

# **NC HISPC State Implementation Project Summary and Impact Analysis Report**

Submitted to: Linda Dimitropoulos  
Project Director  
Privacy & Security Solutions for Interoperable HIE  
RTI International

Submitted by: Holt Anderson  
Executive Director  
NCHICA

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## **ABOUT NCHICA**

North Carolina Healthcare Information and Communications Alliance

The North Carolina Healthcare Information and Communications Alliance, Inc. (NCHICA) is a nonprofit consortium of about 200 organizations dedicated to improving healthcare by accelerating the adoption of information technology. NCHICA members represent the diverse sectors of the healthcare community, including providers, payers, vendors, professional societies, and law firms. To see a list of members, [click here](#). NCHICA's role is to act as a neutral forum to bring together the many sectors of the healthcare industry. Together its members can address how best to accelerate the adoption of IT in healthcare by considering clinical needs, policy questions, and technology issues.

## **ABOUT NC HISPC**

NORTH CAROLINA HEALTH INFORMATION SECURITY PRIVACY  
COLLABORATION

In October 2005, Office of the National Coordinator for Health Information Technology and the Agency for Healthcare Research and Quality awarded the Privacy and Security Solutions for Interoperable Health Information Exchange contract to RTI International. RTI, in collaboration with the National Governors Association Center for Best Practices, formed the Health Information Security and Privacy Collaboration (HISPC) project and invited the states and territories to submit proposals to participate in the project. The HISPC project was designed to examine privacy and security laws and business practices that affect the ability of every state and territory to exchange electronic health information within itself and among each other.

NCHICA submitted a proposal and in April 2006 was awarded the contract to represent North Carolina. Since the project's commencement, teams of healthcare stakeholders have worked collaboratively through a process of consensus to identify, assess, and develop plans to address variations in organization-level business policies and state laws that affect privacy and security practices that may pose challenges to health information exchange.

## **Acknowledgements**

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### **Project Manager**

Angie M. Santiago  
TM Floyd & Company, Inc.

### **NC HISPC Steering Committee**

Holt Anderson, NCHICA Co-Chair  
Linda Attarian, NC DHHS Div. of Medical Assistance Co-Chair  
Fred Eckel, NC Association of Pharmacists  
Jean T. Foster, NCHIMA / Pitt County Memorial Hosp,  
Donald E. Horton, Jr., LabCorp  
Eileen Kohlenberg, Ph.D., NC Nurses Association  
Mark Holmes, Ph.D., NC Institute of Medicine  
Linwood Jones, NC Hospital Association  
Patricia MacTaggart, Health Management Association  
Lawrence Muhlbaier, Ph.D., Duke Univ. Health System  
David Potenziani, M.D., UNC School of Public Health  
Melanie Phelps, NC Medical Society  
N. King Prather, BCBSNC  
Morgan Tackett, BCBSNC

### **NC HISPC Legal Work Group**

Peggy Blackwell, Walter Jones  
Joe Cimbala, NC DMH/DD/SAS  
Sissy Holloman, UNC Hospitals  
Linwood Jones, Hospital Association  
Melanie Phelps, NC Medical Society  
Roy H. Wyman, Jr., Williams Mullen Maupin Taylor, Co-Chair

### **Consumer Engagement Team**

Sherrie Cannoy, UNC Greensboro, Team Leader  
NC Consumer Advisory Council on Health Information  
Zarb Consulting

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>Introduction and Overview.....</b>	<b>5</b>
HIT/HIE Privacy and Security Landscape Prior to HISPC .....	5
Current HIT/HIE Landscape .....	6
Current Privacy and Security Landscape .....	7
<b>Implementation Project Update .....</b>	<b>7</b>
Building thought leadership .....	8
Actively engage consumers .....	9
Reduce legal barriers to timely health information exchange.....	9
Issues encountered.....	10
Next Steps.....	10
<b>Impact Analysis.....</b>	<b>10</b>
Future Vision .....	12
Within the State.....	12
Multi-State Initiatives.....	12
<b>Conclusion.....</b>	<b>12</b>

## **Executive Summary**

This report contains the final HISPC project summary. A presentation of the final deliverables and an internal NCHICA HISPC report will be delivered to the NC HISPC Steering Committee meeting on December 13.

