Virginia Medicaid *Healthy Returns*[SM] Disease Management Program

Virginia Department of Medical Assistance Services
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TABLE OF CONTENTS

CHAPTER		PAGE
I.	Background	2
II.	Disease Management in Virginia Medicaid Managed Care Program	2
III.	Virginia's Fee-for-Service Disease Management Initiative	3
	A. Overview of the *Healthy Returns*[SM] Program	3
	B. Key Components of the *Healthy Returns*[SM] Program	4
	C. Member Engagement	5
	D. Provider Engagement	6
	E. Virginia Innovations in Disease Management: Home and Community-based Waiver Participants	6
IV.	Outcomes: *Healthy Returns*[SM] Year 1 Results	6
V.	Virginia Innovations in Disease Management: Agency for Healthcare Research and Quality Learning Network	10
VI.	*Healthy Returns*[SM] Preliminary Validation and Evaluation Plan	11
VII.	Medicaid Revitalization Committee	11
VIII.	Conclusion	12
Appendix		
•	Appendix A: Authority	14
•	Appendix B: Condition Specific Outcome Measures	15

I. BACKGROUND

According to the Centers for Disease Control and Prevention (CDC), chronic diseases are the leading causes of death and disability in the United States. They account for seven out of ten deaths. Furthermore, the medical costs associated with people with chronic diseases account for more than 75 percent of the $1.4 trillion spent on health care in the United States.[1]

In contrast to Medicaid managed care in Virginia, the Medicaid and FAMIS fee-for-service populations have not had consistent access to disease management (DM) services, despite Virginia's several past attempts to start a DM program. In 2004, Health Management Corporation proposed *Healthy Returns*^{SM} --a pilot DM program targeting congestive heart failure (CHF) and coronary artery disease (CAD) for Virginia Medicaid fee-for-service participants at no cost to the Commonwealth. The program was successful, and in 2005, in accordance with the provisions of Item 326 #11c of the 2005 Appropriation Act, Virginia issued a Request for Proposals (RFP) to expand its DM initiatives. Health Management Corporation (HMC), a wholly owned subsidiary of Anthem, was awarded the contract and the expanded *Healthy Returns*^{SM} DM program was implemented on January 13, 2006. Item 302 GG (2) of the 2007 Appropriations Act requires that the Department of Medical Assistance Services (DMAS) provide annual reports on the status of the program (Attachment A).

Healthy Returns^{SM} focuses on preventive care, promotion of self-management, and appropriate use of medical services in the fee-for-service system. *Healthy Returns*^{SM} provides DM services to Medicaid and FAMIS fee-for-service recipients with asthma, congestive heart failure, coronary artery disease, and diabetes. Chronic obstructive pulmonary disease (COPD) was added to the program on May 1, 2007.

II. DISEASE MANAGEMENT IN VIRGINIA'S MEDICAID MANAGED CARE PROGRAM

Virginia's Medicaid program currently offers two general models of care delivery: managed care for a specific subset of recipients (primarily children and non-institutionalized adults) and fee-for-service for everyone else. For several years now, Virginia has offered asthma, diabetes and other DM services to participants enrolled in Virginia's Medicaid Managed Care Organizations (MCOs). Each MCO is required to submit Healthcare Effectiveness Data and Information Set (HEDIS) data[2] annually. The MCOs are also benchmarked against each other and other national plans. As of August 2007, 423,530 Medicaid and FAMIS recipients received services through five Medicaid

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[1] According to Johns Hopkins University, people with chronic conditions account for 88 percent of all prescriptions filled, 72 percent of all physician visits, and 76 percent of all inpatient stays.

[2] HEDIS measures are standardized performance measures designed to reliably compare the performance of managed health care plans.

MCOs. DMAS worked with the MCOs to ensure that each MCO could offer DM for asthma, chronic obstructive pulmonary disease, congestive heart failure, coronary artery disease, and diabetes by 2007 (see Table I).

