COLORADO DEPARTMENT OF HEALTH CARE POLICY & FINANCING

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

February 1, 2008

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

Dear Representative Buescher:

Enclosed please find a legislative report to the Joint Budget Committee on the Department of Health Care Policy and Financing's Disease Management Programs. Section 25.5-5-316(3), C.R.S., (2007) 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 program and includes the vendor calculated outcomes when available. Questions regarding the disease management report can be addressed to Christy Hunter, Quality Improvement Specialist at christy.hunter@state.co.us. Her telephone number is 303-866-2086.

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, 2008

Disease Management Program Summary

Disease management programs were initially implemented as pilot programs in 2002. These pilot programs were paid for by pharmaceutical companies. Upon evaluation of the efficacy of these pilots, the Department of Health Care Policy and Financing (the Department) was able to identify strengths and weaknesses, prompting the decision to contract directly with disease management vendors, targeting several impactable conditions. The Department currently has six disease management programs. The status of these programs is reported below in the section entitled "Current Disease Management Programs." An overview and the results of the initial six pilot programs are presented below in the section entitled "Pilot Programs Overview and Summary."

Current Disease Management Programs

INITIATIVE	VENDOR	# OF CLIENTS	INTERVENTIONS & PERFORMANCE MEASURES	NOTES
Asthma	Alere Medical, Inc.	500	• Clients receive educational materials, a peak flow monitor and regularly scheduled telephonic assessments. • Program measures number of hospitalizations and ER visits, client functional status, client and physician satisfaction.	• Direct contract began November 2004 and continues through June 2008. An amendment to continue the program is being drafted. Twelve months claims data analyzed by Alere showed a 42.8% decrease in Emergency Room Utilization and a 59.8% reduction in inpatient hospitalizations. Overall client satisfaction is rated at 97.3%.
Congestive Heart Failure	Alere Medical, Inc.	150	• Clients receive a biometric home monitor with scale and/or regularly scheduled telephonic assessments. • Program measures number of hospitalizations and ER visits, client functional status, client and physician satisfaction.	• Direct contract began July 2007 and continues through June 2008. An amendment to continue the program is being drafted. A program analysis will be available by December 2008.
Chronic Obstructive Pulmonary Disease	Alere Medical, Inc.	300	• Clients receive a biometric home monitor with scale and/or regularly scheduled telephonic assessments. • Program measures number of	• Direct contract began October 2007 and continues through June 2008. An amendment to continue the program is being drafted. A program analysis will be available by December 2008.

			hospitalizations and ER visits, client functional status, client and physician satisfaction.	
Telehealth Pilot Program for Chronic Conditions	Specialty Disease Management, Inc.	155	• Clients receive a biometric home monitor appropriate for the condition being managed. • Program measures clinical outcomes, cost savings and client satisfaction.	• Direct contract began July 2007 and continues through June 2008. An amendment to continue the program is being drafted. A program analysis will be available December 2008.
High-Risk Obstetrics	Matria Healthcare, Inc.	4200	• Clients receive educational materials and regularly scheduled telephonic assessments. • Program measures clinical outcomes, cost savings and client satisfaction.	• Direct contract began December 2008 and continues through June 2008. An amendment to continue the program is being drafted. A program analysis will be available by December 2008.
Weight Management	National Jewish Medical and Research Center	500	• Clients receive educational materials, an electronic activity meter or pedometer and a scale. • Program measures client weight loss, changes in activity and client satisfaction.	• Direct contract begins February 2008 and continues through June 2008. An amendment to continue the program is being drafted. A program analysis will be available by December 2008.

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

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
				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 Current 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% 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%

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
				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 of the pilot. 41 out of 388 clients completed 12 months of phase 2 of the pilot.	Number of hospitalizations and ER visits, improve functional status, reduce complications, client satisfaction.	• Pilot program began October 2002 and ended December 31, 2004. Direct contract began in February 2005 and ended June 30, 2007. • Services include telephonic case management of up to 300 clients, client education and care plans developed with 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 University of Arizona College of Pharmacy conducted an independent evaluation of the pilot program. This evaluation showed a slight decrease in medical claims costs, while pharmacy claims costs increased slightly. Program costs exceeded overall cost savings. The evaluation concluded that improving initial enrollment and long-term participation would better capture any potential economies of scale.
Schizophrenia with medical	Eli Lilly	Specialty Disease Management, Inc.	Medication compliance, number of hospitalizations	• Pilot program began August 2002 and ended

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
conditions		275 clients 73 out of 350 clients completed 6 months or longer during phase I.	and ER visits, client functional status, client satisfaction.	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 pilot 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 conducted an independent evaluation of the pilot program. This evaluation showed a reduction in total medical costs, an increase in schizophrenia-related medical costs, and no change in pharmacy costs. Program costs exceeded overall cost savings. The evaluation concluded that relatively low program enrollment due to eligibility issues limited the power of the analysis.
Intensive Care Management/ Care Management Organization	Pfizer, Astra Zeneca, Abbott, Glaxo, Smith Kline	McKesson Health Integrated, Lexicor, American Medical Alert Company	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

INITIATIVE	FUNDING	VENDOR AND # OF CLIENTS	PERFORMANCE MEASURES	NOTES
		150 clients		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.