



**North Carolina  
Department of  
Health and Human Services**

# **BIENNIUM INFORMATION TECHNOLOGY PLAN**

2012 and 2013

**Prepared by :**

DHHS/Division of Information Resource Management

**Date:**

November 1, 2010

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# 1. EXECUTIVE SUMMARY

## 1.1 Introduction

The North Carolina Department of Health and Human Services (DHHS) submits this Biennium Information Technology (IT) Plan to the NC State Chief Information Officer (CIO) in compliance with NC General Statute 147-33.72B. This Biennium IT Plan outlines the major technology changes needed to overcome current business challenges and to modernize the technology that supports the department's business objectives.

## 1.2 Major Factors Influencing This Plan

Several business and IT requirements/drivers and challenges influence this IT Plan for the upcoming biennium.

Business and IT requirements/drivers for this Biennium IT Plan are as follows:

- Secretary Lanier Cansler initiated DHHS Excels to ensure that all DHHS employees are working to make DHHS the best managed agency in state government, and that the department is effective in ensuring all North Carolinians enjoy optimal health and well-being.
- The DHHS Secretary delegates authority to the Division of Information Resource Management (DIRM) via Directive II-12. As such, DIRM supports DHHS' business functions by providing information resource management policy and planning services and information technology services.
- Various mandates that impact existing or require new technology solutions. These mandates include: health reform; health information technology; legislative and executive order IT mandates; statewide IT initiatives, services and standards; and other federal and state mandates that impact business programs and services.
- Other key business drivers in DHHS for automation are customer service, life cycle management for IT assets, data sharing, service delivery, training and management reporting.

Challenges to meeting the business and IT requirements/drivers stated in this Biennium IT Plan are as follows:

- The impact the current economy is having on the department's funding for IT initiatives and technology services.
- Obtaining adequate funding to globally address the refreshment of the department's IT assets.
- Having adequate resources to meet mandates. For example:
  - Statewide IT initiatives and services and corresponding cost estimates need to be developed in collaboration with state agencies. Additionally, adequate lead time also needs to be given to state agencies to identify budgetary impacts and to apply for and receive funding for participation.

- DHHS must have the flexibility to hire and retain IT contractors for the duration needed to ensure the success of multi-year initiatives.
- External approvals for DHHS IT initiatives that receive funding from grants and federal partners. These approvals must be fast tracked to minimize delays and risks to completing initiatives within the mandated timeframe.

## 1.3 Customer Segmentation

DIRM must take into account the following customer segments when developing technology solutions to support DHHS' business operations.

- New state operated facilities – Wireless technology will be a main component of the IT infrastructure implemented for new state operated health care sites that will be constructed as replacements for existing facilities. The Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS) and the Division of State Operated Health Care Facilities (DSOHF) are also exploring implementation of virtualized computing to support similar facility operations in the 15 state operated health care facilities. Wireless network and mobile computing technology is also being investigated for the new facility currently under construction that will house the State Laboratory of Public Health and Office of the State Medical Examiner.
- Call Centers – DHHS maintains a number of call centers throughout the state that require quality telephone platforms, call distribution systems and voice response units that can handle the volume of calls received.
- Satellite State Offices – A number of DHHS divisions and offices operate satellite offices throughout the state in addition to their central office location(s) in Wake County. IT infrastructure support of these sites relies heavily on remote management strategies supplemented with onsite staff or onsite visits from centrally located staff as needed to meet business needs.
- Home- and Field-based State Staff – Home-based employees require improved remote connectivity to the state network. DHHS is also exploring the use of other technologies such as virtualized desktops for these customers. DHHS will enhance mobile computing, remote connectivity and web-based applications already provided as needed to further assist field-based staff as they conduct their onsite visits with providers, clients, etc.
- Staff and Public with Disabilities – To support all staff, clients and members of the public seeking information, including those with disabilities, DHHS must ensure that its technology solutions, especially websites and applications, can support the use of assistive technology. DHHS serves as a leader in the state for compliance with Section 508 and W3C accessibility standards, and can share its knowledge base with other state agencies.
- Business Partners – DHHS must be able to share data with our internal and external partners securely once the appropriate data use agreements are in place.
- General Public – DHHS has, and will, continue to expand its use of web technology to further facilitate the general public's ability to access to data about the department's services and programs.

## 1.4 Major IT Initiatives

DHHS is planning to conduct the following major IT initiatives during the upcoming biennium.

- NC Families Accessing Services through Technology
- NC Medicaid Management Information System Plus (NCMMIS+) Program, which includes the following projects:
  - NCMMIS+ Program-level Project
  - Replacement NCMMIS+ Design, Develop and Install Project
  - Replacement NCMMIS+ Reporting and Analytics Project
  - Division of Health Service Regulation (DHSR) Business Process Automation System
- IT Infrastructure Project for Cherry Hospital Replacement
- IT Infrastructure Project for Broughton Hospital Replacement
- Crossroads State Agency Model Implementation
- Division of Child Development Attendance Reporting and Payment Delivery Services
- DHHS Business Electronic Access Management
- Division of Medical Assistance (DMA) Program Integrity Management System
- DMA Health Analytics
- Drug Regulatory Unit Management System
- IT Infrastructure for the New State Laboratory of Public Health and Office of the Chief Medical Examiner
- DMH/DD/SAS HEARTS Upgrades – Quantim Health Information Management (HIM) Suite
- ICD-10 Implementation
- Health Insurance Portability and Accountability Act of 1996 (HIPAA) ASC X12 5010 Transaction Standards Implementation

## 1.5 Application Modernization and Evolution

DHHS' IT initiatives will result in the modernization and/or evolution of the applications listed in the following table.

Application Name	Migration Strategy	Target Application (if replacing)
Clinical Abstraction Tracking System	Replace	BEAM
HEARTS – Affinity	Enhance	Implement the Quantim HIM Suite
HexLab LIS System	Replace	VistA components
DSDHH Client Tracking System	Replace	BEAM
Electronic Services System	Replace	BEAM

<b>Application Name</b>	<b>Migration Strategy</b>	<b>Target Application (if replacing)</b>
Food Stamps Information System	Replace	NC FAST
DHSR Nurse Aide/Health Care Personnel System	Replace	BPAS
DHSR Long Term Care Initiative System	Replace	BPAS
DHSR Master Facility File	Replace	BPAS
DRIVE	Replace	Replacement NCMMIS+ R&A
Fraud & Abuse Detection System	Replace	Replacement NCMMIS+ R&A
MMIS	Replace	Replacement NCMMIS+
Women Infants & Children	Replace	Crossroads SAM
Purchase of Medical Care Services	Replace	Replacement NCMMIS+ BEAM (for DVRS and DSB)
DHSR Medication Aide Testing System and Search Site.	Replace	BPAS
Integrated Payment and Reporting System	Replace	Replacement NCMMIS+
MC/Plus Pharmacy System	Replace	VistA components

Some of the other key applications DHHS has implemented, or will implement, in the current fiscal year (i.e., before the biennium) include the Health Information System, the NC Vital Records Automation system, and the Quantros Software-as-a-Service solution.

