

# NC HIE Council Finance & Administration Committee

NCHICA  
Research Triangle Park, NC  
September 24, 2008

1

*Improving health and care in North Carolina by accelerating the adoption of information technology and enabling policies*

## AGENDA

<u>Start</u>	<u>Topic</u>	<u>Discussion Leader</u>
2:00	Welcome and Introductions	Phred Pilkington
2:10	Approve notes from August 27 <sup>th</sup> meeting	Andrew Weniger
2:15	NHIN 2 Project Sustainability Plan Status Update Deliverable Schedule & Relationship of Iteration 1 to NC HIE Finance / Administration Committee Topics from Business Plan: <ul style="list-style-type: none"> <li>- Potential Initiatives from 2008 - 2012</li> <li>- Financial Impact</li> </ul>	Andrew Weniger Richard Steen
3:00	Discussion of Iteration 1 Sustainability Plan Preparing for Iteration 2 beginning in October	Finance and Administration Committee Co-chairs
4:00	Adjourn	

2

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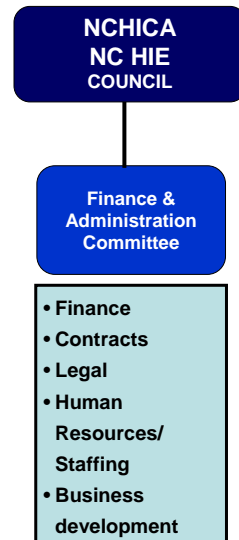
## NC HIE - as a Neutral Convener of Communities

NC HIE, as a part of NCHICA, serves as a neutral convener of standards-based community efforts focused on improving quality and lowering the cost of healthcare

- Promote social capital & develop interoperable policies
- Encourage adoption of EHRs and portals
- Standards-based interoperability
- Support on-going Initiatives – ePrescribing, CCNC Medical Home, Quality Initiatives, etc.
- Promote purchaser / employer participation – e.g., Bridges to Excellence, NC Business Council, etc.
- Engender cooperation and collaboration among potentially competing HIE / RHIO efforts
- Utilize NC HIE Council to build supportive business model to facilitate collaboration between the “bottom up” HIE initiatives underway and expected in the future
- Sponsor various quality initiatives such as applying for the Federal government’s Charter Value Exchange program

## NC HIE - as a Convener of Communities

- ❑ It is the mission of the North Carolina Health Information Exchange Council (NC HIE Council) to enable the timely and secure exchange of electronic health information for the purposes of improving the quality, safety and efficiency of healthcare and the overall health of residents.
- ❑ The NC HIE Council will engage healthcare stakeholders to facilitate the above objectives and deliverables and may hire staff and/or contract with third parties to supplement these efforts.
- ❑ Success will be measured by the utility of these activities and deliverables to NC residents and healthcare stakeholders.



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## Business Case for Nationwide HIE Investment

Level of Exchange	Primary Interest	Support for NHIE
Federal / National	Clinical & Administrative Referrals, Results, Pop. Health events (Medicare, MHS/VA/IHS/SSA etc.)	Strong interest in NHIE and Mandatory Use of National Standards
Regional / Interstate	Referrals, Results, Pop. Health events (Nat'l Payers & Self-funded Plans, etc.)	Strong Interest in National Standards; Interest in NHIE
Statewide / Intrastate	Clinical & Administrative (Medicaid, State Health Plan, State BCBS, Pop. Health awareness)	Strong Interest in National Standards; Mild interest in NHIE
Cross-Communities / HIEs	Referrals, Results, Pop. Health events (Health Systems, Regional Payers, PH)	Interest in National Standards; Mild interest in Intrastate or NHIE
Medical Trading Area / Community	Referrals, Results Delivery, Administrative (eRx, Lab, HIPAA claims/pmts)	Interest in Standards Avoid technical isolation; Mild interest in Intrastate / NHIE
Enterprise	Internal Network (Internal to Practice, PH, Hospital, etc.)	Low Interest in <u>NHIE</u>

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In SCOPE for Iteration 1  
 (Start June 2008 thru October 2008)  
 NHIN Business Planning Deliverable

