



# ***MEDICAID MANAGEMENT INFORMATION SYSTEM (MMIS) REPLACEMENT PROJECT***

## **MMIS ANALYSIS AND EVALUATION**

**JANUARY 3, 2005**

**SUBMITTED BY:**



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## **1.0 EXECUTIVE SUMMARY**

The State of North Dakota Department of Human Services (DHS) has contracted with FOX Systems, Inc. (FOX) to provide technical and professional services related to the analysis and assessment of the current Medicaid Management Information System (MMIS), documentation of all prospective business and technical needs, preparation of a cost benefit analysis, and development of a Request for Proposal (RFP) for the replacement of the MMIS. The information acquired during the review and technical analysis of the current MMIS has provided the MMIS Project Team with a baseline understanding of the present MMIS. This will expedite the process of defining new technical and functional requirements for the replacement MMIS.

This document contains the analysis and assessment of the current MMIS. This Executive Summary provides a synopsis of the document.

### **1.1 North Dakota's Current MMIS Environment**

North Dakota's Planning and Preparation RFP released in January 2004 for the MMIS Rewrite project listed the MMIS core systems that were to be reviewed. This document provides a description of each of the systems listed in the RFP.

### **1.2 The Technical Environment**

This section provides a high-level overview of the existing MMIS systems architecture showing some of the system server and applications. Overviews of the technical environment are provided for the following areas:

- Mainframe Hardware
- Application Software
- Networks
- Servers
- Internet
- Desktop Configuration

### **1.3 MMIS Stakeholders and Partners**

The successful transition to a new MMIS is dependent not only on the selection of a qualified vendor and dedicated staff, but also requires the support of the individuals and agencies that have a stake in its success. The Department of Human Services (DHS) has taken a proactive approach by holding a meeting with stakeholders to share information about the replacement effort and the future plans for the MMIS. Section 3.4 lists the agencies which were invited to participate in this meeting.

## 2.0 METHODOLOGY

The evaluation and analysis of the current MMIS was accomplished by:

- Interviews with program staff
- Descriptions of the current MMIS system, interfaces, and business processes elicited during the Joint Application Development (JAD) sessions
- Review of documentation supplied by the Information Technology Department (ITD), the Division of Information Technology (DoIT), and DHS Medical Services staff, and from the Department of Human Services (DHS) website

## **3.0 NORTH DAKOTA'S CURRENT MMIS ENVIRONMENT**

This document presents a description of the current environment of the North Dakota MMIS. It provides an overview of the relevant subsystems and also discusses the DHS information systems architecture and operations that support the Medicaid program.

### **3.1 Current MMIS and Related Business Processes**

The overview includes the following:

- Background of the project
- MMIS subsystems
- Other systems in scope
- Reports
- Other related business functions

#### **3.1.1 Background of the Project**

The current DHS MMIS is a 1978 EDS MMIS transfer system maintained by the North Dakota Information Technology Department and the Department of Human Services Division of Information Technology. It was designed as a batch payment system for Medicaid providers rendering services to clients. There is not a Medicaid eligibility recipient subsystem in the North Dakota MMIS. However, non-Medicaid eligibility is contained in the MMIS. Medicaid eligibility is stored in the TECS and VISION systems. Both Medicaid and non-Medicaid eligibility is read directly by the MMIS. Old technology and the difficulty of efficiently operating and maintaining a system that has been modified and patched numerous times has created a need to replace the current system.

#### **3.1.2 Core MMIS Subsystems**

The following core MMIS subsystems to be reviewed were listed in the RFP for the MMIS rewrite project:

- Claims (3.1.2.1)
- Recipient Eligibility and Enrollment (3.1.2.2)
- Provider (3.1.2.3)
- Customer Relations (3.1.2.4)
- Managed Care Encounter Claims and Premium Payments (3.1.2.5)
- State Children's Health Insurance Program (SCHIP) Stand-Alone and Medicaid Expansion (3.1.2.6)

- Data Entry (3.1.2.7)
- Decision Support (3.1.2.8)
- Management and Administrative Reporting (3.1.2.9)
- Surveillance and Utilization Review (3.1.2.10)
- Point of Sale (3.1.2.11)
- Recipient Liability (3.1.2.12)
- Third Party Liability (3.1.2.13)

### 3.1.2.1 [Claims](#)

The system operates on the State IBM mainframe, and is written in COBOL and Natural. It uses both VSAM and flat file structures and the CICS transaction monitor. All of the production history files are flat files. Approximately 2.5 million claims are processed annually by the MMIS.

The MMIS processes claims and premiums for medical and non-medical services for Medicaid and other State programs. Covered programs and their services include:

- Medicaid
- Medicaid Expansion: – Pays for Medicaid services for children who meet Medicaid eligibility but exceed the asset level test.
- Health Tracks (formerly Early and Periodic Screening, Diagnostic and Treatment (EPSDT)):- A preventive health program that pays for screenings, diagnosis, and treatment services for children age 0 to 21 who are eligible for Medicaid.
- Developmental Disabilities Family Subsidy: – State funded program that pays costs in excess of Medicaid in order to keep the child in the home.
- Disability Determination Services: – Pays for the consultative exams, the Medical Evidence of Record (MER), and travel expenses for persons applying for Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI).
- Children's Special Health Services (CSHS): – Pays for specialty care for children under 21 that is needed to treat an eligible diagnosed condition, such as cerebral palsy. Primary funding sources include the Maternal and Child Health Block Grant and federal funds.
- Aging and Disabled Programs:
  - Service Payments for the Elderly and Disabled Program (SPED): – Payments for in-home and community based services for older or physically disabled persons – may or may not be Medicaid eligible. SPED is funded primarily with state general funds.
  - Expanded-SPED: – Pays for the same services as SPED, with different eligibility requirements. Expanded SPED is funded through state general funds.

- Waivers (Aged and Disabled, Traumatic Brain Injury Waiver (TBI)): – Pays for services to Medicaid eligible persons who would otherwise require nursing home services
- Developmental Disability (DD) Waiver: – Pays for an array of residential services, day services, and family support services.
- Healthy Steps (SCHIP Program): – Pays for services for children in families who cannot afford health insurance, but do not qualify for Medicaid.
- Vocational Rehabilitation: – Pays for services related to assisting individuals with mental or physical disabilities obtain and maintain employment.
- Department of Corrections: – Pays for services authorized by the Department of Corrections for prisoners in a correctional facility.
- Women's Way: – Pays for services for women who are not eligible for Medicaid and who have been diagnosed with breast or cervical cancer.
- Aid to the Blind: – Pays for services for people 55+ who have vision impairments.
- State Hospital: – Pays for institutional psychiatric services for persons who are not eligible for Medicaid that are ages 21 and under and 65 and older.
- Qualified Medicare Beneficiaries (QMB): – Pays for Medicare Part A premiums, coinsurance and deductible for aged, blind or disabled individuals who meet the non-financial criteria for medically needy and other financial criteria.
- Specified Low Income Medicare Beneficiaries (SLMB): – Pays for Medicare Part B premiums for aged, blind or disabled individuals who meet the non-financial criteria for medically needy and other financial criteria.
- Qualifying Individuals (Buy-In): – Pays for Medicare Part B premiums for aged, blind or disabled individuals who meet the non-financial criteria for medically needy, and other financial criteria, and cannot be receiving Medicaid benefits
- North Dakota Youth Correctional Center (YCC: - Pays for services authorized by YCC for Juveniles in a correctional institution.
- Department of Public Instruction (DPI): - Pays for services for children with Individual Education program (IEP) directed care plans.

Multiple reimbursement methodologies are supported by the MMIS, based on the type of service, including:

- Diagnostic Related Groups (DRG) – Inpatient Hospital
- Per Diem or per unit– Psychiatric and Rehab Hospitals, Immediate Care Facility for Persons with Mental Retardation (ICF-MR) facilities, Residential Treatment Centers, Basic Care, Hospice, Aging Waivers
- Cost to Charge Ratio – Outpatient services, Out-of-State Hospitals

- Medicare Fee Schedule – Lab services
- Medicare Ambulatory Surgical Center (ASC) Grouping – Ambulatory Surgical Centers
- Fee Schedule – Physicians, Council on Naturopathic Registration and Accreditation (CRNAs), Nurse Practitioners, Physician Assistants, Dentists, and other practitioners
- Encounter Rates - Indian Health Services (IHS) facilities
- Minimum Data Set Resource Utilization Groups (MDS RUG) Case Mix Payment System – Long Term Care and Swing Beds
- Prospective Payment System (PPS) Encounter Rate – Federal Qualified Health Centers (FQHC) and Rural Health Centers (RHC)
- Actual Charges – DD Waiver, DD Family Subsidy
- Manual Pricing

Claims are submitted electronically and on paper. Both standard and proprietary formats are being used for claim submission. An analysis of paper versus electronic claims in June 2004 indicated that 85% of the June 2004 claims were submitted electronically. DHS continues to dedicate resources for working with providers in an effort to reduce the volume of paper claims.

The media used for claim submission are listed below:

- Paper: – UB-92, HCFA-1500, American Dental Association (ADA) forms, Turn Around Documents (TADs), and proprietary pharmacy claim forms.
- Pharmacy Claims: – Pharmacy claims are not adjudicated by the MMIS, but rather in the Point of Sale (POS) system and then paid through the MMIS. Paper claims are keyed into the Phoenix Software Data Entry System, converted to an MMIS proprietary format, validated, and converted to the Point of Sale system format.
- Provider Claims Submission Software: Providers utilize various software packages to submit claims through the DHS HIPAA Translator (e.g., PC-ACE).
- Web-based file transfer (Medicaid Claims): – A HIPAA X12 837 claims transaction from the provider is uploaded to an Oracle database. The translator converts the data in the standard transaction into a file format that the MMIS recognizes, and loads the data into the MMIS. Any dropped data fields from the 837 go into the Health Insurance Portability and Accountability Act (HIPAA) data repository, which is an Oracle database.
- Web-based file transfer (Non-Medicaid Claims): – Qualified Service Providers, Basic Care Providers, DD Providers (for non-ICF/MR services) can bill through Web-based file transfer with proprietary Disk Operating System (DOS) based format.
- Fax (special circumstances).
- Cartridges (crossover claims): – still in National Standard format (NSF) until Medicare intermediaries are prepared to submit HIPAA compliant 837 transaction claims.

The MMIS is using the SeeBeyond translator to process HIPAA transactions. DHS revised the current MMIS to accept and receive the following HIPAA transactions: 820 Premium Payment, 834 Benefit Enrollment and Maintenance, 835 Remittance Advice, 837 Professional Claim, 837 Institutional Claim, 837 Dental Claim, 276 Claim Status Inquiry, 277 Claim Status Response, 270 Eligibility and Benefits Inquiry, 271 Eligibility and Benefits Response, 278 Referral and Authorization Inquiry and Response, and 997 Functional Acknowledgement.

Claims are adjudicated and paid weekly. There is a manual process in place to match the check to the remittance advice and stuff the envelopes.

The MMIS contains history for once-in-a-lifetime procedures, three years of claims history for long term care, and two years of history for all other claims. All other claims are archived. The policy for timely filing is one year, but Disability Determination Services can submit claims for up to five years. Adjustments can occur for a year from the date of last payment. Mass adjustments can go back three years. Long term care claims can be adjusted for three years after the date of payment; if providers owe money to the Department, adjustments can occur up to two years after date of payment. Adjustments to adjusted claims could feasibly occur for several years.

The MMIS calculates and tracks service limits and recipient liability, as well as prior authorizations and service plans. Edits are in place for duplicate and near-duplicate claim checking, in addition to edits to validate the formatting requirements and presence of procedure codes, diagnosis codes, revenue codes and date of service. There are also edits to validate recipient and provider information. The MMIS does not contain robust auditing capabilities at this time.

