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Health Promotion Interventions for Disadvantaged Women: Overview of the WISEWOMAN Projects

JULIE C. WILL, Ph.D., M.P.H.,[1] ROSANNE P. FARRIS, Ph.D., R.D.,[1]
CHARLENE G. SANDERS, M.P.H., R.D.,[1] CHRISANDRA K. STOCKMYER, M.P.H., R.D.,[1]
and ERIC A. FINKELSTEIN, Ph.D.[2]

ABSTRACT

Background: **The Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) program aims to remove racial and ethnic disparities in health by addressing the screening and intervention needs of midlife uninsured women. This paper describes the WISEWOMAN program requirements, the design of the 12 projects funded in 2002, the use of a standardized data reporting and analysis system, risk factors among participants, effective behavioral strategies, and plans for the future.**

Methods: **The WISEWOMAN demonstration projects are examining the feasibility and effectiveness of adding a cardiovascular disease (CVD) prevention component to the early detection of breast and cervical cancer. Women aged 40–64 are eligible if they are enrolled in the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) in selected U.S. states and are financially disadvantaged and lack health insurance. The primary outcome measures are blood pressure, lipid levels, and tobacco use. Intermediate measures include self-reported diet and physical activity, measures of readiness for change, and barriers to behavior change.**

Results: **During 2002, the 10 projects that were fully operational screened 8164 financially disadvantaged women and developed culturally and regionally appropriate nutrition and physical activity interventions for a variety of racial and ethnic backgrounds. Twenty-three percent of the women screened had high total cholesterol, with 48% of these being newly diagnosed. Thirty-eight percent of the women had high blood pressure, with 24% being newly diagnosed. Approximately, 75% of participants were either overweight or obese, and in some sites up to 42% were smokers.**

Conclusions: **The WISEWOMAN demonstration projects have been successful at reaching financially disadvantaged and minority women who are at high risk for chronic diseases. These projects face challenges because they are generally implemented by safety net providers who have limited resources and staff to conduct research and evaluation. On the other hand, the findings from these projects will be especially informative in reducing health disparities because they are conducted in those settings where the most socially and medically vulnerable women receive care.**

[1]Centers for Disease Control and Prevention, Division of Nutrition and Physical Activity, Atlanta, Georgia.
[2]RTI International, Health, Social and Economics Research, Research Triangle Park, North Carolina.

INTRODUCTION

IMAGINE A WORLD WHERE ANY WOMAN can access preventive health services and gain the wisdom to improve her health. This is the vision promoted by the Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) program. To achieve this vision, fundamental changes in our society's healthcare systems are needed. At present, roughly 1 in 5 working-age women lacks health insurance,[1] and minority patients, even when insured, are less likely than whites to enjoy a consistent relationship with a provider.[2] The lack of health insurance and of a usual source of care has been described by the American Society of Internal Medicine (American College of Physicians) and the Institute of Medicine as a barrier to receiving important preventive care.[1,3] Ensuring access to preventive health services, therefore, requires expanding healthcare coverage and ensuring consistent and trusting relationships between providers and patients. However, research on racial and ethnic disparities in healthcare indicates that even after accounting for insurance and income, some social groups still receive unequal treatment.[3] The reasons for these disparities are complex and may be occupational, cultural, or linguistic. Thus, preventive healthcare strategies that are sensitive to the economic and cultural context of women's lives are also needed.

The WISEWOMAN program was authorized by Congress in 1993 and funded in 1995. Because they recognized an opportunity to increase the provision of preventive health services to financially disadvantaged and uninsured women, the U.S. Congress asked the Centers for Disease Control and Prevention (CDC) to develop and evaluate the provision of cardiovascular disease (CVD) and other prevention services to women who were already attending the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). In response to this request, CDC invited state and territorial departments of health and tribal agencies to design creative strategies to add CVD screening and lifestyle interventions to their breast and cervical cancer screening programs.

