Chronic Care Management Program
Summer 2010

Chronic Care Management Pilots Show Early Promise
Controlling Medicaid costs and improving health outcomes
A Look At The Scope of the Problem: Making the Case for Chronic Care Management
Coordinating LTC and Medical Care

- Care coordination for people with chronic conditions who participate in Home and Community Based Services has been narrowly focused on supportive services.
- At the same time, a medical model of care coordination is emerging in the FFS health care system.
- And yet... a gap exists between supportive and medical services, and needs to be addressed.
- The absence of one entity or individual responsible for coordinating care and navigating transitions between care providers leads to fragmentation and duplication of services.

Washington State Medicaid Impact

- Five percent of WA Medicaid clients account for 50 percent of the costs.
- They are consumers of LTC.
- Are diagnosed with depression and chronic pain.
- Current health care system is focused on acute care and misses working with clients with chronic conditions from developing complications.
- (Governor Gregoire Memo (01/06))

How did we frame the ADSA Model of Chronic Care Management?
IOM Six Aims for Improvement

Crossing the Quality Chasm Report

• All care provided should be:

1. Safe
2. Efficient
3. Effective
4. Timely
5. Equitable
6. Client Centered
IOM Ten Rules for Redesign

1. Care is based on continuous healing relationships.
2. Care is customized according to patients needs and values.
3. The patient is the source of control.
4. Knowledge is shared and information flows freely.
5. Decision making is evidence-based.
6. Safety is a system property.
7. Transparency is necessary.
8. Needs are anticipated.
9. Waste is continuously decreased.
10. Cooperation among clinicians is a priority.
The Chronic Care Model

Community
- Resources and Policies
  - Self-Management Support

Health Systems
- Organization of Health Care
  - Delivery System Design
  - Decision Support
  - Clinical Information Systems

Informed, Activated Patient

Prepared, Proactive Practice Team

Productive Interactions

Improved Outcomes

Developed by The MacColl Institute
© ACP-ASIM Journals and Books
The Take Home Message

• “People with chronic conditions are getting services, but those services are not necessarily in sync with one another, and they are not always the services needed to maintain health and functioning.”
  (Partnership for Solution 2004)

• Can we make a difference in this synchronization of services with Chronic Care Management, improve health and reduce costs?

Health Care Spending Increases With the Number of Chronic Conditions

Compared to individuals with no chronic conditions:

- Spending is almost three times greater for someone with a chronic condition
- Spending is over seven times greater for someone with three chronic conditions
- Spending is almost 15 times greater for someone with five or more chronic conditions

Source: Medical Expenditure Panel Survey, 2006
More Than Three-Fifths of Health Care Spending Is on Behalf of People With Multiple Chronic Conditions

- Sixteen percent of spending is for 50 percent of the population that has no chronic conditions.
- Eighteen percent of spending is for the 22 percent of the population that has only one chronic condition.
- Seventeen percent of spending is for the 12 percent of the population that has two chronic conditions.
- Sixteen percent of spending is for the 7 percent of the population that has three chronic conditions.
- Twelve percent of spending is for the 4 percent of the population that has four chronic conditions.
- Twenty-one percent of spending is for the 5 percent of the population that has five or more chronic conditions.

Source: Medical Expenditure Panel Survey, 2006
Over One in Four Americans Have Multiple Chronic Conditions

- In 2006, 28 percent of all Americans had two or more chronic conditions.

Source: Medical Expenditure Panel Survey, 2006
The Number of People With Chronic Conditions Is Rapidly Increasing

- In 2000, 125 million Americans had one or more chronic conditions.
- This number is projected to increase by more than one percent each year through 2030.
- Between 2000 and 2030 the number of Americans with chronic conditions will increase by 37 percent, an increase of 46 million people.

Health Care Spending Often Doubles for People With Chronic Illnesses and Activity Limitations

Average Annual Health Care Expense Per Person

Source: Medical Expenditure Panel Survey, 2006
ADSA Chronic Care Management:

- Beneficiaries who use home & community-based services and are at high risk for utilization of medical services
- Evaluations conducted in 2007 and 2009
- Clients randomized to two groups: those offered the CCM intervention & “abeyance” (delayed offer of intervention)
- Recognition and interventions for the medical, social, economic, mental health, chemical dependencies, and environmental factors impacting health and health care choices.
The CCM Intervention

• Nurse care manager to client ratio 1:45  
  – Face to face with telephone support as needed.
• Evidence-based protocols include:
  – Diabetes management
  – Pain management
  – Fall assessment and prevention planning
  – Medication management
  – Health Action Planning
  – Coaching for Activation ™
• Comprehensive Assessment including Patient Activation Measure (PAM™)
• Client-centered Health Action Plan and Goal Setting Worksheet
  – Set goals with client according to activation level
  – Education towards self-management of chronic illness
Risk Determinants

• High medical cost and risk client determinants
  – Predictive modeling (PRISM)
    • Past twelve months medical claims, gender and age determine future medical costs and risk.
    • Diabetes, cardiovascular disease, mental health and substance abuse (highest frequencies).
    • Pharmacy, inpatient care, and emergency room utilization (highest cost utilization)
    • Care opportunities identified (avoidable or reducible care)
    • Risk Score in top 20%
Risk Determinants

• Comprehensive Assessment Resource Evaluation (CARE) LTC risk criteria (presence of one)
  1. Client lives alone
  2. High risk moods/behaviors (agitation/irritable)
  3. Self health rating is fair or poor
  4. Overall self-sufficiency declined in last 90 days
  5. Greater than six medications
Tailored Client Coaching Approach

• The client:
  – Is in charge of the care plan;
  – Sets the pace for change based on perception of need and readiness for change.