This report has four components:

- The *Introduction and Overview* describes North Carolina's privacy and security landscape prior to its involvement in the HISPC project.
- The *Implementation Project Update* is a review of the work that was proposed and completed during duration of the project.
- The *Impact Analysis* describes the milestones, major outcomes, or conclusions of the project from April 2006 through Dec 2007.
- The Conclusion describes how this work will be transitioned into NCHICA's current strategy.

### ***Introduction and Overview***

#### **HIT/HIE Privacy and Security Landscape Prior to HISPC**

The North Carolina Healthcare Information and Communication Alliance (NCHICA—the Governor's designee for the HISPC project) was established by Executive Order of the Governor of North Carolina in 1994 to, "improve healthcare in North Carolina by accelerating the adoption of information technology." Since then, NCHICA has led efforts in developing model privacy legislation, developed tools for HIPAA compliance, and facilitated initiatives to demonstrate the secure exchange of health information on a statewide basis.

Several HIT initiatives were underway in North Carolina at the time the HISPC proposal was written. The North Carolina Healthcare Quality Initiative (NCHQI) is a multiple-stakeholder project designed to automate medication, laboratory, and radiology data. The first phase of this project involves providing a list of patient medications to the patient's healthcare provider at the point of contact, so that the provider can evaluate possible drug-to-drug interactions and prescribe correct dosages. The electronic information will be accessible by health plans, pharmacy benefits managers, pharmacies, and healthcare providers. The second phase of the project involves the electronic exchange of lab and radiology data to further improve care and save time.

The Automated Adverse Drug Events Detection and Intervention project, underway at Duke University, establishes an automated surveillance system for detecting, reporting, intervening in, and measuring the incidence and nature of adverse drug events suffered by patients. The system is designed to alert physicians about critical detected events, and certain triggers will result in automated reports that will be evaluated on a daily basis by pharmacists trained in adverse drug event investigation.

The North Carolina Emergency Department Database (NCEDD) project began in 1999 and created an emergency department data repository for the North Carolina Division of Public Health. NCEDD collected, standardized, and analyzed timely and secure emergency department data. The NCEDD led to the 2005 launch of the North Carolina

Hospital Emergency Surveillance System (NCHESS), a mandated emergency department collection system that is expected to assist the state in the early detection of and response to public health emergencies or potential biological or chemical terrorist attacks. A related project is the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), an early event detection system allowing authorized users to view data from NCEDD and the Carolinas Poison Center, NC Wildlife Center, and other data sources for a variety of public health surveillance needs.

The University of North Carolina Hospital System is implementing a Perinatal EMR project, involving an electronic version of prenatal medical records integrated into software that will facilitate the input, storage, retrieval, and modification of prenatal records. The software will also allow patient access to medical data through a wireless LAN. The data will be transferred to and from a centralized database and can be shared with others over the Internet for clinical and research purposes. Another initiative focusing on children's healthcare was the Provider Access to Immunization Registry Securely Project (PAIRS) system. Started in 1998, PAIRS was an early, critical component in North Carolina's development of a statewide immunization registry, which was implemented in 2005.

North Carolina is collaborating with IBM under a contract with the Office of the National Coordinator for Health Information Technology to develop an NHIN architecture prototype. Communities in Research Triangle Park, NC and Rockingham County, NC/Danville, VA areas are involved in this prototype work.

In the private sector, various healthcare stakeholders are discussing and taking action to create and participate in regional health information organizations (RHIOs). The Western North Carolina Health Network, a consortium of 16 hospitals in the Blue Ridge Mountains, is one of the first RHIOs in North Carolina. Four hospitals are currently connected and the remaining hospitals should be connected by the end of 2006 or early 2007. The participants currently can view patient data from each of the other participating hospitals through a virtual electronic medical records system, and each authorized user has a standardized view of the data.

### **Current HIT/HIE Landscape**

Since the inception of the North Carolina Healthcare Information and Communications Alliance in 1994, North Carolina continues to build a collaborative legacy among its private and public health care stakeholders. It is through these private and public partnerships that the North Carolina health care community has leveraged their resources to accelerate the adoption of health information technology thus enabling the timely and secure exchange of health information.

The HISPC project encouraged North Carolina health care stakeholders to work with other states to formulate and implement privacy and security solutions. Collaborating and exchanging ideas with their counterparts has proven to be one of the most effective means for NCHICA to gain the interest and involvement of the health care community. With the emphasis on privacy and security policy, law, and regulation, the project has given North Carolina the opportunity to update work previously conducted by various privacy and security work groups. Most importantly it has opened a dialog between the professional health care stakeholders, public policy makers, and consumers.

