



HEALTH INFORMATION TECHNOLOGY

Legislative Report

(January 1, 2016)

Session Law 2015-241, SECTION 12A.4

The Joint Legislative Oversight Committee on Health and Human Services

and

The Joint Legislative Oversight Committee on Information Technology

and

The Fiscal Research Division

Prepared by:

North Carolina Department of Health and Human Services

Office of Health Information Technology

January 1, 2016

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Legislative Report

Purpose:

This report is to fulfill the legislative requirement, as set forth in SL 2015 – 241, SECTION 12.A.4 that DHHS make a report on the status of Health Information Technology (HIT) activities. In conformance with the law, this report is being provided to: The Joint Legislative Oversight Committee on Health and Human Services, the Joint Legislative Oversight Committee on Information Technology 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. 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.

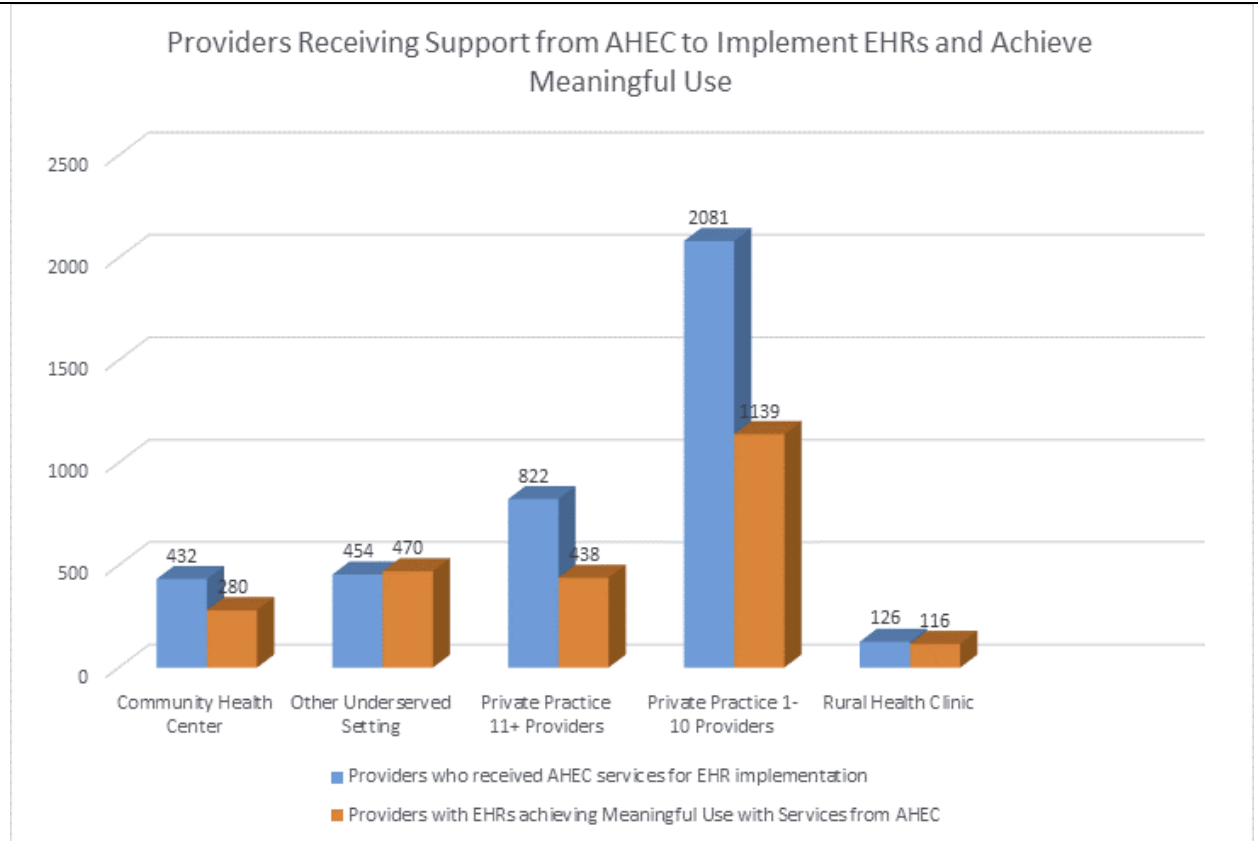
<p style="text-align: center;">HIT INITIATIVE</p> <p>1. Health Information Exchange (HIE)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency - NC HIE Federal Grant: \$12.9 million 2010 HITECH Grant and \$1.7 million 2012 Supplemental Challenge Grant Purpose: Establish a technology infrastructure 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.</p> <p>State Funding FY 15 (SB 14 Section 12A.2.(b) February 1, 2015 to June 30, 2015 Allowable expenses \$885,090, \$833,617 actual expenditures.</p> <p>FY16 (SL 2015-241 Section 12.A.5.(b) July 1, 2015 to February 29, 2016 Allowable NC HIE expenses \$1,416,000</p> <p>FY16 total NCHIEA Budget, including NC HIE expenses above: \$8,000,000 Recurring \$4,000,000 Nonrecurring</p>	<ul style="list-style-type: none"> • The NC HIE continues to make significant progress in its effort to electronically connect North Carolina’s healthcare systems. These connections will enable providers at these facilities to access health information on their patients from other HIE-connected systems including summary records, patient demographics, problems, previous diagnoses, allergies, procedures, medications and laboratory results. • NC HIE has 3,487 HIE web portal users. This does not account for users that access the HIE Network through their native electronic medical records system, including hospital and hosted EMR users. • NC HIE currently has 2,282,563 unique patient lives in the HIE network. • There are 35 hospitals contracted to participate in the HIE network. • There are 300 active ambulatory clinics connected to the HIE Network with an additional 1373 contracted to be implemented. • NC HIE has 18 hospitals and 376 practices that have live data feeds into the HIE Network. • There are 16 hospital facilities utilizing the NC HIE for DIRECT services. • NC HIE has successfully tested with Texas HIE. • The HIE Network will be transitioned to the Government Data Analytics Center (GDAC) under the Department of Information Technology (DIT) per NC Appropriations Act by February 29, 2016. • All Medicaid providers shall be connected to the HIE Network by February 1, 2018, and all other entities that receive State funds for the provision of health services, including local management entities/managed care organizations, shall be connected by June 1, 2018.

