

# Chronic Care Management in Managed Care

## Evidence of Effectiveness

"...disease management services can improve health and may well be cost-effective—that is the value of the benefits could exceed the costs... broad programs aimed at preventive medical care and disease management could reduce the need for expensive care for a portion of [the] recipients."

— CBO, Testimony before the Senate Finance Committee, February 25, 2009



### The Power of Chronic Care Management

- A 12- to 13-point reduction in blood pressure can reduce the incidence of heart attacks by 21%, strokes by 37%, and the total number of cardiovascular disease deaths by 25%.<sup>1</sup>
- A 10% reduction in serum cholesterol levels can reduce the incidence of heart attacks and strokes by 30%.<sup>2</sup>
- Improved blood sugar control in people with diabetes can reduce their risk of developing diabetic complications such as blindness, kidney disease and nerve damage (which can lead to amputation) by 40%.<sup>3</sup>

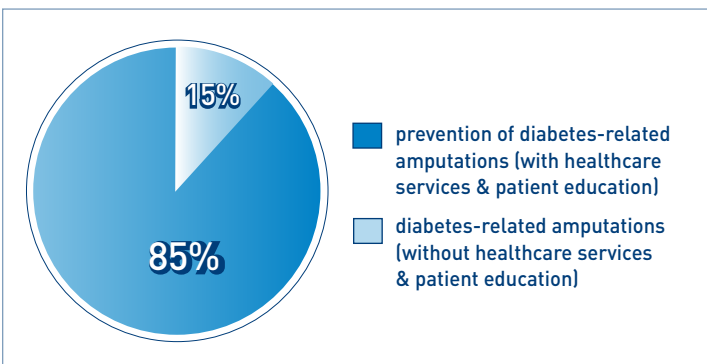
There is consistent evidence that chronic care management can improve processes of care, and the results of studies suggest that improved clinical care leads to better intermediate outcomes and improved disease control.<sup>8</sup>

### Chronic Care Management as a Strategy to Reduce Costs

- Post discharge assessments and other transitional care interventions are effective strategies to reduce preventable hospital re-admissions for Medicare beneficiaries with heart failure, which cost Medicare billions of dollars annually.
- Complex case management services for beneficiaries with diabetes can reduce the rate of hospital admissions by over 50%.<sup>1</sup>
- A chronic care management program for beneficiaries with ESRD can decrease the number of hospital days per thousand by 26% and the number of emergency visits by 7%.<sup>1</sup>

### Chronic Care Management as a Strategy to Improve Quality

- Rates of diabetic beneficiary HbA1c readings above recommended levels and those with no HbA1c readings dropped over 24% following a five-year diabetes care initiative.<sup>4</sup>
- A health plan program offering pharmacy-related interventions improved medication adherence to over 90%, almost twice the usual rate of compliance.<sup>5</sup>
- Beneficiary screening rates for kidney disease increased over 4% in one year due to coordinated reminder calls from nurse care managers.<sup>1</sup>
- Heart failure beneficiaries participating in a plan-sponsored telehealth home monitoring program demonstrated a 3% increase in quality of life readings over a three-year period.<sup>1</sup>



<sup>1</sup> Prevention Works: CDC Strategies for a Heart-Healthy and Stroke-Free American. 2006. [http://www.cdc.gov/dhdsp/library/prevention\\_works/index.htm](http://www.cdc.gov/dhdsp/library/prevention_works/index.htm)

<sup>2</sup> Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers. At A Glance 2008 <http://www.cdc.gov/nccdphp/publications/AAG/dhdsp.htm>

<sup>3</sup> The Power of Prevention, a report by the U.S. Dept. of Health and Human Services (2003) found on the CDC Web Site (<http://www.healthierus.gov/steps/summit/prevportfolio/power/index.html>)

<sup>4</sup> America's Health Insurance Plans. (2008) "Trends and innovations in chronic disease prevention & treatment: An update on Medicare Advantage plans" AHIP Center for Policy and Research

<sup>5</sup> AHRQ (2008) "Pharmacist-Led, Grocery Store-Based Medication Review Reduces Fall and Enhances Compliance for Medicare Managed Care Members." Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=1692>.

