Proactive Health Consumerism: An Important New Tool for Worksite Health Promotion

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Setting the Stage

Employers continually struggle to contain annual increases in health care costs, which were 6% in 2007,¹ and are projected to be 5% in 2008 and 6.4% in 2009.² Nearly 60% of employers surveyed by Mercer recently reported that costs will be passed on to employees in the form of higher deductibles, copayments, or out-of-pocket spending caps. Rising health care costs are also driving health plans and employers to look for new tactics to better manage their populations by injecting consumerism into their existing benefit structure or designing entirely new plans to encourage members/employees to become proactive health consumers who take responsibility for their health care and the cost of that care.

The goal of such benefit plan restructuring is to change behavior in a way that boosts well-being for both the employee and the company. Implementation rates of consumer-directed health care plans (CDHPs) have varied, with adoption rates of 47% among large employers¹ and 7% among smaller employers.³ Overall, 11% of all employers reported being very likely to offer CDHPs in 2008, an increase from the 7% who did so in 2007.³ To date, however, enrollment in such plans has been low, averaging 15%.³ It is also safe to assume that some of the enrollment is attributable to no choice or default options in benefit design, which would further reduce the proportion of individuals who elect to enroll. Moreover, enrollment does not guarantee increased proactive behavior on the part of the employee or member.

Low enrollment or active engagement with CDHPs are examples of how traditional commu-
nication and education activities have yet to succeed in changing employee behavior. Many traditional programs take an action-oriented, one size fits all approach that assumes all participants are ready to become proactive and that the same message will work for everyone. As a result, participation is limited, which in turn limits potential impact. Increasing attention is now being paid to the factors that are necessary for the proliferation of health care consumerism. Chapman recently suggested including cost-sharing, health savings accounts, clear and consistent messaging, access to decision support tools, and incentives for behavior that contributes to personal health. While these factors are admittedly important, they may not be entirely sufficient in the absence of comprehensive, evidence-based tailored messaging to increase readiness to be more proactive.

The sense of health care entitlement held by many Americans that Chapman described is further evidence that many individuals are likely to not be ready to adopt proactive health consumerism, which includes a number of behavior changes ranging from making informed decisions to participating in decision-making with one's health care providers and using health services wisely. In other areas of health promotion and behavior change, we have seen that building it does not mean that they will come. It is now clear that the most effective programs and communications must be targeted to how employees think, how they will respond, and what will motivate employees to change behavior over time, as well as provide them with the right set of skills to help make the change permanent. By matching the programming activity to participants' readiness to engage in such strategies, engagement can be maximized. Increased engagement should in turn increase the population's exposure to targeted behavior change messaging. We consider this approach to fall under the label..."proactive health consumerism" (PHC).

Given that increasing PHC and health promotion are both behavior change challenges, we will apply lessons learned from health promotion campaigns to suggest an intervention approach that can maximize the level of proactive health consumerism in the targeted population. In the process, we will also demonstrate how PHC and health promotion can become integrated as parts of a more comprehensive approach to health behavior change programming that can enhance the health and well-being of employees and companies. In this edition of The Art of Health Promotion, we will be covering the following issues:

- What are the fundamentals of the Proactive PHC approach?
- Applying the lessons learned to develop effective PHC programs
- How should PHC programs be integrated with employer or health plan offerings?
- Strategies for assuring a successful PHC program

What Are the Fundamentals of the PHC Approach?

The fundamentals of the PHC approach have been informed and shaped by the lessons learned through an extensive amount of research on health behavior change in the field of health promotion. The primary lessons learned are highlighted below.

**Lesson 1:** High impact PHC programs need to be population-based and based on a stage of change paradigm rather than just being action-oriented.

Proactive health consumerism uses both population and stage paradigms. To maximize impacts of health behavior change programs, it is essential that programs be designed for entire populations and not just the relatively small minority who are prepared to take action. Unfortunately, the most widely disseminated
Internet programs for health promotion for smoking, weight and stress management are designed for individuals in the preparation stage who are ready to take action. A common complaint from employers is that too few employees participate in such programs.

Similarly, most tools that are available to promote health care consumerism are designed for employees in the action stage. Once again the common complaint is that most employees are not engaged with such programs.

Lesson 2: Proactive health consumerism programs need to be individualized and interactive with adequate tailoring on key change variables and with tailored communications changing over time based on repeated assessments.