During Phase One of the WISEWOMAN program (1995–1998) (Fig. 1), awards were given to three state health departments (North Carolina, Massachusetts, and Arizona) to conduct "enhanced" projects (i.e., projects involving research with control groups, described in detail later). Phase Two began in 1999, when Congress authorized expansion of the WISEWOMAN program, and monies were awarded for "standard" projects (i.e., projects that test feasibility without the use of control groups) as well as enhanced projects. As a result of the expanded competition, 12 state and tribal health agencies now operate WISEWOMAN projects (Fig. 2).

Published results from the first phase of WISEWOMAN indicated that it is appropriate but sometimes challenging to expand breast and cervical cancer early detection programs (BCCEDP) to include screening and interventions to lower CVD risk factors.[4,5] Results showed that WISEWOMAN interventions can increase physical activity and improve nutrition.[6–8] In all three programs, although differences by intervention groups were not apparent, participants appeared to have improvements in some biological risk factors after 1 year. In North Carolina, the average drop in cholesterol was 7–8 mg/dl. Because both intervention groups experienced the same drop in cholesterol, the improvement could not be attributed to the more intensive intervention.[9] In Massachusetts and Arizona, the percentage of women with high blood pressure also dropped for all groups between baseline and 1-year follow-up.[6,7] Challenges to BCCEDP expansion included healthcare providers who felt overburdened by research and newly funded BCCEDP projects that lacked the stability to add yet another set of program requirements.[5]

Important remaining questions are being addressed in the second phase of WISEWOMAN. For example, what is the burden of risk factors among the diverse populations served by WISEWOMAN? How are the WISEWOMAN projects perceived by participants and providers? Which intervention strategies are especially effective in reducing CVD risk factors and improving the ability of women to make behavioral changes? What approaches are particularly successful in influencing multiple social levels (e.g., individuals, families, and communities)? What are the costs of conducting the WISEWOMAN projects? Some of these questions are addressed in this paper, others are discussed in the papers that follow in this special supplement on the WISEWOMAN program, and some questions will be answered in the future.

In this overview, we provide information on WISEWOMAN program requirements, the design of 12 currently funded projects, the use of