#### *3.1.2.1.1.1 Inputs*

- Claims – Electronic and Paper
- Encounter Claims
- Crossover Claims
- Prior Authorizations
- Mass Adjustments
- DRG annual update using the 3M grouper
- Procedure Codes
- Diagnosis Codes
- Relative Value Units (RVUs)

### 3.1.2.1.1.1 *Outputs*

- Claims Payments
- Premium Payments
- Remittance Advices
- Primary Care Provider (PCP) Administration Fees
- Claims Extract for Decision Support System (DSS)
- Pharmacy Data to the Managed Care Organization (MCO)

### 3.1.2.2 Recipient Eligibility and Enrollment

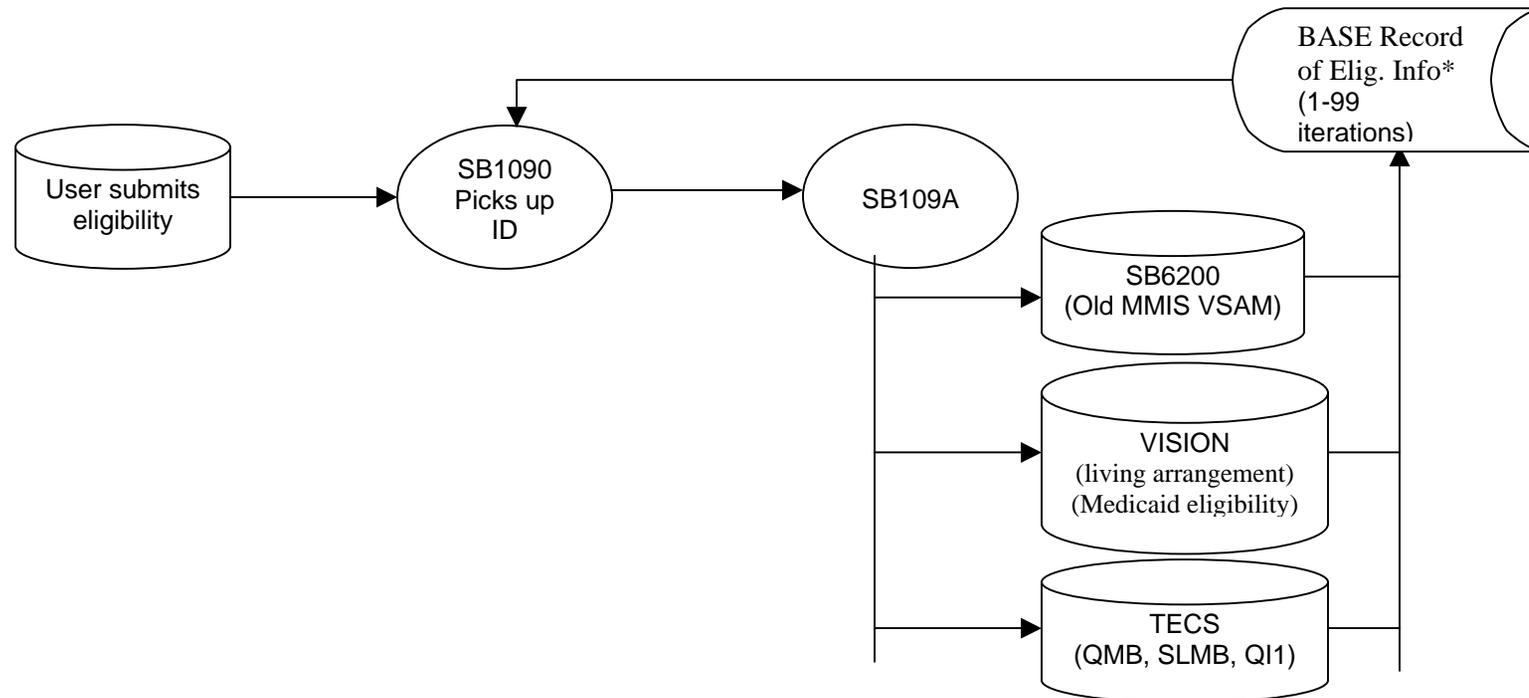
There is not a Medicaid eligibility recipient subsystem in the North Dakota MMIS. However, the non-Medicaid eligibility is contained in the MMIS. Full recipient eligibility for Medicaid is stored in the TECS and VISION systems. Both Medicaid and non-Medicaid eligibility is read directly by the MMIS during the weekly batch adjudication cycle. An eligibility file for Medicaid recipients with a limited amount of data (name, eligibility period) is updated weekly in the MMIS by VISION and TECS.

Eligibility technicians in the County offices determine eligibility for Medicaid and other non-Medicaid programs. Eligibility information is entered directly into VISION or TECS or the MMIS, depending on the program.

1. TECS is an application written using ADABAS, Natural and COBOL
  - Eligibility for QMB, SLMB, Buy-In, and other Medicaid eligibility (may be moved to VISION by June 2007).
2. MMIS on Virtual Storage Access Method (VSAM) – eligibility for non Medicaid DHS programs
  - Department of Corrections
  - Disability Determination Services
  - State Hospital Institutions Psychiatric Services
  - Vocational Rehabilitation
  - Children's Special Health Services
  - Developmental Disabilities
  - SPED and Expanded SPED
  - Women's Way
  - North Dakota Youth Correctional Center
3. VISION is an application written in COBOL, C++, AllFusion Gen and uses the DB2 Relational Database Management System
  - Medicaid eligibility, including managed care enrollment. Healthy Steps (SCHIP) eligibility will be in the VISION system by June 2005

The eligibility inquiry data processing flow is shown in Figure 1.

**Figure 1 – Eligibility Inquiry Data Processing Flow**



- 1.) A batch job looks up information directly from the eligibility files and it is displayed on the MMIS C-screen.
- 2.) All non-Medicaid eligibility information is stored in MMIS/ADABAS files.
- 3.) MMIS uses flat files for claims processing.

In addition to the three systems noted above, there are several shared ADABAS/ Natural Tables. It is the intention of DHS, if funding is approved, to move all eligibility information from TECS to the VISION system.

Assessments for waiver services are stored in databases in the Division of Aging or in ASSIST (Assessment Case Management System). Reports on the assessment results are generated from these systems and manually entered into the MMIS by Medicaid staff. The MMIS can only store one level of care assessment or screening result for an individual, so conflicts occur if other assessments exist with overlapping information.

Complexities with recipient eligibility are a result not only of multiple eligibility systems, but also because eligibility for some programs, such as waiver, is managed by two sets of staff. Issues occur when the recipient loses Medicaid eligibility, but the waiver eligibility stays on the system. The service provider continues to provide services, but claims are denied for lack of eligibility.

The recipient eligibility information is utilized for claims processing and by the Medifax and Verify eligibility verification systems. Providers can access Medifax to obtain a print-out of eligibility information or access electronic eligibility information through Medifax's web portal. They can also verify eligibility through the Verify automated voice response system. There are approximately 53,000 Medicaid eligibles. Of those, 33,600 are in managed care PCP or MCO programs.

#### *3.1.2.2.1.1 Inputs*

- Recipient Eligibility Demographic Information
- Recipient Liability Adjustments
- Social Security Administration Benefits
- Third Party Liability (TPL) information
- PCP information
- EPSDT information

#### *3.1.2.2.1.1 Outputs*

- All information necessary for claims processing
- Managed Care enrollment data
- Data extracts for DSS
- Medifax
- Verify

#### **3.1.2.3 Provider**

The function of this subsystem is to enroll providers and store provider enrollment information needed by the MMIS to process claims. There are currently approximately 15,800 providers enrolled; about 9,300 of the enrolled providers are active, having billed Medicaid in the last two years.

#### **Provider Enrollment**

Providers submit an application for enrollment, indicating their provider type and specialty, to the provider enrollment specialist in the Medical Services Division. In addition to the enrollment form, providers are required to send a copy of their current license, a W-9 form and a signed Provider Agreement, agreeing to the policies and procedures for billing North Dakota Medicaid. Providers within 50 miles beyond the North Dakota border can enroll as border providers and are treated as in-state providers. Providers more than 50 miles

beyond the North Dakota border are enrolled as out-of-state providers. Medicaid provider numbers are assigned manually, and are based on provider types. The Medicaid provider numbers are five digits with four leading zeroes or four digits with five leading zeroes. There is no regular re-enrollment process in place, and there is no process to indicate to Medicaid staff or providers that a provider's license has expired.

Additional enrollment requirements for non-Medicaid waiver providers are not part of this file, but are maintained by Aging Services.

### **Provider File**

The provider file has the capability to associate up to four groups with an individual provider by linking the group number and the individual provider number. The provider file contains a begin and end date for enrollment as a Medicaid provider, but there is no capability to indicate an end date for association for a group.

There is a field on the provider file that indicates whether a provider's claims should be suspended due to suspicion of fraudulent billing. These claims can be reviewed by an auditor and forced for payment. It is possible to enter a range of codes in the provider file that will suspend for review.

Query capabilities are limited to querying on the provider number in the provider file, known as the "G" screen, and on the provider name in the "H" screen. It is not possible to see all of the provider numbers associated with a provider when viewing the "G" screen.

The Division of Information Technology (DoIT) creates the cross-reference file between Medicaid and Medicare numbers from a paper form that links the Medicaid number to the Medicare number (found on the enrollment form). This cross reference file is not visible on the provider screens, so DoIT generates a weekly report with the cross reference information for Provider Services.

The provider file has a screen that stores rates that apply to certain provider types, such as Rural Health Clinics or Nursing Homes. The rates stored in the provider file are primarily per diem rates for room and board. The MMIS will read the provider file for claims submitted with per diem charges for these provider types.

The provider file contains a date field to indicate when a change has occurred to the file, but at this time there is no place within the provider file to record the change that occurred. This audit trail is currently being maintained by handwritten notes on a print-out of the provider screen.

The Provider File also interfaces with the Claims Processing subsystem and the VISION and TECs eligibility systems.

#### *3.1.2.3.1.1 Inputs*

- Provider demographic information
- Manually generated provider Medicaid ID number
- Group associations
- Provider specialty information

- Provider rates

#### 3.1.2.3.1.1 Outputs

- System generated reports
- Provider mailing labels
- Provider Directory supplied to the MCOs for panel development
- Data extracts for the DSS
- All information necessary for claims processing
- Fee Schedule download to MCO

#### 3.1.2.4 Customer Relations

The Department currently has two full-time and four back-up staff members performing Provider Relations services. Provider (and recipient) phone inquiries go to a voice mail system, and are retrieved by the Provider Relations staff. There are approximately 80-200 calls per day. Written correspondence is triaged in the mailroom. There is no automated mechanism to track the calls or written correspondence at this time.

The Department does not currently offer training for its providers. Providers receive billing manuals and bulletins to assist them with billing North Dakota Medicaid.

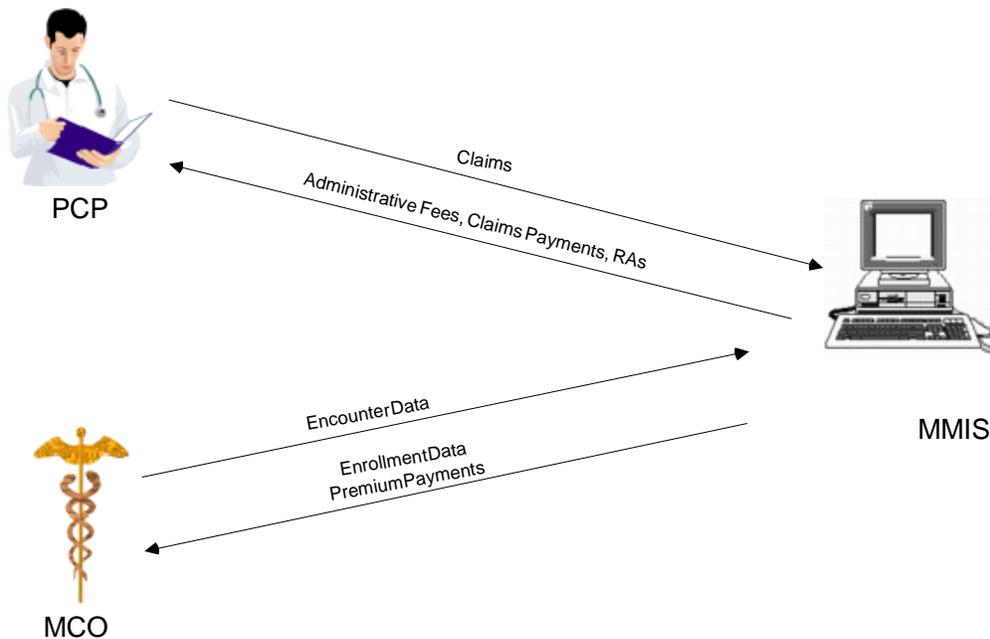
#### 3.1.2.5 Managed Care Encounter Claims and Premium Payment

North Dakota requires that Medicaid eligible recipients meeting certain criteria enroll in the managed care program. Approximately 63% of North Dakota's Medicaid recipients participate in managed care. Of those recipients participating in managed care, 2% belong to a Managed Care Organization (MCO), and 98% are in the Primary Care Case Management (PCCM) program. Upon meeting the eligibility criteria for managed care, the recipient must choose a primary care provider (PCP) or choose between a PCP and the MCO if they live in a designated three county MCO service area.

Primary care providers receive a \$2 administration fee each month for each recipient in their care, and their claims are paid on a fee-for-service basis. North Dakota contracts with Noridian Mutual Insurance Company (Noridian) which in turn subcontracts with Altru Health System for the MCO. Noridian submits encounter claims on a monthly basis. At this time, Noridian uses the NSF format to submit encounter claims. The MMIS processes the encounters the same as fee-for-services claims for pricing and utilization information, but no payment is made.

Enrollment data and premium payments are generated through the MMIS and sent to Noridian. These transactions are in the 834 and 820 HIPAA compliant formats.

**Figure 2 – MCO Interfaces**



#### *3.1.2.5.1.1 Inputs*

- Encounter Claims into the MMIS
- Recipient's choice of PCP or MCO

#### *3.1.2.5.1.1 Outputs*

- MMIS sends pharmacy data monthly to MCO
- Enrollment data from eligibility systems sent monthly to MCO
- Premium payments sent monthly from MMIS to Noridian
- Remittance advices sent with premium payments from MMIS
- Administration fees sent monthly from MMIS to Primary Care Providers
- Data extracts for the DSS

- Monthly roster by Primary Care Provider listing the names of clients selecting the physician as their PCP

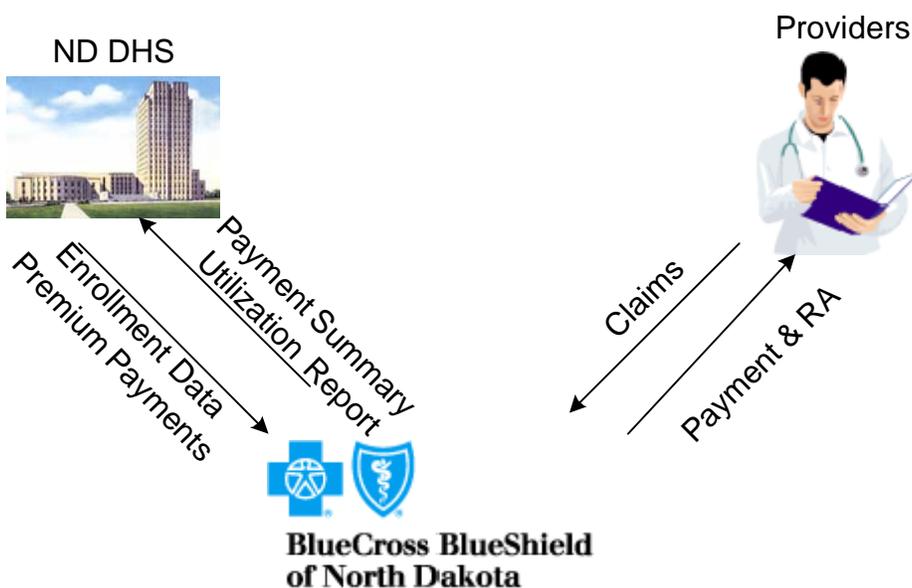
### 3.1.2.6 SCHIP Stand Alone and Medicaid Expansion

Healthy Steps, North Dakota's SCHIP program, serves approximately 2,400 children.

