

**REPORT OF THE DEPARTMENT OF
MEDICAL ASSISTANCE SERVICES**

Options for Enhancing Fraud and Abuse Deterrence in the Virginia Medicaid Program

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



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MEMORANDUM

TO: The Honorable Bob McDonnell
Governor

The Honorable Charles J. Colgan
Chairman, Senate Finance Committee

The Honorable Lacey E. Putney
Chairman, House Appropriations Committee

FROM: Gregg A. Pane, MD, MPA 

SUBJECT: Report on Options for Enhancing Fraud and Abuse Deterrence in the Virginia Medicaid Program

House Bill 733 of the General Assembly states the Director of the Department of Medical Assistance Services shall investigate options for a comprehensive system that utilizes external records search and analytic technologies for the collection and review of data from public and private sources, including (i) data used to confirm the identity and eligibility of medical assistance services benefit recipients, (ii) data related to provider eligibility including information about providers' criminal history or sanctions against providers in other states, and (iii) data about pre-payment and post-payment claims, to detect, prevent and investigate fraud, waste and abuse in Virginia's medical assistance services program, including but not limited to fraud, waste, and abuse in the areas of provider enrollment, claims processing, and audits and investigations, and shall report information related to such options, including cost, to the General Assembly no later than December 1, 2010.

Should you have any questions or need additional information, please feel free to contact me at (804) 786-8099.

Enclosure

cc: The Honorable William A. Hazel, Jr., M.D., Secretary of Health and Human Resources

Executive Summary

Fraud and abuse (i.e., fraudulent activities) are defined as the willful misrepresentation of facts or the failure to report facts important to transactions, which result in unnecessary financial costs and damages to other parties relying on the truthfulness of those facts. Many types of fraudulent activities exist. In health care, most fraud is committed by providers (rather than patients) that bill insurance companies for services not performed or for more expensive services than actually performed. The extent to which these criminal activities occur is only limited by the creativity of the perpetrators committing them and the vigilance of the intended victims.

As with any large enterprise, the nation's health care system is vulnerable to fraud and abuse. This is due partly to the complexity of the health insurance process and the large volume of insurance claims generated each year for medical services. Medicaid and Medicare are especially susceptible because they serve populations that are disproportionately targeted by the perpetrators of fraud. The end result of health care fraud and abuse is increased costs for payers, providers, patients, and other stakeholders. While it is difficult to develop a comprehensive economic impact estimate of these activities because they are not always reported, national annual estimates ranging between \$68 and \$220 billion have been calculated. Regardless of the estimates, it is clear that fraud and abuse divert already limited resources away from the nation's health care delivery system.

The Department of Medical Assistance Services (DMAS) is responsible for administering the Virginia Medicaid Program, and the agency uses a multi-faceted approach to prevent fraud and abuse from occurring in the program. The approach involves various components such as the recipient enrollment process, provider participation agreements, the Program Integrity Division, the Virginia Medicaid Fraud Control Unit (at the Office of the Attorney General), and contracts the agency has with five managed care organizations that participate in Virginia Medicaid. Recognizing the importance of deterring fraud and abuse in Virginia Medicaid, the 2010 General Assembly directed DMAS to identify additional options that could be used to strengthen its deterrence efforts. This report fulfills that directive and contains information on external record sources, such as state police criminal history and prescription drug monitoring data, and analytical technologies, such as a state Medicaid Fraud and Abuse Detection System, that could be used to develop a comprehensive fraud deterrence system for Virginia Medicaid.

Table of Contents

Sections	Page
Introduction.....	1
Recent Federal Legislation and Health Care Fraud and Abuse.....	2
Fraud and Abuse Controls Currently Employed in Virginia Medicaid.....	2
Options for Reducing Fraud and Abuse in Virginia Medicaid Using External Record Sources.....	8
Analytical Technology Options for Reducing Fraud and Abuse in Virginia Medicaid.....	10
Costs Associated with Implementing External Record and Analytical Technology Options Identified by DMAS Staff.....	14
Virginia Medicaid Biometric Identification Pilot.....	14
Summary.....	14
 Appendix	
House Bill 733 Excerpt.....	A-1

Introduction

House Bill (HB) 733 passed by the 2010 General Assembly directs the Department of Medical Assistance Services (DMAS) to study options for developing a comprehensive system using external record search and analytical technologies to prevent and deter fraud and abuse in Virginia Medicaid (an excerpt from HB 733 directing DMAS to conduct this study is presented in Appendix 1). This report was prepared to address the requirements of HB 733.

Medicaid is a public health insurance program for low-income children, pregnant women, the elderly, and individuals with disabilities. The program is financed by both the state and federal governments. As of October 1, 2010, 802,673 individuals were enrolled in Virginia Medicaid, with an additional 102,780 enrollees in the Children's Health Insurance Program (CHIP, known as FAMIS in Virginia). Approximately 62 percent of these individuals received health care services through one of five managed care organizations (MCOs), while the remaining 38 percent received services through the fee-for-service (FFS) program. During fiscal year (FY) 2009, 38,600 active providers (e.g., physicians, pharmacists, dentists, podiatrists, optometrists, clinics, hospitals, and nursing homes) participated in Virginia Medicaid and were reimbursed approximately \$5.7 billion for providing covered services. As such, Medicaid is currently the second largest program in the Virginia State budget and its size is anticipated to increase substantially in the coming years due to the aging of the population and due to expansions under federal health reform.

