



STATE OF WASHINGTON
DEPARTMENT OF SOCIAL AND HEALTH SERVICES
Olympia, WA 98504-5000

January 7, 2009

To Interested Stakeholders:

Aging and Disability Services Administration (ADSA) and Health and Recovery Services Administration (HRSA) have completed an evaluation of the effectiveness of the interventions provided by the Chronic Care Management Projects (CCMP) as requested by Substitute Senate Bill 5930. This evaluation was completed by DSHS staff including ADSA, HRSA, the Office of Research and Data Analysis, and Qualis Health, an External Quality Review Organization.

The CCMP pilot projects were launched by both administrations in January 2007, and have been providing care management services to Medicaid clients who are predicted to be at the top 20% of risk for future Medicaid spending.

The projects were designed to improve the health of enrollees by providing evidence-based assessment and interventions, coordination of health care and supportive services, education and training in improving self-management skills and improving functional and self-care abilities to slow progression of disease or disability.

Key lessons learned and promising practices for future chronic care management services in Washington State include:

- Face-to-face interactions with the care team appear to be more effective with Medicaid beneficiaries who have complex, high-risk chronic conditions. Focusing on high cost, at-risk individuals can have positive results in terms of health outcomes, satisfaction and activation levels and decreases in mortality rates.
- There is value in focusing health care efforts towards self-management behaviors that allow opportunities for improved health. The optimal length of time for receiving chronic care management is dependent on the individual, the complexity of their needs, and the individual's readiness for change. The measure of readiness for graduation from care management continues to require evaluation and refinement.
- The prevalence of mental illness and effect on health behaviors is prominent in our Medicaid clients with high-risk chronic illnesses.
- Improving health and reducing health related costs requires intentional, individualized care planning with client goal-setting.
- Longer term medical care cost reduction evaluation is needed to better understand the gains of investing in chronic care management.

Please feel free to contact ADSA program manager Candace Goehring (360) 725-2562 or HRSA program manager Kristi Tracy (360) 725-1330 for questions or further information.

Sincerely,

Kathy Leitch, Assistant Secretary
Aging & Disability Services Administration

Doug Porter, Assistant Secretary
Health & Rehabilitative Services Administration

In addition to the attached report, individual project detailed stakeholder reports are available on the ADSA and HRSA web sites. The detailed reports include cost analysis, survey results and nurse care manager/physician descriptive file review findings:

<http://www.adsa.dshs.wa.gov/professional/hcs.htm> or
<http://maa.dshs.wa.gov/healthyoptions/newwho/reports/ccm.htm>





Evaluation of Washington State Medicaid Chronic Care Management Projects

Report Submitted By:
Qualis Health

Submission Date:
November 13, 2008

Evaluation of Washington State Medicaid Chronic Care Management Projects

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Executive Summary

In 2007, the Washington State Legislature passed Substitute Senate Bill 5930, authorizing the Department of Social and Health Services (DSHS) to “Evaluate the effectiveness of current chronic care management efforts in the health and recovery services administration and the aging and disability services administration, comparison to best practices, and recommendations for future efforts and organizational structure to improve chronic care management.”

Findings from a randomized controlled trial of the first 9 to 10 months of three Medicaid chronic care management projects targeting high-risk disabled adult clients shows evidence of significant decreases in mortality rate in two projects, signs of positive impact on clients as reflected in care management records and client surveys, and no statistically significant cost savings in the short term. The short program participation period presented an evaluative challenge for two of the projects when a portion of that time was spent attempting to contact and engage the client. Low engagement rates may have diminished the ability of the study to detect statistically significant outcomes.

Overview of the Three Chronic Care Management Approaches

The projects all share two major components:

- **Predictive Modeling**—a computerized program, ImpactPro™, was used to select potential enrollees at highest risk for future healthcare utilization based on analysis of demographics, healthcare claims, and utilization.
- **Care Management**—assessment and intervention provided to high-risk clients by a care manager through telephonic and/or face-to-face contacts that results in a plan of care jointly developed by client and care manager.

ADSA Chronic Care Management Project

The ADSA Chronic Care Management Project:

- Provides intensive care management services throughout Washington State that integrate acute and long-term care services using face-to-face care management focused on supporting existing ADSA clients living in their home.
- Provides clients with a formal, state-paid caregiver to support their personal care needs.
- Builds on long-term care casework and in-home service delivery infrastructure through Area Agencies on Aging.

Clients remain in the project for the period of time that they are eligible for chronic care management services.

AmeriChoice Washington, a subsidiary of United Healthcare, Care Management Project

The AmeriChoice Washington Care Management Project:

- Provides telephonic and in-person care management interventions throughout Washington State (except for King County) to clients not receiving ADSA long-term care services
- Focuses on access to providers and receipt of health education

Clients remain in the project for six months with the opportunity to extend enrollment to a maximum of 12 months.

King County Care Partners Chronic Care Management Project

The King County Care Partners Chronic Care Management Project:

- Provides intensive face-to-face care management services to clients not receiving ADSA long-term care services.
- Is a coalition of The City of Seattle, Aging and Disability Services with other local agencies including Harborview Hospital, UW Informatics Research, many community health centers, and Senior Services of King County.
- Provides linkages for clients in King County to a medical home and extensive coordination between behavioral health and physical health systems.

Clients remain in the project for six months with the opportunity to extend enrollment to a maximum of 12 months.

Key Findings

ADSA Chronic Care Management Project

Engagement rate was 43% of those targeted for the program, similar to projects nationally. Clients' contact information was known to care managers since all were receiving services from ADSA. The engagement rate was limited by the enrollment capacity for each Area Agency on Aging.