<p style="text-align: center;">HIT INITIATIVE</p> <p>2. Regional Extension Center (REC)</p>	<p style="text-align: center;">STATUS/UPDATE</p>										
<p>Lead Agency - NC Area Health Education Centers (NC AHEC)</p> <p>Federal Grant: \$13.6 million</p> <p>Purpose: The NC Area Health Education Centers (NC AHEC) Program at the University of North Carolina at Chapel Hill received a notice of grant award dated February 8, 2010 to perform the function of the North Carolina Regional Extension Center (REC) for health information technology. The award was originally established for a four year period for \$13.6 million dollars; additional federal agency reallocated dollars were awarded for years 3 & 4 increasing award to \$14.4 million dollars, for AHEC to reach at least 3,465 priority primary care providers to assist with practice assessment and readiness for electronic health record (EHR) adoption, workflow redesign, selection and implementation of certified EHR technology and to ultimately achieve meaningful use of the technology according to the CMS incentive program.</p> <p>In February of 2014, NC AHEC was awarded a no cost extension of this award to continue the provision of these services until February 7, 2015.</p>	<p>The current status of federal HIT initiatives:</p> <p>The NC Area Health Education Centers (AHEC) Program at the University of North Carolina at Chapel Hill receives federal funding through the NC Health IT Implementation Advance Planning Document (IAPD) via the Department of Medical Assistance to continue the work of promoting the effective and efficient use of Health Information Technology across the state. This work was originally funded through a cooperative agreement with the Office of the National Coordinator dated February 8, 2010 to perform the function of the North Carolina Regional Extension Center (REC) for health information technology. The award was originally established for a four year period for \$13.6 million dollars for AHEC to reach at least 3,465 priority primary care providers to assist with practice assessment and readiness for electronic health record (EHR) adoption, workflow redesign, selection and implementation of certified EHR technology and to ultimately achieve meaningful use of the technology according to the CMS incentive program. In February of 2014, NC AHEC was awarded a no cost extension of this award to continue the provision of these services until February 7, 2015.</p> <p>To date, the NC AHEC Regional Extension Center has enrolled over 4,974 priority primary care and specialty providers for services from NC AHEC, assisted 3,967 priority primary care providers in fully implementing a certified EHR system and supported 2,713 priority primary care and specialty providers in achieving full attestation for the meaningful use of that system according to the CMS incentive program. Of those meeting the requirements of Stage 1 Meaningful Use, 171 have met the requirements of Meaningful Use Stage 2.</p> <div data-bbox="1008 873 1570 1266" data-label="Figure"> <p style="text-align: center;">Providers Receiving Support from AHEC to Implement EHRs and Achieve Meaningful Use</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Total Enrolled</td> <td>4974</td> </tr> <tr> <td>Assisted with fully implementing EHR</td> <td>3967</td> </tr> <tr> <td>Achieved Stage 1 Meaningful Use</td> <td>2713</td> </tr> <tr> <td>Achieved Stage 2 Meaningful Use</td> <td>171</td> </tr> </tbody> </table> </div> <p>The NC AHEC Program is divided into nine regions to cover the state. The graphic below indicates the number of priority practices currently receiving active services in each region of the state.</p>	Category	Count	Total Enrolled	4974	Assisted with fully implementing EHR	3967	Achieved Stage 1 Meaningful Use	2713	Achieved Stage 2 Meaningful Use	171
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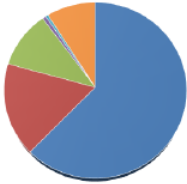
<p style="text-align: center;">HIT INITIATIVE</p> <p>2. Regional Extension Center (REC)</p>	<p style="text-align: center;">STATUS/UPDATE</p>																				
	<div data-bbox="751 261 1753 755" data-label="Figure"> <table border="1"> <caption>Number of Practices by AHEC Region</caption> <thead> <tr> <th>Region</th> <th>Number of Practices</th> </tr> </thead> <tbody> <tr> <td>Northwest</td> <td>101</td> </tr> <tr> <td>Greensboro</td> <td>56</td> </tr> <tr> <td>Wake</td> <td>124</td> </tr> <tr> <td>Area L</td> <td>38</td> </tr> <tr> <td>MAHEC</td> <td>123</td> </tr> <tr> <td>Charlotte</td> <td>102</td> </tr> <tr> <td>SR-AHEC</td> <td>62</td> </tr> <tr> <td>Eastern AHEC</td> <td>190</td> </tr> <tr> <td>SEAHEC</td> <td>106</td> </tr> </tbody> </table> </div> <p data-bbox="680 841 1995 938"> The current status of State HIT efforts and initiatives among both public and private entities: The graph below represents the number of providers served by AHEC that have fully implemented EHRs and achieved meaningful use by the type of practice setting as established by the Office of the National Coordinator. </p>	Region	Number of Practices	Northwest	101	Greensboro	56	Wake	124	Area L	38	MAHEC	123	Charlotte	102	SR-AHEC	62	Eastern AHEC	190	SEAHEC	106
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HIT INITIATIVE
2. Regional Extension Center (REC)

STATUS/UPDATE



A breakdown of current public and private funding sources and dollar amounts for State HIT initiatives: NC AHEC is working with the NC Division of Medical Assistance to continue to provide EHR and meaningful use support services to providers across the state through the use of IAPD funds. Until February 8, 2015, the NC AHEC Regional Extension Center was funded entirely through a cooperative agreement with the Office of the National Coordinator as part of the HITECH Act. Following the completion of the cooperative agreement, NC AHEC initiated use of the IAPD funding to continue the work of supporting HIT which expanded our work to include specialty providers, and assisting providers with meeting Stage 2 of Meaningful Use. This graph shows the number of providers that receive support from NC AHEC by Specialty.

<p style="text-align: center;">HIT INITIATIVE</p> <p>2. Regional Extension Center (REC)</p>	<p style="text-align: center;">STATUS/UPDATE</p>						
	<p style="text-align: center;">Providers Receiving Support from AHEC by Specialty</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Family Practice/Internal Medicine</td> <td>Pediatrics</td> </tr> <tr> <td>OB/GYN</td> <td>Cardiology</td> </tr> <tr> <td>Behavioral Health</td> <td>Other</td> </tr> </table> <p>In continuing the NC AHEC REC services to include Meaningful Use Stage 2, the NC AHEC Program is promoting the use of basic tools of Health IT and Health Information Exchange in NC to include the use of patient portals, Direct Messaging capabilities, clinical data registries and patient messaging.</p> <p>Department efforts to coordinate HIT initiatives within the State and any obstacles or impediments to coordination:</p> <p>The NC AHEC Program works hard to partner and coordinate with all initiatives and stakeholders within the state. We work closely with the NC Health Information Exchange to help providers understand that services and resources available to them through the use of the NC HIE. We supported more than 46 local health departments across the state to help them assess their needs and evaluate and/or implement an EHR system. We also participate regularly with the Safety Net Providers HIE Workgroup to support all safety net providers in acquiring the ability to collect and exchange health information.</p> <p>The NC AHEC Program is currently collaborating with the Division of Public Health and their Community and Clinical Connections for Prevention & Health Branch in a pilot project in Eastern NC to promote the adoption of EHR Direct Messaging capabilities to facilitate point to point HIE between healthcare entities and public health resources. In addition, through membership and collaboration with the NC Healthcare Information & Communications Alliance (NCHICA), the NC AHEC Program is championing education and dialogues of the technical, environmental and social aspects of the widespread implementation of Direct Messaging use across the state.</p>	Family Practice/Internal Medicine	Pediatrics	OB/GYN	Cardiology	Behavioral Health	Other
Family Practice/Internal Medicine	Pediatrics						
OB/GYN	Cardiology						
Behavioral Health	Other						