Preventing health care fraud and abuse is important because they contribute to the nation's growing health care costs and divert limited funds that could have been spent on providing needed medical services to patients.¹ According to Blue Cross-Blue Shield, approximately 75 percent of all health care fraud and abuse is committed by providers nationally, while only 18 percent is committed by patients. Provider fraud generally occurs when providers bill public or private health insurance organizations for services that were never rendered to patients or when they bill for more expensive services than were actually rendered. Patient fraud occurs when individuals use other peoples' medical information to obtain health care services or when they obtain medical services using fraudulent identities. In Virginia, identified fraud accounted for approximately \$20.2 million of Medicaid expenditures during FY 2009. Of this amount, 98 percent was due to provider fraud, while only two percent was due to recipient fraud.

If left unchecked, fraud and abuse can result in increased costs for health insurance organizations, providers, and patients. In fact, it has been estimated that fraud and abuse accounted for between three and 10 percent (or between \$68 and \$220 billion) of the nation's overall health care expenditures in 2007. Within the health care industry, fraud detection is primarily performed through computerized analyses of claims data or

¹ For the purpose of this report, Medicaid fraud is defined as the intentional deception or misrepresentation by an individual to obtain unauthorized benefits, while abuse is defined as any activity that is inconsistent with sound fiscal, business, or medical practices that result in unnecessary costs to the Medicaid program. These definitions were adopted from section 455.2 of 42 Code of Federal Regulations.

when vigilant individuals report suspicious activity. Historically, fraud deterrence has been a “pay and chase” process where insurance organizations pay all health care claims upfront, and then investigate questionable claims. Based on the results of the investigations, insurance organizations may attempt to address their losses by recouping payments made to providers submitting fraudulent claims or by reporting the activities to law enforcement agencies.

Due to the economic burden that health care fraud and abuse place on society, it is important to develop systems for preventing and deterring these activities. Options for enhancing DMAS’ current fraud deterrence efforts are presented in this report. The report provides an overview of recent federal legislation and its relationship to health care fraud and abuse, DMAS initiatives to control fraud and abuse, options that DMAS could implement to enhance its fraud and abuse deterrence efforts using external record searches and analytical technologies, as well as some limited information regarding the costs involved with implementing these options. The report also provides information on the Virginia Medicaid Biometric Identification Program, which is a pilot initiative that the 2010 General Assembly directed DMAS to implement upon receiving federal funding (to date, the federal government has not allocated any funding for this pilot).

Recent Federal Legislation and Health Care Fraud and Abuse

The federal government recently enacted legislation that promotes the use of health information technology and patient data to generate quality of care and efficiency improvements in the nation’s health care delivery system. For instance, the *American Recovery and Reinvestment Act of 2009* (the federal stimulus) includes the goal of significantly increasing the number of health care providers using electronic medical record (EMR) systems by 2014. The legislation specifically requires state Medicaid agencies to administer incentive payment programs for providers adopting EMR systems and to collect clinical data containing patient information from providers that adopt these systems. The *Patient Protection and Affordable Care Act of 2010* (federal health reform) expands the number of people eligible for health care coverage, while continuing to emphasize the use of EMR systems and other health information technologies. Because federal legislation promotes rapid advances in health information technologies and expanded access to health care services and confidential patient information, the potential for fraudulent schemes to occur in health care programs will increase. In fact, national health care reform adds several fraud and abuse deterrence (collectively known as program integrity) changes to Medicaid, including new provider enrollment requirements, enhanced internal program integrity procedures for certain providers, and the use of contract auditors to identify improper payments. Thus, recent federal legislation underscores the importance of enhancing DMAS’ program integrity system.

Fraud and Abuse Controls Currently Employed in Virginia Medicaid

Currently, DMAS uses a complex, multi-faceted approach to prevent fraud and abuse in Virginia Medicaid that consists of several intertwined components: DMAS program integrity division, recipient enrollment, the Virginia Medicaid and FAMIS-Plus

Handbook, provider enrollment, Virginia Medicaid Management Information System, Virginia Death Certificate Data, the Medicaid Fraud Control Unit (at the office of the Attorney General) and local Commonwealth's Attorneys, managed care organization contracts, the Payment Error Rate Measurement Program, the Department of Social Services and its local offices, Medicaid Eligibility Quality and Control, and the Public Assistance Reporting Information System. Collectively, these components represent the bulk of the agency's program integrity continuum. Additional information on these components is provided below.