In all five of the areas of health measured by survey—Overall Health Rating, Patient Activation Measure, Overall Self-Sufficiency, Pain Impact, and Quality of Life Scale—the results consistently pointed to better self-reported health outcomes in the treatment group than the comparison group.

There was a statistically significant lower risk of death among the clients randomly assigned to being offered chronic care management in the ten-month study period. Those in the treatment group had lower average medical costs in the first ten months of the project than those not offered treatment, though this was

partially offset by increased in-home long-term care services. This difference was not statistically significant.

Findings from the client record review showed that nearly half of the clients in the sample achieved improvements in health condition, living environment, or access to treatment. The greatest challenges appeared to be resource limitations, particularly in rural areas of Washington State.

AmeriChoice Washington Chronic Care Management Project

Engagement rate was 45%, as measured by premiums paid during the study period. Engagement was actually less, at approximately 15%, due to an implementation problem identified through program monitoring and later corrected. Low engagement rates may have diminished the ability of the study to detect statistically significant outcomes.

Survey findings showed no significant differences in responses between the treatment and comparison groups.

There was no significant difference in mortality rate. There was no average cost savings for those in the treatment group.

Client record review found evidence of self reported successes such as smoking cessation, use of preventive care, and completion of advanced directives. These findings were based on only 15 care management records with five corresponding physician records that were available for review out of 60 records requested.

King County Care Partners Chronic Care Management Project

Engagement rate was 18% during the study period due to slow program start-up and difficulty reaching clients. Low engagement rates may have diminished the ability of the study to detect statistically significant outcomes.

In the five areas of health measured by survey—Overall Health Rating, Patient Activation Measure, Overall Self-Sufficiency, Pain Impact, and Quality of Life Scale—the results were conflicting.

There was a statistically significant lower risk of death among the clients randomly assigned to treatment group in the first nine months of the project. There was no significant average cost savings between the two groups.

Findings from the client record review in the sample included referring clients to supportive health and social service programs, stabilizing mental health conditions through coordinating services for clients, and an increase in smoking cessation.

Conclusions and Recommendations

Comparison between chronic care management projects was not the intent of this evaluation, nor was it appropriate given the distinct nature of each project's population, focus, and interventions. Key findings from the evaluation are as follows:

- The significant reduction in mortality in the ADSA and King County Care Partners projects was unexpected and considerable given the short evaluative period. These findings bear further study.
- The projects showed no statistically significant cost savings to the state in the first nine to ten months of implementation.
- Client engagement is and will remain a challenge for programs targeting high-need high-cost Medicaid clients. Offering services does not guarantee client engagement. Increasing such client engagement may require a combination of strategies appropriate to each program and population.
- Limited access to resources diminishes the ability of the care manager to successfully impact the client's plan of care and was experienced by all projects. Examples of limited resources include: access to pain management specialists, emergency mental health services, chemical dependency services, and timely availability of interpreters.
- Expediting clients' continued enrollment in two of the three projects would improve care management efforts by reducing administrative workload.

Background

As directed by Substitute Senate Bill 5930, this report evaluates three chronic care management projects offered by the Washington State Department of Social and Health Services (DSHS):

- Aging and Disability Services Administration (ADSA) Chronic Care Management Project
- Health and Recovery Services Administration (HRSA) AmeriChoice Washington Chronic Care Management Project
- Health and Recovery Services Administration (HRSA) King County Care Partners Chronic Care Management Project

The purpose of the evaluation is to report findings of the start-up phase of three chronic care management programs. It was specifically designed to measure the impact of offering a new program to a select group of high-need, high-cost Medicaid clients. The projects are not comparable due to significant differences between essential project elements and client characteristics.

Methods

Evaluation Design

Each project targeted a somewhat different client population selected from the top 20% of their risk group. The target groups were then randomized to a treatment group to whom chronic care management was offered, and to a comparison group, who could be offered chronic care management at a later date. The changes over time experienced by the two groups (treatment and comparison) were then compared, to see if those offered chronic care management showed any differences in outcomes. Not all those who were offered chronic care management actually participated. Data was collected through client surveys, from reviews of care management and physician charts, and from medical claims.

Client Survey

The purpose of the comparative client survey was to elicit the client's perception of his or her health and satisfaction with care, and to see if offering the chronic care management program made a difference at the client level. The data source was a comprehensive client survey conducted in 2008, after the projects had been in operation for at least 9 months. The survey questions were drawn from five sources:

- A modified Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey
- The 8-element Client Satisfaction Questionnaire© (CSQ-8)
- The 13-element Patient Activation Measure© (PAM-13), a survey that measures patient involvement in healthcare decisions and activities
- The 5-element EQ-5D, a survey that measures quality of life
- Questions developed by DSHS

The client survey was administered over a 9-week period in the late winter and spring of 2008. The response rate for the overall survey project was 44.6%.

A complete description of the survey methodology and survey questions is available at: <http://www.adsa.dshs.wa.gov/professional/hcs.htm> or <http://maa.dshs.wa.gov/healthyoptions/newwho/reports/ccm.htm>.

Cost and Mortality

The purpose of the cost and mortality analysis was to determine if offering chronic care management resulted in short-term DSHS cost savings or decreased mortality rates. Comparisons were made of two time periods—a nine or ten month study period and the same study period one year earlier.

The two populations compared were those randomized to be offered treatment and those randomized to the comparison group. Only those clients who had at least one month of study eligibility in both the study period and the previous comparison period were included in the analyses. Once assigned to a group, the client was evaluated according to that assignment regardless of their subsequent use of care management.

A complete description of each program's cost and mortality findings is available at: <http://www.adsa.dshs.wa.gov/professional/hcs.htm> or <http://maa.dshs.wa.gov/healthyoptions/newwho/reports/ccm.htm>.

