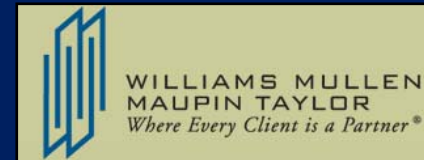
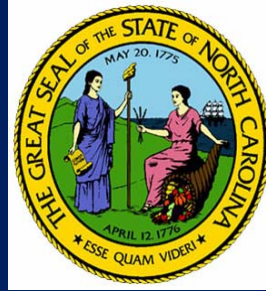


Represented Organizations Include:



NC HISPC

Project Summary Meeting

Phil Telfer, Governor's Office – Co-chair

Holt Anderson, NCHICA – Co-chair

Angie Santiago, Project Manager

Project Co - Chairs

April 17, 2007

Today's Agenda

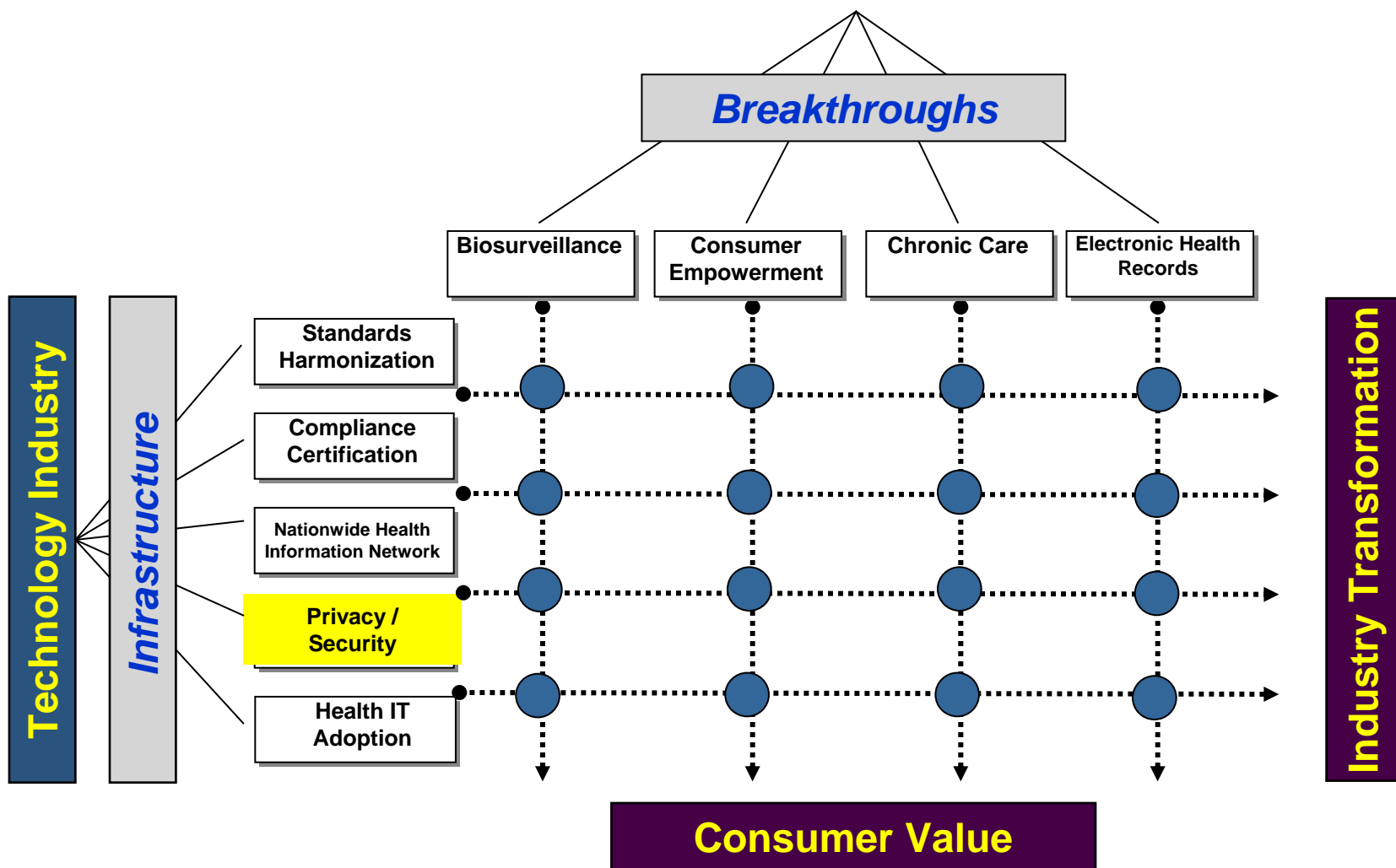
- **Networking Lunch**
- **Welcome and Introductions**
- **Project Overview**
- **Project Status**
- **Solution Plan Highlights**
- **Implementation Plan Highlights**
- **Next Steps**
- **Open Discussion**
- **Closing Remarks**