DMAS Program Integrity Division. The federal government requires all state Medicaid agencies to perform program integrity activities. As a result, the primary component that DMAS uses to control fraud and abuse in Virginia Medicaid is its program integrity division. Because Medicaid operates as a vendor payment program, the program integrity division's oversight activities are limited to the FFS program (DMAS requires MCOs to conduct their own program integrity activities). Division staff review paid claims to identify potentially fraudulent activities and investigate providers and recipients suspected of committing these activities. Cases determined to be fraudulent are referred to the Medicaid Fraud Control Unit in the Office of the Attorney General or to local Commonwealth's Attorneys for criminal prosecution, while cases that are not forwarded for prosecution are addressed internally through an administrative recovery process.

Between FY 2006 and FY 2009, audits conducted by staff in the program integrity division and the Department of Social Services identified at least \$12.4 million in improper payments made on behalf of recipients (recipient fraud or error). On the provider side, audits conducted by division staff identified almost \$30 million in improper payments between FY 2006 and FY 2009. The division also manages four contracts that the agency has with national auditing firms hired to perform special audits on pharmacy, physician, and community mental health providers.

In addition to audit and contract monitoring activities, the division performs several major oversight functions including:

- service authorization, which is a utilization management review process that only allows payments for services that are medically necessary;
- the surveillance and utilization review subsystem that identifies potentially abusive or fraudulent practices by providers and recipients through profiling provider billing practices and recipient use of medical and pharmacy services;
- analysis of claims data contained in the Virginia Medicaid Management Information System to identify overpayments made to specific providers; and
- the client medical management system that provides utilization control and case management to recipients with a history of obtaining services that are not medically necessary by restricting them to designated providers.

The service authorization (SA) process has been particularly effective at reducing improper payments to providers for services that are not medically necessary. In fact, between FY 2008 and FY 2010, the SA process identified almost \$133 million in costs for “unnecessary” medical services (it is possible that some portion of these services were subsequently approved upon receipt of appropriate documentation of medical necessity). In addition to achieving “hard” savings through actual cost reductions, it is likely that the SA process has achieved “soft” savings through avoided costs because providers know in advance that the medical necessity of the services will be subjected to the review process.

Medicaid Recipient Enrollment. One component that DMAS uses to address fraud is the recipient enrollment process, which is administered by the Department of Social Services (DSS) through its local offices. The enrollment process is designed to ensure that only eligible individuals are enrolled in Medicaid. For example, to qualify for Medicaid coverage, individuals must first pass citizenship verification through the U.S. Social Security Administration and identity verification through a review of official documents, such as state drivers’ licenses or government identification cards with attached photographs. Individuals must also pass annual income verifications based on reviews of various financial documents including paystubs, bank statements, tax records, and mortgage statements.

Virginia Medicaid and FAMIS-Plus Handbook. DMAS educates all enrollees about the importance of preventing health care fraud and abuse through its Medicaid and FAMIS-Plus Handbook. The handbook contains information on member benefits as well as information on fraud and abuse and the likely consequences that recipients will face if they commit these offenses (e.g., recipients will lose their Medicaid coverage and could be fined up to \$25,000 and/or face up to 20 years in prison). The handbook includes a telephone number and e-mail address that recipients can use to report fraudulent activities.

Medicaid Provider Enrollment. To participate in Virginia Medicaid, providers must meet certain requirements including Virginia Board of Health Professions’ certification, licensure, and education requirements; have no Medicaid- or Medicare-related felonies; and have no history of patient abuse or similar offenses. Providers must also submit a comprehensive application to the DMAS provider enrollment contractor as part of this process. The application is used, in part, to deter fraud and abuse among enrolled providers by asking questions about their medical licenses, tax identification numbers, practice ownership structures, and criminal convictions. Providers failing to complete any of the required sections in the application or that later violate certain sections are prohibited from participating in Virginia Medicaid.

As part of the enrollment process, the contractor uses the List of Excluded Individuals/Entities (LEIE), which is a database maintained by the federal government that lists all providers prohibited from participating in the Medicaid and Medicare programs, to verify that the applicants are not listed in the database. DMAS will not enroll (and reimburse) providers for Medicaid services if they are listed in the LEIE

database. As of June 2010, 1,080 Virginia providers were excluded from participating in Medicaid because they were listed in the database. Most of the providers were in the database due to medical license suspensions or because of program-related crime convictions.

In addition to these measures, all enrolled providers are required to ensure that their employees and contractors are qualified to participate in Medicaid. For instance, long-term care facilities and home health agencies enrolled as providers must verify that their staff and contractors have backgrounds and experiences appropriate to their positions and do not have any convictions that would exclude them from participating.

Furthermore, Virginia Medicaid providers must inform their employees about the Virginia Fraud Against Taxpayers Act (Va. Code 8.01-216.1, et. seq.), which provides for civil penalties imposed for submitting a false or fraudulent claim to the Commonwealth for payment or approval, use of a false record in support of such a claim, conspiring to defraud the Commonwealth, and several other actions for involving fraudulently holding or concealing property of the Commonwealth or authorizing any of these actions. The Act permits private citizens to bring a civil action for false claims, and provides that the Virginia Office of the Attorney General shall investigate the matter and decide whether to proceed with prosecuting the case. The Act also provides that the citizen bringing the action may receive a share of any recovery made by the Commonwealth. Finally, § 8.01-216.8 of the Act protects employees against termination or discrimination for opposing fraudulent actions or for participating in the investigation or prosecution of an action for fraudulent government claims (“whistleblower” protection).