## 1.6 IT Infrastructure

DHHS' key IT infrastructure objectives for the biennium are as follows:

- IT Asset Life Cycle Management – DHHS has implemented automation for an IT asset inventory and will replace its physical computing infrastructure where financially possible.
- Standards – DHHS will continue to standardize technology and configuration for its IT infrastructure to enhance the IT efficiency of support and cost effectiveness, and to facilitate compliance with federal and state requirements.
- Process Improvement – DHHS will continue to improve the efficiency and effectiveness of our processes and services. The department has recently implemented change, incident and configuration management processes.

DHHS' planned IT infrastructure activities for the biennium include:

- Extending LANDesk Management Suite capabilities by upgrading to the latest version.
- Deploying Symantec as the end point security solution for DHHS servers.

- Migrating from Novell Netware to a file storage and access solution that leverages Active Directory.
- Extending our existing metrics and monitoring capabilities.
- Upgrading DHHS' networks to provide service optimization.
- Expanding the core network infrastructure at all state operated health care facilities to support new business needs.
- Expanding the core network infrastructure to support separate operations of the DSOHF and the DMH/DD/SAS (formerly all operations were in DMH/DD/SAS).

## 1.7 Client Computing Strategy

The department has implemented automation for life cycle management of workstations and will replace these assets as funding permits. Other planned activities include:

- Deploying the Windows 7 operating system for workstations.
- Deploying end point security with workstation security policies and enterprise reporting.
- Enhancing our remote connectivity to support mobile computing, reinforce our business continuity planning and provide enhanced teleworking.

## 1.8 Enabling Technology

Some of DHHS' current and planned IT initiatives and activities in biennium will leverage the following enabling technologies:

- Service-oriented architecture
- Software-as-a-Service
- Enterprise service bus
- Application server virtualization
- Magnetic card technology

DHHS' IT initiatives and activities in the future could benefit from the following enabling technologies:

- Cloud computing
- Virtual desktop environment
- Expanded use of mobile computing
- Expanded use of web-enabled file access and collaboration technologies such as SharePoint and Adobe Connect Pro
- Storage replication technologies for distributed applications to support business continuity and disaster recovery requirements

## 1.9 Privacy and IT Security

The DHHS Secretary delegates authority to the DHHS Privacy and Security Office (PSO) via Directive II-48. The DHHS PSO will continue to provide information security, HIPAA (including privacy, security and transactions, code sets and identifiers) and business continuity planning leadership for the department throughout the biennium.

Specific activities planned for the DHHS PSO include:

- Continuing the security assessment of HIPAA covered entities and expand to non covered entities within the department.
- Enhancing the department's privacy and security awareness training.
- Updating departmental IT standards and procedures as appropriate to meet new requirements.
- Participating in the development of the baseline security setting for the department's end point security solution.
- Addressing any hidden challenges or security gaps that may come to light during disaster recovery testing and business continuity efforts that the DHHS PSO oversees annually.

## **2. INTRODUCTION**

The North Carolina Department of Health and Human Services (DHHS) submits this Biennium Information Technology Plan to the NC State CIO in compliance with NC General Statute 147-33.72B.

### **2.1 Purpose**

This Biennium IT Plan outlines the major technology changes needed to overcome current business challenges and modernize the technology that supports the department's business objectives.

### **2.2 Scope**

This plan covers the upcoming biennium, beginning July 1, 2011, and ending June 30, 2013, and provides the following:

- The major technology-addressable, strategic challenges currently facing DHHS business areas.
- The major technology strategies needed to enable the preferred future business environment.
- The two-year technology plan for DHHS.

## 3. MAJOR FACTORS INFLUENCING THIS PLAN

Factors influencing this plan include requirements from the DHHS Excels initiative, the DHHS Secretary's delegation of authority to DIRM, mandates and key business drivers as well as challenges to meeting these requirements.

### 3.1 DHHS Excels

In 2009 Secretary Lanier Cansler launched DHHS to a new day. To be effective in ensuring all North Carolinians enjoy optimal health and well-being, all DHHS employees must work on making DHHS the best managed agency in state government. As part of this effort, DHHS has redefined its vision and mission statements, and developed the values essential to ensuring DHHS Excels.

#### 3.1.1 *DHHS Vision*

All North Carolinians will enjoy optimal health and well-being.

#### 3.1.2 *DHHS Mission*

The North Carolina Department of Health and Human Services, in collaboration with its partners, protects the health and safety of all North Carolinians and provides essential human services.

#### 3.1.3 *DHHS Values*

When all DHHS employees adhere to the following values, all North Carolinians will view DHHS as the best managed agency in state government.

- **Customer-focused.** North Carolinians are the center of our service design and delivery, and allocation of human and fiscal resources.
- **Anticipatory.** DHHS uses feedback from our customers and partners on all levels – national, state and local – to guide our thinking, planning, policies and practices.
- **Collaborative.** DHHS values internal and external partnerships.
- **Transparent.** DHHS shares information, planning and decision-making processes and communicates openly with its customers and partners.
- **Results-oriented.** DHHS emphasizes accountability and measures its work by the highest standards.

## 3.2 DHHS Directive Delegating Authority to DIRM

The DHHS Secretary delegates authority to DIRM via Directive II-12<sup>1</sup>, and defines the roles and responsibilities for DIRM in its relationship to DHHS and its divisions and offices. For the biennium, DIRM's leadership envisions that by continuing to use its cross-agency access to business requirements for technology and user communities, the division will continue to play a key role in the department's design, implementation and maintenance of enterprise strategies for technology, resulting in improved quality, lowered costs, and managed growth of the benefits and services delivered.

As subsequent sections of this Biennium IT Plan convey, fulfilling the directive for DIRM will continue to require significant technological changes to overcome the major strategic business challenges facing the department. Some of the changes have been and will continue to be at the enterprise level and coordinated by DIRM, while others have been and will continue to be at the level of various divisions and offices, with DIRM providing oversight and guidance.

## 3.3 Mandates

DHHS programs and services must comply with various state and federal statutes, laws, rules, regulations and executive orders as well as statewide IT initiatives, enterprise services and standards.

### 3.3.1 Health Reform

On March 23, 2010, Congress enacted the Patient Protection and Affordable Care Act (Public Law 111-148). The new law, often referred to as health care reform or health reform, and changes made to the Act by the subsequent Health Care and Education Affordability Act of 2010 (Public Law 111-152, signed into law on March 30, 2010), focuses on provisions to expand health insurance coverage, increase access to and the quality of care, grow the health care workforce, reduce health care costs, and improve the health care delivery system.

Key changes mandated by health reform that impact DHHS include, but are not limited to:

- Expanding Medicaid and NC Health Choice, NC's implementation of the State Children's Health Insurance Program (SCHIP).
- Simplifying enrollment and coordination among Medicaid, NC Health Choice and the new state-based American Health Benefit Exchange, which will allow individuals to purchase health insurance.
- Changing Medicaid payments to primary care, prescription drug rebates percentages, etc.
- Accommodating quality, prevention and wellness measures as well as health information technology (HIT).

Secretary Cansler has established a workgroup to identify the full impact of all health reform requirements on the department's services, programs and information systems. Known impacts include, but are not limited to the following DHHS divisions and offices: Division of Medical Assistance (DMA), Division of Public Health (DPH); Division of Mental Health, Developmental Disabilities, and Substance

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<sup>1</sup> Available at <http://info.dhhs.state.nc.us/olm/manuals/oos/dir/man/DirII-12a.htm>.

Abuse Services (DMH/DD/SAS); Division of Social Services (DSS); Office of Rural Health and Community Care (ORHCC); Division of Health Service Regulation (DHSR); and DIRM. Information systems that support these programs and related services will require enhancement.

