HEALTH INFORMATION TECHNOLOGY

Quarterly Legislative Report
(January - March 2012)
Session Law 2011 – 145, SECTION 10.24

The Senate Appropriations Committee on Health and Human Services
and
The House of Representatives Appropriations Subcommittee on Health and Human Services
and
The Fiscal Research Division

Prepared by:
North Carolina Department of Health and Human Services
Office of Health Information Technology
April 1, 2012

Legislative Quarterly Report

Purpose: **This report is to fulfill the legislative requirement, as set forth in SL 2011 – 145, SECTION 10.24, that DHHS make quarterly reports on the status of Health Information Technology (HIT) activities. In conformance with the law, this extended version of the report is being provided to: The Senate Appropriations Committee on Health and Human Services, the House of Representatives Appropriations Subcommittee on Health and Human Services and the Fiscal Research Division of the General Assembly.**

Background

Improved health information systems are essential to the goal of transforming healthcare and improving health outcomes. NC is consistently viewed as a state leader both in terms of existing healthcare partnerships and innovative models of care. NC continues to demonstrate successful strategies that achieve the triple aim of better health, better care and lower costs. As a result, NC received early approval for funding in all categories made available to states for building health information technology (HIT) capacity under the HITECH component of the American Recovery and Reinvestment Act of 2009 (ARRA). Throughout NC, various Health IT partners have received grant commitments across all categories of federal HIT funding that total approximately $630 million, a significant portion of which is electronic health record (EHR) incentive payments from Medicaid and Medicare to individual eligible hospitals and providers over the next 4 years. The total will exceed $1 billion in federal investments to support HIT in North Carolina. Federal funds flow directly to various lead agencies as listed in this report. The Office of Health Information Technology was established in the Secretary's Office of the NC Department of Health and Human Services in June 2010 for the purpose of coordinating HIT initiatives statewide and reporting progress to the Governor's Office and the NC General Assembly.

TABLE OF HIT INITIATIVES AND SIGNIFICANT ACTIONS
First Quarter 2012

HIT INITIATIVE	STATUS/UPDATE
1. Health Information Exchange (HIE) **Lead Agency –**NC HIE **Federal Grant:** $12.9 million $1.7 million Supplemental Challenge Grant **Purpose:** Establish a technology infrastructure and policy framework for connecting the various components of the healthcare ecosystem to allow the secure exchange of patient health information between participating healthcare providers and hospitals statewide.	• The North Carolina Health Information Exchange (NC HIE) is in the Implementation Phase of the Cooperative Agreement from the Office of the National Coordinator (ONC) for HIT. • Development of the core HIE infrastructure is complete and deployment is scheduled for March 30, 2012 under the NC HIE and Capgemini/Orion Healthcare consortium. • Blue Cross and Blue Shield of North Carolina (BCBSNC), in collaboration with the NC HIE and Allscripts, launched the North Carolina Program to Advance Technology for Health (NC PATH)—a program created to equip 600 rural independent physicians with Allscripts EHR software and support, and connect health care providers across the state through NC HIE. The NC HIE will manage the program administration. BCBSNC is donating the cost for the implementation of an Allscripts EHR as follows: o For in-network providers, BCBSNC will cover 85% of the software cost, support and maintenance costs and the NC HIE connectivity and membership fee for a period of 5 years*. The provider is responsible for the remaining 15%. o For free clinics, BCBSNC will cover 100% of the software cost, support and maintenance costs and NC HIE connectivity and membership fee costs for a period of 5 years.* **After 5 years, the practice or clinic will own the Allscripts software and will be responsible for their own product upgrades, hosting, support and maintenance, and yearly membership fees.* o On boarding of participants begin April 2012 • NCHIE continues to partner with the North Carolina Community Care Network (NCCCN) in developing and deploying the medication management services funded through the Supplemental Challenge Grant from Office of the National Coordinator (ONC). • On March 20, 2012, the first "Qualified Organization" (QO) to functionally connect providers to the NC HIE was announced in partnership with Community Care of North Carolina (CCNC).

<table>
<tr><th>HIT INITIATIVE</th><th>STATUS/UPDATE</th></tr>
<tr><td>2. Regional Extension Center (REC)

Lead Agency –NC AHEC

Federal Grant: $13.6 million

Purpose:
The NC Area Health Education Centers (AHEC) Program at the University of North Carolina, Chapel Hill received a notice of grant award dated February 8th, 2010 to perform the function of the North Carolina Regional Extension Center (NC REC) for health information technology. The award was for $13.6 million dollars over 2 years which will allow NC AHEC to reach at least 3,465 priority primary care physicians and assist with practice assessment, workflow redesign, selection and implementation of electronic health records (EHR) to achieve meaningful use of the technology and improve health outcomes throughout the state of North Carolina. NC AHEC will expand its consulting workforce throughout the nine regions of the state to help practices implement technology and/or use previously existing technology to meet the federal standards of meaningful use to achieve incentive payments from the Centers for Medicare & Medicaid Services between 2011 and 2015.</td><td>

The NC Area Health Education Center’s Regional Extension Center (NC AHEC REC) has enrolled over 3800 primary care providers, which exceeds the previous goal of 3465.
NC REC was designated one of five “vanguard” states by the ONC due in large part to the success of enrolling targeted primary care providers and supporting their progress toward meaningful use of EHRs. (Vanguard States: North Carolina, Ohio, California, Washington, and New York)
The table below displays the number of practices/providers currently enrolled in each of the nine AHEC regions across the state.

<table>
<tr><th>Region</th><th>Practices</th><th>Providers</th></tr>
<tr><td>Area L</td><td>62</td><td>236</td></tr>
<tr><td>Charlotte</td><td>122</td><td>350</td></tr>
<tr><td>Eastern</td><td>174</td><td>605</td></tr>
<tr><td>Greensboro</td><td>139</td><td>573</td></tr>
<tr><td>Mountain</td><td>100</td><td>569</td></tr>
<tr><td>Northwest</td><td>109</td><td>450</td></tr>
<tr><td>Southeast</td><td>126</td><td>362</td></tr>
<tr><td>Southern</td><td>117</td><td>282</td></tr>
<tr><td>Wake</td><td>116</td><td>407</td></tr>
<tr><td>Total:</td><td>1065</td><td>3834</td></tr>
</table>

ONC requires NC AHEC to monitor this activity via implementation milestones achieved. A definition of those milestones is below:
Milestone 1: The provider has signed an agreement to work with the NC AHEC Regional Extension Center.
Milestone 2: The provider is live on an EHR and can produce ePrescribing (eRX) and quality data reports.
Milestone 3: The provider has successfully attested to meaningfully using an EHR and can be validated with the data pulled from the certified EHR system. (Note: the first year of Medicaid’s Acquired/Implemented/Upgraded (A/I/U) attestation does not count towards milestone 3)

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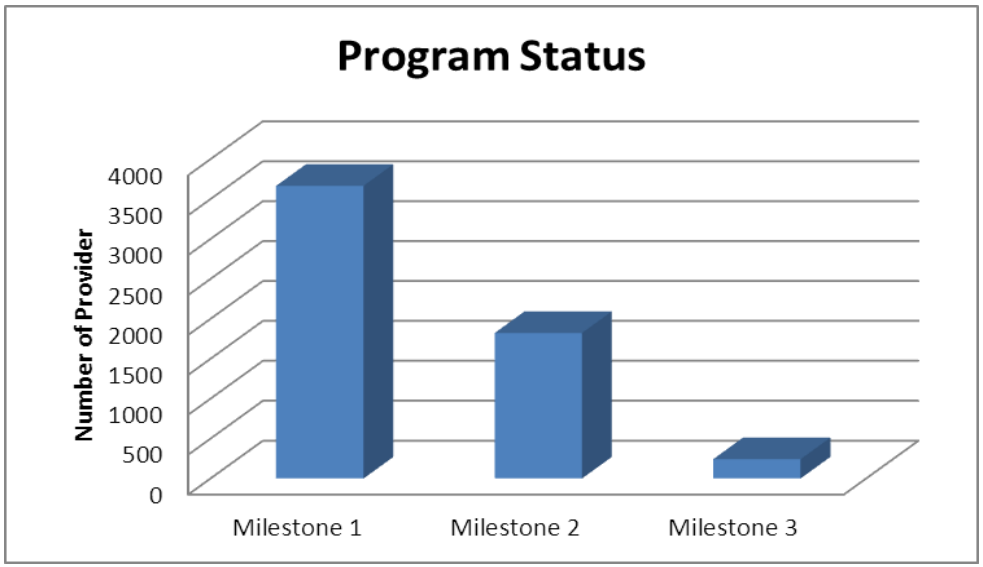
2. Regional Extension Center (REC) (continued)	The chart below displays NC AHEC's current status for providers meeting the ONC milestones. 
HIT INITIATIVE	**STATUS/UPDATE**