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# Status Report

## NHIN Trial Implementation Business Plan

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### A nationwide “Network of Networks” is Being Driven From The Top-down ... But Evolving From The Bottom Up

Level of Exchange	Typical Priorities and Rationale for Interest		
Federal / National	NHIE Standards & Certifications	Population Health Data Collection	↑Quality ↓Costs “Pay for Results”
Regional / Interstate			
Statewide / Intrastate			
Cross-Communities / HIEs			
Medical Trading Area / Community			
Enterprise	Lab Results Delivery & Medication Mgmt.	Patient Summary Record & Medical Home	Mandated Population Health Reporting

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## Assumptions

- Quality Costs Less & HIE = Quality
- Minimize duplication of effort in deploying HIE across North Carolina
- Statewide collaboration on key HIE initiatives will increase the overall net value of HIE across North Carolina.
- Enterprise or community level HIE solve local healthcare problems and provide “markets” for HIE solutions developed collaboratively statewide.
- An “on-ramp” of clinician connectivity will have an impact on this Business Plan
- Business Plan = first iteration
- HIE will utilize standards-based, non-proprietary approaches, and maintain hardware, software and even reimbursement system neutrality.
- To move beyond enterprise and community based HIE efforts, formal state-level authority appears needed in North Carolina.
- Benefits from HIE may not align with costs and therefore a re-balancing of costs and benefits will be necessary.

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## NHIN Business Plan Deliverable Table of Contents

1. Introduction .....	3
1.1 Purpose.....	3
1.2 Scope.....	3
1.3 Definitions, Acronyms, and Abbreviations.....	3
1.4 References.....	3
1.5 Overview .....	3
2. National Context for a Statewide NC HIE .....	4
2.1 NHIN Governance Structure and Roles .....	4
2.2 Federal Agency Healthcare Initiatives .....	4
2.3 Nationwide Healthcare Trends.....	4
3. Marketing Plan .....	5
3.1 Market Structure and Segmentation.....	5
3.2 Market Opportunity for NC HIE.....	5
3.3 Market Strategy .....	7
4. Operating Plan.....	8
4.1 NC HIE Provisional Organizational Structure .....	8
4.2 Permanent Organizational Structure for State-wide NHIE Operations .....	8
5. Financial Plan .....	9
5.1 Financial Model.....	9
5.2 Financial Projections .....	9
Appendices.....	10

10 Improving health and care in North Carolina by accelerating the adoption of information technology and enabling policies

## NC Healthcare Market Description

- State-level issues in North Carolina include:
  - Health care as a competitive advantage for attracting/maintaining employers
  - Growing burden of Medicaid and uninsured on State budgets
  - Unemployment increase in a slow economy and Medicaid enrollment
  - Increase in chronic diseases due to NC's projected greater than national average growth in elderly population
  - NC's high percentage of returning military personnel with significant medical issues (approx. 5K returning to NC each month from Iraq and Afghanistan)

## NC Market Stakeholders

An important responsibility for the NC HIE Council will be to publicize North Carolina's many successes and progress across the state and nationally