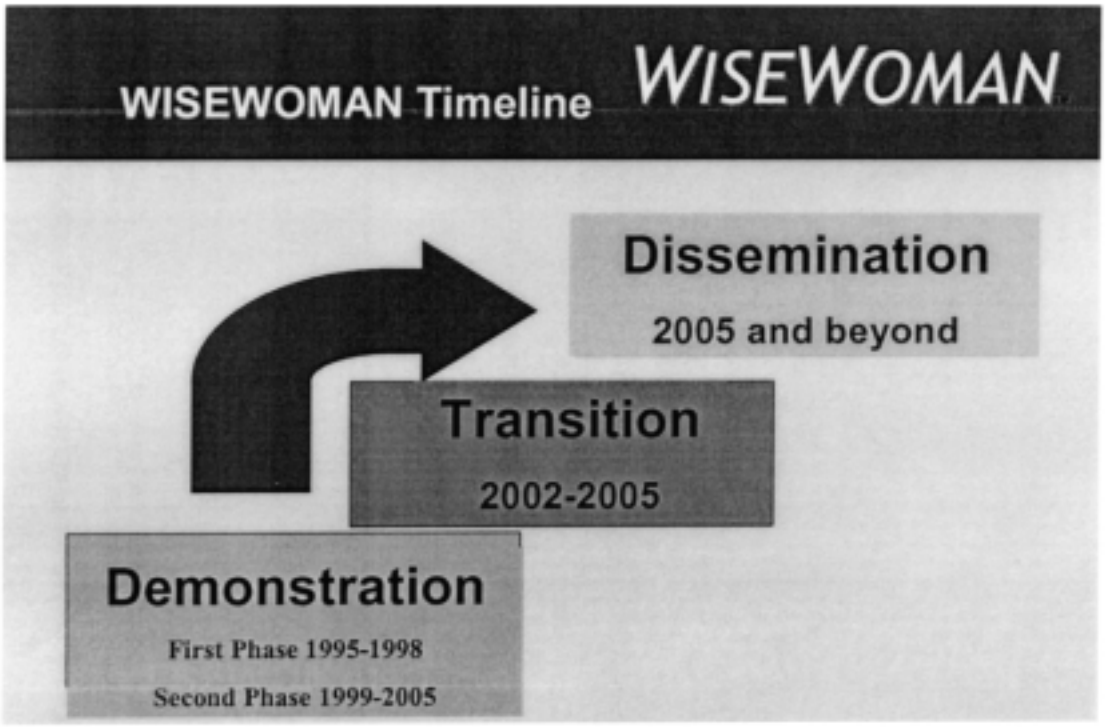

FIG. 1. The federal WISEWOMAN program: Phases and timeline.

standardized data to allow comparisons across projects, the burden of risk factors in our study populations, effective behavioral strategies, and plans for the future. Ultimately, approaches that prove feasible and cost-effective in the WISEWOMAN program will aid the public health community in combating disparities in access to preventive healthcare and improving knowledge and skills to effect behavioral change.

PROGRAM REQUIREMENTS

To fulfill the vision of the WISEWOMAN program, funds are provided for preventive health screenings, appropriate medical referrals, and lifestyle interventions to women aged 40–64 who have participated in the NBCCEDP.[10] Federal dollars are provided to CDC, which then uses at least 80% of the money to fund state and territorial health departments and tribal agencies to develop the WISEWOMAN services. CDC uses the other 20% to fund universities or private contractors to conduct additional program activities, such as evaluation and development of interventions. CDC also funds a small group of in-house staff to provide scientific and programmatic advice to recipients of WISEWOMAN funds. Thus, the federal WISEWOMAN program relies heavily on paid partners outside of CDC to fully develop the program. Currently, most of these partners are located in state health agencies. Although Congress prohibits the use of federal monies for treatment, project partners are required to develop a treatment plan when women have abnormal screening results.

Screening

The WISEWOMAN projects are required to screen for high blood pressure and high cholesterol levels and are allowed to screen for other clinical conditions, such as abnormal blood glucose and overweight or obesity. All screenings must be performed according to recommendations published in national clinical guidelines.[11–14] In many of the projects, personnel also conduct written behavioral assessments to detect tobacco use, poor dietary habits, sedentary lifestyle, or high risk of osteoporosis. In addition to paying for specified screening tests, the WISEWOMAN program provides monies for confirmation of abnormal screening results and an annual follow-up examination. Some projects are