<p style="text-align: center;">HIT INITIATIVE</p> <p>3. Beacon Community Grant</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>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 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.</p>	<p>There were no updates provided this year.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>4. Broadband Technology Opportunities Program (BTOP) Round 1 and Round 2</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – Microelectronics Center of North Carolina (MCNC)</p> <p>Federal Grant: \$144M total: \$40M in private match, \$7.7M from MCNC Endowment, \$24M Golden Leaf Foundation, \$0 state or county investments.</p> <p>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.</p>	<p>There were no updates provided this year.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>5. Workforce Development in HIT</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – Pitt Community College (Training) and Duke University (Curriculum)</p> <p>Federal Grant: Training Grant - \$21.1 million for the 13 state region, (Southeastern United States Region D)</p> <p>Purpose: In April 2010, the Office of the National Coordinator for Health Information Technology chose Pitt Community College to lead a regional HIT 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 workers for HIT roles to implement electronic health records. 82 community colleges across the country are offering the HIT training online. Students receive training in six HIT priority workforce roles: practice workflow and information management redesign specialists; clinician/practitioner consultants; implementation support specialists; implementation managers; and technical/software support staff and trainers.</p>	<p>There were no updates provided this year.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>6. NC Medicaid Electronic Health Record (EHR) Incentive Program</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – NC Division of Medical Assistance (DMA)</p> <p>Federal Grant: Medicaid HIT Implementation Grant \$331M (\$299M 100% federal; \$32M 90%/10% federal/state)</p> <p>Purpose: The ultimate goal of the NC Medicaid Electronic Health Record (EHR) Incentive Program is to encourage eligible Medicaid providers to adopt, implement or upgrade to certified EHR technology, and then demonstrate meaningful use of that technology. This fundamental shift to the meaningful use of EHR technology will:</p> <ul style="list-style-type: none"> ○ Improve quality, safety, and efficiency of patient care; ○ Reduce health disparities; ○ Engage patients and families in their healthcare; ○ Improve care coordination; ○ Improve population and public health; and, ○ Maintain privacy and security. 	<ul style="list-style-type: none"> ● As of October 20, 2015, the Medicaid EHR Incentive Program has paid out a total of \$265,073,857 in the form of 8,742 eligible professionals (EPs) and 233 eligible hospitals (EHs) incentive payments. ● The NC Medicaid EHR Incentive Program is partnering with the Department of Public Health, North Carolina Community Center Networks (N3CN), and the NC Health Information Exchange (HIE) to build connectivity between public health systems and electronic reporting through the NC HIE. ● Post-Payment audits have been completed for Program Year 2012. As of October 2015, 390 post-payment audits have been completed for Program Year 2013. ● The program is updating its Implementation Advance Planning Document (IAPD) and State Medicaid HIT Plan (SMHP) for program years 2017 and 2018 and will submit to CMS for approval on June 30, 2016.

<p style="text-align: center;">HIT INITIATIVE</p> <p>7. NC Telehealth Network</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency - North Carolina Telehealth Network (NCTN)</p> <p>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; Approximately \$10M from new Healthcare Connect fund program in 2015.</p> <p>Purpose: The NCTN provides broadband services to health programs and sites across the state including hospitals, free clinics, community health centers and public health agencies as well as other types of public and non-profit healthcare providers.</p>	<p>The North Carolina Telehealth Network-NC Telehealth Network initiative is a collection of projects focused on developing broadband communication services (e.g. Internet access) in support of health and care in NC.</p> <ul style="list-style-type: none"> • As of September 2015, the NCTN serves about 185 sites including - 51 public health sites, 47 hospitals, 24 mental health clinics; eight Federally Qualified Health Centers, 55 other non-profit clinics. • The project is in an expansion phase with support from the new FCC Healthcare Connect Fund. There are about 150 new sites expected to subscribe in the next few months with more to follow.

<p style="text-align: center;">HIT INITIATIVE</p> <p>8. NC Statewide Telepsychiatry Program (NC-STeP)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – Office of Rural Health</p> <p>State Appropriations: \$2 million in recurring funds</p> <p>Additional Funding: \$1.5 million from The Duke Endowment for further development of the program, information dissemination of best practices, and website development.</p> <p>Purpose: NC-STeP assists NC hospitals in providing assessments to patients placed under involuntary commitment. The use of telepsychiatry can reduce patients’ length of stay in the emergency department and overturn unnecessary involuntary commitments.</p> <p>Outcomes as of June 2015:</p> <ul style="list-style-type: none"> • 54 hospitals live • 14,056 assessments • 1320 overturned involuntary commitments 	<ul style="list-style-type: none"> • The North Carolina Statewide Telepsychiatry Program was created through Session Law 2013-360 to assist North Carolina hospitals in providing assessments to patients placed under involuntary commitment. Telepsychiatry is defined by legislation as the <i>“delivery of acute mental health or substance abuse care, including diagnosis or treatment, by means of two-way, real-time interactive audio and video by a consulting provider at a consultant site to an individual patient at a referring site.”</i> • There are 35 counties in NC that are classified as Mental Health Professional Shortage Areas. These areas have a very low supply of mental health professionals in proportion to the population. The practice of telepsychiatry, through NC-STeP, allows for the psychiatric evaluation of patients, through videoconferencing technology, in emergency departments lacking psychiatric staff. This use of technology can reduce patients’ length of stay in the emergency department (which can last for days in some cases) and overturn unnecessary involuntary commitments, thereby reducing the burden on staff and reducing costs to the state and federal governments. • As of June 2015, NC-STeP was operational in 54 hospitals in 40 counties. There are 54 consulting sites that provide services to the hospitals. As of June 2015, NC-STeP has conducted 14,056 assessments. As a result, 1320 involuntary commitments have been overturned. • Overall, the program has resulted in cost savings to the State, its partners, and external stakeholders. The primary method of cost savings from this program is overturning unnecessary involuntary commitments. Of the 5,403 patients held under involuntary commitment and served by the program, 1,320 have been discharged into their own communities to receive treatment using community resources.

<p style="text-align: center;">HIT INITIATIVE</p> <p>9. Safety Net HIE Connectivity</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – Office of Rural Health (ORH)</p> <p>State Appropriations: \$750,000 non-recurring funds</p> <p>Purpose: Applicants were to identify and purchase hardware and/or software necessary for establishing a functional connection to NC HIE. This connection would ultimately permit the sharing of patient health information via the health information exchange. Only capital items, such as hardware/software necessary to facilitate linkage were funded through this one-time initiative.</p> <p>Outcomes as of October 2015:</p> <ul style="list-style-type: none"> • 30 out of 30 safety net grant-funded organizations have been connected utilizing ORH grant funds. • To date, more than 230 safety net providers are connected or in some stage of connecting to the NCHIE 	<p>The Office of Rural Health identified funds in the Community Health Grant SFY 2012 budget to help enable safety net organizations, such as state-recognized rural health clinics, health departments, federally qualified health centers, and free clinics, to connect to the NC Health Information Exchange (NC HIE).</p> <p>The infrastructure built has been leveraged by the Safety net providers resulting in an overall connectivity increase:</p> <ul style="list-style-type: none"> • 32 Free Clinics • 138 Community Health Centers (aka FQHCs; includes School Based Health Centers) • 42 Local Health Departments • 9 ORH Rural Health Centers • 9 School Based Health Centers

<p style="text-align: center;">HIT INITIATIVE</p> <p>10. Children’s Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Program</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – Office of Rural Health Federal Grant: All federal funding, \$9,277,361 over five years comes from the CMS’ CHIPRA Quality Demonstration Grant. Project received one-year no-cost extension through Feb. 2016.</p> <p>Purpose: Category A - The vision 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.</p> <p>Category B –Not Applicable Category C–evaluates new provider-based models to improve the delivery of care to Children and Youth with Special Health Care Needs (CYSHCN.) 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 delays, asthma, and autism screening, growth charting, and, preventive care.</p>	<p>The CHIPRA Quality Demonstration Grant, an enhancement to CHIPRA, identifies strategies for improving the quality of health care for children enrolled in the CHIPRA program, with the ultimate goal of reducing costs.</p> <ul style="list-style-type: none"> • As of December 2014, North Carolina DHHS was able to report on all required Core Quality Measures (CQMs) for children annually to CMS for Category A. The CHIPRA team has been able to meet our objective of defining a process to collect and report data on all CQMs. • Since the beginning of the program in 2010 eligible children have shown increases in: <ul style="list-style-type: none"> ○ Having four or more dental varnishings from 37% to 43% ○ BMI percentile monitoring in children from 2% to 13% ○ Adolescent Well Child Visits (WCVs) in the past year from 39% to 44% ○ Autism screening of toddlers (using the M-CHAT tool) from 42% to 55% • Through Category C, NC is developing and implementing a plan to strengthen the medical home for children, particularly children and youth with special health care needs and to build patient-centered medical home teams with specialists to ensure the coordination of treatments and services within their communities and to promote co-management by primary care clinicians. • 23 practices participated in Category C quality improvement projects that are replicable state-wide: <ul style="list-style-type: none"> ○ Maternal depression: 16 practices completing screening in 98% of well visits ○ Developmental Screening: 100% of practices screening at 98% ○ Weight for Length: 20 practices at 100% ○ BMI Percentile Coding: 100% of practices at all ages documenting at 100% ○ Autism Screening 100% of practices completing screen at 100% of recommended visit schedule • 26 practices in 17 counties and five EHR vendors have committed to participate in evaluation of the Model Format.