North Carolina is committed to building a policy framework and a secure health information exchange infrastructure which will reduce the policy, legal, and regulatory barriers to exchanging health information.

### **Current Privacy and Security Landscape**

Several strategic health information technology (HIT) initiatives have been undertaken or currently exist in North Carolina. The North Carolina health care community continues to demonstrate that when presented with a suitable opportunity and appropriate incentives, trusting partnerships can design and adopt cutting edge technology to share health information to meet their objectives. As a result of the work conducted in the Privacy and Security Solutions for Interoperable Health Information Exchange project, the North Carolina Health Information Security and Privacy Collaboration (NC HISPC) stakeholders were given an introductory opportunity to focus solely on the business practices, policy, and legal drivers that create barriers to the secure and timely exchange of health information.

The HISPC project has accelerated and further cemented the on-going process for formulation and implementation of inter-state privacy and security policies regarding health information exchange. Since 1995, the state has had a Privacy and Confidentiality Work Group in place to scan federal and state laws to see if they could build model privacy laws. HISPC has now joined hands with this Work Group to speed up activities of the group.

There is no formal governance structure for privacy and security in the state however, the North Carolina Healthcare Information and Communications Alliance, Inc. (NCHICA), a nonprofit consortium of over 200 organizations dedicated to improving healthcare by accelerating the adoption of information technology, is a vehicle towards the establishment of such a structure. The NHIN Phase II proposal aims to create the North Carolina Health Information Council which will focus on laying a foundation for policy and procedures, security infrastructure, and business practices to allow the timely and secure electronic exchange of health data.

### ***Implementation Project Update***

#### **Describe reasoning for choosing implementation project(s)**

As described in the NC HISPC Implementation Plan Report, the North Carolina health care stakeholders have formulated a five year phased plan to build a policy, legal, and technical framework to support health information exchange. The goals of the NC HISPC implementation plan are:

#### **Goals**

1. **Build thought leadership.** The North Carolina health information exchange privacy and security framework would begin by forming thought leaders among public policy makers, the health care stakeholder community, and consumers through the creation and implementation of statewide health information privacy and security awareness programs.
2. **Actively engage consumers.** Consumers – as the subject of the health information to be exchanged electronically and as the intended users of personal health records - generally do not have sufficient information at their disposal to weigh the risks and benefits of health information technology and, accordingly,

they do not play an active role in technology's design and use. North Carolina is committed to actively engage consumers through workshops, town meetings, public communications, and through the establishment of the North Carolina Consumer Advisory Council on Health Information (NC CACHI).

3. **Seek executive-level private and public sponsorship.** As individual consumers become aware of the benefits of exchanging health information in an electronic format, North Carolina stakeholders will seek support from their organizations, as well as public policy makers at the local and state levels, to participate in and fund collaborative demonstration health information technology projects.
4. **Reduce legal barriers to timely health information exchange.** The legal community and health care stakeholders will conduct legal analyses of the ongoing relevance and effect of North Carolina's current privacy laws as the State increases its use of health information technology in exchanging health information among entities, as well as the effect of such laws on the emerging person – oriented health information exchange model (where the subjects of the information determine and manage access to their health information).
5. **Adopt health information policy, legal, and technology standards.** North Carolina's voluntary adoption of health information technology standards will support the future interoperability of health information exchange. Awareness campaigns to increase North Carolina's participation in the Health Information Technology Standards Panel may increase voluntary data and security standards adoption in the State. In addition to adopting health information technology standards, the North Carolina health care stakeholders will begin exploring opportunities to participate in the research and development of model policy and legislation. Specifically, the NC HISPC will assist in supporting the development of policy and agreements that support statewide interoperability of HIE and the implementation of Phase 2 of the NHIN Contract with ONC if awarded to an organization in NC. Likewise, the NC HISPC will inform and support the policies related to a CDC contract if awarded to an organization in NC for broad collection of health information for early detection of public health incidents.
6. **Increase rural connectivity and the adoption of health information technology.** Participating in any type of regional or nationwide health information exchange can be facilitated by increasing electronic medical record adoption among North Carolina's provider community. Likewise, statewide health information technology cannot be realized without increasing rural connectivity. North Carolina stakeholders will seek to understand, publicize, and support potential policy and other incentives for providers to invest in electronic medical records for rural stakeholders and to facilitate local, regional, and nation-wide information sharing opportunities, as supported by the consumers.