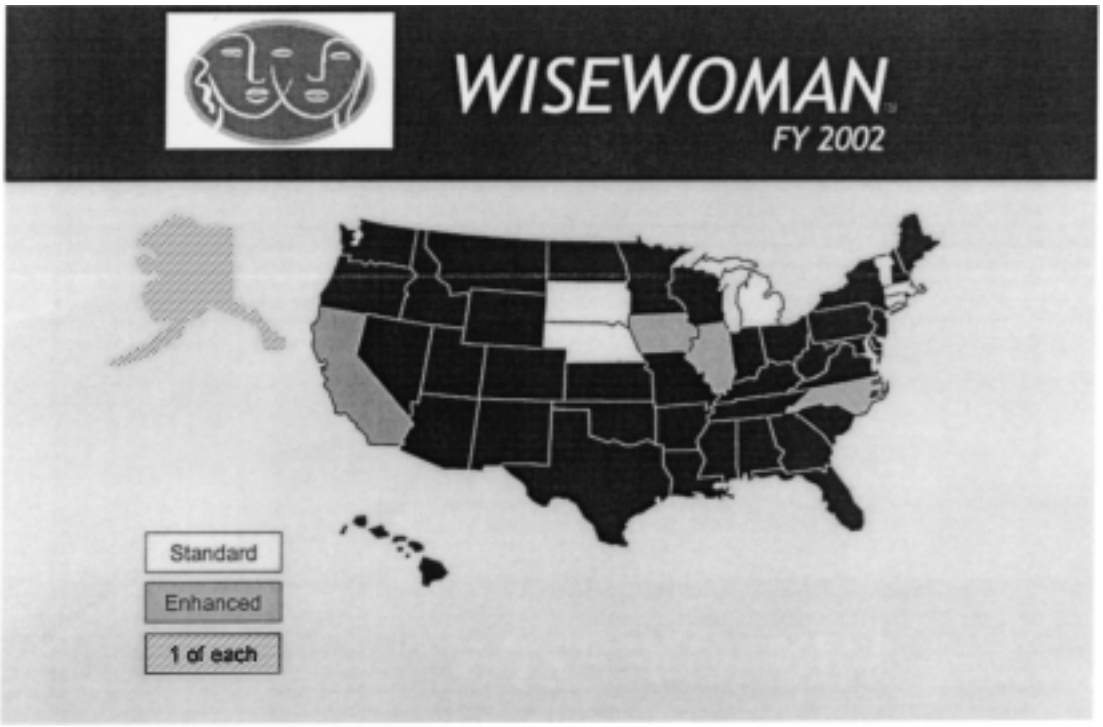

FIG. 2. Locations of WISEWOMAN projects funded in 2002.

allowed to pay for a 6-month visit to collect needed data for research purposes.

Medical referral

All WISEWOMAN participants who have high blood pressure, high cholesterol, or high blood glucose according to national guidelines will require further medical attention. At a minimum, the WISEWOMAN projects must ensure that women are referred for a diagnostic examination to confirm screening results. Staff are urged to send a medical referral form along with a letter that describes the intervention and the participant's clinical results. The referral form often will state the reasons for the referral and include the clinician's initial assessment and recommendations. To help track referrals, the WISEWOMAN program strongly recommends that clinicians keep a copy of the form and send the original back to the referring agency. At all projects, the staff are responsible for documenting that a referral was made.

Lifestyle interventions

According to national clinical guidelines, the first step toward improving abnormal clinical values is usually the provision of lifestyle interventions. WISEWOMAN project staff develops lifestyle interventions targeted toward the population served, that is, multiethnic, financially disadvantaged women. Staff are required to review the existing literature and select scientifically sound, culturally relevant interventions that will be most effective for their populations. Thus, lifestyle interventions vary across projects.

Evaluation

WISEWOMAN projects include an evaluation or research component. Project staff must report 23 standardized data elements beyond what is already required by the NBCCEDP. These minimum data elements (MDEs) are reported to the Research Triangle Institute (RTI) twice a year. In addition, the project staff is expected to design physical activity and nutrition assessments that measure the effects of the intervention. For example, if the intervention staff encourages women to walk more each day, they may assess walking time as a measure of success. The assessments are not standardized across projects but must be reported to RTI. Projects may collect as much additional information as they wish.

For all projects, the primary outcome measures

are blood pressure and lipid levels. Intermediate measures include self-reported diet and physical activity, measures of readiness for change, and barriers to behavior change, which are assessed as modifiers of the intervention effect.

PROJECT DESIGN

Enhanced projects

Enhanced projects are designed to determine the most effective lifestyle interventions for underserved women by comparing women who receive an enhanced intervention with women who receive a minimum intervention or usual care. Assignment to the minimum or enhanced intervention is either by group (clinic or county) or by woman; for both designs, the unit of observation is the individual woman. All enhanced projects report MDEs to RTI but also collect additional information to support further analyses. The group-randomized design effect is accounted for statistically in all analyses.[15]

Although details of the minimum intervention vary by project, all enrolled women receive baseline screening for CVD risk factors and minimal on-site counseling, education, referral, and follow-up using established protocols.[11–14] Repeat screening is recommended at 6 and 12 months after the initial screening. Women enrolled in the enhanced intervention receive all services of the minimum intervention plus a specially designed education and intervention program tailored to the population served. Some projects have employed a third intervention group that is even more intensive and may include services such as those provided by community health workers.