### **3.3.2 Health Information Technology**

The federal economic stimulus legislation known as the American Recovery and Reinvestment Act of 2009 (ARRA) authorized nearly \$36 billion in funding for the development of a nationwide health information technology (HIT) infrastructure over six years. The purpose of the HIT infrastructure is to enable electronic health information to be recorded, shared and used in a way that improves the health care delivery system. HIT specific requirements are set forth in the Health Information Technology for Economic and Clinical Health (HITECH) portion of ARRA.

At a high level, HITECH requires:

- Wide adoption of electronic health records (EHRs)
- Establishment of interoperable systems for health information exchange (HIE)
- Aggregate data reporting to improve the quality of individual health care as well as overall population health reform

In Executive Order Number 19, Governor Beverly Perdue authorized the NC Health and Wellness Trust Fund Commission as the state's designated entity to apply for and receive federal funding under the HITECH provisions of ARRA. NC has also incorporated a new 501 (c) (3) non-profit entity, the North Carolina Health Information Exchange (NC HIE), to provide leadership and governance for the planning, design and implementation of a statewide health information exchange for North Carolina.

DHHS Secretary Cansler established the Office of Health Information Technology and appointed Dr. Steve Cline as the Assistant Secretary for Health Information Technology/State Health IT Coordinator effective June 1, 2010. The State Health IT Coordinator is charged with coordinating health IT efforts across state government, including Medicaid and Public Health, and other key stakeholders across the state, as well as ensuring consistency with federal policy and initiatives.

Key DHHS accomplishments and current efforts to date include, but are not limited to, the following:

- The Replacement NC Medicaid Management Information System Plus (NCMMIS+) is being developed with HIE capability and following the federal Medicaid Information Technology Architecture (MITA).
- The Replacement NCMMIS+ Reporting and Analytics solution will replace the current Medicaid decision support data warehouse with a more robust centralized informatics reporting solution capable of storing multi-payer claims data.
- DHHS' implementation of the NC Public Health Information Network (NC PHIN) meets requirements for quality reporting and improvement in the public health arena. NC PHIN provides syndromic surveillance, notifiable results, immunization reporting and statewide registries.
- DHHS continues to collaborate with external entities on the following HIE activities:
  - Development of the State Medicaid HIT Plan.
- The NC Medicaid HIT team is leading a national initiative, in collaboration with the Centers for Medicare and Medicaid Services (CMS) and the State of Pennsylvania, for states to collaborate on the development of business use cases to facilitate the rapid development of

systems to interface with the National Level Repository (NLR) and expedite the capacity for states to make incentive payments for HITECH compliance.

- NC is building its North Carolina Medicaid Incentive Payment System and has been the first state to test interfaces with the NLR.
- Community Care of North Carolina (CCNC), community health networks that are organized and operated by community physicians, hospitals, and local health departments and departments of social services, is administered by ORHCC.
- North Carolina Community Care Networks, Inc. (NCCCN) is a private non-profit arm of the CCNC enhanced medical home model Medicaid program that collects and reports valuable health information to improve the quality and to control costs for NC Medicaid.
- The State Health Director and the president of the NC Association of Local Health Directors of Public Health have jointly established a Public Health Information Technology Steering Committee to assure public health participation in the larger statewide HIT initiatives and proposal development.
- DHHS coordinates and collaborates with NC HIE to:
  - Map out a strategy to coordinate and align HIE, data access and public health reporting efforts.
  - Participate in NC HIE workgroups for Clinical and Technical Operations, Finance, Governance and Legal/Policy.
- DHHS has also formed a DHHS HIT Workgroup to coordinate the department's work around HIT and to collaborate with the NC HIE workgroups.

### **3.3.3 Legislative and Executive Order IT Mandates**

As an executive branch agency, DHHS must comply with the Governor's Executive Orders and NC legislative mandates concerning information technology. Current examples include, but are not limited to:

- IT Infrastructure Study and Assessment
- Use of a single state e-mail system
- Archiving state e-mail

### **3.3.4 Statewide IT Initiatives, Enterprise Services and Standards**

DHHS participates in statewide IT initiatives and leverages enterprise IT service offerings that meet our business requirements. Examples include migration to the new incident management system (Remedy), NCID Next Generation deployment, and end point security deployment.

The department also complies with state-level processes and standards set by the Office of the State CIO related to IT initiatives/projects, technical architecture, security and IT procurement.

### **3.3.5 Federal and State Mandates for DHHS Programs and Services**

DHHS programs and services are subject to various requirements set by state and federal legislation, regulations, rules and policies. Depending on the scope of these requirements, technology changes related

to compliance and implementation activities may be addressed via enhancements to legacy systems or major IT initiatives.

## **3.4 Key Business Drivers for Automation**

### **3.4.1 Customer Service**

A common thread underlying all identified drivers is customer service. DHHS Excels recognizes the criticality of being customer-focused and has embraced this as a key value. Therefore, improving DHHS' internal and external customer service is a primary business driver for automation.

### **3.4.2 Life Cycle Management for IT Assets**

To ensure that business operations and the delivery of benefits and services to NC residents continue uninterrupted, DHHS has implemented life cycle replacement strategies for all IT assets (e.g., voice and data networks, development/test/production servers, printing services, and desktop computing environment). DHHS management recognizes the importance of establishing a budget for IT asset life cycle management. In 2008, the DHHS CIO and staff developed and submitted the first expansion budget request for department-wide IT infrastructure replacement. Due to pressing direct service needs and funding limitations, this request was not included in the Governor's budget recommendations. DHHS has implemented automation for an IT asset inventory to facilitate the identification of replacement needs, and will continue to pursue funding to globally address these requirements.

### **3.4.3 Data Sharing**

DHHS will continue to expand sharing of data securely within the department, especially through increasing the number of programs using the department's Client Services Data Warehouse (CSDW), and with federal, local and other external partners (e.g., EHR, HIE, and Social Security Administration and Medicaid data). Data sharing facilitates DHHS' ability to comply with federal and state mandates and achieve the goals of DHHS Excels.

### **3.4.4 Service Delivery**

DHHS will continue to modernize its portfolio of applications and information systems, especially those that are built on outdated technology, through IT initiatives such as North Carolina Families Accessing Services through Technology (NC FAST) and the Replacement NCMMIS+ Program. These improvements address the department's evolving business requirements and enable the department to:

- Operate more effectively and efficiently, thereby reducing costs.
- Adapt to changes in business and technology quickly.
- Collect revenue and make electronic payments.

### **3.4.5 Training**

Technology can facilitate the department's ability to deliver both business and technology training, especially in times where the budget will not allow for travel or enrollment in external training programs and courses. DHHS will expand its use of computer-based training, web casts and webinars, and leveraging regional centers as technical solutions for the delivery of workforce training.

### **3.4.6 Management Reporting**

The department will expand its management reporting to meet new requirements such as DHHS Excels, health reform and HIT.

## **3.5 Challenges in Meeting Requirements**

### **3.5.1 Current Economy**

The State of North Carolina is challenged by the economic downturn that has been impacting the entire nation. Financial forecasts indicate that it will be 2013 before the State's revenues return to 2008 levels. DHHS requires continued state funding to implement and maintaining IT solutions that are key to realizing efficiencies in the delivery of critical benefits and services to NC residents. To meet this challenge, DHHS will continue to pursue federal and other grant funding sources (e.g., ARRA) for IT efforts.

