

## The WISEWOMAN Projects: Lessons Learned from Three States

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### ABSTRACT

**Background:** The WISEWOMAN program provides chronic disease risk factor screening, lifestyle interventions, and referrals to financially disadvantaged women who participate in the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). Three states (Arizona, Massachusetts, and North Carolina) participated in Phase One (1995–1998).

**Methods:** Using a case study approach, we reviewed documents and conducted telephone interviews to compare the three projects' design and execution. The interviews, carried out in mid-2002, involved a convenience sample of project coordinators, project directors, researchers, and one CDC project officer ( $n = 9$ ).

**Results:** Many providers were overwhelmed by WISEWOMAN's research component and disliked its lack of flexibility. Researchers emphasized that high-quality evaluation requires resources and attention. Informants described the challenges of integrating WISEWOMAN with state BCCEDP programs that are in varying development stages and recommended changes in organizational culture and provider practices. Regarding implementation, informants emphasized the need for adequate and appropriate planning, buy-in, training, professional support, and outreach. Our sample also noted that WISEWOMAN projects tend to be labor intensive.

**Conclusions:** WISEWOMAN projects face challenges of integrating clinical and lifestyle interventions, reaching beyond a focus on individuals, marshaling substantial resources, and introducing complex interventions into stretched healthcare environments. The three Phase One projects were deemed successful in reaching underserved women, developing a more comprehensive women's health model, strengthening linkages to primary healthcare, experimenting with innovative behavioral interventions, and tapping into women's roles as social support providers and family/community gatekeepers.

### INTRODUCTION

THE WELL-INTEGRATED SCREENING AND EVALUATION for Women Across the Nation (WISEWOMAN) program supports demonstration projects that provide preventive health services to

low-income and uninsured women aged 40–64.<sup>1</sup> The goal of the WISEWOMAN initiative is to test the feasibility and effectiveness of providing chronic disease risk factor screening, lifestyle interventions, and referral services to financially disadvantaged women who are participating in

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the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).<sup>2</sup> NBCCEDP and WISEWOMAN are federally mandated programs administered by the Centers for Disease Control and Prevention (CDC) in collaboration with state departments of health, tribal associations, and territories.

During the first phase of WISEWOMAN (1995–1998), the CDC awarded funding to Arizona, Massachusetts, and North Carolina. All three projects used a comparison-group design to compare the effectiveness of a high-intensity enhanced intervention with that of a low-intensity minimal intervention.<sup>3</sup> Women in both comparison groups received free cardiovascular disease (CVD) risk factor screening as well as breast and cervical cancer screening provided through the NBCCEDP. Each project had the latitude to develop behavioral interventions for the high-intensity group in accordance with their populations, settings, interests, and resources (Table 1).

The Arizona WISEWOMAN project used community health workers, called *promotoras*, to encourage primarily Hispanic women to increase physical activity levels. The *promotoras* provided physical education classes, organized walking groups, and offered individual support and encouragement to women enrolled in the enhanced intervention. The centerpiece of the North Carolina enhanced intervention was a structured diet and physical activity assessment and intervention package titled *New Leaf . . . Choices for Healthy Living*, which guided three clinic-based counseling sessions involving individual tailoring and goal setting. In Massachusetts, the WISEWOMAN project held clinic-based mass screening events (including counseling and education) for women in both comparison groups. Women in the enhanced intervention group were invited to take part in additional physical activity and nutrition interventions.

This paper reviews and synthesizes lessons learned from Phase One. Because the interventions' effectiveness is summarized elsewhere,<sup>4</sup> we focus on project design and implementation. Many lessons learned from the three completed projects were used to improve the programs funded during the second phase of WISEWOMAN, which began in 1999 and is ongoing. Thus, the Arizona, Massachusetts, and North Carolina WISEWOMAN projects are considerably different today from those described here.

## MATERIALS AND METHODS

We used a case study design<sup>5,6</sup> and two data collection methods (document review and telephone interviews) to examine the experiences of the three Phase One projects (1995–1998). Beginning with a review of written sources, we scrutinized published papers<sup>3,4,7,8</sup> and project documents, including final reports for all three states. The documents were used to identify central project features, achievements, and limitations and to develop a list of questions to guide semistructured telephone interviews. Interview questions focused on integrating chronic disease prevention with breast and cervical cancer screening, combining research and service, program startup, outreach and recruitment, program models, screening, and overall strengths and weaknesses. In mid-2002, the first author (C.I.V.) interviewed a convenience sample of nine key informants who were involved with WISEWOMAN during Phase One, were available at the time of the interviews, and were interested in participating. Informants included project coordinators, project directors, researchers, and one CDC project officer. No program participants were interviewed. Using extensive notes taken during the interviews, we compared informants' responses to each question, returning to the document review to amplify some responses. We then identified cross-case lessons and themes<sup>9</sup> pertaining to WISEWOMAN's design and the implementation experiences of the three states.