Review of Client Records

To understand the services, successes, and challenges in providing each model of chronic care management, a random sample of clients who were enrolled for at least six months was selected from each project. A minimum sample size of 50 clients in each project was thought to be representative of each project, though 60 client records were requested based on the assumption that some records would be difficult to access.

Data sources included interviews with key project leadership and staff, care manager records, and medical records, where available. In total, five interviews, 121 care manager records, and 59 physician records were available for review. These included:

- Fifty-nine (59) care manager records with 42 corresponding physician records for the ADSA Chronic Care Management Project
- Fifteen (15) care manager records with 5 corresponding physician records for the AmeriChoice Washington Chronic Care Management Project
- Forty-seven (47) care manager records with 12 corresponding physician records for the King County Care Partners Chronic Care Management Project

Analysis consisted of identification of major themes through review of client records. Both care management and physician charts were abstracted for demographic information, client diagnoses, care management and provider problem lists, care management interventions, durable medical equipment needs, referrals, and challenges and successes as described in the charts.

A complete description of the qualitative findings is available at: <http://www.adsa.dshs.wa.gov/professional/hcs.htm> or <http://maa.dshs.wa.gov/healthyoptions/newwho/reports/ccm.htm>.

Aging and Disability Services Administration Chronic Care Management Project Evaluation

Project/Population Description

The Aging and Disability Services Administration (ADSA) Chronic Care Management Project:

- Provides intensive care management services throughout Washington State that integrates acute and long-term care services using face-to-face care management focused on supporting existing ADSA clients living in their home
- Provides clients with a formal, state-paid caregiver to support their personal care needs
- Builds on long-term care casework and in-home service delivery infrastructure through Area Agencies on Aging

Clients remain in the project for the period of time that they are eligible for chronic care management services.

The clients targeted for the ADSA Chronic Care Management Project were those who were eligible for aged/blind/disabled, categorically needy, Medicaid-only medical benefits, and who were currently receiving home and community based long-term care services managed by one of five participating Area Agencies on Aging. Additionally, to be included in the project, clients had to be identified in the top 20% at risk of having future high medical expenses (as defined by the ImpactPro™ risk score¹) and meet 1 or more of the following 5 assessed risk factors based on a prior assessment of their need for long-term care:

- Living alone in their own home
- Experiencing isolating moods and behaviors (for example, agitated and irritable)
- Self-rating of health as fair or poor
- Having deteriorated self-sufficiency
- Taking more than six medications

Those with certain cancer diagnoses and treatments were excluded.

The project was funded at a 1:45 nurse care manager to client ratio. The project's focus is to integrate acute and long-term care services, as well as educate clients and caregivers in self-management skills. Each client develops a health action plan with their nurse care manager. Included in the action planning were the results of the patient activation measure (PAM) and care opportunities identified

¹ For example, for an "average person," the risk score would be 1.0. A risk score of 7.5 implies that the individual is predicted to use 7.5 times more healthcare resources than the average person.

in ImpactPro™. Clients identified goals to work on with the nurse and the other members of their health and social services team.

Participants in this project live at home and had a formal, state paid caregiver to support their personal care needs. Clients often had multiple chronic diseases, such as diabetes, heart disease, and mental illness.

Client Survey Analysis

In all five of the areas of health measured by the survey—Overall Health Rating, Patient Activation Measure, Overall Self-Sufficiency, Pain Impact, and Quality of Life Scale—the results consistently pointed to better self-reported health outcomes in the treatment group than the comparison group. The evidence supporting these differences was strong, with statistically significant differences between groups in every area of health. Specific findings in each area of health are summarized below.

Summary

- More comparison group clients reported “poor” health than did treatment group clients. After adjusting for client age, gender, and education level, this difference was no longer statistically significant ($p=.06$).
- More treatment group clients indicated they were “beginning to take action” (PAM Stage 3) than did clients in the comparison group after adjusting for client age, gender, health status, and education.
- There were large differences between treatment and comparison groups in the ability of clients to care for themselves as compared to 6 months ago. More treatment group clients reported no change in their overall self-sufficiency than did comparison group clients.
- Pain affected clients in both groups in their ability to do the things they needed to do. However, more treatment group clients reported a lower frequency of pain limiting their ability than did comparison group clients.
- Significantly more clients in the comparison group reported being “unable to perform their usual activities” than did clients in the treatment group.
- The mean quality of life index for the treatment group was statistically higher than that for the comparison group.

Complete survey results can be found at:
<http://www.adsa.dshs.wa.gov/professional/hcs.htm>

Health Outcomes and Savings/Cost Analysis

Target Population for Analysis

The savings/cost analysis compared ADSA costs and utilization of the two randomly assigned groups. The first group (called the “treatment” group) was

offered chronic care management, though not all chose to participate or could participate due to care management capacity limits. The bulk of clients participating from this group began by March 2007. The second group (comparison group) was not offered chronic care management during the study period.

In the baseline period, costs and utilization were identified for 790 clients—182 clients in the offered treatment group and 608 in the comparison group. In this population, the average age was 56, the average ImpactPro™ risk score was 7.5, and the average monthly expenditures were \$1,978 in Medicaid medical expenses and \$1,095 in long-term care services.

In the ten-month study period, 43% of targeted clients received at least one month of chronic care management. Reasons for not receiving chronic care management included:

- Enrollment caps at the five participating Area Agencies on Aging; there were 45 slots at each site for both pre-existing workload and clients associated with this study
- Loss of eligibility for the project
- Unwillingness of client to participate

Mortality Rate

A statistically significant finding is that those in the treatment group experienced a significantly ($p = .04$) lower mortality than those in the comparison group (1.1% versus 4.4% in the ten-month follow-up period). Regardless of randomized group, 29 clients who died in the ten-month intervention period had very high average baseline costs at the start compared to surviving counterparts (\$4,208 vs. \$1,893, respectively), and incurred higher average costs in the post period when they died (\$6,665 vs. \$1,809, respectively).