Table I: Disease Management Programs Offered to Medicaid MCO Participants (as of August 2007)

Plan	Disease Management Programs
CareNet	Asthma, Coronary Artery Disease (CAD), Congestive Heart Failure (CHF), Diabetes, Depression, High-risk Pregnancy, Lower Back Pain, Obesity Program (for children) Adding COPD in 2008
Virginia Premier	Asthma, Diabetes, Prenatal, Chronic Obstructive Pulmonary Disorder (COPD), Heart Disease, Obesity
Anthem	Asthma, CAD, CHF, Diabetes, Maternity Management Program, Renal Care Management Program
Optima- Sentara	Asthma, Cardio Vascular Disease (CVD), Chronic Obstructive Pulmonary Disorder (COPD), Diabetes, Prenatal, End Stage Renal Disease, sickle cell disease, high complexity case management
Amerigroup	Asthma, CAD, CHF, COPD, Depression, Diabetes HIV/AIDS, Schizophrenia, Obesity ages 6-21

III. VIRGINIA'S FEE-FOR-SERVICE DISEASE MANAGEMENT INITIATIVE

A. Overview of the *Healthy Returns*^{SM} Program

Similar to the DM programs provided by the MCOs, all fee-for-service Medicaid and FAMIS enrollees are potentially eligible to receive DM services, but through the *Healthy Returns*^{SM} program. *Healthy Returns*^{SM} is designed to help patients in the fee-for-service environment better understand and manage their condition(s) through prevention, education, lifestyle changes, and adherence to prescribed plans of care (POCs). The purpose of the program is not to offer medical advice, but rather to support provider staff in reinforcing patients' POCs.

Healthy Returns^{SM} provides DM services to Medicaid and FAMIS fee-for-service recipients with asthma (adults and children), congestive heart failure (adults), coronary artery disease (adults), and diabetes (adults and children). In accordance with the provisions of Item 302 FFF of the 2006 Appropriation Act, DMAS added chronic obstructive pulmonary disease (adults and children) to the *Healthy Returns*^{SM} disease management program on May 1, 2007.

Healthy Returns^{SM} is offered to all fee-for-service Medicaid and FAMIS enrollees identified as having any of the covered chronic conditions with the exception of (1) individuals enrolled in Medicare (dual eligibles), (2) individuals who live in institutional settings (such as nursing facilities), and (3) individuals who have third party insurance.

As shown in Table II, as of July 2007, 16,103 patients were enrolled in the *Healthy Returns*[SM] program. Of these, 97 percent of these patients were Medicaid recipients and 3 percent were FAMIS recipients.

Table II: *Healthy Returns*[SM] Participation: Status as of July 2007

Condition	Medicaid	FAMIS
Asthma	9,753	516
Chronic Obstructive Pulmonary Disease	894	5
Coronary Artery Disease	898	0
Congestive Heart Failure	522	0
Diabetes	3,486	29
TOTAL	**15,553**	**550**

Healthy Returns[SM] operates as a voluntary "opt-in" program (participants must actively enroll in the program). Virginia obtained approval for this initiative through the Medicaid State Plan, under the Deficit Reduction Act of 2005, State Flexibility in Benefits Packages. This option provides states with the opportunity to offer an alternative benefits package to beneficiaries without regard to comparability and certain other traditional Medicaid requirements. Under this plan, *Healthy Returns*[SM] had to be an "opt-in" program. Virginia received CMS approval in March 2007.

B. Key Components of the *Healthy Returns*[SM] Program

Key *Healthy Returns*[SM] 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.

Healthy Returns[SM] interventions are focused on the patient and include:

- Participant Care Management
    - Baseline health status assessment;
    - Routine monitoring;
    - Education on health needs and self-management;
    - Monitoring of participant compliance with self-management protocols; and

- Facilitation of contact with providers and community agencies.

- Nurse Line Call Line
  - Available to participants 24 hours per day, 7 days per week through a centralized toll-free number; and
  - Provides clinical support to answer questions for DM program participants and assist participants with referrals.

- Evidence-Based Treatment
  - Utilization of national evidence-based guidelines for the specialized conditions.