DHHS is exploring deployment of cost effective technologies such as open source solutions, cloud computing, etc. The department would also benefit from exploration of these technologies at the state level.

### **3.5.2 Funding for Life Cycle Management of IT Assets**

DHHS implemented automation for IT asset life cycle management during the last biennium. Funding will be needed to refresh our assets accordingly.

### **3.5.3 Resources to Meet Mandates**

#### **3.5.3.1 Funding for Statewide IT Initiatives and Services**

As noted above, state funding available for IT initiatives is extremely limited at this time given the financial challenges the state is facing. Further economic strain is placed on state agencies when statewide IT initiatives and changes to existing services are planned and initiated without:

- Collaborating with business agencies to define requirements prior to establishing statewide IT initiatives.
- Estimating the financial impacts to the state agencies that must comply.

- Providing sufficient lead time for state agencies to identify budget impacts and to request and receive funding through the state budget cycles.

### **3.5.3.2 Human Resources**

IT initiatives require a mix of state employees and short- and long-term contract staffing. DHHS has continuously communicated the need for the state-level IT staffing contracts to be flexible enough to enable the department to acquire and retain skilled contract staff for the amount of time needed to complete initiatives successfully. It is critical for the success of multi-year initiatives that the state's IT staffing contracts provide options that are in alignment with the need for continuity of resources throughout the duration of the effort.

### **3.5.4 Ability to Fast Track IT Initiatives**

DHHS has the opportunity to pursue grants and other federal funds (e.g., ARRA) to fund IT initiatives that have mandated timelines for the use of funds and completion. DHHS must be able to fast track external approvals related to these initiatives (e.g., project approvals, budget transfers, contract approvals) to minimize delays to the initiation of work efforts.

## **4. CUSTOMER SEGMENTATION**

### **4.1 New State Operated Facilities**

DHHS opened Central Regional Hospital (CRH) in July 2008 as the first of three new hospitals that NC is building to address the mental health needs of our citizens as we enter the 21<sup>st</sup> Century. Wireless networks and communications, mobile computing devices and a personnel duress alert system were deployed at CRH to increase staff efficiency, improve decision support, reduce errors, facilitate intra/interdepartmental communications, and increase the security and safety of patients and staff. Similar technologies will also be deployed in remaining two replacement hospitals. In some case, wireless technology has been deployed to older facilities where it makes the most operational sense.

DHHS is also exploring new technologies such as virtualized desktop implementation to support similar facility operations (e.g., nursing stations, financial operations, doctors and clinics) in the 15 health care facilities the department operates.

Wireless network and mobile computing technology are also being investigated for the new facility currently under construction that will house the State Laboratory of Public Health and Office of the State Medical Examiner.

### **4.2 Call Centers**

DHHS operates several call centers like the Food Stamps Electronic Benefit Transfers and Information and Referral (NC CARE-LINE), Child Support Enforcement, and the DHHS Customer Support. These sites rely on quality telephone platforms, call distribution systems and voice response units that can handle the volume of calls received.

### **4.3 Satellite State Offices**

DHHS divisions and offices have a number of satellite offices that are located throughout the state. IT infrastructure support to a large extent is accomplished through remote management services. However, onsite staffing or onsite visits from centrally located staff are also needed to address business needs.

### **4.4 Home- and Field-Based State Staff**

Many DHHS divisions and offices have staff that work either at home or in the field with service providers and clients. Home-based staff requires improved remote connectivity to the state network. We are also exploring the benefits of the use of virtualized desktops. The department will also continue to benefit from the mobile computing, remote connectivity and use of web-based applications that are provided to assist staff working in the field.

## 4.5 Staff and Public with Disabilities

DHHS has a number of divisions that are dedicated to providing services to individual with disabilities. The department also has on staff individuals with visual and other disabilities that impair their ability to use conventional technology. These users often need to use assistive technology to access the state's applications and websites. Therefore, DHHS continues to serve as a leader in the state in regards to ensuring technology solutions comply with Section 508 and W3C accessibility standards, and is willing to share our knowledge in this area with other state agencies.

## 4.6 Business Partners

DHHS partners with various public and private health care entities throughout the state. Examples of these partners include for profit and not for profit service providers, local governments including local public health and social services departments, local managing entities for community-based delivery of MH/DD/SAS, area agencies on aging, research partners (e.g., universities), etc. DHHS also has business relationships with the federal agencies that provide requirements and funding for state administered and state/local delivered services and benefits. DHHS must be able to continue to share data with our internal and external partners securely, and to ensure that the appropriate data use agreements are in place.

## 4.7 General Public

DHHS will continue to expand the availability of data about the department's services and programs online for access via the Internet. Examples of expanded web technology include, but are not limited to:

- Providing access to systems for the purpose of reporting complaints and researching administrative actions taken against providers licensed/certified by DHHS.
- Enabling NC residents to pre-qualify and apply for participation in the Food and Nutrition Services program.
- Obtaining information and referral data.

## 5. MAJOR IT INITIATIVES

DHHS plans to conduct the following major IT initiatives during the biennium.

### NOTE

All initiatives and programs discussed in this section are based on projects that are known at the time of this writing.

In the sections that follow, DHHS provides *order-of-magnitude costs* for the department's planned initiatives. The estimated costs provided are for the total cost of ownership, which will extend beyond the biennium, and are meant to include the cost of internal staff, outside consultants, hardware, software, etc. DHHS plans to submit expansion budget requests and anticipates that it is eligible to receive some funding participation from federal, local, grant and other sources to apply toward the costs of some of the projects under the initiatives.

Dates provided are based on the calendar year.

### 5.1.1 *NC Families Accessing Services through Technology Program*

#### Summary Description

NC FAST is designed to improve the way DHHS and the 100 county departments of social services provide benefits and services to NC residents. Benefits and services encompass the following mandated programs: Child Welfare, Adult and Family Services, Food and Nutrition Services, Energy Assistance, Medicaid, Work First, Special Assistance, Refugee Assistance, and Child Care.

#### Major objectives to be achieved and business benefits/value that will accrue to the agency/state

NC FAST is an enterprise approach that will enable DHHS to deliver family-centered benefits and services to NC residents through enabling technology.

#### Approach for accomplishing it

In an effort to expedite interim functionality to North Carolina's 100 county departments of social services staff and to ensure program success by staged implementation of functional modules, NC FAST identified four main components:

- Online Verification – in production
- Service Delivery Interface – in production
- Case Management – in process; vendor COTS solution
- ePASS (Electronic Pre-Assessment Screening Service) – Phase 2 is in process; vendor COTS solution

Project Sponsor: DHHS Office of the Secretary

#### Timeframe

Q3 2006 through Q2 2017

#### Relationship with other agency initiatives/programs/projects

N/A

<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$377.9M – this is the current estimated not-to-exceed cost per the federally approved Advanced Planning Document; these costs will be revised as DHHS negotiates and progressively awards other contracts for the NC FAST Program

## 5.1.2 NCMMIS+ Program

The NCMMIS+ Program contains the following four IT projects.