Project Overview

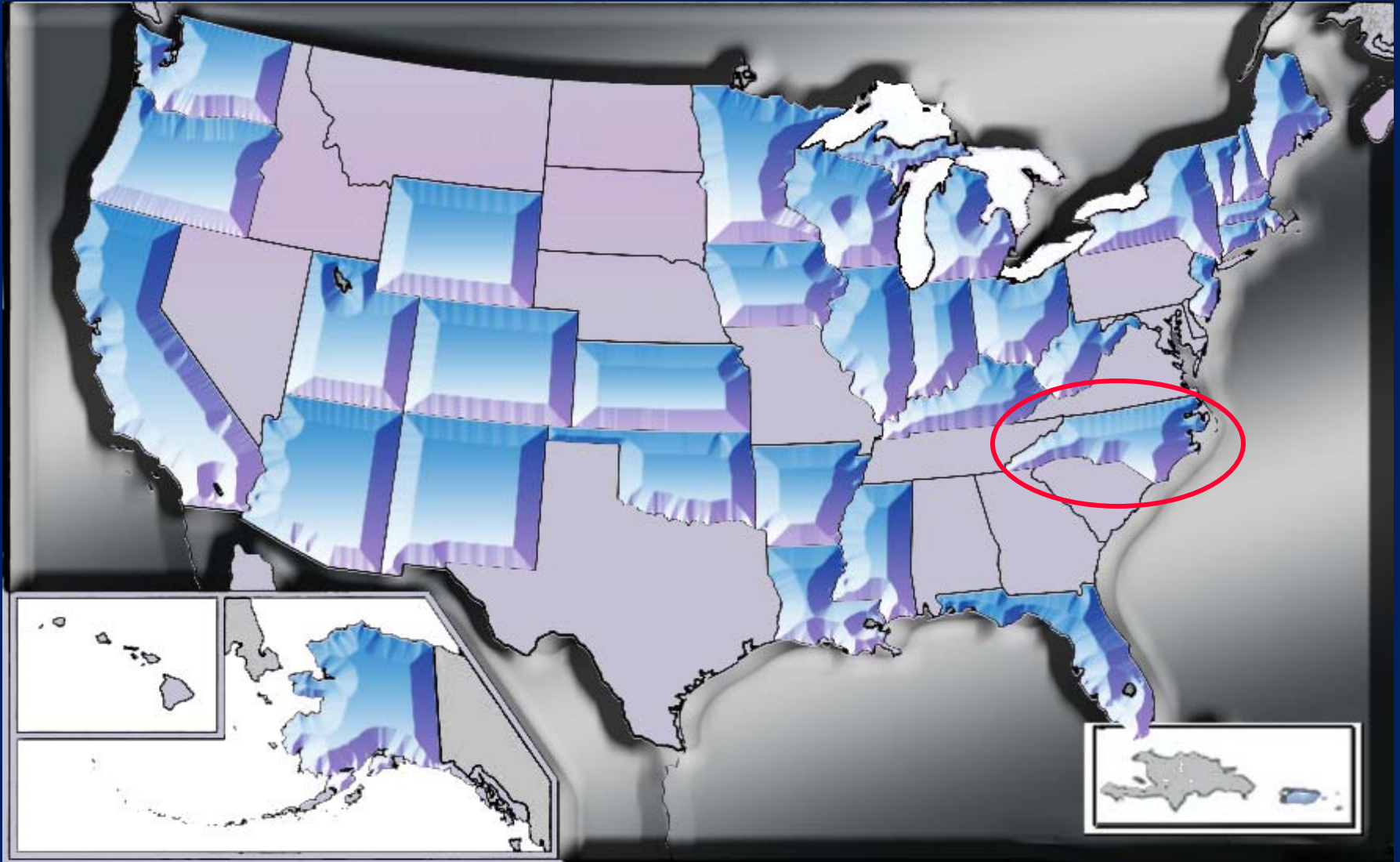
Holt Anderson

Health Information Technology Deployment Coordination

“Health Care Industry” – American Health Information Community



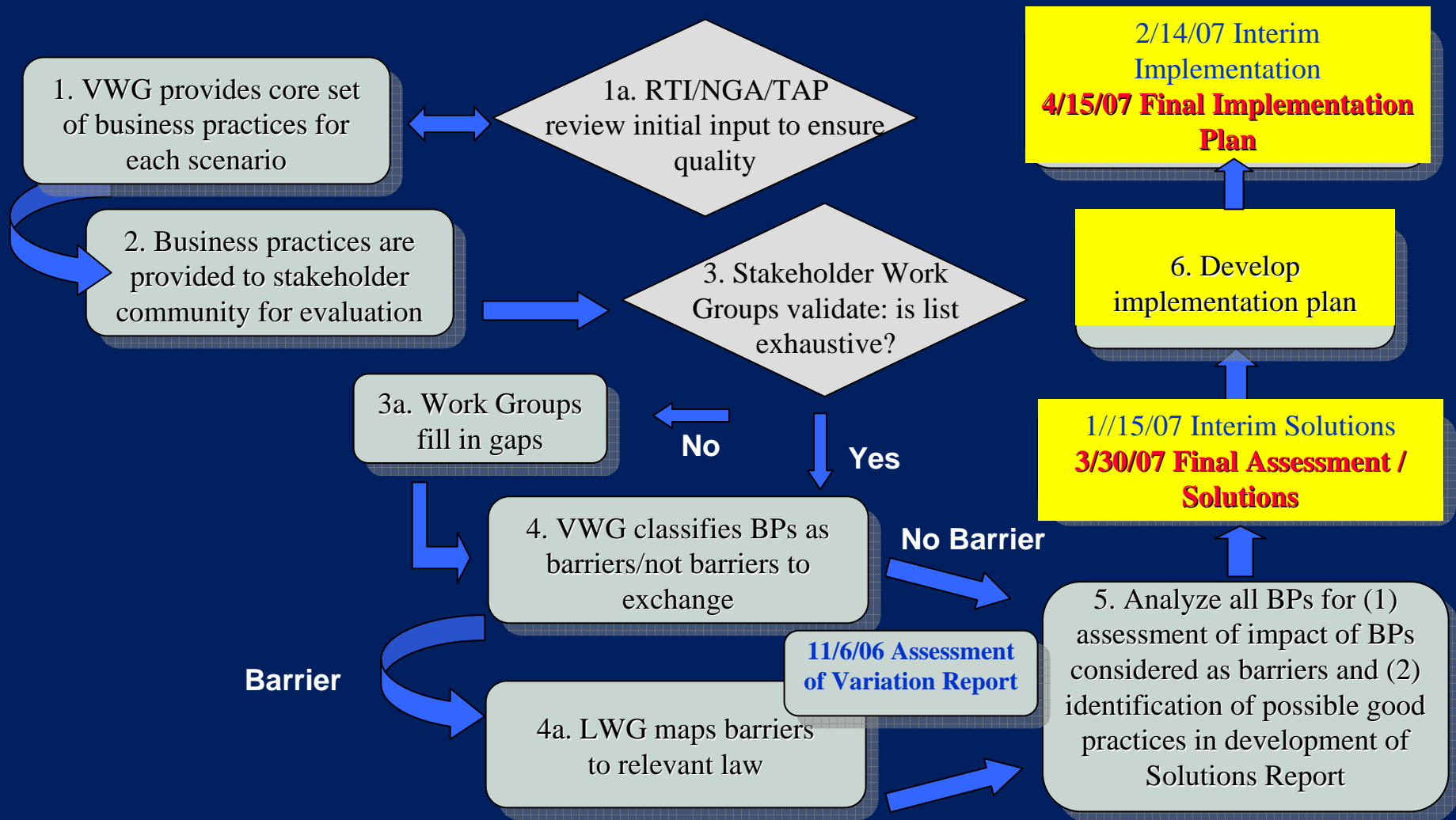
Subcontracts



HISPC Project Objectives

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

Project Process



Project Status

Angie Santiago

Deliverables Status

Deliverable	Original Due Date	New Due Date	Status
Interim Assessment of Variations	11/9/06	11/9/06	Submitted
Interim Solutions Report	12/11/06	1/15/07	Submitted
Interim Implementation Report	1/15/07	2/14/07	Submitted
Final Assessment of Variations and Solution Report	3/30/07	3/30/07	Submitted
Final Implementation Report	3/30/07	4/15/07	Submitted

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 interoperability between process and technology**
- 6. Lack of workable technology**
- 7. Conflicting or outdated Federal or State Laws / Regulations**
- 8. Lack of consumer involvement**

Top Solutions

- 1. Establish a pilot project with adequate funding to explore the concept of the Person Oriented HIE.**
- 2. Implement policy standards, such as model policy and legislation, to address the complexity and ambiguity surrounding the release of information.**
 - a) Implement security standards to address the complexity and ambiguity surrounding the safeguarding of health information.
- 3. Implement sound business models to incentivize potential information sharing partners to participate in community based health information exchange.**
- 4. Encourage greater collaboration between policy makers, subject matter, and technical experts to develop a HIE infrastructure in North Carolina.**
- 5. Explore the dependencies between the business processes and their technical components for the purpose of interoperability.**
- 6. Address the misinterpretation of laws or regulations by obtaining clarification and developing public and private awareness programs.**
- 7. Raise HIT awareness by developing consumer empowerment programs**