<p style="text-align: center;">HIT INITIATIVE</p> <p>10. Children’s Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Program</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> • Category D has completed a third phase of practice and vendor surveys covering additional requirements in the Model Format. Topic areas in this phase include: Foster Care, Health Information Exchange, Maternal History, and Vaccinations. • Five participating EHR vendors are using the projects detailed quality improvement measures, with the newly added sample data sets, to develop custom reports for the project. Pursuant to the first addendum of their participation agreements (MoU), these vendors are developing EHR system capability around capture and storage of data to drive report outputs. In some cases this work around report generation is driving system changes in very positive and meaningful ways, filling gaps in capability. The first such change can be seen in the area of child oral health. The agreement addendum also includes small financial incentivizes for vendors to incorporate and automate tools such as an Oral Health Risk Assessment and that work has begun. Complete baseline data around the measures is still being developed due to the extent of EHR system changes and provider training needs that have surfaced.

<p style="text-align: center;">HIT INITIATIVE</p> <p>11. NC Hospital Association (NCHA)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>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:</p> <ul style="list-style-type: none"> ○ implementation of certified electronic health record systems ○ reporting of quality measures to the Centers for Medicare and Medicaid Services and/or states ○ exchanging of clinical data with other providers 	<p>PDS+ Readmission Readiness Initiative NCHA established a statewide unique hospital patient identifier in 2013 that tracks patients across all hospitals. The purpose of this effort is to help hospitals link the quality of patient care with the financial risks hospitals face as part of emerging models of care based on shared savings rather than volume alone. NCHA now delivers nine quarters of statewide, all-payor, all-case readmission data to hospitals through the PDS+ Readmission Readiness Initiative. Hospitals receive this data via a secure reporting website with the option to acquire enhanced reports and source data for use within their own analytic tools and methodologies. Reporting options include readmission analysis for any reason, same clinical classification, payer, sex, race, and CMS measures, as well as other trend reports.</p> <p>Medicaid Admission / Discharge Data Initiative NCHA, DHHS, and NCCCN continue a five-year collaboration 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 coordinates hospital data collection and twice-daily delivery electronic data for Medicaid patients to NCCCN's Informatics Center. The data is generated using technology already installed in hospital/system as part of the NCHES and NCHES+ programs and there is no additional cost to hospitals to participate. 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.</p> <p>Improve Public Health Surveillance The North Carolina Hospital Emergency Surveillance System (NCHES) is a state-mandated program begun in 2004 as a public-private partnership between NCHA and the NC Division of Public Health (DPH). The mandate requires hospitals with 24/7 emergency departments (ED) to submit 23 data elements at least twice per day for syndromic surveillance purposes. The mandatory program is sometimes referred to as NCHES-EDDI (Emergency Department Data Initiative) and there are currently 123 EDs participating in this portion of the program that account for approximately 4.5 million ED visits per year in North Carolina.</p> <p>In addition to the mandatory NCHES-EDDI program, NCHES operates a voluntary program called NCHES-IMC (Investigative Monitoring capability) that provides DPH epidemiologists with the capability for real-time surveillance of ED and inpatients for advanced public health surveillance. In addition to the 23 ED data elements, NCHES-IMC also surveils ADT, vitals, labs, and microbiology data for inpatient, observation, and ED beds.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>11. NC Hospital Association (NCHA)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<p>The NCHES platform has been upgraded over the past 12 months to meet Meaningful Use 2014 / Stage 2 requirements and is being implemented for all hospitals to enable real-time, whole-hospital surveillance. Our current status is as follows for the state’s 128 Emergency Departments:</p> <p style="padding-left: 40px;">118 Emergency Departments sending live HL7</p> <ul style="list-style-type: none"> • 7 implementations in progress • 3 implementations pending due to EHR conversions • 98.6% of all inpatient volume sending data <p>The primary benefits for participating in the NCHES+ program for hospitals, NC DPH, and communities includes:</p> <ul style="list-style-type: none"> • Reduces burden on hospital staff during public health investigations by reducing call-backs and the need for chart abstractions and record review by hospital staff • Only pathway for hospitals to meet the Meaningful Use Stage 2 Syndromic Surveillance objective <p style="padding-left: 40px;">More timely and effective public health intervention through early event detection and enhanced surveillance capabilities</p> <p>The NCHES+ system decreases the amount of time spent by hospital staff for each public health investigation, reducing hospital staff time from 30-60 minutes per episode to five minutes or less (and often no time at all). The NCHES+ system also enables hospitals to voluntarily participate in several NCHA-sponsored initiatives that promote better and more efficient care, including the Medicaid ADT Initiative and the State Health Plan ADT Initiative. In both of these programs, a small amount of Admit-Discharge-Transfer (ADT) data for the appropriate plan is sent from the NCHES platform and forwarded to the care managers of each plan to enhance their ability to manage their populations. These programs are strictly voluntary and have no participation or maintenance costs to participating hospitals and health systems.</p> <p>NC-STeP Portal</p> <p>In 2015, the NC Hospital Foundation built a multi-purpose Portal for NC-STeP. The purpose of the Portal is to facilitate the collection and exchange of clinical and demographic data between hospital EDs and psychiatric provider hubs for up to 80 hospital EDs that do not currently have access to a full-time psychiatrist. The Portal also provides reporting and billing functions, as well as administrative tasks and easy access to a statewide, voluntary inpatient psychiatric Bed Board operated by NCHA. We are currently onboarding two cohorts of approximately 25 hospitals each.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>12. Public Health Meaningful Use</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – NC Division of Public Health (DPH)</p> <p>Federal Grant: N/A</p> <p>Purpose: Facilitate public health reporting and the meaningful use of EHRs.