Healthy Returns[SM] provides two levels of DM services: standard and high-intensity. Individuals are placed into a service level based on factors including recent emergency room utilization and progression of the condition.

- ***Standard Program:*** The majority of individuals eligible for DM are enrolled in the standard program. Standard program interventions include an initial phone call to enroll the individual, a welcome kit including detailed information on his or her condition, and quarterly educational newsletters. Standard enrollees may also contact the 24-Hour Call Line. Licensed medical professionals staff the call line to answer basic medical questions and facilitate referrals to HMC's licensed pharmacists and nutritionists.

- ***High-intensity Program:*** Generally, 20 percent of members participate in the high-intensity program. In addition to services that are provided in the standard program, these individuals receive scheduled phone calls from a HMC nurse. The HMC nurse reviews the patient's prescribed plan of care (as provided to HMC by the patient's physician) or if the prescribed plan of care is not available, the nurse will utilize nationally recognized evidence-based guidelines to assist the patient in better managing his or her condition.

C. Member Engagement

Members receive a general notification of the program, a condition specific welcome kit (targeted towards high or standard patient intensity), a patient goals letter, scheduled and unscheduled nurse follow-up calls (high intensity), a quarterly newsletter with disease specific information, condition specific non-compliance letters (if appropriate), outbound call messages, and a satisfaction survey. All materials are available in both English and Spanish, and a medical translation service is available on-demand for participants who speak languages other than English.

D. Provider Engagement

HMC engages providers though several strategies. Providers receive an introductory letter and brochure, new participant report, physician action guide, evidence based guidelines, action guides, and prescription and emergent reports.

To improve the program, DMAS and HMC are working with the Virginia Chapter of the American Academy of Pediatrics (VAAAP) to ensure that *Healthy Returns*^{SM} meets the needs of the pediatric members. Through this effort, HMC implemented several suggestions of the VAAAP including disseminating the key care recommendations included in the HMC practice guidelines; convening a council to improve collaboration among HMC and academic medical center staff; and providing information about *Healthy Returns*^{SM} through the professional societies so that physicians will be well informed about the program. In addition, VAAAP members were invited to participate on HMC's Medical Advisory Board to further encourage collaboration and ultimately improve the care of children in Virginia.

E. Virginia Innovations in Disease Management: Home-and-Community Based Waiver Participants

Virginia is the first state to offer DM to participants receiving long-term care services though one of seven home and community-based waivers. Virginia's home and community-based waivers provide specialized services that allow participants to receive services in a community setting of their choice as an alternative to an institution. DMAS currently offers the following home and community-based waivers: Elderly and Disabled with Consumer Direction, HIV/AIDS, Mental Retardation (MR), Day Support, Developmental Disabilities, Technology Assisted, and Alzheimer's. Special protocols were developed based on input from key stakeholders to optimize DM resources for home and community-based waiver participants – particularly for the MR waiver participants.

DMAS worked with several advocacy organizations and local agencies to develop the protocols for working with individuals with MR. Since some MR wavier clients are not always in the position to make unassisted healthcare decisions, DMAS found that it is often more appropriate for the participant's case manager, guardian, family member, or residential provider to be the direct contact for HMC. DMAS, therefore, requested that HMC contact the MR Director of the appropriate community services board to identify the appropriate contact for the individual.

IV. OUTCOMES: *HEALTHY RETURNS*^{SM} YEAR 1 RESULTS

DMAS' contract with HMC requires that HMC report on the following measures:

- Condition specific outcome measures (Appendix B) at baseline and every 6 months;
- The health and functional status of participants based on a standardized tool at baseline and every 6 months;

- The utilization of medical services to include:
    - The number of hospital admissions and readmissions,
    - The number of emergency room visits,
    - The number of ambulatory visits, and
    - HEDIS-like measures.
- The level of participant satisfaction with the program (conducted annually by a third party); and
- Documentation of participant's experience with and access to HMC's services.