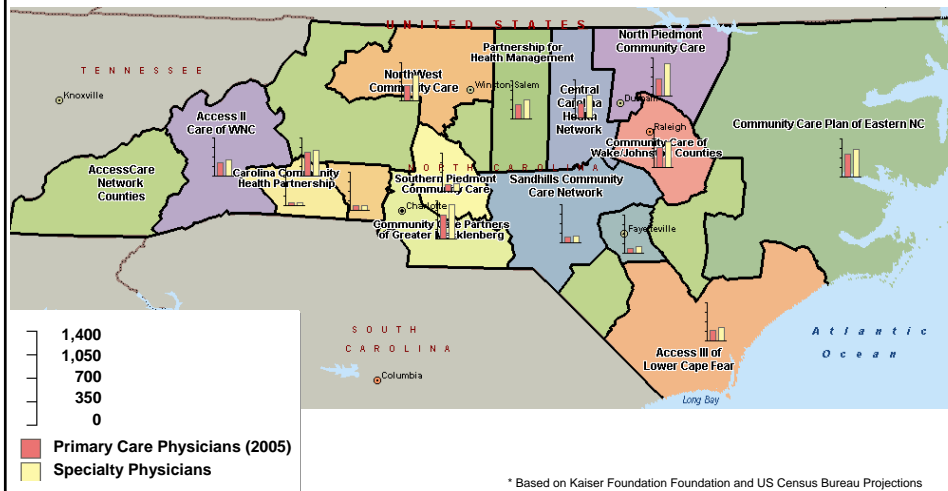
- As currently represented in the HIMSS RHIO Dashboard by state\*, North Carolina Community HIEs include:
  - Eastern Counties (2 Medical Trading Areas – Southeastern, Eastern)
    - North Carolina Information Exchange Consortium (WakeMed and Department of Public Health),
    - Community Partners HealthNet, Inc.
    - PCMH/ University Health Systems (emerging)
    - Rocky Mount HIE
  - Central Counties (4 Medical Trading Areas – W-S/Greensboro, Charlotte, Triangle, and Piedmont)
    - Duke University Health System – Durham County Medicaid Data Exchange
    - Sandhills Community Care Network (SCCN)
  - Western Counties (1 Medical Trading Area – Western)
    - Western North Carolina Health Network
    - Mission Health and Hospital, Buncombe County Health Center, Nursing Homes, Home Health Providers
    - Community Health Network (CHN)

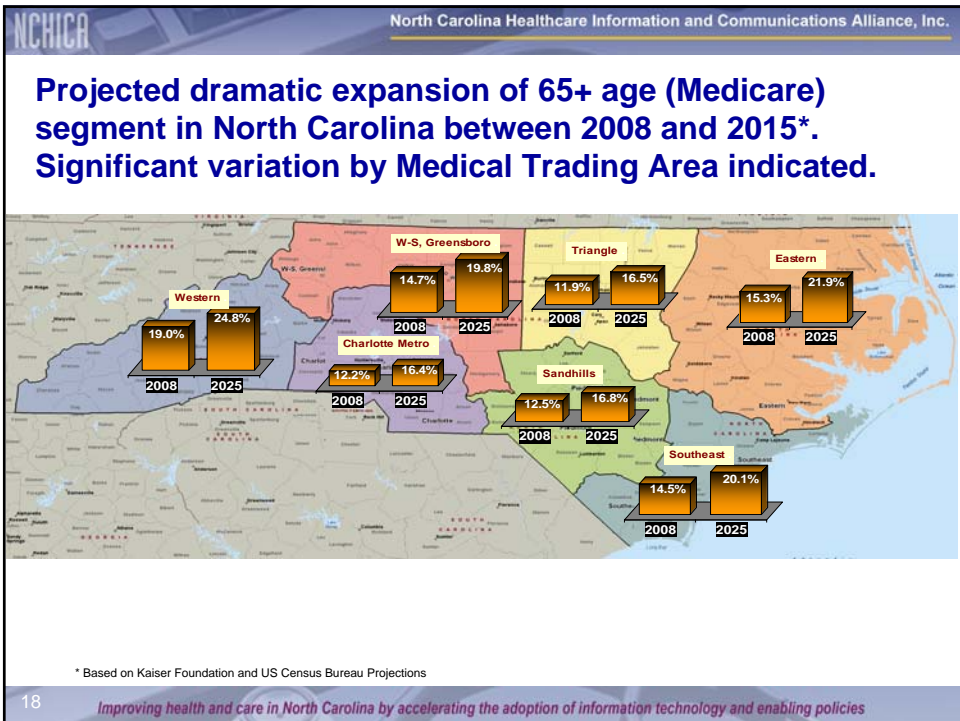
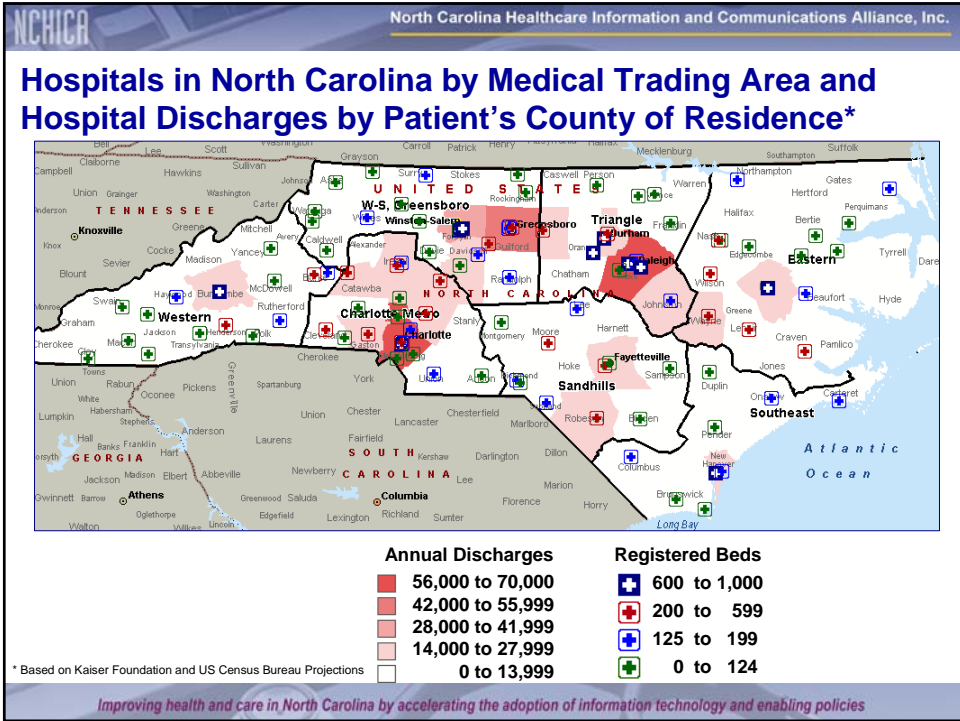
\* The Healthcare Information and Management Systems Society (HIMSS) State Dashboard lists 9 currently active or emerging Regional Health Information Organizations (RHIOs). Health Information Exchange (HIE) while sometimes used synonymously with "RHIO" can also imply a RHIO offering technology enabled services to their constituents (e.g., Health Information Exchange technology and NHIN certified physician practice EMR systems).