Eligibility determination for Healthy Steps occurs at the State office and in a pilot project with Cass County. At this time, with the exception of Cass County, there is one State Full Time Equivalent (FTE) in the Medical Services Division performing all of the eligibility determination duties for all applicants of the Healthy Steps program. There is a possibility that other counties may participate in the eligibility determination process in the future. The family fills out a paper application form which goes to the eligibility technician. Family income and expenses are reviewed to determine whether it appears that the family is Medicaid eligible. If so, they are referred to the county for Medicaid services. If not, and they meet the SCHIP eligibility guidelines, the application is approved and the family demographic information is entered into the VISION system.

The State contracts with Noridian Mutual Insurance Company to process and pay claims. Noridian pays the providers directly, and sends a remittance advice. Enrollment data and premium payments are sent to Noridian on a monthly basis. These transactions are in the 834 and 820 HIPAA compliant formats. Noridian sends a hard copy claims payment summary report and utilization report to the Medical Services Division.

**Figure 3 – Healthy Steps Interfaces**



#### *3.1.2.6.1.1 Inputs*

- Family demographic and eligibility data

#### *3.1.2.6.1.1 Outputs*

- Enrollment data from eligibility systems sent monthly to Noridian
- Premium payments sent monthly to Noridian from MMIS
- Remittance advice sent with premium payments from MMIS
- Data extracts from Noridian to the DSS

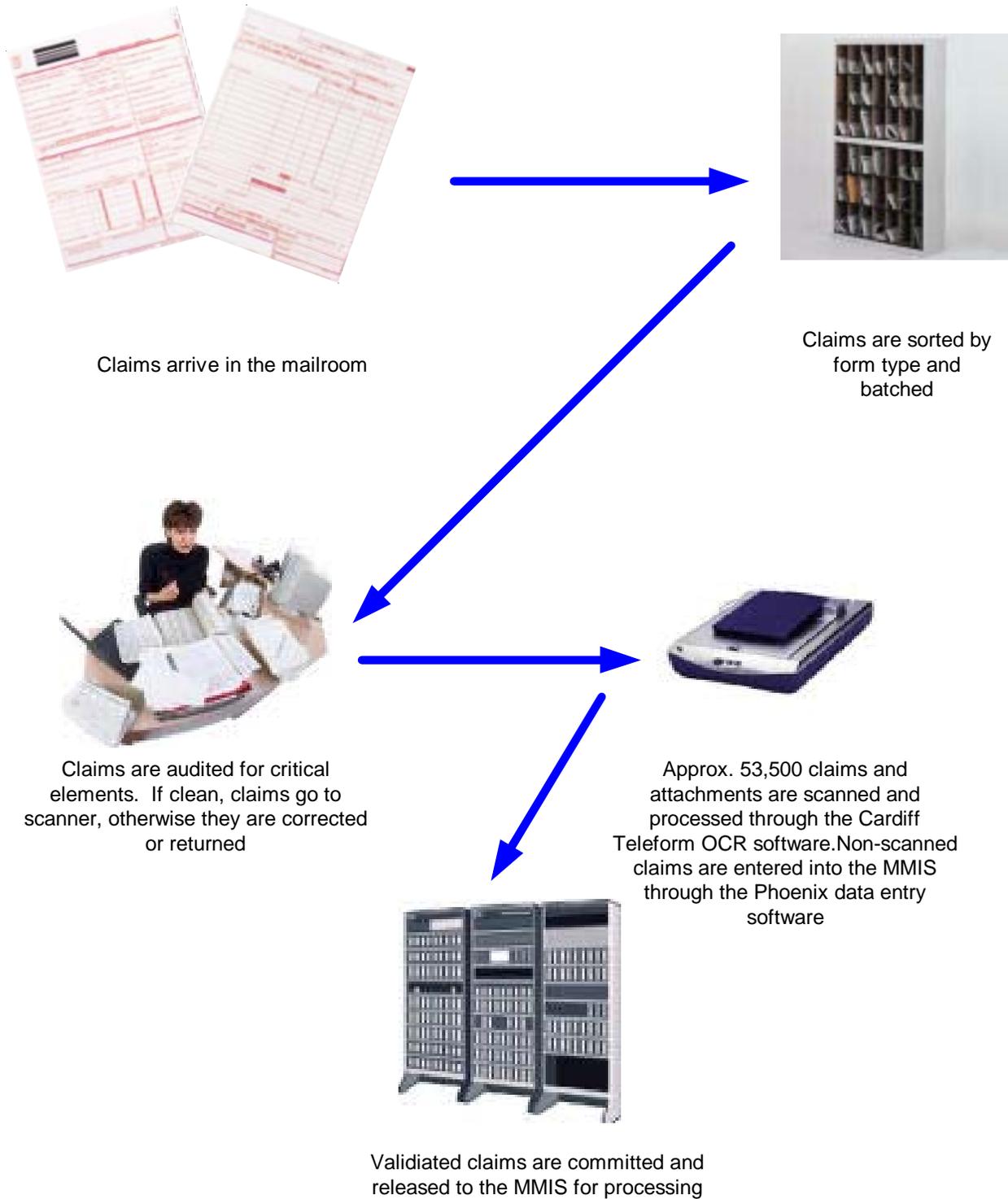
#### 3.1.2.7 Data Entry

There are currently two processes for entering paper claim and attachment data into the MMIS, depending on the type of claim form. The Phoenix Data Entry System is used to enter data from pharmacy, Home and Community Based Services (HCBS) and waiver claims on Turn-Around Documents, eligibility forms, and other miscellaneous data sources into the MMIS. UB-92 CMS-1500 forms, as well as any associated attachments, are scanned using a Kodak i260 and a Kodak 2500D scanner and processed through the Cardiff Teleform Optical Character Recognition (OCR) process. Because there are a number of different dental claim forms, dental claims cannot go through the OCR process, but are considered to be "Scan and Key from Image" (SKFI) claims. These claims are keyed from the scanned image rather than a paper document.

There are four FTEs and nine temporary employees involved in data entry and scanning. Operators key the information from the forms, and the information is then verified by a different operator. There are approximately 18,300 paper claims manually entered into the MMIS monthly. In addition to the paper claims, approximately 54,500 claims and attachments are scanned monthly and approximately 4,570 SKFI claims are keyed monthly. Significant manual quality control occurs to ensure that the imaged claims are legible, that the system has identified claims and attachments appropriately, and that the counts are accurate.

Medical Services auditors review the paper claims to identify claims that are missing critical data elements that would cause the claims to be rejected by the MMIS. These claims are pulled and returned to the providers for correction and resubmission.

**Figure 4 – Data Entry**



### 3.1.2.7.1.1 Inputs

- Eligibility data
- Paper Claims and attachments data

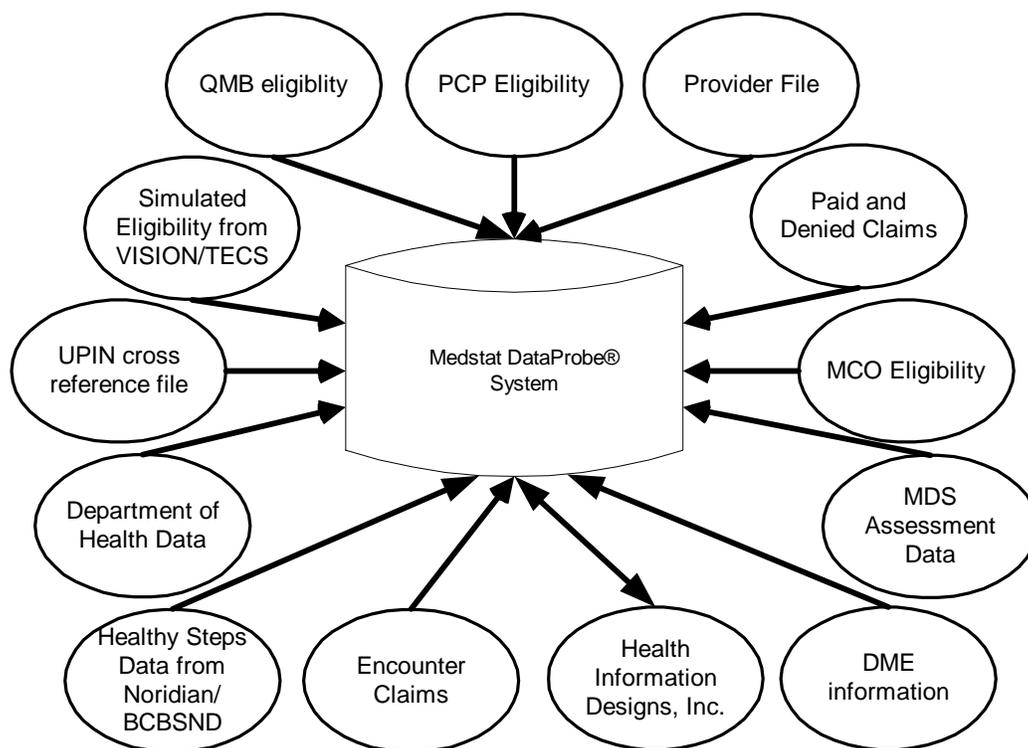
### 3.1.2.7.1.1 Outputs

- Images
- Files that go into MMIS

### 3.1.2.8 Decision Support System (DSS)

The Department uses the Medstat DataProbe® System for data maintenance and reporting. Claims data from the MMIS and simulated eligibility from the VISION, TECS and Old MMIS systems feed into the Medstat DSS. Healthy Steps claim data is sent to Medstat directly from Noridian. There are currently seven years of data stored in the data warehouse. The Medstat DSS also houses data from the Department of Health.

**Figure 5 - Data Feeding the Decision Support System**



The DataProbe® System is not available to all program managers at this time, so requests for ad-hoc reports must be submitted to the staff data analysts. The Department can also request assistance from Medstat to create reports. Certain MARS and SURS reports are generated

from the decision support system, as well as standard reports for Finance and the other programs within the Department. There is a great need and desire for more flexible reporting capabilities, including improved data accessibility, improved query capability, enhanced reporting against the entire database, and visibility of certain reports for external users, potentially via the Web.

Staff reported that there are data integrity issues in the current decision support system. There is about a month's lag before the MMIS data is entered into the DSS.

#### *3.1.2.8.1.1 Inputs*

- Recipient Demographic and Eligibility Information
- Provider Information
- Claims Payment Information
- Encounter Claims
- Tapes of Data from the Department of Health
- MDS Assessment Data
- Pharmacy Data
- QMB Information
- PCP Information
- Healthy Steps Information
- Managed Care Organization (MCO) Eligibility Information
- Durable Medical Equipment (DME) Information
- Unique Physician Identification Number (UPIN) cross reference information

#### *3.1.2.8.1.1 Outputs*

- Management Administrative Reporting (MAR) reports
- Surveillance and Utilization and Review (SUR) reports
- Health Plan Employer Data and Information Set (HEDIS) reports
- Ad-hoc reports
- CD to Department of Health
- Monthly Rx Reports
- Claims and prescription data to Health Information Designs for Retro Drug Utilization Review (DUR)

#### 3.1.2.9 Management and Administrative Reporting Subsystem (MARS)

Standard management and administrative reports are generated within the MMIS by the Division of Information Technology, and through the Decision Support System. MARS reports primarily give an account of the way the Medicaid dollars were spent in a given time period. These reports, the Center for Medicare and Medicaid Services (CMS) 64 and CMS 21, are sent to CMS. The CMS 37 and CMS 21b reports are used for budgeting. As in the discussion of the DSS, staff indicated that they want more flexibility in reporting capabilities. For example, they would like to have the ability to change the parameters on a regularly scheduled MARS report without damaging the integrity of the original report, change the scheduled run of the report, or download the reports to Microsoft Excel or Access.

### 3.1.2.9.1.1 Inputs

- Recipient Data
- Provider Data
- Claims Data
- Encounter Data
- Pharmacy Data

### 3.1.2.9.1.1 Outputs

- Financial Reports
- Medicaid Summary Reports
- Medicaid Statistical Reports
- CMS 2082, CMS 64, CMS 21, CMS 37 and CMS 21b Reports
- EPSDT 416 Report

### 3.1.2.10 Surveillance and Utilization Review Subsystem (SURS)

North Dakota does not have a SURS module within the MMIS. The Medstat DataProbe® System is used to create reports for statistical analysis. Medstat provides exception reports based upon the parameters set by the State (e.g., procedures, categories of service, providers, and specialties).

Various preventive measures, exception review, and post utilization review are methods used to monitor utilization of Medicaid services, and to prevent and detect fraudulent billing.