In 2002, five WISEWOMAN enhanced projects operated in selected breast and cervical cancer screening sites in California, North Carolina, Illinois, Iowa, and the Southcentral Foundation in Alaska (Table 1). As in Phase One, these enhanced projects continue to conduct research to determine whether the enhanced intervention has a greater impact on risk factors than the minimum intervention. All five projects have developed intervention strategies tailored to participants' racial and ethnic profile and age group (40–64 years).

Standard projects

Standard projects are designed to determine the best operational methods for delivering CVD screening and evidence-based lifestyle interventions to eligible uninsured women. Standard projects are similar to the enhanced intervention component of enhanced projects because they provide services that improve upon the usual care at each clinic. However, standard projects do not employ an experimental design with a control group. Participants in standard projects receive baseline screening for CVD risk factors, on-site counseling, education, referral, and follow-up, with repeat screening at 12 months. All activities are based on established protocols.[11–14] In addition, standard projects offer a specially designed education and intervention program tailored to the population served. All projects report MDEs to RTI. In 2002, the seven funded standard projects operated in selected breast and cervical cancer screening sites in Connecticut, Massachusetts, Michigan, Nebraska, South Dakota, the Southeast Alaska Regional Health Consortium (SEARHC), and Vermont (Table 2).

RISK FACTOR BURDEN

In 2002, the 10 projects that were fully operational screened 8164 financially disadvantaged women (Tables 3 and 4). Women have been screened from a variety of racial/ethnic groups. North Carolina, Connecticut, and Michigan have screened high proportions of African Americans (39%, 28%, and 17%, respectively), and Connecticut, Massachusetts, and Nebraska have been effective in reaching Hispanic/Latina women (25%, 28%, and 11%, respectively). All of the women screened by Alaska's Southcentral Foundation have been Alaska Natives. The WISEWOMAN projects, therefore, are effective in reaching minority women.

Data on various chronic disease risk factors are available for some Phase Two WISEWOMAN projects for 2002 (Tables 3 and 4). In all states, substantial proportions of women screened (17%–37%) had high total cholesterol. However, many were unaware of their cholesterol status, ranging from 24% at SEARHC to 60% in Massachusetts and South Dakota. Approximately half (40%–55%) of participants in North Carolina, Iowa, Alaska's Southcentral Foundation, Connecticut, Michigan, and Nebraska were not aware of having high cholesterol. Women in North Carolina showed the highest prevalence of hyper-

TABLE 3. RESULTS (JANUARY 1, 2002–DECEMBER 31, 2002) FROM WISEWOMAN ENHANCED PROJECTS: PHASE TWO[a]

Variable[b]	*North Carolina*	*Iowa*	*Southcentral Foundation*[c]
Number screened	2317	36[d]	412
Age, years			
<55	51	56	75
≥55	49	44	25
Race/ethnicity			
White	51	100	0
Black	39	0	0
Hispanic/Latina	6	0	0
American Indian/Alaska Native	3	0	100
Asian	1	0	0
High total cholesterol[e]	26	37	22
Unaware of high cholesterol	42	42	44
Low HDL[f]	18	19	9
Hypertension[g]	54	42	38
Unaware of hypertension	17	27	9
History of diabetes	14	3	10
Estimated coronary heart disease deaths per 1000 women expected in 10 years[h]	24	32	14
Overweight[i]	29	42	31
Obese[j]	53	42	47
Smoker	27	42	32

