

# IT Plan – Agency Operations

**Agency:** Department of Human Services

**Responsible Party:**

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**Technology Description:**

DHS maintains the following major information systems to support its program operations and service delivery:

Medical Services:

*Being replaced in the 2011-2013 biennium - Websphere, Oracle*

Medicaid Management Information System

Medicaid provides health care coverage for certain low-income individuals and families who fit into an eligibility group that is recognized by federal and state law. The primary function of the Medicaid Management Information System (MMIS) is the payment of Medicaid claims from healthcare providers for individuals that are enrolled in a Medicaid benefit plan. The MMIS does not determine financial eligibility. Once an individual or family is found to be Medicaid eligible, information is passed from the eligibility system to the MMIS and the beneficiary is “enrolled” into the appropriate benefit plan within the MMIS. The MMIS is composed of several sub-systems that support the following business processes and their associated functions: Beneficiary Management , Provider Management, Program Management (benefit administration and financial reporting), Payment/Operations Management (claims adjudication, pricing, prior authorizations/service limits, remittance advice, electronic funds transfer, coordination of benefits, third party liability, recoupment, mass adjustments, drug rebate, estate recovery), Care Management, and Program Integrity Management.

Pharmacy Point of Sale System

*Being replaced in the 2011-2013 biennium - Websphere, Oracle*

Pharmacy POS included many of the functions also included in the MMIS specific to prescription drug claims.

Medicaid Decision Support System

*Being upgraded in the 2011-2013 biennium - proprietary infrastructure of Thomson-Reuters*

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The DSS is a specific business intelligence system for analysis of medical claim data.

## Medicaid Eligibility and Economic Assistance Policy

Vision

*Allfusion Gen, DB2*

This system determines eligibility and benefit levels for the Temporary Assistance for Needy Families (TANF) and determines eligibility for Medicaid for all children and family coverage groups.

TECS (Technical Eligibility Computer System)

*COBOL/CICS, various DB*

This is DHS's information system used for determining client and case eligibility for Food Stamps and Medicaid Aged, Blind and Disabled coverage groups. TANF (interfaced through Vision) and Food Stamps benefit payments are generated from this system.

LIHEAP (Low Income Heating Assistance Program)

*Natural, ADABAS*

This system is designed to keep track of client and vendor (utilities, heating oil suppliers, etc.) records and determine appropriate benefits for those eligible for low income heating assistance. It calculates benefit levels, tracks amounts paid to vendors, maintains statistical information on clients and provides reports and notices.

Child Care Assistance

*Natural, ADABAS*

This system is designed to enter information for payments for child care recipients on a monthly basis.

## Child Support:

FACSES (Fully Automated Child Support Enforcement System)

*Natural, Adabas*

FACSES is designed to be used by State Child Support and Clerks of Court to maintain and manage child support enforcement activities such as establishment of paternity, court order establishment and enforcement, locate and new hire reporting. It maintains financial records pertaining to the accrual of support obligations, collection and receipt support and is designed to distribute all support collected according to existing distribution laws. Child support is replacing the legacy interactive voice recognition software (IVR) system since the old system is obsolete.

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## Children and Family Services

### *FRAME*

*Websphere, DB2, Initiate Master client Hub, Oracle Cognos Data Warehouse (Sequel Server ETL)*

The FRAME system provides a single presentation interface with the functions necessary to support the workflow and business processes and federal requirements of the county Child Welfare community, including the documentation and tracking of in-home services, family preservation, child abuse and neglect, foster care, and adoption activities. The FRAME application is integrated with the Department's Master Client Index solution. The FRAME application reporting and business intelligence solution includes the use of Cognos both for the transactional reports and those running on the Department's enterprise data warehouse.

CCWIPS (Comprehensive Child Welfare Information Processing System)

### *Natural, ADABAS*

CCWIPS is the system used at the state office for all cases administered by licensed child placing agencies. CCWIPS generates all payments for foster care and subsidized adoption. As the FRAME application is the "front-end" system, data necessary for payments and federal AFCARS reporting requirements is replicated from the FRAME DB2 tables to CCWIPS ADABAS files.

## Mental Health and Substance Abuse

ROAP (Regional Office Automation Program)

*Propriety DB, RS6000 AIX operating system, Apache TomCat, product: MIS e/CET Advantage suite*

The ROAP application is used to support client demographics, clinical scheduling and service recording, accounts receivable, billing, clinical intakes and assessments, medication management, treatment planning, progress notes and clinical document management for the DHS Field Offices known as Regional Human Service Centers. ROAP (CMHC/MIS Advantage enterprise product) was purchased in 2001, from CMHC Systems. In 2006, Netsmart Technologies acquired CMHC Systems and continues to support and enhance the product.

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## Developmental Disabilities

Therap Services Individual, Billing and Medication Management applications.

