

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

Disease Management and Virginia's Medicaid Program

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



HOUSE DOCUMENT NO. 90

**COMMONWEALTH OF VIRGINIA
RICHMOND
2005**

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Introduction

The 2005 Appropriations Act, Chapter 951, directed the Department of Medical Assistance Services (DMAS) to report on its efforts to contract for and implement Disease Management (DM) programs into the Medicaid program and on the results of the *Healthy Returns*SM DM program. This report combines both legislative directives and provides the history of DM programs in Virginia, the clinical and financial outcomes of the *Healthy Returns*SM program, and highlights the development of DMAS' new DM program.

DM programs are used by health insurers and companies as mechanisms for managing chronic illnesses, which are defined by the U.S. National Center for Health Statistics as illnesses that last three months or more. Examples of chronic illness include asthma, diabetes, chronic pulmonary artery disease, congestive heart failure, and Acquired Immune Deficiency Syndrome (AIDS). Virginia's health data reflects national trends for chronic illness. Approximately 25 percent of adult Virginians have hypertension, which increases the risk of a stroke, heart attacks, kidney failure, and congestive heart failure. Another leading chronic illness, cardiovascular disease, caused 35 percent of all the deaths in Virginia in 2002. DMAS spent approximately \$825 million in Fiscal Year 2005 on health care expenses related to chronic illnesses.

Health insurers and companies are developing DM programs in an effort to alleviate individuals and society of the physical, psychological, social, and economic pressures associated with chronic conditions and diseases. DM programs attempt to both improve a patient's quality of care and slow the growth of his or her health care costs. DM programs were once considered experimental in the early 1990s, but their success in helping to improve quality of care and slow the spiraling costs of health care have led to unprecedented growth in this industry. Many health insurers and most states now offer some form of DM services.

In Virginia, DMAS Managed Care Organizations (MCOs) provide the majority of DM services; however, DMAS has gradually expanded its DM programs to fee-for-service (FFS) participants. While Virginia's initial Medicaid fee-for-service DM programs were instituted primarily for cost saving measures, true cost savings from these programs were not as great as anticipated. Virginia Medicaid has since focused more on developing DM programs for its managed care and fee-for-service Medicaid populations to reduce direct and indirect health care costs, increase the quality of life for patients, and realize improvements in clinical health outcomes.

The most recent developments with Virginia DM programs are part of Governor Warner's "Healthy Virginians" initiative. "Healthy Virginians" is an effort by the Commonwealth to promote healthy lifestyles in workplaces, schools, and among families who receive health care through Medicaid. The Medicaid efforts include the development of a fee-for-service DM program for individuals with coronary artery disease, congestive heart failure, asthma, and diabetes. DMAS awarded a contract to Health Management Corporation (HMC) to administer this program, and it will be

implemented by January 13, 2006. This follows a yearlong DM pilot project administered by HMC known as the “Healthy Returns” program.

Part I: Disease Management Programs and Reimbursement

Chronic illness is the leading cause of death in the United States (U.S.). The U.S. Centers for Disease Control and Prevention (2005) reported that chronic illness was responsible for seven out of ten deaths, and care for individuals with chronic illness accounted for more than 75 percent of the \$1.4 trillion spent on U.S. health care and nearly 80 percent of all Medicaid expenditures in 2004.

Shortcomings exist in the effective treatment of chronic illnesses, or conditions, for several reasons:

- Chronic conditions are often left untreated or poorly controlled until more serious complications arise (Institute of Medicine);
- There is a large gap between evidence-based treatment guidelines (what medical research has shown to be the most effective protocols for treating specific diseases) and current practices. Disease Management programs encourage providers to include the most advanced science in their treatment practices; and
- Many patients receive care from numerous providers and they often lack the ability to monitor, coordinate, or carry out their own treatment plan.

DM covers a range of activities that address these shortcomings.

Disease Management Program Overview

Disease Management works to slow the progression of chronic disease and to help contain health care expenditures for program participants. This is accomplished through a combination of enhanced screening, monitoring, and education, the use of best medical practices, and the coordination of care among providers. Furthermore, regardless of potential variations in program technique and design, experts indicate that good DM programs must embrace many, if not all, of the following components:

1. A patient identification and selection process that targets people who suffer from particular types of diseases;
2. Program or practice guidelines that are evidence-based;
3. Service delivery models that are both physician and patient centric;
4. Patient self-management and education programs that include some combination of behavior modification, support groups, and surveillance;
5. Regular reporting and feedback centered on communication with the patient, physician, and ancillary healthcare providers; and

6. A system for evaluating the DM process, patient health outcomes, and the financial rate of return.

The greatest return on investment, or cost savings, for DM programs occur by targeting diseases with high prevalence rates (e.g. congestive heart failure, diabetes) or expensive treatment costs (e.g., Acquired Immune Deficiency Syndrome or AIDS). Expenses for these diseases are typically driven by the reoccurrence of acute events such as emergency rooms visits, or costly inpatient and outpatient treatment plans.