#### **Preventive Measures**

- MMIS claims edits
- Prior Authorization – Requires that services be prior authorized based on medical necessity
  1. Prior Authorization Requirements (Multiple forms are used)
    - a. Medicaid
      - a. Certain surgical procedure
      - b. Long Term Care (LTC), ICF-MR, (including waiver) admissions
      - c. Personal care
      - d. Certain dental procedures
      - e. Certain drugs
      - f. Any services over designated dollar limits or limits on number of services
      - g. Psychiatric services for children under 21
      - h. Home health services
      - i. Out-of-state services
      - j. Partial hospitalization
      - k. Hospice
    - b. Service Plans
      - a. DD Waiver
        - i. Family Support Services uses a contract
        - ii. Individual Supported Living Arrangement (ISLA) uses a contract
      - b. Aging waiver

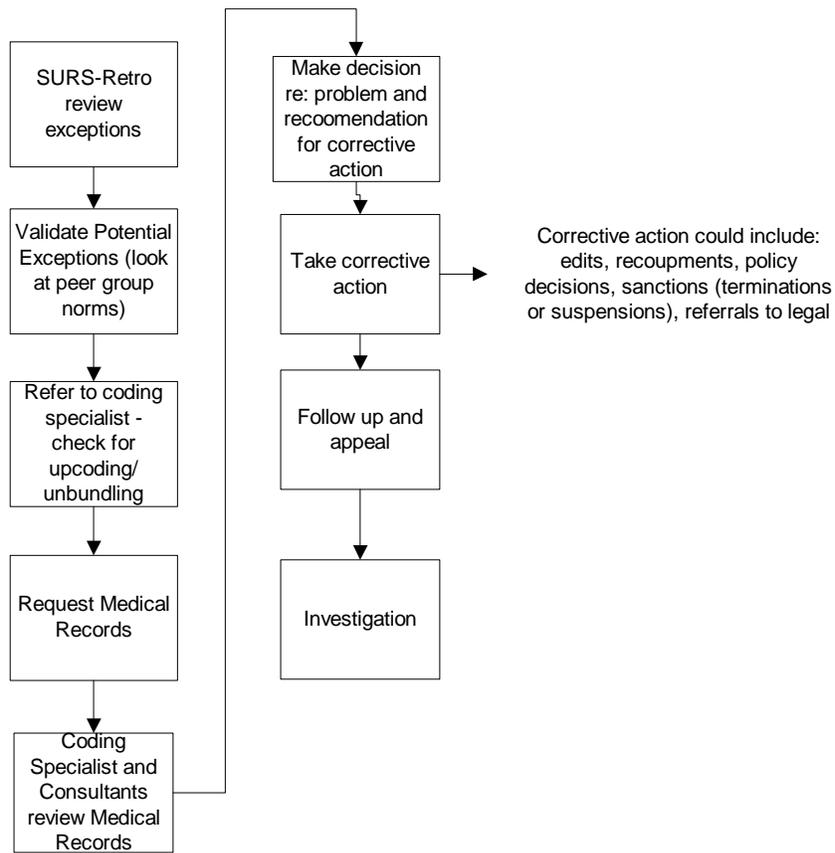
c. State funded aging services

- Coordinated Services Program (CSP – formerly Recipient Lock-In) – Restricts recipients who have demonstrated over-utilization of certain physicians and pharmacies
- Service Limits - Currently the PA limit counting does not work well in the MMIS. The MMIS is not looking at the PA for start and stop dates, or restricting to a specific provider. It only applies to a procedure code, and will kick out a claim with a specific procedure when the limit has been exceeded.
- Nursing Home admissions and classifications – captured in MDS
- Certificate of Need (CON) for residential treatment services
- OP Partial Hospitalization (Ambulatory Behavioral Health Care) – a request is submitted for length of stay determination (CAL LOCUS)
- Out-of-State Providers – a letter of explanation is required from an in-state physician when a referral is made to an out of state provider
- Transplants – require a letter requesting authorization for a transplant. This information is currently not captured as a PA in MMIS to use for claims editing
- North Dakota Health Care Review – authorizations for services such as gastric bypass surgery, and cosmetic surgery. These authorizations come back in a letter that is filed, but the information is not currently captured in the MMIS.

**Exception Reviews**

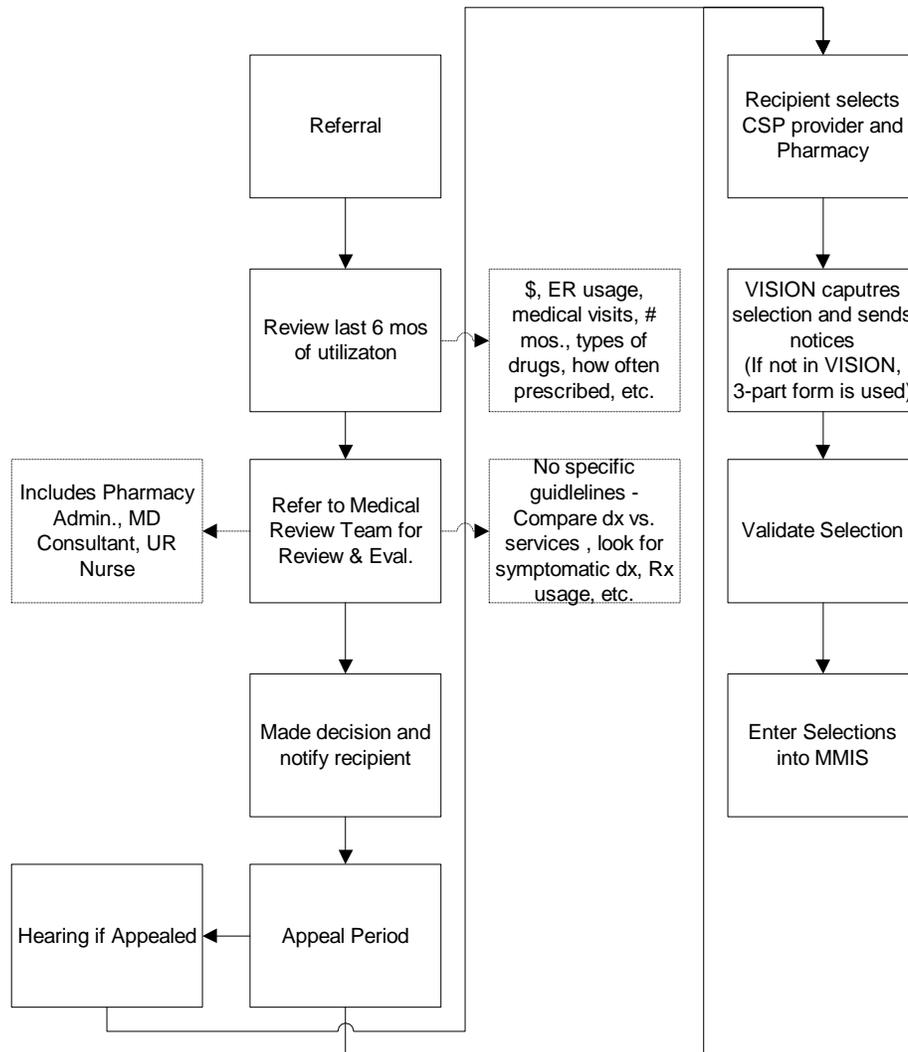
Exception reports and post payment reviews are used by the Fraud and Abuse unit to determine whether a provider's billing practices are outside the norm. Each quarter the staff, which consists of the Administrator and two analysts, determine what criteria will be used to run DataProbe® reports to find exceptions in medical delivery or usage patterns. The criteria is selected from a data base of items that have potential for abuse and misuse, e.g., "Number of ER Services", "Number of Extended Comprehensive Visits", "Number of Potential Addicting Drugs", etc. If a provider deviates significantly from the peer group norm, further review of claims history is warranted. If the claims history indicates suspicious billing practices, the information is reviewed by the coding specialist at the State, and review of medical records may be necessary if there is suspicion of fraud. At this point consultants or other professionals may become involved with the investigation. If indicated, corrective action may take place in the form of edits, recoupments, policy decisions, sanctions (suspension, termination), or referrals to the State's attorneys or the U.S. attorney general.

**Figure 6 – SURS Retro-Review of Exception Reports**



Exception reviews are also used to monitor the use of Medicaid services by recipients to identify patterns of over-utilization of physician or Emergency Room visits, “doctor-shopping”, or inappropriate drug utilization. This information determines whether a recipient will be restricted to one doctor and pharmacy in order to manage utilization.

**Figure 7 – Recipient Coordinated Service Program (CSP)**



**3.1.2.10.1.1 Inputs**

- Parameter data for exception reports
- Data from Claims Processing, Recipient, and Provider subsystems

**3.1.2.10.1.1 Outputs**

- Exception Reports
- Provider reimbursement rate research
- Provider profiling
- Provider service pattern research
- Recipient profiling (e.g., number of claims, types of services)
- Transplant recipient data profiling (from both cost and service perspectives)

### 3.1.2.11 Point of Sale

The Pharmacy Point of Sale (POS) system is a mainframe CICS/COBOL system first developed by GTE for Missouri that was transferred to Utah. It was transferred from Utah to North Dakota in 1996. It has been modified beyond the National Council for Prescription Drug Programs (NCPDP) 5.1 compliance mandated by HIPAA, and is compatible up to version 5.5. It is compliant for batch version 1.1, but batch claims are only typically used by nursing home pharmacies. The Point of Sale system uses the same eligibility interfaces as the MMIS (i.e., TECS, VISION) for a combined / virtual MMIS eligibility, and reads directly from the MMIS provider file. Two years of drug history is maintained in a VSAM file.

The Point of Sale drug file is updated twice a month with data from First DataBank. At this time the file is received on cartridges, but there has been a work request submitted to modify the system to allow for an on-demand FTP download of the data.

North Dakota DHS offers pharmacy benefits to Medicaid and claims processing for non-Medicaid recipients. Claims processing for other entities are done to a varying degree. These other entities include:

- AIDS Drug Assistance Program - (A Ryan White Federal Grant program); strictly follows formulary
- Children's Special Health Services - State-funded program; follows formulary, with diagnosis screening for various disease states
- Vocational Rehabilitation – Coverage based on Claim
- Youth Correctional Centers - Contracting done with retail pharmacy; will pay for any Rx prescribed (No Adult Corrections coverage)
- Indian Health Services (IHS) - Payment per encounter; IHS does not use POS, but utilizes the UB92 form and processes the claims through the MMIS

Public Health 340(b) Pharmacies (e.g., University in Fargo and FQHC related pharmacies) bill Medicaid for 340(b) drugs through the POS. They receive Acquisition Cost plus "Reasonable Dispensing Fee" and are exempt from drug rebates.

Physicians and other prescribers are not required to be enrolled as Medicaid providers to prescribe to recipients. The MMIS contains "dummy" numbers for non-Medicaid prescribers. A pharmacy must be enrolled as a provider and given a Medicaid provider number in order to be paid by Medicaid. The Medicaid provider number is not cross-referenced to pharmacy's National Association of Boards of Pharmacy (NABP) number.

The system has the capability to classify claims as new claims, reversals (voids), and re-billed claims. Pharmacy claims are adjudicated online in the POS and paid through the MMIS.

#### New Claims and Denied Claims

- Based upon claim transaction classification, transaction is routed to different areas of POS
- Transaction goes through standard edits and audits for any claim that is being processed for payment
- Values are validated (e.g., dates, etc.)
- Claim is "pending" if a problem exists, but system continues to scan for all errors

Indian Health Services Pharmacy Claims

- Medicaid receives 100% federal match
- UB92s are used; billing done using a Revenue Code when drug is received through an IHS facility
- Claims submitted electronically and hardcopy; mostly electronic
- Claims processed by MMIS
- Per Encounter payment is distributed
- Claims not in Retro or ProDUR POS process

Edits:

- Client eligibility edit (including TPL and copay, which are done for Cost Avoidance purposes)
- Provider eligibility
- National Drug Code (NDC) validations and pricing
  - 1.1 Pricing is lesser of State Maximum Allowable Cost (MAC), Estimated Acquisition Cost (EAC), Usual and Customary
  - 1.2 Pricing as per above, unless override

Audits:

- Straight duplicate (by NDC, Date of Service, Rx #, Recipient, Pharmacy)
- Near duplicate (e.g., Different pharmacy with a different Rx number, but everything else is same)
- Service limits (as previously identified)
  - 1.3 Quantity (units)
  - 1.4 Number of Prescriptions
- Refill limits
- Compound Prescriptions:
  - 1.5 Checks for matching ingredients
  - 1.6 First compound ingredient claim is just paid
  - 1.7 Subsequent claims are checked for previous "compound prescription matches" using NDCs
  - 1.8 Creates a "Super Rx" with multiple NDCs
  - 1.9 Sequence of ingredients does not matter, but all must match

**Prior Authorization and Drug Utilization Review (DUR)**

Prior Authorization

- System looks to see if Prior Authorization (PA) is required by drug and in system
- Have hardcopy PA form
- CICS screens allow data entry or NCPDP Prior Authorization request, which in turn generates work queue
- Types of PA transactions:
  - 1.10 PA Request
  - 1.11 PA Inquiry Status (immediate response)
  - 1.12 PA with Accompanying Bill (This is the bill for which PA is being requested)
  - 1.13 PA Reversal for prior PA Request
- All PA transaction types are NCPDP 5.1 compliant

- PAs can be done by NDC or Generic Code Number/Generic Product Indicator (GCN/GPI)
- System will “match and pay” or “match and deny” based on PA result
- “Recycle” command matches PAs with pended claims
- Can process authorization limits by:
  - 1.14 Quantity over duration of days
  - 1.15 Claims over duration of days
  - 1.16 Individual pharmacy, prescribing physician/pharmacist, or both

#### Drug Utilization Review

ProDUR is performed using First DataBank criteria to promote appropriate drug utilization. First DataBank issues an alert if a problem with a prescription is identified. The POS system can deny the claim based on the criteria established, such as a serious drug interaction. The POS contains a Client Profile, which is updated weekly, that includes medical history for diagnostic purposes and interaction review.

DHS contracts with Health Information Designs, Inc. (HID) for RetroDUR review and drug management. HCFA-1500 and UB-92 claims are reviewed for diagnosis and treatment information corresponding to the prescription

#### **Drug Rebate**

North Dakota Medicaid participates in the Drug Rebate program with drug manufacturers. CMS sends a quarterly tape identifying drug manufacturers participating in the Drug Rebate program. Invoices are created and mailed to the manufacturers. Refunds are credited to the State accounting system and the adjustments are made in the MMIS.