## RESULTS

### *Program design*

The design of the three demonstration projects shared two elements. First, the projects were required to have strong research components to assess screening effectiveness and compare low-intensity and high-intensity interventions. Second, the projects incorporated new services and activities into the established NBCCEDP framework. Both design elements gave rise to challenges and unexpected outcomes.

*Combining research and service.* Most research-service projects require juggling the agendas and priorities of researchers and service providers.<sup>10</sup> The Phase One WISEWOMAN projects were no

TABLE 1. KEY FEATURES OF WISEWOMAN PROJECTS, PHASE ONE (1995–1998)

| Feature  | Arizona   | Massachusetts  | North Carolina   |
|--|---|--|--|
| Population of interest and role of NBCCEDP <sup>a</sup> in recruitment | Primarily Hispanic women<br>Recruited to both programs concurrently   | All women<br>Recruited irrespective of prior participation in NBCCEDP  | All NBCCEDP participants with high serum cholesterol or elevated blood pressure <sup>b</sup><br>Recruited during NBCCEDP examination |
| Outreach strategies  | Local radio<br>Local cable television<br>Health fairs<br>Mailings<br>Health worker referrals<br><i>Promotoras</i>                   | Newspaper announcements<br>Local cable television<br>Community meetings<br>Mailings<br>Community health worker and clinician referrals   | NBCCEDP examination  |
| Minimum intervention   | Examination in NBCCEDP clinics <sup>c</sup><br>Counseling<br>Referrals  | Examination at clinic-based screening sites <sup>c</sup><br>Counseling<br>Referrals  | Examination in NBCCEDP clinics <sup>c</sup><br>Counseling<br>Referrals<br>Resources  |
| Enhanced intervention  | Organized by <i>promotoras</i><br>Physical education classes ( <i>Camine con Nosotros</i> )<br>Walking groups<br>Individual support | Site-specific activities<br>Physical activity programs<br>Mall-based and outdoor walking<br>Cultural festivals<br>Supermarket tours<br>Cooking classes<br>Assessment tool<br>( <i>New Leaf</i> ) | Individually tailored counseling in NBCCEDP clinics<br>Assessment and intervention tool<br>( <i>New Leaf</i> )                       |

<sup>a</sup>NBCCEDP, National Breast and Cervical Cancer Early Detection Program.

<sup>b</sup>Serum cholesterol  $\geq 200$  mg/dl or systolic BP  $\geq 140$  mm Hg or diastolic BP  $\geq 90$  mm Hg.

<sup>c</sup>Breast and cervical cancer screening and CVD measures (height, weight, blood pressure, total cholesterol, high-density lipoprotein [HDL] cholesterol), glucose (AZ and MA only).

exception (Table 2). Whereas project evaluators principally sought to ascertain the effectiveness of enhanced and minimal interventions, agencies and providers focused on delivering interventions and providing the best possible services to women in need. As a result, many providers considered the evaluation component a burden. Observing that research goals are often poorly understood outside academic institutions, informants noted that providers disliked the lack of flexibility and were unaccustomed to the rigor imposed by project research requirements. Providers at some sites reportedly expressed frustration at not being able to tailor projects to local conditions. One project's use of computerized screening and evaluation tools, however, was viewed as helpful in giving evaluators timely access to data while reducing provider paperwork and facilitating client follow-up.

Informants involved in the research component emphasized that high-quality evaluation requires ongoing attention. However, staff turnover was mentioned as a factor that constrained some projects' ability to guarantee consistency. In one state where an evolving assortment of individuals and agencies shared responsibility for data collection and management, "having too many hands touching things" made it difficult to coordinate tasks, provide oversight, and ensure an unobstructed data flow. An informant suggested that projects maintain written process records to ensure institutional memory.