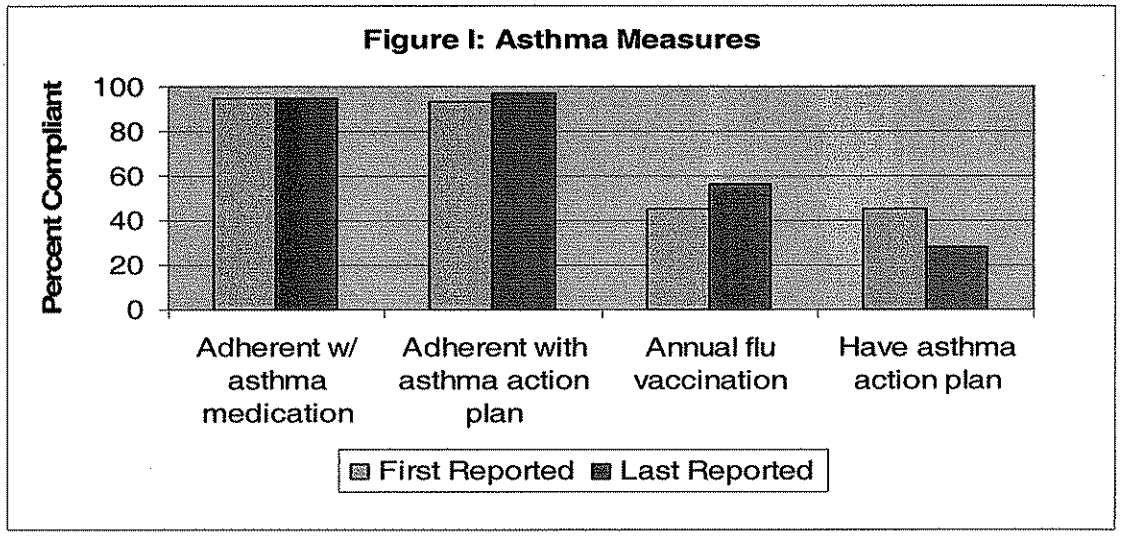
Based on an initial Year 1 outcomes report submitted by HMC, the *Healthy Returns*^{SM} program is providing effective services to program participants. Self-reported clinical outcomes suggest improvements in the majority of measures (based on high intensity members in the program). Self-reported data are collected at the time members enter the disease management program and then are collected again at a later point in time, usually six months after entering the program.

However, some results based on claims-based clinical outcomes for high and standard intensity members highlight the need for continued improvement. Short-term results associated with disease management programs are difficult to show--results are generally realized in the long-term. This makes evaluating disease management programs somewhat difficult. Furthermore, disease management evaluations require claims-based data. However, even with these data, it is sometimes difficult to prove causal relationships and show definitive outcomes because of factors, such as demographic, environmental, and programmatic changes.

Self-reported condition-specific outcomes are highlighted below.