3. Beacon Community Grant
 	
Lead Agency – Southern Piedmont Community Care Plan (SPCCP)
 	
Federal Grant: $15.9 million
 	
Purpose:
The Beacon Community Cooperative Agreement Program provides communities with funding to build and strengthen their health IT infrastructure and exchange capabilities. These communities demonstrate the vision of a future where hospitals, clinicians, and patients are meaningful users of health IT, and together, help the community
	• The first quarter of 2012 has been very productive at Southern Piedmont Beacon Community. Projects at each of the health systems and health departments have been implemented and forty nine jobs have been created. Project summaries are below.
	• Southern Piedmont Beacon Community has continued its focus on the **Triple Aim:**
	  ○ Better care for individuals;
	  ○ Better health for populations;
	  ○ Reducing costs
	• This focused effort has helped us work toward achieving our overall goals:
	  1. Decreasing preventable hospital readmissions from 14.7% in April 2011 to 10.9% in January 2012;
	  2. Decreasing inappropriate emergency department (ED) utilization from 3.3% in April 2011 to 3% in January 2012;
	  3. Decreasing asthma emergency department rates from .8% in April 2011 to .66% in January 2012;

3. Beacon Community Grant (continued)

achieve measurable improvements in health care quality, safety, efficiency, and population health. The Southern Piedmont Community Care Plan (SPCCP) is one of 14 independent networks of Community Care of North Carolina and one of only 17 organizations nationwide selected to be a Beacon Community after a rigorous and competitive grant application and selection process.

The overall goal of the Beacon program is to leverage **Community Care of North Carolina's (CCNC's)** patient-centered medical home model, health information technology and innovative interventions to improve care coordination, encourage patient activation (involvement in their medical care), and improve health outcomes in a high quality, cost-effective manner.

The projects each Health System and Health Department/Alliance are engaging in will help us meet these goals and lead to:

- Increasing health information exchange between providers, hospitals, and other appropriate stakeholders;
- Decreasing inappropriate emergency department (ED) utilization;
- Decreasing preventable hospital readmissions;
- Improving chronic care disease management for those with congestive heart failure (CHF), diabetes and asthma;
- Improving public health.
- Improving transitions of care;
- Improving chronic care disease management for those with congestive heart failure (CHF)
- diabetes, COPD, and asthma;
- Improving public health.
- Increasing health information exchange between providers, hospitals, and other appropriate
- stakeholders;

- **Carolinas Medical Center – Northeast (CMC-NE)**
  - *Transitional Care* – The project encompasses care mangers, social workers, and pharmacists in provider offices, the emergency departments and the hospital. This process will include coordination of care and facilitation of patient customized plans of care. Each customized plan of care will address the patient's self-management of their condition (appointment management, medication reconciliation, medication adherence and symptom management) with identification of barriers. The plan of care will embed reminders into daily routine, when appropriate, with: telemonitoring, text education, text reminders, virtual visits, home visits, patient calls, e-mails, pre recorded voice messages, and health diaries.
  - *Patient Safety Net* – This project includes the purchase and connection of the Massimo Patient Safety Net System on 150+ non-ICU beds to monitor vital signs and alert providers of possible complications that might otherwise be missed. The project's outcome measures are : 1) Length of Stay 2) Number of rapid response calls, 3) Transfers to the ICU, 4) Resources used during the hospital stay (Cost), 5) identification of OSA, 6) identification of dysrhythmias, 7) improved mortality. www.masimo.com The installation plan is complete and expected to occur in March and April with training to follow.
  - *Virtual Care* – The purpose of this project is to determine if video-enhanced telemedicine devices can increase access to the Patient Centered Medical Home (PCMH) and secondarily improve outcomes. 120 patients with poorly controlled diabetes (HgbA1c>9) will be randomly assigned to one of three groups.
  - *Chronic Obstructive Pulmonary Disease (COPD)* – CMC-NE has chosen COPD to test extending a chronic disease management model. This project is focused on coordinating health care interventions and

3. Beacon Community Grant (continued)	communications for optimal COPD disease management, resulting in improved clinical and economic outcomes. The aim is to reduce ER visits and readmission rates for COPD cases by 25%. Five pilot sites have been chosen and committees have been busy developing guidelines, best practices, patient education, and developing marketing efforts for the project. • **Cabarrus Health Alliance (CHA)** o *Electronic Medical Records (EMR)Project* -CHA went "live" in January with two Insight EMR modules for the Communicable Disease clinic – Sexually Transmitted Diseases/HIV and Tuberculosis (TB). • **Rowan Regional Medical Center (RRMC)** o *Transitional Care* - The project encompasses care mangers, social workers, and pharmacists in provider offices, the emergency departments and the hospital to improve the transitional of care for patients. The three disease focus areas are: diabetes, CHF, and Behavioral Health. They have hired a Diabetes Navigator, two embedded care managers (1 hospital based and in a provider's office), and a Physician Champion. o *Louise* – Louise is a virtual discharge advocate who will assist in risk stratifying patients for more detailed instruction prior to discharge from the hospital. Training will occur in March and implementation will occur near the end of March on 10 patients on the telemonitoring floor(s) . http://www.bu.edu/fammed/projectred/meetlouise.html o *Bedside EMR* - Purchase of laptops and carts for the bedside to enhance patient care after implementing Invision for their EMR and Almalga for the data repository. o *Urgent Care* - The Urgent Care facility will hold 2 slots open for follow-up at the Urgent Care to attempt to avoid unnecessary ED visits, hospitalizations, and connect patient to a primary care physician. o *Informatics Center (IC) Data Connection* - A streaming Admission/Discharge/Transfer feed is being channeled into the production Clinical Data Repository at the IC. Beacon team is working with Novant's interface team to obtain the clinical data from their HIE. The clinical data will be released in groups beginning in the spring. • **Rowan County Health Department (RCHD)** o *Electronic Medical Records (EMR) Project* - RCHD is in the process of upgrading to a certified version of their EMR . Target go live date is in April, after their accreditation is completed. They will be implementing

3. Beacon Community Grant (continued)	e-prescribing after the upgrade is live. e-Signatures for consent is the next big step. • **Stanly Regional Medical Center (SRMC)** o *Transitional Care* – The hospital and practice-based embedded care manager and have completed training and are currently managing transitions and assisting in workflow process improvements. One ED position has been hired. Decision on the second ED position will be determined by early March. SRMC Beacon team has been working with the Marketing Dept. to create care manager cards, a quarterly hospital newsletter, and a press release to local newspapers and radio stations. o *IC Data Connection* - Data use agreement has been signed and a kick-off meeting was held in early February. • **Stanly County Health Department** o *Electronic Medical Records (EMR) Project* - The Implementation team has been meeting regularly to build tables and logistics. They have completed system admin training and the plan is to implement practice management module first, then the clinical modules. • **Data/Health Information Exchange N3CN's Informatics Center (IC)** This project includes additional data and an enhanced infrastructure to receive and store the data at N3CN's clinical data repository. This capability will drive more efficient workflow to many stakeholders in the Southern Piedmont Beacon Community and sets the stage for scaling to other networks over time. Currently, Medicaid and dually eligible claims data, SureScripts, and Lab Corp data reside in this data repository. Other payers may be added in the future. These rich and robust data sources will allow better data and reporting mechanisms to come in to the IC and thus better care can be rendered to an increased number of patients in North Carolina. Data will include: o CMC-NE - All Medicaid, Duals, Health choice o Rowan Regional Medical Center - All Medicaid, Duals, Health Choice o Stanly Regional Medical Center - All Medicaid, Duals, Health Choice o Cabarrus Health Alliance -All clinical data, Full CCD, meds, labs o Rowan County Health Department - All Clinical data, full CCD, meds, labs o Stanly County Health Department -All Clinical data, full CCD, meds, labs • **Super Connectors** -Two "super connector" projects will further extend the data listed above through connecting to the CHS HIE, Medicity, and Rowan's HIE,