Top Implementation Plans

- **NC HIE Framework**
- **Training requirements**
- **Outreach programs**
 - Public policy makers, technologists, consumers

Top Implementation Plans

- **Cultivate core teams**
- **Adopt project methodology**
- **Implement project tools**
- **Apply central processes**

Top Implementation Plans

- **Develop a budget process**
- **Secure funding**
- **Propose project**
- **Plan project**
- **Implement project**

Top Implementation Plans

Implementations

- State-level
 - Awareness programs
 - Consumers, General Assembly, medical and legal community
- Multi-state
 - Model policies
- National-level
 - CLIA
 - 42 CFR §§ 2.1 and 2.2

Person-Oriented HIE

Dave Kirby

What does a Person-Oriented HIE do?

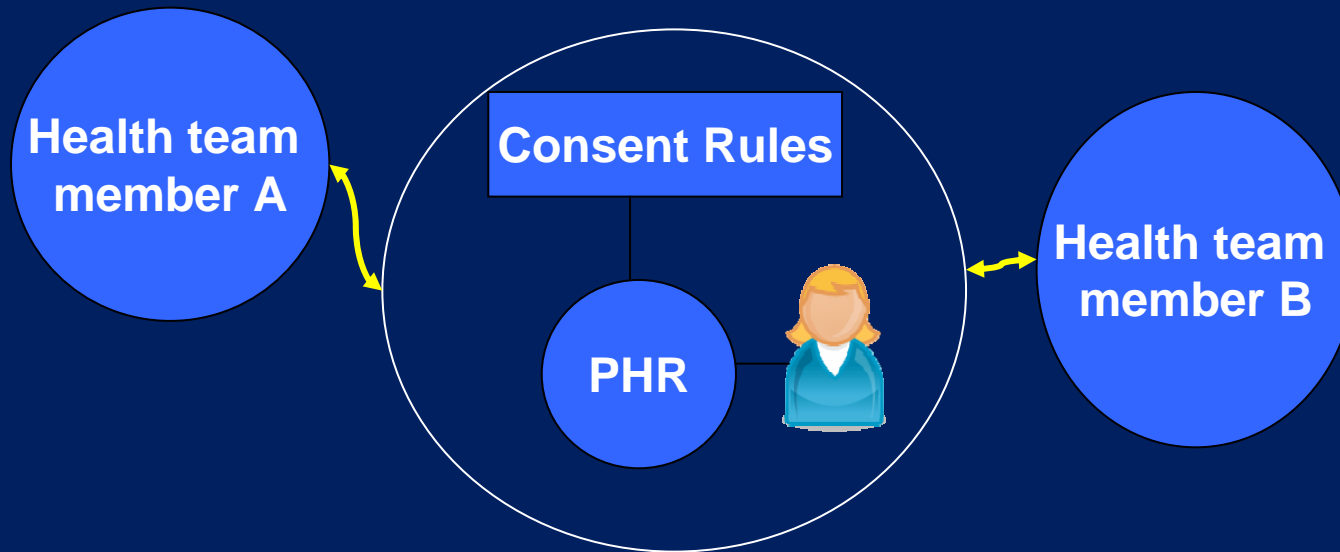
- **Provides for routine timely flow of relevant health information about a person:**
 - A) to that person or his/her agent where it is accumulated into a Personal Health Record and used by the person
 - B) to entities that are authorized by the person (the person's health team)
 - C) in a way that is respectful of the person's individual perspective of his/her privacy needs.



Benefits of PO HIE

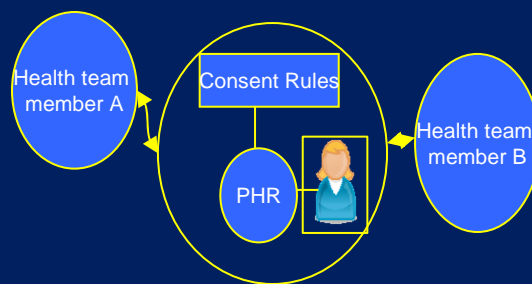
- Provides a way to support routine, wide-spread, timely, relevant, secure, and privacy-respectful health information exchange.
- Reduces inhibitions on exchange related to privacy laws/regulations and/or concerns about patient objections.
- Creates new opportunities to incent the public and healthcare enterprises to participate in health-beneficial exchanges and uses of information.

High-level view of Person-oriented Health Information Exchange



The Common Element

- What all of these have in common is that they depend on timely relevant data about a person converging (or being created by the person) into a record system under the person's control and...
- The data is used by the person in concert with computer applications and the person's health team to improve some aspect of the person's health.