CARE Measures²

The group offered treatment appeared to have a higher average aggregate pain score, lower average depression score, and lower average total nurse referrals compared to the comparison group, though none of the differences were statistically significant.

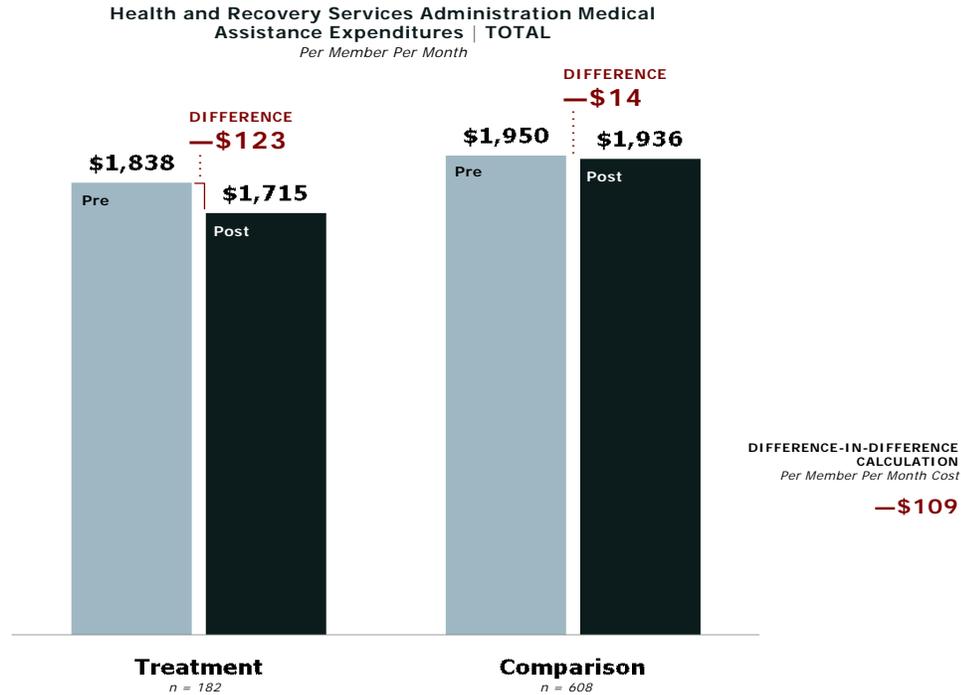
Cost Savings

The impact of offering chronic care management services was estimated to result in an average \$109 per member per month reduction in medical expenditures. Roughly 80% of the cost reduction was associated with fewer unplanned admissions to the hospital through the emergency room. However, the \$109 per

² Comprehensive Assessment Reporting Evaluation (CARE), ADSA's long-term care assessment used to determine program eligibility and service planning need.

member per month difference was not statistically significant given the extreme cost variability in this high-risk population.

Aging and Disability Services Administration



These savings were partially offset by an estimated increase of \$54 per member per month in ADSA long-term care expenditures, which occurred primarily as a result of in-home support services.

Review of Client Records

Description of Care Management Interventions

For the client record review for the ADSA Chronic Care Management Project, 59 care manager records with 42 corresponding physician records were reviewed. Each chart contained documentation of home visits by the care manager.

Care managers conducted a range of interventions that included:

- Health-related interventions
- Patient education
- Referrals
- Advocacy and social service opportunities

Care managers provided the following types of health-related interventions:

- Physical assessment of the client as well as assessment of ongoing health problems.
- Arrangement for home healthcare services or other ancillary healthcare.
- Assessment of risk for falling and development of a fall prevention plan.
- Transition assistance from the ADSA Chronic Care Management Project to hospice, when appropriate.
- Assistance in locating and establishing care with a new primary care provider.
- Placement of personal medical alert emergency response service equipment (e.g., LifeLine) in the home for clients living alone or in remote areas.

Care managers also provided patient education, including the following types of information and instruction:

- Dietary teaching
- Diabetic management for clients and caregivers
- Smoking cessation teaching
- Medication management
- Training on accessing and using the medical home and primary care provider
- Alternative pain management strategies

Care managers made referrals for necessary services that would improve the client's ability to remain in their homes. Of the charts reviewed, only one client had a documented referral to a primary care physician or other medical/surgical specialty physician during the study period. This may be a result of clients having established relationships with primary care providers due to their chronic health conditions.

Charts for 5 of 59 clients receiving services documented referrals for either a mental health or chemical dependency evaluation or to a chemical dependency support group. When a client died, the care manager occasionally assisted the family in accessing bereavement or grief counseling.

Care managers coordinated advocacy and social service opportunities. For example, care managers:

- Attended primary care physician office visits with clients
- Worked to procure energy assistance
- Collaborated with other care providers to ensure continuity of care
- Worked with the client to keep the client linked to a medical home

Of the 59 clients whose charts were reviewed for this evaluation, nine had no referrals provided to them as availability of specialists varied by geographic region.

Successes

The majority of the reviewed records document some improvement in client condition over the course of the intervention, especially in the management of medications, diabetes, weight loss, wound care, and pain. Additionally, care managers helped to adjust the hours of state paid caregivers to match the needs of clients.

