Chronic Disease
Self-Management Program
Implications for Policy and Practice

Kate Lorig, DrPH
Stanford Patient Education Center
1000 Welch Road, Suite 204
Palo Alto CA 94304
650-723-7935
self-management@stanford.edu
http://patienteducation.stanford.edu

Valarie Blue Bird Jernigan, DrPH, MPH
Assistant Professor, University of Oklahoma
College of Public Health
So Why Should We Care?

Self-management programs focus on preparing people with chronic conditions for the 99% of the time they live outside of the health care system.
When One Has a Chronic Condition One Can Not... Not Manage
How One Manages

Makes All the Difference to Health, Quality of Life, and Costs
We Usually Think in Terms of a Single Program

People Learn in Different ways

1. Some like to go to groups

2. Some like the Internet
Self-Management: What Is It?

Self-management is defined as the tasks that individuals must undertake to live with one or more chronic conditions.

These tasks include having the confidence to deal with the medical management, role management, and emotional management of their conditions.
How to Build Confidence: Self-Efficacy

- Self-efficacy is one’s belief that they can accomplish a specific task or behavior

- SE is built by:
  - Skills Mastery
  - Modeling
  - Reinterpretation of Symptoms
  - Social Persuasion
Stanford Self-Management Programs

- Peer led (2 peer leaders)
- Community based
- Standardized training for leaders
- Highly structured teaching protocol
- Standardized participant materials
- No literacy requirements
- Several topics per session
- Self tailored
- Evaluated in randomized trials
Modes of Delivery

- Six week small group
- Six weeks via the Internet
Chronic Disease Self-Management Small Group Program - What Is It?

- Small groups of 10-16 people
- People with many different diseases and comorbid conditions in same group
- 2 ½ hours per week for 6 weeks
- Peer taught
What is Taught?

- Problem Solving
- Action Planning
- Decision Making

- Managing Symptoms (*pain, fatigue, depression, shortness of breath*)
- Exercise
- Relaxation Techniques
- Healthy Eating
- Communication Skills
- Medication management
So Where Is the Evidence?
Small Group Chronic Disease Self-Management Program Randomized Trial

Demographic Data

- Age: 62 years
- Male: 27%
- Education: 14 years
- No. Diseases: 2.2
Percent with Common Diseases

- Lung disease 21%
- Heart disease 24%
- Diabetes 26%
- Arthritis 42%
Chronic Disease Self-Management

6-Month Improvements in Health Outcomes

- Self-Rated Health
- Disability
- Social and Role Activities Limitations
- Energy/Fatigue
- Distress with Health State

All $p < .05$
Chronic Disease Self-Management

Improvements in Utilization and Costs

- Average .8 fewer days in hospital in the past six months ($p=0.02$)
- Trend toward fewer outpatient and ER visits ($p=0.14$)
- Estimated cost of intervention $300
Spanish Diabetes Self-Management Small Group (n=417)

Demographic Data

- Age: 52.8 years
- Male: 38%
- Education: 7.5 years
- Born in Mexico: 72%
- All type 2 diabetics
Diabetes Self-Management
6 and 18 month Outcomes

- A1C (-0.36) – Baseline (7.3)
- Less Health Distress
- Fewer Symptoms of Hyperglycemia
- Fewer Symptoms of Hypoglycemia

- At 18 months all improvements remained as well as -0.5 MD visits and -0.2 ED visits in six months
  
  all p<.05
But Something Funny Happened

As reinforcement, half the participants received monthly Automated Telephone Calls
Something Funny Happened

At 18 months there were no differences between those receiving and those not receiving reinforcement.
Let’s Go On-Line

Internet Based Self-Management
Characteristics of Healthier Living @ Stanford

- 20-25 people with chronic conditions
- No “real time” commitment
- Peer led by two facilitators
- Highly interactive
- Participants asked to log on 2-3 times/week
- Six-week workshop (entirely on-line anywhere there is Internet access)
What Do We Know from Stanford Internet Studies
The Evidence?

- Improves quality of life
- Improves self-efficacy
Chronic Disease Self-Management

Internet Randomized Trial (n=958)

Age 55 years (range 20-87)
Education 15 years
Male 30%
1-Year Changes (Treatment / Control) N=782

**Improvements (p<.05)**

- Communicating with Providers
- Exercise
- Fatigue
- Health Distress
- Shortness of Breath
- Pain
Yea, but “XXXX” do not use the Internet
Native Americans/Alaskan Natives
Diabetes On-line: What We Did

- We placed notices about the study on NA/AN websites and in user groups. These were linked to our study website.

- The home page of the website had Native American photos, images and introduced our Native American Staff.
Native Americans/Alaskan Natives
What We Did

- AI/AN were randomized and attended online workshops with non Native Americans/Alaskan Natives

- No changes were made to the website or study except the home page.
Who Participated

- 110 NA/ANs
- More than 70 tribes
- Mean age 50
- Male 22%
- Year of education 15 (SD 2.8)
What We Learned

At six months treatment participants vs controls improved:

- Health Distress
- Role Function
- A1C -.3
- More Visits to Physicians
What We Learned

- NA/AN will participate and can benefit from Internet based programs.

- NA/AN posted slightly less than African Americans and non-Hispanic Whites. The content of the posts was very similar.
What is Needed for Scaling

Funding is necessary but not sufficient
Scaling

- Partnering
- Fidelity
- Community Buy In
- Knowing the Competition
- Business Plan
Fidelity and Scaling

- Infrastructure
- Number of people needed
- Types of personnel needed
- Training
- Program delivery
- After program delivery
What are the bumps in the road?

- Wrong Program
- Wrong Partners
- Wrong Evidence
- Wrong Fit
- Wrong Business Plan
- Trying to Do it All