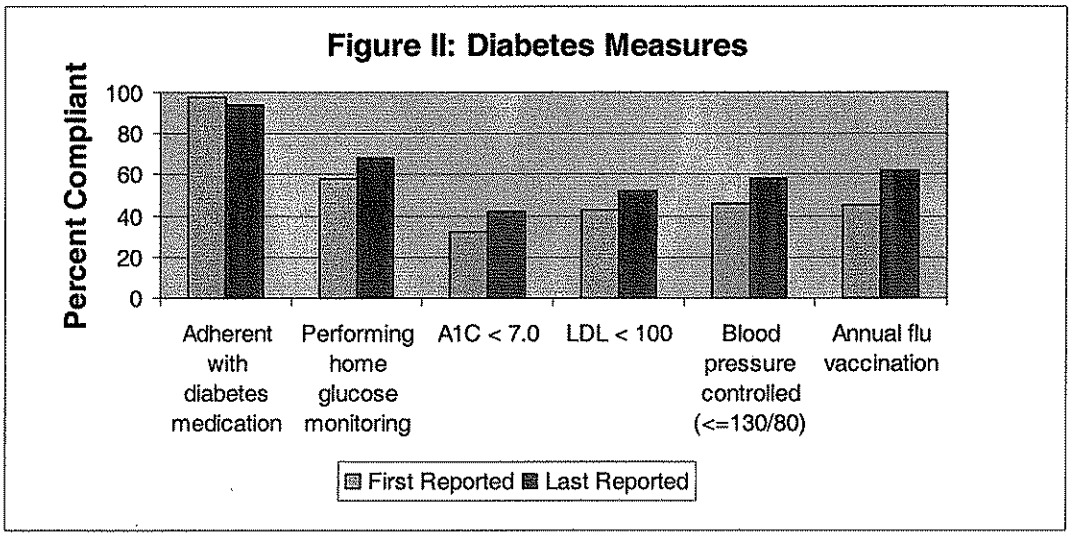
Asthma

Asthma-related medication use among members with asthma is high and indicates members are compliant with their drug regimen (see Figure I). Specifically, based on self-reported clinical outcomes data, 95 percent of members reported being adherent with their asthma medication post enrollment in the program. Program participants also reported a slight increase in adherence to asthma action plans from the time they entered the program to their last self-report (93 percent to 97 percent). Annual flu vaccination rates also increased from 45 percent to 56 percent during the same time frame. Increases in these preventive care mechanisms are expected to increase participants' ability to effectively manage their condition and ultimately decrease the number of hospitalizations and inappropriate emergency room use. Fewer program participants reported having an asthma action plan, or a plan developed by their provider that tells them what medications to take and how to keep their asthma under control. This illustrates an area that needs continued improvement.



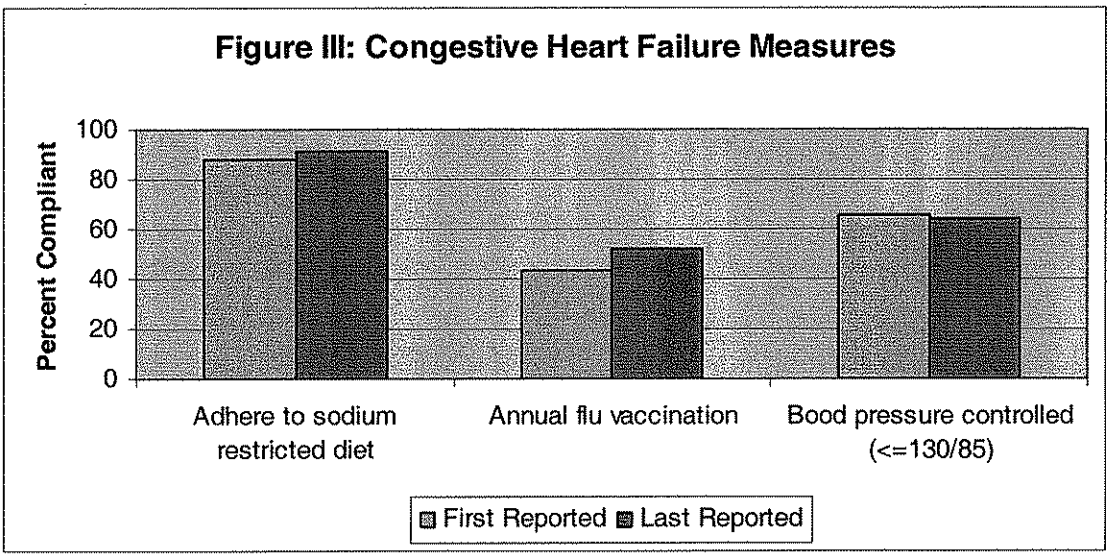
Diabetes

Program participants also reported improvements on most of the diabetes measures. However, slightly fewer participants reported adherence with diabetes medications (see Figure II). Based on self-reported clinical outcomes data, the number of members who are performing home glucose monitoring increased from 58 percent to 68 percent from the time members entered the disease management program to a later point in time, usually six months after entering the program. The number who reported that their HbA1c level was < 7.0 increased from 32 percent to 42 percent, and the number who reported that their LDL < 100 increased from 43 percent to 52 percent. Furthermore, the number of participants who reported that their blood pressure was controlled (<=130/80) increased from 46 percent to 58 percent. Lastly, the percent of members who received an annual flu vaccination increased from 45 percent to 62 percent. Improvements on these measures (1) enable members to better manage their conditions, and (2) puts them at decreased risk for major complications associated with diabetes.