3. Beacon Community Grant (continued)	Amalga. This will allow data from all CHS and Novant locations to be accessible through N3CN's Informatics Center. • **Public Health** o *Women, Infants, and Children Training Program Pilot "Louise"* - Staff from CHA and the contractor, Engineered Care, will collaborate to adapt "Louise", an automated online assistant, to pilot the use of computer avatars to provide interactive health education. This pilot project is intended to better understand the value of an online health educator and the time and resources required for implementation. The automated assistant will be portrayed as a WIC participant who has already been through the program. Initial instructional draft is complete and a draft of the logic model is underway. The next step is to begin avatar development and application/qualification script. o *Public Health Portal* - The next phase after EMR implementation at each of the health departments/systems will be a Public Health Portal that will enable authorized users to view demographic and community health data. The project has been structured into 4 phases: 1. Demonstration application; 2. Data integration w/Health Landscapes and N3CN to add data; 3. Design phase 4 requirements; 4. Implement new requirements. Phase 1 demonstrations are underway. Phase 2 discussions will begin on 3/14/12. o *Daily Disease Reporting (DDR)* - This project will utilize Covisint's ProviderLink tool to collect current disease data through a web application for school nurses. This data will be sent to N3CN to provide a "Daily Disease Report" to improve surveillance, awareness and overall responsiveness to emergent threats. The data will also be analyzed to make improved decisions for health outcome management. This project will automate the current paper-based data collection process.
HIT INITIATIVE	**STATUS/UPDATE**
4. Broadband Technology Opportunities Program (BTOP) Round 1 and Round 2 **Lead Agency –** Microelectronics Center of	• MCNC continues to make significant progress on the $144 million expansion of the North Carolina Research and Education Network (NC REN) with efforts expected to be complete by July, 2013. This effort is part of the federal National Telecommunications and Infrastructure Administration's (NTIA) Broadband

4. Broadband Technology Opportunities Program (BTOP) Round 1 and Round 2 (continued) North Carolina (MCNC) **Federal Grant:** $144M total: $40M in private match, $7.7M from MCNC Endowment, $24M Golden Leaf Foundation, $0 state or county investments **Purpose:** These programs will expand the North Carolina Research and Education Network (NCREN) to provide improved connectivity and internet capacity to rural counties all across NC using a "middle mile" strategy that will decrease the cost of improved internet services to end users. Local hospitals, public health departments and community health centers will become anchor institutions for broadband connectivity services in their communities. NC received funding in both BTOP Round 1 and Round 2.	Technologies Opportunity Program (BTOP) award. The NTIA divided the awarding of its BTOP funding into two rounds and staged a highly competitive application process in each round. • In Round 1 awarded in January 2010, MCNC applied and received funding for a $39.9 million project (including $28.2 million in Federal BTOP Funds and $11.7M in privately raised match- including $7.7M from the MCNC Endowment) to build 2600 linear miles of newly constructed fiber optic broadband infrastructure in 37 counties in southeastern and western N.C. • For Round 2, MCNC, in concert with the Frank Hawkins Kenan Institute for Entrepreneurship and the School of Government at UNC-Chapel Hill, crafted an application called the Golden LEAF Rural Broadband Initiative (GLRBI). The GLRBI application proposed to build more than 1,200 miles of new middle-mile fiber in the northeast, north central, northwest and south central portions of the state. The proposed project is valued at $104 million with $75.75 million coming from BTOP, $24 million from the Golden LEAF Foundation, and $4.25 million in other cash and in-kind donations from private sources. • MCNC and Chief Executive Officer Joe Freddoso were honored at the White House in February as a "Champion of Change." Freddoso and MCNC were recognized for the BTOP project to expand the North Carolina Research and Education Network across North Carolina. The Champions of Change program was created as a part of President Obama's Winning the Future initiative to highlight community leaders for the work they are doing to serve and strengthen their communities. For more information please visit: https://www.mcnc.org/news/white-house-highlights-btop-projects-as-champions-of-change . • ***BTOP Round 1 Update*** MCNC has fully completed all aspects of the Round 1 build in eastern North Carolina. All fiber has been placed and spliced, and all equipment has been deployed to light the fiber in this region. This encompasses nearly 200 miles of new fiber to benefit eastern North Carolina. In the west, the project placed the optical equipment on the path from Asheville to Cullowhee, and is down to the last two reels for fiber placement on the path from Cashiers to Huntersville. Crossing of the Catawba River near the intersection of the existing network in Huntersville took a substantial amount of time to complete, but it is now punched through to the other side and final placement of cable will be commencing soon. MCNC anticipates having all portions of the western network operational by the middle of March as all equipment currently is being located in the regeneration facilities along the network.

4. Broadband Technology Opportunities Program (BTOP) Round 1 and Round 2 (continued)	• ***BTOP Round 2 Update*** In the Round 2 project, construction progress continues to be steady with more than 450 miles of conduit now complete, which is more than the overall placement in the Round 1 project – but only about one-third of the miles to be built in the complete second phase. • The conduit for the Charlotte-to-Wilmington segment is nearly complete; more than 120 miles of fiber have been placed. Construction continues from Hamlet towards Sanford, with approximately 75 percent of the conduit now in place. Construction has commenced in the north-central portion of the network in the Reidsville area back towards Roxboro, and expected to begin the segment from Roxboro toward Henderson in the coming weeks. In the northeast, bridge construction is nearing completion as the conduit installation on the Virginia Dare, Washington Baum, and Wright Memorial bridges are almost finished. Only two shorter bridges in the mainland Outer Banks area will remain to be done once those three are complete. In addition, construction between Williamston and Elizabeth City is now at full progression speed. • Please visit the MCNC BTOP home page (https://www.mcnc.org/btop) to learn more about the project, including regular progress updates and interactive online maps. • **North Carolina Telehealth Network**-MCNC, in collaboration with other organizations including the N.C. Office of Information Technology Services (ITS), is proud to be a partner to provide the North Carolina TeleHealth Network (NCTN). The NCTN provides broadband services to health programs and sites across the state including free clinics, community health centers and public health agencies. To date, 58 NCTN-Public Health sites are fully operational with another five in the final stages of provisioning. The first non-profit hospital became operational on the NCTN during the last quarter of 2011 (https://www.mcnc.org/news/nc-telehealth-network-connects-first-non-profit-hospital) and an additional nineteen non-profit hospitals have been connected to the network as of March 1, 2012 and another three are in the final stages of provisioning. Another round of NCTN-Hospital subscribers will be added later in 2012 with provisioning scheduled to begin in late spring/early summer. Connecting these healthcare institutions to the statewide network backbones will provide the high availability, low latency broadband service that facilitates implementation of Health Information Exchange and Telehealth applications that will benefit all North Carolina citizens. With this in mind, ITS and MCNC will work closely with the North Carolina HIE team to ensure that the existing backbone networks and the existing connections they provide to public health