## NC Market Stakeholders

- North Carolina Medical Home Networks, with support from large employers, Medicaid, physician practice associations, safety-net providers, and other payers, includes:
  - Eastern
    - Access III of Lower Cape Fear
    - Community Care plan of Eastern NC
  - Central
    - NorthWest Community Care
    - Southern Piedmont Community
    - Community Partners of Greater Mecklenberg
    - Pagership for Health Management
    - Central Carolina Health Network
    - Sandhills Community Care Network
    - North Piedmont Community Care
    - Community Care of Wake/Johnston Counties
  - Western
    - Community Health Network
    - Access II Care of WNC
    - Carolina Community Health Partnership
    - Access Care Network Counties
    - Community Health Partners

## CCNC Networks displaying proportion and number of Primary Care versus Specialty Physicians within each of 14 Community Care North Carolina (Medical Home) Networks\*





**NCHICA Proposed NC Program** North Carolina Healthcare Information and Communications Alliance, Inc.

## North Carolina – Proposed State-wide Initiative Areas to focus on to meet ONC project goal of “sustainable operations by 2012”

*Illustration of Potential Initiatives by Type (Red indicates analysis focus)*

<b>CORE + QUICK HITS</b>	1. Summary Patient Record Exchange (ER, Out-Patient, In-Patient, Consultant)
	2. Test Results Reporting (Lab and Radiology)
	3. Medication Management (Meds History, ePrescribing, Meds Reconciliation)
<b>EXTEND VALUE</b>	4. Federal Agency Program Automation (SSA, Wounded Warrior)
	5. Consumer / Provider Comm. (Permissions, Access, Secure eMail, Requests)
	6. Provider / Provider Communication (Secure eMail, Referral Workflow)
<b>TRANS-FORM</b>	7. Patient Centered Medical Home Automation (Phys. Portal Dashboards)
	8. Administrative Health Plan Data Exchange (Eligibility/Auth., EHR-Lite)
	9. Population Health Automation (Registries, Case Reporting, Immunization)
	10. Health Analytics (Quality Measures and Decision Support)

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**NCHICA Potential NC Priorities** North Carolina Healthcare Information and Communications Alliance, Inc.