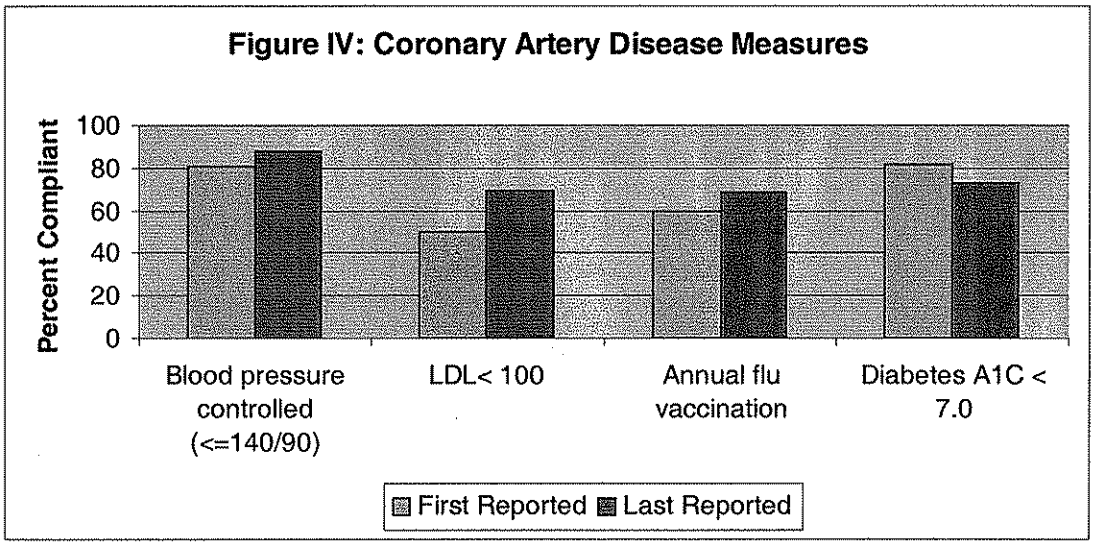
Congestive Heart Failure

According to Figure III, the number of members adhering to a sodium restricted diet increased from 88 percent to 91 percent. It is important for CHF patients to adhere to a sodium restricted diet because it helps relieve some of the burden placed on the heart. Furthermore, the percent of members who received an annual flu vaccination increased from 43 percent to 52 percent, which is positive because people with heart failure should receive a yearly influenza vaccine to guard against infections, such as pneumonia. The number of program participants reporting that their blood pressure was controlled decreased slightly (from 66 percent to 64 percent).



Coronary Artery Disease

The number of members who reported that their blood pressure is controlled (<=140/90) increased from 81 percent to 88 percent, the percent that reported LDLs <100 increased from 50 percent to 69 percent (see Figure IV). Furthermore, annual flu vaccination rates increased from 60 percent to 68 percent. Improvements on these measures enables members who have CAD better manage their conditions and decreases major complications associated with the disease. Fewer program participants self-reported having their diabetes A1C level < 7.0, illustrating an area that needs continued improvement.



Participant Satisfaction and Physical and Mental Status

In addition to the improved self-reported clinical outcomes, the *Healthy Returns*[SM] program received high satisfaction marks based on a satisfaction survey completed by high intensity participants. Specifically, 99 percent indicated that they made positive changes as a result of participating in the *Healthy Returns*[SM] program, 98 percent indicated that they would recommend the program, and 88 percent rated the program as excellent/very good. Lastly, participants reported they have made improvements in both physical and mental status since participating in the program. These improvements are paramount to the success of disease management programs, including *Healthy Returns*[SM].

