

Better Choices, Better Health™ - Diabetes Online Chronic Disease Self-Management Program

How It Works

Better Choices, Better Health™ - Diabetes, the online Diabetes Self-Management Program developed at Stanford University, is a six-week workshop offered on a dedicated web site. Groups consist of about 25 persons per workshop. It does not require “real time” attendance (i.e., there are bulletin boards rather than chat rooms).

A pair of trained peer facilitators moderates each workshop. Each week, participants are asked to log on at least three times for a total of about two hours. Weekly activities include reading and interacting via the Learning Center, making and posting a weekly action plan, participating in problem solving and guided exercises on bulletin boards, and participating in any appropriate self-tests and activities. Participants are encouraged to post diabetes-related problems on a bulletin board and help other group members with their problems.

The Learning Center contains the primary content of the workshop and is where participants learn self-management techniques. Each week, new content is made available. Past weeks' content also remains available. The Learning Center is self-directed, that is, participants can control the speed and timing of their progress. In addition to the Learning Center, there are four other areas of the workshop's web site, which are reflected on the menu bar. The four sections include:

- The Discussion Center is interactive and consists of four directed bulletin boards: the action-planning board, the problem-solving board, the difficult emotions board, and the celebrations board.
- Additionally, participants wishing to communicate with each other individually may do so through the Post Office, which is an internal messaging system.
- My Tools is a personal area accessible only by the participant and contains such tools as glucose, food and exercise monitoring logs, menu planning tools, carbohydrate counting tables, journals, and medication records. In addition, My Tools contains a glossary, a review of workshop guidelines, and privacy policies.
- Help is where participants can take a tutorial on how to use the workshop and learn computer skills such as how to scroll and use pop-up windows. Help also contains e-mail links to the facilitators and other online staff.

Using the menu on each web page, participants can move among these five areas as they wish.

Broadly Accessible

BCBH for Diabetes is built on Stanford's experience with the original Chronic Disease Self-Management and Diabetes Self-Management Programs that are offered in person. BCBH - Diabetes has been designed so that it can be used by almost anyone who has access to the Internet, including those that do not have access to broadband. For this reason, video clips and extensive graphics are not used. BCBH is compatible with Internet Explorer, Netscape, Safari, Foxfire, Chrome and AOL web browsers and can be used with Windows and Macintosh platforms.

Rich Content

All of the BCBH content has been written for the Learning Center as a semi-interactive program, and meets current American Diabetes Association guidelines. The following is a session-by-session overview of the content:

Workshop Overview						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Overview of self-management and diabetes	✓	✓				✓
Introduction to diabetes	✓					
Understanding numbers: Glucose, A1c, blood pressure, cholesterol, body mass index	✓					✓
Glucose monitoring	✓	✓	✓			
Cholesterol	✓	✓				
Weight management	✓			✓		
Problem solving	✓					
Healthy eating	✓	✓	✓	✓	✓	✓
Making an action plan	✓	✓	✓	✓	✓	✓
Action plan feedback		✓	✓	✓	✓	✓
Fitness/exercise		✓		✓		
Difficult emotions			✓			
Expressing feelings			✓			
Using your mind to manage symptom/stress			✓	✓	✓	✓
Blood pressure				✓		
Depression				✓		
Working with your health care team					✓	
Medications					✓	
Hypoglycemia (low blood sugar)					✓	
Diabetes complications					✓	
Foot problems					✓	
Relationships with family and friends					✓	
Sick days						✓
Sleep						✓
Accomplishments						✓

Participants' resources also include a copy of *Living a Healthy Life with Chronic Conditions*. In Stanford's previous online studies, participants have indicated they would rather have a book than lengthy online text.

Fostering Self-Efficacy

As in other Stanford programs, BCBH helps participants gain a sense of control over their health-related functioning through enhanced self-efficacy. This includes guided mastery experiences, acquisition of skills and enhancement of self-confidence through peer modeling, reinterpretation of physiological symptoms, and social persuasion.

Skills mastery: Participants create a weekly action plan and try new behaviors such as exercise monitoring. Each session includes a place for feedback on progress and discussion of problems.

Modeling: To enhance the connection between participants and moderators, at least one of the two peer moderators for each BCBH program must have a chronic condition. The program offers structured opportunities for participants to support each other, with problem solving via bulletin boards. Thus, participants model for each other and, by serving as models, enhance their self-efficacy. Finally, group members are asked to check in with each other via the Post Office between session meetings.

