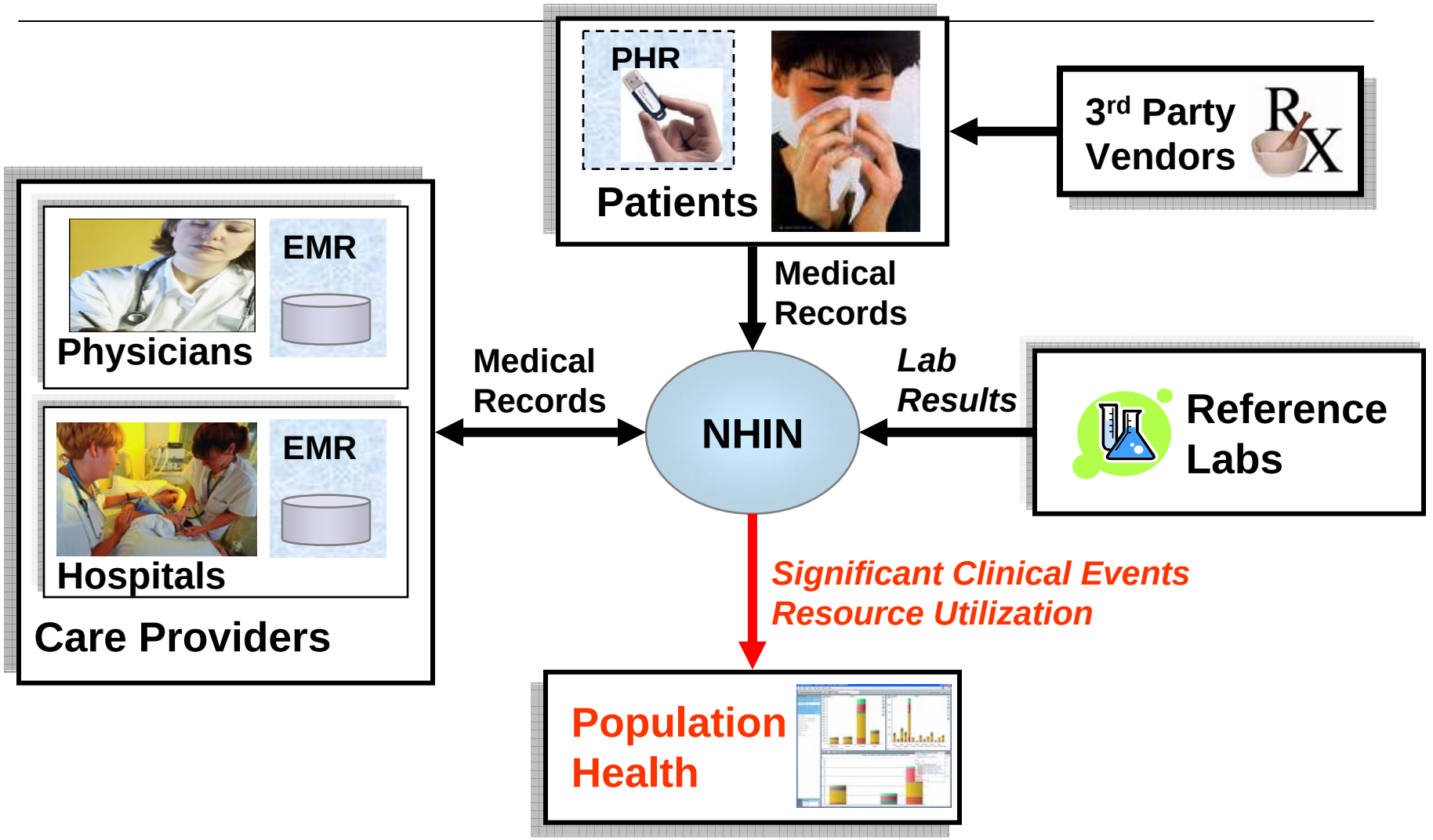
NHIN Phase 1 Deliverables

- A standards-based network prototype
- Demonstrate in 3 healthcare marketplaces
- Demonstrate via 3 use cases
- Develop and deliver 3 models:
  - Deployment
  - Operations
  - Cost and Revenue

NHIN Architecture Prototype Project Overview IBM Healthcare Marketplace Partners



IBM's NHIN Architecture – A "Network of Networks" linking Patients, Providers and Population Health



