Usability Testing of a Goal-Setting Platform

PURPOSE OF THE STUDY
This study will collect insights to inform the design and content of a new online goal-setting platform.

SIGNIFICANCE
At the center of behavior change is the ability to successfully set and achieve attainable goals. Centene is developing a goal-setting platform that will optimize user preferences with a focus on engagement so members are committed to the health goals they create. We will empower members to choose the online goal path that's right for them, driven at first by their ability to define their motivation and second by their priorities to feel well-informed and confident that they have the ability to change the desired behavior.

This study will inform the design of an online health behavior change program that includes health coaching and a goal-setting activity. Health coaching is a strategy used to promote health behavior change in a variety of contexts, including health insurance plans, workplace wellness programs and primary care clinics. Coaching combines health education with psychosocial support and behavior modification techniques in order to meet patient-determined goals – although the particular components used may vary by program (Hill, Richardson, & Skouteris, 2015; Wolever et al.). A positive effect of coaching interventions has been demonstrated for health-related behaviors such as physical activity, nutrition and weight loss (Hill et al., 2015; Olsen & Nesbitt).

Most often, health coaching is delivered in person or over the telephone. However, programs that deliver coaching via the Internet have been shown to provide many of the benefits of traditional health coaching at a lower cost (Simkin-Silverman, Conroy, Bhargava, & McTigue, 2011). Online coaching programs can reach patients whose schedules may not fit with traditional counseling programs. Personalized advice can be delivered via text messages or emails, and other educational resources (e.g., print booklets, interactive tools) can be distributed through the online program itself or by email.

Goal setting is incorporated into health coaching programs as a strategy for eliciting positive behavior change. Setting specific short-term goals can translate abstract objectives into clearer targets for participants to reach (Shilts, Horowitz, & Townsend, 2004). Commitment to goals is increased when goals are perceived to be possible and important (Locke & Latham, 1990). Goal setting, combined with support such as feedback and education, has been linked to positive outcomes for dietary and physical activity behaviors (Pearson, 2012).

Our study design and the selection of outcome measures was informed by recommendations for usability testing (Johnson & Turley, 2007; Morville, 2004; usability.gov; Yen & Bakken, 2011), usability standards of the International Organization for Standardization (ISO) (ISO 9241-11, 1998), the Technology Acceptance Model (TAM) (Davis, 1989; Legris, Ingham, & Collerette, 2003; Venkatesh & Davis, 2000), and published examples of similar usability studies (Atkinson et al., 2011; Atkinson et al., 2009; Glenton, Nilsen, & Carlsen, 2006; Peleg, Shachak, Wang, & Karniel, 2009; Verhoeven, Steehouder, Hendriz, & Van Gemert-Pijnen, 2010).

STUDY DESCRIPTION
The initial study will focus on the program's goal-setting platform to determine the most efficient and effective methods for engaging individuals. We will examine when to introduce coaching in the goal-setting platform and what to call it, how to present personalized targets for behavior change, and which data-capture methods are most efficient and intuitive for users in helping to set specific behavior change goals.
Up to 100 individuals 18 years or older from a convenience sample and 100 members from a Medicaid plan will participate in an in-depth, one-on-one interview. The individuals recruited from a health plan will be mailed a recruitment letter inviting them to participate. Project staff will follow up by phone to introduce the study, invite participation, confirm eligibility and schedule interviews. Reminder calls and/or emails will be sent to scheduled participants one week prior (when applicable) to the interview and one day before the interview.

The interviews will be conducted in a public setting – such as a university, clinic or community facility (library) – with separate areas to maintain the privacy of members. Interviews will be conducted on a range of days and times to accommodate those with different schedules. Interviews are expected to last 60 minutes to allow for obtaining written informed consent, answering questions, taking breaks (if needed), and collecting qualitative data.

Individuals will participate in one of the following interview types:

- Semi-structured qualitative interview with card sort exercises to identify participants’ familiarity, perceptions and preferences for “coaching” and related terms.
- Semi-structured task-focused interview with paper prototypes of the web-based program to assess usability and preferences for specific design elements in the goal-setting platform. Prior to the interview, participants will be asked to complete the NCQA-accredited Health Risk Assessment in order to increase the real-world context of the research tasks.

Participants will be given a $25 gift card for their time. Transportation reimbursement such as bus or metro passes will be available as needed.

**STUDY METRICS AND EXPECTED OUTCOMES**

Several research questions will be addressed: (1) How do people perceive and respond to terms such as “health coach,” and what terms have the largest mass appeal across health behaviors? (2) What are the effects on engagement, efficiency and user satisfaction when coaching is introduced before vs. after a health behavior change goal-setting activity? (3) How do different methods of proposing a goal-setting program to individuals affect engagement, efficiency and user satisfaction with the program? Specifically, we will compare goal-setting programs that a) recommended a specific behavior as a target for change to improve health and wellness, b) an individual chooses from a menu of health behaviors, and c) an individual chooses from a menu of broader life domains (health vs. non-health). (4) For task completion, efficiency and user satisfaction, what are the optimal data entry methods (free text vs. drop-down list) for users setting goals?

We will use the information obtained from the interviews to inform the design and development of an online coaching program. The goal-setting platform will be custom designed to meet the specific needs of members based on the one-on-one interviews and the findings. A summary of the survey results will be shared with participating health plans and other stakeholders at the conclusion of the study.

**REFERENCES**


Pearson, E. S. (2012). Goal setting as a health behavior change strategy in overweight and obese adults: A systematic literature review examining intervention components. Patient Education and Counseling, 87, 32-42.