## North Carolina – Core and Quick Hit Initiatives

### Potential five-year deployment and technology requirements (Statewide – “Green”, Independent or Community-wide – “Yellow”)

Potential HIE Initiatives in North Carolina (Statewide - "Green" and Independent, Community-wide - "Yellow")	Years->					-<Technologies								
	2008	2009	2010	2011	2012	Core Exchange	Physician Directory	Access Permissions	Secure Email & Alerts	Workflow Mgmt.	Physician ID & Access	Physician Portal	Consumer ID & Access	Consumer Portal
<b>1) Summary Patient Record Exchange</b>														
Emergency Care Summaries →	1					☑	☑		☑	✓				
In-Patient Discharge Summaries →	1					☑	☑		☑	✓				
Out-Pat. Summaries & Consult Reports →			1			☑	☑		☑	✓				
<b>2) Test Results Reporting</b>														
Lab Results Delivery or Notification →		2				☑	☑	☑		☑	✓			
Radiology Reports Delivery / Notification →			2			☑	☑	☑		☑	✓			
<b>3) Medication Management</b>														
Medication History from PBMs →				3		☑	☑		☑	✓				
ePrescribing - Electronic Orders / Refills						☑								
Medication Reconciliation						☑								

**KEY**

**Initiatives**

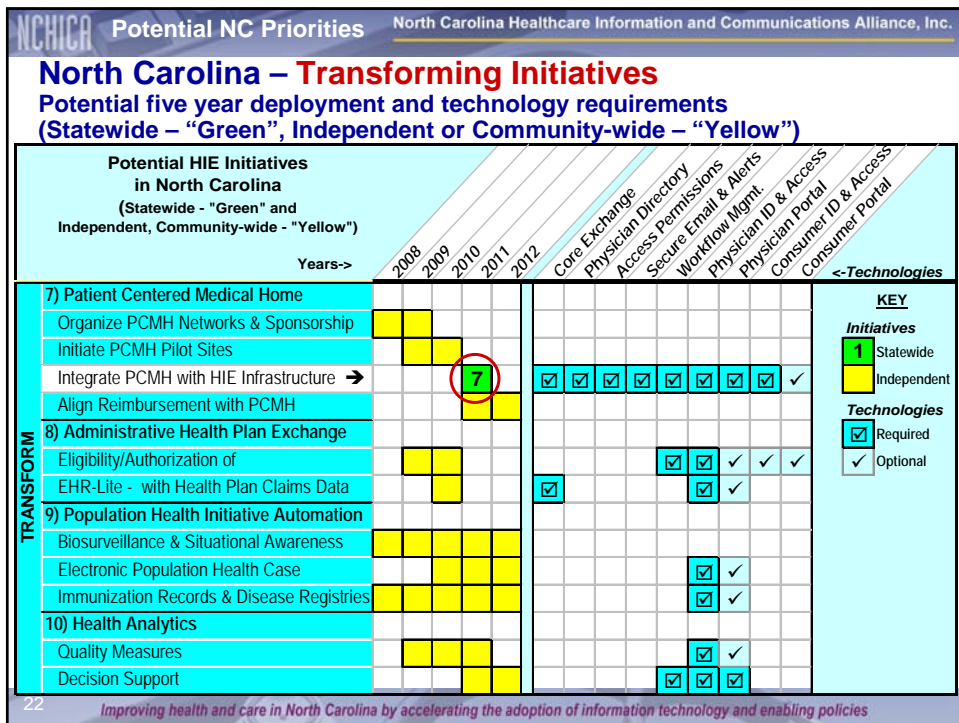
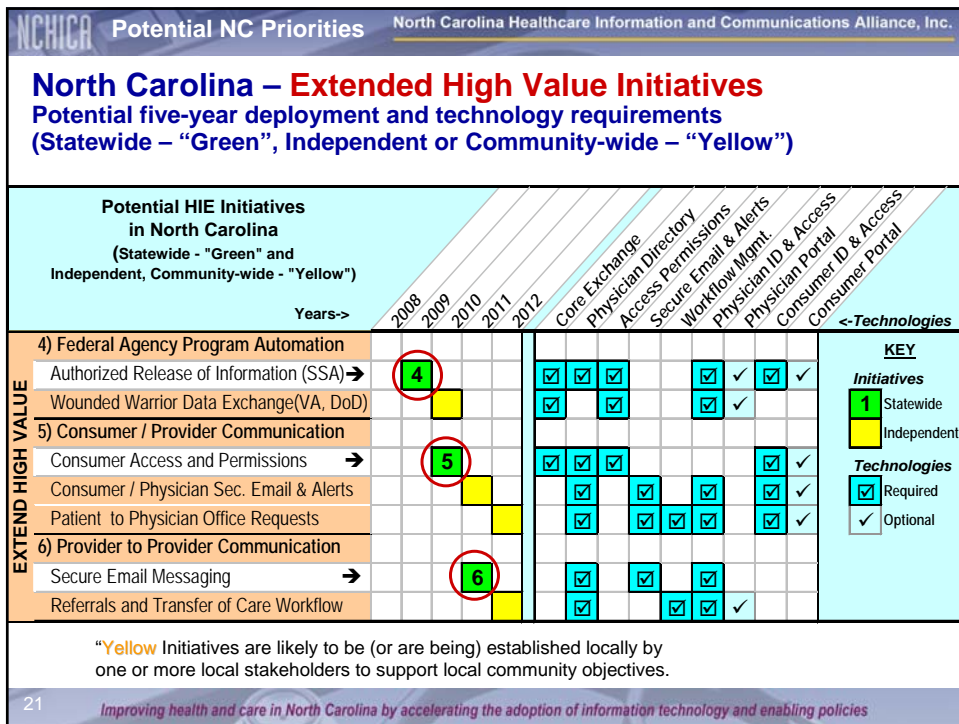
- 1 Statewide
- Independent