*Software as a Service license agreement with Therap Services.*

Therap Services provides a web enabled, ASP model solution designed to meet the needs, business practices, security requirements and reporting requirements of the Developmental Disabilities (DD) community of practice and supporting agencies, including providers, ND state program management related functions. The Therap Services product is interfaced with the Department's Master Client Entity Solution.

## Vocational Rehabilitation

VRIS (Vocational Rehabilitation Information System)

*Natural, ADABAS*

VRIS tracks client demographics, plan of employment, services provided, payments for services, and provider demographics.

## Disability Determination Services

Versa

*Proprietary infrastructure*

The Versa System is a complete case processing system supports for the determination of disability services.

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## One Center

AIMS (Advanced Institutional Management Software)

*AS400, RPG II*

The One Center - Two Specialized Facilities, are currently using AIMS software for managing client registration, client movement, fiscal operations, as well as clinical, such as doctors orders, treatment plans, progress notes and pharmaceutical activities AIMS was purchased in 2001 by what is now Netsmart Technologies . In 2001, the State of North Dakota opted to purchase the source code rather than upgrade to Netsmart Technologies replacement system. Since 2001, ND Information Technology Department has been maintaining and modifying the source code.

## COMPUTRITION

*Unix, Care Tracker 15.1, Oracle 10g*

The Computrition software is the Nutrition Services software used by both facilities at the One Center (North Dakota Developmental Center and North Dakota State Hospital).

## KRONOS, ANSOS

*Unix*

Kronos is the time and attendance system for the One Center. The State Hospital currently uses ANSOS software for staff scheduling in the Nursing Department. ANSOS is interfaced to Kronos to send the schedules from ANSOS into Kronos. ANSOS is also interfaced with AIMS to import patient acuity data from AIMS into ANSOS. KRONOS is interfaced with Peoplesoft to facilitate the transfer of timesheet/payroll information.

## LAWSON

*AS400*

State Hospital inventory system

## Aging

SAMS (Social Assistance Management Software)

*Software as a Service license agreement with Harmony Systems.*

SAMS software is used to manages and track consumer (client) and service data for the Aging Services Division and HSC Aging staff. Product provides comprehensive automated web-enabled solution for information and referral programs with integration to case management, care planning, service management and reporting requirements.

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## Department Wide

Employee Security Information Tracking System (ESITS)

*Websphere, Oracle*

ESITS is an application that tracks current security access granted to all DHS employees and tracks any changes to security access on a daily basis. It will also track any non-DHS employees who have access to any DHS applications or resources.

Master Client Index (MCI)

*Linux*

Client matching software purchased from Initiate Systems.

Data Warehouse

*Oracle*

With the rapid pace of change in health and human services programs, and the phase-out of the Department's legacy systems, the Data Warehouse (DW) is increasing in importance as a source of information to support agency decision-making. The Data Warehouse is proposed to begin operations by January 2011, almost 18 months in advance of the new MMIS and DSS. DHS has expanded the scope of the DW by adding Supplemental Nutritional Assistance Program (SNAP) data with Thomson Reuter's assistance.

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## **Planned activities:**

### Medical Services

#### MMIS

#### **Implementation of the ACS Enterprise MMIS/POS and Thomson Reuters Data Warehouse solutions.**

Replace the Medicaid Management Information System (MMIS), the Pharmacy Point of Sale System (POS) and the Decision Support System (DSS). The MMIS represents a complex set of business functions that work together to ensure that payments for medical services are processed in a timely and accurate manner. The POS system receives online requests for pharmacy claims through clearinghouses that interact with individual pharmacies.

Ultimately these claims are processed by the MMIS for payment. The DSS is a data warehouse with a sophisticated set of analysis tools to assist with the management of the Medicaid program.

The current MMIS system requires replacement due to outdated architecture and difficulty in modifying it to meet the changing business needs of the Medical Services Division. Due to the integrated nature of the POS and DSS, it is necessary to include their replacement in the redesign of the MMIS.

### Health Information Technology

In March 2010, the ND Department of Human Services hired a Medicaid HIT Coordinator to be housed in the Information Technology Services unit to complete the Planning-Advanced Planning Document, the State Medicaid Health Information Technology Plan and the Implementation Advanced Planning Document and to serve as project coordinator for the "To-Be Landscape" and implementation of Provider Incentive Payments.

One of the most crucial steps to be taken initially will be to identify which and how many providers would be eligible for incentive payments. Another is to conduct an assessment of programs within NDDHS to determine which of these programs currently use or house health information, how that information currently is being exchanged and how systems could be standardized or electronic standards could be established to facilitate that exchange for other agencies, staff and clients, including eligible providers.

Although long-term care is not an area of support under ARRA-HITECH, the NDMO will look to include long-term care in its gap analysis for the exchange of electronic health information, as they comprise a large part of the NDMO business and are very limited in electronic exchange capabilities. NDMO intends to keep long-term care in mind when developing processes to implement Provider Incentive Payments.