</p>	<ul style="list-style-type: none"> • The North Carolina Division of Public Health (DPH) continues to maintain a single web-based registration and tracking system for Meaningful Use Eligible Providers and Eligible Hospitals to register their intent to submit any of the public health data types across all of the public health program areas. Currently 108 hospitals in NC have registered their intent to submit electronic laboratory data and over 1,330 providers have registered with the NC Central Cancer Registry (NC-CCR). • DPH is currently on-boarding 114 hospital laboratories to implement electronic reporting of laboratory results. Over 80% of hospitals in NC have registered their intent to submit electronic laboratory results according to Meaningful Use regulations. At this time, electronic laboratory results are being received from the NC State Laboratory of Public Health, a large commercial laboratory, and 13 hospitals. The data received via these electronic interfaces represent over 70% of all reportable laboratory results received for surveillance of communicable diseases and elevated blood lead levels in North Carolinians. • All civilian North Carolina hospitals operating a 24/7 emergency department are required to contribute data for syndromic surveillance to the North Carolina Hospital Emergency Surveillance System (NCHES). NCHES data are then incorporated into North Carolina's statewide syndromic surveillance system, North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). The NCHA is currently upgrading to NCHES+ to allow hospitals to send Meaningful Use compliant HL7 syndromic surveillance messages. As of November 4, 2015, 118 hospitals have completed the upgrade and an additional seven implementations are in process. <p>The North Carolina Immunization Registry (NCIR) is used to support the federal Vaccines for Children Program (VFC) in North Carolina and as a clinical tool used by providers to track and administer immunizations. Ultimately, the purpose of the NCIR is to ensure the appropriate delivery of immunization services to all members of a population. Quality of care in immunization services requires age-appropriate administration of vaccines to the individual patient in a clinical setting. To accomplish this end, the NCIR provides access to quality, complete immunization data and clinical decision support information, in a location and at a time where it can affect patient care. Immunizing providers order, document, and account for</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>12. Public Health Meaningful Use</p>	<p style="text-align: center;">STATUS/UPDATE</p>						
	<p>VFC vaccines and in the NCIR. To enable current and future providers to exchange information via an electronic interface, a two way bi-directional interface was developed. Construction of the NCIR's bi-directional interface that has real-time query/response, real-time vaccine update, and inventory decrementing capabilities is complete and was successfully piloted with North Raleigh Pediatrics using the Allscripts Electronic Health Record (EHR) system. Work is currently underway to roll out additional providers using Allscripts' Electronic Health Record (EHR) system. The NCIR is also working with two additional organizations from NC HIE, UNC Healthcare and Wake Forrest Baptist Health, with Duke Medicine's EHR exchange hub and with athenahealth system.</p> <ul style="list-style-type: none"> The NC-CCR has received 1,324 registrations from physicians till date. Providers that meet the initial requirements and have been approved for follow up are then contacted by the NC CCR MU team indicating that they then start the onboarding process. Of these providers, NC-CCR MU2 is accepting cancer case reports to enable Eligible Providers (EP) to meet the Stage 2 Meaningful use cancer reporting objective: Capability to identify and report cancer cases to a public health registry. Priority to onboard is given to providers based on their medical specialty and their EHR vendor certification status. Specialties with a high incidence of cancer in an outpatient setting are given higher priority such as Dermatology, Urology, Hematology, Oncology, Gastroenterology etc. Priority is also given based on the volume of cancer cases and reporting period. The only available mode of electronic transmission of data for MU2 cancer reporting is through SFTP server. We have 114 EPs who have credentials on the SFTP server, currently uploading cancer cases and who are in the actively testing phase. The 2014 Certified EHR vendors who we are working with include Modernizing Medicine, athenahealth, Altos Solutions, Nextech, and Nextgen. We are working with EHR vendors and EP offices on a daily basis to review and test HL7 CDA format cancer files and we are continuing to monitor the data quality issues when receiving the cancer files electronically. <table border="1" data-bbox="963 1149 1491 1256"> <tbody> <tr> <td>Registered EPs</td> <td>1,324</td> </tr> <tr> <td>EP's with Certified EHR</td> <td>180</td> </tr> <tr> <td>EP's testing and production</td> <td>114</td> </tr> </tbody> </table>	Registered EPs	1,324	EP's with Certified EHR	180	EP's testing and production	114
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<p style="text-align: center;">HIT INITIATIVE</p> <p>13. NC Community Health Center Association</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<p>The North Carolina Community Health Center Association (NCCHCA) has worked with Community Care of North Carolina (CCNC) to build a central data repository and develop analytics applications to leverage this data. The connectivity of our Federally Qualified Health Centers (FQHCs) to the NC HIE and CCNC has been vital, as it has served as the conduit into our data repository. Eighty-six percent (32/37) of our FQHCs are currently contracted to connect to the NC HIE, with 84% (31/37) of our FQHCs connected or in the process of connecting to our data repository as of November 2015. The analytics applications that utilize this connectivity, with the aim of enabling our health centers to use data to improve care, include the following:</p> <ul style="list-style-type: none"> • Disease Registries for Diabetes, Hypertension, Asthma, and Heart Failure. • Uniform Data System (UDS) Reporting Tool • Meaningful Use eCQM Dashboard • PCMH Dashboard • Accountable Care Quality Reporting Tool • Accountable Care Cost, Utilization, and Risk Dashboard <p>Many of the above analytics builds are in Release 1a within our FQHCs, with a larger rollout in the fourth quarter of 2015 and the first quarter of 2016.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>14. NC Community Care Networks and Community Care of North Carolina (CCNC)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<p>Two major efforts have dominated the HIT work of CCNC in the last six months:</p> <ul style="list-style-type: none"> • Re-establishing the Medicaid data feed from NCTracks to the Informatics Center (IC) of CCNC. The 14 Networks of CCNC depend on the IC analytics to appropriately manage the care of their Medicaid patients and to identify priority Medicaid patients in their practices. Claims and enrollment data is critical to the analytics and identification of patients who are impacted. This functionality is dependent on the completeness and validity of the claims data received from DMA. CCNC and DMA have re-established the timely data transfer since the new NCTracks MMIS was implemented. As of December 8, the Medicaid claims data has been transmitted to the IC for claims dating back to July 2008. • Updating the data platform supporting the CCNC IC. CCNC is underway to upgrade and modernize the data analytic platform that supports Medicaid program. The IC has a 2-year plan to gradually transition from the old software to a new integrated, flexible platform that delivers enhanced functionality through the use of software as a service technology, dynamic data analytics and cloud-based capacity. The new platform will allow faster, more comprehensive, and customizable services to meet the needs of the users. The new platform will also enable integration of near real time clinical data from electronic medical records through a partnership with the NC HIE. The first phase of this modernized data platform was implemented in the first quarter of 2015 with additional enhancements to follow. <p>Highlights included:</p> <ul style="list-style-type: none"> ○ Release of advanced business intelligence dashboards for very detailed analysis of member costs, diagnoses, utilization patterns, and high-yield care management opportunities. ○ Release of risk-adjusted key performance indicators updated through SFY15, for examination of performance on total cost of care, inpatient and ED utilization, and hospital readmissions by network. ○ Successful statewide deployment and implementation of updated care management “impactability scores” to drive prioritization of care management activities to yield highest return on investment.

