COLORADO DEPARTMENT OF HEALTH CARE POLICY & FINANCING

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Bill Ritter, Jr., Governor • Joan Henneberry, Executive Director

February 1, 2007

The Honorable Abel Tapia, Chairman
Joint Budget Committee
200 East 14th Avenue, Third Floor
Denver, CO 80203

Dear Senator Tapia:

Enclosed please find a legislative report to the Joint Budget Committee on the Department of Health Care Policy and Financing's Disease Management Program. Section 25.5-5-316(3), C.R.S. (2006) requires the Department to report the fiscal implications generated by implementation of the disease management programs on or before February 1 thereafter in which program is in place.

The attached report provides updated information about each disease management pilot program and includes the vendor calculated savings, if any. Questions regarding the disease management report can be addressed to Katie Brookler, Quality Improvement Section Manager at katie.brookler@state.co.us. Her telephone number is 303-866-6320.

Sincerely,

Joan Henneberry
Executive Director

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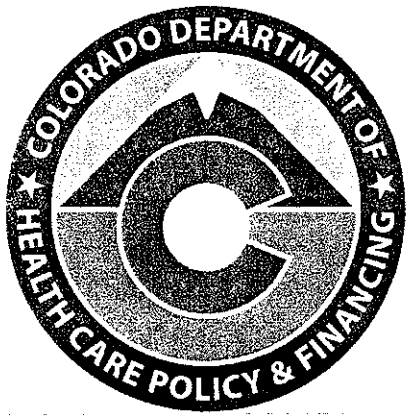
Attachments



COLORADO DEPARTMENT OF HEALTH CARE POLICY AND FINANCING

REPORT TO JOINT BUDGET COMMITTEE

DISEASE MANAGEMENT PROGRAMS

FEBRUARY 1, 2007

Colorado Disease Management Programs Overview

Background

In 2002, the Colorado General Assembly enacted legislation authorizing the Department of Health Care Policy and Financing (the Department) to develop disease management programs "to address over- or under-utilization or the inappropriate use of services or prescription drugs and that may affect the total cost of health care utilization by a particular Medicaid recipient with a particular disease or combination of diseases." Section 25.5-5-316, C.R.S (2006).

As a result of this legislation the Department implemented six disease management pilot programs. The purpose of these pilot programs was to assess the efficacy of disease management programs for various chronic conditions. Funding for each of the programs was provided by pharmaceutical companies and, in some cases, vendors developed programs to meet the Department's requests (e.g. the Schizophrenia and Intensive Case Management programs). The six programs were:

Diabetes	Asthma
Schizophrenia with medical comorbidities	Chronic Obstructive Pulmonary Disease
Intensive Care Management	Neonatal Intensive Care Unit

The pilot programs began at different times between July 2002 and November 2003 and most lasted for one year. Because the results of some disease management programs can be difficult to demonstrate in one year, the Diabetes and Schizophrenia programs funding was extended to two years. Most disease management vendors evaluated the efficacy of their own programs. The funder for the Schizophrenia and Diabetes programs also funded an independent evaluation, conducted by the University of Arizona Center for Health Outcomes and Pharmacoeconomic Analysis.

Results

Results of the six pilot programs were mixed. Vendors reported positive outcomes from the Diabetes, Asthma and Chronic Obstructive Pulmonary Disease pilot programs. Results of the Intensive Care Management pilot, which included some clients using telehealth, provided some valuable lessons in case management of persons with chronic conditions. The vendor for the Schizophrenia program could not demonstrate expenditure reduction after two years. The Neonatal Intensive Care Unit pilot program used the internet to educate parents about caring for their infant upon discharge from the hospital. The program was not evaluated and Department follow-up calls to the vendor regarding the final report were not answered.

The Department selected two programs, Diabetes and Asthma, to continue past the pilot phase. The programs were selected because of vendor reported savings during the pilot phase. Any actual savings achieved as a result of these programs have been included in the Department's Budget Request for Medical Services Premiums; therefore further reduction to the Medical Services Premiums Long Bill group as a result of the savings is not necessary.

Disease Management Program Summary

The attached document provides a summary of the current disease management programs and the six pilot programs.

Disease Management Program Summary

The status of the current disease management programs, Asthma and Diabetes, is reported below in the section entitled "Current Disease Management Programs."

An overview and specific results of the six pilot programs are presented in the following section entitled "Pilot Programs Overview and Summary."

Current Disease Management Programs

INITIATIVE	VENDOR	# OF CLIENTS	PERFORMANCE MEASURES	NOTES
Asthma	Alere Medical, Inc.	362 clients currently enrolled	Number of hospitalizations and ER visits, client functional status, client and physician satisfaction.	• Direct contract began November 2004 and continues through June 30, 2007 for a continuous enrollment up to 500 clients. An amendment to continue the program has been drafted. Twelve months claims data analyzed by Alere showed a 15.9% decrease in Emergency Room Utilization and a 73.1% reduction in the rate of inpatient hospitalizations. Estimated savings from these reductions is $532,314 for 487 clients, over and above program costs*.
Diabetes	McKesson Health Solutions, Inc.	292 clients currently enrolled	Number of hospitalizations and ER visits, client clinical status.	• Direct contract began February 2005 for a continuous enrollment up to 300 clients. Twelve months claims data analyzed by McKesson showed a 5.3% decrease in Emergency Room Utilization and a 5% reduction in the rate of inpatient hospitalizations. Estimated savings from these reductions is $24,304 for 95 clients*. Total program costs for this 12 month time period was $241,014.11. The Department is evaluating the clinical outcomes, program costs and overall value of the program.