IBM's NHIN Prototype Architecture Guiding Principles

- **Community-Centric**
  - Document repositories normalize and store clinical data within a community
    - Hosted by individual hospitals/practices and/or shared within the community
  - Community Hub for MPI, document locator, security and support services
  - Community Hub is the gateway to other communities
- **Drive and conform to standards**
  - Instantiation of IHE interoperability framework
  - Clinical events stored as HL7 CDA(r2)-compliant documents
  - Cross-community search & retrieval
- **Provide security & privacy w/o sacrificing usability or research value**
  - Anonymous/pseudonymous data that can be re-identified as needed/permitted
  - Supports other data aggregates (registries, biosurveillance, outcomes analysis, quality of care)
- **Practical**
  - Scalable and cost-effective at every level of practice
  - Point-of-care performance is critical to adoption

Providers and Vendors

Working Together to Deliver

Interoperable Health Information Systems

in the Enterprise

and Across Care Settings

http://www.ihe.net

NHIN Phase I - Lessons Learned

- Physician and hospital participants are excited about and able to conceptualize the value of the NHIN in terms of improving patient care and enhancing the clinician's business and care processes
- Most all the participants view this prototype as a stepping stone to broader community and cross-community data sharing
- Participants would like to be able to 'continue on' with NHIN capabilities after Phase I is complete (regardless of what follow-on phases may include)

NHIN Phase I - Lessons Learned (cont.)

- Uniform community HIE data sharing/BAA agreements need to be developed at the institution, practice and patient level to minimize bi-lateral negotiations
- Each community has differing objectives and environments around which to develop a community hub (which suggests a more strategic / consulting assessment of what services the community hub needs to include)
- Each enterprise, participating institution, and practice will have differing requirements with health care vendors (e.g. EMR vendors) participation
- The technical aspects of the prototype were designed to test the underlying infrastructure and capabilities of interoperability (core vs. edge systems)

NHIN Phase I - Lessons Learned (cont.)

- HIE services, access capabilities support tools and processes would still need to become hardened (e.g. how additional patients are enrolled)
- Fostering adoption deliverables will suggest options for deployment, operations and cost/revenue sustainability – again issues that may vary across how each community or participant defines their community HIE
- How other stakeholders – whether they are other institutions or physician practices, or other stakeholders, such as payors, pharma, research are brought in

Nationwide Health Information Network

NHIN Phase 2

[State & Regional Initiatives]

NHIN Phase 2 - Trial Implementations

- **State and Regional Focus**
  - RFP: April 2007
  - Awards to 10-12 States/Regions: June/July 2007
- **Incorporate:**
  - 2006 "Products" and lessons learned
  - Technical expertise and accomplishments of the consortia
  - State and regional health information exchanges
  - Focus on interfaces:
    - Between health information service providers
    - Linking health information service providers and provider organizations/systems
    - Include specialty networks and systems
    - Include government health systems
  - A collaboration of awardees