<p style="text-align: center;">HIT INITIATIVE</p> <p>14. NC Community Care Networks and Community Care of North Carolina (CCNC)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> ○ Implementation of new methodology for identification of “non-emergent ED use”, incorporated into several existing IC reports. ○ Successful deployment of improved “FIND” report to alert care managers to specific care needs of patients with behavioral health comorbidity, and to identify practices and communities appropriate for targeting of BH program interventions ○ Additional hospitals contributing to real-time electronic notification of inpatient, outpatient, or emergency department admissions, discharges and transfers; now totaling 73 hospitals representing over 80% of hospital visits for Medicaid and HealthChoice recipients. ○ Successful beta release of “Care Aim” application, providing CA-2 practices who have established an EHR connection to the IC with a state of the art mechanism for real-time tracking of performance on quality measures related to chronic conditions and preventive care, and for identification of recipients with gaps in recommended care. <p>The IC analytic applications continued to be highly utilized. The care management platform serves over 1,200 care managers and provider portal supports 1,800 practices, and pharmacehome is utilized for medical management and supports wide range of network and community pharmacists. Usage stats include: 1) Over 1,000 users of Pharmacehome application for medication management for 16,000 recipients each month. 2) Over 2,000 users of provider portal each month accessing patient information for over 30,000 recipients each month.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>15. Office of Emergency Medical Services</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<p>The North Carolina Office of EMS (OEMS) 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 (ePCR), inspection reports and EMS certification records through the Pre-hospital Medical Information System (PreMIS), Credentialing Information System (CIS), and State Medical Asset Resource Tracking Tool (SMARTT) applications. During this period, we continue to implement the new reporting features that were implemented in the CIS application. These include:</p> <ul style="list-style-type: none"> • EMS STATS (Self Tracking and Assessment of Targeted Statistics): EMS STATS are the NCOEMS’s next generation of Performance Improvement Tools. The EMS STATS are still in the production phase in conjunction with the EMS Performance Improvement Center (EMSPIC) through a grant by The Duke Endowment. The EMS STATS consists of eight (8) different analytical reports focusing on time-sensitive illness and injuries that provides a comparison of the care provided to other providers of like demographics locally and statewide. These EMS STATS will assess topics identified as national areas for assessment by National EMS Information System (NEMESIS). The EMS STATS are currently being piloted in select counties to ensure accuracy of the data and analytical analysis. This project will include a provider level EMS STATS to allow field level providers to assess their performance and, for the first time, drive performance improvement from the field level up. STATS will have a streamlined format to facilitate ease of use, while focusing on key indicators that have the greatest impact on system and personal improvement. It will provide for the ability for systems, agencies, and providers to make the best data driven decisions to improve the care that they provide while optimizing the service they deliver. • EMS Data Linkage: OEMS has worked to link EMS ePCR data to other medical records. Currently EMS data is linked to Emergency Department data for the purposes of EMS outcomes and for bio surveillance as well as to the Trauma Registry data for the purposes of both EMS Performance Improvement and so that hospital Trauma Registrars are given a more complete picture of the original EMS incident. EMS data is now being linked to itself, so that multi-leg EMS transports (defined as transport from scene to community hospital, then transport from the community hospital to a Trauma Center) can be viewed in their entirety by the receiving Trauma Center. Currently, in a multi-leg transport, the Trauma Center would only be able to see the Patient Care Record for the transport from the community hospital to the Trauma Center. We continue to work with EMS agencies to stress the criticality of the data entered or imported, as it is adversely proportionate to our ability to achieve success with outcomes.

<p style="text-align: center;">HIT INITIATIVE</p> <p>16. NC Health Benefits Exchange</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>Lead Agency – NC Department of Insurance</p> <p>Federal Grant: Level I Planning Grant \$12.4 million</p> <p>Purpose: Explore the feasibility and system design for a state operated Health Benefits Exchange under the provisions of the Affordable Care Act (ACA).</p>	<ul style="list-style-type: none"> • The General Assembly enacted legislation in 2013 halting all work under the exchange planning or any other exchange-related grants and prohibiting any State entities (agencies, etc.) from taking any actions toward formation of a State-run health benefit exchange, unless explicitly authorized by the legislature. The Session Law doing this is available at the following link: http://www.ncleg.net/EnactedLegislation/SessionLaws/PDF/2013-2014/SL2013-5.pdf • As directed by the Legislature in SL 2013-5, the Department of Insurance then terminated all work under the grants and notified the Secretary of USDHHS that the remaining \$70+ million in funds awarded to the State would not be used by the State. The final actions relating to a health exchange in North Carolina were the payments made to NCDHHS in the summer of 2013 for already incurred NC FAST expenditures funded under the Level One Cooperative Agreement Exchange Establishment Grant. • A limited amount of analysis and preliminary planning was conducted pursuant to previous legislative authorization, no NC Health Benefit Exchange was ever created and no action relating to exchange planning or implementation has occurred since enactment of SL 2013-5 on March 6, 2013. The final action under the grants was the payment to NCDHHS for certain NC FAST expenditures, payment was made by mid-July 2013.

HIT INITIATIVE 17. Department of Information Technology (DIT) / State Chief Information Officer	STATUS/UPDATE
	There were no updates provided this year.

<p style="text-align: center;">HIT INITIATIVE</p> <p>18. NC Division of State Operated Healthcare Facilities (DSOHF) and NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> <p>• Electronic Health Record (EHR): Although identified as a critical initiative, DSOHF facilities have not been able to implement an EHR other than at CRH. This is due to the availability of funding to implement. DSOHF State Facilities have been exempted from the Federal HITECH Act and Affordable Care Act EHR requirements as well as cost reimbursement for implementation. DHHS has approached UNC to look at using their EHR system but this was determined as not supportable by UNC at this time. A plan for regional implementation of the Federal VA’s VistA Electronic Health Record (Veterans Health Information Systems and Technology Architecture) was completed and submitted to DHHS and State DIT for review. The plan has been updated to reflect implementation at all 3 DSOHF State Psychiatric Hospitals. Other State Facility types will be added as separate projects and as funding is made available. As directed by State CIO and DHHS PMO, a RFI was posted to determine EHR capabilities within the industry today. This RFI was issued without direction to system type or vendor. 12 responses were received and evaluated by DSOHF Stakeholders. The evaluation was based on technical functionality, clinical capabilities and cost. The evaluation has been submitted to DSOHF and DHHS Management for determination of direction.</p> <p>• CRH VistA EHR: Central Regional Hospital (CRH) completed a successful implementation pilot of the VistA Electronic Health Record (EHR). Along with physician order entry, clinical documentation for all disciplines, and lab results, CRH’s EHR includes Bar Code Medication Administration (BCMA). Costs have continued to be kept low through the use of predominantly open source (rather than proprietary) technologies and free upgrades to VistA from the VA available through the Freedom of Information Act (FOIA). CRH staff is currently focused on operations, enhancements, supportability, and continuous staff training for their EHR. Over the past year CRH has made enhancements directed toward End-of-Like medical equipment, therapeutic home visits, patient diagnosis information conforming to DSM V standards, PPD and immunizations integration with BCMA, upgrade graphing tools, document importation and report development. CRH has also improved the clinical consults package, health summary, integration of x-ray and EKG results and third party EHR records imports. Improvements to the VistA imaging viewers, active treatment tracking and progress notes were completed.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>18. NC Division of State Operated Healthcare Facilities (DSOHF) and NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> • Regional Laboratory Information Systems: Broughton and Cherry Hospitals have implemented replacement Laboratory Information Systems that now allow seven other regional state operated facilities to remotely access medical laboratory reports. DSOHF has approved and is funding CRH replacement Lab project that will standardize all State Psychiatric Hospitals on the same platform and regionalization processes for the Central Region Facilities. • Neuro-Medical Treatment Center Care Tracker (Electronic Medical Record): DSOHF has successfully expanded the use of CareTracker, an electronic health documentation system, to all of the Neuro—Medical Treatment Centers. This enables all to document resident care immediately and electronically, permits supervisors to ensure documentation is complete and will feed directly into the newly replaced and upgraded Hi-Tech MDS system for care plan information that is submitted to CMS to verify services provided. This new replacement system is from the same vendor as the Care Tracker system and fully integrates the 2 systems together.