Figure 8 - Drug Rebate Invoicing Process

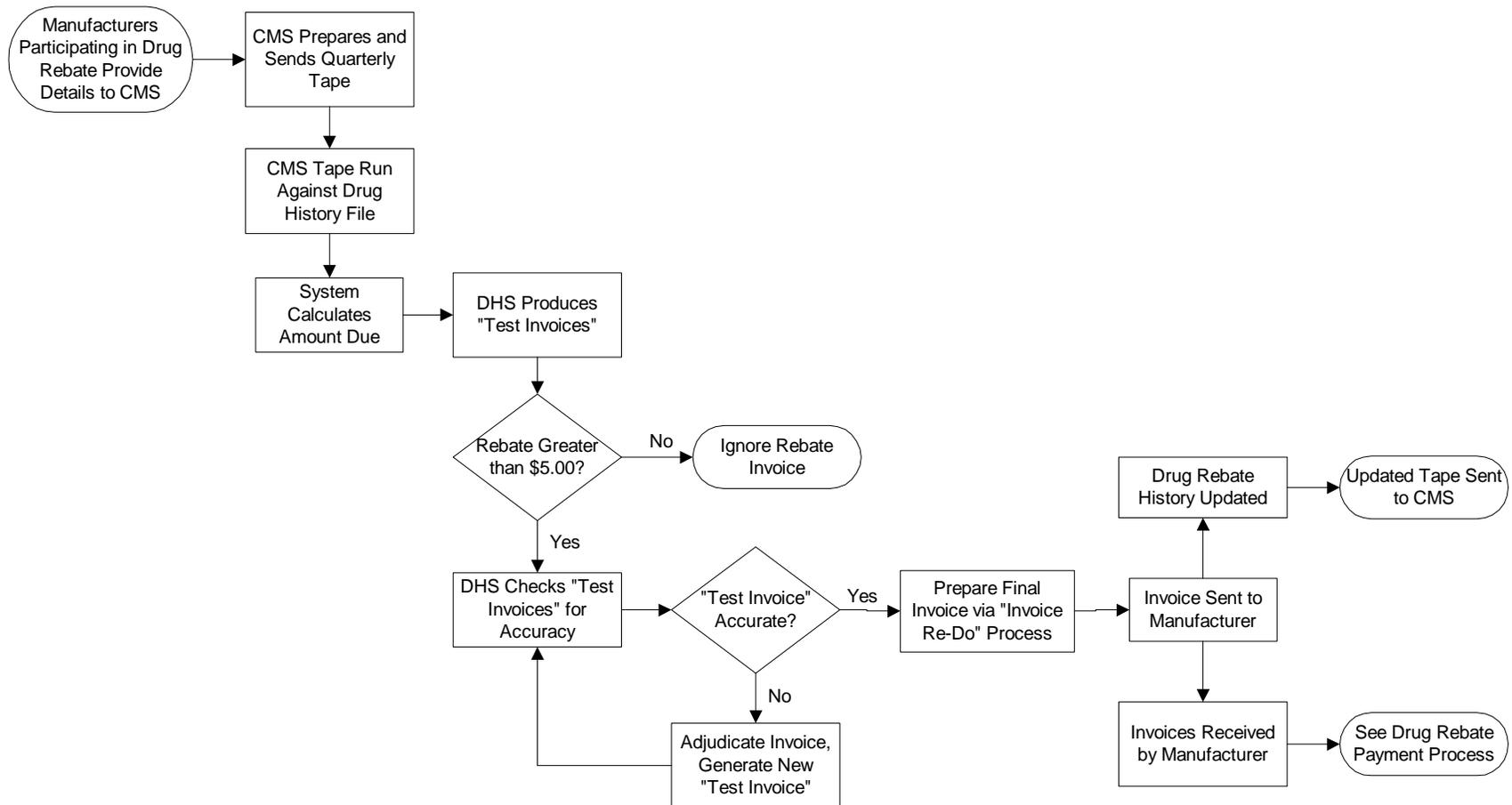
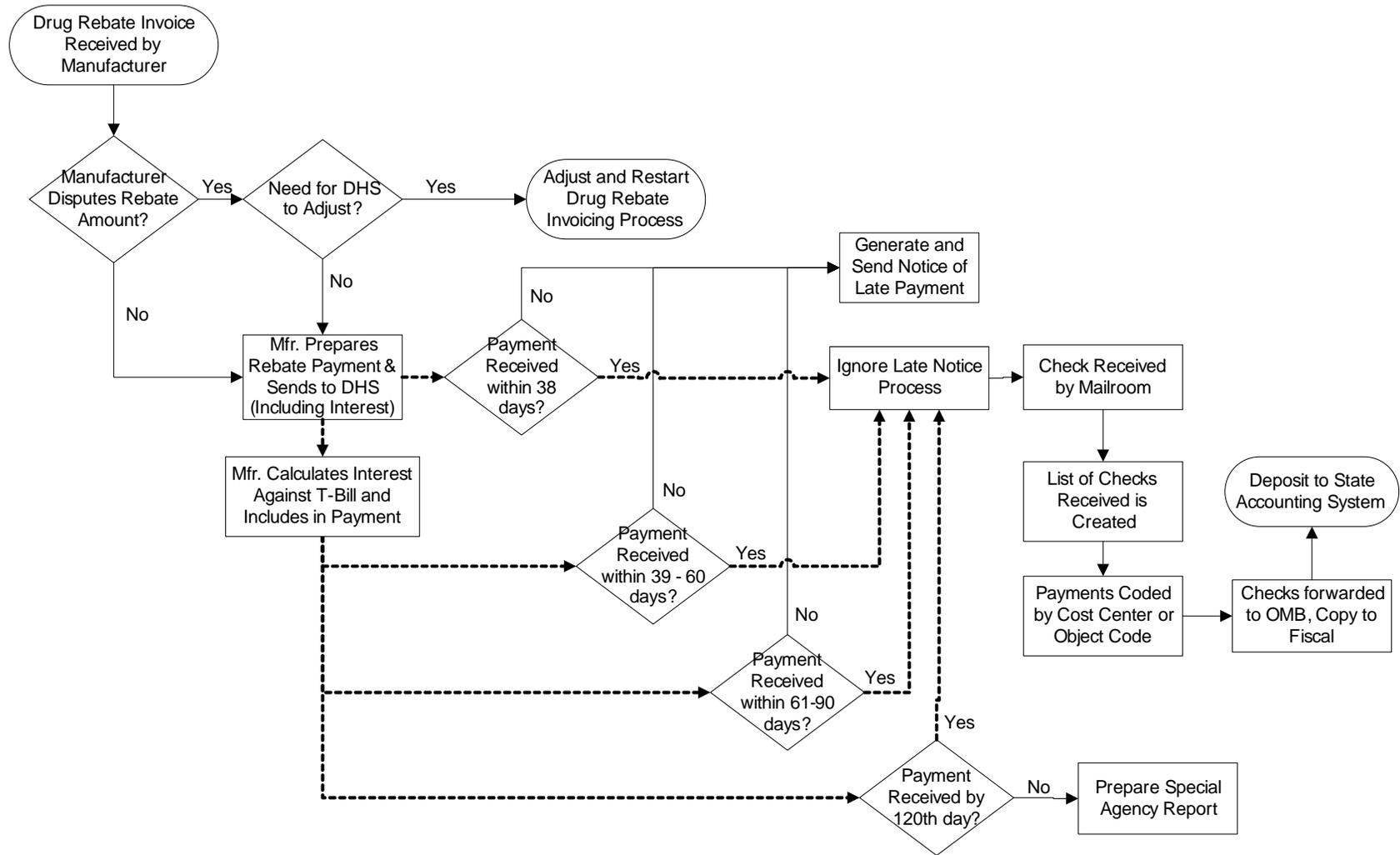


Figure 9 - Drug Rebate Payment Process



#### 3.1.2.11.1.1 *Inputs*

- Drug File from First DataBank
- Quarterly drug rebate update file from CMS listing manufacturers participating in drug rebate
- Rebate payments
- File from MMIS with warrant number, date paid, and status for the pharmacy claims
- Prior Authorizations
- Manual pricing for some drugs

#### 3.1.2.11.1.1 *Outputs*

- Variety of reports for DHS staff
- Paid, denied, and suspended claims are forwarded to MMIS weekly for payment
- Hardcopy invoices for drug rebate participating manufacturers
- Tape to CMS with updated drug rebate invoice information
- Additional rebate data sent to two vendors per Freedom of Information Act (FOIA) requests

#### 3.1.2.12 Recipient Liability

Some of North Dakota's Medicaid recipients are responsible for a portion of their medical expenses each month, based on their monthly income. Recipient Liability (RL) is determined by the TECS and VISION systems along with the Medicaid eligibility. The system calculates and stores the amount of RL based on the information that the county eligibility workers enter into the systems. The amount of medical expense incurred to date is also maintained on the VISION and TECS systems, and can be updated by MMIS or manually through the eligibility system by the DHS RL staff. When a claim is processed through MMIS, the system checks the RL balance, and if the recipient liability has not been met for the time period the service was delivered in, the claim is processed with no payment or reduced payment. The MMIS updates the RL balances in VISION and TECS with the unpaid amount. In addition, clients or providers may submit medical bills to the RL staff, who then update the recipient liability balances with the amount of the bills. Once the spend-down or deductible amount has been met for a period, claims for that period process and pay without failing this edit. Each Internal Control Number (ICN) that affects the Recipient Liability is listed in the VISION or TECS systems.

#### Basic Care Program Recipient Responsibility

In the Basic Care Program, North Dakota DHS provides residential coverage for aged, blind, and disabled SSI recipients. Coverage is limited to persons in licensed basic care facilities. In this program, the state subsidizes non-Medicaid services (referred to as Room and Board) provided by a basic care facility for Medicaid eligible individuals. All but \$60 of a recipient's SSI income or medically needy income level is used to pay room and board. The amount the recipient must pay for room and board is identified as Recipient Responsibility (RR). If the recipient has insufficient RR to pay the room and board charges, any additional costs are then subsidized by the State. If the recipient has recipient responsibility remaining after paying room and board charges, the remainder is applied as other income to charges for personal care

services billed by the basic care facility. The remaining RR can only be applied to basic care charges for personal care services, (a Medicaid service) and is applied before recipient liability.

### **Recipient Copayment**

Some of North Dakota's Medicaid recipients are responsible for a small part of the cost (co-payment) for some medical services. Co-payments are deducted on claims for certain services and recipient groups, according to the co-payment policy set by the State. Co-payment amounts are applied to recipients based on, but not limited to: type of provider, diagnosis codes, place of service, procedure code, etc. Co-pays are excluded from some Federal and State-defined recipient groups. There are also some specific services excluded from the co-payment requirement. Other non-Medicaid programs may apply co-payments as well. For example, in some instances those participating in the DD waiver program may be responsible for a co-payment.

#### *3.1.2.12.1.1 Inputs*

- Recipient Liability amount
- Adjustments to Recipient Liability based upon paid claims
- ICN related to adjustment of Recipient Liability

#### *3.1.2.12.1.1 Outputs*

- Adjusted Recipient Liability

### **3.1.2.13 Third Party Liability**

The State has the responsibility to collect payments from third party payers when it is reasonable to do so. At times, it may be necessary to pay a claim and later recover the money from the third party payer (pay and chase). In some cases, it may benefit the State to pay the recipient's premium to another insurance payer to off-set some of the costs of medical care.

### **Cost Avoidance**

In most cases, Medicaid is the payer of last resort for medical claims. For the majority of medical claims, North Dakota requires providers to attempt to collect payment from other payers before submitting a claim to Medicaid for payment. If third party coverage is identified retroactively, an automated process is initiated to adjust claims.

### **Recoveries (Pay and Chase)**

In some situations, such as pharmacy claims, liability claims, and trauma claims, Medicaid pays the medical claims and attempts to recover from the liable third parties. Recovery billing may be sent to providers, insurers, attorneys, recipients, or any other liable entity. Currently, there is not an automated system to track the billings, and TPL recovery checks are sent directly to the Finance Division with no consistent notification to the TPL unit.

## **Estate Recovery**

Upon the death of a Medicaid recipient age 55 and over, the State can file claims against the estate. If the recipient has a spouse that is living, the claim does not have to be paid until the death of the spouse. The claim against the estate is for the cost of services that occurred between the recipient's 55<sup>th</sup> birthday and the date of death. DHS receives probate notices for North Dakota residents from attorneys and DHS determines whether the person has received Medicaid benefits. Probate is not filed for every individual, so the obituaries are also monitored to determine whether the deceased individuals received Medicaid.

The current process for determining the dollars paid from age 55 until death is manual. The staff must search microfiche and TECS, which contains records of Medicaid payments, for all the claims paid since the recipient turned 55. The amount claimed is calculated manually, based on review of the records. Any recovered funds are entered into the TECS system, which sends an adjustment to the MMIS. There is only two years of claims history in the MMIS, so only those claims are adjusted.

### *3.1.2.13.1.1 Inputs*

- Third party coverage information, including carrier code
- Information obtained from match report from Workforce Safety and Insurance
- Date of Death from Probate Notices, obituaries, and file from vital statistics

### *3.1.2.13.1.1 Outputs*

- Eligibility file to Workforce Safety and Insurance

## **3.1.2.14 Cost Sharing**

### **Medicare Buy-In**

Eligible individuals that wish to participate in Medicare Part B must pay a monthly premium. Under the Buy-In Program, however, states may pay the premium on their behalf. This arrangement transfers some medical costs for this population from the Medicaid Program, which is financed in part by the state and counties, to the Title XVIII Medicare Program for which the federal government assumes responsibility.

