

PROGRAM	HEALTH FOCUS INCIDENCE & COST REACH IN WISCONSIN	PROVEN OUTCOMES & SAVINGS
<p>Living Well with Chronic Conditions is a 6-week, evidence-based intervention that decreases health care utilization through self-management in people with chronic conditions. The program is delivered by trained leaders and is also available in Spanish in Wisconsin as Tomando Control de su Salud.</p> <p>Developed by: Kate Lorig, DPH at Stanford University in 1992.</p>	<p>Focus: Chronic conditions – e.g., arthritis, diabetes, heart disease, chronic obstructive pulmonary disease</p> <p>Incidence and Cost:</p> <ul style="list-style-type: none"> ◆ 80% of older adults have at least one chronic condition; 50% have 2 or more ◆ 95% of health care dollars spent on older adults attributable to chronic conditions ◆ 2 of 3 deaths in the U.S. are attributable to heart disease, stroke, cancer, and diabetes <p>Reach in Wisconsin through 2014 (<i>instituted in 2007</i>)</p> <ul style="list-style-type: none"> ◆ 7,297 participants in workshops ◆ 853 workshops held statewide ◆ 62 counties and 2 tribes have held workshops 	<p>People who participated in the 6-week intervention demonstrated:</p> <p>NATIONAL</p> <ul style="list-style-type: none"> ◆ 27% reduction in average Emergency Department (ED) visits in the first six months following the intervention.¹ ◆ 21% reduction in average ED visits in first twelve months following the intervention.¹ ◆ 22% reduction in average number of hospitalizations in first six months post intervention.¹ ◆ Average cost saving: \$364 net per program participant¹ <p>IN OREGON</p> <ul style="list-style-type: none"> ◆ With 3,919 residents studied between 2005-2009: demonstrated reduction in health care utilization of 557 avoided ED visits (ED cost savings estimate: \$634,980), 557 avoided hospitalizations, and 2,783 avoided hospital days (hospitalization cost savings estimate: \$6,501,088).² <p>IN WISCONSIN</p> <ul style="list-style-type: none"> ◆ Network Health members: 24% fewer encounters with health care system in the six months post intervention compared to the six months prior.³

Sources

¹ Ory, Marcia G., PhD, MPH, et al., “Successes of a National Study of the Chronic Disease Self-Management Program: Meeting the Triple Aim of Health Care Reform,” *Medical Care*, Volume 51, Number 11, November 2013.

Summary: Meta-analysis of data collected at baseline, 6-month and 12-month assessments, using 3 types of mixed-effects models to provide unbiased estimates of intervention effects from 1,170 community-dwelling program participants nationwide. Triple Aim-related outcome measures: better health (e.g., self-reported health, pain, fatigue, depression), better health care (e.g., patient-physician communication, medication compliance, confidence completing medical forms), and better value (e.g., reductions in emergency department (ED) visits and hospitalizations in past six months). Results showed significant improvements for all better health and better health care outcomes measures from baseline to 12-month follow-up. Odds of ED visits significantly reduced from baseline to 12 month follow-up. Significant reductions in hospitalization from baseline to 6-month follow-up.

² “Program Impact Report: Oregon’s Living Well with Chronic Conditions,” Dr. Viktor E. Bovbjerg and Ms. Sarah Jane Kingston, August 5, 2010, Oregon State University College of Health and Human Sciences.

Summary: Researchers from Oregon State University College of Health and Human Sciences applied findings from national articles summarizing this program’s findings, relying only on articles with sound research design, rigorous methods and thorough analysis, with description of measures and instrumentation, including documentation of reliability and validity of self-report measures, descriptions of participant recruitment and retention and appropriateness of statistical analyses, similar populations and appropriate, quantified outcomes. The latter included: length of follow-up for outcomes; estimates for both subjective (e.g., quality of life, health status) and objective (e.g., utilization) outcomes, with measures of variation (e.g., standard deviations, confidence intervals); disaggregated health care utilization data (e.g., separate estimates for outpatient, inpatient and emergency department use); and presentation of results from appropriate statistical analyses. They used a conservative “duration of effect” of only two years post-intervention and a participant workshop completion rate of 71%, which is comparable to Wisconsin experience. They used utilization costs from the mid-point of the period of their data collection, using mean cost of hospital day in Oregon from the U.S. Census Bureau’s State and Metropolitan Area Data Book and the mean cost of an ED visit from the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey. They used a per participant program cost of \$375, which is consistent with the national average used by the National Council on Aging. Using these assumptions, they calculated the cost-savings from Oregon’s 3,919 participants (.3% population penetration) between 2005-2009, and concluded that participants avoided 557 ED visits, 557 avoided hospitalizations and 2,783 avoided hospital days. Total savings: \$7,136,068.

³ Network Health presentation at 2012 Healthy Aging Summit – Neenah, Wisconsin (*available from WIHA*)

Summary: Mike Van Ryzin, (former) Director of Quality Improvement at Network Health (insurance company) presented data that measured the number of encounters with the health care system of their members who successfully completed the workshop. Members who completed a workshop had 24% fewer encounters in the six months following the workshop compared to the six months prior to the workshop.

See also:

- 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.” *Med Care*. 1999;37:5-14
- Lorig, K., Ritter P., Stewart AL, et al., “Chronic disease self-management program: 2-7 year health status and health care utilization outcomes.” *Med Care*. 2001;39:1217-1223.
- Lorig, KR, Sobel DS, Ritter PL, Laurent D, Hobbs M., “Effect of a self-management program on patients with chronic disease,” *Eff Clin Pract* 2001; 4(6):256-62.
- Lorig, Kate, DPH, et al., “Spanish Diabetes Self-Management With and Without Automated Telephone Reinforcement: Two randomized trials,” *Diabetes Care*, Volume 31, Number 3, March 2008.