Phase 1 of the NC HISPC Implementation Plan was to begin foundational work to begin reducing the barriers identified by the Solutions and Legal Work Groups. During the extension period from June 1 – December 31, 2008, the NC HISPC team focused their efforts on goals 1 - 4.

**Building thought leadership and seeking executive level private and public sponsorship through awareness and outreach programs. Seek executive-level private and public sponsorship.** NC HISPC team members developed, presented, attended, and hosted numerous informational programs to raise awareness of current health information exchange initiatives underway and the effects these exchanges have

on privacy and security considerations for the consumers, employers, legal community, and public policy makers. These formal and informal presentations by our HISPC leaders were given to individuals and groups in formal and informal settings through coffee talk meetings, Web Conferencing, professional association meetings, and the NCHICA Annual Conference. Through these meetings, presentations, and its participation in the National Governor's Association State e-Health Alliance, North Carolina has extended its communication efforts beyond its NCHICA membership opening a new dialog with consumers, public policy makers in North Carolina's State House and Senate, NC Medical Society, NC Hospital Association, the Governor's Office.

### **Actively engage consumers**

During the assessment phase of the Health Information Security Privacy Collaboration project, obtaining consumer input was cited as the most difficult challenge the project leaders faced. Consumers cited that they were unable to participate due to lack of transportation, lack of trust with a government sponsored project, and inability to attend the meetings during the traditional work day. These issues continue to pose a challenge for those interested in directly engaging consumers in discussions, workshops, and projects to related health information technology and exchange.

In August of 2006, the North Carolina Health Information Communications Alliance responded to this challenge by forming the North Carolina Consumer Advisory Council on Health Information (NC CACHI). Although in their infancy, NC CACHI continues to gain the interest of consumers and respect of the health information exchange and technology professionals. As one of the resources available to NC CACHI, the NC HISPC Consumer Engagement Team assisted the North Carolina Consumer Advisory Council on Health Information realize the following tasks:

- a) Develop and implement public messages to raise awareness of the Council's existence and mission.
- b) Develop a long term strategy and process that will act as a roadmap the Council can use to address privacy and security concerns.
- c) Develop a program to raise broader consumer and provider awareness for the general public on issues surrounding health information privacy and the risks and benefits of health information technology.
- d) Test this pilot program at NCHICA's Annual Conference September 23 – 26 by having the NC CACHI attend sessions and report on their perceptions of the policy and technology presentations made at that event. A structured for the reports will be developed in advance and approved by the Council.
- e) Propose that the NC CACHI present their work and insights gained at the National HISPC Meeting in November.
- f) Develop a health information consumer toolkit to share with other states interested in starting similar initiatives.

### **Reduce legal barriers to timely health information exchange**

As North Carolina moves toward increased use of health information technology, the legal community must conduct collaborative legal analyses of the relevance and effect of current privacy laws on the electronic exchange of health information. This effort is complicated and will be planned and implemented by phases. The initial phase of the strategy is to raise awareness about the foundational work conducted by the HISPC

Legal Work Group. The HISPC Legal Work Group reviewed the NC HIPAA Preemption Analysis to identify potential barriers to health information exchange and to identify all consent related statutes. It also prepared a draft model patient consent form and data exchange agreements to be utilized by organizations engaging in health information exchange.

**Issues encountered during implementation and lessons learned**

Since North Carolina developed the statement of work and correlating tasks, there were no major issues.

**Next Steps**

In 2008, the HISPC Legal Work Group will prioritize the potential legal barriers and begin in depth legal analyses of the North Carolina general statute that may pose legal and implementation barriers to North Carolina health care stakeholders as they to design and implement the health information exchange framework.

Future HISPC related work will transition to NCHICA’s Privacy Work Group.

**Impact Analysis**

Describe milestones that outline the major outcomes or conclusions of the project April 2006 through Dec 2007.