4. Broadband Technology Opportunities Program (BTOP) Round 1 and Round 2 (continued)	facilities, free clinics, hospitals and existing DHHS data repositories are utilized to their maximum extent in the HIE implementation process. • MCNC also completed upgrading infrastructure to support a robust suite of videoconferencing services to include interoperability between standards-based IP video (H.323), High Definition (HD), Cisco Telepresence and desktop videoconferencing. Health organizations in the state and nationwide will be able to access and leverage these services as a value add to the enhanced broadband connectivity.
HIT INITIATIVE	**STATUS/UPDATE**
5. Workforce Development in HIT **Lead Agency –** Pitt Community College (Training) and Duke University (Curriculum) **Federal Grant:** Training Grant - $21.1 million for the 13 state region, (Southeastern United States Region D) **Purpose:** In April 2010, the Office of the National Coordinator for Health Information Technology chose Pitt Community College (PCC) in Greenville to lead a regional Health Information Technology Workforce Training Consortium tasked with addressing the growing need for HIT training. Through the project, five universities, including Duke University, developed a six-month non-degree community college curriculum to prepare	• Region D of the HITECH Workforce Training, of which NC is a part, has been diligently working toward meeting the goals to prepare individuals to implement and maintain the EHR. Of primary importance is the approval of the extension of the program through April 1, 2013. With this extension, the three NC community colleges offering this training online (Catawba Valley Community College, Central Piedmont Community College and Pitt Community College) have been allowed to extend their efforts. A dedication toward establishing opportunities for training for rural health centers and critical access hospital personnel is one focus, as is the sustainability of this training beyond the funded period. There are multiple colleges in the state offering CAHIIM accredited associate degree HIT programs and those, along with the three colleges offering the HITECH continuing education, as well as the associate degree program are expected to be able to serve our health care market . • In NC we have had 399 students in North Carolina to complete the program as follows: o CVCC 45 o CPCC 185 o PCC 169

5. Workforce Development in HIT (continued)

workers for HIT roles to implement electronic health records (EHRs). Eighty-two community colleges across the country, including PCC, are offering the six-month HIT training online. Students are receiving training in six HIT priority workforce roles, including: practice workflow and information management redesign specialists; clinician/practitioner consultants; implementation support specialists; implementation managers; and technical/software support staff and trainers.

New Students as of 2/29/12

Workforce Role	Catawba Valley	Central Piedmont	Pitt Community	Total
Practice Workflow	5		0	5
Clinical Practitioner	0	1	0	1
Implementation Support Specialist	0	1	0	1
Implementation Manager	0		0	-
Technical Support Specialist	3		0	3
Trainer	1		0	1
Total	9	2	-	11

LESS WWITHDRAWALS AS OF 2/29/12

Workforce Role	Catawba Valley	Central Piedmont	Pitt Community	Total
Practice Workflow	0	12	12	24
Clinical Practitioner	0	8	3	11
Implementation Support Specialist	0	23	6	29
Implementation Manager	0	16	7	23
Technical Support Specialist	1	0	4	5
Trainer	1	0	4	5
Total	2	59	36	97

Individual Member Enrollment as of 2/29/12	114	108	59	
Total Enrolled Students (Start to 2/29/12)	1,072			
Total Attrition (Start to 2/29/12)	392			
Total Completers as of 2/29/12	**399**			
Total Active Students as of 2/29/12	281	**CVCC 45**	**CPCC 185**	**PCC 169**

HIT INITIATIVE	STATUS/UPDATE
6. Curriculum Development Centers – **Lead Agency –**Duke University **Federal Grant:** $4 Million **Purpose:** Develop specified components of the curriculum to be used in conjunction with the HITECH funded Workforce Development Initiative	• The Duke Center for Health Informatics (DCHI) in conjunction with our community college partners, Durham Technical, Rowan Cabarrus, and Pitt Community Colleges have developed 4 components under the Curriculum Development Centers Program: o Health Management Information Systems o Networking and Health Information Exchange o Fundamentals of Health Workflow Process Analysis & Redesign o Installation and Maintenance of Health IT Systems • The DCHI completed development of the version 3.0 components. ONC is expected to launch these materials sometime in March 2012. As with versions 1.0 and 2.0 version 3.0 will be released through the Oregon Health and Science University (OHSU) National Training and Dissemination Center (NTDC). • Version 3.0 changes include increased standardization across all components, increased accessibility for the disabled, increased number of real world applications and improved content. • The current funding period for this grant ends April 2012. The DCHI and the other Curriculum Development Centers have received approval for a no cost extension to draft a sustainability plan for all 20 components developed under this grant and to create an electronic medical record for educational purposes. • University-Based Training Grant (UBT) - Duke University and the University of North Carolina at Chapel Hill (UNC-CH) are offering training and research programs designed to produce highly specialized health information technology professionals. At the conclusion of their studies, graduates of the Duke and UNC informatics programs are expected to possess a firm grasp of concepts and skills needed to succeed in the following roles: o Clinician/Public Health Leader o Health Information Exchange Specialist o Research and Development Scientist o Programmer and Software Engineer o Health IT Sub-specialist • A total of ninety two students will be funded by this grant. Twenty-three students were enrolled and funded in the spring of 2012; 21 type I students and 2 type 2 students; 11 students completed their programs in the December 2011

HIT INITIATIVE	STATUS/UPDATE
7. NC Medicaid Incentive Payment System (MIPS) **Lead Agency –** NC Division of Medical Assistance (DMA) **Federal Grant:** Medicaid MIPS Planning Grant $2.3M, Medicaid MIPS Implementation Grant $240M ($210M 100% federal; $30M 90/10 federal/state) **Purpose:** The NC Medicaid Electronic Health Record (EHR) Incentive Payment Program provides substantial incentive payments to eligible professionals and hospitals. The ultimate goal of the program is to encourage a majority of providers and hospitals to adopt, implement or upgrade to a certified EHR technology in their healthcare practice and then meaningfully use that technology. This fundamental shift to the meaningful use of EHR technology will o Improve quality, safety, efficiency and reduce health disparities o Engage patients and families in their healthcare o Improve care coordination o Improve population and public health o Maintain privacy and security	• As of March 19, 2012, there are approximately 1229 unique providers who have attested with NC Medicaid EHR Incentive Program. Of these, 1205 are Eligible Professionals (EPs) and 24 are Eligible Hospitals (EHs). • To date, the Medicaid Electronic Health Record (EHR) Incentive Program has paid out a total of $31,890,228 to 671 professionals and 21 hospitals. • **A listing of providers participating in NC MIPS by specialty type is included as an Appendix to this report.** • The Program is currently carrying out planned upgrades to its Medicaid Incentive Payment System, NC-MIPS. • DMA submitted annual updates to its State Medicaid HIT Plan and EHR Incentive Program Implementation Advance Planning Document to CMS in February, and is awaiting approval of these documents. The HIE Core Services Implementation Advance Planning Document has been approved. • DMA conducted a stakeholder meeting on March 19, 2012 to brief key partner organizations on the status of the MIPS Program. Provider organizations represented included the NC Medical Society, NC Hospital Association, NC Dental Society, NC Community Health Center Association, NC AHEC, NC Psychiatry Association, NC Academy of Family Practice, NC Pediatric Society, the NC Nurses Association/Council of Nurse Practitioners and the NC Office of HIT. DMA reported the average time for provider payments was reduced from 122 days the first year of the program to 42 days since December 2011.

HIT INITIATIVE	STATUS/UPDATE
8. Replacement of the Medicaid Management Information System (MMIS) **Lead Agency:** Office of Medicaid Management Information System Services (OMMISS) **Purpose:** OMMISS is the DHHS agency leading the development of the Replacement MMIS for NC Medicaid, with Computer Sciences Corporation (CSC) as the prime vendor.	• The Replacement MMIS project continued to progress through the Design, Development, and Installation (DDI) phase. Much of the activity at this time is focused on testing the new system. CSC is performing system integration testing for the Medical Claims, Financial, Third Party Liability, Medicaid Allowable Reimbursement, and HIPAA 5010 portions of the system while planning for the Final and Systems Integration Testing and Production Simulation Testing. The State team is planning the execution of the user acceptance testing phase of the project, scheduled to begin on August 29, 2013. • Activity is also on going to implement the tremendous volume of change that has been identified since the design of the system. Change requests are under design, development, and testing to implement the changes required by State and Federal legislation and rule-making. These changes include the full implementation of the HIPAA 5010 transaction set and the ICD-10 diagnosis and procedure codes as well as the changes required to support the 2010 and 2011 North Carolina Legislative Sessions. • In order to achieve the scheduled operational start date, a system freeze began on March 2, 2012. This freeze was implemented to manage the limited capacity for additional changes to be implemented in the system prior to operational start. • The project schedule calls for the Replacement MMIS system to begin operations on July 1, 2013.
HIT INITIATIVE	**STATUS/UPDATE**
9. Electronic Health Record (EHR) Loan Program **Lead Agency –** Office of HIT, DHHS, and the Medical Society Foundation **Federal Grant:** Federal Funds have not yet been awarded for this purpose **Purpose:** In the absence of a federal program, $750,000 was allocated from the Health Wellness Trust Fund (HWTF) to be available to eligible primary care providers to assist with the	• The Electronic Health Record (EHR) Loan Fund Program was originally funded by the NC Health and Wellness Trust Fund. It is now housed within the NC Department of Health and Human Services, Office of Health Information Technology, in partnership with the NC Medical Society Foundation and the Center for Community Self-Help. Initially, the program was targeted to small, rural providers in Tier 1 counties, but in October 2011 eligibility was expanded to include any primary care practices committed to adopting, implementing, or upgrading a certified EHR system and using it to achieve Meaningful Use (MU) through NC Medicaid's Incentive Payment Program. • To date, the EHR Loan Fund has received 18 pre-applications with 1 application completed and sent to Self-Help for loan terms. The practice that was approved for funding was able to qualify for alternate funding due to its strong financial standing.