Virginia Medicaid Management Information System (VaMMIS). VaMMIS is a computerized system that DMAS uses to perform claims processing, information retrieval, and program management support. In FY 2009, VaMMIS processed over 35 million provider claims at a cost of approximately \$5 billion, which accounted for about 12 percent of the Virginia State FY 2009 budget. Because the majority of health care fraud is committed by providers, VaMMIS is used to detect fraud and abuse activities through a series of front-end claims verification controls known as “edits”. The edits are designed to ensure that providers are appropriately reimbursed for only providing medically necessary services to eligible recipients. For example, when providers submit claims for reimbursement, the edits verify that the recipients were actually eligible for Medicaid coverage on the date of service, that the providers were enrolled in Medicaid, that the services billed for were within their professional expertise, and that they did not submit multiple claims for providing the same services to the same recipients on the same day. Claims passing these edits are processed for payment. In FY 2009, VaMMIS edits avoided approximately \$11.8 million in unnecessary costs.

Virginia Death Certificate Data. To ensure that providers do not receive payment for submitting fraudulent claims for providing services to deceased Medicaid recipients, DMAS compares death certificate data obtained from the Virginia Department

of Health (VDH) against its enrollee eligibility file on a monthly basis to identify these recipients. Once identified, the recipients are removed from the agency's eligibility file.

Virginia Medicaid Fraud Control Unit and Local Commonwealth's Attorneys.

The Virginia Medicaid Fraud Control Unit (MFCU), which is part of the Office of the Attorney General, was established in 1982 to conduct criminal investigations and prosecutions of three major types of cases: Medicaid provider fraud, elder neglect or abuse, and the misappropriation of Medicaid patient private funds. The MCFU employs 49 attorneys, auditors, and investigators that investigate and prosecute provider fraud and abuse cases. Between FY 2005 and FY 2009, the MCFU conducted 340 investigations. Approximately two-thirds of the investigations resulted from whistleblowers and focused on home health agency providers and pharmaceutical manufacturers. DMAS and the MCFU meet periodically to share information on fraud and abuse investigations. During the last five fiscal years, the MCFU recovered approximately \$48.7 million for DMAS through its prosecutions.

Local Commonwealth's Attorneys are elected constitutional officers responsible for prosecuting felony, misdemeanor, and traffic cases within their jurisdictions. The DMAS program integrity division refers cases involving recipient Medicaid fraud to Commonwealth's Attorneys for prosecution. Between FY 2005 and FY 2009, DMAS forwarded 172 cases of suspected recipient fraud to Commonwealth's Attorneys. Of this amount, 124 were prosecuted; however, only 100 of these cases resulted in convictions. (Cases that are rejected for prosecution are typically due to insufficient evidence.) These prosecutions generated \$758,289 in restitution. The most common fraud convictions were for prescription drug fraud and unreported income.

Managed Care Contracts. DMAS does not process direct reimbursement claims for Medicaid recipients enrolled in the managed care organizations (MCOs). As a result, these claims are not subject to the front-end edits contained in VaMMIS. Because DMAS does not perform any direct program integrity reviews of managed care claims, the agency requires, through contracts, all MCOs that participate in Virginia Medicaid to analyze service data to identify potential billing errors and fraudulent claims, to ensure that their contracted providers sign Medicaid participation agreements, and to verify that their providers are licensed to perform the specific services for which they were contracted. The contracts also require the MCOs to meet certain program integrity procedures to protect against fraud and abuse, such as designating compliance officers, conducting staff training, and performing internal monitoring and auditing activities.

In addition to the explicit requirements for program integrity activities by the contracted Medicaid MCOs, the capitation rate payment structure of payments from DMAS to the MCOs places the MCO at risk for fraud and abuse occurring within their network providers. In other words, the MCOs have a direct financial interest in avoiding inappropriate payments within their systems; such payments would impact the MCOs' bottom line directly.

Payment Error Rate Measurement (PERM) Program. The PERM program was developed by the federal government in 2005 to determine the number of errors that states make in verifying eligibility status for Medicaid applicants. The goal of the program is to ensure that only qualified individuals receive Medicaid benefits. PERM reviews are conducted on a rotating basis, such that each state Medicaid agency is only reviewed once every three years. The most recent PERM review that DMAS participated in was conducted in 2009 using data from federal fiscal year 2006. While the federal government did not estimate a statistically valid eligibility error rate for Virginia as part of the review, a national eligibility error rate was reported at 6.7 percent. DMAS will be receiving the results of a more recent PERM review in the coming months.