Experience also shows that DM program participants often have several chronic conditions in addition to the targeted condition. In order to manage the care efficiently of patients with these “comorbidities,” DM programs are now designed to avoid focusing all program resources on only one disease state and address participant comorbidities in addition to the primary chronic condition.

In 2004, the Centers for Medicare and Medicaid Services (CMS) issued a letter to State Medicaid Directors, urging them to take advantage of the opportunities DM programs offer to provide coordinated, cost-effective care that improves the health of Medicaid beneficiaries. CMS provides two general frameworks for states to design and implement DM programs for Medicaid participants: the Medical and Administrative model.

CMS allows Medical Model DM programs to provide direct patient care. Medical Model DM programs use licensed health professionals, and typically provide assessments, education, instruction in self-management, and medical monitoring. Virginia will use the Medical Model for its new DM program.

As an alternative to Medical Models, state Medicaid agencies can implement DM programs using the Administrative Model DM programs, which promote provider adherence to evidence-based guidelines and provide feedback on a beneficiary’s utilization of services. The Administrative Model does not provide direct patient care and therefore avoids the challenges created by the Medicaid state plan requirements of statewideness and comparability for medical programs. Administrative DM programs are generally less costly to implement than Medical Model programs. Administrative DM programs, however, are not likely to improve health outcomes as significantly as Medical Model programs due to fewer available services and less direct patient contact.

National Prevalence of Medicaid DM Programs

According to a study conducted by the Georgetown University Center on an Aging Society, an estimated 97 percent of health plans are currently pursuing some type of DM program and 71 percent of employers that provide health insurance either have or are considering offering DM services. State Medicaid programs are also among the group of health plans pursuing these services. As of March 2004, over 30 states (including Virginia) have Medicaid DM programs for FFS and/or managed care clients. Chart 1 highlights State DM programs that target Medicaid FFS participants.

Chart 1
Examples of State Medicaid DM Programs for FFS Participants (2004)

State	DM Program Focus	Years in Operation
Florida	Asthma, Congestive Heart Failure, Depression, Diabetes, HIV/AIDS, Hemophilia, End-stage Renal Disease, Hypertension,	1998-Present
Mississippi	Asthma, Coagulation Disorders, Diabetes, Hyperlipidemia	1998-Present
North Carolina	Asthma, Diabetes, Long-term Care Polypharmacy	1998-Present
Washington	Asthma, Congestive Heart Failure, Diabetes, End Stage Renal Disease, Other High-cost Patient Populations	2002-Present

Source: Centers for Medicare and Medicaid Services, 2005

History of Disease Management in Virginia

Due to recent state and federal budget shortfalls and a nearly double-digit growth in the Medicaid program, Virginia, like many other states, is grappling with ways to control health care spending for its Medicaid beneficiaries. Expenditure data consistently show that a disproportionate amount of spending in Virginia's Medicaid program is attributed to recipients with chronic diseases. DMAS spent approximately \$825 million in Fiscal Year 2005 on health care expenses related to chronic illnesses. Accordingly, policymakers have given considerable attention to the concept of disease management as a means of improving health outcomes for program beneficiaries while concomitantly slowing the growth in Medicaid spending.

Current DMAS Program Structure

DMAS provides health care coverage for approximately 679,000 individuals through Title XIX Medicaid and XXI State Child Health Insurance programs. DMAS provides Medicaid coverage to individuals through three program delivery systems: fee-for-service, the standard Medicaid program; MEDALLION, a Primary Care Case Management (PCCM) program utilizing contracted primary care providers; and Medallion II, a program utilizing contracted Managed Care Organizations (MCO).

DMAS also administers the State Child Health Insurance Program (SCHIP) called the Family Access to Medical Insurance Security (FAMIS) under Title XXI of the Social Security Act. Although FAMIS is not a Medicaid program, it is administered using the FFS, PCCM, and MCO delivery systems. For further explanation of the DMAS program structure, please see Appendices A and B.

Development of Virginia's Medicaid Disease Management Programs

Virginia has provided disease management services through its MCO program, Medallion II, which began in 1996. Medicaid's MCOs, as part of their internal quality improvement program, have systems in place that ensure coordinated patient care for all enrollees and that provide particular attention to the needs of Medicaid and FAMIS enrollees with complex, serious and/or disabling conditions. Also, since MCOs are paid a Per Member Per Month (PMPM) capitated rate, it is in the best interest of MCOs to use DM services to improve long-range health outcomes. Chart two lists DM programs offered through Virginia Medicaid's MCOs (2005). For detailed information on Virginia Medicaid MCOs, please download a copy of the MCO Annual Report from the DMAS website at <http://www.dmas.virginia.gov/mc-home.htm> and selecting "Annual MCO Report."