Some key issues with a POHIE

- How will it be funded?
- How will it's operations be governed?
- How will operations risk be managed?
- How can we assure enough demand to make it useful to start?
- How will it interact with other health data exchanges?
- How will public health and private health business process need to change to take advantage of the system?
- What efforts are needed to make the business risk involved in changing acceptable?
- Who will build the person-oriented applications?



Issues for PO HIE

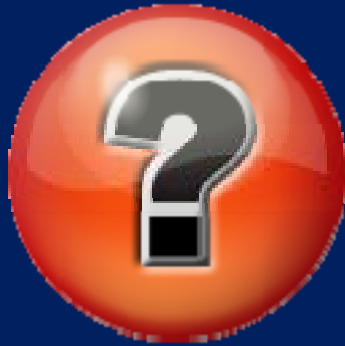
- **Address initial perceptions of barriers, such as:**
 - Address access barriers for indirect providers such as laboratories
 - Address impact upon legitimate secondary uses and disclosures that are permissible under existing law.
 - High-level of education required
 - Perception that consumer empowerment is new concept healthcare delivery
 - Access barriers derived from consumer invoking their right to restrict
 - Consider circumstances whereby the health care consumer is unable to grant access to health care information (though prior permission granting is practical),

Who is building systems with similar principles?

- LouHIE – Louisville Health Information Exchange.
- Washington State (its principle base);
- Duke Heart Center’s Health Record Network
- The health exchange for the State of Washington.
- Dossia (a joint project with Intel, Wal-Mart, Cardinal Health, New Orleans Health Dept, and others),
- The next round of implementation grants for the National Health Information Infrastructure (for projects like this) will require significant consumer information flow controls.
- Vendor Examples: YouTakeControl, Patient Command, eHealthTrust
- HRN (the Health Record Network). <http://www.healthrecord.org/> (leadership include Ed Hammond and Kevin Schulman (Duke SOM/Fuqua)
- Note that some people describe these systems as “health record banking models”.
- Note that none of these is at a stage of development where there is an operational administrative, governance, and technical model actually servicing a large population.



Q&A about PO HIE



Building Consumer and Provider Trust

Linda Goodwin

Sherrie Cannoy

North Carolina Consumer Advisory Council on Health Information

NC CACHI

North Carolina Consumer Advisory Council on Health Information Technology

NC CACHI

- **Goal:** *To engage health care consumers in providing input and feedback on topics related to health information*
- **Council Members:**
 - diverse representation
 - 15-member panel goal
 - recruited through NCHICA membership and focus groups
 - activities include participation in consumer focus groups and research studies to find ways to educate and empower North Carolina health care consumers
- **Resource Panel Members:**
 - group of approx. 6 experts in areas such as technology, security, privacy plus 2 co-chairs
 - assist and support the council members

Impetus

- **Improve quality of healthcare**
- **Increased ability to share medical information through technology**
 - EMR, EHRs, and PHRs
 - Connected Communities and RHIOs
 - NHIN
- **Need to understand the impact of such technology on the consumer**
- **Need for consumer empowerment and control over medical information**

Goal

To engage patients (health care consumers) in providing input and feedback on topics related to health information.

- Formed for grassroots input, participation, and outreach
- To explore ideas and issues surrounding health information, such as privacy and electronic health records
- Provides an opportunity to influence both state and national policy
- To aid in finding a balance between a patient's need for privacy and the health care system's need for access to personal health information.

Current Projects

- **Understand concerns and impact of healthcare information on consumers:**
 - Consumer focus groups
 - Provider focus groups
- **PHR for seniors**

Interoperability – Process & Technology

Jim Murphy
Mike Voltero

Interoperability – Process & Technology

Authentication and Authorization - Jim Murphy

- **Identity** – *multiple sources mandatory!*
- **Authentication** – *verifying and validating Identity*
 - Something you are, know, have, e.g., fingerprint, password, token
- **Authorization** – *granting permission, 2 parts*
 - Management signoff (paper or electronic)
 - System implemented – enabling access & restrictions
- **Provisioning** – *making it happen!*
- **Identity Management**
 - Centralized administration of all four
 - System User ID Lifecycle

Authentication & Authorization: Planning

- **Implemented using Business Rules**
 - Data sensitivity categories
 - User permissions, restrictions
 - External users – encryption, interoperability, matching
- **Access control process**
 - Policy
 - Responsibilities, training
- **FOUR 'A's:**
 - Authentication
 - Authorization
 - **Accountability** – working the process
 - **Audit** – tracking everything!