9. Electronic Health Record (EHR) Loan Program (continued) up-front cost of implementing EHRs in their offices.	• The North Carolina Medical Society Foundation (NCMSF) continues to work onsite with the AHEC offices throughout the state to provide training and information on the EHR Loan program. NCMSF is also working with the Community Practitioner Program and other specialty practices. The website for applying to the EHR Loan program is: www.ncehrloanfund.org
HIT INITIATIVE	**STATUS/UPDATE**
10. Telehealth **Lead Agency -** North Carolina Telehealth Network (NCTN) **Federal Grant:** $12.1M federal funds through the Federal Communications Commission (FCC) Rural Healthcare Pilot Program (85%), $125K one time state dollars in 2008 from the NC Division of Public Health for initial development, additional funds from local public health (almost always County dollars), Hospital funding directly from NCTN community hospital subscribers. **Purpose:** The NCTN provides broadband services to health programs and sites across the state including free clinics, community health centers and public health agencies. To date, 54 NCTN sites are fully operational with another three in the final stages of provisioning.	• Below is a summary of known NC TeleHealth Programs based on a survey done in February 2012. The survey contains additional details on each program. This is not intended to be a comprehensive list of all telehealth programs in operation in North Carolina. • The loosely organized NCTN continues to work with public health departments, free clinics, hospitals and DHHS data facilities to provide robust broadband internet capacity through the North Carolina fiber optic network. See NCNC-NCTN (page 9) for a full explanation of network expansion. **Albemarle Hospital Foundation**: Telepsych(assessment in ED), Telecare(primary care), Telepsych(assessment in jail), Telecare(general in health depts- piloting) **Forsyth Memorial**: Teleneuro(stroke and other emergent neuro issues), Telepsych(assessment in ED) **CCNC** : Telepsych, Telecare(hypertension, CHF), Other (being surveyed now) **Veterans Health Admin:** Teleretinal imaging (diabetes), Telederm, Telecounseling (genetic), Telepsych(assessment), Telepsych(therapy) **Duke:** Telestroke **CCNC** (Behavioral Health): Telepsych (to primary care sites, med mgmt) **SE AHEC**: Telederm (peds), Teleed (grand rounds, resident training), Teleconsult(pre-op interview with anesthesiologist), **Center for Rural Health Innovation**: Telecare(primary care to K-12 schools), Telepsych(to primary care site), Telestroke (assessment in ED) **WakeHealth:** Telestroke(assessment in ED), Telecare(general - in planning stages) **NC Stroke Care Collaboration**: Telestroke (ED assessment programs in Wakemed, CMC, Mission), Telerehab (speech rehab after stroke) **UNC:** Telepsych(therapy for cancer patients), Teleed(tumor boards)

10. Telehealth (continued)	**Vidant Health:** Telehomecare (Cardiovascular disease - post discharge), Telehomecare (planned - support for - diabetes, renal disease) **AlbemarleHealth:** Telepsych (assessments in ED) **UNC** (peds): Teleconsult (children with disabilities), Teleed (for parents, children with **First Health:** Telepsych(assessment in ED), Telecare(K-12 schools), Teleed(diabetes ed for patients), Telehomecare(cardio, diabetes, wound mgmt). **Carteret General (with WakeHealth):** Telestroke(assessment in ED). **Roanoke-Chowan Community Health Center:** Telehomecare(cardio) **ECU (Vidant Health)**: Teledermatology, Telecardiology (pediatric and adult), Tele - pediatrics (general and neonatal), Telepsychiatry (mostly pediatric, some adult), and Tele-rehabilitation medicine, teleradiology, Telehomecare.
HIT INITIATIVE	**STATUS/UPDATE**
11. Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Program **Lead Agency –**Office of Rural Health and Community Care (ORHCC) **Federal Grant:** All federal funding, $9,277,361 over five years from the federal CMS CHIPRA Quality Demonstration Grant **Purpose:** **Category A** - The vision of North Carolina over the 5 year grant period is that all 24 of the child health measures will be collected and reported to CMS as well as to CCNC (Community Care of North Carolina) providers statewide. **Category B –** Not Applicable **Category C** - The core purpose of Category C is to develop and implement a plan to strengthen the medical home for children, particularly children and youth with special health care needs and to ensure the	• The North Carolina CHIPRA Demonstration Grant - CMS Purpose**:** to evaluate a pediatric electronic health record (EHR) format developed by AHRQ to assess the impact of the EHR on the quality and cost of children's health care across the care continuum. • North Carolina and Pennsylvania are the only two states selected for Category D of this grant program. • North Carolina is using its Community Care infrastructure and working closely with the AHRQ contractor (Westat) to ensure that the AHRQ/CMS Model Children's EHR Format is implemented in a manner that ensures the ability to measure and evaluate its impact on child health care. • Delays in the completion of the final Model Children's EHR Format resulted in a push forward of the national conformance assessment (mentioned in the quarterly report for July, 2011). In response, the CHIPRA Category-D grantees have pressed forward with the evaluation design phase, including initial vendor selection, and practice outreach. North Carolina submitted an initial draft of an evaluation design to CMS on December 29, 2011 and, based on feedback, submitted a revised evaluation design document to CMS on February 17, 2012. They are awaiting final approval of the revised document. • AHRQ contractor Westat is now working with grantees to conduct conformance assessments of selected vendors and is expected to complete this work by July, 2012. The benefits of that process include: o exposing vendors to the Model Format in a way that showcases its direct correlation to real-word clinical scenarios o exposing areas of strength and opportunities for improvement in current

11. Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Program (continued) coordination of treatments and services within their communities. **Category D** – The core purpose of Category D is to develop and implement a pediatric EHR model which will be used in the process of care for small to large practices and will focus on the areas of developmental, asthma, and autism screening, growth charting, and preventive care.	EHR products • The CCNC CHIPRA team continues to collaborate with NC AHEC. The team is also very close to signing Memorandums of Understanding with 5 vendors. • Connecting EHRs of participating practices to CCNC's Informatics Center (IC) via the state HIE is a key component of this evaluation for collecting and analyzing clinical data. • The CHIPRA Category-D team is in the process of interviewing and hiring an Analyst to work closely with the IC staff in developing data standards, databases, and reports to support quality improvement measures for this project.
HIT INITIATIVE	**STATUS/UPDATE**
12. NC Hospital Association	• The North Carolina Hospital Association has a diverse strategy to help hospitals achieve meaningful use of electronic health records (EHR) and health information technology (HIT) to create significant clinical improvements and lower the cost of healthcare delivery. Member hospitals stand to gain as much as $540 million in Medicare and Medicaid incentive payments through the Health Information Technology for Economic and Clinical Health (HITECH) portion of the American Recovery and Reinvestment Act (ARRA). The main goals of HITECH are quality improvement and cost reduction by moving from a transactional basis to process-driven delivery of healthcare. NCHA's goals are aligned with HITECH and the State of North Carolina in the three areas of focus that will help hospitals become "meaningful users" of electronic health record (EHR) technology: o implementation of certified electronic health record systems o reporting of quality measures to the Centers for Medicare and Medicaid Services and/or states o exchanging of clinical data with other providers • NCHA is also focused on helping hospitals and hospital-owned physician practices acquire broadband Internet access and education opportunities regarding HITECH and meaningful use, and we are especially concerned that small and rural hospitals and safety net providers not be left behind in the rapid period of HIT adoption. A wave of healthcare reform-related grant opportunities