Chart 2
Managed Care Organization Disease Management Programs (2005)

CareNet	Asthma, Diabetes, Depression, Congestive Heart Failure, High-risk Pregnancy
UniCare	Diabetes, Asthma, Prenatal
VA Premier	Asthma, Diabetes
Anthem	Prenatal, Congestive Heart Failure, Coronary Artery Disease, Asthma, Diabetes
Optima	Asthma, Diabetes, Prenatal, Cardiovascular Disease, Chronic Obstructive Pulmonary Disease, Schizophrenia
AMERIGROUP	Asthma, Diabetes, HIV/AIDS

Source: DMAS survey, August 2005

In contrast to Medicaid managed care, the Medicaid and FAMIS fee-for-service populations have not had consistent access to DM services. Virginia first piloted a disease management program for this population in 1993, when Virginia Commonwealth University's Williamson Institute developed the Virginia Health Outcomes Partnership (VHOP) program. This program targeted MEDALLION PCCM participants and focused primarily on educating primary care physicians in the in the MEDALLION program who were treating beneficiaries with asthma. The outcomes reported for the program were favorable and the estimated rate of return was a \$3.00 return for every \$1.00 spent. However, the administrative cost to operate the demonstration project was significant, and the methods used to estimate the return on investment for this pilot program were not reliable.

In 1997, the VHOP program was revised and expanded to operate statewide, but the program model was changed to de-emphasize direct patient care, substantially increase the number of disease states, and focus on pharmacological management. An outside consultant (Heritage/ACS) evaluated the program and estimated a rate of return of \$1.75 for every dollar spent. This program ended in 2000.

Under the direction of the 2002-2004 Appropriation Act, DMAS pursued the development of a statewide DM program by issuing a Request for Proposal (RFP) in 2002. The proposed program included management of 12 disease states (an extremely high number of diseases by DM standards) and had a projected cost of \$1.4 million with assumed savings of \$22 million – a rate of return of \$16 for every dollar spent (this rate of return has never been achieved in any DM program). DMAS was, however, unable to find a vendor to operate a DM program for \$1.4 million and guarantee the return on investment. DMAS was subsequently forced to withdraw the RFP for this program in the spring of 2003.

Despite the withdrawal of the RFP, DMAS continued to explore the feasibility of developing a FFS DM program by conducting research of other state programs, attending DM conferences, and participating in training sessions given by the Academy of Health. DMAS even contracted with an outside consultant to determine if it was feasible to develop an in-house program, or continue with the initial strategy to contract the service to an outside vendor. DMAS subsequently learned that some states, such as Florida and Washington, that were currently operating DM programs were not realizing significant “guaranteed” cost savings that were listed in the contracts with the DM vendor. This occurred for several reasons:

1. Cost savings for some chronic conditions are realized over long-term (three-four years) rather than short-term periods of time (one-two years). States that are looking for “quick” cost savings or high returns on investment are encountering this situation and are not realizing the cost savings originally anticipated.
2. Evaluating the effectiveness of a DM program is difficult. Several of the strategies currently used by DM vendors to determine health outcomes and develop cost savings methodologies and are considered flawed because they are difficult to evaluate.
3. The development of DM programs has only recently occurred over the past decade, and several States, such as Florida and Washington, are just learning how to truly develop a program that will improve the health of program participants and realize a modest cost-savings.

Despite these issues, health insurers and States believe that DM programs do provide a valued service in improving health outcomes of participants with chronic conditions. This background of information, along with discussions with several DM vendors and States, provided DMAS with valuable insight in the benefits, as well as pitfalls to avoid, when developing a new FFS DM program.

In 2004, Health Management Corporation (HMC), a subsidiary of Anthem Health Plan, approached DMAS and offered to operate a DM program at no cost for Virginia Medicaid fee-for-service participants. The pilot, titled “*Healthy Returns*SM,” began June 1, 2004, and targets Medicaid FFS participants who have coronary artery disease and congestive heart failure. The *Healthy Returns*SM program is described in more detail in Section II of this report.

The Warner administration, as part of the “Healthy Virginians” initiative, and the legislature were very interested in disease management program development. This interest was peaked when initial clinical outcomes for the *Healthy Returns*SM program appeared to reflect promising results. In 2005, the Appropriations Act authorized DMAS to outsource the administration of a program to provide DM and chronic care management services for Medicaid recipients (Appendix C). DMAS subsequently developed and released a Request for Proposals (RFP) in May 2005 to contract with an administrator for a new DM program for Medicaid and FAMIS fee-for-service participants. Details about the new DM program are outlined later in Section III of this report.

Part II: Virginia’s *HEALTHY RETURNS*SM Pilot Program

In June 2004, Health Management Corporation, a wholly owned subsidiary of Anthem Health Plans, implemented the *Healthy Returns*SM Care Management program at no cost for Medicaid fee-for service participants who have a diagnosis of Congestive Heart Failure (CHF) or Coronary Artery Disease (CAD). The *Healthy Returns*SM program was scheduled to run from June 2004 through June 2005; however, DMAS extended the program to continue providing services to those enrolled in the program as of June 1, 2005, until the new Medicaid DM program is implemented. The *Healthy Returns*SM program currently provides DM services to 1,977 members through the CAD program and 1,274 members through the CHF program.

Program Description

*Healthy Returns*SM is a voluntary DM program where HMC is responsible for identifying and contacting potential eligible Medicaid fee-for-service participants with CAD or CHF and encouraging them to enroll in the program. It excludes those individuals who are institutionalized, who are dually eligible for both Medicare and Medicaid, who are home and community-based waiver participants, and who have third party insurance.