The ADSA care managers were also successful coordinating client care among primary care physicians and other healthcare providers. Care managers worked closely to update physicians when a client had a change in condition or a change in level of care. They also notified physicians and/or facilitated requests for ancillary services such as equipment, physical therapy, and occupational therapy assessments for their clients.

Challenges

Available resources for the ADSA Chronic Care Management project appeared to vary by geographic location. This was most apparent in the rural areas of Washington State where care managers had a difficult time finding pain management resources. In addition, there appeared to be more frequent provider turnover for clients in rural areas of the state.

AmeriChoice Washington Chronic Care Management Project Evaluation

Project/Population Description

The AmeriChoice Washington Chronic Care Management project:

- Provides telephonic and in-person care management interventions throughout Washington State (except for King County) to clients not receiving ADSA long-term care services
- Focuses on access to providers and receipt of health education

Clients remain in the project for six months with the opportunity to extend enrollment to a maximum of 12 months.

Clients targeted for the AmeriChoice Project were those who were eligible for aged/blind/disabled, categorically needy, Medicaid-only medical benefits and not covered by another similar insurance policy; who were not receiving long-term care services from Aging and Disability Services Administration; and who were residing anywhere in Washington State except in King County. The top 20% of clients, as identified by the ImpactPro™ risk score for being at risk of having future high medical expenses, were selected for the project. Clients with certain diagnoses (HIV/AIDS, hemophilia) were excluded, as were clients who were pregnant, clients with end stage renal disease, and clients receiving hospice services.

AmeriChoice's project was designed to provide care management services to appropriate clients through a combination of telephonic and in-person care management services, although the project was designed to be primarily telephonic. Approximately 2,000 clients were determined to be suitable for the project each month by DSHS. A letter of introduction was sent to all 2,000 clients, after which attempts to reach the client by phone or in person were made. The executive director and the medical director for the AmeriChoice project reported an engagement rate of approximately 15%. Clients did not receive personal care services from a state paid caregiver.

The AmeriChoice Washington project reported having five care managers (four registered nurses and one medical social worker) who live and work in Washington State. These care managers provided both face-to-face and telephonic care management services to clients. Face-to-face caseloads were up to 150 clients per care manager. In addition, there was one engagement specialist in Washington responsible for assisting members with transportation, housing, and medical home issues.

The project also had four registered nurse care managers located in Indiana, who provided telephonic screening, assessment, and care plan development for up to

200 clients. In addition, there were two health educators working telephonically from the Indiana location, providing patient teaching “scripts” for clients with conditions such as diabetes, hypertension, and heart disease.

The initial contact with these clients was made using an auto dialer that repeatedly dials the client’s telephone number until someone was reached at that number. Once answered, the call was forwarded to a registered nurse care manager in Indiana, who completed a telephonic assessment of the client’s current condition. After completing the telephonic assessment and the care plan, the Assessment Team care manager referred the case to a care manager located in Washington State if the ImpactPro™ score was five or higher.

Once referred to a care manager in Washington State, the client was assessed for additional care management intervention. If warranted, a home visit was conducted. AmeriChoice care managers provided at least monthly follow-up contacts with clients until their condition stabilized. Clients “graduated” from the project once their condition had stabilized, or after six months. When necessary, the care manager requested an extension from HRSA to keep a client in the project.

Of the approximately 2,000 clients appropriate for the AmeriChoice Washington project each month, approximately 15% were eventually reached for the initial assessment. If a client was not reached by the auto dialer and therefore did not receive an initial assessment and care plan by the care manager in Indiana, then further attempts to contact the client were made for as long as the client remained eligible for the project.

Some barriers to reaching these clients included incomplete or inaccurate address information and the inability of the client to contact AmeriChoice due to either not having telephone access and/or because of frequent address changes.

Client Survey Analysis

In all five of the areas of health measured by the survey—Overall Health Rating, Patient Activation Measure, Overall Self-Sufficiency, Pain Impact, and Quality of Life Scale—the results showed no significant differences in self-reported health outcomes between the treatment and comparison groups.

Complete survey results can be found at:
<http://maa.dshs.wa.gov/healthyoptions/newho/reports/ccm.htm>.