*Combining programs.* Because BCCEDP programs exist in every state, the central tenet of the WISEWOMAN projects—using the NBCCEDP foundation to offer underserved women more comprehensive preventive services—makes con-

TABLE 2. PROGRAM DESIGN: COMBINING RESEARCH AND SERVICE

| <i>Themes</i>  | <i>Illustrative quotes</i>   |
|--|--|
| 1. Research can be overwhelming to service providers and agencies.                               | Local clinics are overstressed, underfunded, and understaffed. Evaluation is an easy thing to let go when you're pressed with people coming to your front door who need services.  |
| 2. Research is poorly understood by service providers.   | The service providers were not looking at stuff from a research perspective, they were just "filling out paperwork."   |
| 3. Research limits program flexibility and imposes extra requirements.                           | A research and evaluation component puts a lot of handcuffs on what you can and can't do—it makes it a more rigid approach.  |
| 4. Computerized instruments can ease providers' data collection burden while enhancing services. | A big positive of using computerized questionnaires [was that] the providers could instantly get a summary report of the women they needed to contact for follow-up. Do you know how long it would have taken to send the data in, enter the data, and clean the data? |
| 5. Quality research requires attention and resources.  | If you expect to have something that's worth showing, it takes as much or more commitment to do evaluation as to build the program.  |

siderable sense. Informants agreed on the theoretical merits of a one-stop shopping approach to delivering women's health services. Informants' conclusions about the actual fit between NBC-CEDP and WISEWOMAN were mixed, however, suggesting that the piggyback model may have limitations (Table 3).

The NBCCEDP, by definition, is rooted in clinic settings, addresses individual behaviors, offers a finite set of annual screening services (i.e., pelvic examination, Pap smear, clinical breast examination, mammography), and focuses on diagnosis and treatment.<sup>2</sup> WISEWOMAN was conceptualized as a more wide-ranging package of services and activities that includes chronic disease risk factor screening and emphasizes lifestyle interventions that are not necessarily clinic based.<sup>1</sup> Professionals involved in Phase One observed

that blending two programs with such different aims had been challenging. Informants also said that the WISEWOMAN projects should have more explicitly sought to change organizational culture and individual providers' medical-model outlook and practices.

Informants agreed that coordination of NBC-CEDP and WISEWOMAN services depends in part on the maturity of a given BCCEDP program. Specifically, a BCCEDP program's development stage may influence strategies used to attract and enroll WISEWOMAN participants. In North Carolina, county health departments had an established and successful breast and cervical cancer screening program when the state launched WISEWOMAN. Local agencies capitalized on existing outreach strategies and enrollment procedures to recruit BCCEDP participants into WISE-

TABLE 3. PROGRAM DESIGN: COMBINING PROGRAMS

| <i>Themes</i>  | <i>Illustrative quotes</i>  |
|--|---|
| 1. It can be difficult to blend programs with different emphases and aims. | A woman who is overweight or who has high blood pressure has problems that are not going to be fixed in 3 months—we're talking about lifelong change. It's not about, "Come in, get a test, then don't worry for the other 364 days a year!" We're talking about very different approaches. |
| 2. WISEWOMAN calls for changes in providers' attitudes and behaviors.      | [WISEWOMAN required] a lot of changes in the way that providers worked. [The WISEWOMAN approach] was a foreign entity to the NBCCEDP <sup>a</sup> staff and providers.  |
| 3. The NBCCEDP implementation stage affects recruitment to WISEWOMAN.      | We were working with folks who were already enrolled in the NBCCEDP program. Clients were already comfortable coming to local health departments for services; there were very few refusals.  |

<sup>a</sup>NBCCEDP, National Breast and Cervical Cancer Early Detection Program.

WOMAN. In Massachusetts, because the 3-year-old BCCEDP program was undergoing numerous changes when WISEWOMAN was initiated, independent outreach strategies were developed. These efforts and the project's appealing and innovative screening events drew women into WISEWOMAN regardless of their previous participation in the BCCEDP. Because all women received both sets of screening services once enrolled, however, the WISEWOMAN project in effect recruited women concurrently to both programs. In the words of Massachusetts BCCEDP providers, WISEWOMAN "helped grow our program" and "brought in business." Finally, Arizona launched its BCCEDP and WISEWOMAN programs at the same time. Because of the simultaneous start up, participating clinics found it difficult to differentiate between programs. WISEWOMAN *promotoras* ended up recruiting women to both programs and often spent time and resources helping WISEWOMAN participants address breast and cervical cancer screening issues.