[a]California and Illinois data not yet available.
[b]All data are presented as percentages, except for number screened. Because of missing responses, denominators vary; most variables had few missing responses.
[c]Located in Anchorage, Alaska.
[d]Iowa did not begin screening until October 2002.
[e]≥240 mg/dl.
[f]<40 mg/dl.
[g]Systolic ≥140 mm Hg or diastolic ≥90 mm Hg or taking medication.
[h]Based on a risk projection formula that uses smoking, systolic blood pressure, total cholesterol, and age.
[i]Body mass index = 25–29.9 kg/m^2.
[j]Body mass index ≥ 30 kg/m^2.

tension (54%) of any state, and at least one third of participants (35%–44%) were hypertensive in all but two other states. Again, many participants were unaware of their hypertension (9%–27% in enhanced projects and 15%–42% in standard projects). The combined prevalence of overweight and obesity has been extremely high in all projects, affecting nearly 3 of 4 women screened in almost all settings. In one of the Alaska projects (SEARHC), 60% of the women who attended the program in 2002 were obese (body mass index [BMI] ≥ 30 kg/m^2). In addition, several projects have reported a high prevalence of smoking during the first year of screening, including 42% in both South Dakota and Iowa. In several other projects, the prevalence of smoking (23%–33%) was higher than the prevalence of 21% for women aged 45–64 in the U.S. population.[22]

BEHAVIORAL STRATEGIES

A major goal of the WISEWOMAN program is to determine which behavioral strategies are effective in reducing CVD risk factors among racially and ethnically diverse, underserved, financially disadvantaged women.

Phase One

All three enhanced projects funded during Phase One have completed key analyses. The published results from North Carolina[8] showed that women who received lifestyle counseling through the enhanced intervention reported less fat in their diets at follow-up than did women who received the minimum intervention. Cholesterol and blood pressure profiles generally im-

TABLE 4. RESULTS (JANUARY 1, 2002–DECEMBER 31, 2002) FROM WISEWOMAN STANDARD PROJECTS: PHASE TWO[a]

Variable[b]	*Connecticut*	*Massachusetts*	*Michigan*	*Nebraska*	*South Dakota*	*SEARHC*
Number screened	670	1684	321	1404	921	394
Age, years						
<55	39	72	78	68	86	72
≥55	61	28	22	32	14	28
Race/ethnicity						
White	43	59	77	84	77	0
Black	28	3	17	3	2	0
Hispanic/Latina	25	28	5	11	5	6
American Indian/ Alaska Native	0	0	0	2	14	94
Asian	4	10	1	0	1	0
High total cholesterol[c]	26	20	23	23	17	20
Unaware of high cholesterol	40	60	55	50	60	24
Low HDL[d]	10	8	16	13	17	9
Hypertension[e]	44	24	37	37	25	35
Unaware of hypertension	15	42	26	31	37	26
History of diabetes	11	4	8	9	8	11
Estimated coronary heart disease deaths per 1000 women expected in 10 years[f]	27	14	15	18	11	16
Overweight[g]	36	33	28	26	29	25
Obese[h]	38	26	46	48	42	60
Smoker	17	19	33	23	42	26

[a]Vermont data not shown because only 5 women were screened during 2002.
[b]All data are presented as percentages, except for number screened. Because of missing responses, denominators vary.
[c]≥240 mg/dl.
[d]<40 mg/dl.
[e]Systolic ≥140 mm Hg or diastolic ≥90 mm Hg or taking medication.
[f]Based on a risk projection formula that uses smoking, systolic blood pressure, total cholesterol, and age.
[g]Body mass index = 25–29.9 kg/m^2.
[h]Body mass index ≥ 30 kg/m^2.

proved for both the enhanced and minimum interventions, although the differences between groups were not significant. Results from the Massachusetts and Arizona projects are included in this supplement.[6,7]