Health Outcomes and Savings/Cost Analysis

Mortality Rate

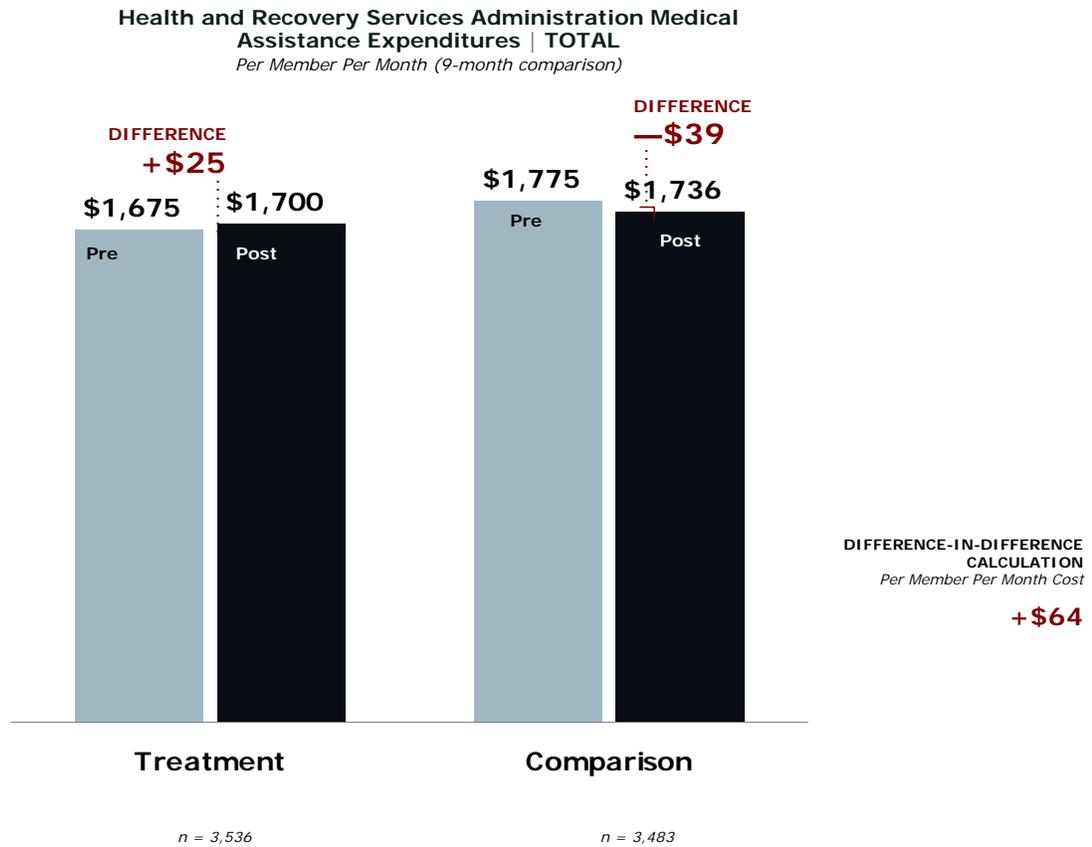
The mortality rate for clients in the AmeriChoice Washington Chronic Care Management Project was essentially the same for the offered treatment group (2.7%) as for the comparison group (2.6%).

Cost Savings

In the baseline period, costs were identified for 7,019 clients—3,536 clients in the offered treatment group and 3,483 in the comparison group. In this population, the average age was 49 and the average ImpactPro™ risk score was 7.22.

The percentage of targeted clients covered by care management premiums was 45% (1,576). Reasons cited for not receiving chronic care management included inability to locate clients and unwillingness of clients to participate.

AmeriChoice Chronic Care Management



The impact of offering chronic care management services in the project's initial 9 months of operation is estimated to have resulted in an average \$64 per member per month increase in HRSA medical expenditures, less than a 4% change from baseline. The change is not statistically significant given the variability of costs within both groups.

Review of Client Records

Description of Care Management Interventions

For the client record review for the AmeriChoice Chronic Care Management Project, 15 care manager records (out of 60 requested) were reviewed with 5 corresponding physician records. The small number of records reviewed may not be representative of the services provided to the AmeriChoice treatment group. As a consequence, interviews with the project's executive director and medical director played a more prominent role in information gathering. Of the records available for review, there was no evidence of home visits by care managers.

Care managers conducted a range of interventions. Health-related interventions included:

- Performing assessment of risk for falling
- Establishing primary care provider
- Helping clients identify and receive preventive service
- Assessing health conditions and providing education related to health conditions
- Identifying a primary care physician, or accessing transportation to and from appointments

Care managers provided patient education that addressed the following:

- Managing weight or diabetes
- Accessing and receiving preventive services, mental health conditions, and smoking cessation assistance
- Completing an advanced directive
- Accessing a primary care provider
- Finding alternative forms of pain relief

Care managers made referrals for preventive services. Identifying referral sources was a particular challenge for clients in rural areas. Finding a specialist who accepts Medicaid clients was also particularly challenging.

Advocacy and social service interventions provided for clients included:

- Negotiating with providers to accept a pain management client
- Developing self-management techniques for clients to use to improve adherence to mental health medications

Successes

Examples of individual client successes include proactive use of the primary care provider rather than using the emergency room, and ongoing care management

assistance and support for clients with pain management, mental health, and chemical dependency needs.

Challenges

Access to appropriate pain management services is limited in many areas of Washington State. A number of clients in this program have longstanding pain management issues and difficulty maintaining primary care providers.

A challenge for the telephonic care management assessment model is client accessibility and engagement. Clients may also under report their health issues during the initial assessment.

Record reviews revealed that some clients were “graduated” before reaching their self-management goals or before stabilization with their new healthy behaviors.

King County Care Partners Chronic Care Management Project Evaluation

Project/Population Description

The King County Care Partners Chronic Care Management Project:

- Provides intensive face-to-face care management services to clients not receiving ADSA long-term care services.
- Is a coalition of The City of Seattle, Aging and Disability Services with other local agencies including Harborview Hospital, UW Informatics Research, many community health centers, and Senior Services of King County.
- Provides linkages for clients in King County to a medical home and extensive coordination between behavioral health and physical health systems.

Clients remain in the project for six months with the opportunity to extend enrollment to a maximum of 12 months.

Clients targeted for the King County Care Partners Chronic Care Management Project were those who were eligible for aged/blind/disabled, categorically needy, Medicaid-only medical benefits and not covered by another similar insurance policy; who were not receiving long-term care services from Aging and Disability Services Administration; and who had previously been served at least once by a King County Care Partners organization in the past year. The top 20% of clients, as identified by the ImpactPro™ risk score for being at risk of having future high medical expenses, were selected for the project. Clients with certain diagnoses (HIV/AIDS, hemophilia) were excluded, as were clients who were pregnant, clients with end stage renal disease, and clients receiving hospice services.

After receiving the eligibility list from DSHS, initial contact was through an introductory letter followed by a telephone call from the registered nurse care manager. If the client agreed to participate in the project, then a registered nurse care manager either contacted the client to arrange an in-home visit, or met the client at another location. As many of these clients received care at Harborview Medical Center, the care managers often met with the client there prior to or following a clinic visit.