**Technologies**


- ☑ Required
- ✓ Optional

“Yellow” Initiatives are likely to be (or are being) established locally by one or more local stakeholders to support local community objectives.

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NCHICA Potential Staging		North Carolina Healthcare Information and Communications Alliance, Inc.		
North Carolina – 3-Stage, Multi-year Deployment Program				
	Stage 1	Stage 2	Stage 3	
<b>CORE + QUICK HITS</b>	1. HIE Core Services for Sum. Exchange 2. Labs. & Rads. Diags. Reporting 3. Medication History for Outpatient Rx's	1. Roll-out to ED, Out-Patient, & In-Patient		
<b>EXTEND – HIGH VALUE</b>		4. Disability Claims Enrollment (SSA) 5. Consumer Access & Permissions Setting	6. Provider to Provider (Secure eMail)	
<b>TRANSFORM</b>	<input checked="" type="checkbox"/> NC HIE Inception, By-laws, Agreements	<input checked="" type="checkbox"/> Med. Home - Process Transformation Pilots	7. Med. Home Automate (Dashboards, Portals)	
<b>OPERATE (Staged with Initiatives)</b>	<input checked="" type="checkbox"/> Backup, & Disaster Recovery Support <input checked="" type="checkbox"/> Physician ID +Acct. Mgmt. & Help Desk	<input checked="" type="checkbox"/> Patient Access to Permissions Portal <input checked="" type="checkbox"/> Consumer ID Proof, Access & Help Desk	<input checked="" type="checkbox"/> Phys. Portal and/or hosted EMR Support <input checked="" type="checkbox"/> Prac. Admin. ID+Acct Mgmt. & Help Desk	
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NCHICA Initiative Dependencies		North Carolina Healthcare Information and Communications Alliance, Inc.		
North Carolina – 3-Stage, Multi-year Deployment Program				
	Stage 1	Stage 2	Stage 3	
<b>CORE + QUICK HITS</b>	1. HIE Core Services for Sum. Exchange 2. Labs. & Rads. Diags. Reporting 3. Medication History for Outpatient Rx's	1. Roll-out to ED, Out-Patient, & In-Patient		
<b>EXTEND – HIGH VALUE</b>	<i>Medical Home Transformation requires multi-stage preparation</i>	4. Disability Claims Enrollment (SSA) 5. Consumer Access & Permissions Setting	6. Provider to Provider (Secure eMail) <i>Medical Home Pilots leverage foundational initiatives</i>	
<b>TRANSFORM</b>	<input checked="" type="checkbox"/> NC HIE Inception, By-laws, Agreements	<input checked="" type="checkbox"/> Med. Home - Process Transformation Pilots	7. Med. Home Automate (Dashboards, Portals)	
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## Assumptions for Business Plan

