

ences in recruitment. Control practices were able to personally use the tools after completing patient enrollment, which may have motivated control practices to complete enrollment quickly. The telephony system we used for research purposes presented a barrier, decreasing our ability to detect behavior changes at the individual level. For both groups the average number of weeks participants reported data was very low because many patients reported only 1 week of data.

## CONCLUSIONS

Interventions designed to fit unique interests and needs of each practice, including easy-to-use informational resources and incentives, can change behavior and promote a healthy primary care office. Personal success with behavioral change activities and practice-level enthusiasm for change did not translate to enhanced patient recruitment, however. Fitting health promotion into personal routines for clinicians and staff seemed easier than integrating LEAP tools into the routine of busy primary care practice. Although early findings suggest a very modest impact of the LEAP tools for both control and intervention patients, enhancing coaching skills and using simpler self-monitoring systems might improve the program's impact.

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**Key words:** Primary care; behavior change; practice culture; exercise and diet; physical activity; diet; practice-based research network; health behavior

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# Mutual Learning and the Transformation of Study Intervention Tools

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## PURPOSE

We planned a multicomponent intervention to increase primary care practices' provision of health behavior advice and patients' access to resources for health behavior change. The intervention included 2 tools: (1) a Web-based resource (<http://www.arch2healthyhabits.org>) consisting of a database

of community programs for health behavior change (eg, smoking cessation classes) and links to health behavior self-management resources (eg, change strategies), and (2) a prescription pad for health behavior change (Pad).<sup>1</sup> The pocket-sized Pad, measuring 4 in by 6 in, was designed to facilitate clinician-patient discussion of health behaviors and to prompt treatment planning. The uniform resource locator (URL) and a

**Table 1. An Example of the Sequential Transformation of the Pad**

Practice No. *	Need or Idea	Innovations and Modifications in Tools or Processes
2	Requests a list of titles of all support materials for health behavior change that are available on the Web site to more easily direct patients to specific topics.	Facilitator generates a hard-copy list of available titles organized by topic.
4	Requests paper handouts of patient support materials printed from the Web site for patients with low computer literacy. Requests handouts be organized in a number-based filing system used in conjunction with the list of titles from practice 2.	Facilitator prints selected handouts from Web site and numbers them for easy organization and access. List of titles of patient support materials is numbered, resulting in a numbering key used by staff to identify available handouts.
5	Requests a paper handout system similar to that of practice 4, but suggests a patient self-serve file would better suit their needs. Suggests that clinicians should write the handout number on the Pad to allow patients to access handouts in the file themselves.	A numbered file of handouts is placed in a publicly accessible area so that patients can retrieve handouts themselves as they exit by referring to the number their clinician wrote on the Pad.
6	Requests a patient self-serve handout system similar to that of practice 5. Clinical staff notes inefficiency of writing a number on the Pad and suggests placing handout numbers on the Pad itself so clinicians can simply circle the appropriate number.	Facilitator expands the size of the Pad from a half sheet to a full sheet to accommodate a list of numbers.
7	Requests a self-serve handout system, but notes inefficiency of looking for handout title on a separate piece of paper, then circling a number; suggests incorporating the title listing/numbering key itself on the Pad.	The title listing/numbering key is fully incorporated into the full-page Pad.

\*Practices were numbered in the order of enrollment.

checklist of major sections of the Web-based resource were preprinted on the Pad to assist clinicians in directing patients to the resource for additional change support. This article describes the exchanges between the study team and the participating practices that resulted in successive innovative iterations of the Pad.

## METHODS

Seven practices from the Research Association of Practices (RAP), a practice-based research network, participated in the study. Practices were recruited and interventions were implemented on a rolling basis. The study had a pretest-posttest design and involved both quantitative and qualitative data collection. A practice facilitator collected 1 to 2 days of baseline ethnographic data including observations of the practice's physical systems (eg, computer availability), current approaches to providing health behavior advice, and staff attitudes toward health promotion. Similar data were collected after the intervention. In combination with baseline patient survey data about current health behaviors and receipt of health behavior advice, the qualitative data were summarized into a practice report.

The practice facilitator led a practicewide planning meeting to discuss the baseline data and how the intervention tools might be tailored and implemented. At the close of the meeting, the facilitator encouraged formation of a smaller team consisting of a variety of practice members. This team and the facilitator met several times to brainstorm ideas, discuss options, and generate final tailoring decisions. Team decisions were typically arrived at by consensus, although clinicians' opinions tended to carry greater weight in most of the practices.

After implementation of the intervention, ongoing interchanges between the practice and the facilitator continued in the form of telephone calls with key team members to learn how implementation plans were proceeding, drop-in visits to check supplies and maintenance of intervention procedures, and for some practices, additional team meetings to solve implementation problems. Field notes documenting each contact with a practice member were recorded.

## LESSONS LEARNED

The participatory approach to tailoring the intervention and the ongoing implementation support provided by the facilitator led to a synergistic exchange of creative ideas among practices, resulting in substantial changes to the Pad. With the practice facilitator acting as a conveyor of key information about each practice's tailoring decisions, accumulated wisdom was shared at practice team meetings to adapt the tools in successively more innovative ways. The facilitator's stories of past developments from previously launched practices spurred brainstorming and discussion at each successive practice, resulting in additional modifications in accordance with the needs of that practice. Table 1 depicts the sequence of events that led to one major change in the Pad.

Through ongoing, iterative conveyance of practices' innovative ideas via the facilitator, the Pad's design and method of use were further modified. For example, practice 6 engaged medical assistants to check off health behavior topics the patient wished to discuss. The Pad was then clipped to the chart for the clinician. Used in this manner, the Pad was transformed into a screening tool and clinician reminder. Other innovations included

printing the Pad in a distinctive color to enhance its use as a clinician reminder and adding visual icons for use with low-literacy patients in place of written advice.<sup>2</sup> What started as a prescription pad for health behavior change was transformed through the cumulative wisdom of 7 practices into a new, multipurpose tool.

## CONCLUSIONS

Although we intended to tailor the tools to practices' needs, the methods used in this study facilitated changes in the tools' intended use and design beyond our expectations. For such innovations to occur, the research team must assume roles as both learners and conduits of cumulative participant wisdom, rather than as experts.

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**Key words:** Health promotion; practice-based research network; health promotion/disease prevention; Internet; health behavior; patient education

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# Minnesota Clinicians Motivating Health Improvement (MINIT) Study: Motivating Healthy Habits

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## PURPOSE

The MINIT (Minnesota Clinicians Motivating Health Improvement) Study was designed to target 4 risk behaviors that are strongly linked to a variety of negative health outcomes in the United States: (1) cigarette smoking, (2) sedentary lifestyle, (3) poor diet, and (4) risky drinking.

The specific purpose of this investigation was to field-test an interactive educational program that implemented a motivational approach to behavior change in order to enhance the use and success of established behavior-specific modification programs.

## METHODS

We recruited for the study 114 patients from 10 participating community-based primary care clinics within the Minnesota Academy of Family Physicians Research Network (MAFPRN). Subjects were initially identified by the physician or site coordinator as having 1 of the 4 targeted risk behaviors, and were not actively participating in behavior change or a behavioral intervention program. After introducing the study to patients and obtaining appropriate consent, we asked participants a set of questions to assess their readiness to change. They were also assessed on a scale of 10 motivational