Access to the electronic medical record at Harborview Medical Center was a feature unique to the King County Care Partners Chronic Care Management Project. The project was staffed by two registered nurse care managers who each managed a caseload of up to 75 clients. Additionally, the project employed a medical social worker and a health education specialist who assisted in helping clients with medical home interface, transportation, health education, and eligibility issues.

Client Survey Analysis

In the five areas of health measured by the survey—Overall Health Rating, Patient Activation Measure, Overall Self-Sufficiency, Pain Impact, and Quality of Life Scale—the results were conflicting. In the areas of Patient Activation Measure and Quality of Life Scale, there was evidence of benefit for clients in the treatment group. In the area of Overall Health, there was evidence of worse self-reported outcomes in the treatment group. The areas of Overall Self-Sufficiency and Pain Impact showed no significant differences between the treatment and comparison groups. Specific findings in each area of health are summarized below.

Summary

- On average, clients randomized to the treatment group rated their overall health worse than did clients from the comparison group.
- Clients in the treatment group were about half as likely as clients in the comparison group to believe that the patient’s role in their health is important.
- About half of clients in both the treatment and comparison groups reported “no change” in their overall ability to care for themselves when compared to 6 months ago.
- There were no statistical differences between the treatment and comparison groups for any pain measures.
- A larger proportion of clients in the treatment group reported having “moderate pain or discomfort” while more comparison group clients reported having “extreme pain or discomfort.”

Complete survey results can be found at:
<http://maa.dshs.wa.gov/healthyoptions/newho/reports/ccm.htm>.

Health Outcomes and Savings/Cost Analysis

Mortality Rate

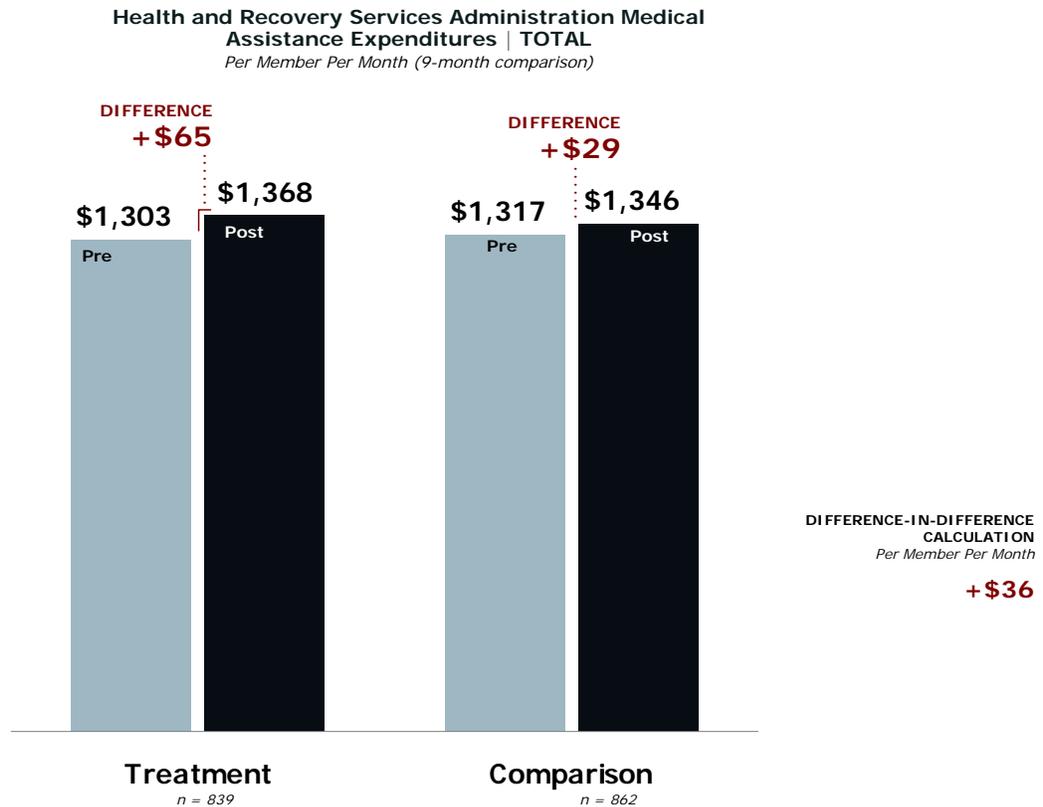
In the nine-month post period, there was a statistically significant lower risk of death among the clients randomly assigned to the treatment group. In the nine-month follow-up period, 0.8% of clients in the treatment group died compared to 2.2% in the comparison group ($p = .03$).

Cost Savings

In the baseline period, costs for 1,701 clients were identified. There were 839 clients in the treatment group and 862 clients in the comparison group. In this population, the average age was 51 years and the average ImpactPro™ risk score was 5.83.

Of those in the offered chronic care management group (839 clients), 18% (153 clients) received at least 1 month of chronic care management in the 9-month post period.

King County Care Partners Chronic Care Management



The impact of offering chronic care management services in the project's initial 9 months of operation is estimated to have resulted in an average \$36 per member per month increase in HRSA medical expenditures, less than a 3% change from baseline. The change is not statistically significant given the cost variability within both groups.

Review of Client Records

Description of Care Management Interventions

For the client record review for the King County Chronic Care Management Project, 47 care manager records (out of 60 requested) were reviewed with 12 corresponding physician records.