### 5.1.2.1 NCMMIS+ Program-level Project

<b>Summary Description</b>	<p>This project will capture costs and hours associated with the program management for all projects related to the NCMMIS+ replacement, i.e., activities not related to a specific project. Items reported in this project include management oversight for the program, federal reporting required for the program, program-level budgeting, LAN and web support, program operational costs, etc. By the end of the program it is estimated that the total costs for the Program-Level Project will equal approximately 5% of the total cost of the program.</p> <p>The projects that are in scope of this program-level project are as follows:</p> <ul style="list-style-type: none"> <li>• Replacement NCMMIS+ DDI Project</li> <li>• Replacement NCMMIS+ Reporting and Analytics (R&amp;A) Project</li> <li>• Division of Health Service Regulation (DHSR) Business Process Automation System (BPAS) Project</li> <li>• SCHIP Business Rules and Analysis Project – This project is not listed in this plan as a major IT initiative as it is an analysis effort that will externalize business rules for benefit plans and edits, and develop a comprehensive pricing manual for NC Health Choice.</li> </ul>
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<ul style="list-style-type: none"> <li>• Satisfy the current business needs of the department.</li> <li>• Satisfy CMS requirements.</li> <li>• Be implemented in accordance with the state's quality assurance standards, state's quality assurance standards, IEEE standards for developing software life cycle processes and the State CIO's project approval process.</li> <li>• Ensure business program credibility with all stakeholders.</li> </ul>
<b>Approach for accomplishing it</b>	<p>Provide project management and oversight for the Replacement NCMMIS+ Program</p> <p>Project Sponsor: DHHS Assistant Secretary for Finance and Business Operations</p>
<b>Timeframe</b>	Q3 2006 – Q4 2013

<b>Relationship with other agency initiatives/programs/projects</b>	<ul style="list-style-type: none"> <li>• Replacement NCMMIS+ Design, Develop and Install (DDI) Project</li> <li>• Replacement NCMMIS+ R&amp;A Project</li> <li>• DHSR Regulation BPAS Project</li> <li>• SCHIP Business Rules and Analysis Project</li> </ul>
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$11M

### 5.1.2.2 Replacement NCMMIS+ Design, Develop and Install Project

#### Summary Description

This project will implement a componentized, integrated, replacement of the NC Medicaid Management Information System and fiscal agent operations and related business and technical processes that will satisfy all DHHS requirements. The replacement NCMMIS+ will be a multi-payer claims processing system that will address the following state-operated programs:

- Title XIX Medicaid Health Insurance Plan administered by DMA
- Title XXI NC Health Choice, the SCHIP administered by DMA
- Multiple benefit programs administered by DMH/DD/SAS
- Purchase of Medical Care Services (POMCS) administered by DPH (includes the Migrant Health Program in ORHCC)
- CCNC-UP (Uninsured Parents) and Health Net benefit programs administered by ORHCC

<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<p>Implement a replacement NCMMIS+ system and associated business services that will:</p> <ul style="list-style-type: none"> <li>• Satisfy the business needs of the legacy NCMMIS+.</li> <li>• Support future initiatives involving ICD-10 codes and evolving Health Insurance Portability and Accountability Act of 1996 (HIPAA) rules.</li> <li>• Satisfy CMS certification requirements.</li> <li>• Align with the State Technical Architecture and comply with statewide security standards.</li> <li>• Implement a solution that aligns with the state's quality assurance standards, IEEE standards for developing software life cycle processes and the State CIO's project approval process.</li> <li>• Support the expanding demand for data access by the recipient and provider communities.</li> <li>• Support the expanding demand for data access in support of forecasting/budgeting and financial reporting.</li> <li>• Provide a solution that can support the future direction of health care programs and a recipient community that extends beyond the needs of traditional Medicaid services.</li> <li>• Position the department favorably for MITA alignment and future growth.</li> <li>• Have credibility with all stakeholders.</li> </ul>
<b>Approach for accomplishing it</b>	<p>Vendor COTS solution</p> <p>Project Sponsor: DHHS Assistant Secretary for Finance and Business Operations</p>
<b>Timeframe</b>	Q4 2008 – Q4 2011 – revised timeframe under review.
<b>Relationship with other agency initiatives/programs/projects</b>	<p>The Replacement NCMMIS+ DDI Project is aligned with the following DHHS IT initiatives:</p> <ul style="list-style-type: none"> <li>• NCMMIS+ Program-level Project</li> <li>• Replacement NCMMIS+ R&amp;A Project</li> <li>• DHSR BPAS Project</li> <li>• SCHIP Business Rules and Analysis Project</li> </ul>
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$92.7M

### 5.1.2.3 Replacement NCMMIS+ Reporting and Analytics Project

<b>Summary Description</b>	<p>This project will implement a state-of-the-art multi-payer data warehouse, surveillance and utilization review system, and decision support system that meets not only current DHHS needs, but provides a platform for changes leading to future growth with enhanced self-service by the end-user community.</p>
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<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<p>To implement an information system and associated business services that will:</p> <ul style="list-style-type: none"> <li>• Improve timely access and query capabilities by internal and external stakeholders to enhance DHHS management planning and control capabilities.</li> <li>• Acquire reporting and analytics tools to provide broad business intelligence capability to support management of the NC Medicaid and other state programs.</li> <li>• Identify and analyze the behavior of DHHS recipients and providers to design or evaluate appropriate cost effective and cost containment initiatives.</li> <li>• Provide users with intuitive decision support software to support agency decision making to support the efficient, economical and effective administration of the Medicaid Plan, NC Health Choice and other state programs.</li> <li>• Expand and improve the state's identification of fraud, waste and abuse.</li> <li>• Track and monitor trends in budget and cost patterns across DHHS lines of business.</li> <li>• Comply with HIPAA and other requirements regarding the safeguarding of protected health information.</li> <li>• Interface the R&amp;A solution with the North Carolina Teachers and State Employees Health Plan.</li> </ul>
<b>Approach for accomplishing it</b>	<p>Vendor COTS solution</p> <p>Project Sponsor: DHHS Assistant Secretary for Finance and Business Operations</p>
<b>Timeframe</b>	<p>Q3 2008 – Q4 2011</p>
<b>Relationship with other agency initiatives/programs/projects</b>	<ul style="list-style-type: none"> <li>• NCMMS+ Program-level Project</li> <li>• Replacement NCMMS+ DDI Project</li> </ul>
<b>Relationship with statewide initiatives/programs/projects</b>	<p>N/A</p>
<b>Estimated Cost</b>	<p>\$10.6M</p>