### **Workers with Disabilities**

A new Medicaid Buy-In program enables people with disabilities who are between the ages of 18 and 65 to enroll in Medicaid if their net household income is at or below 225% of the federal poverty level. Qualifying individuals will pay a one-time \$100 enrollment fee and then will be responsible for a monthly premium equal to five percent of the disabled individual's monthly income.

3.1.2.14.1.1 *Inputs*

- Medicare and buy-in information

### 3.2 Internal and External Interfaces

This section lists the current external and internal interfaces with the MMIS, VISION and TECS, and the Point of Sale System. Not all of the identified interfaces are electronic at this time, but the objective is to use electronic interfaces whenever possible. The State of North Dakota is seeking appropriation for funding in the 05-07 biennium to transition all Medicaid eligibility into the VISION system. If the funding is approved, the intent is to accomplish the transition prior to the implementation of the new MMIS.

CURRENT INTERFACES			
TYPE OF DATA	INTERFACE	PROGRAMS/ CLIENTS	COMMENTS
Vocational Rehabilitation Claims	Vocational Rehabilitation Information System (VRIS)	Voc. Rehab.	Inbound and Outbound Interface; VR person at the Regional Office enters data directly onto a MMIS ADABAS file using HC programs MMIS writes check and gives the check number and related claim detail such as amount, status, reason codes, authorizations, etc. back to VRIS through batch process
Payment Data	PeopleSoft Connect ND	Claims Payment	Outbound Interface; A journal voucher is used to send summary payment data to Connect ND on a weekly basis
Pharmacy Data	POS	Pharmacy	Inbound Interface; Pharmacy claims are adjudicated online in the POS and paid through the MMIS
Monthly claims and encounters, Simulated eligibility, CHIP enrollment, PCP enrollment, DME, Provider File, Provider cross-reference file	Medstat		Outbound Interface; Data from the VISION, MMIS, and DD systems feed into the Medstat Decision Support System
Data on NH resident's health, physical functioning, mental status, and well-being	CMS Minimum Data Set (MDS)	Nursing Homes	Outbound Interface; Level of Care data used for Nursing Home payments via RUG

<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
Claims	PC-ACE		Inbound Interface; PC-ACE is the software that Noridian provides to their providers to submit claims. It is an online system that submits the claims to Noridian. Noridian creates an 837 transaction to submit to the MMIS.
Imaged Documents	FileNet		Database used to store and access imaged documents maintained by ITD
2082 File – MSIS data	CMS	All	Outbound Interface; File from MMIS
Codes, RVUs	CMS Website	Reference tables for claims processing	Inbound Interface; Web download
ICD-9 Codes	AMA	Reference tables for claims processing	Inbound Interface; CD download
<b>Eligibility</b>			
Medicaid and SCHIP Eligibility; Demographic Information; Eligibility Dates; Recipient Liability; Coordinated Service Program	VISION	Temporary Assistance for Needy Families (TANF); Family Coverage; Pregnant Women; Medicaid-Related Children; SSI (non-disabled); Medicaid Expansion; Workers with Disabilities	Inbound interface for recipient eligibility and demographic data, and Recipient Liability balance. Vision also stores living arrangement, TPL and enrollment data and provides it to MMIS through the interface.  Outbound for monthly claims payment to calculate Recipient Liability balances within VISION
Medicare Eligibles Demographic Information; Type of Eligibility; Recipient Liability; Coordinated Service Program	TECS	QMB; SLMB; Q11; SSI; Spousal	MMIS looks at Natural ADABAS file. Data is received in batch from TECS.  Will eventually be moved to VISION

<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
Non-Medicaid Programs	Old MMIS/ ADABAS Files	Developmental Disabilities; Disability Determination Services (DDS) for SSI-Disabled; Department of Corrections; State Hospital; SPED; Basic Care; Women's Way; Ryan White Program; Special Education; Aging Services; CSHS	Inbound interface  DOC data entered manually
Eligibility, Recipient Liability, PCP, Copay, TPL, Vision Benefits	Medifax	All Providers; All recipients in the VISION and/or TECS eligibility systems	Outbound Interface from VISION and TECS. Providers can have recipient eligibility information faxed to them
Eligibility, Recipient Liability, PCP, Copay, TPL, Vision Benefits	VERIFY voice response system	All Providers; All recipients in the VISION and/or TECS eligibility systems	Outbound Interface from VISION and TECS. Providers can receive recipient eligibility information through an automated voice response system
Eligibility, Assessments, Case Planning	ASSIST (Case Management System)	DD Waiver Clients	Inbound Interface; Assessment results are stored in ASSIST and entered as screenings into the MMIS
SAMS	ASSIST	DD Waiver Clients	Inbound Interface; Assessment results are stored in SAMS and manually entered into the MMIS
<b>Managed Care</b>			
MCO Enrollment	Noridian	Medicaid Recipients participating in the MCO	Outbound Interface
Premium Payments	Noridian	Medicaid Recipients participating in the MCO	Outbound Interface
Encounter Claims	Noridian	Medicaid Recipients participating in the MCO	Inbound Interface; Received monthly in NSF format via NDM

<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
<b>Healthy Steps</b>			
Enrollment	Noridian	Healthy Steps Eligibles	Outbound Interface
Premium Payments	Noridian	Healthy Steps Eligibles	Outbound Interface
<b>Provider Subsystem</b>			
Licensing	State Board of Examiners website	All providers	Online or telephone verification
Excluded Party Listing	HHS Office of Inspector General Website	All physicians	Online verification
UPIN Look-up	NEBO e-care Website	All physicians	Online verification
Drivers License	Manual check with Dept of Transportation	Transportation providers only	Telephone/manual verification
Provider File Information	Medstat	All Providers	Provider file information sent to Medstat
<b>Pharmacy POS</b>			
Medicaid and SCHIP Eligibility; Demographic Information; Eligibility Dates; Recipient Liability; Coordinated Services Program	VISION	TANF; Family Coverage; Pregnant Women; Medicaid-Related Children; SSI (non-disabled); Healthy Families (future); Medicaid Expansion; Workers with Disabilities	Inbound interface for eligibility data and Recipient Liability balance  Outbound for monthly claims payment to calculate Recipient Liability balances within VISION
Medicare Eligibles Demographic Information; Type of Eligibility; Recipient Liability; Coordinated Services Program	TECS	QMB; SLMB; Q11; SSI; Spousal	MMIS looks at Natural ADABAS file. Data is received in batch from TECS.  Will eventually be moved to VISION
Provider Information	MMIS	Providers	POS does a direct read of the Provider File in the MMIS

<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
Non-Medicaid Programs Eligibility	Old MMIS/ ADABAS Files	Developmental Disabilities; Disability Determination Services (DDS) for SSI-Disabled; Department of Corrections; State Hospital; SPED; Basic Care; Women's Way; Nursing Home Clients	Inbound interface  DOC data entered manually
HCFA-1500 and UB-92 Claims; Pharmacy Data	Health Information Designs, Inc.	Pharmacy	Retro DUR - Claims data reviewed for consistency between diagnosis/procedure and prescriptions; data sent to State on CD-ROM
Pharmacy Data	First DataBank	Pharmacy	Pro DUR - First DataBank issues an alert if a problem with a prescription is identified
Drug File	First DataBank	Pharmacy	Drug file updates received twice monthly on cartridges; State has submitted a work request for an on-demand FTP download
Quarterly Rebate Update	CMS	Pharmacy – Drug Rebate	CMS sends a quarterly update tape with a list of participating drug rebate manufactures. After invoicing, State sends CMS an updated tape.
Pharmacy Claims	WebMD	Pharmacy	Inbound – WebMD is a clearinghouse for pharmacy claims
<b>TPL</b>			
Recipient demographic data	Workforce Safety and Insurance	Medicaid Eligible Recipients with Workforce Safety and Insurance Claims	DHS sends a file to WSI and receives back a match report to identify TPL

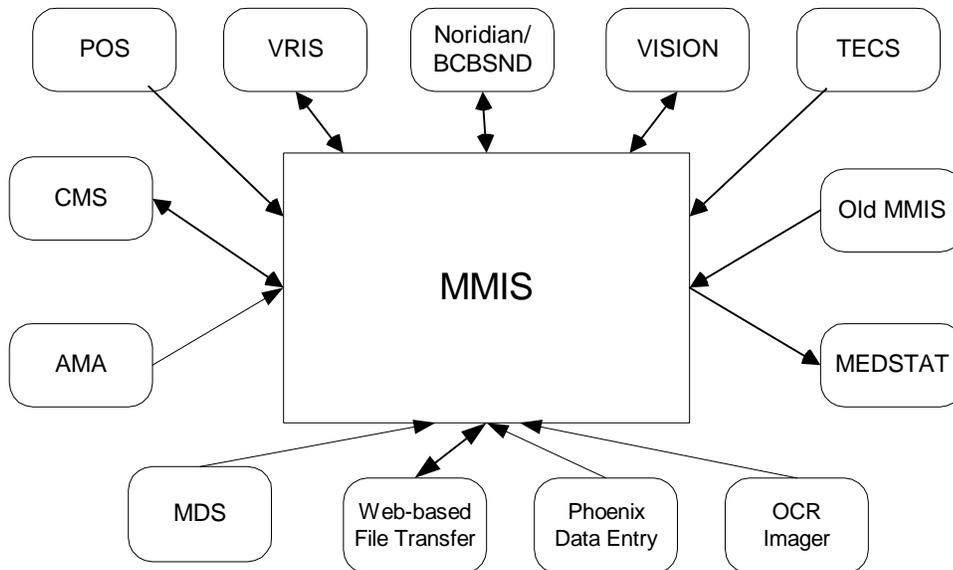
<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
TRICARE eligibility	DEERS	TRICARE/CHAMP VA eligibles	Child Support Enforcement (IV-D) currently sends IV-D eligible file to DOD. DOD matches and sends back match file with TRICARE/CHAMPVA eligibility information  Inbound match report is used for manual entry of DEERS data into MMIS
Other Insurance Information	County Offices	All Clients on VISION (if also on TECS, assume will be consolidated within VISION)	County workers enter TPL data into VISION. State is interested in using 270/271 to validate TPL benefits.
<b>Prior Authorizations</b>			
Prior Approvals	Multiple	Multiple programs and provider types	Multiple Hard Copy Forms; DHS can accept and respond to a 278 transaction
Waiver Service Plans	Multiple	Multiple programs and provider types	Multiple Hard Copy Forms; DHS can accept and respond to a 278 transaction

The following table lists the current external and internal interfaces with the Decision Support System.

<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
<b>Decision Support System</b>			
Provider File	Medstat	All Providers	Outbound Interface to Medstat
Simulated Eligibility File	Medstat	All Recipients	Outbound Interface; VSAM eligibility file creates integrated eligibility spans from VISION/TECS. This simulated Eligibility File is sent to Medstat
Claims	Medstat	All	Outbound Interface; Paid and Denied Claims sent to Medstat
Encounter Claims	Medstat	Managed Care	Outbound Interface; Encounter Claims sent to Medstat
Nursing Home Assessment Data	Medstat	Nursing Home recipients	Outbound Interface; MDS Screening data sent to Medstat

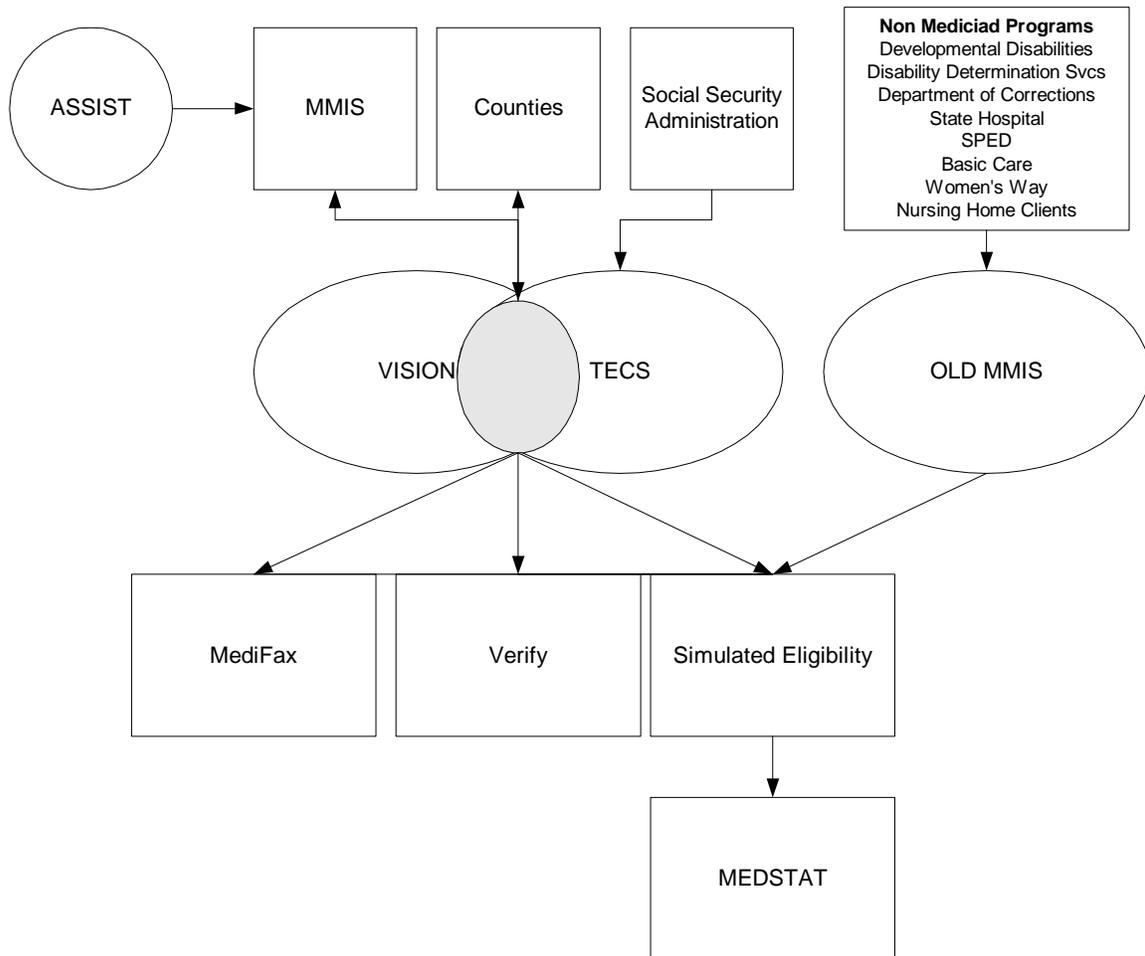
<b>CURRENT INTERFACES</b>			
<b>TYPE OF DATA</b>	<b>INTERFACE</b>	<b>PROGRAMS/ CLIENTS</b>	<b>COMMENTS</b>
Claims	Medstat	Healthy Steps	Outbound Interface; Noridian sends Healthy Steps (SCHIP) claims to Medstat
HCFA-1500 and UB-92 data from Third Party Payers	Medstat	DOH	Outbound Interface; Department of Health sends tape to Medstat; Medstat returns data on CD