Proactive health consumerism uses individualized and interactive paradigms. To date, PHC programs have relied heavily on standardized information that is essential for effective consumer decisions. In fact, AAPPO\(^4\) recently reported that consumerism depends on information and education. Having access to information for evidence-based interventions for treating a particular disease, for example, is essential for participating in shared decision-making. Such information can start the change process but cannot sustain the change process. This is similar to disease management programs that are heavily reliant on sharing information about standards of care for managing a particular disease. Such programs often do not include interactive behavior change programs that are tailored to the needs of each individual. These programs are often characterized as behavior change “lite,” and a major concern of employers is that they do not produce enough behavior change. Similarly, the most widely disseminated health promotion programs on the Internet are not adequately tailored. A baseline assessment is used to drive a series of communications over a six or eight week period. The assumption here is that all participants change at the same pace and follow the same pattern or none of the participants change. Neither of these assumptions is valid. Rather, dynamic tailoring that occurs on multiple occasions is likely to improve outcomes.\(^5\)

Coaching programs for health promotion and disease management are typically described as being based on the stage model or Prochaska model. But, the only construct they use from the Transtheoretical model (TTM) is stage of change. Stage is a construct; it is not a model. A model or theory is a systematic relationship between constructs. Research on smoking cessation indicates that programs that include only stage of change from TTM have only about a 40% chance of being effective.\(^6\) Programs that include other TTM constructs, such as pros and cons of changing, self-efficacy and 10 processes of change have a 60% to 90% chance of being effective. Further support for tailoring on multiple theoretical constructs comes from a recent meta-analysis of 57 studies on tailored communications. Noar et al.\(^5\) reported that interventions tailored on behavior only had the smallest effects on outcomes as compared to the larger effects for interventions tailored on theoretical constructs and behavior. Furthermore, tailoring on 0–3 behavior change constructs resulted in a smaller effect size than tailoring on 4–5 constructs.\(^5\)

Lesson 3: Complex problems involving multiple behaviors and multiple roles need to apply sophisticated and systematic strategies if participants and providers are not to be overwhelmed by too many demands of a program.

Proactive health consumerism uses multiple behavior change paradigms. Proactive health consumerism involves a complex set of multiple behaviors, such as engagement in informed decision-making, shared decision-making and health behaviors to prevent or manage disease. Most health promotion and disease management programs do not have a systematic and sophisticated approach to multiple behavior change. Some experts still advocate changing only one behavior at a time because it is hard enough to change one behavior.\(^7\) Others advocate that costly coaching should only be applied to behaviors in the preparation stage of change to deliver the biggest bang for the buck. But, in populations with four health risk behaviors, less than 10% of the individuals are prepared to change two or more behaviors.\(^8\) Almost two-thirds of these populations are not prepared to change even one of their four health risk behaviors. These are the highest risks and highest cost individuals and treating only behaviors in the preparation stage will not produce the types of impacts needed to enhance health and help control health care costs.
Fortunately, programmatic research is demonstrating that three and four behaviors can be effectively changed on a population basis using TTM tailored interventions. Further analyses show that individuals changing three behaviors are just as effective as those changing two behaviors that are just as effective as those changing a single behavior.

More recent research demonstrates that multiple behaviors can be changed without full tailoring for each behavior. With cholesterol management, adherence to medication was treated with full tailoring and produced large effects: Only 15% of the treated group were non-adherent at 18 months compared to 45% of the control group. Exercise and diet were treated via targeting only on stage of change. In both cases the treatment group had about twice the success rates for exercise (40% vs. 20%) and for diet (22% vs. 11%).

These interventions reflect the importance of covariation in which a treatment group is more likely to take action on a secondary behavior when taking effective action on a primary behavior. Such covariation is much less likely to occur in control groups indicating that it is not a particularly strong naturally occurring phenomenon. Johnson et al. reported that individuals receiving computer tailored interventions for multiple behaviors related to weight management were 2.50–5.18 times more likely to make progress on one behavior after taking action on another as compared to 1.24–2.63 times more likely among individuals in the control group.

Another strategy for producing multiple behavior change with complex problems is to apply integrative themes that connect to a broad range of behaviors and risks. “Bullying” is an example of such complexity and involves a range of behaviors including hitting, kicking, stealing, damaging possessions, ostracizing and mean gossiping. Bullying also involves at least three roles of bully, victim and passive bystander.

Bullying is one of the most important behaviors threatening the physical and mental health of students across a broad range of grades and school systems. The evidence-based interventions that were available were so complex and costly that most schools could not apply them. In an era of testing and teaching to tests all too little time is available for health promotion. So, we decided to produce population treatments based on an integrative theme that could drive change across behaviors and roles. The theme was relating with respect. In high school, middle school, and elementary school populations treated in separate studies, our TTM-tailored interventions produced two to four times greater success across all three roles than found in the control schools.