V. VIRGINIA INNOVATIONS IN DISEASE MANAGEMENT: AGENCY FOR HEALTHCARE RESEARCH AND QUALITY LEARNING NETWORK

Virginia was one of six states initially selected to participate in the national Agency for Healthcare Research and Quality (AHRQ) Medicaid Case Management Learning Network. Virginia's *Healthy Returns*[SM] program is being evaluated by AHRQ for best practices in design, implementation, satisfaction, and outcomes. AHRQ Learning Network also provides Virginia the opportunity to learn about initiatives and innovations in other states and obtain technical assistance from experts in the field.

Staff from the AHRQ Learning Network provided consultation and technical assistance on program evaluation, provider involvement, and the waiver approval process. DMAS staff provided AHRQ a quarterly log detailing the development, implementation, and progress of *Healthy Returns*[SM]. DMAS staff worked with AHRQ staff through workshops, site visits, and conference calls. DMAS also presented the program at the annual meeting in Chicago in June 2007 as well at the national state Medicaid director meeting in Vermont in June 2007. The Department continues to participate with the learning network on an ongoing basis.

VI. *HEALTHY RETURNS*[SM] PRELIMINARY VALIDATION AND EVALUATION PLANS

DMAS contracted with MPRO, a Michigan-based external quality review organization, to develop a validation strategy for *Healthy Returns*[SM]. MPRO is a recognized leader in healthcare quality improvement and patient safety initiatives with extensive experience in Medicare and Medicaid programs, managed care operations, research methodologies and data analysis. MPRO will work directly with HMC to validate *Healthy Returns*[SM] program processes, procedures, and outputs.

Overall, DMAS hopes to see an increase in the quality of care patient receive, including fewer gaps in medications, improved compliance with prescribed medications, better control of chronic conditions, increased utilization of the primary care system, decreased inappropriate use of the emergent care system, increased adherence to physicians' prescribed plans of care, and most importantly, improved health outcomes and better overall health.

The focus of *Healthy Returns*[SM] is on quality of care; however, HMC will report on the return of DMAS' financial investment in *Healthy Returns*[SM]. Expected healthcare expenditures will include, but will not be limited to inpatient hospital, outpatient hospital, physician, pharmacy, lab, and x-ray expenditures.

In addition to evaluating *Healthy Returns*[SM], DMAS worked with each MCO to ensure that all five plans could offer DM services for individuals with asthma, chronic obstructive pulmonary disease, congestive heart failure, coronary artery disease, and diabetes by 2007. These conditions are covered in the *Healthy Returns*[SM] program for fee-for-service participants. This will allow DMAS to compare the results of the MCO DM programs with the results of *Healthy Returns*[SM], thus enabling DMAS to identify strengths and areas for improvement in Virginia Medicaid DM programs.

VII. MEDICAID REVITALIZATION COMMITTEE

House Bill 758, passed by the 2006 General Assembly, created the Medicaid Revitalization Committee consisting of patient advocates, healthcare providers, and other stakeholders. During the Summer and Fall of 2006, the Committee examined alternative and innovative approaches to healthcare delivery under Medicaid.

The Medicaid Revitalization Committee was very interested in disease management. One of the Committee's recommendations was that DMAS seek funding and approval (both state and federal) to provide access to enhanced benefit accounts, or similar mechanism, in which disease management recipients are rewarded for compliance with aspects of their care plan through financial incentives that can be used to purchase healthcare related goods and services not otherwise covered by the Medicaid program (including patient cost sharing responsibilities). Item 302 GGG of the 2007 Appropriations Act directed DMAS to request funding in the 2008-2010 biennial budget to fund the implementation of enhanced benefit accounts. DMAS is currently developing

incentive models for Medicaid recipients in the *Healthy Returns*[SM] program, which will be considered during the upcoming Executive Budget development process.