The *Healthy Returns*SM program fosters improved health of its members by better coordinating pharmacy utilization, physician services, and patient self-care. It also emphasizes increased adherence to behaviors associated with optimal health. Key *Healthy Returns*SM program components include patient assessment, routine patient contact, an inbound call service, and patient mailings. Specifically, the program objectives are to:

- **Improve Health Quality Outcomes** - reflected in patients having the appropriate tests performed in compliance with recommended guidelines;
- **Improve Health Status Outcomes**- reflected in patients having improved clinical test levels and fewer days of lost activity;
- **Optimize Utilization**- reflected by increased use of preventative services to reduce the use of more expensive medical services, such as inpatient admissions and emergency room visits; and
- **Control Healthcare Costs**- reflected through decreased costs for expensive, but often-preventable hospital stays and procedures.

Clinical Outcomes

Clinical outcomes after one year of program intervention indicate that overall, the *Healthy ReturnsSM* Care Management Program positively affects members' health status and utilization of services. The program also returned noteworthy financial returns; however, these results not only reflect cost savings from the DM program itself, but they also reflect the effectiveness of DMAS' new Preferred Drug List (PDL) prescription drug program. The PDL program resulted in a significant decrease in the cost of many drugs used by *Healthy ReturnsSM* program participants. For further information on how the *Healthy ReturnsSM* program was evaluated, please see Appendix D.

Overall, program participant's levels of health quality improved in nine of twelve clinical outcomes. During the first 10 months of the program, participants made improvements in their ability to manage their own self-care and in their clinical test scores. Specific health outcomes for members with each condition are outlined below.

Coronary Artery Disease Members

- Members with Coronary Artery Disease (CAD) reported improved compliance with cardiac-related medications, including daily aspirin/anti-platelet therapy and beta-blockers.
- Members reported increased frequency of anti-platelet therapy.
- Ninety-four percent of CAD members (up from 84%) report Low-Density Lipoprotein (LDL) values of less than 100; indicating improved condition management.
- Seventy-six percent of CAD members reached their target blood pressure, a 6% improvement.
- For CAD members who have diabetes as a comorbid condition, the percentage of compliant members declined by 14%. This finding indicates members are not managing their diabetes as necessary. Research has not determined the reasons for this decline this at this time. The management of diabetes and cardiac conditions is closely related; therefore, it is important that both conditions receive appropriate treatment. Failure to control either

condition may adversely affect the comorbid condition, leading to various complications and possible hospital stays.

Congestive Heart Failure Members

- Members with Congestive Heart Failure (CHF) reported improvements in self-care practices including blood pressure control, adherence to a sodium restricted diet, the frequency of weight monitoring, and improved rates of LDL testing.
- There was a 26% improvement in the number of CHF members reporting blood pressure below the target level of 130/85 mm/Hg.
- Based on claims results, rates of Angiotensin-Converting Enzyme (ACE) inhibitor use and beta-blockers declined.
- Average days of lost activity declined for members with CAD. The program goal is to reduce days of lost activity to less than 4 days by improving overall mental and physical health status.

Cognitive Functioning for CHF and CAD Members

- According to results of the SF-12[®] Health Survey, a survey developed to study outcomes for patients with chronic illnesses, members reported their mental functioning improved by 13% across both conditions while physical functioning was stable. This is very positive as it indicates willingness for change and perceived ability to make lifestyle changes.
- Fifty-one percent of members reported improved physical functioning scores, while 68% reported an improvement in their mental function scores.

Utilization of Services

The *Healthy Returns*SM Care Management Program seeks to optimize service utilization by reducing expensive exacerbations of care by encouraging drug regimen adherence and preventive care. The following demonstrates some of the members' improvements in service utilization:

- Hospital inpatient admissions were reduced by 5%, driven by a decrease in CHF-related admissions. Similarly, the number of days members spent in the hospital declined 11%, driven by a decrease in CHF-related stays.
- Consistent with program goals, there was increased utilization in professional related visits. Specifically, outpatient facility utilization rose five percent and outpatient professional utilization increased 23%. These findings are consistent with program goals to reduce acute care and increase routine care.
- The overall rate of filled prescriptions increased 3% from the baseline data to Year 1. An increase in pharmacy utilization is expected as nurse consultants and pharmacists educate members about appropriate drug regimens for their conditions. Specifically, there was improvement among cardiac-related

medications. The use of lipotropics and beta blocking agents both increased in Year 1.

- Another positive effect of educating members about their conditions is that utilization of some specific drugs may decrease as program interventions help to identify inappropriate medications or contraindications. This was evident through declines observed for the following drug classes: quinolones, non-sedative barbiturates, various analgesics, and antihistamines.