### VR

The Division of Rehabilitation Services is requesting the replacement and/or modernization of the current IT application known as VRIS. The

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intent of the effort is to have a web-based, modern, case management system

## Economic Assistance Policy

TECS, Vision, Child Care, LIHEAP and Health Care Reform Rewrite - Rewrite the TECS/VISION/Child Care and LIHEAP system into a web application using Java and storing the data in Oracle. Once implemented, we would reduce our 5.1 million dollar mainframe costs significantly. Eligibility workers would be able to access all TANF, Medicaid Eligibility, LIHEAP and Child Care in one application.

\*\*Estimated costs do not include Health Care Reform changes since these changes have not been identified.

\*\*Estimated costs do not include payment functionality for LIHEAP and Child Care.

## Child Support

Move Child Support off of the IBM Mainframe – If TECS, Vision, Child Care and LIHEAP move off of the mainframe, Child support would end up paying for virtually all costs of the mainframe and this would be very costly.

Options include:

- Downsizing the current mainframe to reduce costs
- Migrate child support off of the current mainframe onto a server(s) hosted by ITD
- Move child support programs and data off of the State of ND's mainframe onto another mainframe hosted by a private vendor

## Data Warehouse

As we receive requests for new and/or enhanced reporting capabilities in the maintenance of our existing applications, we will assess the applicability of the request being satisfied by including the reporting functionality in the Data Warehouse verses being incorporated into the online application.

- **Addition of new data sources:** The DW is designed to be scalable and expandable to incorporate additional data sources and types. The person-centric design allows DHS to get a complete picture of a client, based on all the information available. DHS has expressed interest in DW projects such as the following:
  - Child Support current downloads transactional information from the FACES system to Microsoft Access on a regular basis. It would be more effective to include this data into the Data Warehouse and build out the needed reports to provide for division-wide access.
  - Expansion of claims history to include data prior to the currently-identified DSS/DW start date. This would include historical claims with a paid date prior to January 1998. This older history would primarily be used in Estate Recovery research activities.

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- The construction of a new interface and data structures to house Vocational Rehabilitation (VR) data. Should VR data not be processed by the new MMIS, such an interface/structure would be required to provide for this data.
- Integration of the MSP Data Warehouse with the FRAME data warehouse to enable better management and use of DHS enterprise data.
- The construction of data structure to house performance data from services provided from Human Service Centers along with Mental Health and Substance Abuse outcome data.

The scope of work to load and maintain new data sources will vary significantly, based on the number of data tables and data elements, extent and consistency of historic data, the complexity of the data structures and analytic reporting requirements, the frequency of data refreshes, etc. Activities during implementation typically include Requirements Analysis, Design, Development, System Test, User Acceptance Test, and Training.

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## **Planned changes /updates to technology:**

### Master Client Index (MCI)

Intent is to plan the extension to applications that were not included in the initial implementation, i.e the ES100000 applications. Additionally, there is a tremendous opportunities to integrate with our key “trading partners” they we exchange data with today for client support. Interoperability opportunities continue to grow and become standardized. As these protocols are adopted by the health industry for data exchange, it is imperative that we understand how to incorporate these opportunities into our system replacement initiatives.

### Electronic Document Management Services (EDMS)

EDMS is extensive in its provision for increased efficiencies. Beyond scanning of records and their subsequent retrieval, EDMS can provide for forms automation and workflow management. EDMS can provide efficiencies in the management of documents/forms/unstructured communication that crosses staff desks on a daily basis. DHS continues to explore the incorporation of this technology as standalone or integrated functionality into our information systems.

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## Technologies being watched or investigated:

### Electronic Document Management Services (EDMS)

The county social services are starting to scan all of their client case files and DHS would like to find an enterprise solution for them. DHS would like to see these files become part of our current FileNet solution. Each county could have their own document class and security. With the State Office staff having only the access that the counties would request. They could email links to the documents that the State Office staff need to review, creating a quicker turnaround and less paper.

### Tele-medicine

DHS is currently looking at possibly rolling out a telemedicine solution. Telemedicine is where medical information is transferred through interactive audiovisual media for the purpose of consulting, and sometimes remote medical procedures or examinations. DHS is very interested in using ITD's videoconferencing solution of Polycom CMA for this solution.

### Tele-pharmacy

The State Hospital is looking at providing clinical and professional support of a licensed pharmacist to the Human Service Centers.

### E-prescribing

DHS is currently looking into the possibility of integrating a web-based prescribing and medication management system with the electronic medical record solutions used by the Human Service Centers and possibly State Hospital. This is in alignment and support of the goal of Meaningful use to improve quality, safety, efficiency, and reduce health disparities. Functional areas include CPOE-Medications, Drug Decision Support, Electronic Prescribing, Medication List and Medication Allergy List.

### MS Windows 7

The Microsoft Windows 7 operating system is currently being tested in the department and planned to be rolled out in the next year or two. Both the 32 bit and 64 bit operating systems are being tested with the preference of the 64 bit to be actually rolled out.