

# National Study of the Chronic Disease Self-Management Program: A Brief Overview



## What is the Chronic Disease Self-Management Program?

The Chronic Disease Self-Management Program (CDSMP) is a peer-led, community-based intervention that helps individuals with chronic conditions learn how to manage and improve their health. The program focuses on challenges that are common to individuals living with any chronic condition, such as pain management, nutrition, exercise, medication use, emotions, and communicating with doctors. Led by a pair of trained facilitators, many of whom also have chronic health conditions, these small, highly interactive workshops meet once a week for six consecutive weeks. During each 2 ½ hour session, approximately 10-15 participants focus on building the skills they need to manage their conditions. Workshops are highly participative, with mutual success and support building participants' confidence in their ability to manage their health and maintain active, fulfilling lives.

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## CDSMP National Study

The CDSMP National Study consisted of 1,170 participants who enrolled in a CDSMP workshop from 2010-2011. Sociodemographic, health status, and behavioral data were collected at baseline, 6, and 12 months with 825 participants providing 12-month data. This study was supported by the U.S. Administration on Aging via the American Recovery and Reinvestment Act of 2009.

### Workshop & Delivery Characteristics

- 145 workshops were hosted by 22 delivery organizations in 17 states.
- Workshops were held at a variety of locations including senior centers (21%), residential facilities (19%), health care organizations (15%), and community centers (13%).
- 83% of workshops were delivered in English and 17% in Spanish (Tomando Control de su Salud).
- Workshops had an average of 12 participants.

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## Workshop Leader Characteristics

- 12% of workshops were led by 2 Master Trainers and 55% by 2 Lay Leaders.
- 53% of workshop facilitators were volunteers.
- On average, leaders had facilitated 4 workshops in the past 2 years.
- 70% of the leaders had one or more chronic conditions.

## Participant Characteristics at Baseline

- The mean age of participants was 65 years.
- 83% of participants were women.
- 55% of participants were non-Hispanic White, 16% were African American, and 22% were Latino/Hispanic.
- On average, 79% of participants reported having 2 or more chronic conditions, with the most commonly reported conditions being high blood pressure, arthritis, and diabetes.
- 79% of participants successfully “completed” the workshop, attending at least 4 of 6 sessions.

## Outcome

The CDSMP National Study found many positive, significant improvements in terms of meeting the Institute of Healthcare Improvement’s Triple Aims<sup>1</sup> of better health, better care, and lower cost. Aggregate improvements from baseline to 12 months include<sup>2</sup>:

## Better Health

- **Feel healthier:** 5% improvement in self-reported health. Improved symptom management in 5 indicators: fatigue (10%), pain (11%), shortness of breath (14%), stress (5%), and sleep problems (16%).
- **More active lives:** 13% improvement in number of days per week being moderately active.
- **Less depression:** 21% improvement in depression.
- **Better quality of life:** 6% improvement on health-related quality of life.
- **Fewer sick days:** 15% improvement in unhealthy physical days and 12% improvement in unhealthy mental days.

Table 1. CDSMP: Better Outcomes<sup>2+</sup>

	Baseline Mean	12-Month Mean	% Improvement <sup>+</sup>
Self-assessed health (1~5) (Lower scores = Better health)	3.2	3.0	5%**
Days per week being moderately active (0~7)	2.4	2.8	13%**
Depression (0~3)	6.6	5.1	21%**
Quality of life (0~10)	6.5	7.0	6%**
Unhealthy physical days (0~30)	8.7	7.2	15%**
Unhealthy mental days (0~30)	6.7	5.6	12%**

<sup>1</sup> Institute for Healthcare Improvement. *IHI Triple Aim Initiative*. Retrieved July, 2013 from <http://www.ihiofferings/Initiatives/TripleAim/Pages/default.aspx>.

<sup>2</sup> Ory, M. G., Ahn, S., Jiang L., Smith, M. L., Ritter, P., Whitelaw, N., & Lorig, K. (2013). Successes of a National Study of the Chronic Disease Self-Management Program: Meeting the Triple Aim of Health Care Reform. *Medical Care*, 51(11), 992-998.

<sup>+</sup> These statistics control for covariates gender, age, race/ethnicity, education, number of chronic conditions.

\*\*p<0.01, \*p<0.05

**Table 2. Impact on Symptom Management<sup>2,+</sup>**

On a 0-10 Analogue Scale	Baseline Mean	12-Month Mean	% Improvement+
Fatigue	4.9	4.4	10%**
Pain	4.6	4.1	11%**
Shortness of breath	2.7	2.3	14%**
Stress	4.2	3.9	5%*
Sleep problems	4.6	3.7	16%**

### Better Care

- **Communication:** 9% improvement in communication with doctors.
- **Medication compliance:** 12% improvement in medication compliance.
- **Health literacy:** 4% improvement in confidence filling out medical forms.

**Table 3. CDSMP: Better Care<sup>2,+</sup>**

	Baseline Mean	12-Month Mean	% Improvement
Communication with MD (0~5)	2.6	2.9	9%**
Medication compliance (0~1)	0.25	0.21	12%**
Health literacy (Confidence filling out medical forms) (0~4)	3.0	3.1	4%**

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<sup>3</sup> Ahn S, Basu R, Smith ML, Jiang L, Lorig K, Whitelaw N, Ory MG: The Impact of Chronic Disease Self-Management Programs: Healthcare Savings through a Community-Based Intervention. *BMC Public Health*. 2013, 13(1):1141.

<sup>4</sup> Lorig K, Sobel DS, Stewart AL, et al. Evidence Suggesting That a Chronic Disease Self-Management Program Can Improve Health Status While Reducing Hospitalization: A Randomized Trial. *Medical Care*. 1999;37:5-14.

<sup>5</sup> Lorig K, Ritter P, Stewart AL, et al. Chronic Disease Self-Management Program: 2-Year Health Status and Health Care Utilization Outcomes. *Medical Care*. 2001;39:1217-1223.

### Lower Health Cost

- \$714 per person saving in emergency room visits and hospital utilization.
- \$364 per person net savings after considering program costs at \$350 per participant.
- Potential saving of \$6.6 billion by reaching 10% of Americans with one or more chronic conditions.

**Table 4. CDSMP: Lower Health Care Use<sup>3,+</sup>**

	Baseline	6-Month	12-Month
Percentage with any emergency room visits in the past 6 months	18%	13%**	13%**
Percentage with any hospitalization in the past 6 months	14%	11%*	14%

### The Impact of CDSMP

The national rollout of CDSMP resulted in similar benefits as shown in earlier randomized clinical trials<sup>4,5</sup>, demonstrating an effective translation of research to practice. Not only were significant, measurable improvements in the health and quality of life of people with chronic conditions achieved, but CDSMP also appears to save enough through reductions in health care expenditures to pay for itself within the first year. It is thus recommended that CDSMP become part of routine care of individuals with chronic disease, and that stronger linkages between medical and community care be established to facilitate greater access to CDSMP workshops.

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