<p style="text-align: center;">HIT INITIATIVE</p> <p>19. Comparative Effectiveness</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p>North Carolina universities and research organizations continue to engage in both the education of future Comparative Effectiveness Research (CER) researchers as well as the conduct of timely and policy-relevant initiatives.</p>	<ul style="list-style-type: none"> • North Carolina universities and research organizations continue to engage in both the education of future Comparative Effectiveness Research (CER) researchers as well as the conduct of timely and policy-relevant initiatives. UNC continues to train future researchers through AHRQ T-32 training programs and doctoral programs in pharmacoepidemiology. The Duke and the UNC-RTI NIH-sponsored Clinical Translation Science (CTSA) programs are collaborating with each other on CER educational issues, with some faculty jointly mentored across the institutions. The programs joined with RTI in sponsoring a Triangle CER conference in May, 2015. Wake Forest was funded as a CTSA center in 2015 and collaboration has begun. Duke is the coordinating center for the large NIH ‘collaboratory’ program, seeking to enhance research across major health care systems, and was recently renewed as the coordinating center for the nationwide PCORI Clinical Data Research Network program. • PCORI, in collaboration with NIH, has developed a national network of clinical data research networks (CDRN) called PCORnet. This network will be able to offer research opportunities to over 70M Americans through use of federated clinical data repositories. The long term goal is to facilitate research that is more generalizable, more responsive to patient need, and less costly. Such efforts will be transformative in enhancing our ability to offer research participation to the public. Three NC integrated delivery systems (UNC, Duke, Wake Forest) have received funding to join PCORnet in collaboration with Harvard and Vanderbilt universities. Duke continues as one component of the PCORnet coordinating center. In addition, Duke, UNC and Wake Forest are collaborating with Health Sciences South Carolina (HSSC) to federate EMR derived information across NC and SC. This effort, called the “Carolinas Collaborative” is supported by a \$15M award from the Duke Endowment. These networks will facilitate the conduct of multiple CER and quality improvement project funded by NIH, PCORI, AHRQ, foundations and industry. <p>An increasing characteristic of CER is its close engagement with patients, caregivers and other stakeholders. Duke and UNC each also host one of the over 20 PCORI-funded “Patient Powered Research Network” awards, in which the research questions are driven by the needs of the affected patients. The UNC award is partnered with the Crohns and Colitis Foundation, focused on inflammatory bowel disease, the Duke award is focused on childhood arthritis and related autoimmune conditions. Both networks are conducting multiple research studies with national scope.</p>

<p style="text-align: center;">HIT INITIATIVE</p> <p>19. Comparative Effectiveness</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> • North Carolina universities and research organizations continue to engage in both the education of future Comparative Effectiveness Research (CER) researchers as well as the conduct of timely and policy-relevant initiatives. To date, the programs have been highly successful, with more applicants than positions, and a good job market for those who will be graduating. Faculty are collaborating with colleagues nationally to develop shared core curricula in CER. Courses on informatics have grown at both universities. Duke currently offers a master’s program in health informatics, and UNC Chapel Hill has begun a professional master’s degree in informatics, is planning for a PhD, and has instituted a degree track on CER within their Masters of Science in Clinical Research degree. Several other UNC system campuses are also active in informatics training. All of the NC academic health centers are hiring faculty in health informatics. UNC recently brought on 4 faculty members at the Assistant Professor level with an active ongoing planning process, and has established a Program on Health Informatics in the School of Medicine. • Research is ongoing in a number of areas. NC is experienced in systematic review comparing tests and treatments, hosting two AHRQ funded Evidence-based Practice Centers at Duke and RTI-UNC. UNC also conducts reviews for a consortium of state Medicaid programs. Duke, UNC, Wake Forest and RTI are also centers of excellence in pharmacoepidemiology, with funded projects in CER across a range of conditions ranging from cardiac disease to cancer to renal failure. The Duke and UNC-RTI CTSA affiliates are meeting on a regular basis to discuss matters of mutual interest in the area of CER and health informatics applications. Research sponsored by industry, NIH and others are also ongoing, this work is not restricted to funding by AHRQ or PCORI. • The Patient Centered Outcome Research Institute (PCORI) is becoming much more active and NC has extended its early success. PCORI is a non-federal institution and will fund about \$500M per year in CER research and educational activities: www.pcori.org. To date, 32 competitive research projects have been awarded by PCORI to NC investigators at an aggregate funding level of over \$100M. The range of organizations participating includes UNC Chapel Hill, Duke, Research Triangle International, Family Health International, Wake Forest, Carolinas Medical Center and the Gramercy Research Group. Many of these awards involve investigators from other NC institutions and community partners. This volume of activity places North Carolina as a leader in patient-centered outcomes research and CER. Multiple additional collaborative proposals are in the works. NC faculty are working with PCORI in a number of capacities, including as a board member (Dr. Debra Barksdale of the

<p style="text-align: center;">HIT INITIATIVE</p> <p>19. Comparative Effectiveness</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<p>UNC School of Nursing) and in a number of advisory capacities. (Dr. Tim Carey of UNC and Dr. Gillian Sanders-Schmidler of Duke among others). Dr. Ethan Basch of UNC is an oncologist and member of the PCORI methodology committee.</p> <ul style="list-style-type: none"> • An area of growth in CER is the evaluation of tests, treatments and policies through large ‘pragmatic clinical trials’ and cohort studies. These studies enroll large numbers of research participants, are conducted where patients usually seek care, and address problems of importance to patients, caregivers, advocates and other stakeholders. Multiple NC investigators are now conducting such studies and additional submissions are planned: <ul style="list-style-type: none"> • Dr. Evan Meyers at Duke is conducting a multi-site cohort study to evaluate the effectiveness of the multiple treatments currently offered to women with uterine fibroids. • Dr. Sam Cykert at UNC seeks to improve hypertension care in 300 small NC primary care practices when added to standard clinical practice. • Dr. Pam Duncan at Wake Forest University is working with multiple hospitals in NC to evaluate the benefit of improved access to rehabilitation services after stroke. • Dr. Michael Kappelman at UNC is evaluating whether there is benefit from a 2 drug, compared with a one drug regimen for children with inflammatory bowel disease.

<p style="text-align: center;">HIT INITIATIVE</p> <p>20. NC Healthcare Information and Communications Alliance (NCHICA)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
<p><u>Background:</u> The North Carolina Healthcare Information and Communications Alliance, Inc. (NCHICA) was established as a 501(c)(3) NC nonprofit corporation in 1994 by Executive Order of the Governor. For 21-years, NCHICA has served as a neutral convener to build consensus solutions for compliance with policy and technical challenges. NCHICA’s mission is “assisting NCHICA members in transforming the US healthcare system through the effective use of information technology, informatics and analytics.” NCHICA participates in national initiatives and has been recognized for its contributions to the improvement of health and health care and the resultant quality and cost efficiencies. From the original 17 founding members, NCHICA has grown to over 300 organizations and 2,400 health professionals.</p>	<ul style="list-style-type: none"> • Over the past decade, NCHICA has been a contractor for the U.S. Health and Human Services Office of the National Coordinator for Health Information Technology (ONC) in developing privacy policies. NCHICA supports a number of HIE efforts including the NC Health Information Exchange that has the capability of supporting the State’s safety net providers, public health, practices and hospitals in achieving Meaningful Use requirements that will bring significant incentive payments to NC and underpins improvements in health care outcomes, safety, and improved efficiencies in the health care system. • NCHICA’s Mobile Device Taskforce published the <i>Bring Your Own Device (BYOD) Policy Framework: Policy Considerations & Recommendations for Securing & Managing Mobile Devices such as Tablets & Smartphones</i> to help healthcare providers, such as hospitals, physician offices, clinics, etc., implement policies for the secure use of mobile health devices. • NCHICA is a key participant in the Policy and Governance Framework Taskforce of the national Learning Health Community and hosted the inaugural meeting of the group in 2014. ONC has published their ten-year plan entitled, <i>Connecting Health and Care for the Nation: A 10- Year Vision to Achieve an Interoperable Health IT Infrastructure</i> which calls for the creation of a broad scale learning health system by 2024. • NCHICA has been actively involved in telehealth/telemedicine planning activity with representatives of leading health organizations in NC. • NCHICA’s Health Care IT/IS Internal Auditors Taskforce has published a bulletin on <i>Networked and Implantable Medical Devices</i> that evaluates the risks, common approaches to device management, and risk and control considerations. • The NCHICA ICD-10 Task Force has attracted national attention for its limited pilot for end-to-end testing of ICD-10 codes to ensure that no interruption in cash flow occurs when the transition from the current ICD-9 diagnostic codes takes place. The Task Force published a bulletin entitled <i>ICD-10 Testing with CMS</i> which was distributed to members of NCHICA’s ICD-10 Taskforce and TCI Workgroup as well as state health associations, professional societies and mental health agencies to share with their respective members.

