



Chronic Disease Self-Management Program (CDSMP)

Evidence-based Chronic Disease Self-Management Program for Older Adults

Program Approved by AoA, CDC, and NCOA

Web Site

<http://patienteducation.stanford.edu/programs/cdsmp.html>

Program Synopsis

Year Program First Implemented in Community Settings: Early 1990s

- General description of program
 - CDSMP is a lay-led participant education program offered in communities in the United States and several other countries. Participants are adults experiencing chronic health conditions such as hypertension, arthritis, heart disease, stroke, lung disease, and diabetes; their family members, friends and caregivers can also participate. The program provides information and teaches practical skills on managing chronic health problems. The CDSMP gives people the confidence and motivation they need to manage the challenges of living with a chronic health condition.
- Program goal
 - The overall goal is to enable participants to build self-confidence to take part in maintaining their health and managing their chronic health conditions.
- Reasoning behind the program design and elements:
 - People with chronic conditions have similar concerns and problems;
 - People with chronic conditions must deal not only with their disease(s), but also with the impact on their lives and emotions;
 - Lay people with chronic conditions, when given a detailed leader's manual, can teach the CDSMP as effectively, if not more effectively, than health professionals (Lorig et al, 1999);
 - The process or the way the CDSMP is taught is as important, if not more important, than the subject matter that is taught.
- Target population
 - Adults with chronic diseases
- Essential program components and activities
 - The CDSMP focuses on problems common to individuals suffering from chronic diseases. Coping strategies such as action planning and feedback, behavior modeling, problem-solving techniques, and decision making are applicable to all chronic diseases. Individuals are taught to control their symptoms through:
 - ③ Relaxation techniques;
 - ③ Healthy Eating;
 - ③ Managing sleep and fatigue;
 - ③ Manage Medications;

- ③ Exercise;
 - ③ Communication with health providers.
- Length/Timeframe of program
 - 2.5 hours per week over a 6 week period.
- Recommended class size
 - 10-16 people
- Desired outcomes
 - Increases in healthy behaviors (i.e., exercise and cognitive symptom management techniques, such as relaxation);
 - Positive changes in health status (less pain, fatigue, and worry; less health distress);
 - Increased self-efficacy;
 - Better communications with health providers;
 - Fewer visits to physicians and emergency rooms.
- Measures and evaluation activities
 - There are several outcome evaluation tools available that range from detailed outcome evaluation questionnaires to simple (whether and how successfully participants are following their action plans).

Health Outcomes and Evidence Supporting Health Outcomes

Over a period of 2 years, Agency for Healthcare Research and Quality (AHRQ)-funded investigators compared health behaviors, health status, and health services use in patients age 40 to 90 years (average age, 65) who had completed the CDSMP (Lorig et al., 1999). When compared to baseline measures taken for the 6 months prior to the CDSMP, researchers found that CDSMP participants had:

- Increased exercise;
- Better coping strategies and symptom management;
- Better communication with their physicians;
- Improvement in their self-rated health, disability, social and role activities, and health distress;
- More energy and less fatigue;
- Decreased disability;
- Fewer physician visits and hospitalizations.

Lorig et al. (2001a) found that after 1 year, CDSMP participants had:

- Significant improvements in energy, health status, social and role activities, and self-efficacy;
- Less fatigue or health distress;
- Fewer visits to the emergency room;
- No decline in activity or role functions, even though there was a slight increase in disability after 1 year.

In the same study by Lorig et al. (2001a), after 2 years CDSMP participants had:

- No further increase in disability;

- Reduced health distress;
- Fewer visits to physicians and emergency rooms;
- Increased self-efficacy.

The increase in patients' perceptions of their self-efficacy was associated with reduced health care use (Lorig et al., 2001a). Self-efficacy, the degree of belief people have that they can perform the behavior required to produce a desired outcome, is crucial to the success of the CDSMP (Lorig et al., 1999). The more self-efficacy people have, the more control they believe they have over their behavior (Lorig et al., 1999; Lorig, Mazonson, & Holman, 1992). Therefore, increasing self-efficacy contributes to better decisionmaking processes, stronger motivation, and perseverance (Lorig et al., 1992).

Program Costs

Training fees:

At Stanford University

- For the 4½ day CDSMP Master Training, including all instruction, one set of all materials, and breakfast for 5 days, lunch for 4 days and one evening banquet, \$1,600 per health professional or \$900 for a lay person with chronic disease.
- CDSMP books (~\$19 each) and relaxation tapes/CDs (~\$12 each) are required for each CDSMP class participant.

Off-Site Training

- Training by Stanford at a site other than Stanford for CDSMP is \$16,000 for 4½ days of Master training.

For additional training cost information, please see the Stanford Patient Education website at <http://patienteducation.stanford.edu/training/trnfees.html>

Licensing fees:

Licenses are offered at the following rates:

- \$500.00 for offering 10 or fewer workshops a year
- \$1,000 for offering 30 or fewer workshops a year

Every organization offering a Stanford program must purchase a license for that program. If more than one program is being offered, the organization must have a license for each program. A multiple-program license is available.

Each license is good for 3 years from the date of issue. Renewal is mandatory if an organization wishes to continue CDSMP program offerings beyond the license term.