Preliminary Savings

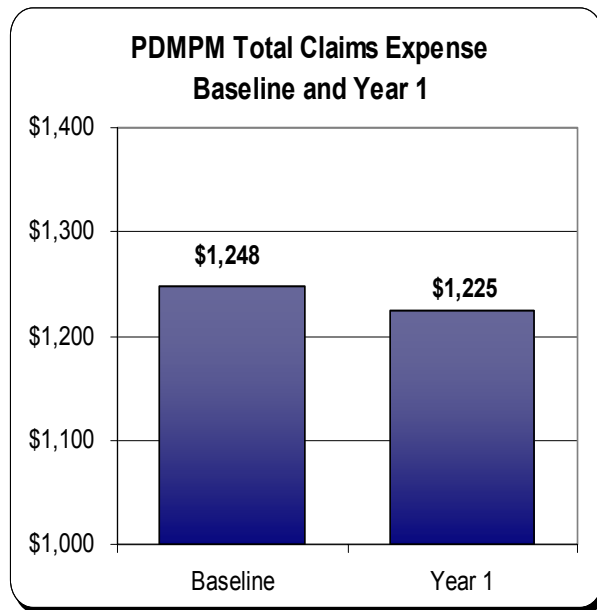
As previously discussed, evaluating the effectiveness of Disease Management programs is a difficult task, as looking solely for a decrease in health care costs is not an accurate indicator of the effectiveness of a DM program. DM programs strive to make patients better stewards of their conditions, and this can initially drive up patient costs. For example, improving condition management often results in patients better utilizing preventative care treatment (possibly resulting in an increased number of doctor visits) and better managing their medications (potentially resulting in an increased number of prescribed prescriptions purchased). Cost savings in a DM program often result from reductions of expensive treatments, emergency room admissions, and long inpatient hospital stays.

As members with chronic conditions improve their health status and adhere to protocols that encourage the optimized utilization of services, utilization patterns change in a positive manner, thereby enabling more effective cost-control.

The *Healthy Returns* program was designed using a predictive modeling strategy, which is a process that applies available health care data to identify persons who have high medical need and are 'at risk' for above-average future medical service utilization. HMC used this strategy to measure cost savings by developing a predictive model of expected expenditures, and evaluated the program by comparing the expected expenditures to actual expenditures, less program costs. The cost difference is considered the "net savings."

Overall, the Expense Per Diagnosed Member Per Month (PDMPM) decreased \$23 between baseline data and Year 1 (from \$1248 to \$1225), which led to a two percent gross savings rate (See Chart 3). Across all settings, expenses declined for disease states related to conditions managed in the program. Expenses related to "other forms of heart disease," declined by nine percent PDMPM, and expenses related to hypertensive disease declined by 15%. HMC, however, did not provide a return on investment calculation because DMAS did not incur any administrative fees in relation to operating this pilot program.

Chart 3



Of particular interest is how the overall savings were driven in part by a decline in pharmacy expense (\$17 PDMPM) as compared to total medical expenses, which decreased by \$6 PDMPM. As outlined in Chart 3, some of the decreases in cost were driven by non-condition-related factors, such as the implementation of Virginia's Medicaid Prescription Drug List. While the overall results are positive and improvements were made, the fact that non-condition-related expense drove the savings indicates there is much room for improvement to successfully manage these conditions.

Chart 4

DMAS Program Savings		
Program Time Period	Baseline	Year One
Diagnosed Member months	27,581	26,734
Costs (total)		
Medical claims expense	\$ 20,575,296	\$ 19,787,241
Rx claims expense	\$ 13,842,984	\$ 12,955,071
Total Claims Expense	\$ 34,418,280	\$ 32,742,312
Total Expense PDMPM	\$ 1,247.90	\$ 1,224.74
Gross savings		\$ 618,998
Gross savings (PDMPM)		\$ 23.15
Savings Rate (Gross Savings PDMPM/Trended BL PDMPM)		1.86%

Baseline expense was trend-adjusted. Source: Anthem Virginia Actuarial Department

Note: HMC and DMAS agreed to apply Richmond Medicaid trends to the DMAS baseline claims because DMAS was unable to provide the requisite trend information. Trends for Richmond Medicaid are based on the general Richmond Medicaid population and calculated by Anthem Actuarial Department.

Summary

Program results indicate that the *Healthy Returns*SM Care Management pilot program is making strides in improving the health of its program's members. Through participant education on improved health care practices and appropriate use of services, DMAS anticipates that these participants will continue the trend toward overall improved health. For more detailed evaluation results of the *Healthy Returns*SM program, please download a copy of the annual report from the DMAS website at www.dmas.virginia.gov.

Part III: Virginia's New Disease Management Program and Current Agency Activities

The 2004-2006 Appropriation Act, Item 326, AAAA (see Appendix C) provides DMAS the authority to develop a DM program for Medicaid and FAMIS fee-for-service enrollees. On May 25, 2005, DMAS solicited proposals for a Disease Management Program Administrator through a competitive procurement process. The Request for Proposals (RFP) explained requirements for a statewide or geographically targeted DM program for Medicaid and FAMIS fee-for-service enrollees. A copy of the RFP may be found on the DMAS website at www.dmas.virginia.gov, and by clicking on "RFPs and Awards" in the Administration and Business section.