Phase Two

Information from Phase Two about the enhanced and standard WISEWOMAN projects was gathered from original applications, research protocols submitted to CDC for Institutional Review Board approval, and interviews with current project staff (Tables 1 and 2). Baseline results from analyses conducted by RTI with use of the MDE database are summarized in Tables 3 and 4. Additional details about the MDE database are provided in a companion paper in this supplement.[23]

Physical activity and nutrition interventions: enhanced projects. The physical activity and dietary strategies that are being tested in enhanced projects in Phase Two are summarized in Table 1. In general, all strategies are based on key concepts from social cognitive theory[24] and the socioecological model,[25] including tailoring, self-monitoring, readiness for change, self-efficacy, small achievable steps, social support, collaborative goal setting, and overcoming barriers.

Three of the five projects (California, North Carolina, and Alaska Southcentral Foundation) are using modifications of the *New Leaf . . . Choices for Healthy Living*,[8] a structured diet and physical activity assessment and intervention tool adapted and expanded from the *Food for Heart Program*.[26–28] The physical activity component of *New Leaf* is based on the CDC/American College of Sports Medicine guidelines, which call for daily accumulation of moderate activity (rather than less frequent and more vigorous activity).[14] The *New Leaf* program uses behavior change the-

ory to help counselors and patients remove obstacles to lifestyle modification (e.g., complexity, cost, lack of time, cultural irrelevance) by developing practical strategies to integrate more activity into participants' daily work and household and social activities.

New Leaf was designed for a Southern, multiethnic, low-literacy population but has been adapted for other populations; a Spanish-language version (*Vida Saludable, Corazón Contento*) was created for the Hispanic/Latina population in North Carolina. In North Carolina, the project also is assessing whether *New Leaf* supplemented with telephone calls, reminders from community health workers, and referrals to community resources is more effective than the usual care provided by a community health center. The California WISEWOMAN project, which is in the process of developing its intervention, is conducting a pilot test to learn how to modify *Vida Saludable, Corazón Contento* for Hispanic/Latina women in that state and to provide counseling with bilingual community health workers. After the pilot test is completed, the intervention will be tested in additional sites. In Alaska, the Southcentral Foundation is using an adaptation of *New Leaf* called *Traditions of the Heart*. The 12-session program, designed in an interactive group format, includes a Native Alaskan traditional wellness component in each session.

The two other states with enhanced projects have also developed 12-week intervention programs. The Illinois WISEWOMAN project has worked with the Cooper Institute to develop a nutrition and physical activity group program based on *Project Active*,[16] called *Women with Heart*. Illinois staff are also developing a Spanish version of this program. In Iowa, Cooperative Extension nutritionists lead a group format that is based on the Dietary Approaches to Stop Hypertension (DASH) diet.[17]

Physical activity and nutrition interventions: standard projects. Four standard projects (Connecticut, South Dakota, Vermont, and Alaska's SEARHC) are using modifications of *New Leaf* in conjunction with other resources. In Connecticut, the project also has adopted the *Physician Assisted Counseling and Evaluation* (PACE) program[18] for physical activity, and in South Dakota, the project has developed a modified version of *Project Active*[16] called *Active Living Every Day*. The Vermont and SEARHC projects supplement *New Leaf* with group interventions focused on nutrition and physical activity (called "wellness circles" in Vermont).

In the three standard projects not using *New Leaf*, staff have developed a variety of intervention strategies. The Massachusetts WISEWOMAN project uses PACE[18] and also refers women to community-based individual or group interventions on nutrition and physical activity. The Michigan project promotes a modified version of the DASH diet[17] and advocates moderate physical activity incorporated into a woman's daily life, negotiates lifestyle contracts after determining a woman's readiness for change, and employs a variety of incentives to motivate change. In Nebraska, Cooperative Extension nutritionists are administering *ABCs for Good Health* (developed by the U.S. Department of Agriculture and based on the *Dietary Guidelines for Americans*[19]) and the *10,000 Steps* program.[20,21] The Nebraska nutritionists help participants set achievable goals and provide pedometers for feedback on physical activity.