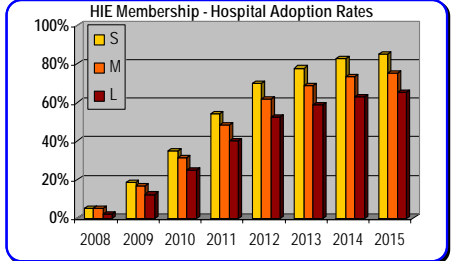
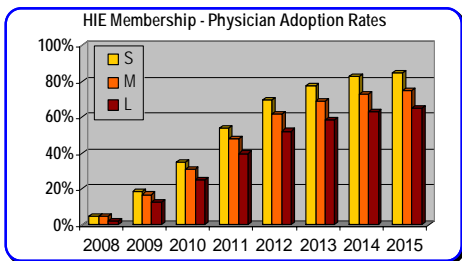
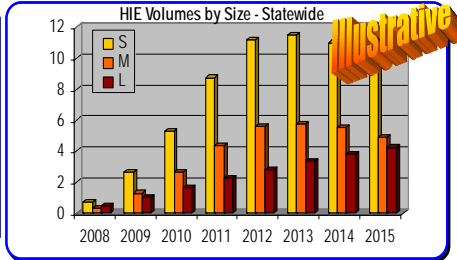
- Objective: Cost justify statewide Health Information Exchanges compatible with shared national standards
- Ultimate rationale for technology enablement is based on improving quality and transparency in health care delivery
- Cost effectiveness is also paramount; Successful adoption demands that overall quantitative benefits significantly outpace cost and that the benefits can be proportionately distributed (shared)
- Scale-driven technology components (particularly for the “green” - statewide initiatives though for “yellow” - independent ones as well) may benefit considerably by a “shared services” approach.
- The model must account for varying rates of adoption by stakeholder group (e.g., physicians, hospitals) as well as by geography.
- Model takes a holistic approach with a “program” of initiatives; these are initiatives that have demonstrated positive acceptance and value in other sustaining HIEs.

## Assumptions for Business Plan

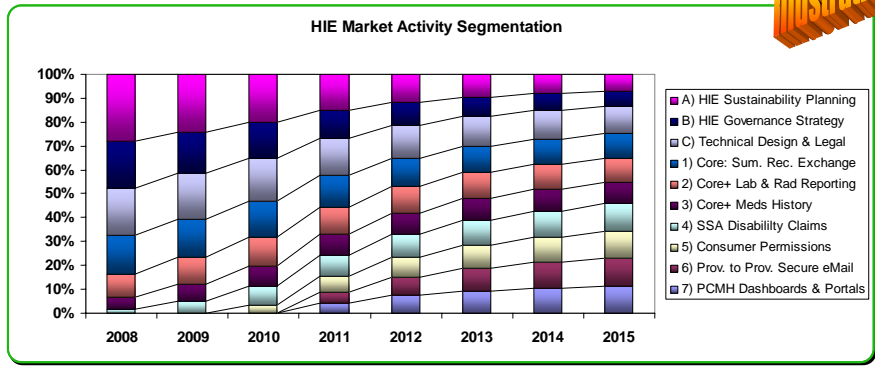
- The model’s market segmentation assumes that individual HIEs and “yellow” initiatives already underway while others emerge and commence operations on a delayed time scale.
- Community HIEs are classified as “small”, “medium” and “large” and key stakeholders (physicians, hospitals) are assigned a “home” HIE, to avoid redundant counting.
- While benefits may clearly outpace costs for the proposed initiatives, the one-time and on-going costs are sizeable implying that some type of formal state-level authority appears needed in North Carolina.
- Benefits from HIE may not align with costs and therefore a re-balancing of costs and benefits will be necessary.