• The nurse’s role:
  – Encourage client confidence - that their actions can make an impact on their health and independence
  – Discuss and offer options and education that allow the client to increase their ability to manage their own care to improve quality of life and/or health outcomes
  – Ask the client what ideas they have to better manage their health care.
A look at the 22 month evaluation findings

- 22-month follow-up impacts relative to a randomized waiting list control group:
  - Medicaid costs
  - Mortality for CCM clients

Due to the relatively small number of clients enrolled in the pilot and the extreme variability of costs among high-risk Medicaid patients, the findings summarized here did not achieve standard levels of statistical significance. However, the results show promising potential to improve health outcomes and control costs for patients with high medical risk and major functional limitations.
Key Findings

- CCM enrollees were less likely to have inpatient hospital stays involving emergency room activity. The overall estimated medical cost savings were $253 per month enrolled in CCM.
- Nursing facility costs were lower and in-home care costs were higher for CCM enrollees. Overall long-term care costs were $46 per month higher for clients enrolled in CCM, excluding pilot costs.
- Including the $180 per month cost of enrollment in CCM, the program is estimated to have generated a small net savings of $27 per month of enrollment.
- CCM enrollees were less likely to die in the 22-month follow up period. However, mortality impacts that were statistically significant at the 10-month follow-up have moderated over time.
KEY FINDING | Early outcomes are promising

**Cost detail**
Estimated Per member per month impact

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Care Costs</td>
<td>-$253</td>
</tr>
<tr>
<td>Intervention Costs</td>
<td>$180</td>
</tr>
<tr>
<td>Medical Costs</td>
<td>$46</td>
</tr>
</tbody>
</table>

**OVERALL Savings**
- $27

**BENEFIT/COST RATIO**: 1.15
Key Finding Detail

• We analyzed outcomes for 233 clients offered enrollment in the CCM pilots since 2007, relative to 527 clients randomized to a waiting list. Of the clients offered enrollment, 87 clients enrolled in CCM, with an average enrollment period of 16 months. The cost impact analyses used an intent-to-treat difference-of-difference design that compared changes in costs over time between all clients randomized to the group offered treatment and all clients randomized to the waiting list.
FINDING 1 | CCM enrollees have lower medical costs

Cost detail
Per member per month

MEDICAL Savings

Emergency Room Inpatient

All Other Medical Costs

— $253

— $222

— $31
Finding 1 Detail

• We compared changes in medical costs for clients offered the choice of enrolling in CCM services with changes in medical costs for clients randomized to the waiting list. Changes in per member per month medical service costs were measured from the February 2006 to January 2007 “pre period”, relative to the 22-month March 2007 to December 2008 “post period”.

• Estimated medical cost savings were $253 per month enrolled in CCM, after translating the estimated savings from the intent-to-treat model to impacts per treated client per month enrolled. Medical savings were due almost entirely to a $221 per member per month reduction in inpatient hospital admissions associated with emergency department activity.
FINDING 2 | CCM enrollees have lower nursing facility costs, higher in-home care costs
Finding 2 Detail

- CCM clients showed a tendency toward reduced use of skilled nursing facility services, with an estimated reduction of $145 per month enrolled in the CCM program. Balanced against this reduction was an offsetting increase in use of in-home care of $191 per month enrolled in the CCM program. Taken together, long-term care costs increased by $46 per client per month of enrollment in chronic care management. The CCM intervention cost of $180 per client per month of enrollment is not included in this calculation.
FINDING 3 | CCM enrollees were less likely to die in the follow-up period

**MORTALITY**

After 22 months

- **Treated**: 8.2%
- **Untreated**: 10.1%
Finding 3 Detail

• Clients randomized to the “offered treatment” group were somewhat less likely to die in the 22-month follow-up period than clients randomized to the waiting list. Previously reported impacts on mortality at the 10-month follow-up point showed that CCM clients were significantly less likely to die than members of the control group, but the strength of this impact has moderated over the longer follow-up period.
• 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.
In all five of the areas of health measured by survey, the results consistently pointed to better self-reported health outcomes in the treatment group than the comparison group.

1. Overall Health Rating;
2. Patient Activation Measure;
3. Overall Self-Sufficiency;
4. Pain Impact; and
5. Quality of Life Scale
### Patient Activation Measure (PAM) Levels

#### CCM Clients | First Survey

<table>
<thead>
<tr>
<th>PAM Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of clients (n=321)</strong></td>
<td>104</td>
<td>89</td>
<td>65</td>
<td>63</td>
</tr>
</tbody>
</table>

#### Percentage Distribution

![Percentage Distribution Chart]

- **Level 1**
- **Level 2**
- **Level 3**
- **Level 4**
PAM Levels | 4 Surveys

<table>
<thead>
<tr>
<th>CCM Clients with 4 surveys (n=29)</th>
<th>Median PAM Level 2</th>
</tr>
</thead>
</table>

![Bar chart showing PAM levels across 4 surveys with percentages for each level.](chart.png)
ADSA CCM Summary

• The client is in charge of the care plan;
• There is value in bridging systems of care;
• Behavioral changes take time (self-management);
• A client’s perception of need and readiness for change will determine the speed of the change (activation);
• This approach includes; physical, mental, emotional, psycho-social and environmental needs.
Contact Information

Candace Goehring RN MN
Department of Social and Health Services
WA State ADSA
360-725-2562
1-800-422-3263

goehrcs@dshs.wa.gov

• Copies of the key findings may be obtained at www.dshs.wa.gov/rda/
• CCM Full Report http://www.adsa.dshs.wa.gov/professional/hcs.htm