Care managers provided a range of interventions. Health-related interventions were focused in these areas:

- Conducting a home visit to assess client condition and appropriateness for participation in chronic care management
- Assisting clients in establishing a medical home to receive necessary healthcare services
- Working with clients to obtain chemical dependency or mental health treatment
- Accompanying and transporting clients to healthcare office visits
- Assisting clients to find secure housing
- Assessing clients with their durable medical equipment needs
- Assisting clients to access smoking cessation programs

Care managers also provided patient education. Nearly every client receiving services received some form of client teaching including:

- Medication management
- How to access a Primary Care Physician
- Use of specialized equipment such as self-blood glucose monitors and automatic blood pressure cuffs

Clients in the project were referred by care managers for:

- Transportation assistance
- Mental healthcare services
- Chemical dependency programs
- Smoking cessation
- Housing assistance
- Dental services

Care managers also coordinated advocacy and social service opportunities. One important area of advocacy involved helping appropriate clients remain in the project. Staff interviews revealed advocacy by assisting with initial and ongoing eligibility paperwork for clients at risk of losing project eligibility.

Successes

The majority of the records reviewed show evidence of improvement in client condition or behaviors. Examples include admission to chemical dependency and mental health programs, attending physical conditioning classes resulting in improved activity tolerance, achieving weight loss through dietary counseling, and connecting with a primary care provider for effective diabetes management.

Challenges

Challenges for the project included:

- Maintaining enrollment for clients who were benefiting from the project
- Adequately addressing the complexity and intensity of social and healthcare needs for this population
- Obtaining timely interpreter services for non-English speaking clients

Examples of the complexity of these social and healthcare needs include findings that 44 of 47 reported they use the food stamp program for food purchases and that 12 of 44 report either running out of food or skipping meals in order to make their food last until the end of the month. Additionally, 24 clients in this project were described as living alone, transient, or homeless.

Discussion

In January 2007, the Department of Social and Health Services implemented a chronic care management program targeted to helping a segment of Medicaid clients with high-risk and expensive chronic conditions to access earlier interventions and more appropriate healthcare. The project coincides with Governor Chris Gregoire's healthcare initiatives calling for DSHS to focus on improved ways of dealing with chronic care since a relatively small percentage of Medicaid clients typically account for a majority of Medicaid healthcare expenditures. Washington State spends nearly half of all Medicaid funds on just over a fifth of the Medicaid enrollees, the elderly, and the disabled³.

This evaluation reports on the preliminary findings in three chronic care management projects with Medicaid clients in the State of Washington. The projects are not comparable due to significant differences between essential project elements and client characteristics.

An unexpected finding in two of the projects was a statistically significant reduction in mortality for those clients randomly assigned to being offered treatment. Further study is necessary to understand this relationship.

The projects have not demonstrated statistically significant cost savings in the first nine to ten months of implementation. Finding statistically significant cost savings in this high-risk, high-need client population is difficult due to extreme variability in costs, small sample sizes, and the time needed to show long-term changes in costs.

Limitations

Engagement

A large percentage of those clients who were randomized to the treatment group and analyzed as such did not actually receive care management services. This low engagement rate may have diminished the ability of the study to detect statistically significant differences between treatment and comparison groups.

Barriers identified to engagement include caseload limitations of care managers, difficulty contacting clients due to outdated address and phone information, mobility of the population, lack of understanding of the program by clients and providers, and more urgent basic needs of clients such as housing or food.

³ Kaiser Commission on Medicaid and the Uninsured, FY 2005 data.

Timeframe

The study findings reflect the earliest stage of the programs based on the data available at the time of this report. The findings do not reflect a mature program, nor do they identify longer term effects of providing such a program.

Other Limitations

Other limitations included the following:

- The qualitative record review portion of the evaluation was based on a limited sample of the clients believed to be engaged in the intervention. It covered a relatively short period of time and in many cases records were incomplete. The results should be interpreted as a glimpse into the nature of the care management activities and interaction with Primary Care Providers, with limited ability to generalize to the group as a whole.
- Client survey findings are also subject to limitations. They reflect a single point-in-time assessment and possible response bias.
- The primary limitation of the cost study was the high variability in expenditures experienced over time by each client. Because the top 20% of future high-cost patients were targeted for care management, high-cost outliers greatly affect group averages.

Recommendations

Much more needs to be done to increase client engagement in DSHS chronic care management programs. Priority should be given to identifying and using evidenced-based best practices, if available, for increasing engagement. At a minimum, chronic care management programs should develop strategies and measurable goals for increasing and maintaining client engagement.

Chronic care management programs could benefit from increased use of validated tools, such as the Patient Activation Measure and ImpactPro™ risk assessment, that help target interventions appropriate to the client's readiness to change and their areas of greatest need.

The intervention time for clients participating in two of the projects evaluated needs to be extended to allow more time to work with clients on changes that can affect future health outcomes and healthcare costs.

Access to critical resources needs to be improved. In many rural areas of Washington State, chronic pain management resources are limited or entirely lacking. Improved access to interpreters is needed in King County. All regions of the state could benefit from improved coordination of emergency mental health and chemical dependency treatment for Medicaid clients.

This evaluation used a single set of cost and health outcome measures to evaluate three distinct chronic care management projects. While this approach is justified in a first time evaluation, future evaluations may benefit by tailoring measures based on what is already known about project goals and populations.

Conclusions

The randomized controlled design used for this evaluation allows us to have more confidence in the findings than would have been possible with a purely observational design. Results can be used to estimate the short run effect such programs would have if implemented in other areas of the state, with similar clients and similar interventions.

For chronic care management programs, many challenges remain in the areas of engagement, client identification, and measuring short and long-term effects of care management. There are, however, very preliminary indicators of a positive trend in health outcomes for using care management interventions with a medically and socially complex population. Particularly interesting was the statistically significant decrease in mortality rates detected for ADSA and King County Care Partners projects. With continued effort by public and private partnerships, increasingly effective strategies will be developed to reduce healthcare costs and improve client health.