12. NC Hospital Association (continued)	will likely bring additional projects to the attention of hospitals in the near future, and ongoing projects such as ICD-10 conversion will continue to be important and require action on the part of NCHA and member hospitals. • **Create Low-Cost Health Information Exchange Using Existing Technology** NCHA developing the North Carolina Healthcare Exchange (NCHEX), a voluntary, not-for-profit HIE that leverages existing technology installed as part of the North Carolina Hospital Emergency Surveillance System (NCHESS) project, a state-mandated ED data program to benefit the state's syndromic surveillance and epidemiological research efforts. NCHESS hospitals also provide 25% of the data used by the Centers for Disease Control for their BioSense program. In June 2011, the North Carolina Division of Public Health (NCDPH) announced that the North Carolina Hospital Emergency Surveillance System (NCHESS) is the designated pathway for eligible hospitals to meet the meaningful use syndromic surveillance objective as part of the Medicare and Medicaid EHR Incentive Programs. • NCHEX leverages an existing relationship between Thomson Reuters and CareEvolution, whose HIE platform provides the majority of the technical infrastructure of the statewide exchanges for the South Carolina Health Information Exchange (SCHIEx), West Virginia Health Information Network (WVHIN), Alabama OneHealthRecord, as well as private exchanges. NCHEX will provide HIE services to hospitals as well as affiliated and unaffiliated physician practices using the Thomson Reuters Integration Discovery platform, which has been certified for 26 Stage 1 meaningful use objectives and 15 clinical quality measures (CQMs) in 2012 by the Drummond Group. All participating clinicians will have a virtual Single Patient Record (vSPR) within their existing EHR; non-participating providers will have access to the same information using a secure Web browser. • NCHEX is standards-based and provides numerous features to all participants that will enable them to satisfy meaningful use criteria. NCHEX has concluded its pilot phase with the Cone Health and WakeMed health systems, which consists of 7 hospitals, 8 emergency departments and 57 hospital-owned physician practices. NCHEX has 1.5M unique patients in the pilot system and is currently deploying to its first health system. The goals of the pilot include providing standards-based access and data interchange capabilities for public health reporting, disease management for Medicaid and case management for safety net providers, and to build local collaboratives among providers using NCHEX to facilitate achievement of specific clinical goals.

12. NC Hospital Association (continued)	• **Medicaid Admission / Discharge Data Initiative**-NCHA, the North Carolina Department of Health and Human Services, and North Carolina Community Care Networks are collaborating on the Medicaid Admission / Discharge Data Initiative to enhance the coordination of care for Medicaid beneficiaries. The initiative builds on existing care management efforts already underway between hospitals and local community care networks and utilizes technology already in place in hospitals. NCHA, NCCCN, and DHHS are working with Thomson Reuters Healthcare to provide a twice-daily electronic data for Medicaid patients to NCCCN's Informatics Center. The data feed will work off of technology already installed in hospital/system and there is no additional cost to hospitals to participate. The technology is known under several names including Care Focus, Clinical Xpert Navigator, and Mercury MD MData. The technology was widely installed in many North Carolina hospitals/systems with funding from NC Division of Public Health under the name North Carolina Hospital Emergency Surveillance System-Investigative Monitoring System (NCHESS-IMC). Local Community Care agencies will be able to access the Medicaid patient data directly from the Informatics Center pursuant to network system access agreements they have in place with NCCCN. • **Improve Patient Safety through Quality Reporting and Collaboration-** The North Carolina Center for Hospital Quality and Patient Safety, a federally-designated patient safety organization (PSO), is leading our hospital quality improvement activities and will assist hospitals to understand and report the 15 quality measures required under sections 4101(a) and 4102(a)(1) of the HITECH Act. These Stage 1 measures are thought to be extractable directly from a HITECH-certified EHR and should not require manual extraction or chart abstraction. Additional quality reporting measures and procedures are likely to be required in 2011 and 2013. • **Support Small and Rural Hospitals in Health IT Adoption-** To assist hospitals with HIT education and EHR adoption, NCHA and the North Carolina Rural Health Center are coordinating with private funders and federal programs from ONC to become meaningful users of EHR. The Duke Endowment has funded comprehensive HIT strategic planning for 19 rural hospitals using the services of the Computer Sciences Corporation (CSC), and additional private grants are under consideration. We are also working with rural and Critical Access hospitals to leverage education opportunities through the Regional Educational Center (REC) federal funding program from ONC, which is being managed by the NC Area Health Education Centers (AHEC). It was announced

12. NC Hospital Association (continued)	at the first post-funding meeting of the REC that hospitals will not receive assistance from the REC grant during the first two years of the initial four-year program. NCHA and the Rural Health Center will continue to work with the REC staff to attempt to deliver comparable resources using grant opportunities and relationships with qualified vendors through NCHA Strategic Partners and other stakeholders. • **Develop Strategic Partnerships with Qualified Health IT and EHR Vendors-** NCHA Strategic Partners is evaluating qualified vendors to provide value-based purchasing of HIT education, strategic planning, EHR selection and implementation services and health information exchange (HIE) to hospitals. We are communicating with potential vendors on a weekly basis to evaluate products and services to meet the needs of hospitals and physician practices. • **Promote Better Connectivity Among Providers-** Hospitals and providers will require fast and stable Internet connections to be able to share clinical data and become meaningful users of EHR. NCHA has partnered with the North Carolina TeleHealth Network (NCTN) to create a private statewide broadband network of healthcare providers to help meet the growing bandwidth needs that will result from EHR adoption and HIE activities. The hospital phase of the project is known as NCTN-H and will provide an 85% discount for public and not-for-profit hospitals; other hospitals will be able to leverage a volume discount and join the network as well. Currently, 85% of NC licensed hospitals and 76% of all NC hospitals are registered and eligible to participate in the NCTN offering. • **ICD-10 Collaborative-** NCHA and NCMS collaborating to help hospitals and providers tackle the issue of converting from ICD-9 to ICD-10. We recently cosponsored an ICD-10 education session and have been engaged in the efforts of the North Carolina Healthcare Information & Communications Alliance (NCHICA), and the collaboration with NCMS will seek to build on these types of activities. ICD-10 conversion will require massive changes to health information systems, business practices and provider workflows. • **Improve Public Health Surveillance-** The North Carolina Bio-Preparedness Collaborative (NCB-Prepared) is a $5M federal grant from Homeland Security to enhance the state's current surveillance and threat-detection capabilities and serve as a model for the nation. NCHESS hospitals currently provide 93% of the data consumed by the state's bio-surveillance system and NCHA is participating in the Collaborative to offer strategies on how to provide more, and better, data into the NCHESS system that could be of benefit to NCB-Prepared as well as the state's Medicaid analytics capabilities.