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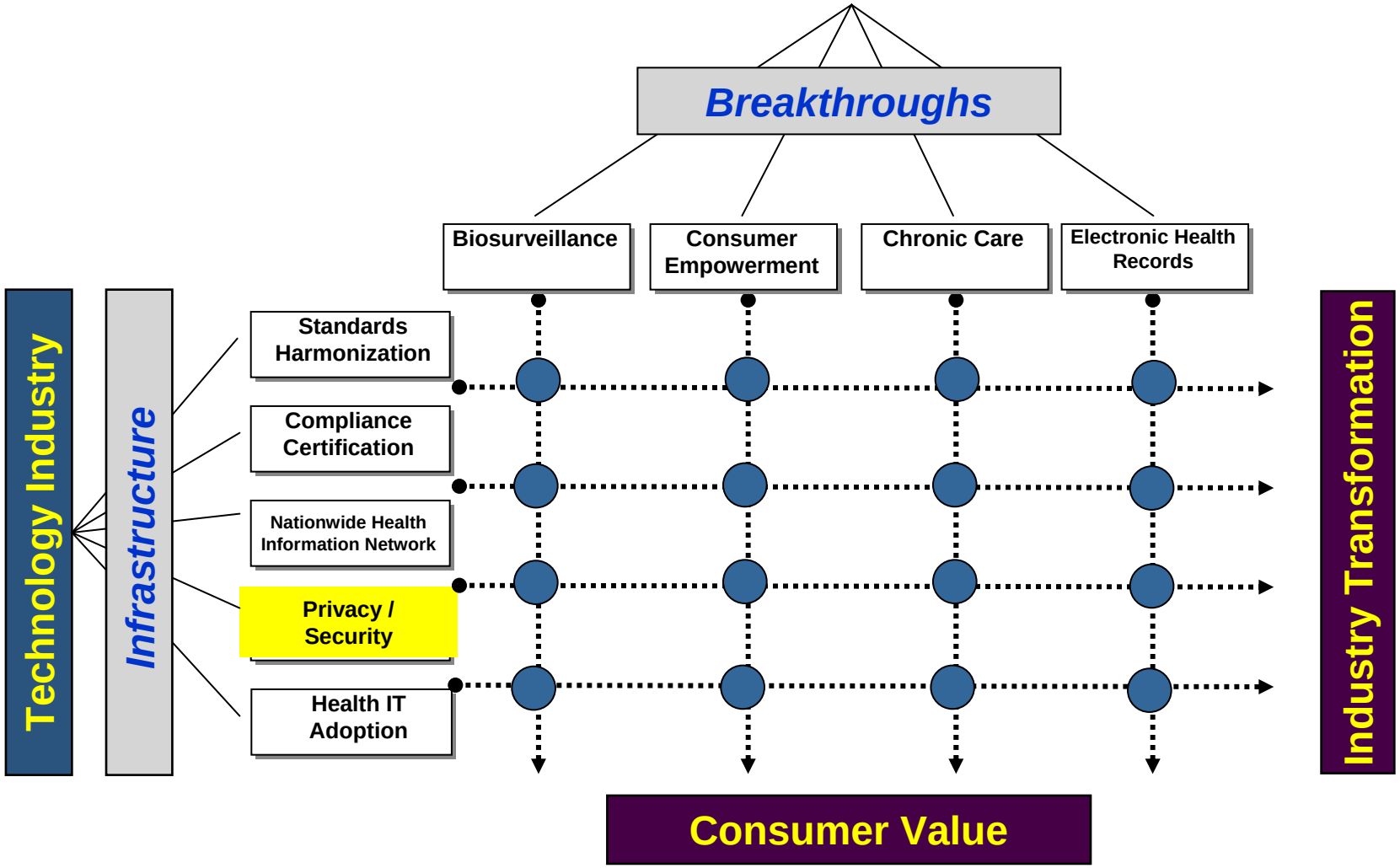
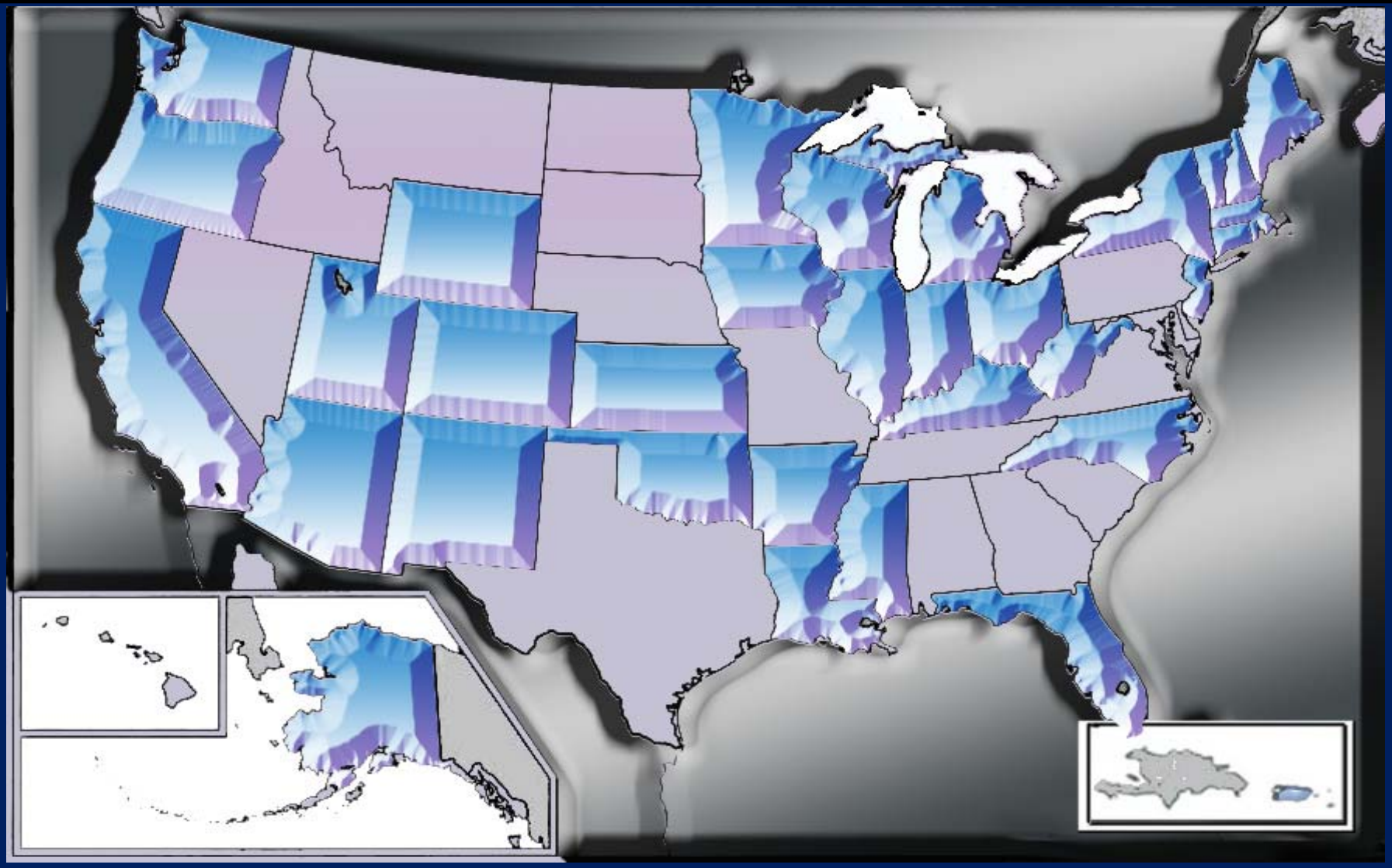
NC HISPC