Authentication & Authorization Methodology

- **Intersection:**
 - Subject (attributes) \leftrightarrow Object (labels)
 - Attributes: roles, permissions
 - Labels: criticality, privacy
- **Role-Based Access Control**
 - Non-discretionary (*Mandatory*)
 - Centralized authority
 - Distributed environments – delegation
 - User assigned to a Group with a Role delimited by Capabilities – ‘CRUD’ matrix:
 - Create, Read/Inquire, Update/Add, Deactivate/Delete

Authentication & Authorization: Costs

- **Business Process Definition**
 - *Generates Business Rules*
 - Data categorization, defines Groups & Roles
 - Regulation (Segregation of Duties!)
- **Architecture Design**
 - *Providing protection, controlling access*
 - Distributed environments, Multi-Tier, Legacy Systems
- **Interoperability with External Relationships**
 - *Need to define Trust!*
 - Consortia members, Business Associates, Regional HIN
- **User Identity Life Cycle Management**
 - Identity Management – provisioning A&A&A&A
 - Changing, termination

Interoperability – Process & Technology

Mike Voltero

- **Connecting providers and payers**
 - What BCBSNC is doing in this area
 - Why BCBSNC saw the need for the provider portal
 - Incentives for the provider's involvement
 - Business agreements associated with the provider portal
 - Leveraging and expanding that model into other types of sharing
 - Other items

Interoperability – Process & Technology

Mike Voltero

- **Connecting with the Customer**
 - BCBSNC has several primary constituent groups: Providers, Members, Group Administrators, Sales professionals
 - BCBSNC has created constituent-specific portals accessible through its public internet site.
 - Each group can electronically access its most-used information and/or transactions.
 - The demand for transactional efficiency, as well as for regulatory compliance, is greatest with Providers.

Interoperability – Process & Technology

Mike Voltero

- **Provider Portal**
 - Medical Policies
 - Prior Plan approval information/requests
 - Provider Credentialing and BCBS Provider number (NPI for HIPAA transactions)
 - Discount Programs available
 - Health Management Programs
 - Drug formularies
 - Electronic Transactions

Interoperability – Process & Technology

Mike Voltero

- **Electronic Connectivity with Providers**
 - e-Prescribing
 - Multiple Internet-enabled applications
 - *Blue esm*
 - RealMed
 - Health Trio (PARTNERS only)
 - HIPAA Transactions - Batch processing through direct connection or clearinghouse
 - Professional Claims: 90%
 - Hospital Claims: 93%

Interoperability – Process & Technology

Mike Voltero

- **Providers' incentives for participation**
 - Faster reimbursements
 - Edits capability
 - Acknowledgement and Timeliness of Receipt
 - Administrative Expense Reduction (postage, forms, manpower, etc.)
 - Privacy and Security of information exchange
 - End-to-End Processing—Eligibility, Claim submission/status, Remittance

Interoperability – Process & Technology

Mike Voltero

- **Business Agreements between BCBSNC and Providers**
 - Trading Partner Agreements (HIPAA batch transactions)
 - Electronic Connectivity Request (ECR) forms
 - *Blue e* Interactive Network Agreement

Interoperability – Process & Technology

Mike Voltero

- **Leveraging technology and model for other uses:**
 - Member portal – Claims status, benefits, ID card requests, update contact information, manage HSA, forms and tools
 - Group Administrator portal – enrollment, member maintenance, eligibility checks, benefits, forms and tools
 - Producers (Brokers/Agents) portal – quote generation, online application, application status, forms and sales tools

Building an Interoperable Framework

Melanie Phelps
Trish Markus
Roy Wyman
Angie Santiago

Building an Interoperable Framework

- **Melanie Phelps and Trish Markus**
 - Legal Framework
 - General Assembly Sponsorship
 - Exchanging HIE across state lines
- **Roy Wyman**
 - Collaborative Projects and Contractual Liability
- **Angie**
 - Collaborative Project Approaches
 - RFP Development
 - Minimizing Project Risks
 - HISPC Lessons Learned

Building an Interoperable Framework

Melanie Phelps
Trish Markus

Inform the General Assembly

- **Develop a message to inform the General Assembly.**
- **Proposed messages:**
 - In order to improve the quality of care, reduce medical errors, and contain costs, NC needs to initiate actions to develop an information technology infrastructure that will connect NC state government, providers, health plans, rural communities, facilities, and consumers.
 - (See Florida's executive order number 04-93)
 - In order to improve the quality of care, reduce medical errors, and contain costs, healthcare providers need financial incentives from multiple sources including state funds to adopt health information technology.