Four solicitations were received in response to the RFP. After several months of internal review, DMAS posted a notice of intent to award the management of the new Medicaid DM program to the Health Management Corporation on September 22, 2005. The Department is currently in contract negotiations with HMC and anticipates the new DM program will be implemented by January 13, 2006. The new DM program will target Medicaid participants diagnosed with asthma, coronary artery disease, congestive heart failure, and diabetes. Virginia's new DM program is designed to meet the following objectives:

1. Identification, evaluation, and management of disease state(s) specified in the contract as well as all co-morbid conditions of all participants included in the project;
2. Adherence to national evidence-based disease management practice guidelines, in order to improve participant's health status;
3. Integration of preventive care into the clinical management model;
4. Overall reduction of acute medical expenditures, on average, for the population of participants served;
5. Reduction in hospital admissions and non-emergent emergency department use;
6. Coordination and reduction of unnecessary or inappropriate medication;
7. Increased participant and provider education and participant self-management skills;
8. Measured indication of participant and provider satisfaction with program;

9. Coordination of participant care including establishment of coordination between providers, the participant, and the community; and
10. Regular reporting of clinical outcome measures, profiles of participants and providers, and Medicaid/FAMIS health care expenditures of participants.

The DM Program Administrator's (DMPA) contract will be for three years from implementation, with up to two one-year renewals at DMAS' option. The DMPA's responsibilities include providing outreach and education (including the use of mailings) to participants and providers, performing initial assessments, counseling, and regularly assessing program participants, and maintaining a 24-hour toll-free call line for all program participants. The DMPA will also monitor clinical health outcome measures and track changes in health care expenditures for participants in the DM program.

The new DM program will include Medicaid and FAMIS fee-for-service enrollees. It was determined that 54,065 beneficiaries have at least one of the chronic conditions identified for this program, and may be eligible to receive services through the new DM program. Certain groups of Medicaid and FAMIS participants will not be eligible for the program, and they include individuals enrolled in Medicaid/FAMIS managed care organizations, individuals enrolled in Medicare (dual eligibles), individuals who live in institutional settings (such as nursing homes), and individuals who have third party insurance. This program will be unique, however, in that it will offer DM services to Medicaid beneficiaries who receive home and community-based long-term care services.

Program Design Structure

The DM program will initially be voluntary ("opt-in") for program participants, which means Medicaid fee-for-service beneficiaries who are identified to have at least one of the chronic conditions (diabetes, asthma, CHF, or CAD) will be contacted by the DMPA and offered an opportunity to participate in the program. The Department will be pursuing federal approval to change the DM program into a mandatory, or "opt-out" model. Federal approval, through the form of a waiver, will allow DMAS to design the DM program to automatically enroll Medicaid beneficiaries who have been identified to have one of the chronic conditions. Program participants will, however, be given the opportunity to leave the program if they do not wish to participate. The "opt-out" model is administratively less burdensome to the DMPA. This is reflected in the lower per member, per month cost per beneficiary.

The DM program will also be designed to provide three main interventions: Care Management, a 24-hour Call Line, and use of Evidence-Based Treatment protocols.

Care Management

The Care Management component will include a baseline health status assessment, routine monitoring of health status, patient education on health needs and self-management, monitoring of participant compliance with self-management protocols. This component will also facilitate contact with providers and community agencies. These services may be provided through phone calls on a regular basis or face-to-face visits. Care Managers may also use of electronic media devices to communicate health status with participants.

Call Line

The Call Line will be available to participants on a 24-hour basis, seven days a week through a centralized toll-free number. Licensed medical professionals will staff this line and answer basic medical questions and assist program participants with referrals. The Call Line will also ensure that services for non-English speaking enrollees are provided and that Virginia Relay service for the deaf and hard-of-hearing is available.

Evidence-Based Treatment Protocols

The DM program will utilize nationally recognized evidence-based guidelines, the Health Plan Employer Data and Information Set (HEDIS® measures), for each condition. The DMPA will disseminate treatment protocols to participants and providers based on these measures and will use these measures to evaluate the effectiveness of the DM program. The use of HEDIS measures in this DM program is significant because DM programs being offered by the Medicaid MCOs will also use these to measure program effectiveness. This will enable Virginia to establish a benchmark of care for Medicaid DM program participants, regardless of their method of health care delivery (fee-for-service or managed care.) This benchmark will be used to compare the effectiveness of these programs across the nation as well as within the State.

Additional DM Activities

All DMPA activities will comply with HIPAA confidentiality requirements, and at a minimum shall include follow-up with the participant or the participant's responsible party regarding the issue/need communicated to the Care Manager. In addition, the DMPA will:

- Effectively manage individuals who are functionally or cognitively incapable of assisting in their treatment plan, children who have special health needs, individuals with severe mental illness or substance abuse issues, and individuals who are homeless or who do not have telephone access;
- Work closely and cooperatively with entities, including but not limited to community services organizations, advocacy groups, Medicaid and

- private providers, schools, health departments, local departments of social services, family members, and other interested parties; and
- Provide regular reports to DMAS on the status of program activities, to include member and provider satisfaction surveys, and quality improvement activities.