<p style="text-align: center;">HIT INITIATIVE</p> <p>20. NC Healthcare Information and Communications Alliance (NCHICA)</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> • NCHICA sponsored the <i>eHealth Transformation Challenge</i> at Quintiles in RTP, NC. The event drew over 40 students, programmers, caregiver advocates and NCHICA members together to develop solutions that will improve the quality of life for caregivers of elderly patients suffering from dementia. • NCHICA has a robust educational platform and hosted Thought Leader Forums on <i>Using Analytics for Population Health Management, Connected Health and Patient-Generated Data, and Predictive Analytics for Population Health Management</i>. NCHICA also hosts two major annual conferences: the Academic Medical Center Security and Privacy Conference and the NCHICA Annual Conference and Exhibition.

<p style="text-align: center;">HIT INITIATIVE</p> <p>21. Heart Health Now</p>	<p style="text-align: center;">STATUS / UPDATE</p>
<p>Lead Agency – University of North Carolina - Cecil G. Sheps Center</p> <p>Federal Grant: \$15 million</p> <p>Purpose: Heart Health Now is one of seven regional cooperatives funded by the Agency for Healthcare Research and Quality’s (AHRQ) Evidence Now Program. Heart Health Now is a research project designed in response to AHRQ’s R18 funding mechanism to explore whether or not on-site practice coaching supported by advanced health informatics in small primary care practices will lead to rapid dissemination of new evidence with associated improvements in health outcomes.</p> <ul style="list-style-type: none"> - CCNC partnered with Sheps to leverage the NC HIE and the CCNC IC to provide the advanced informatics needed for participating practices. - AHEC partnered with Sheps to leverage its Practice Support Program to provide the on-site practice coaching intervention. <p>The Sheps Center has assembled a team of physician experts to assemble the new evidence and construct the patient outcome measures that will stratify adult patients in participating practices by 10 year cardiovascular risk then identify the interventions that would promptly reduce cardiovascular risk.</p>	<p>Funding for Heart Health Now began in May 2015. A three year project duration is anticipated. The first seven months have been used for evidence synthesis, practice recruitment, building the informatics tools, and training the practice coaching staff.</p> <p>The goals of Heart Health Now include:</p> <ul style="list-style-type: none"> • Teaching small primary care practices how to use informatics support to achieve effective population management and participate in care models associated with value-based care. • Enrolling 300 primary care practice sites with 10 or fewer primary care providers to participate in the intervention. • PRACTICE PARTICIPATION The first 150 of qualified and enrolled practice sites have been assigned their start dates. The first 50 sites will start in January 2016 while recruitment for the next 150 sites is ongoing. • EVIDENCE SYNTHESIS PERFORMED AND UP DATED The evidence team has selected the risk stratification process and designed the outcome measures most important to rapidly reduce cardiovascular risk including blood pressure control, appropriate aspirin use, cholesterol management, and smoking cessation. Web-based learning modules have been produced. • INFORMATICS SYSTEMS In partnership with the CCNC Informatics team, automated risk stratification tool built. Data extraction protocols for care measures created. Dashboards for practice utilization constructed. Initial testing completed. • PRACTICE COACHING / FACILITATION AHEC Practice Support has nine years of experience in working on site with practices and building workflows and systems to optimize care. The facilitators / coaches have now been trained in the context of Heart Health Now and cardiovascular risk reduction. • EVALUATION The evaluation data fields and tools for Heart Health Now are being constructed at UNC-Sheps. Once data from the practices are available, we’ll be able to analyze the impact of the Heart Health Now Intervention on important cardiovascular measures, cardiovascular events, and related healthcare utilization and costs. We will also measure the practices ability to adapt to change and the usability and their satisfaction with the informatics tools. Initial outcome data will be available in December 2016.

HIT INITIATIVE	STATUS / UPDATE
<p>21. Heart Health Now</p>	<ul style="list-style-type: none"> • GOALS <ul style="list-style-type: none"> ○ Teaching small primary care practices how to use informatics support to achieve effective population management and participate in care models associated with value-based care. ○ Enrolling 300 primary care practice sites with 10 or fewer primary care providers to participate in the intervention. ○ Reduce cardiovascular risk among the adult patient population of participating practices (est. 500,000 – 750,000 NC adults). ○ Demonstrate the effect of the risk reduction on cardiovascular events, death, healthcare utilization, and cost. ○ Improving public health given that cardiovascular disease is the #1 cause of death in North Carolina. ○ Prove that small primary care practices can rapidly implement new evidence and produce excellent outcomes with proper support and infrastructure. ○ Have systems in place to help these small practices thrive in Medicaid Reform and other new care models.

<p style="text-align: center;">HIT INITIATIVE</p> <p>22. DHHS Chief Information Officer</p>	<p style="text-align: center;">STATUS/UPDATE</p>
	<ul style="list-style-type: none"> • Established a proof of concept (POC) joint venture with DOT for BioMetrics electronic driver cards for driver identification, DOR for NC resident tax return fraud prevention and DHHS NCFAST smart phone facial recognition for Medicaid food stamp identity management with a NIST and NSTIC grant. POC pilot ends Aug 2016. • Direct all the NC HIE, CMS funding requests construction and negotiation of services and fees with CMS. • Key player for DHHS’s potential entry into North Carolina’s All Payers Claims Data Base model. • NC HIE transition management, per HIE FY16 law, from CCNC to the Government Data Analytics Center (GDAC). Establish SOW with GDAC and its service provider for execution of NC HIE transition of operations, deployment and buildout. Transition to be complete by February 29, 2016. • In the process of establishing a Medicaid Information Technology Architecture (MITA) data governance model for DHHS in conjunction with the Department of Information Technology (DIT). • On May 12, 2015, CMS conducted a Medicaid Electronic Health Records Incentive Program review. The following materials were reviewed to help evaluate North Carolina’s HITECH program and activities (Approved State Medicaid HIT Plan (SMHP), Approved IAPD, audit-strategy, quarterly Data Tool report, annual Data Reporting Tool report and the HITECH Pre-visit Checklist. The site visit did not result in any findings and/or recommendations for improvement. • NC HIT approached UNC to partner with them in using their EPIC EHR system for DHHS DSOHF facilities. UNC is interested but the timing is not workable at this time. We need to revisit this solution with UNC with a proposed optimal time for UNC with a pricing model. • Have reviewed and have identified UNC’s Heart Health Now that relates to a new state HIT initiative. No other new HIT initiatives have been identified. • Have reviewed identified HIT initiatives to avoid duplication of HIT efforts within the state.