Applying the Lessons Learned to Develop Effective PHC Programs

The lessons learned from behavior change programs for health promotion have now been used to develop a comprehensive and integrative PHC program, which will be described to illustrate how the principles described above can be employed.

First, the program had to be population and stage-based. Second, it had to be individualized and interactive, drawing on the most effective principles of tailored communications and interactive exercises. Third, it had to apply sophisticated multiple behavior and multiple role strategies. With PHC, the theme or higher order construct that could drive change is being proactive by taking more responsibility for health, health care, and health care costs. Three roles were also conceptually identified: patient, purchaser, and provider. Patient is the role of taking care of one’s health through wellness behaviors, like physical activity, smoking cessation, healthy diets and stress management. Purchaser is the role of selecting and using health care services from professionals. Provider is the role of purchasing and selecting health care services for a child, spouse, parent, or other dependent. Besides the wellness behaviors we identified, three additional behaviors are common to patient, purchaser, and provider: (1) informed decision-making; (2) shared decision-making; and (3) shared financial responsibility for health care costs. As Chapman did, we identified a number of additional prerequisites for the program, including:

1) clear communication about why their employer’s health care costs matter to employees so that they become more engaged in managing costs and a
clear definition of what it means to be an “engaged” consumer; 18-21
2) the right tools and resources, including information on specific health care issues, pricing transparency and quality/performance information; 20,21-23
3) “seamless support across an array of communication channels and analytics infrastructure to optimize engagements with consumers;” 24
4) encouragement for healthy lifestyles through lifestyle behavior change programs; 21,23 and
5) incentives and other methods of engagement to “encourage personal involvement in altering health and health care purchasing behaviors.” 26

With the behaviors and roles established, the principles of the TTM were used to guide the tailored communications. When applying the TTM to a new behavior or set of behaviors, it is necessary to identify the action criteria. What would people be doing if they were in action for being a proactive health consumer? Identifying the action criteria includes revising definitions used by different experts in the field with the focus on what criteria are agreed upon across experts and understood by consumers. The result of the comprehensive and iterative process was the following definition of the essential elements of being a proactive health consumer on behalf of one’s self and one’s family:

1. Participating as a partner in decision-making with health care providers (such as doctors, nurses, physicians’ assistants, and dieticians);
2. Learning about and carefully considering the options before making decisions regarding health insurance coverage, health care providers, tests, treatments, and end of life care;
3. Engaging in ongoing health and wellness activities (such as exercise, monitoring weight, and taking medications as directed); and
4. Using health services wisely and in a financially responsible way (such as asking if a generic drug could work for a condition).

Once the definition was established, a measurement development study was conducted to test the initial application of TTM to PHC and to develop assessment instruments that can be used to drive tailored communications designed to help populations become and maintain PHC. The resulting measures and model development provided the foundation for the intervention development. Through the use of validated assessments and the Transtheoretical Model- and empirically-based individualized guidance, the Proactive Health Consumer Program: Making Health Happen was developed to promote active participation in managing health and health care for one’s self and one’s family.

The user’s experience begins with a TTM-based computer-tailored intervention, which provides individualized feedback on the global concept of being a proactive health consumer. During the computer-tailored intervention, the user proceeds through a series of screens that include questions and feedback on different aspects of being a proactive health consumer. The feedback screens are based on each user’s answers to the questions and a set of empirically-derived decision rules. After completing the computer-tailored intervention, the user is directed into a dynamic portal that is populated with a variety of different activities and resources specifically chosen for the user based on his or her previous answers. The portal contains stage-tailored interactive activities and quizzes, as well as a health information database. In addition to containing overall stage-matched activities to facilitate stage progression for becoming a proactive health consumer, the portal includes four areas that provide additional specific stage-matched activities to address the four main elements of PHC.

The Informed Decision-Making section provides step-by-step guidance through the decision-making process for choosing health plans, providers, and other health care decisions. This includes worksheets for four of the seven steps to making an informed decision, external links to comparative information, a satisfaction with the decision assessment, and information on next steps.

The Shared Decision-Making section has information and activities to help consumers:

- Assess how well they communicate with their health care providers
- Assess how well their health care providers communicate with them
- Identify the barriers to communication and strategies for dealing with them
- Consider their personal values and preferences and the importance of expressing them
- Make the most of office visits
There are also personal testimonials, scripts, and worksheets, all geared to readiness to share in decision-making with health care providers.