Department of Social Services and Local Social Services Offices. In Virginia, the Department of Social Services is responsible for determining the eligibility of applicants and enrolling them in Medicaid. This function is actually performed by staff in the department's 120 local offices. As outlined in a 2004 agreement between DMAS and DSS, the local offices are responsible for investigating suspected cases of recipient fraud, and forwarding cases for prosecution to Commonwealth's Attorneys that also involve other public assistance programs, while DMAS is responsible for investigating and forwarding for prosecution recipient fraud cases involving Medicaid-related crimes. According to the recent Joint Legislative Audit and Review Commission (JLARC) report titled *Interim Report: Fraud and Error in Virginia's Medicaid Program*, in FY 2009, 83 local offices conducted investigations of cases involving potential recipient Medicaid fraud and abuse, while 23 offices referred Medicaid cases to local Commonwealth's Attorneys for prosecution or to DMAS for further investigation.

Medicaid Eligibility Quality Control (MEQC). Since 1975, the federal government has required state Medicaid agencies to conduct annual MEQC reviews to identify errors in the eligibility determination process. In Virginia, staff at DMAS and the Department of Social Services (DSS) have primarily performed MEQC pilot reviews, which are typically targeted toward known or suspected issues, or new policy, to provide further guidance and education aimed at improving compliance with the stated policy. If errors are found, then staff works with the appropriate local DSS offices to develop corrective action plans.

Public Assistance Reporting Information System (PARIS). Virginia also participates in PARIS, which is a federal program used to verify that individuals enrolled in one state's public benefits program are not enrolled in other states' programs based on a comparison of enrollee social security numbers. Because DMAS does not typically enroll recipients directly into Medicaid, local DSS staff use PARIS to perform this verification when individuals apply for coverage. The local DSS departments are responsible for investigating and forwarding for prosecution Medicaid fraud cases that involve other public benefits programs.

Options for Reducing Fraud and Abuse in Virginia Medicaid Using External Record Sources

The above information indicates that DMAS uses a comprehensive program integrity system to deter fraud and abuse in Virginia Medicaid. Overall, the system has been effective. In fact, the study referenced earlier by JLARC on Medicaid fraud and abuse found that DMAS has achieved \$2.62 in savings for every one dollar invested in reviewing Medicaid claims to identify fraudulent activities. Moreover, JLARC reported that the Medicaid program integrity efforts generated almost \$87 million in avoided costs and payment recoveries in FY 2009. However, the program integrity system could be enhanced by expanding it to include information from additional external record sources, including: Virginia Supreme Court land records, Virginia State Police criminal history data, local/regional/state inmate data, federation physician center data, the health care integrity and protection data bank, the national practitioner data bank, and Medicare data available in partnership with the federal government through the Medi-Medi program. While these sources can strengthen the agency's fraud and abuse deterrence efforts, the use of some sources may result in additional costs for Virginia Medicaid. Descriptions of the record sources are provided in the subsections below.

Virginia Supreme Court Land Records. To ensure that only individuals meeting income and financial asset thresholds are allowed to enroll in Medicaid, local DSS staff rely on signed client statements and other documents submitted by the applicants. Because the extent to which these individuals fail to accurately report their assets is unknown, local eligibility workers could use the database to verify the accuracy of applicants' reported financial assets by comparing them against land records maintained by the Supreme Court of Virginia (however, localities are not required to enter land transactions in this database). Use of the database for this purpose may become essential because in 2013, the federal government will begin requiring states to perform asset verification on their Medicaid recipients.

Virginia State Police Criminal History Data. Criminal history data on individuals with felony or misdemeanor convictions are maintained by the Virginia State Police. The *Code of Virginia* (§9.2-389 A.37) authorizes the State Police to provide DMAS with criminal history background information on enrolled providers. Criminal history searches are conducted using the providers' names and/or fingerprints. Searches based on names cost \$15 per individual, while searches based on fingerprints cost \$37 per individual. Currently, DMAS only requires criminal history searches on personal care attendants. The State Police performs searches on approximately 17,200 personal care attendants annually. Application of criminal background checks for all enrolled Medicaid providers is estimated to cost \$2.5 million (\$1 million GF) in FY 2012.

Local/Regional/State Inmate Data. Under federal Medicaid regulations, federal reimbursement for health services is not available for incarcerated individuals. When incarceration is known, eligibility is terminated for these recipients. To better identify incarcerated recipients, DMAS could access the names of inmates held in local or regional jails using data from the Compensation Board or inmates held in prisons using

data from the Department of Corrections. DMAS could also use these sources to identify incarcerated providers. Recipients and providers identified through this process would be barred from participating in Medicaid.

Federation Physician Data Center. The Federation of State Medical Boards maintains the Federation Physician Data Center, which contains information on regulatory actions taken against physicians by medical regulatory agencies and licensing organizations in the United States. Examples of center information include licensure revocations, consent orders, and administrative actions. Data are available to participating organizations through online inquiry or batch processing where organizations provide lists of physicians for comparison against the database. The cost of accessing the data is \$7 per individual.