**5.1.2.4 DHHS Business Process Automation System Project**

<b>Summary Description</b>	<p>Acquire and implement an IT solution that will support the DHHS business functions as well as critical processes within several business areas of the Medicaid program.</p> <p>DHSR is responsible for allocating, approving, licensing, and inspecting health care facilities, services, and equipment within North Carolina. Ninety-seven percent (97%) of DHSR-regulated services are also Medicaid providers. In addition, DHSR health care personnel registry information is essential to Medicaid providers. DHSR and the Medicaid Program collect and rely on similar data. BPAS and the Replacement NCMMS+ will ensure efficient data sharing.</p>
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<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<p>Implement an IT solution that will support the DHSR business functions as well as critical processes within several business areas of the Replacement NCMMIS+ (e.g., provider enrollment, credentialing, and claims payment). The business benefits are:</p> <ul style="list-style-type: none"> <li>• Reduction in manual analysis, reporting and routing of requests for information from other business areas</li> <li>• Reductions in time and costs associated with handling of phone and mail requests requiring copying and distribution of printed materials</li> <li>• Reduction in redundant operations or work items that are handled multiple times by the different business areas such as duplicate manual data collection and entry</li> <li>• Reduction in the number of temporary staff required during high volume periods</li> <li>• Greater support for existing, new or changed business models, which includes improved process documentation capable of reacting to changes in regulations or laws governing that business</li> <li>• Reduced process cycle time through the standardization of data, processes and transactions</li> <li>• Improved decision making capabilities through timely review and monitoring of process results</li> <li>• Consistent execution through standardization of repeatable processes</li> <li>• Completion and automation of the business process models for the six business areas</li> </ul>
<b>Approach for accomplishing it</b>	<p>Vendor COTS solution – contract negotiation currently in process</p> <p>Project Sponsor: DHHS Assistant Secretary for Finance and Business Operations</p>
<b>Timeframe</b>	<p>Q3 2008 – Q2 2012 – end date is pending the outcome of current contract negotiations</p>
<b>Relationship with other agency initiatives/programs/projects</b>	<ul style="list-style-type: none"> <li>• NCMMIS+ Program-level Project</li> <li>• Replacement NCMMIS+ DDI Project</li> </ul>
<b>Relationship with statewide initiatives/programs/projects</b>	<p>N/A</p>
<b>Estimated Cost</b>	<p>\$7M</p>

### **5.1.3 IT Infrastructure Project for Cherry Hospital Replacement**

<b>Summary Description</b>	<p>Provide the core IT infrastructure supporting WAN, LAN, communications and wireless network and application implementation at the new facility that is being constructed to replace the current Cherry Hospital.</p>
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<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	The core IT infrastructure will support: 1) existing and new business and clinical applications; and 2) parallel projects within DHHS such as updating operations that will provide improved efficiencies and communication capabilities for facility staff on a day-to-day basis for maximized productivity. The resulting IT infrastructure will enhance the provision of psychiatric support and treatment while ensuring the safety of clients and facility staff.
<b>Approach for accomplishing it</b>	IT Infrastructure Project  Hospital construction will be overseen by DHHS Office of Property and Construction.  Project Sponsor: DMH/DD/SAS and DSOHF
<b>Timeframe</b>	Q2 2010 – Q1 2013
<b>Relationship with other agency initiatives/programs/projects</b>	Construction of the replacement facility by the DHHS Office of Property and Construction
<b>Relationship with statewide initiatives/programs/projects</b>	Mental Health Reform
<b>Estimated Cost</b>	\$26.3M

#### **5.1.4 IT Infrastructure Project for Broughton Hospital Replacement**

<b>Summary Description</b>	Provide the core IT infrastructure supporting WAN, LAN, communications and wireless network and application implementation at the new facility that is currently being constructed to replace the current Broughton Hospital.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	The core IT infrastructure will support: 1) existing and new business and clinical applications; and 2) parallel projects within DHHS such as updating operations that will provide improved efficiencies and communication capabilities for facility staff on a day-to-day basis for maximized productivity. The resulting IT infrastructure will enhance the provision of psychiatric support and treatment while ensuring the safety of clients and facility staff.
<b>Approach for accomplishing it</b>	IT Infrastructure Project  Hospital construction will be overseen by DHHS Office of Property and Construction.  Project Sponsor: DMH/DD/SAS and DSOHF
<b>Timeframe</b>	Q3 2010 – Q3 2013
<b>Relationship with other agency initiatives/programs/projects</b>	Construction of the replacement facility by the DHHS Office of Property and Construction
<b>Relationship with statewide initiatives/programs/projects</b>	Mental Health Reform
<b>Estimated Cost</b>	\$26.3M – this estimate will be refined as planning for this effort continues.

### 5.1.5 **Crossroads State Agency Model (SAM) Implementation**

<b>Summary Description</b>	This project will replace the existing Women's Infant and Children Supplemental Nutrition System (WIC). North Carolina is serving as lead for a four-state (NC, Alabama, West Virginia and Virginia) federal consortium to design, develop and implement a new system to meet the WIC business needs.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Provide a stable web-based application that supports WIC participants, vendors, local agency staff, directors, nutritionists, program assistants, and state and federal staff in the administration and oversight of the WIC program. Provide an automated system with features such as interfaces that allow for integration to assist in program administration and outcome tracking.
<b>Approach for accomplishing it</b>	Vendor custom solution Sponsor: Division of Public Health
<b>Timeframe</b>	Q2 2009 – Q4 2012
<b>Relationship with other agency initiatives/programs/projects</b>	NC Immunization Registry and Health Information System (HIS)
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$24.6M

### 5.1.6 **DCD Attendance Reporting and Payment Delivery (ARPD) Services**

<b>Summary Description</b>	Implement an automated child care facility attendance reporting solution to facilitate the automated calculation of subsidized child care payments from the state.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Deliver a system that reports child care facility attendance in real time and facilitates the automatic calculation of payments from the state's automated clearinghouse account to reduce errors and administrative costs.
<b>Approach for accomplishing it</b>	Vendor attendance tracking and reporting to include use of POS magnetic card technology at child care facilities. Final approach pending outcome of the contract negotiations currently in process. Project Sponsor: Division of Child Development (DCD)
<b>Timeframe</b>	Q4 2010 – Q1 2012
<b>Relationship with other agency initiatives/programs/projects</b>	N/A
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$20M

### 5.1.7 *DHHS Business Electronic Access Management (BEAM)*

<b>Summary Description</b>	This project will replace outdated legacy systems that are currently used by Division of Vocational Rehabilitation Services (DVRS), the Division of Services for the Blind (DSB), and the Division of Services for the Deaf and the Hard of Hearing (DSDHH) for application and payment processing and to track services offered.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Implement a fully automated web-accessible client data and case management solution (BEAM), along with optional related technical, operational and maintenance support services.
<b>Approach for accomplishing it</b>	Vendor COTS solution Sponsors: DVRS, DSB and DSDHH
<b>Timeframe</b>	Q3 2010 – Q4 2011
<b>Relationship with other agency initiatives/programs/projects</b>	N/A
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$9.4M

### 5.1.8 *DMA Program Integrity Management System (PIMS)*

<b>Summary Description</b>	Provide a program integrity management system so that data that can be easily viewed, searched, shared and routed by staff; and provide a tracking system that routes information according to specific business rules and processes.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Data sharing and integration of information between Program Integrity and other DMA systems. Project scope currently under discussion.
<b>Approach for accomplishing it</b>	To be determined Sponsor: DMA
<b>Timeframe</b>	Q3 2010 – Q1 2012 – estimate may change as project scope is currently under discussion.
<b>Relationship with other agency initiatives/programs/projects</b>	To be determined
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	To be determined

### 5.1.9 *DMA Health Analytics*

<b>Summary Description</b>	This initiative will implement an automated Fraud and Abuse Management System to detect and investigate fraudulent and abusive practices by Medicaid providers.
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<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<ul style="list-style-type: none"> <li>• Implement a user-friendly fraud and abuse solution that supports DMA's Program Integrity activities.</li> <li>• Significantly increase the detection of fraud, waste and program abuse, and maximize the potential for increased recoveries.</li> </ul>
<b>Approach for accomplishing it</b>	Vendor COTS solution
<b>Timeframe</b>	Q1 2010 – Q3 2011
<b>Relationship with other agency initiatives/programs/projects</b>	N/A
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$1.6M