Building an Interoperable Framework

Angie Santiago

Building an Interoperable Framework

Collaborative Project Approaches

- Identify manageable projects
 - Start small
 - Funding easier
 - Develop stronger leaders
- RFP development
 - Purpose of the RFP
 - Conflicts of interest
 - Co-bidding strategies
 - Legal review
 - Public accountant review
- Collaborative tools
 - Project Methodology – PMI
 - Security Program Methodology – IEEE, NIST
 - Communications

Building an Interoperable Framework

Managing Project Risks

- Project Initiation Process Review
 - Identify need for project
 - Define scope and statement of work
 - Identify tasks, resources, tasks, resources
 - Draft initial budget
 - THEN actual project costs are estimated
- Funding limits are NOT the same of project costs
- The higher the cost sharing the higher the risk
- Ensure project stays within original scope
 - Changes to scope may require formal changes to statement of work, timeline, and deliverables

Building an Interoperable Framework

HISPC Lessons Learned

Project management methodology not followed

- Lack of formal budget review
- Confusing accounting procedures
- After final project plans were submitted, % of work complete was not measured against the formal project plan
- **Assessment tool inadequate and unavailable**
- **Project started late, Variations phase and deliverables rushed**
- **Volunteer workforce increases NCHICA's work performance risks**
 - Cost share should be limited to certain expenses but not the direct labor required to perform the work
 - For every 10% of additional cost share re-estimate impact to project schedule and extend performance period by 90 days
- **Project risks such as the "open records" was not Cap cost sharing to 10 – 15 % of total project estimates**

Building an Interoperable Framework

Roy Wyman

Collaborative Project Risks

Roy Wyman

- **Things to think about (TTTA) for the next round**
 - NCHICA appointed by Governor's Office to submit proposal for North Carolina but project sponsor is AHRQ
 - Cost-sharing risks
 - How much is appropriate?
 - NC open records law vs. project sponsors' confidentiality requirements
 - Volunteer workforce risks:
 - Retaining volunteers for extended periods of time
 - Lack of contract to perform tasks
 - Legal liability if they fail to perform

Where do We Go From Here?

Holt Anderson

Implementation Issues

- **Implementation issues:**
 - As potential sponsors of HIE initiatives, the General Assembly is not aware of the benefits of health information technology such as improved patient safety, quality of care, privacy protections, and reduced costs.
 - NCHICA would seek the mandate and financial support from the State of North Carolina to implement these solutions.

Next Steps

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

State Alliance for e-Health

NGA Center for Best Practices



State Alliance for e-Health

Project Overview

- Sole source contract through the Office of the National Coordinator for Health Information Technology (ONC) within the Department of Health and Human Services (HHS)
- Period of performance:
 - Sept. 2006 - Sept. 2009 (base year with 2 option years)
- Working with partner organizations such as NCSL, NAAG, NAIC, and others



Vision and Purpose

State Alliance Co-chairs:

Governor Phil Bredesen (TN)

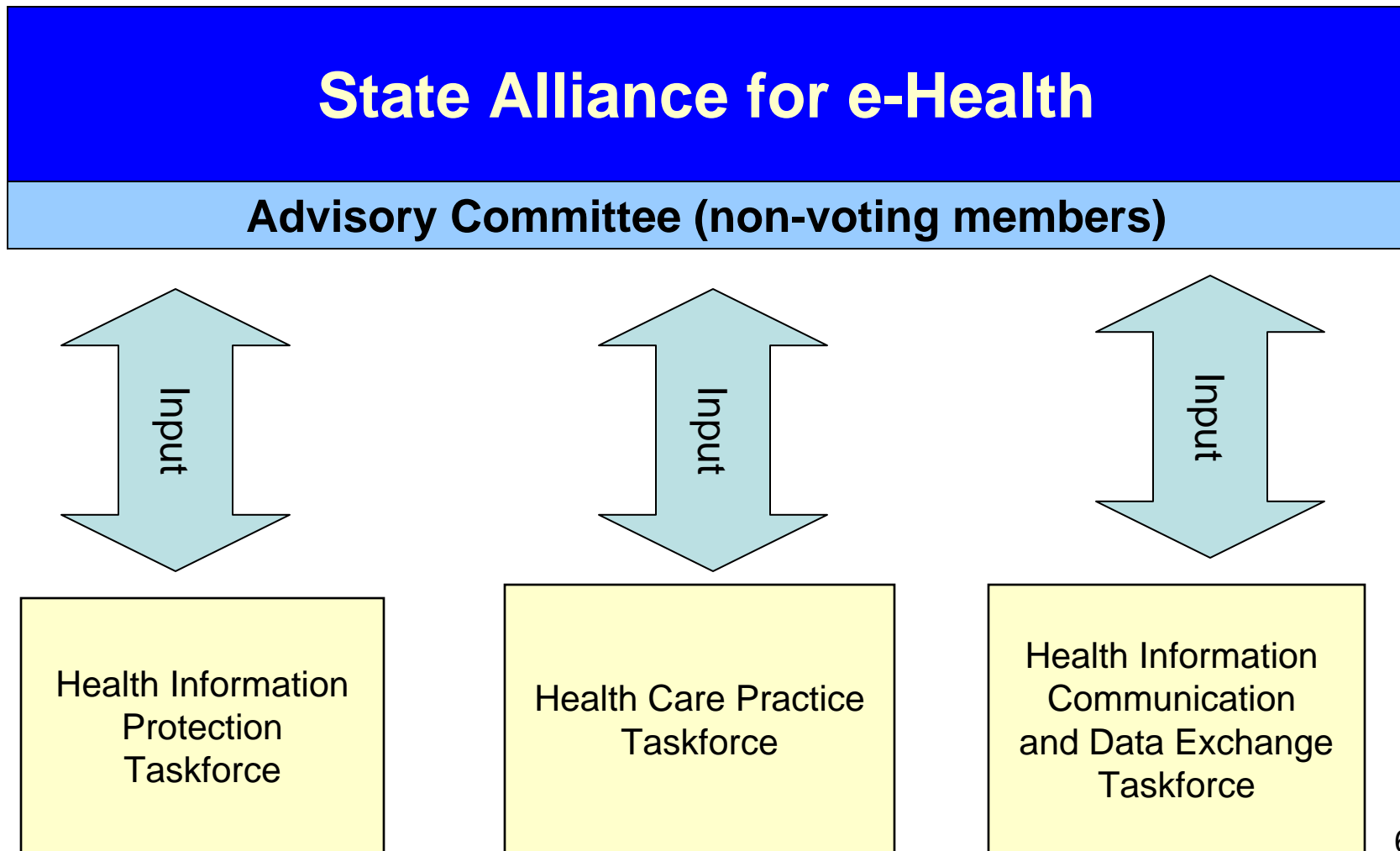
Governor Jim Douglas (VT)