Health Care Integrity and Protection Data Bank. The Health Care Integrity and Protection Data Bank (HIPDB) is an information clearinghouse created by the federal government to improve health care quality by reducing fraud and abuse. It contains final adverse actions taken against practitioners, providers, and suppliers. Sources for this information include: health care-related criminal convictions or civil judgments taken in federal or state courts, federal or state licensing and certification actions, exclusions from participation in federal or state health care programs, and any other adjudicated actions or decisions defined in the HIPDB regulations. The cost of accessing the data is \$4.75 per individual.

National Practitioner Data Bank. The National Practitioner Data Bank (NPDB) is another federal information clearinghouse that was created to improve health care quality by reducing fraud and abuse. The NPDB differs from the HIPDB because it collects information on medical malpractice payments, Medicare/Medicaid exclusions, and adverse actions against providers, such as licensure and clinical privilege revocations. The NPDB was designed to augment provider credential reviews. The cost of using this data source is \$4.75 per individual.

Medi-Medi Program. The Medi-Medi program is a partnership between 11 state Medicaid agencies and the federal government to detect and deter health care fraud and abuse through the analysis of claims data in both the Medicare and Medicaid programs. Key partners involved include state and federal law enforcement agencies and regional program contractors hired by the Centers for Medicare and Medicaid Services.

DMAS does not currently participate in the Medi-Medi program, but is in the process of considering enrollment in the program. Participating state Medicaid agencies are expected to contribute staff to the Medi-Medi steering committee, provide claims data for review to identify fraudulent activities, and to pursue any criminal leads identified through these reviews. The benefits of participating include improved detection of fraud and abuse, enhanced communication and collaboration with state Medicaid and law enforcement partners, and access to additional fraud prevention resources at the federal, regional, and state levels. Some recent information, however, indicates that some state participants have been unsatisfied with the return on investment in their participation with

Medi-Medi. DMAS is currently examining the costs and benefits of participation and anticipate a decision on participation in the next several months.

Analytical Technology Options for Reducing Medicaid Fraud and Abuse

Based on information obtained for this report, large computer systems that incorporate analytical technologies can be used to detect fraudulent activities in health care settings. These computer systems are known as Medicaid Fraud and Abuse Detection Systems (MFADS). The sections that follow provide an overview of MFADS technology, background information on MFADS enterprises used by four state Medicaid agencies, and three options that DMAS staff identified for implementing a MFADS in Virginia Medicaid.

Overview of MFADS Technology. MFADS technology processes data stored in data warehouses to identify patterns, associations, clusters, outliers, and other phenomena that indicate fraud and abuse. A key characteristic of this technology is the use of “learning experiences” where findings from previous analyses are integrated into the next round of analyses to strengthen the search for fraudulent activities. These analyses are based on rules or algorithms which describe data relationships where inappropriate service utilization may be occurring and are refined over time. MFADS technology detects potentially fraudulent activities using three methodologies: 1) a provider-centric methodology to identify providers consistently submitting suspicious claims, 2) a claim-centric methodology to identify patterns within claims indicative of fraud and abuse (without linking the claims to specific providers), and 3) a predictive modeling algorithm to identify previously undetected fraudulent activities. The predictive modeling algorithm scores claims based on their deviance from provider peer group norms.

Additional functions supported by MFADS enterprises include the ability to identify emerging criminal schemes using generalizations from previous analyses, the generation of ad hoc reports to increase program oversight, and the ability to add software programming updates as needed to improve detection capabilities. Case tracking is another supportive component of MFADS. The electronic case that is developed contains all the information which is part of the review including electronic eligibility and qualification data, provider claims under review, the generation of status reports, the generation of letters, the collection of repayments, and case closure information. A supervisor can assign cases through the tracking system and various levels of security-access can be set.

MFADS are not wholly a computer related process. Staff, including nurses and physicians, is critical in providing input into the algorithms as well as interpreting the results. Instances where fraud is indicated following computer processing of data may have a logical explanation once reviewed by staff and therefore reduce the number of “false positives”.

State Medicaid Fraud and Abuse Detection Systems. As part of this report, DMAS staff identified four states (Florida, Pennsylvania, Texas, and Washington) that use MFADS technology to identify and deter Medicaid fraud and abuse activities. The Florida MFADS is composed of a variety of analytical functions designed to prevent fraudulent schemes by providers and recipients. For example, to detect up-coding (billing for higher reimbursed services than actually performed) and phantom billing (billing for services not provided) schemes, the system compares the pattern of claims submitted by individual providers against the pattern of claims submitted by similar providers, and it monitors reimbursements to identify providers receiving sudden payment increases. The MFADS also identifies recipients with adjudicated claims to verify that their providers actually provided them with the medical services billed to Medicaid through periodic surveys. This process generally produces about 300 leads on potentially fraudulent activities that are investigated by program integrity staff. As part of the investigations, staff audits the providers to determine if they have assets available to perform the billed services. The system also performs prepayment reviews on claims for services identified as not being medically necessary. Providers submitting claims for these services are requested to provide written justification before their claims are processed for payment. Florida staff reported that the MFADS generated a cost savings for the state of approximately \$5.8 million between FY 2008 and FY 2009 for the pre-payment review component, while producing over \$50.3 million in overpayment recoveries (post-payment).