Every licensed organization must make a yearly report (due on the anniversary of original license agreement) to Stanford. The report should: state the number of workshops offered during the past year; dates of each workshop and number of participants; identify the leaders of each workshop and number of leader trainings conducted; state the number of trainings for Master Trainers.

For other licensing details, including downloadable applications, visit:
<http://patienteducation.stanford.edu/licensing/licfees.html>

Program Savings

The CDSMP saved from \$390 to \$520 per patient over a 2-year study period because participants used fewer health care services. CDSMP participants used less hospital and physician services than they had used before participating in the program, and less than those who had not participated in the CDSMP control group (Lorig et al., 1999; Lorig et al., 2001a).

Specifically, researchers found that hospitalization rates for CDSMP participants did not increase over the 2-year duration of the study. For example, during the first 6 months, CDSMP participants were hospitalized fewer days than they had been during the 6 months before they began the program. (Lorig et al., 2001a). CDSMP participants also had 2.5 fewer visits to the emergency room and their physicians (Lorig et al., 2001a).

The CDSMP cost between \$70 and \$200 per person to administer. After subtracting costs from the savings due to lower health services use, the total amount saved as a result of the CDSMP over a 2-year period was estimated at \$390 to \$520 per person (Lorig et al., 1999; Lorig et al., 2001a).

Further evidence of the effectiveness of the CDSMP can be found in a study funded by Kaiser Permanente (Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001b). Kaiser CDSMP participants had fewer visits to the emergency room and fewer hospital days compared to the year prior to completing the CDSMP. As a result, they reduced their health care costs. (2001b).

Kaiser Permanente paid approximately \$200 per participant for CDSMP training, materials, and administration. With 489 participants, Kaiser's total cost was \$97,800. However, if the cost to care for each participant decreased \$990 because participants used fewer health services, Kaiser Permanente's net savings would be nearly \$400,000 (Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001b).

Resource Requirements

- Workshops can be offered in community settings such as senior centers, churches and hospitals. A flipchart and markers are required for each class.

Training Requirements

- Instructor training
 - Facilitator trainings for representatives of health care organizations run 4½ days per program and are held at Stanford University. It is strongly suggested that health professionals bring a lay person with chronic disease with them. All workshops and trainings are designed to be facilitated by 2 people. Each trainee receives a detailed leader's manual, and a copy of the workshop's textbook and audio CDs (if applicable). Those being trained as Master Trainers (trainers of leaders) will also receive a trainer's manual and a program implementation tool kit. Stanford can also come to you, providing two Stanford trainers to train up to 26 Leaders and/or Master Trainers at an organization's facility. Local Master Trainers can then serve as an

organization's on-site trainers for the future. Such training may be shared among multiple organizations to reduce costs, if desired.

- Instructor certification required?
 - Yes
- Instructor qualifications
 - Instructors must be health professionals, or lay leaders or with a chronic health problem. Instructors must be able to complete the CDSMP training.
- Number of instructors required per class
 - Two. Workshops are facilitated by a team of two trained leaders, pairing either two lay leaders, or a health professional and a lay leader who has a chronic disease.

References

Cost Data:

Stanford Patient Education Research Center, Stanford University School of Medicine, Department of Medicine. Chronic Disease Self-Management Program Web site: <http://patienteducation.stanford.edu/programs/cdsmp.html>

Summaries of Outcome Data:

Preventing Disability in the Elderly With Chronic Disease. Research In Action, Issue 3. AHRQ Publication No. 02-0018, April 2002. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/research/elderdis.htm>

Stanford Patient Education Research Center, Stanford University School of Medicine, Department of Medicine. Chronic Disease Self-Management Program Web site: <http://patienteducation.stanford.edu/programs/cdsmp.html>

Original outcome data:

Lorig K.R., Mazonson P.D., Holman H.R. (1992). Evidence suggesting that health education for self-management in patients with chronic arthritis has sustained health benefits while reducing health care costs. *Arthritis Rheum*, 36(4):439-46.

Lorig K.R., Sobel D.S., Stewart A.L., Brown Jr. B.W., Ritter P.L., González V.M., Laurent D.D., Holman H.R. (1999). Evidence suggesting that a chronic disease self-management program can improve health status while reducing utilization and costs: A randomized trial. *Medical Care*, 37(1):5-14.

Lorig K.R., Ritter P., Stewart A.L., Sobel D.S., Brown B.W., Bandura A., González V.M., Laurent D.D., Holman H.R. (2001a). Chronic Disease Self-Management Program: 2-year health status and health care utilization outcomes. *Medical Care*, 39(11),1217-1223.

Lorig K.R., Sobel D.S., Ritter P.L., Laurent D., Hobbs M. (2001b). Effect of a self-management program on patients with chronic disease. *Effective Clinical Practice*, 4(6),256-262.

This program overview was prepared by Ellen Schneider, Associate Director for Operations and Communications, UNC Institute on Aging. For further program information, please visit the program web site listed on page 1. We extend our thanks to Katy Plant, Stanford Patient Education Research Center, for reviewing this summary and to the NC Area Agency on Aging directors for their assistance in designing the format for this document.