Organizational capacity and strong performance as BCCEDP sites generally determined clinics' eligibility to participate in WISEWOMAN, and informants confirmed that organizational factors had shaped clinics' receptivity to WISEWOMAN. For example, many county agencies assigned to North Carolina's enhanced intervention already had experience with *New Leaf* educational materials, having participated in a prior study called *Food for Heart*.<sup>11</sup> Local health departments appreciated broadening the NBCCEDP's scope and reportedly were excited about adding CVD screening and prevention services. Similarly, most eligible BCCEDP clinics in Massachusetts responded favorably to the WISEWOMAN project's request for proposals and were willing to experiment with a comprehensive service delivery approach. In Arizona, development of both the NBCCEDP and WISEWOMAN programs was constrained by the "heavily HMO" orientation of the state's healthcare system. Private sector agencies displayed little interest in WISEWOMAN until the state increased its proposed reimbursement rate and offered practical support to participating clinics.

### *Implementation*

Our review focuses on three critical phases of WISEWOMAN implementation: planning and

startup, outreach and enrollment, and screening and intervention (Table 4). Follow-up and tracking issues have been examined elsewhere (Mathematica Policy Research, Inc., Washington, DC, April 18, 2002. Summary of WISEWOMAN Consultant Group Meeting I: Tracking and Follow-up in WISEWOMAN. Final report to CDC).

*Planning and startup.* With a startup date that followed closely on funding notification, the three projects had limited time for planning. Informants unanimously agreed that their projects would have benefited from a more extended planning period, even as much as 1 year. As one informant noted, WISEWOMAN projects must accomplish a variety of initial tasks, including fostering communication between program and clinic managers "to talk about and address the burden of expanded services," enlisting buy-in from key clinic staff, developing materials and procedures, formulating referral protocols, and identifying funding sources for follow-up care. The lack of a sufficient planning phase made it difficult to recruit fully informed agencies. As noted in one project document, agencies were enlisted to participate "before they had full details of what would be expected of them and before they had planned for the intervention." In part to address this information gap, informants emphasized the need to cultivate buy-in from institutions and individuals ranging from higher-ups and medical directors to frontline providers. Articulating the need to build support for WISEWOMAN as distinct from NBCCEDP, informants described the importance of clarifying "roles, procedures and rules before startup" and engaging in "constant checkup to build program identity." An informant noted that frontline support from service providers might be contingent on project demands: "It's difficult to get buy-in from local providers if you are trying to give them too much to do."

Informants were adamant about the need for appropriate provider training, admitting that some approaches had not been successful. In Arizona, providers were apparently "overwhelmed" by a 1-day training blitz that addressed CVD and breast and cervical cancer. In North Carolina, centralized videoconferences did not always reach the staff most involved with the project and failed to address provider skepticism about older women's capacity for behavior change. On the other hand, the labor-intensive approach used in Mass-

TABLE 4. WISEWOMAN IMPLEMENTATION

| <i>Implementation stage</i> | <i>Theme</i>   |
|-----------------------------|--|
| Planning and startup        | Projects need a planning phase.<br>Projects benefit from buy-in at all levels.<br>Providers need appropriate onsite training.  |
| Outreach and enrollment     | Multiple channels and personal contact are effective.<br>Reaching out to women in their communities is important.<br>Recruitment is enhanced when funds are designated for outreach.   |
| Screening and intervention  | Each program model has strengths and limitations.<br>WISEWOMAN's two-pronged focus on risk factor screening and lifestyle intervention is labor intensive.<br>Agencies and professionals involved in WISEWOMAN need individualized support.<br>WISEWOMAN projects require a commitment from participants.<br>The types of services offered and their availability free of charge may influence program participation.<br>General barriers (e.g., transportation) and barriers specific to diet and physical activity may affect participation. |

achusetts provided up to 4 days of on-site training that included many elements considered vital to effective training<sup>12</sup>: a comprehensive manual; use of small group discussions, role playing, demonstrations, and other techniques suited to adult learners; discussion of counseling strategies and social support mechanisms; and regular opportunities for on-site refresher training. The training also "inculcated" providers with a screening approach that focused as much on encouraging a philosophy of caring as on teaching basic skills and procedures. According to one investigator, this emphasis paid off for participants, who were "treated like royalty," and for providers, who reported valuing the opportunity to care for women more attentively.