### ***5.1.10 Drug Regulatory Unit Management System (DRUMS)***

<b>Summary Description</b>	Implement a new automated registration and data system.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Accommodate online, customer-oriented, web-based registration and payment as well as allowing for complete management of, and where feasible, automation of all of the business registration, re-registration, inspection and drug destruction activities. It will also allow external agencies such as the Drug Enforcement Agency to query for data.
<b>Approach for accomplishing it</b>	DIRM developed solution Project Sponsor: DMH/DD/SAS
<b>Timeframe</b>	Q3 2011 – Q2 2012
<b>Relationship with other agency initiatives/programs/projects</b>	Business process re-engineering to coincide and integrate with other DHHS programs that are subject to drug regulatory requirements.
<b>Relationship with statewide initiatives/programs/projects</b>	Integrating online payments with the Common Payment System managed by the Office of Information Technology Services (ITS).
<b>Estimated Cost</b>	\$800K

### ***5.1.11 IT Implementation for the New State Laboratory of Public Health and Office of the Chief Medical Examiner***

<b>Summary Description</b>	This project will implement the IT required for the new facility that will replace the current locations for the State Laboratory of Public Health (SLPH) and the Office of Chief Medical Examiner (OCME).
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	Update SLPH and OCME capacity and capability with appropriate facilities aligned with the services performed and meet the required state standards of operation.

<b>Approach for accomplishing it</b>	IT Implementation Project managed by DPH Construction will be overseen by DHHS Office of Property and Construction Project Sponsor: DPH
<b>Timeframe</b>	Q4 2010 – Q1 2012
<b>Relationship with other agency initiatives/programs/projects</b>	Construction of the new facility by the DHHS Office of Property and Construction.
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	\$500K

### **5.1.12 DMH/DD/SAS HEARTS Upgrades – Quantim Health Information Management (HIM) Suite**

<b>Summary Description</b>	Implement the Quantim HIM Suite for the state operated healthcare facilities. This effort will result in an upgrade of the legacy Healthcare Enterprise Accounts Receivable and Tracking System (HEARTS).
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	<ul style="list-style-type: none"> <li>• Improve revenue enhancement and recovery.</li> <li>• Improve patient safety and quality of care.</li> <li>• Achieve ICD-10 compliance.</li> <li>• Improve functionality for chart tracking, correspondence management and chart completion.</li> <li>• Make chart documentation available on line.</li> </ul>
<b>Approach for accomplishing it</b>	Vendor COTS solution – contract negotiation currently in process Project Sponsor: DSOHF and DMH/DD/SAS
<b>Timeframe</b>	To be determined – project is on hold
<b>Relationship with other agency initiatives/programs/projects</b>	ICD-10 Implementation
<b>Relationship with statewide initiatives/programs/projects</b>	N/A
<b>Estimated Cost</b>	To be determined – project is on hold

### **5.1.13 International Classification of Diseases (ICD)-10 Implementation**

<b>Summary Description</b>	All DHHS programs that submit or process medical claims must convert their billing and claims processing systems from use of the ICD-9 to the ICD-10 diagnosis and procedure codes by October 1, 2013.
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<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	DHHS programs will be able to continue to bill and process medical claims using the new ICD-10 codes, thereby preserving the flow of payments for health services.
<b>Approach for accomplishing it</b>	Work with vendors to ensure systems are ICD-10 compliant. Coordinate and implement coding changes required to ensure DHHS supported systems are ICD-10 compliant. Project Sponsor: DHHS Assistant Secretary for Finance and Business Operations
<b>Timeframe</b>	Q2 2010 – Q2 2014
<b>Relationship with other agency initiatives/programs/projects</b>	HIPAA ACS X12 5010 Transaction Standards Implementation and other HIPAA activities conducted by the DHHS PSO.
<b>Relationship with statewide initiatives/programs/projects</b>	ICD-10 compliance is required for all state health care entities.
<b>Estimated Cost</b>	Under development

#### **5.1.14 HIPAA Accredited Standards Committee (ASC) X12 5010 Transaction Standards Implementation**

<b>Summary Description</b>	All HIPAA covered divisions must be compliant with new standard for conducting medical claims transactions, i.e., ASC X12 5010 by January 1, 2012. Medical claims billing and processing systems will be migrated from ASC X12 4010A to the 5010 standard transaction code sets.
<b>Major objectives to be achieved and business benefits/value that will accrue to the agency/state</b>	DHHS programs will be able to continue to bill and process medical claims using the new 5010 standard for electronic transactions, thereby preserving the flow of payments for health services will be preserved.
<b>Approach for accomplishing it</b>	Work with vendors to ensure systems are compliant with the 5010 transaction standard. Coordinate and implement coding changes required to ensure DHHS supported systems are compliant with the 5010 transaction standard. Project Sponsor: DHHS Assistant Secretary of Finance and Business Operations
<b>Timeframe</b>	Q2 2010 – Q3 2012
<b>Relationship with other agency initiatives/programs/projects</b>	ICD-10 Implementation and other HIPAA activities conducted by the DHHS Privacy and Security Office
<b>Relationship with statewide initiatives/programs/projects</b>	HIPAA X12 5010 compliance for transactions is required for all covered state health care entities.
<b>Estimated Cost</b>	Under development

## 6. APPLICATION MODERNIZATION AND EVOLUTION

### 6.1 Overview/Objectives

DHHS' application modernization and evolution includes a range of IT activities that will increase the alignment between the applications that provide automation and the changing goals of our business customers. In the current economic conditions it is more imperative than ever that DHHS' IT activities provide efficient, secure, reliable, cost-effective and improved information and technology that supports the delivery of benefits and services to NC residents.

Key objectives of the current IT initiatives that will result in application modernization and evolution are as follows:

- Improve patient care, including steps towards achieving an Electronic Health Record (EHR).
- Assist with the future implementation of Health Information Exchange and HIT.
- Improve benefits and services to enable families in need to become more self-sufficient through a true case management framework.
- Provide the highest level of health care and human services available for the state's adults, children and families.

### 6.2 Applications Roadmap

Application Name	Migration Strategy	Target Application (if replacing)
Clinical Abstraction Tracking System	Replace	BEAM
HEARTS – Affinity	Enhance	Implement the Quantim HIM Suite
HexLab LIS System	Replace	VistA components
DSDHH Client Tracking System	Replace	BEAM
Electronic Services System	Replace	BEAM
Food Stamps Information System	Replace	NC FAST
DHSR Nurse Aide/Health Care Personnel System	Replace	BPAS
DHSR Long Term Care Initiative System	Replace	BPAS
DHSR Master Facility File	Replace	BPAS
DRIVE	Replace	Replacement NCMMIS+ R&A
Fraud & Abuse Detection System	Replace	Replacement NCMMIS+ R&A

<b>Application Name</b>	<b>Migration Strategy</b>	<b>Target Application (if replacing)</b>
MMIS	Replace	Replacement NCMMIS+
Women Infants & Children	Replace	Crossroads SAM
Purchase of Medical Care Services	Replace	Replacement NCMMIS+ BEAM (for DVRS and DSB)
DHSR Medication Aide Testing System and Search Site.	Replace	BPAS
Integrated Payment and Reporting System	Replace	Replacement NCMMIS+
MC/Plus Pharmacy System	Replace	VistA components

Examples of other applications DHHS has implemented in the current fiscal year (i.e., before the biennium) include:

- Health Information System – statewide deployment completed in September 2010.
- NC Vital Records Automation system – statewide deployment must be completed in December 2010.
- Quantros – DHHS will subscribe to this Software-as-a-Service solution in Q1 2011. Quantros is a safety and risk management system in use by the NC Center for Hospital Quality and Patient Safety, DSOHF's patient safety organization.