The *Financial Decision-Making* section includes a quiz regarding screenings and immunizations needed at various ages in one’s life, questions to ask providers regarding cost of services, cost calculators, advice on challenging barriers to using services wisely, myths and facts about reducing health care costs, and interactive testimonials with decision trees.

The *Health and Wellness* section links users to the online Pro-Change LifeStyle Management programs for smoking cessation, exercise, stress management, weight management, depression prevention, cholesterol management, and high blood pressure management.

The computer-tailored intervention is available once monthly, and users have unrestricted access to the portal. The individualized feedback participants receive, as well as the activities on the portal, are updated after each interaction with the computer-tailored interaction. Ideally, as Chapman recommended, program utilization is tied to participation in the Proactive Health Consumer Program. To further increase participation, proactive e-mail prompts should be a configurable feature of the system.

Regarding indices of utilization, participation in each element of the program can be tracked. Outcome metrics include stage movement, behavior change, and progress on other important behavior change constructs, as well as a validated measure of productivity—an obvious key metric for employers.

**How Should PHC Programs be Integrated with Employer or Health Plan Offerings?**

For a PHC program to be successful, true integration must occur in one of two ways depending on what the employer or health plan currently offers. In the event that an employer or plan has a well-established and comprehensive wellness, health promotion, and benefits portal, the PHC program can be integrated into the existing portal. Because the Pro-Change PHC program is a flexible software platform, it can be integrated into the back-end of current portals, with user registration and identity verification passed on the back-end to allow single sign-on. The second option is the PHC program can serve as the integrative platform for less well-developed health promotion offerings. The latter is clearly more straightforward and would simply involve adding links within the PHC portal to any elements that the employer offers (e.g., benefit information, personal health record, benefits calculators, etc.).

**Strategies for Assuring a Successful PHC Program**

Regardless of the integrative approach, several important elements will be needed to ensure the successful dissemination of the program within businesses or health plans. The first is adequate advanced communication in multiple channels (e.g., Web site, face-to-face, direct mail, inter-office mail, e-mails, and webcasts) about its availability. The communication about the program, which ideally comes from senior management to reflect the commitment of leadership to the program, needs to underscore the importance of assuming responsibility for health care given that employers cannot continue to sustain the current annual increases in health care costs. Terry recommends highlighting the potential personal effect on the employee of failing to contain health care costs (e.g., smaller or no pay increases or bonuses, fewer new hires).

The messages, however, must emphasize that participation in a PHC program is not simply designed to cut costs for the employer, but is also in the best interest of the employee. The messaging must also be tailored to the target population and emphasize that the program offers something for everyone. Terry recently reported that 82% believe that they are already being a proactive health consumer. Therefore, the communications must emphasize all of the components of PHC and let employees or members know that the program will be appropriate for them regardless of how well they think they are doing or how ready they are to change their behavior. In addition to communications,
Experts have recommended that the plan involve incentives\(^6\) and/or premium reductions\(^2\) for those who participate.

In the current program, once participants log-in, the PHC program offers a comprehensive Health Risk Intervention to provide targeted feedback on readiness to change leading behavioral risks and what one or two behavior change strategies would be most helpful to the participant at that time. Throughout the program, multiple links can be included to tools offered by the employer or plan (e.g., cost and quality information on physicians, laboratories, or hospitals\(^4,\)\(^2\) or personal health record, which are considered important elements of a PHC program\(^3\)). Once a participant completes an initial interaction with the PHC program, proactive email reminders can be sent to encourage return visits.

Depending on the employer or plans' preferences and needs, evaluation questions can be added to the program or to the computer-tailored intervention to collect satisfaction data. The data regarding behavior change (i.e., progression through the stage of changes, changes in TTM constructs, or productivity) is also captured by the program. These data elements can be exported easily to a larger employee or plan database that contains additional indices of health care utilization or claims, absences, short and long-term disability claims, and so forth.

Conclusions

Employers and health plans need to engage in more effective health consumerism efforts with their respective populations. More traditional paradigms, such as the action paradigm, are not likely to be effective enough in enhancing health consumerism among working Americans. The PHC approach as described here and the initial prototype program highlighted above, illustrates one application of a leading model of behavior change to a formidable multiple behavior change challenge: increasing proactive health consumerism among employees and health plan members. Chapman\(^5\) has asserted that we are entering a... “brave new world of health consumerism.” Hopefully, we will do so informed with insights and lessons learned from our successes and failures with other health promotion behavioral challenges. We believe that the future of health and health care consumerism requires a systematic, integrated, theoretically-driven, interactive, and individually-tailored approach for not just single behaviors, but an expanding array of important multiple behaviors.

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