Health Information Technology Deployment Coordination

"Health Care Industry" – American Health Information Community



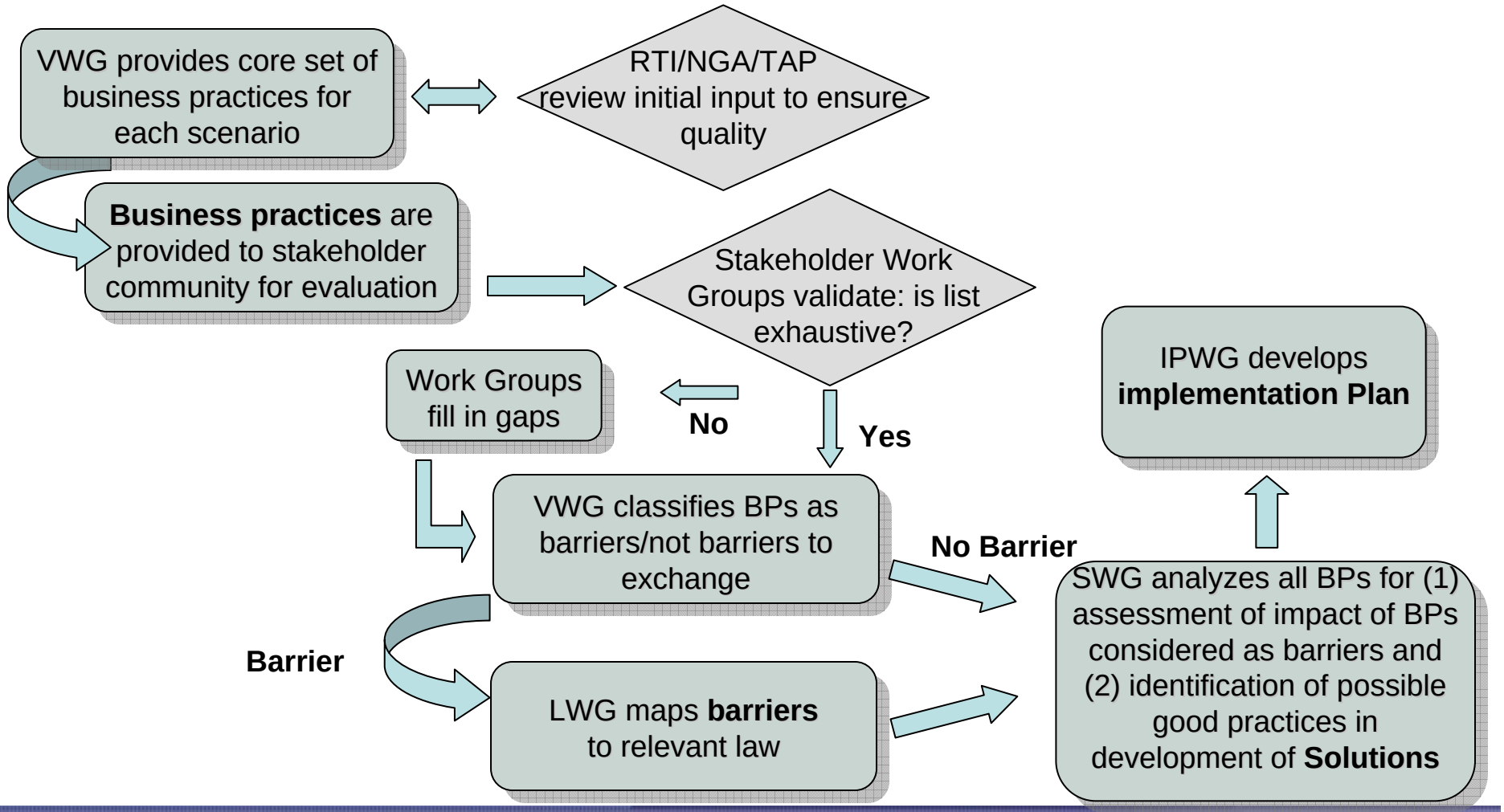
Subcontracts



HISPC Project Objectives

- Assess variations in organization-level business policies and state laws.
- Articulate potential solutions.
- Develop implementation plans.

Project Process



NC HISPC Steering Committee

• Phil Telfer, Co-chair	NC Governor's Office
• Holt Anderson, Co-chair	NCHICA, Executive Director
• Linda Attarian	NC DHHS Div. of Medical Assistance
• Wesley G. Byerly	Wake Forest Univ. Baptist Med. Ctr.
• Fred Eckel	NC Assoc. of Pharmacists
• Jean Foster	NC Health Information Mgmt. Assoc.
• Don E. Horton, Jr.	LabCorp
• Mark Holmes	NC Institute of Medicine