Interpreting symptoms: Patients' adaptations to chronic disease are influenced by their beliefs about their conditions. Thus, if they believe that their fatigue is due to the disease process, they will rest. When it is explained that fatigue can also be due to de-conditioning, poor nutrition, stress, or depression, participants have a rationale for trying new behaviors to manage fatigue. As each symptom or problem is discussed, the multiple possible causes are identified and a set of management techniques suggested. This allows participants to self-tailor their management program to fit their beliefs and lifestyle. For example, if exercise is presented as a means of controlling blood sugar, dealing with stress and depression, and increasing general fitness, it is more likely that participants will begin or enhance an exercise program.

Persuasion: Participants are urged to share their action plans and other workshop activities with family and friends in order to create a supportive environment for change. In addition, moderators urge participants to do a little more than they are doing now. Finally, the use of bulletin boards and the Post Office assist group members to interact with and support each other.

Facilitators

Two trained facilitators moderate each BCBH workshop. Their role is to facilitate the discussion and to act as role models. They do not teach content. They see that participants log on to weekly learning modules and discussion areas, and send them e-mails if this does not happen. In addition, they monitor and stop any "flaming" type activities. They never offer individual medical advice and if asked about this either directly or through the discussion boards, they advise participants to seek the answer from their health care providers. Facilitators monitor all discussion boards daily and if a program participant offers medical advice to another, the facilitator cautions that it is best to check this out with health care providers and also notifies program staff.

All facilitators follow a protocol that provides detailed guidelines for the conduct of the program. All programs are moderated daily. This means that at least one of the facilitators reads all new posts, assists program participants with problem solving, and reports any difficulties to the project staff. (Project staff are available to facilitators online seven days a week.) Facilitators are heavily drawn from those with experience leading the small group CDSMP workshops. All facilitator training is conducted online. To validate the consistency of moderation and as a quality control, NCOA staff randomly observe at least 25% of the workshops.

Peer facilitators serve as influential role models for promoting self-management skills and self-efficacy. Considering the growing prevalence of chronic disease, the use of an Internet group format with peer facilitators should be easily sustainable.

Certified Diabetes Educators (CDEs) as Mentors

All Stanford online programs have a mentor overseeing the program and assisting the facilitators in handling problem situations. For BCBH-Diabetes, the mentors will usually be CDEs, experienced as online facilitators and available to address participant safety issues.

Demonstrated Outcomes

Stanford Patient Education Research Center (part of the Department of Medicine at the Stanford School of Medicine) recruited 761 adult study participants in 2006-2007. This sample included 110 American Indian/Alaska Native participants. All participants had type 2 diabetes, most had other diseases as well.

At six months A1C, patient activation and self-efficacy were improved for program participants compared to usual care controls. There were no changes in other health or behavioral indicators. The American Indian/Alaska Native group demonstrated reduced distress about their health and activity limitation. The subgroup with initial A1C above 7 demonstrated stronger improvement in A1C. At 18 months, self-efficacy and patient activation were improved for program participants (A1C was not measured).

Recruitment

Recruitment of both facilitators and participants may be done either by NCOA or by sponsoring organizations. NCOA works with the sponsoring organization to determine the best participant recruitment strategy for their population. It should always have an online component and take advantage of other communication vehicles and trusted sources when appropriate.

How does a participant travel through the workshop?

Potential participants join the program through an online registration process. When there are enough people expressing interest to fill a workshop (about 25 people), a workshop is formed. Potential participants are told that they will be contacted about the start date of the next workshop.

Approximately two weeks before the start of a workshop, the interested individuals are e-mailed an invitation to enroll on a secure website. After reading and agreeing to the informed consent, potential participants fill out a questionnaire, which contains demographic questions, and possibly screening questions, depending upon the client organization's preferences. Participants are not able to proceed without completing the consent form. They must also complete the questionnaire, although many of the questions are optional. Once participants have completed both the consent form and questionnaire, they are entered into the system and sent the program materials.

All participants are sent email information on how to enroll in their workshop and participate in the workshop for up to eight weeks. The actual workshop is six weeks, but the site may be made available for each workshop for an additional two weeks so that participants can continue communicating with one other after the formal portion of the workshop ends.

If the client organization opts for a clinical trial or study, the participants will be contacted again at the first interval (typically six months after they began the program), when they will be sent information via email on how to access their online follow-up questionnaire (if the client so chooses to have one administered). Each participant will receive up to four reminders by email, mail, and/or phone to complete the questionnaire. This process is/can be repeated at a second interval, usually 12 or 18 months after baseline.

For More Information

If you would like more information about the Better Choices, Better Health - Diabetes program, please contact Jay Greenberg, Senior Vice President, NCOA at jay.greenberg@ncoa.org.