<b>NC HISPC Phase 1 Deliverables</b>		
<b>Deliverable to RTI</b>	<b>Task Owner</b>	<b>Status</b>
Final work plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
Interim Variation of Assessment	Angie Santiago	Submitted by NCHICA Accepted by RTI
Interim Solutions Plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
Interim Implementation Plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
Final Variation of Assessment and Solutions Plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
Final Implementation Plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
Collaborative workgroup strategy plan	Angie Santiago	Submitted by NCHICA Accepted by RTI
NC HISPC Impact Analysis Report	Angie Santiago	Submitted by NCHICA Pending by RTI

<b>NC HISPC Phase 2 Deliverables</b>		
<b>Deliverables to North Carolina</b>	<b>Task Owner</b>	<b>Outcomes / Status</b>
Health privacy and security awareness and outreach toolkit for public policy makers.	Originally assigned to Communications Collaborative	<ul style="list-style-type: none"> <li>▪ To eliminate task redundancy with the Communications Collaborative the name changed to NC HISPC / NC</li> </ul>

	but reassigned to Zarb Consulting	<p>CACHI Awareness and Outreach Campaign Messages.</p> <ul style="list-style-type: none"> <li>▪ Messages are based on release of Consumer Empowerment Toolkit.</li> <li>▪ The public relations campaign is currently underway.</li> <li>▪ NC CACHI News Release</li> <li>▪ Conducting telephone outreach following media materials distribution</li> <li>▪ Scheduled media interviews per interest and NC CACHI spokespeople.</li> <li>▪ Public Service Announcements</li> <li>▪ Distribute public service announcements via local and national public radio</li> <li>▪ Final Status: Implemented</li> </ul>
Health privacy and security awareness and outreach toolkit for consumers	Angie Santiago Zarb Consulting	<p>Title: Consumer Empowerment Toolkit</p> <ul style="list-style-type: none"> <li>▪ Draft Completed.</li> <li>▪ Currently under edit by Zarb Consulting.</li> <li>▪ Submit to NC CACHI by 12/10.</li> <li>▪ Posted to NCHICA website by 12/15.</li> <li>▪ Public Awareness campaign begins 12/16.</li> </ul>
NC Consumer Advisory Council program toolkit	Angie Santiago	<p>Title: Consumer Empowerment Toolkit</p> <ul style="list-style-type: none"> <li>▪ Draft Completed.</li> <li>▪ Currently under edit by Zarb Consulting.</li> <li>▪ Submit to NC CACHI by 12/10.</li> <li>▪ Posted to NCHICA website by 12/15.</li> <li>▪ Public Awareness campaign begins 12/16.</li> <li>▪ NC CACHI to customize for their use.</li> </ul>
Consent Inventory	Angie Santiago	Due 12/15.
A draft model consent form for NC, and/or participate in multi-state project preparing model consent forms.	Trish Markus	<ul style="list-style-type: none"> <li>▪ Draft Completed.</li> <li>▪ Currently in edit mode by LWG.</li> <li>▪ Draft to be re-submitted on 12/4 for final LWG review.</li> </ul>
A draft model data exchange forms for NHIN/RHIOs/HIEs in NC based upon current types of exchanges.	Roy Wyman	<ul style="list-style-type: none"> <li>▪ Draft Completed.</li> <li>▪ Currently in edit mode by LWG.</li> <li>▪ Draft to be re-submitted on 12/4 for final LWG review.</li> </ul>

## **Future Vision**

### **Within the State**

**Any specific challenges to private and secure interoperable identified in Phase I still need resolution?**

Yes. All of them.

**What is the plan and/or commitment within the state to resolve these issues?**

The State of North Carolina's be it the Governor's Office or DHHS has not revealed any formal plans but NCHICA will continue to encourage their involvement.

### **Multi-State Initiatives**

**Interactions between states that have been of value**

All of the Webex's, regional and national meetings have been of much value. We have been able to take the lessons learned from the other states to design a policy framework for North Carolina Health Information Exchange Council to build from.

**Intended/Future outcomes of Collaborative work**

This work will transition to NCHICA's Privacy Work Group.

## ***Conclusion***

The newly formed North Carolina's Consumer Advisory Council on Health Information will advise NCHICA's emerging North Carolina Health Information Exchange Council on consumer issues as they advise public policy makers or participate in demonstration projects. The primary goal of the North Carolina Health Information Exchange Council is to design and implement an infrastructure for the routine, timely, and secure exchange of health information, relying on informed authorization and consent by the individual or person responsible for that individual's care, no matter where the health information may reside. The model would need to be supported by carefully defined policies for authentication, authorization, protecting data in transit and at rest, and responsibilities of the individual for the care of his or her records.

As individuals become aware of the benefits of exchanging health information in an electronic and secure method, North Carolina Health Information Exchange Council will seek support from their supporting organizations as well as public policy makers at the local and state levels to participate in and fund collaborative demonstration health information exchange projects.