**Figure 10 – MMIS Interfaces**

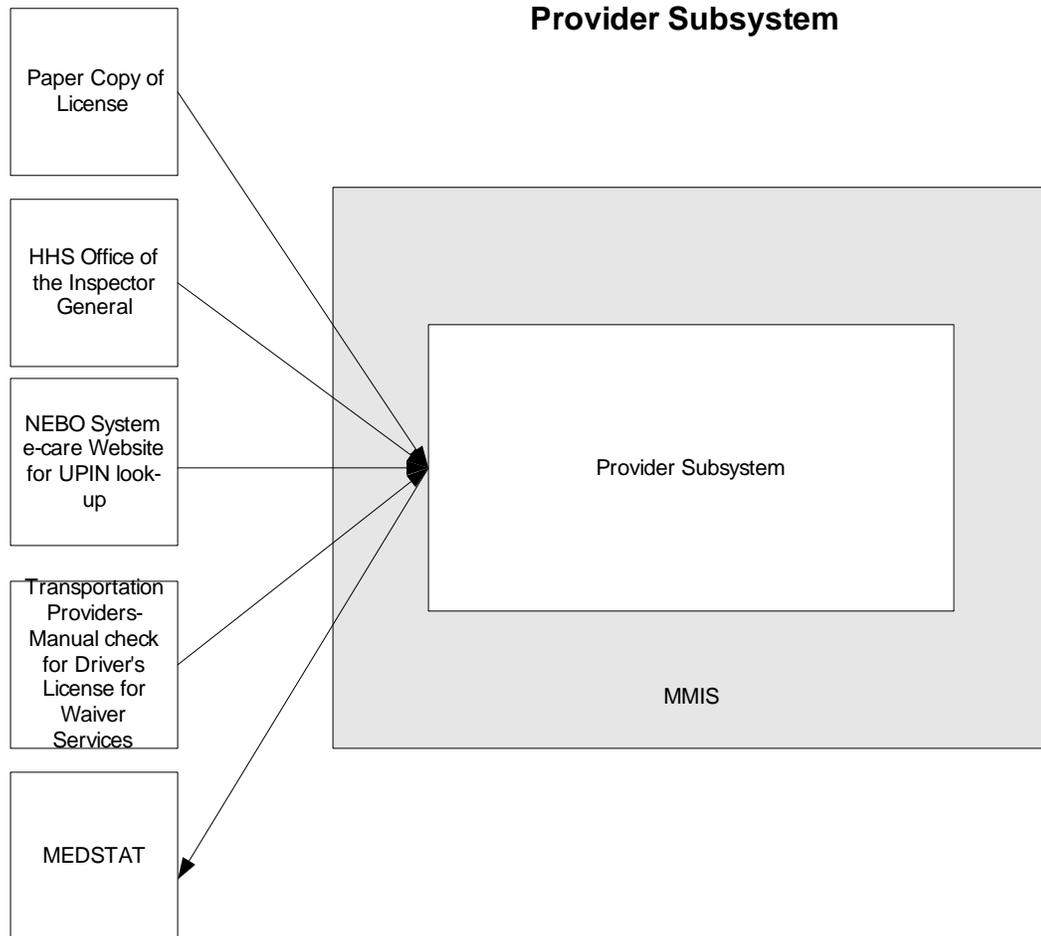


- CMS** – Center for Medicare and Medicaid Services
- CPT** – Current Procedural Terminology
- ICD-9** – International Classification of Diseases, 9<sup>th</sup> Revision
- MDS** – Minimum Data Set
- Noridian** – Noridian Health Insurance Company/Blue Cross Blue Shield of North Dakota
- OCR** – Optical Character Recognition
- POS** – Point of Sale
- VRIS** - Vocational Rehabilitation Information System

**Figure 11 – Eligibility Interfaces**



**Figure 12 – Provider Subsystem Interfaces**



**Figure 13 – Pharmacy POS Interfaces**

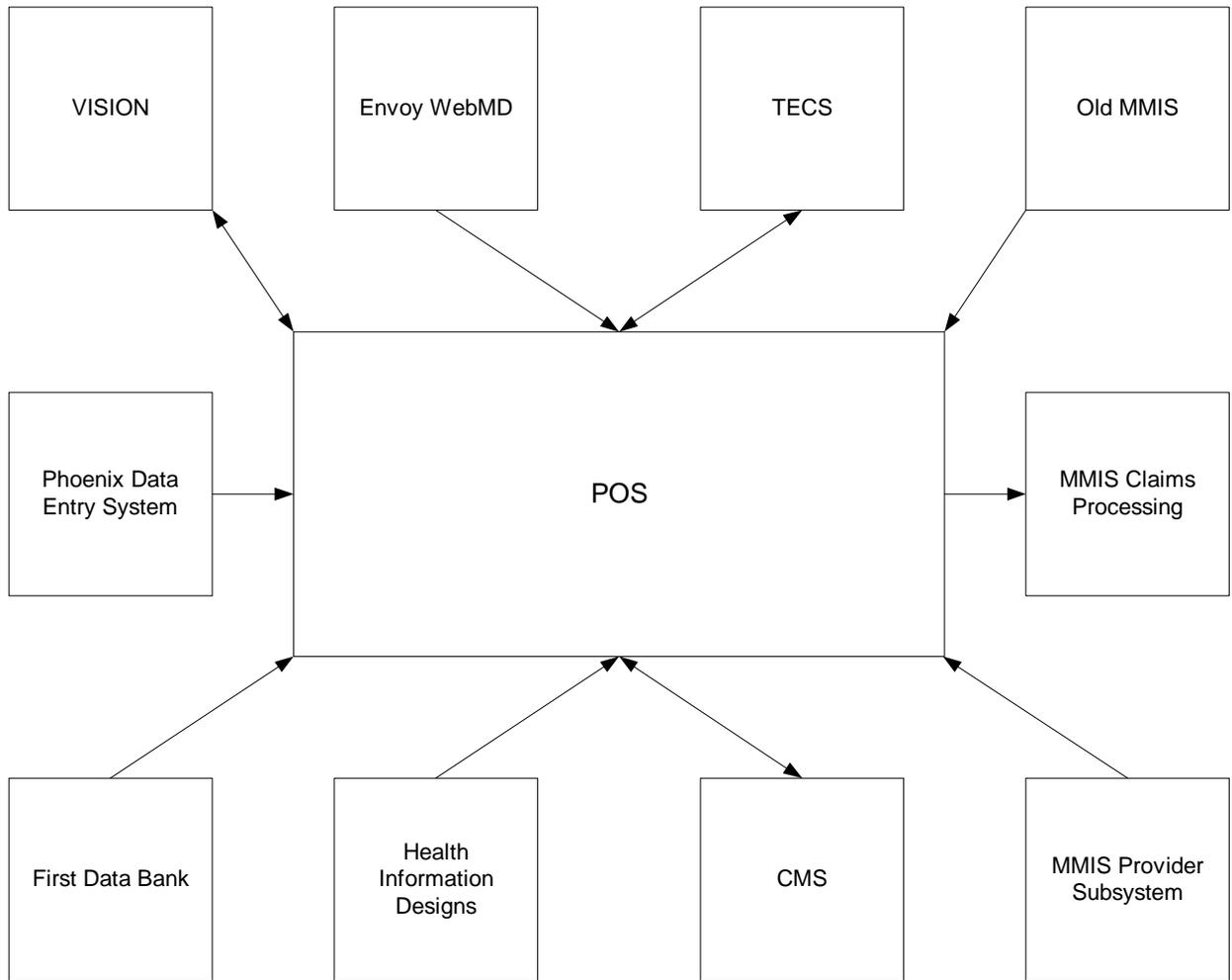
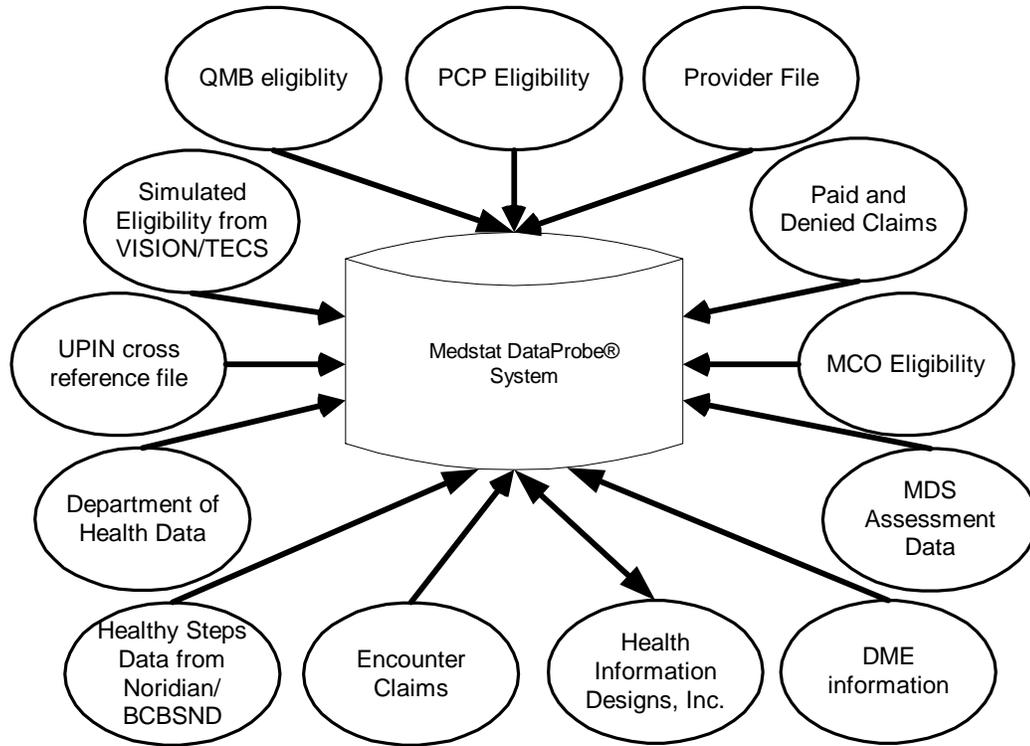
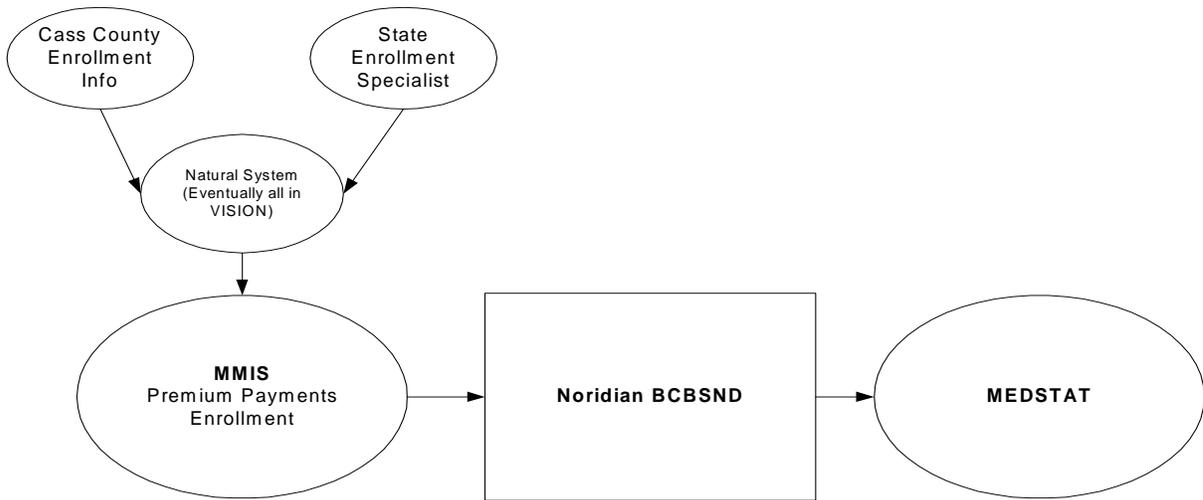


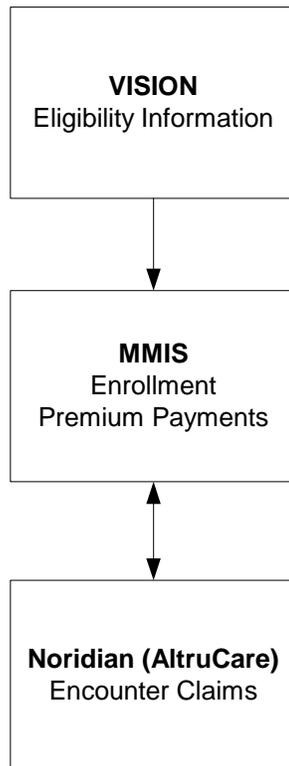
Figure 14 – Decision Support System Interfaces