Pennsylvania operates a complex MFADS that uses 250 algorithms to identify fraudulent activities in its Medicaid program. The algorithms analyze large amounts of information on providers, claims, program services, procedure codes, diagnoses, and pharmacy prescriptions. Based on the analyses, program integrity staff investigate providers suspected of committing fraudulent activities. The state attempts to recover payments made to providers that are convicted of fraud in criminal courts. Pennsylvania staff reported that the MFADS cost the state approximately \$3.3 million to implement and has annual operating costs of about \$140,000.

To enhance its program integrity efforts, Texas Medicaid revised its existing MFADS by merging it with the state's surveillance utilization review subsystem. The revised MFADS became operational in 2009 and includes several new analytical functions that are useful for detecting fraudulent activities. For example, the system includes functions that reduce the amount of manual research and analysis required to identify and investigate fraud, identify duplicative and near duplicative claims, and profile recipients and providers that commit fraud and abuse. The MFADS also provides Medicaid staff with online query access capabilities to monitor recipients and providers suspected of committing fraudulent schemes through ad hoc reporting. Texas staff reported that the MFADS initially cost approximately \$1.3 million and has annual operating costs of about \$2.8 million. For the period September 2009-August 2010, Texas reported \$10,640,280 in recoveries through its MFADS.

Washington State's MFADS is composed of various analytic technologies using a "triage and referral process" to identify fraudulent schemes. For example, the system

generates profiles of Medicaid providers based on billed claims and utilization patterns. Using these profiles, individual providers are compared against their respective peer groups to identify suspicious billing patterns. The MFADS also identifies providers submitting claims for non-medically necessary services and alerts staff that additional documentation is needed from these providers before they can be processed for payment. Overpayment notices are generated for improperly billed claims. Washington's MFADS was recently enhanced to include additional capabilities such as geographic mapping and case tracking. Washington's current system also includes prepayment reviews to ensure that providers do not receive payment for submitting multiple claims for providing services to the same recipient on the same day. According to staff, the Washington MFADS has generated approximately \$75 million in savings over the past 11 years.

Virginia Medicaid MFADS Implementation Options. DMAS does not currently have an MFADS; however, it does have some analytical technologies (e.g., the surveillance and utilization review subsystem) that could be used to develop such a system. Because DMAS would enhance its fraud and abuse deterrence efforts by adopting an MFADS enterprise, staff identified three options that could be used to implement an MFADS in Virginia Medicaid.

- **Option 1:** The first option involves the Executive Support System (ESS), which is a software product incorporating data warehousing, analysis, and reporting functions. ESS is currently being implemented within VaMMIS to provide DMAS with enhanced program and financial management oversight capabilities through the analysis of Medicaid data. It is scheduled to be implemented by August 2011. Because ESS contains a diverse suite of tools, it can be modified to function as an MFADS. For example, its analysis and reporting functions can be customized to include algorithms for profiling provider- and recipient-related fraud and abuse activities, and its reporting capabilities can be enhanced to generate both macro- and micro-level reports to facilitate activities such as monitoring prescriptions for certain narcotics.
- **Option 2:** The second option is available through the Virginia Information Technologies Agency (VITA). VITA has a business intelligence software product that supports advanced data warehousing and analytical functions. The software is currently used by several state agencies. VITA staff reported that their agency would assist DMAS with developing a process to use this technology as a MFADS. Because VITA already has a license for the software, DMAS would not need to obtain one to use this product.
- **Option 3:** The last option involves developing an MFADS through a competitive request for proposals (RFP) process. This option would allow DMAS the opportunity to obtain an MFADS based on current technology. Because DMAS staff lack experience with these systems, a particular strength of the RFP process is that it would ensure that the most appropriate, efficient, and cost-effective technology is selected for the MFADS.

While an MFADS could be implemented using any of the above options, certain limitations exist that could affect its implementation. For example, the agency would have to expend considerable resources to implement the MFADS using either Option 1 or 2 because customized analysis algorithms would have to be developed to identify fraud and abuse activities, additional staff would have to be hired to manage the systems, and specialized software may have to be purchased to enhance the products' internal learning capabilities. The limitation of Option 3 is that it may take up to 18 months (or longer) to implement the MFADS through an RFP process due to the complexity of such systems and state requirements governing large private vendor contracts.

Program Integrity Gap Analysis. DMAS has undertaken to document the current state of its fraud, waste and abuse identification and risk mitigation efforts to compare our present program integrity (PI) practice to the analysis and recommendations for improvement embodied in the JLARC report(s). We intend to compare our practices and JLARC's recommendations for improvement against generally accepted PI best practices. To identify such best practices, DMAS will reach out to 1) the private sector, 2) to professional organizations, 3) to vendors, 4) to other state Medicaid programs, and 5) to CMS and other relevant Federal agencies for innovative approaches and ideas.