Virginia’s New Disease Management Program Projected Timeline

November 15, 2005	<ul style="list-style-type: none"> • Contract with the DMPA will be signed, a program “Kick-off” will be held
December 2, 2005	<ul style="list-style-type: none"> • Medicaid Memos and provider-specific memos will be sent to providers, alerting them of the new DM program • Training events will occur between now and January 13, 2006 to educate advocates, providers and beneficiaries about the program • Letters will be sent to patients who have one or more of the designated conditions, informing them of the availability of the new program
January 13, 2006	<ul style="list-style-type: none"> • The new DM program begins on a voluntary, or “opt-in” basis
March 1, 2006	<ul style="list-style-type: none"> • Expected approval from CMS for a federal waiver, which will allow the DM program to become an “opt-out” program

Program Monitoring/Evaluation

There are several approaches that will be used by the DMPA to evaluate the new DM program’s effectiveness. These include use of a savings methodology to evaluate financial cost savings, measurement of clinical outcomes, program monitoring through the use of reports, and an independent program evaluation.

Savings Methodology

The DMPA will measure net savings by developing a predictive model of expected expenditures (which must be approved by DMAS) and comparing the expected expenditures to actual expenditures, less DM program operating costs. Health care expenditures that will be measured include:

- Inpatient and outpatient hospital expenses
- Physician visits
- Pharmacy
- Lab, and x-ray expenditures

The primary focus of this DM program is to improve the quality of care for program participants. While DMAS anticipates that cost savings will result from this program, DMAS does not expect these cost savings for a minimum of 18 months after the program's implementation. The DMPA has guaranteed cost savings for the opt-out model. This means if the cost savings from a reduction in health care expenditures for DM program participants does not cover the costs of operating the program, then the DMPA will reimburse DMAS the difference between the savings and the costs for operating the DM program.

Clinical Outcomes

The DMPA will identify clinical outcomes using HEDIS® measures for the identified disease states and for any additional clinical variables necessary for adherence to evidence-based guidelines for care. The DMPA will provide clinical measurement outcomes to DMAS every six months. The utilization of services measurement (taken after first year and every six months thereafter) will include:

- Number of hospital admissions and readmissions
- Number of emergency room and ambulatory care visits
- Pharmacy
- Utilization/physician office visits

In addition, the DMPA will look at the participant's:

- Overall health status
- Degree of participation in self-management skills

Independent Evaluation

An independent evaluation of the DM program's effectiveness will either be performed by DMAS or contracted to a third party vendor. This evaluation will include barriers and successes encountered by the DM program, and it will be based on participant claims data and other clinical measures provided by the DMPA. In addition, The DMPA will use a third-party vendor to document participant experience and satisfaction with services. This information will be provided on an annual basis.

Other Agency Activities

The Department was recently selected as one of six states to participate in the Agency for Healthcare Research and Quality's (AHRQ's) Quality Improvement and Performance Measurement in Medicaid Care Management initiative. The key component of this initiative is a pilot Learning Network of "action-ready" state Medicaid agencies that have recently implemented care management or disease management programs or are well along in planning for such programs. Virginia was selected to participate in the Learning Network due to its managed care and recent fee-for-service DM initiatives. Virginia recently hosted a site visit and will attend workshops, conference calls, and participate in other activities during this 18-month

initiative to share knowledge about its DM programs and assist with developing performance measures for care management programs.

Conclusion

The Department of Medical Assistance Services is making significant strides towards improving the quality of care that it provides beneficiaries through Disease Management Programs. As the complexities of health care and self-management become greater, the need for high-quality, effectual, and cost-effective solutions are necessary to keep patients healthier, inhibit disease progression, and keep patients out of more restrictive and more expensive health care settings. The use of Disease Management programs fulfills this need. Though the road to successful design and implementation of programs is challenging, the positive impact that Disease Management will have on Virginia's most vulnerable citizens is substantial and is worth pursuing.

APPENDIX A

Virginia's Medicaid Delivery System

Fee-for-Service (FFS): DMAS directly administers the FFS program benefits to Medicaid individuals who fall within one of the following population groups: newly eligible enrollees awaiting MCO assignment; dual eligible (those who are eligible for Medicare and Medicaid); individuals participating in a home and community based care waiver program; institutionalized individuals; individuals with third party insurance; or, foster care children. In addition, FFS benefits FAMIS enrollees who are in geographic areas of the state not served by DMAS contracted MCOs. As of October 1, 2005, DMAS' FFS program served 266,349 individuals.

PCCM: The PCCM program utilizes contracted primary care providers to manage the care needs of Medicaid or FAMIS enrollees. The PCCM program enables Medicaid and FAMIS recipients to select their personal primary care physician who is responsible for providing and/or coordinating the services necessary to meet all of their health care needs. As of October 1 2005, the MEDALLION program served 62,389 individuals.