# Chronic Care Management in Managed Care

## Evidence of Effectiveness



### Managed Care's Ability to Support Medicare's Chronically III

- **Decreasing overall Medicare spending:** A 10% increase in Medicare-managed care enrollment can reduce market per-beneficiary spending by as much as 3.9%.<sup>6</sup>
- **Lowering out-of-pocket costs:** A 2008 GAO report found that average out-of-pocket spending for Medicare managed care enrollees was 42% of what it would have been had they remained in FFS Medicare.
- **Increasing use of preventive services:** Areas with higher Medicare managed care penetration are generally associated with increased use of preventive services for Medicare enrollees.<sup>7</sup>

### Results from Large-Scale Chronic Care Management Programs

- There is consistent evidence that chronic care management can improve processes of care, and the results of studies suggest that improved clinical care leads to better intermediate outcomes and improved disease control.<sup>8</sup>

Sponsor	Conditions	Interventions	Results
Geisinger Health Plan	Diabetes	<ul style="list-style-type: none"> <li>• Nursing support</li> <li>• Patient education</li> <li>• Case management services</li> <li>• Provider-based medical education</li> <li>• Self-monitoring tools</li> </ul>	<ul style="list-style-type: none"> <li>• Lowered healthcare costs</li> <li>• Reduced inpatient hospital admissions</li> <li>• 30% in HbA1C screenings<sup>9</sup></li> </ul>
Kaiser Permanente	Coronary Artery Disease (CAD), Heart Failure (HF), Diabetes, Asthma	<ul style="list-style-type: none"> <li>• Patient self-management education</li> <li>• Disease registries</li> <li>• Risk stratification</li> <li>• Proactive outreach</li> <li>• Reminders</li> <li>• Multidisciplinary care teams</li> <li>• Performance feedback to providers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved LDL levels among CAD and diabetes participants</li> <li>• Reductions in Blood Pressure levels among CAD, HF, and diabetes participants</li> <li>• Improved medication adherence for asthma participants<sup>10</sup></li> </ul>
National Managed Care Organization offering HMO and POS plans	Diabetes	<ul style="list-style-type: none"> <li>• Telephonic nursing support</li> <li>• Remote home monitoring</li> <li>• Reminders</li> <li>• Educational outreach</li> </ul>	<ul style="list-style-type: none"> <li>• Lowered healthcare costs</li> <li>• 30% reduced inpatient hospital admissions</li> <li>• Increased quality scores<sup>11</sup></li> </ul>
Veterans Health Administration	Several chronic conditions targeted including Diabetes, HF, Chronic Obstructive Pulmonary Disease (COPD), and Hypertension	<ul style="list-style-type: none"> <li>• Technology-based care coordination services</li> </ul>	<ul style="list-style-type: none"> <li>• 40% reduction in emergency room visits</li> <li>• 63% reduction in hospital admissions</li> <li>• 64% decrease in nursing home admissions<sup>12</sup></li> </ul>

<sup>6</sup> Welch, J.P. (1994) "HMO market share and its effect on local Medicare costs," in H. Luft, ed., HMOs and the elderly, Ann Arbor: Health Administration Press, 231-249

<sup>7</sup> Baker, L.C. (1997) "The effect of HMOs on fee-for-service health care expenditures: evidence from Medicare," Journal of Health Economics, 16:453-481.

<sup>8</sup> Mattke, S. Seid M., Ma S. (2007) Evidence for the effect of disease management: Is \$1 billion a year a good investment? American Journal of Managed Care. 13(12): 670-676.

<sup>9</sup> Sidorov, J., Shull, R., Tomcavage, J., Girolami, S., Lawton, N., Harris, R. (2003) Does diabetes management save money and improve outcomes? Diabetes Care. 25:684-689.

<sup>10</sup> Fireman, B., Bartlett, J., Selby, J., (2004) Can disease management reduce health care costs by improving quality? Health Affairs; 23:63-75

<sup>11</sup> Villagra, V.G., Ahmed, T., Effectiveness of a disease management program for patients with diabetes. Health Affairs; 23:255-266

<sup>12</sup> Meyer, M., Kobb, R., Ryan, P. (2002) Virtually healthy: Chronic disease management in the home. Disease Management; 5:97-94