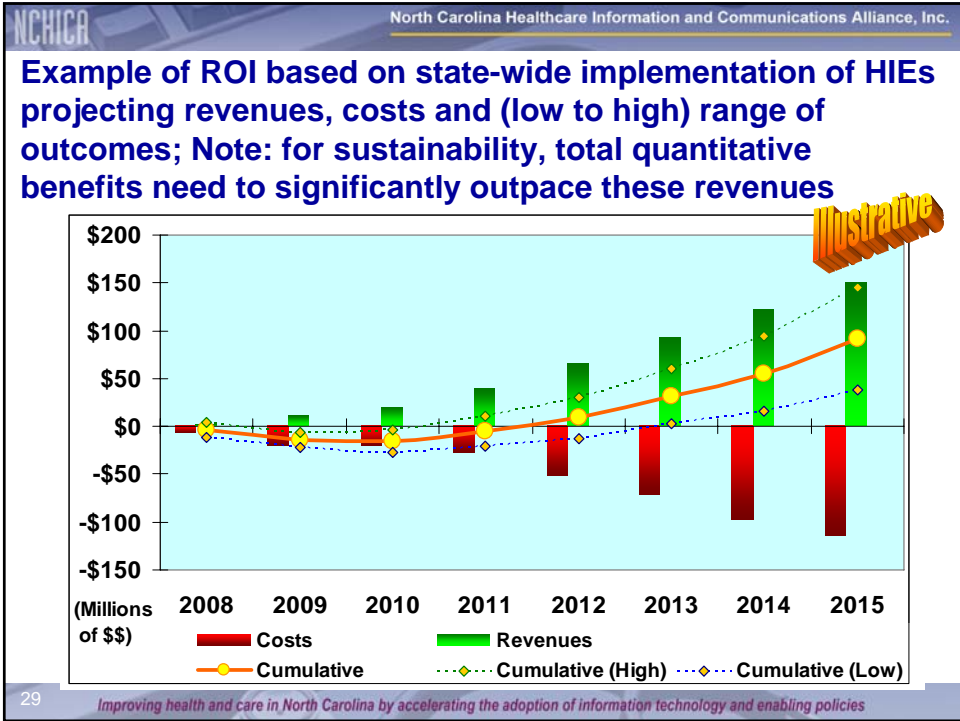
## NC HIE Model based on statewide demographics accounts for adoption growth of HIEs, and key stakeholder groups

HIE Units <sup>1</sup> - Size, Composition, Costs			
Characteristics	Small	Medium	Large
- Population	250,000	625,000	1,000,000
- Physicians	500	1,250	2,000
- Hospitals/IDNs	3	8	12
- Private Payers	6	6	6
- Local Labs/Rads	2	3	4
- Govt. Payer - State, Federal	1	1	1
- Gov. Contracts & Philanthropy	1	1	1



## Market segmentation scenario for NC HIE in North Carolina illustrated with proposed program of “green” initiatives; Note: this model assumes individual HIEs and initiatives already underway while others emerge and begin operations during this time window.





**Stakeholder Alignment for Summary Patient Record Exchange initiative illustrates the challenge of misaligned costs and benefits**

Stakeholders:	Participant	Funder <sup>1</sup>	Qual. <sup>2</sup>	Quant. <sup>2</sup>	Costs
Hospitals	✓✓	\$\$	+++	\$	\$\$\$
Physicians	✓✓		+++	\$	\$
Payers (private)	✓	\$	+++	\$\$\$	\$
Payers (gov't)	✓	\$	+++	\$\$\$	\$
Gov't Grants		\$\$			
Population Health	✓		++		\$
Researchers	✓		++	\$	\$
Patients	✓		+++	\$	
Employers	✓	\$	+	\$	

<sup>1</sup> Potential Initiative Financiers; <sup>2</sup> Projected Qualitative & Quantitative Benefits.

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## Committee Discussion

- Discussion of Iteration 1 Business Plan
- Preparing for Iteration 2 beginning in October

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# Thank You