THE PATIENT-CENTERED MEDICAL HOME'S IMPACT ON QUALITY AND COST

The Patient-Centered Medical Home (PCMH) incorporates characteristics associated with better outcomes and lower costs. The PCMH:

- **Is built upon the value of primary care** in achieving better health outcomes, higher patient experience, and more efficient use of resources. PCMH patients have **continuous access to a personal physician who** provides comprehensive and coordinated care for the large majority of their health care needs (from Institute of Medicine definition of primary care).

- **Would be responsible for all of the patients' health care needs** – acute care, chronic care, preventive services, and end of life care working with teams of health care professionals. The PCMH would coordinate the care of its patients with specialists, lab/x-ray facilities, hospitals, home care agencies, and all other health care professionals on the patient care team.

- **Would adopt the principles of patient-centeredness**: allowing patients free choice of physician, providing prompt appointments, reducing waiting times, delivering care based on the best evidence on clinical effectiveness, empowering patients to partner with their personal physicians on decision-making, and providing care in a culturally and linguistically appropriate manner.

- **Uses health information systems** to provide data and reminder prompts such that all patients receive needed services.

According the Center for Evaluative Clinical Sciences at Dartmouth, for patients with severe chronic diseases, those who live in states in the U.S. that relied more on primary care have:

- **lower Medicare spending** (inpatient reimbursements and Part B payments),
- **lower resource inputs** (hospital beds, ICU beds, total physician labor, primary care labor, and medical specialist labor)
- **lower utilization** rates (physician visits, days in ICUs, days in the hospital, and fewer patients seeing 10 or more physicians), and
- **better quality** of care (fewer ICU deaths and a higher composite quality score).[1]

Barbara Starfield of Johns Hopkins University reviewed dozens of studies, comparing health care in the United States with other countries as well within the U.S., and found that:

- Within the United States, **adults with a primary care physician had 33 percent lower costs of care and were 19 percent less likely to die from their conditions than those who received care from a specialist**, after adjusting for demographic and health characteristics.
- **Primary care physician supply is consistently associated with improved health outcomes** for conditions like cancer, heart disease, stroke, infant mortality, low birth weight, life expectancy, and self-rated care.
- In both England and the United States, **each additional primary care physician per 10,000 persons is associated with a decrease in mortality rate** of 3 to 10 percent.
- In the United States, **an increase of just one primary care physician is associated with 1.44 fewer deaths per 10,000 persons.**
- **An orientation to primary care reduces socio-demographic and socio-economic disparities**. African-Americans who have a primary care physician in particular are less likely to die prematurely.[2]

A medical home can reduce or even eliminate racial and ethnic disparities in access and quality for insured persons, a new Commonwealth Fund report finds. When adults have a medical home, their access to needed care, receipt of routine preventive screenings, and management of chronic conditions improve substantially.[3]

The Fund has also found that when primary care physicians in the United States effectively manage care in the office setting, **patients with chronic diseases like diabetes, congestive heart failure, and adult asthma have fewer complications, leading to fewer avoidable hospitalizations.**[4]

A research team from RAND and the University of California at Berkeley undertook a rigorous evaluation of care provided according to PCMH principles. For almost 4,000 patients with diabetes, congestive heart failure (CHF), asthma and depression, they found that

- Patients with **diabetes had significant reductions in cardiovascular risk**;
- **CHF patients had 35% fewer hospital days**;
- **Asthma and diabetes patients were more likely to receive appropriate therapy**.[5]

The North Carolina Medicaid program enrolls recipients in a network of physician-directed medical homes. A Mercer analysis showed that an upfront $10.2 million investment for North Carolina Community Care operations in SFY04 **saved $244 million in overall healthcare costs for the state.** Similar results were found in 2005 and 2006.[6]

The Commonwealth Fund reports that **Denmark has organized its entire health care system around patient-centered medical homes, achieving the highest patient satisfaction ratings in the world.** Primary care physicians are highly accessible and supported by an outstanding information system that assists them in coordinating care. Among Western nations, **Denmark has among the lowest per capita health expenditures and highest primary care rankings**.[7]

THE BOTTOM LINE: **Care delivered by primary care physicians in a Patient-Centered Medical Home is consistently associated with better outcomes, reduced mortality, fewer preventable hospital admissions for patients with chronic diseases, lower utilization, improved patient compliance with recommended care, and lower Medicare spending.**

---

[1] Dartmouth Atlas of Health Care, Variation among States in the Management of Severe Chronic Illness, 2006

[2] Starfield B. Shi L, and Macinko J., Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. Health Aff (Millwood). 2001;20:64-78ions of Primary Care to Health Systems and Health, Millbank Quarterly, 2005;83:457-502; Starfield, presentation to The Commonwealth Fund, Primary Care Roundtable: Strengthening Adult Primary Care: Models and Policy Options, October 3, 2006

[3] A. C. Beal, M. M. Doty, S. E. Hernandez, K. K. Shea, and K. Davis, Closing the Divide: How Medical Homes Promote Equity in Health Care: Results From The Commonwealth Fund 2006 Health Care Quality Survey, The Commonwealth Fund, June 2007

[4] Commonwealth Fund, Chartbook on Medicare, 2006;

[5] A Robert Wood Johnson-funded evaluation of the effectiveness of the Chronic Care Model and the IHI Breakthrough Series Collaborative in improving clinical outcomes and patient satisfaction with care, accessed June 19, 2007 at http://www.rand.org/health/projects/icice/index.html; Higashi, Takahiro, Wenger, Neil S., Adams, John L., Fung, Constance, Roland, Martin, McGlynn, Elizabeth A., Reeves, David, Asch, Steven M., Kerr, Eve A., Shekelle, Paul G. Relationship between Number of Medical Conditions and Quality of Care N Engl J Med 2007 356: 2496-2504

[6] Mercer Cost Effectiveness Analysis – AFDC only for Inpatient, Outpatient, ED, Physician Services, Pharmacy, Administrative Costs, Other). From presentation by Dobson, Al, Patient-Centered Primary Care Roundtable, March 12, 2007. Accessed June 24, 2007 at www.patientcenteredprimarycare.org/Meetings/March%202007/March.htm

[7] K. Davis, Learning From High Performance Health Systems Around the Globe, Invited Testimony: Senate Health, Education, Labor, and Pensions Committee Hearing "Health Care for All Americans: Challenges and Opportunities," January 10, 2007