*Outreach and enrollment.* The North Carolina WISEWOMAN project offered services to women who attended clinics for breast and cervical examinations but did not try to recruit other underserved women from the community. Conversely, because the Massachusetts and Arizona BCCEDP programs could not provide adequate platforms for outreach, the two states' WISEWOMAN projects recruited women concurrently to both programs. Recognizing that no single medium reaches all groups, informants identified several ingredients of effective outreach, including multiple channels, personal contact, and community outreach. Multiple outreach tools and face-to-face approaches were viewed as particularly important in reaching women from varied ethnic and cultural backgrounds, as exemplified by the *promotoras'* success in recruiting Hispanic women to

the Arizona project. Community leaders and individual providers also reached out to women in their neighborhoods and clinics. Informants agreed that designating a portion of WISEWOMAN funding for outreach "made a huge difference" in their projects' abilities to develop creative and successful outreach campaigns.

*Screening and intervention.* At WISEWOMAN's inception, the CDC adopted a "flexible approach to permit states to test new ideas and tailor interventions to the specific needs of their populations" (Mathematica Policy Research, Inc., Washington, DC, April 18, 2002. Summary of WISEWOMAN Consultant Group Meeting I: Tracking and Follow-up in WISEWOMAN. Final report to CDC). Thus, the three states experimented with different program models to carry out CVD screening and implement lifestyle interventions (Table 1). In Arizona, selection of the *promotora* model was a logical outcome of the decision to focus on Hispanic women. The model had a track record in the state and had worked well with Hispanic populations. Moreover, the WISEWOMAN project engaged experienced *promotoras* who had been trained in women's health, were familiar with the healthcare system, and were well known in their communities. In Massachusetts, investigators developed a "cutting-edge model of good care for women." With the goal of improving on fragmented healthcare services typically available to underserved women, the project devoted as much or more effort to the screening component (offered to women in both comparison groups) as it did to activities devel-

oped for the enhanced intervention. In North Carolina, the earlier *Food for Heart* program<sup>11</sup> provided an intervention tailor-made for WISEWOMAN's target population. *Food for Heart* materials had been rigorously tested in and well received by local health departments and (re-named *New Leaf . . . Choices for Healthy Living*) were easily expanded to focus on physical activity as well as diet.

Informants generally were satisfied with their program models but commented on some of the models' drawbacks. In Arizona, the *promotoras'* versatility resulted in their being assigned too many responsibilities. *Promotoras* were viewed as "critical to recruiting the numbers of Hispanic women needed in the short period of time open to the project" but also addressed access barriers, completed paperwork, led group sessions, provided one-on-one support, modeled healthy behavior by walking with participants, encouraged follow-up appointments, and functioned as *de facto* counselors to address other problems. In Massachusetts, investigators developed an ambitious "Cadillac pilot." The project's screening arm was labor intensive, however, requiring continuous training and support for the sometimes large contingent of providers needed to implement mass screening events. In North Carolina, evaluators found that providers often spent two to three times longer than intended to complete *New Leaf* counseling sessions or failed to tailor the materials to client needs. As a result, some providers reported feeling burdened by intervention demands.

All three states made an effort to implement WISEWOMAN only in sites considered to have an organizational capacity adequate to the two-pronged screening and intervention demands. In addition to interest in WISEWOMAN's behavior-change goals, candidates "had to have the resources to do screening, the community resources to handle the referrals, and the ability to do the intervention and follow-up and to do the data component." Nonetheless, the sites "fell along a continuum of capability" that left some clinics struggling with labor-intensive project requirements. As one researcher observed about primary healthcare clinics, "You definitely have to go in with the notion that these are not people twiddling their thumbs—they aren't necessarily going to thank you for bringing in things that, while useful, add an extra burden to their day." Massachusetts informants emphasized the importance of creative staffing, particularly in light of the

problem of provider turnover. The Massachusetts project hired student nurses and other *per diem* personnel to carry out some screening event functions and drew on outreach workers and volunteers to provide critical support for other project components.

Not surprisingly, informants emphasized the need to support individual agencies and professionals involved in WISEWOMAN. Commenting on differences among sites, one informant stated, "You can't have a master plan that works for all clinics—there is no 'one size that fits all.'" Another informant described the value of working to mitigate the negative impact of hectic, resource-scarce healthcare environments, noting, "It is hard to get providers to nurture women when they are not getting nurtured themselves." To minimize clinic and provider burden, informants argued in favor of streamlined billing and referral procedures and user-friendly information systems.