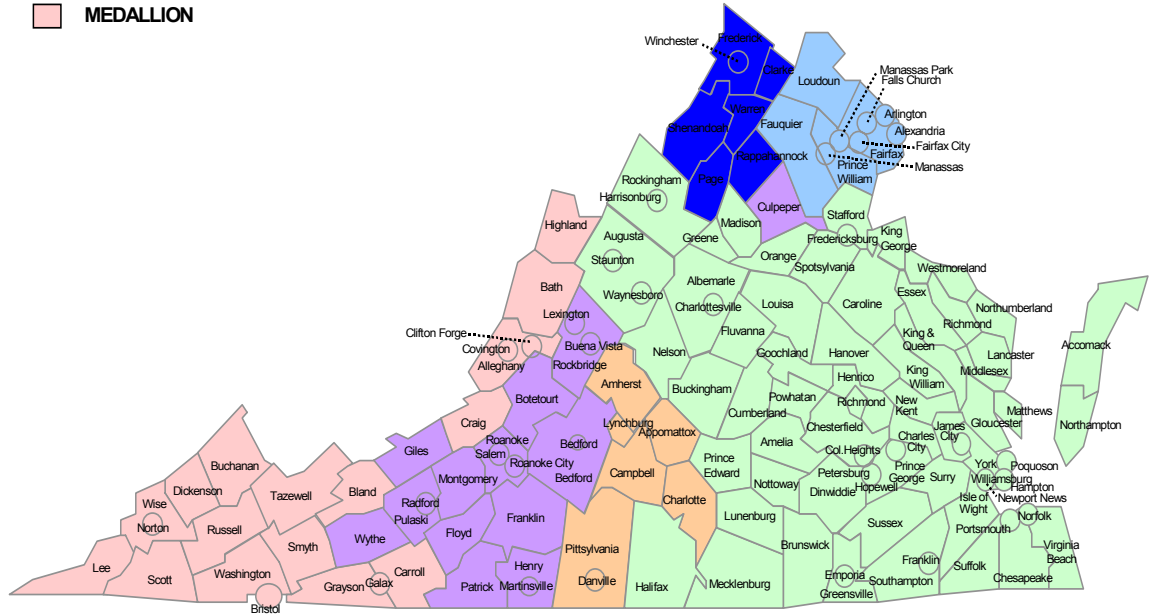
MCO: The Medicaid (Medallion II) and FAMIS MCO programs serve DMAS clients through contracted MCOs. Current MCOs include AMERIGROUP, Anthem HealthKeepers Plus by HealthKeepers Plus, Anthem HealthKeepers Plus by Peninsula Health Care, Anthem HealthKeepers Plus by Priority Health Care, Southern Health/CareNet, Optima Family Care, UniCare Health Plan, and Virginia Premier. The Medallion II program operates through a Center for Medicare and Medicaid Services (CMS) 1915 (b) Medicaid Waiver, and primarily serves Medicaid children, pregnant women, and aged, blind, and disabled individuals. The Medallion II program does not provide services to DMAS clients who are institutionalized or who receive services through home and community-based waiver programs. As of October 1 2005, the Medallion II and FAMIS MCO programs served 103 localities and 394,822 individuals.

APPENDIX B

Medallion II in Virginia

Map Key

- Medallion II
- Medallion II effective 09/01/05
- Medallion II effective 12/01/05
- Medallion II effective 05/01/06
- One MCO and PCCM
- MEDALLION



APPENDIX C
2005 Appropriations Act 322 K and 326 AAAA

322 K. The Department of Medical Assistance Services shall report on the Healthy Returns Disease Management Program to the Joint Commission on Health Care by November 15, 2005.

326 AAAA. The Director of the Department of Planning and Budget is authorized to transfer amounts, as needed, from the Medical Assistance Services program (program 45600) to the Administrative and Support Services program (program 47900) to fund administrative expenditures associated with contracts between the Department of Medical Assistance Services and companies providing disease state and chronic care management programs services for Medicaid recipients. The Department shall report on its efforts to contract for and implement disease management programs in the Medicaid program by November 15, 2005, to the Chairmen of the House Appropriations and Senate Finance Committees and the Joint Commission on Health Care. The Department shall have the authority to promulgate emergency regulations to implement this amendment within 280 days or less from the enactment of this act.

Appendix D

***Healthy Returns*SM Program Evaluation**

Data Source

Baseline data for this evaluation was derived from data from Anthem Virginia's Actuarial Department for Anthem Medicaid managed care participants in the Richmond Metro area from June 1, 2003 to March 31, 2004 (including Medicaid claims paid for program participants through June 30, 2004). The data was analyzed in this evaluation over a ten-month period. This period was necessary in order for the initial program results to be included in this report.

Clinical outcomes measured for Coronary Artery Disease include:

1. Patient use of Beta blockers;
2. Patient receiving annual Low-Density Lipoprotein (LDL) tests;
3. Patient having controlled Blood Pressure;
4. Daily ASA or Anti-Platelet Therapy;
5. A LDL of less than <100; and
6. If the participant also had a diagnosis of diabetes, an A1C count of less than seven.

Clinical outcomes measured for Congestive Heart Failure include:

1. Annual LDL test;
2. Angiotensin-Converting Enzyme Inhibitors;
3. Beta Blockers;
4. Daily weight monitoring;
5. Adhering to sodium restricted diet; and
6. Controlled blood pressure.