# 7. IT INFRASTRUCTURE

## 7.1 Overview/Objectives

DHHS strives to improve the computing environment for its employees and the people who use our services. Our key IT infrastructure objectives for the biennium are as follows:

- IT Asset Life Cycle Management – DHHS has implemented automation for an IT asset inventory and will replace its physical computing infrastructure where financially possible.
- Standards – DHHS will continue to standardize technology and configuration for its IT infrastructure to enhance the IT efficiency of support and cost effectiveness, and to facilitate compliance with federal and state requirements.
- Process Improvement – DHHS will continue to improve the efficiency and effectiveness of our processes and services. The department has recently implemented change, incident and configuration management processes.

## 7.2 Planned Activities

- Extend LANDesk Management Suite capabilities by upgrading to the latest version.
- Deploy Symantec as the end point security solution for DHHS servers.
- Migrate from Novell Netware to a file storage and access solution that leverages Active Directory.
- Extend our existing metrics and monitoring capabilities.
- Upgrade DHHS' networks to provide service optimization.
- Expand the core network infrastructure at all state operated health care facilities to support the new business needs.
- Expand the core network infrastructure to support the operations of two new separate DHHS divisions: Division of State Operated Healthcare Facilities and the DMH/DD/SAS (formerly all operations were in DMH/DD/SAS).

## **8. CLIENT COMPUTING STRATEGY**

### **8.1 Overview/Objectives**

The department has implemented automation for life cycle management of workstations and will replace these assets as funding permits.

### **8.2 Planned Activities**

- Deploy the Windows 7 operating system for workstations.
- Deploy end point security with workstation security policies and enterprise reporting.
- Enhance our remote connectivity to support mobile computing, reinforce our business continuity planning and provide enhanced teleworking.

## 9. ENABLING TECHNOLOGY

Some of DHHS' current and planned IT initiatives and activities in biennium will leverage the following enabling technologies:

- Service-oriented architecture
- Software-as-a-Service
- Enterprise service bus
- Application server virtualization
- Magnetic card technology

DHHS' IT initiatives and activities in the future could benefit from the following enabling technologies:

- Cloud computing
- Virtual desktop environment
- Expanded use of mobile computing
- Expanded use of web-enabled file access and collaboration technologies such as SharePoint and Adobe Connect Pro
- Storage replication technologies for distributed applications to support business continuity and disaster recovery requirements

# 10. PRIVACY AND IT SECURITY

## 10.1 Overview/Objectives

The DHHS Secretary delegates authority to the DHHS Privacy and Security Office (PSO) via Directive II-48<sup>2</sup>, and defines the roles and responsibilities for the DHHS PSO in its relationship to the DHHS Chief Information Officer, the DHHS Assistant Secretary for Finance and Business Operations, and the Secretary of DHHS as well as DHHS divisions and offices. For the period between July 1, 2011 and June 30, 2013, the DHHS PSO will continue to provide information security, HIPAA (including privacy, security and transactions, code sets and identifiers) and business continuity planning leadership for the department.

## 10.2 Planned Activities

- Continue the security assessment of HIPAA covered entities and expand to non covered entities within the department to identify potential risks and vulnerabilities to the confidentiality, integrity and availability of information under the department's stewardship.
- Enhance the department's privacy and security awareness training that addresses current business needs and associated risks while informing users of their privacy and IT security responsibilities.
- Update departmental IT standards and procedures to bring them in alignment with new requirements.
- Participate in the development of the baseline security setting for the end point security solution the department will deploy.
- Address any hidden challenges or security gaps that may come to light during disaster recovery testing and business continuity efforts that the DHHS PSO oversees annually.

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<sup>2</sup> Available at <http://info.dhhs.state.nc.us/olm/manuals/oos/dir/man/DirII-48a.htm>.

# APPENDIX A. ABBREVIATIONS AND ACRONYMS

Abbreviation/Acronym	Definition
ASC	Accredited Standards Committee
ARPD	Attendance Reporting and Payment Distribution
ARRA	American Recovery and Reinvestment Act of 2009
BEAM	Business Electronic Access Management
BPAS	Business Process Automation System
CCNC	Community Care of North Carolina
CCNC – UP	Community Care of North Carolina – Uninsured Parents
CIO	Chief Information Officer
CMS	Centers for Medicare and Medicaid Services
COTS	Commercial-off-the-Shelf
CRH	Central Regional Hospital
CSDW	Client Services Data Warehouse
DCD	Division of Child Development
DDI	Design, Develop and Install
DEA	Drug Enforcement Agency
DHHS	Department of Health and Human Services
DHSR	Division of Health Service Regulation
DIRM	Division of Information Resource Management
DMA	Division of Medical Assistance
DMH/DD/SAS	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
DPH	Division of Public Health
DRUMS	Drug Regulatory Unit Management System
DSB	Division of Services for the Blind
DSS	Division of Social Services
DSDHH	Division of Services for the Deaf and Hard of Hearing
DSOHF	Division of State Operated Health Care Facilities
DVRS	Division of Vocational Rehabilitation Services
EBT	Electronic Benefits Transfer
EHR	Electronic Health Record
ePASS	Electronic Pre-Assessment Screening Service

<b>Abbreviation/Acronym</b>	<b>Definition</b>
ESAP	Enterprise Services Access Point
FAMS	Fraud and Abuse Management System
HEARTS	Healthcare Enterprise Accounts Receivable Tracking System
HIE	Health Information Exchange
HIM	Health Information Management
HIPAA	Health Insurance Portability and Accountability Act of 1996
HIS	Health Information System
HIT	Health Information Technology
HITECH	Health Information Technology for Economic and Clinical Health
ICD	International Classification of Diseases
IT	Information Technology
ITGC	Information Technology Governance Committee
ITS	Office of Information Technology Services
LME	Local Managing Entity
MITA	Medicaid Information Technology Architecture
MH/DD/SAS	Mental Health, Developmental Disabilities and Substance Abuse Services
NCMMIS+	North Carolina Medicaid Management Information System Plus
NC	North Carolina
NC FAST	North Carolina Families Accessing Services through Technology
NC HIE	North Carolina Health Information Exchange
NCIR	North Carolina Immunization Registry
NC PHIN	NC Public Health Information Network
NCCCN	North Carolina Community Care Networks
NCVRAS	North Carolina Vital Records and Statistics
NLR	National Level Repository
OCME	Office of the Chief Medical Examiner
ORHCC	Office of Rural Health and Community Care
OSBM	Office of State Budget and Management
PIMS	Program Integrity Management System
POMCS	Purchase of Medical Care Services
PSO	Privacy and Security Office
R&A	Reporting and Analytics
SAM	State Agency Model
SCHIP	State Children's Health Insurance Program

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<b>Abbreviation/Acronym</b>	<b>Definition</b>
SLPH	State Laboratory of Public Health
WIC	Women, Infant and Children

\*\*\*End of Document\*\*