VIII. CONCLUSION

The Department of Medical Assistance Services worked successfully to implement *Healthy Returns*[SM] for more than 16,000 Medicaid fee-for-service participants. There have been substantial improvements in the majority of self-reported clinical outcome measures. This illustrates that through *Healthy Returns*[SM], individuals with complex chronic conditions are now receiving the support and assistance that they need to handle the difficult challenge of managing a chronic illness. DMAS is working with experts to develop an evaluation strategy to ensure that *Healthy Returns*[SM] is providing the best possible DM services in the most cost-effective manner possible. DMAS looks forward to enhancing DM services and using them to better meet the needs of Medicaid participants in the upcoming years.

APPENDICES

APPENDIX A

2006-2008 Appropriations Act, Item 302. GG. 2. The department shall report on its efforts to contract for and implement disease state management programs in the Medicaid program by November 1 of each year of the biennium, to the Chairmen of the Senate Finance and House Appropriations Committees and the Department of Planning and Budget. The report shall include estimates of savings that may result from such programs.

APPENDIX B

CONDITION SPECIFIC CLINICAL OUTCOME MEASURES

A. Clinical Outcome Measures for Coronary Artery Disease (CAD)
Variables to be Measured
Percent of participants post-MI taking beta-blockers
Percent of all participants taking an aspirin or antiplatelet drug
Percent of participants with a CAD diagnosis who had fasting lipid panel assessed within the measurement year per ATP-III
Percent of all participants who received a flu vaccination within the last 12 months.
Percent of all participants who have ever received a pneumococcal vaccine
Hospital admissions for MI within the measurement period
Percent of all participants who had a depression screening
Percent of participants with BP<130/85

B. Clinical Outcome Measures for Congestive Heart Failure (CHF)
Variables to be Measured
The percent of participants taking aspirin, other antiplatelet medication or anticoagulant
Percent of all CHF participants who received a flu vaccination within the last 12 months
Percent of all CHF participants who have ever received a pneumococcal vaccine
Participant Education Percent of CHF participants who comply with daily weights Percent of CHF participants who comply with sodium restriction Percent of CMF participants who comply with medication regimen
Percent of CMF participants readmitted to the hospital with a primary diagnosis of heart failure within 30 days of hospital discharge for heart failure
Rate of emergency department visits with heart failure primary diagnosis or for pulmonary edema
Rate of hospital admissions for CHF
Percent of all CHF participants who had a depression screening

C. Clinical Outcome Measures for Diabetes
Variables to be Measured
Percent of diabetes participants with a cholesterol test in the past year
Percent of diabetes participants with BP <130/80
Percent of participants with diabetes who had one microalbumin screening test in the measurement year or receiving treatment for existing nephropathy
Percent of participants with diabetes who had at least two A1C tests in the measurement year
Percent of all diabetes participants who received a flu vaccination within the last 12 months
Percent of all diabetes participants who have ever received a pneumococcal vaccine
Percent of all diabetes participants who had a depression screening

D. Clinical Outcome Measures for Asthma
Variables to be Measured
Rate of hospital admissions for asthma
Percent of all asthma participants who received a flu vaccination within the last 12 months
Percent of participants with spirometry testing within the past 12 months
Percent of asthma participants with an emergency department admission for asthma in the past 12 months
Percent of asthma participants with personal action plan for managing their asthma

E. Clinical Outcome Measures for Chronic Obstructive Pulmonary Disease
Variables to be Measured
Percent of COPD participants prescribed bronchodilator medications
Percent of COPD participants adherent with COPD-related medications
Percent of COPD participants currently not smoking
Percent of COPD participants with annual influenza vaccination

HEDIS-like 2005 Measures
Effectiveness of Care
Controlling High Blood Pressure
Beta-Blocker Treatment After a Heart Attack
Persistence of Beta-Blocker Treatment After a Heart Attack
Cholesterol Management After Acute Cardiovascular Event
Comprehensive Diabetes Care
Use of Appropriate Medications for People with Asthma
Access/Availability of Care
Adult's Access to Preventative/Ambulatory Health Services

Satisfaction With the Experience of Care
CAHPS ® 4.0 or the most recent version of the Adult Survey
Use of Service
Inpatient Utilization-General Hospital/Acute Care
Ambulatory Care
Inpatient Utilization-Nonacute Care
Outpatient Drug Utilization