Pilot Programs Overview and Summary

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
Asthma	Novartis and Astra Zeneca	National Jewish Medical and Research Center 258 clients in pilot program	Number of hospitalizations and ER visits, client functional status, client and physician satisfaction	• Pilot program began October 2002 and ended December 31, 2003. • Services included telephonic education, 24-hour nurse call line, physician education and case management of 258 clients (75% children). • Program analysis done by National Jewish showed an 86% reduction in Emergency Room visits, a 55% reduction in hospitalizations, a statistically significant improvement in pediatric functional status. 94% of program participants were satisfied with the program. • Vendor estimated savings from available claims data was $68,833 or 24.9% for 150 clients, over and above program costs*. • Department has implemented a statewide contract for a continuous enrollment up to 500 clients (see State Disease Management Programs).
Chronic Obstructive Pulmonary Disease	Boehringer Ingelheim	National Jewish Medical and Research Center Pilot allowed 300 clients; 242 completed the pilot program, 343 clients participated in the program.	Number of hospitalizations and ER visits, client functional status, client and physician satisfaction.	• Pilot program began November 1, 2003 and continued through December 31, 2004. • Services included telephonic education, 24-hour nurse call line, physician education and case management of 250 clients. • 242 clients completed the 12 month program. • Twelve month claims data analyzed by National Jewish Medical and Research Center showed a 20.5% decrease in Emergency Room Utilization, and a 24.1%

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
				reduction in the rate of inpatient hospitalizations. Estimated savings from these reductions is $173,702, over and above program costs*. • Twelve month client reported information indicates lower service utilization and higher level of functioning. 8% of clients reported they had quit smoking and there was a 5% increase in appropriate medication use. The number of clients receiving a flu shot had increased from 62% to 96%.
Diabetes	Eli Lilly	McKesson Health Solutions, Inc. 279 clients 32 out of 279 clients completed 12 months of Phase 1 pilot.	Number of hospitalizations and ER visits, improve functional status, reduce complications, client satisfaction.	• Phase 1 of the diabetes pilot program began October 2002 and ended December 31, 2003. Phase II began January 1, 2004 and ended December 31, 2004. • Services include telephonic case management of 279 clients, client education and care plans developed with clients. • Twelve month claims data analyzed by McKesson showed a 3.5% reduction in Emergency Room Utilization, and a 3.7% decrease in the rate of inpatient hospitalizations. Estimated savings from these reductions is $125,374, not accounting for program costs*. • The University of Arizona College of Pharmacy conducted an independent evaluation of Phase I. This evaluation showed the pilot program clients' per member per month costs for medical claims decrease slightly while pharmacy claims costs increased slightly. Eli Lilly funded the

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
				evaluation and is funding a similar evaluation of phase II with results due January 2007. • Department has implemented a statewide contract for 300 clients (see Current Disease Management Programs).
Schizophrenia with medical conditions	Eli Lilly	Specialty Disease Management, Inc. 275 clients in Program for 6 months or longer during Phase I.	Medication compliance, number of hospitalizations and ER visits, client functional status, client satisfaction.	• Phase I of the schizophrenia pilot program began August 2002 and ended December 31, 2003. Phase II of the program began January 1, 2004 and ended December 31, 2004. • Services included face-to-face and telephonic case management, client education and activities of daily living for clients diagnosed with schizophrenia and at least one chronic medical condition. This program requires extensive coordination of care between mental and physical health providers. • Specialty Disease Management Services' evaluation of Phase I showed increased claims cost (net of program expenses), evidence of increased client well being and improved clinical outcomes for some clients*. • The University of Arizona College of Pharmacy is conducting an independent evaluation of Phase I. Eli Lilly is funding the evaluation. Results of this evaluation are in draft form pending Department review.

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
Intensive Care Management/ Care Management Organization	Pfizer, Astra Zeneca, Abbott, Glaxo, Smith Kline	McKesson Health Integrated, Lexicor, American Medical Alert Company 150 clients	Number of hospitalizations and ER visits, client functional status.	• Pilot program began February 2003 and ended December 31, 2003. • Services included telephonic case management of 120 medically complex clients in the Home and Community Based Clients (HCBC) program. Home-based biometric and subjective monitoring (telemedicine) was also done for 30 clients under this program. • Vendor evaluation showed little cost savings (specific dollar amount not stated). • The Department is not pursuing evaluation of this program due to the low program enrollment and the lack of cost savings.
Neonatal Intensive Care Unit	Johnson & Johnson and Clinician Support Technology	Clinician Support Technology 391 clients	Readmissions, lengths of stay, parent satisfaction	• Pilot program began October 2002 and continued through June 30, 2004. • Services included web-based hospital specific parent and family education modules covering birth to 18 months. Program was open to all Neonatal Intensive Care Unit patients at four Colorado hospitals and had 391 Medicaid and 151 non-Medicaid newborns enrolled. Participating hospitals included Denver Health and Hospitals, Children's Hospitals, University Hospital and Presbyterian/St. Luke's Medical Center. Laptops were provided to Medicaid parents needing web access. • A final report was not received by Clinician Support Technology.

*There is controversy in the disease management industry about how to calculate disease management cost savings for two reasons:

1. Benefit changes (and the subsequent impact on costs) between pre-program and post-program time periods can greatly impact costs creating a skewed picture of savings.
2. Claims costs for some diseases are cyclical (i.e., a costly hospitalization may occur once every year or two). This cycle can create a false view of cost savings or cost increases. Once school of thought recommends vendors include a two year average of claims costs to reduce the cyclical variability. National Jewish Medical Center used a two-year pre-program average when calculating the chronic obstructive pulmonary disease pilot program cost savings.

The asthma, diabetes and chronic obstructive pulmonary disease vendors have reported pre-program and post-program differences in the frequency of hospitalizations and emergency room visits as well as estimated claims cost differences.