HIT INITIATIVE	**STATUS/UPDATE**
13. Public Health Meaningful Use **Lead Agency –**NC Division of Public Health **Federal Grant:** N/A **Purpose:** Facilitate public health reporting and the meaningful use of EHRs.	• The NCIR is currently reviewing proposals for its maintenance and operations vendor. A new contract is expected by August of this year. In the meantime, work is underway with OHIT and NC HIE on moving forward with an interface between NCIR and the NC HIE. Federal funding from CMS will make this possible and the timeline is 6-9 months. • The capacity to report electronic lab results are critical to MU. DPH is working with NC HIE to make the SLPH one of the first reporting labs connecting via interface to the NC HIE. An implementation study meeting was held on March 16, 2012 and work should begin within the month. CMS funding will be leveraged for this connection as well.
HIT INITIATIVE	**STATUS/UPDATE**
14. NC Community Health Center Association	• The North Carolina Community Health Center Association received a three-year, $450,000 grant from the Blue Cross Blue Shield of North Carolina Foundation to employ a data driven approach towards transitioning health centers through the patient centered medical home recognition process. Through a competitive Request for Proposals process, North Carolina Community Care Network has been selected as the vendor for the project. Existing data resources (NCHIE, CCNC-IC, etc.) will be leveraged to create a data warehouse and analytics tool assisting community health centers with quality benchmarking and data analysis. Through this initiative, NCCHCA is partnering with rural health centers, free clinics, and others to bring safety-net providers onto the NC Health Information Exchange. Benchmarking and comparative analysis will enable health centers to develop best practices for their unique patient populations to achieve the Triple Aim - improve outcomes and population health, lower costs, and improve quality.
HIT INITIATIVE	**STATUS/UPDATE**
15. NC Community Care Networks	• During 2011, CCNC completed a major expansion of its Care Management Information System to incorporate new CMIS functionalities and open CMIS access to public health case managers involved in care management for pregnant women (PHM program) and children with special healthcare needs (CC4C program). To date, CCNC has trained 580 new CMIS users in local health departments, who now have a shared, secure, web-based patient record for case management documentation and coordination of care management activities for

15. NC Community Care Networks (continued)	children with special health care needs and women with high-risk pregnancies. New screening tools and documentation screens to monitor processes and outcomes have been developed in CMIS to support these programs. • Through the joint efforts of CCNC, DHHS, and the North Carolina Hospital Association (NCHA), CCNC receives twice daily notification of Medicaid recipient Inpatient and ED visits from 51 hospitals as of December 2011, with additional hospitals underway. These 51 hospitals served 55% of all Medicaid inpatient admissions across the state. This real-time notification greatly facilitates the identification of patients in need of care management support as they transition from hospital to home, including pharmacist review of medications and follow-up in the primary care medical home. In addition, CCNC is receiving a daily data feed of inpatient and ED visits as well as outpatient labs and prescribed medications for Medicaid patients served by UNC Health Care. Also available are the discharge summaries for UNC Hospital inpatient admissions. • In addition to the NC Medicaid population, the Informatics Center now supports NC Health Choice population data in the Provider Portal, Pharmacy Home, Reports Site, and Care Management Information System applications. • CCNC expanded the secure reporting services for local health departments and Local Management Entities, who now have direct access to population analytics, alerts, risk flagging, and hospital visit notification for individuals in their respective catchment areas eligible for CC4C child service coordination services, Pregnancy Medical Home maternity care coordination services, and specialized behavioral health services. • Informatics Center applications continue to gain widespread use by providers and care managers throughout the State, facilitating "right information in the right hands at the right time" during care encounters for over 100,000 patients each month. Active users of IC applications now include 2,225 primary care providers or practice staff; 514 hospital-based providers; 500 users in local public health departments; 369 users in mental health Local Management Entities (LMEs); and 63 users in State psychiatric facilities.

15. NC Community Care Networks (continued)

Informatics Center Usage Statistics Update

CARE MANAGEMENT INFORMATION SYSTEM (CMIS)

Time Period	September 2010	January 2011	July 2011	January 2012
Number of unique user log-ins	654	732	1,325	1,653
Total log-ins	16,379	16,418	24,061	36,966
Number of unique patients accessed	73,369	71,984	84,205	121,373
Total pages viewed	2.3 million	2.4 million	7.5 million	12.8 million

PROVIDER PORTAL

Time Period	September 2010	January 2011	July 2011	January 2012
Number of unique user log-ins	99	548	1,551	1,875
Total log-ins	654	4,062	4,806	5,050
Number of unique patients accessed	444	5,749	17,343	26,334
Total pages viewed	data unavailable	48,868	138,436	209,465

HIT INITIATIVE	STATUS/UPDATE
16. Office of Emergency Medical Services	• The North Carolina Office of EMS continues to maintain and enhance all data systems pertaining to medical record collection and regulatory data. This includes, but is not limited to, electronic Patient Care Records, inspection reports and EMS certification records through the PreMIS, CIS, and SMARTT applications. • The "Lead the Wave" project, funded by The Duke Endowment, has now distributed 108 12-lead EKG and Capnography devices to 28 qualifying North Carolina EMS Systems. Additionally, training has been provided on the use of these devices. • The North Carolina Office of EMS is now providing de-identified ePCR data to the National Collaborative for BioPreparedness (NCB Prepared) for use in identifying regional health threats, including disease outbreaks and possible bioterrorism incidents. • The PreHospital Medical Information System (PreMIS) has collected over 10,000,000 records since initial implementation in 2006.

HIT INITIATIVE	STATUS/UPDATE
17. NC Health Benefits Exchange **Lead Agency –** NC Department of Insurance **Federal Grant:** Level I Planning Grant $12.4 million **Purpose:** Explore the feasibility and system design for a state operated Health Benefits Exchange under the provisions of the Affordable Care Act (ACA)	• In March 2010, the Patient Protection and Affordable Care Act (ACA) was enacted by Congress and signed by the President. This Health Care Reform law mandates the creation of Health Benefits Exchanges (HBE) that will allow consumers to access and evaluate health insurance plans online from commercial insurers and to apply to health subsidy programs such as Medicaid, CHIP, and subsidized commercial plans. The HBE must be operational by the fall of 2013 in order to process applications for coverage that will take effect on January 1, 2014. • DOI was awarded a Planning grant to plan for a state operated HBE in North Carolina under the provisions of the ACA. The HBE will require modifications to a key IT system currently being built. The estimated cost to make the new integrated eligibility and enrollment system, called NC FAST (North Carolina Families Accessing Services through Technology), ACA-compliant is $2.0 million. Federal funds under ACA are available to support the development of the state HBE. • Pursuant to legislative authorization and direction (Session Law 2011-391, Sec. 49), DOI submitted an Exchange Establishment grant proposal for Level 1 funding to support planning activities, including beginning the necessary IT systems design and modifications. On August 12, 2011 DOI was awarded almost $12.4 million of Level 1 funding for Exchange planning and development activities. Proposed activities under the Level 1 grant include working with DHHS to expand NC FAST to administer HBE eligibility determinations for tax subsidies, cost-sharing reductions, and other eligibility functions, and gather preliminary requirements for other exchange functions. Funding for Level 1 is awarded for one year and states have the opportunity to apply for more than one Level 1 grant. • During the past quarter, NCDOI hired an IT Project Manager and IT analyst team to begin preliminary requirements gathering for all non-eligibility-related exchange requirements, and DHHS and subcontractors began developing eligibility system requirements to support the HBE. The requirements for all non-eligibility-related functions will go into a Request for Proposals (RFP) for exchange IT systems. • NCDOI has also engaged DHHS in forming an interagency advisory group that meets on a weekly basis to discuss policy and IT issues relevant to exchange planning. • Level 2 Establishment grants provide funding through 2014. As a part of the

17. NC Health Benefits Exchange (continued)	application, states are required to prove legal establishment of the exchange, and develop a complete operational budget, financial sustainability plan and comprehensive work plan through 2014. • The final deadline for submission of applications under the current funding opportunity for either Level 1 or Level 2 grants is June 29, 2012. A new round of funding for Level 1 and Level 2 grants is expected to be released in June 2012. Applications for this new round of funding will be accepted through 2014.
HIT INITIATIVE	**STATUS/UPDATE**
18. State Information Technology Services (ITS) / State Chief Information Officer	• The Office of the State CIO and Information Technology Services (ITS) remain engaged in the Health Information Technology planning and policy establishment processes for the State of North Carolina. ITS will also become involved operationally as requested. • Please note: there has been a change in leadership at the Office of Information Technology Services. Jerry Fralick has left the agency and been replaced by Jonathan Womer. Mr. Womer attended his first meeting of the North Carolina Health Information Exchange (NCHIE) Board of Directors on March 12th, meeting previously with Jeff Miller, the CEO of the Exchange to be brought up-to-date on the primary issues facing the Board. Jonathan brings his intergovernmental and financial knowledge and experience to his position of SCIO. • ITS Staff provided technical information for inclusion in the recent RFP to select a vendor to build and operate core services of the Statewide Health Information Exchange. Staff is also involved with an important work group at the Department of Health and Human Services sponsored by the HIE Office on Service Oriented Architecture for the Department.
HIT INITIATIVE	**STATUS/UPDATE**
19. NC Division of State Operated Healthcare Facilities (DSOHF) and NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS)	• Central Regional Hospital is replacing some legacy medical components with VistA (Veterans Health Information Systems and Technology Architecture) solution. The medical components being replaced at CRH with VistA are critical to health care patient care and patient and staff safety. This best practice model achieves patient care and patient and staff safety goals through a tightly integrated clinical/medical system. By having CRH Clinical and Medical Records personnel focus on a moderate amount of configuration and template work during the VistA medical system implementation, this tightly coupled patient safety and highly efficient clinician workflow integration can be greatly