The three projects made considerable demands of participants, particularly at the enhanced intervention sites. In addition to providing baseline data, women were asked to participate in screening, follow-up, and intervention activities. In the two states for which data were available, participation rates for counseling and other intervention activities were generally high. In North Carolina, three fifths (59%) of women at enhanced intervention sites returned for all three counseling visits, and 85% received at least one counseling session. Considering enrollees' hard-to-reach demographic profile (40% nonwhite, 54% with less than high school educations, 92% reporting annual incomes of less than \$15,000) and rural healthcare barriers, such as lack of transportation and inability to take time off work without losing pay, these participation rates represent a notable achievement. In Massachusetts, three fourths of enhanced intervention participants received counseling, and about half participated in any intervention activity. Three fourths of participants in both comparison groups also returned for repeat screening at 6 and 12 months. Staff attributed high participation and rescreening rates to the use of incentives as well as to flexibly scheduled screening events offered at multiple times in multiple locations. Moreover, documented participation in structured activities may underestimate the extent to which women engaged in informal unmeasured activities. In Arizona, an attempt to track participants' at-home walking behavior using a self-adminis-

tered daily log was hampered by an extremely low response rate.

In its client satisfaction survey, the Massachusetts WISEWOMAN project identified a range of factors motivating participants to seek screening. At enhanced intervention sites, the most important factors were women's concerns about their health (74%), free services (73%), and specific offered services (36%–57%). Only 12% of surveyed participants listed personalized counseling as a motivating factor; other innovative program elements (e.g., coordinated services, immediate results, meeting new people) also garnered limited appreciation (10%–17%). In considering factors that may have inhibited participation, informants mentioned general barriers, such as transportation and competing life demands, as well as barriers specific to dietary changes (e.g., cost of fruits and vegetables) and walking (e.g., unfavorable weather conditions, unsafe neighborhoods, inadequate footwear). Movement back and forth to Mexico was cited as a barrier specific to some of Arizona's Hispanic residents. On the clinic side, informants reported that clinics were not always successful in notifying participants about follow-up appointments.

## DISCUSSION

Our case studies confirm that the WISEWOMAN projects' dual focus on clinical screening and lifestyle intervention renders their design and implementation inherently complex. In addition to screening women for multiple risk factors and disease entities, the three states were required to develop comprehensive lifestyle interventions. It is noteworthy that with enhanced interventions that varied in emphasis and dosage, North Carolina and Massachusetts achieved impressive levels of participation (Arizona data were not available when this review was conducted). North Carolina's structured intervention provided three fifths of enrollees with the full dose of three counseling sessions. In Massachusetts, where participants (and sites) could choose from a menu of activities, the flexible approach drew half of all women enrolled in the enhanced intervention group. Although results from the Massachusetts project's client satisfaction survey suggest that participants primarily were attracted by basic program features, such as free services, less highly rated elements (e.g., tailoring, coordi-

nated services, immediate feedback, social support) may have played a role in establishing program acceptability.

Informants identified several broad conceptual challenges for WISEWOMAN projects. First, the three states' experiences highlight limitations of the medical model. Informants agreed that WISEWOMAN's impact could be strengthened by broadening the program's scope to include family, community, and environmental influences on diet and physical activity. Authorizing NBCCEDP and WISEWOMAN legislation requires that at least 60% of funding be spent on individual screening services and referrals, however, leaving no more than 40% for all other activities (e.g., public and professional education, administration, evaluation).<sup>2</sup> These funding requirements support a clinical orientation that may constrain WISEWOMAN's ability to fully implement a socioecological approach<sup>13</sup> to chronic disease prevention.

Some informants recommended linking WISEWOMAN to a program other than NBCCEDP or working to build one program that "eliminates boundaries between disease entities." On the other hand, NBCCEDP offers a ready-made foundation and provides a convenient way to identify and recruit financially disadvantaged women. To the extent that NBCCEDP continues to provide the institutional framework for WISEWOMAN, evidence suggests that WISEWOMAN projects should only be launched in states that have mature breast and cervical cancer programs. Moreover, agencies with strong track records of NBCCEDP involvement may be predisposed to adopting a more comprehensive approach to chronic disease prevention.