• Eileen Kohlenberg	NC Nurses Association
• Linwood Jones	NC Hospital Association
• Patricia MacTaggart	Health Management Associates
• Doc Muhlbaier	Duke University Health System
• David Potenziani	UNC School of Public Health
• Melanie Phelps	NC Medical Society
• N. King Prather	BCBSNC
• Morgan Tackett	BCBSNC
• Work Group Co-Chairs	Various Organizations

Top Barriers

1. Misinterpretation of laws or regulations
2. Lack of business incentives to exchange information
3. Lack of policy standardization
4. Lack of security standardization
5. Lack of workable technology
6. Conflicting or outdated Federal or State Laws / Regulations

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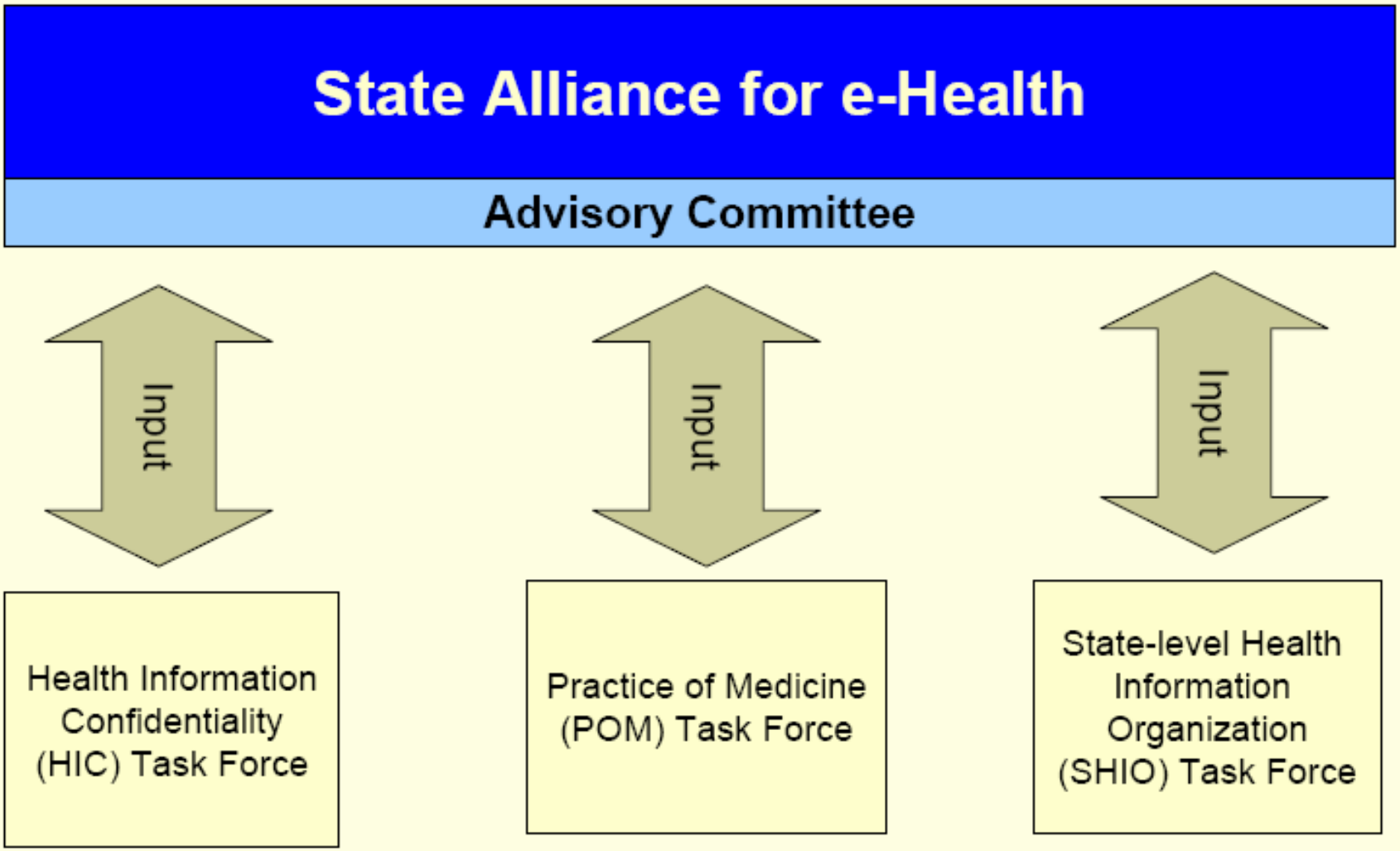
Next Steps