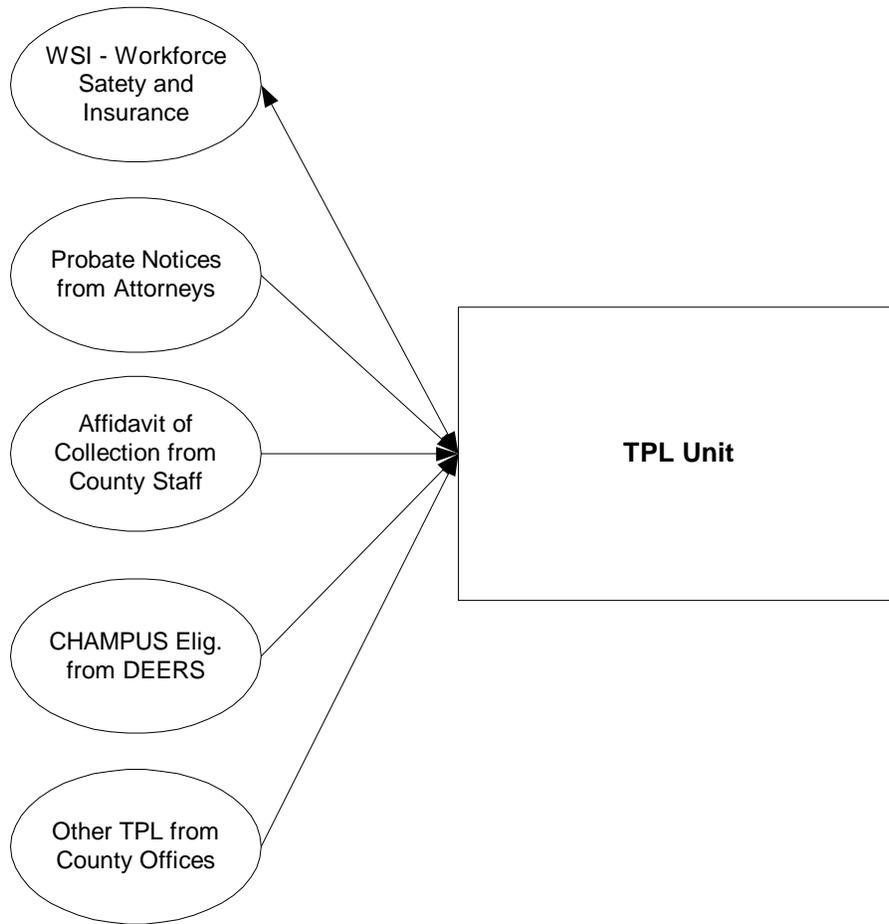
**Figure 15 – Healthy Steps Interfaces**



**Figure 16 – MCO Interfaces**



**Figure 17 – TPL and Estate Recovery Interfaces**

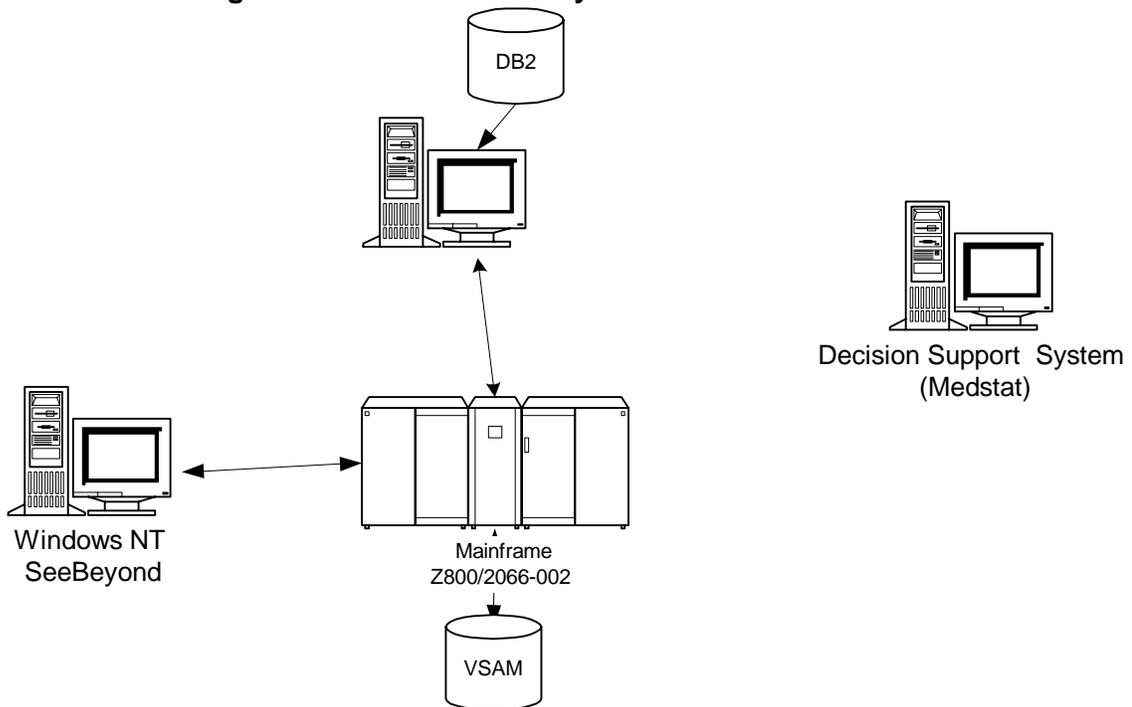


### 3.3 The Technical Environment

#### 3.3.1 MMIS Systems Architecture

The following diagram provides a high level basic overview of the existing MMIS systems architecture showing some of the system servers and applications.

**Figure 18 – North Dakota Systems Architecture**



##### 3.3.1.1 Mainframe Hardware

Most of the core components of the Medicaid Management Information System (MMIS) are hosted on an IBM z800 mainframe system running the IBM zOS 1.4 operating system software. The MMIS utilizes CICS for the online accessing of data. Both VSAM and sequential flat files are the primary storage methods for storing and organizing the MMIS data. All of the communication between the mainframe and desktop workstations is accomplished using TCP/IP protocols.

3.3.1.2 [Application Software](#)

In addition to the IBM z800 mainframe, the current MMIS also consists of several servers. The majority of the application software that is used on the mainframe and servers is as follows:

<b>SOFTWARE TOOLS AND LANGUAGES</b>	<b>SERVER</b>	<b>APPLICATION SOFTWARE</b>	<b>DESCRIPTION</b>
<b>ADABAS</b>	Z800	MMIS, TECS	A non-relational database management system from Software AG; a facility on the mainframe that provides file administration for the MMIS data
<b>AllFusion Combridge</b>	HP	VISION	Provides SNA communication to the mainframe. Communication package to allow clients to access the VISION application
<b>AllFusion Gen (C++ Client)</b>	NA	VISION	Software package used for the development and maintenance of the VISION application
<b>Blaze</b>	Intel/Windows	VISION	Inference engine for the VISION eligibility rules
<b>CICS</b>	Z800	MMIS, POS, TECS	Transaction software utilized by many of the core MMIS subsystems to enter and display data
<b>COBOL</b>	Z800	MMIS, VISION, TECS, POS	The programming language that is used in most of the MMIS application
<b>CORBA</b>	NA	VISION	Communication methodology between C++ Client and Blaze
<b>DB2</b>	Z800	MMIS, VISION, TECS, POS	Relational Database software that supports the MMIS, VISION, TECS, POS applications
<b>IVR</b>	WINTEL	MMIS (Verify)	Voice Response Eligibility Inquiry System
<b>LOTUS</b>	Intel/Windows	VISION	VISION client notification
<b>Natural</b>	Z800	TECS, MMIS	The Software AG programming application

SOFTWARE TOOLS AND LANGUAGES	SERVER	APPLICATION SOFTWARE	DESCRIPTION
			software that provides application support and for access to the data in the ADABAS and DB2 environment
<b>Oracle</b>	Sun	SeeBeyond	Relational Database software that supports the SeeBeyond Translator for HIPAA transactions
<b>VSAM</b>	Z800	MMIS	The primary data access method for the administration of MMIS data. Provides for both random access of data through key structures as well as the sequential processing of data
<b>Websphere</b>	Intel/LINUX		Allows for web development in addition to data/file transfers

3.3.1.3 [In-House Applications](#)

The state also utilizes several Commercial-Off-the-Shelf (COTS) applications that are listed in the following table:

COMMERCIAL APPLICATIONS	SERVER	DESCRIPTION
<b>Claredi</b>	Intel	HIPAA X12 rules validation
<b>Medifax EDI</b>		Application that receives copies of all the eligibility system files and provides a for-pay eligibility verification service for the providers
<b>Medstat</b>	Compaq	Provides support and maintenance of the Decision Support System. This database system consists of claims, encounters, CHIP, MCO, PCP, DME, eligibility, MDS, and provider information to perform analysis and reports
<b>Network Data Mover (NDM)</b>	Multiple servers	Provides for data and file transfers from mainframes, midrange servers

COMMERCIAL APPLICATIONS	SERVER	DESCRIPTION
<b>Mover (NDM)</b>		and PCs
<b>SeeBeyond</b>	WINTEL Windows/Intel based server	Translator software package that is used to process HIPAA transactions
<b>Verity Mediclaim</b>	Windows	OCR software package for paper claims

### 3.3.1.4 [Networks](#)

The MMIS environment encompasses only the TCP/IP protocol for communications among the mainframe, user workstations, and servers hosting applications and web capabilities. The WAN connectivity primarily consists of a SONET ring topology incorporating ATM-T1 technology. User sites employ Local Area Networks (LANs) connected to a Wide Area Network (WAN) for communications between machines and locations. These LAN connections are 100 megabit Ethernet networks with Fargo and Bismarck metropolitan area being gigabit fiber based.

### 3.3.1.5 [Servers](#)

As stated, the MMIS environment has more than a mainframe to host and perform processes to support the Department of Human Services. There are a number of smaller servers host applications and data that support eligibility, HIPAA transactions, and the decision support system, in addition to a number of other various elements. A brief inventory of those machines and their purpose is presented in the following table:

SERVER	DESCRIPTION
<b>Mainframe</b>	IBM z800 mainframe running the zOS operating system. It houses most of the core subsystems and data used within the MMIS environment.
<b>HP</b>	This server hosts the VISION application in addition to some web based file transfer facilities
<b>SUN</b>	The server that runs the Oracle RDBMS. This database is used to store data associated with HIPAA transactions
<b>Wintel</b>	The server that maintains the SeeBeyond translator
<b>Compaq 6000</b>	The server housing the Medstat Decision Support System

### 3.3.1.6 [Web File Transfer](#)

Internet and web services are in their infancy and only provide for claims and encounters to be sent and received. There are current plans to increase the functionality of web transactions.

Some web transactions are currently available but the provider community is not set up to submit them yet.

#### 3.3.1.7 [Desktop Configuration](#)

The typical desktop configuration for North Dakota State government consists of a variety of Intel based PCs running some variety of Microsoft Windows operating system. For the Department of Human Services and those users accessing the MMIS and other associated applications, the minimal processor is a 500 mhz running Windows NT. As machines are cycled out for newer models they are replaced with faster processors and use the Windows XP Professional operating system.

### 3.4 MMIS Partners and Stakeholders

The successful transition to a new MMIS is dependent not only on the selection of a qualified vendor and dedicated staff, but also requires the support of the individuals and agencies that have a stake in its success. The North Dakota Department of Human Services has taken a proactive approach by hosting a meeting in 2004 with the stakeholders to share information about the MMIS replacement effort. A webcast of the meeting is available at the following location: <http://www.state.nd.us/humanservices/info/news/2004/20040921.html>

Invitees were encouraged to submit any questions they had prior to the meeting. Listed below are the agencies that were invited to participate.

<b>ORGANIZATION</b>
AARP
Aberdeen Area Indian Health Service
Bismarck School Special Education
Budget Committee on Health Care Chairman
Budget Committee on Human Services Chairman
Budget Section Committee Chairman
Cass County Social Service Board
Community Healthcare Association of the Dakotas
DOCR Division of Juvenile Services
DOCR Prisons Division
Durable Medical Supply Association
Family Voices of North Dakota
FOX Systems, Inc.
Governor's Office
House Appropriations
Information Technology Committee
Legislative Council Staff
Mental Health Association in North Dakota
Metro Area Ambulance
Noridian BlueCross BlueShield of North Dakota
North Dakota Association for the Disabled
North Dakota Association of Community Facilities
North Dakota Center for Persons with Disabilities
North Dakota Chiropractic Association
North Dakota Dental Association
North Dakota Department of Health
North Dakota Department of Human Services
North Dakota Department of Information Technology
North Dakota Department of Insurance
North Dakota Department of Public Instruction

<b>ORGANIZATION</b>
North Dakota Emergency Medical Services Association
North Dakota Federation of Families For Children's Mental Health
North Dakota Health Care Review
North Dakota Healthcare Association
North Dakota Home Care Association
North Dakota Legislature
North Dakota Long Term Care Association
North Dakota Medical Association
North Dakota Nurses Association
North Dakota Office of Management & Budget
North Dakota Office of the State Auditor
North Dakota Optometric Association
North Dakota Pharmaceutical Association
North Dakota Public Health Association
North Dakota State Board of Medical Examiners
North Dakota State Hospital
North Dakota Workforce Safety & Insurance
Northland Healthcare Alliance
Public Health Association
Senate Appropriations
Spirit Lake Tribal Health
Standing Rock Tribal Health
State Home Care Association
The ARC of Bismarck
Three Affiliated Tribes
Trenton Indian Service Area
Turtle Mountain Tribal Health
Youth Correctional Center