Participating clinics were selected on the basis of organizational and performance criteria and, in some instances, were allocated to the enhanced intervention group based on organizational strengths. Describing the rationale for this purposeful study design, an evaluator stated, "We wanted to find the biggest possible effect—if we did not find an effect in the most competent health centers, then we could not justify moving to less competent centers." Given WISEWOMAN's goal of reaching underserved women, however, a next step may be to consider strategies for feasibly implementing WISEWOMAN in less competent clinics. Experience in Arizona also suggests that it may be important to examine state healthcare systems and develop program models that enable



a wide variety of implementing agencies to participate.

It may require a concerted effort to ensure that the evaluation component of a large-scale WISEWOMAN project is not eclipsed by the exigencies of service delivery. Informants insisted that high-quality evaluation requires adequate allocation of money and other resources and generally agreed on the benefits of centralized data management. Informants also noted that simpler data-collection and data-processing procedures would likely alleviate provider burden. To balance the needs of researchers and service providers, a North Carolina investigator proposed greater use of that state's current "hybrid" approach, which involves rigorous evaluation in one site and more extensive program dissemination (accompanied by minimal data collection) in a larger number of sites (A. Ammerman, Testing CVD lifestyle interventions in underserved women, CDC grant U48/CCU409660, 2001).

All three states substantively changed their projects during the second WISEWOMAN phase (1999–present). During Phase One in North Carolina, providers frequently failed to use *New Leaf* materials as intended and reported that the intervention was time consuming (notwithstanding efforts to design an intervention compatible with existing clinic routines). In Phase Two, providers were encouraged to use *New Leaf* materials more flexibly and to conduct group sessions or counseling by telephone when feasible or appropriate. Recognizing that comprehensive training is essential to any successful intervention delivery,<sup>12</sup> the North Carolina project modified its training strategy, adopting a more intensive on-site approach and incorporating content on behavior change theory and counseling techniques. In Arizona, the *promotoras'* role was redefined in Phase Two to enable more of a focus on intervention activities and less on recruitment tasks. To expand the Massachusetts project in Phase Two from the original 12 sites to all 33 state BCCEDP sites, the state department of health set aside successful but demanding mass screening events in favor of a more streamlined approach that would "dovetail better with the existing NBCCEDP program" and use fewer state healthcare system resources. Although innovation is encouraged by WISEWOMAN's flexible state-by-state approach, these changes taken together suggest that there may be a tradeoff between experimentation and sustainability. The

individual and organizational resources available in a given setting likely will determine the extent to which projects can institutionalize innovative approaches.

Our methodology is characterized by several limitations primarily associated with the length of time elapsed since Phase One. First, the passage of time complicated the task of selecting informants. Because of turnover, we were unable to reach some key Phase One players and could not interview the same categories of informants (e.g., evaluator, project director) in each state. Second, some informants had difficulty recalling project details. Although project documents supplied additional facts, written information varied for each state. Third, because it would have been difficult to select a meaningful sample so many years after their WISEWOMAN involvement, we did not interview program participants. As a result, our review primarily represents lessons learned from the research and service delivery perspectives.

WISEWOMAN projects face challenges of integrating clinical and lifestyle interventions, reaching beyond a focus on individuals, marshaling substantial resources (particularly for full-scale evaluation), and responding to problems that arise when complex and novel interventions are introduced into stretched healthcare environments. It is also evident, however, that the Arizona, Massachusetts, and North Carolina demonstration projects produced many noteworthy achievements. Some written reports hint at WISEWOMAN's role as a catalyst for changing attitudes about health promotion and underserved populations. In one state, providers told evaluators that the project "helped educate agency staff about the issues of the underinsured and uninsured" and fostered a shift away from an illness model and toward a wellness approach. Similarly, informants were proud of providing "some incredibly necessary screening to women who did not previously get a lot of attention." In addition to praising the projects for reaching underserved and high-risk women, informants pointed to successes in developing a more comprehensive women's health model, strengthening linkages to primary healthcare, experimenting with "innovative" and "cutting-edge" behavioral interventions, building social support among women, and tapping into women's roles as "gatekeepers" for their families and communities. Although one informant concluded that it is easier

to “make the case for screening” than to resolve intricate questions about intervention effectiveness, there was little disagreement that the WISEWOMAN program represents an important step in the direction of improved health for women. Valuable lessons learned to date have created propitious circumstances for launching new projects in other states.

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