- Engage legislators and executive level government
- Engage NCHICA members
- Ramp up awareness efforts
- Nurture the Consumer Advisory Council
- Participate in NGA State Alliance for e-Health

State Alliance for e-Health Structure



Web Site and Listerv

- State Alliance for e-Health Web Site
  - http://www.nga.org/center/ehealth
- To subscribe to the State Alliance listserv send a blank e-mail to:
  - subscribe-state-alliance@talk.nga.org

Overall Conclusions

Beginning the journey …

- **Focus on clear drivers:**
  - Quality of care and affect on cost
  - Complex and costly chronic conditions
  - Physician work flow – save time and improve job satisfaction (meds history, allergies, problem lists)
  - Build on quick wins (low-hanging fruit) with obvious benefits to the public (e.g. immunizations, meds)
  - Leverage statewide payers: Medicaid, State Health Plan, BCBSGA, other
  - Include major employers with self-funded plans
  - Use Bridges-to-Excellence and Leapfrog

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Challenges to Broader Exchange of Information

- **Business / Policy Issues**
  - Competition
  - Internal policies
  - Consumer privacy concerns / transparency
  - Uncertainties regarding liability
  - Difficulty in reaching multi-enterprise agreements for exchanging information
  - Economic factors and incentives
- **Technical / Security Issues**
  - Interoperability among multiple enterprises
  - Authentication (Federated ID Management)
  - Auditability

www.nchica.org/Activities/toolkit.htm

NCHICA Toolkit for State-Level HIE

NCHICA has received many requests for documents from communities, regions and states who wish to develop a nonprofit organization similar to that established in 1994 by Executive Order of the Governor of NC and this site has been created to assist in locating key corporate documents and work products that might provide a jump start to such efforts. We are pleased to respond to these requests and will assist to the extent that our time and resources make it possible. Membership in NCHICA by those effort is encouraged as is attendance at NCHICA meetings that may be found on our Web site home page.

NCHICA Corporate Documents

- Executive Order of the Governor
- Articles of Incorporation
- Bylaws
- Intellectual Property Policy
- 501(c)(3) IRS Letter
- Membership Application including Terms of Membership

Compliance and Model Documents

- Sample Documents for Privacy and Security Compliance (Reviewed) – Disclaimer Acknowledgement Required
- Sample Documents for Privacy and Security Compliance (Not Reviewed)
- Tools for Privacy and Security Gap Analysis
- Other Helpful Links for Regulations and Compliance

Improving Healthcare in North Carolina by Accelerating the Adoption of Information Technology

Thank You

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