A Gap Analysis Report will be prepared embodying findings and recommendations to address identified control weaknesses and to strengthen relevant DMAS fraud related business processes accordingly. The general objectives of the gap analysis are:

1. Identification and documentation of the objectives and related controls of all business units, both within DMAS and within sister state entities, whose objective is the mitigation of Medicaid fraud, waste and abuse and over payment. This would included documentation of relevant business process strengths and weaknesses across DMAS divisional and sister state agency lines.
2. Comparison of DMAS and sister state entity current fraud identification practices with best practices as defined by state and Federal authorities, nationally recognized certification authorities with a focus on fraud prevention such as the National Association of Certified Fraud Examiners and the American Institute of Certified Public Accountants, and private sector vendors recognized as industry leaders in the application of fraud related analytics.
3. Documentation of gaps and limitations, from whatever source, which prevent achievement of the fraud mitigation objectives of the Secretary and of DMAS management.
4. Identification of specific existing Medicaid fraud related business processes requiring reform to correct identified deficiencies and to extend fraud identification capabilities.
5. Identification of categories of private sector partners to assist in addressing PI control deficiencies (gaps).
6. Drafting of a request for proposal (RFP) to engage vendor partners to address deficiencies.

Costs Associated with Implementing External Record and Analytical Technology Options Identified by DMAS Staff

HB 733 directs DMAS to estimate the costs of implementing the external record searches and analytical technology options identified as part of its report. However, staff are unable to provide an estimate at this time because several factors that influence the costs of these sources are unknown. For example, it is not possible to estimate the costs involved with using the external record sources to detect fraud because staff do not know the extent to which they would be used. Staff are also unable to estimate the cost of implementing an MFADS due to the complexity of the analytic technologies involved with developing, implementing, and maintaining these systems. However, information obtained from states reviewed for this report suggests that the costs of such systems are variable. For instance, the Pennsylvania MFADS initially cost the state approximately \$3.3 million, while the Texas MFADS cost \$1.3 million. The costs incurred when implementing an MFADS may depend upon the particular technologies employed to implement them as well as the extent to which the states already have existing technologies in place that could be incorporated into such systems.

Virginia Medicaid Biometric Identification Pilot

In addition to directing DMAS to identify external records and analytical technology options for deterring fraud and abuse in the Virginia Medicaid Program, the 2010 General Assembly directed the agency to deter fraudulent activity by implementing a biometric identification pilot in three localities. (The pilot program was required by HB 1378.) Biometrics is the science of identifying people based on certain unique physical and/or behavioral characteristics, such as fingerprints and walking patterns. Biometrics can be used to deter health care fraud by verifying the identity of patients at provider offices based on their unique characteristics (as opposed to their insurance cards) and by preventing providers from submitting claims for services never rendered because specific numbers that identify patients based on their biometric traits are attached to the claims to verify that the patients were physically present for the services. As required by HB 1378, DMAS developed a plan for implementing the pilot that was submitted to the General Assembly in November 2010 (House Document #10). While implementing the biometric pilot would further enhance DMAS' fraud and abuse detection activities, the agency has not implemented the pilot because it is contingent on receiving 100 percent federal funding. To date, the federal government has not provided any funding for the biometric pilot.

Summary

As directed under HB733, this report describes options that DMAS could use to enhance its fraud and abuse deterrence efforts using various external record searches and analytical technologies. DMAS currently uses a multifaceted approach to preventing fraud and abuse in Virginia Medicaid. However, this report identified several options that the agency could adopt to enhance its program integrity capabilities. The external record search options represent individual data sources that can improve the accuracy of

DMAS recipient and provider information to reduce fraud and abuse. In contrast, the analytic technology options address comprehensive solutions for reducing fraud and abuse using complex computer-based enterprises. Depending on which technology option the agency eventually adopts (if any), staff will need to fully examine it to ensure that it integrates satisfactorily within DMAS' current operational and service structure.

In addition to this report, it is important to note that the JLARC review previously mentioned is on-going, with expected recommendations regarding enhancements to the program integrity functions under Medicaid in a final report in the Fall of 2011. DMAS looks forward to the JLARC recommendations in further articulating the most comprehensive system available that provides the appropriate return on the front-end investment required to implement these additional strategies. Fraud and abuse prevention is a high priority for the Department and DMAS looks forward to implementing new strategies that will continuously increase the integrity of the Virginia Medicaid program.

Appendix

House Bill 733 Report Excerpt

“2. That the Director of the Department of Medical Assistance Services shall investigate options for a comprehensive system that utilizes external records search and analytic technologies for the collection and review of data from public and private sources, including (i) data used to confirm the identity and eligibility of medical assistance services benefit recipients, (ii) data related to provider eligibility including information about providers' criminal history or sanctions against providers in other states, and (iii) data about pre-payment and post-payment claims, to detect, prevent and investigate fraud, waste and abuse in Virginia's medical assistance services program, including but not limited to fraud, waste, and abuse in the areas of provider enrollment, claims processing, and audits and investigations, and shall report information related to such options, including cost, to the General Assembly no later than December 1, 2010.”