The State Alliance for e-Health will:

- From a state-specific perspective, address barriers to health information exchange and adoption of health IT, while preserving privacy, security, and consumer protections.
- Build consensus in seeking the harmonization of the variations in state policies, regulations, and laws, where appropriate, and develop standards and/or guidance for modifying such policies, regulations, or laws.
- Allow for dialog among states that will fuel creativity and partnerships among states and with the private sector in the health IT arena.
- Allow for the appropriate input of experts and others working on health IT endeavors to inform state policymaking.



State Alliance for e-Health Structure



Outcomes

Outcomes and products will be determined by the Alliance and may include:

- Model laws and regulations on key issues
- Guidance and measures for collaborative cross-sector efforts
- Recommendations on key state actions by legislative and/or executive leadership

Outcomes are expected to be complementary and supportive of on-going efforts and other policy workings

The Alliance will actively seek input and wisdom from other efforts



Open Discussion

Closing Remarks

Phil Telfer

Holt Anderson

**NC HISPC
THANKS YOU!!**

Project Co-chairs

**Phil Telfer
Holt Anderson**

NC HISPC THANKS YOU!!

Organizations

Blue Cross Blue Shield of North Carolina

Duke University Medical Center

Kirby Information Management Consulting

Laboratory Corporation of America

Principal Health Management Associates

Radar Find Corporation

North Carolina Association of Pharmacists

North Carolina Health Information Management Association

North Carolina Healthcare Information Communication Alliance

North Carolina Hospital Association

North Carolina Institute of Medicine

North Carolina Medical Society

North Carolina Nurses Association

NC HISPC THANKS YOU!!

Organizations

SmithMoore LLP

University of North Carolina Hospitals

University of North Carolina Greensboro School of Nursing

University of North Carolina School of Public Health

Wake Forest University Health Sciences

Williams Mullen Maupin Taylor

**NC HISPC
THANKS YOU!!**

Project Management Office:

**Diana Gildea
Laura Ksycewski
Angie Santiago
Lori Von Collin**

**NC HISPC
THANKS YOU!!**

Legal Work Group

Sissy Holloman

Andra Welch

Katherine White

**NC HISPC
THANKS YOU!!**

Solutions Work Group

Vincent Carrasco

Joe Cimbala

Susan Ward

Andrew Weniger

NC HISPC THANKS YOU!!

Steering Committee

**Linda Attarian
Wesley G. Byerly
Fred Eckel
Jean Foster
Don E. Horton, Jr
Mark Holmes
Linwood Jones
Eileen Kohlenberg
Patricia MacTaggart
Doc Muhlbaier
Melanie Phelps
David Potenziani
N. King Prather
Morgan Tackett**

NC HISPC THANKS YOU!!

Work Group Co-Chairs

Sherrie Cannoy

Dave Kirby

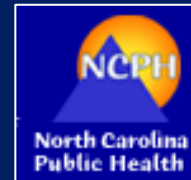
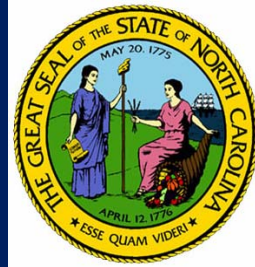
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Kirby Information Management Consulting