19. NC Division of State Operated Healthcare Facilities (DSOHF) and NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS) (continued)	enhanced. The implementation of VistA at CRH could be the foundation for other DHHS health care facilities in the future. • In addition, DSOHF is engaged in a project to expand the use of Teleradiology in its facilities. This entails the professional reading of x ray images that are electronically transmitted to UNC and a report generated back to the facility where physicians can then use the information to provide services to patients and residents. The service had a successful start with images and reports flowing seamlessly between CRH and UNC. Other facilities will be coming online in the next few months. • Electronic Health Record Pilot for Mental Health and Substance Abuse Providers Lead Agency – DMHDDSAS Federal Grant – Funding from the Substance Abuse and Mental Health Services Administration will support this project. Purpose – To encourage the use of EHRs by behavioral health providers, especially those that must comply with the confidentiality requirements of 42 CFR Part 2, as well as HIPAA requirements. The DMHDDSAS is seeking approval to pilot Web Infrastructure for Treatment Services (WITS), an open source, public domain collaboratively licensed application that was developed by SAMSHA specifically to meet the stricter 42 CFR Part 2 requirements for substance abuse providers. The project has been approved by DHHS and is awaiting approval from ITS for the vendor to host the data. Once the contract with the vendor, FEI, Inc., is signed, the Division will work with 20 providers to implement WITS and to pilot exchange of health information with the Local Management Entity and the NC HIT
HIT INITIATIVE	**STATUS/UPDATE**
20. Implementation of the Patient Protection and Affordable Care Act in NC **Lead Agency –** The NC Institute of Medicine **Purpose:** In March 2010, Congress passed	• This effort is led by an Overall Advisory Group, which is co-chaired by the Secretary, North Carolina Department of Health and Human Services; and G. Wayne Goodwin, JD, Commissioner, North Carolina Department of Insurance. In addition to the Overall Advisory Group, eight other workgroups were charged with studying specific areas of the new act: Medicaid and Elder Services; Health Benefit Exchange and Insurance Oversight; Prevention; Health Professional Workforce; Safety Net; Quality; New Models of Care; and Fraud, Abuse, and Overutilization. Each workgroup was tasked with studying specific areas of the ACA and providing advice to the state about the best way to implement these provisions as well as examining federal funding opportunities in their area.

20. Implementation of the Patient Protection and Affordable Care Act in NC (continued) national health reform, referred to throughout this report as the Affordable Care Act (ACA). The ACA was enacted to address certain fundamental problems with our current health care system, including the growing numbers of uninsured, poor overall population health, poor or uneven quality of care, and rapidly rising health care costs. The ACA expands coverage to the uninsured, focuses on prevention to improve population health, and places an increased emphasis on quality measurement and reporting. The legislation creates new challenges for the states as well as for families, businesses, health care professionals, and organizations. In order to implement the new law, the North Carolina Department of Insurance (NCDOI) and the North Carolina Department of Health and Human Services (NCDHHS) asked the North Carolina Institute of Medicine (NCIOM) to convene workgroups to examine the new law and gather stakeholder input to ensure that the decisions the state makes in implementing the ACA serve the best interest of the state as a whole.	• The recommendations of the NCIOM Workgroups are not final, however several of the NCIOM health reform workgroups noted the need for enhanced data to improve the functioning of the current health care system. State government, public and private payers, health systems, health care professionals, employers and consumers need information about diagnosis, utilization, costs, and outcomes in order to evaluate new delivery or payment models. • The Health Benefits Exchange (HBE) workgroup identified the potential need for diagnosis and utilization data to develop a risk adjustment system that can help stabilize the individual and small group insurance market inside and outside the HBE. • The ACA also requires health care providers (e.g., hospitals, nursing facilities) and health care professionals (e.g., doctors) to report quality measures to the federal government. However, the Quality workgroup recognized the importance of also collecting and analyzing these data at the state level and making data available to individual health care systems or providers so that we can more rapidly examine state-level data and develop appropriate interventions to improve patient safety and quality. This is especially important as Medicare moves towards value-based purchasing. • The New Models of Care Workgroup recognized the importance of creating a data system that could evaluate quality, costs, and patient experience as we move to test new payment and delivery models. Several states have created all payer claims data (APCD) systems to help provide the necessary state-level data that can support quality improvement activities, compare disease prevalence or utilization patterns across the state, identify successful cost containment measures, and evaluate health care reform efforts on costs, quality and access. • The NC DHHS has created a workgroup to examine the possibility of creating a similar APCD or a confederated data system that can capture data from multiple existing data systems that could be used in North Carolina to examine similar population health, cost, and quality issues across the state. • The New Models of Care workgroup recommended that NC DHHS, in collaboration with the North Carolina Department of Insurance, continue this effort to examine the state's existing data systems, gaps in the existing system, and different options to address data gaps. • A concern addressed by the Quality Workgroup was the impact on providers of multiple requests or demands for quality indicator data, since the state and federal governments, and private insurers are requesting data. The observation also was made that, if providers submit data directly and only to specific

20. Implementation of the Patient Protection and Affordable Care Act in NC (continued)	requestors (such as CMS nationally), then the state loses access to the wealth of information provided in these data that could be utilized for state-level research and quality improvement initiatives. To reduce this reporting burden on providers, while providing data to the state for state level quality improvement initiatives, the workgroup recommended that the State explore centralized reporting and or data storage.

APPENDIX

NC Medicaid EHR Incentive Program Breakdown

Type	Specialty	EHR Incentive Program Participants by Type and Specialty
Individual physician	ALLERGY	2
	ANESTHESIOLOGY	21
	CARDIOLOGY	7
	FULL-TIME EMERGENCY ROOM	5
	GASTROENTEROLOGY	5
	GENERAL/FAMILY PRACTICE	154
	GENERAL/THORACIC SURGERY	10
	HEMATOLOGY	5
	INFECTIOUS DISEASE	8
	INTERNAL MEDICINE	91
	NEUROLOGY	9
	OBSTETRICS/GYNECOLOGY	128
	ONCOLOGY	1
	OPHTHALMOLOGY	5
	ORTHOPEDIC/HAND SURGERY	2
	OSTEOPATH	3
	OTOLOGY, LARYNGOLOGY	3
	PATHOLOGY	1
	PEDIATRICS	456
	PHYSICAL MEDICINE AND REHABILIATION	4
	PLASTIC SURGERY	1
	PSYCHIATRY	48
	PULMONARY DISEASE	4
	RADIOLOGY/NUCLEAR MEDICINE	8
	RHEUMATOLOGY	2
	UROLOGY	2
Physician group	INTERNAL MEDICINE	1
Individual dentist	GENERAL DENTIST	44
Hospital, general	1-100 BEDS NC HOSPITAL	3
	101-200 BEDS NC HOSPITAL	10
	201-300 BEDS NC HOSPITAL	3
	301-474 BEDS NC HOSPITAL	4
	475 UP BEDS NC HOSPITAL	3
Nurse practitioner	NURSE PRACTITIONER	129
Nurse midwife	NURSE MIDWIFE	32
Critical access hospital	1-100 BEDS NC HOSPITAL	1
Mental health providers – individual	MENTAL HEALTH NURSE PRACTITIONER	14
TOTAL PARTICIPANTS		1229