Tobacco control interventions: enhanced projects. In all the enhanced projects, staff assess participants' tobacco use and refer women to either a tobacco cessation program or a state quitline.[29] Some projects provide brief counseling, including tips for quitting. Because Native Alaskan women are more likely to use chewing tobacco than are women from other cultures, the Southcentral Foundation WISEWOMAN project targets both cigarette smoking and tobacco chewing. Participants at the Southcentral Foundation complete a tobacco use assessment, receive individual counseling, set goals to stop using tobacco, and may obtain additional counseling at a tobacco cessation clinic. Participants can also request quit aids (e.g., nicotine patches) at no cost.

Tobacco control interventions: standard projects. In all the standard projects, staff refer women to their state quitline.[29] In some states, the quitline service includes up to six telephone contacts. Several projects, including those of SEARHC, Vermont, and Nebraska, are able to track women's participation in the quitline program and thereby assess the quitline's impact on smoking cessation rates. Nebraska provides smoking cessation classes through its state health department, and Alaska's SEARHC project partners with the American Lung Association's *Freedom from Smoking* pro-

gram. Two projects (SEARHC and Vermont) offer nicotine replacement therapy at no cost.

DISCUSSION

It is clear that by serving financially disadvantaged, uninsured, and multiethnic women, WISEWOMAN projects are reaching women who are at high risk of developing CVD and other chronic diseases. Our initial baseline results from Phase Two suggest that many of the women enrolled in WISEWOMAN were unaware of their high blood pressure or their high cholesterol before entering the program. Nearly three quarters of the women who attended baseline screenings were overweight or obese, including a 60% prevalence of obesity in one location. The prevalence of smoking was also higher than would be expected in U.S. women aged 45–64.

Because WISEWOMAN projects are located in a variety of settings and serve women from many different cultural backgrounds, each project strives to adapt evidence-based lifestyle interventions to the culture(s) of the women they serve. We have learned that cultural adaptation involves more than simply translating interventions into a different language. It also requires careful formative research to understand dietary and physical activity practices, facilitators and barriers to behavioral change, and cultural norms. After intervention materials are translated into another language, they are back-translated to ensure that the translation is appropriate for the women who will be receiving the intervention. More detail is provided in other papers in this supplement on how materials have been adapted and used in WISEWOMAN projects.

Although WISEWOMAN projects have helped increase physical activity and improve nutrition,[6–8] it is not entirely clear why our enhanced lifestyle interventions have been less effective in influencing physiological measures (e.g., blood pressure, lipid levels, and anthropometric measures). We suspect that there are critical barriers and facilitators to delivery of complete interventions that, to date, have not been addressed fully in our program. These barriers may include provider skepticism about women's ability to change behavior, social isolation, unsafe neighborhoods, and lack of access to healthful foods. In some locations, for example, women may have to rely on neighborhood stores that do not stock high-quality, affordable fruits and vegetables or low-fat snacks.

Because many of the barriers that women face are structural, WISEWOMAN is now planning to supplement the current approach with a broader societal approach to improve health behaviors. Borrowing from the socioecological model,[25] we are encouraging projects to develop multifaceted interventions that address intrapersonal, organizational, community, and policy influences on health and health behaviors. For example, to strengthen the family and peer support available to participants, some projects now invite family members and friends to attend the interventions. At the organizational level, we are training staff to examine their own attitudes and work collaboratively with women to change their behavior. Organizations are also developing their own creative solutions as a result of receiving WISEWOMAN funding. In North Carolina, for example, a county health department clinic partnered with a community free clinic to extend their operating hours so that WISEWOMAN participants could attend appointments more easily. At the community level, some projects have hired community health workers from participants' neighborhoods to conduct outreach, make telephone calls to encourage attendance at medical examinations and intervention sessions, arrange transportation, help find low-cost medications, and provide other support services. Some projects provide discount passes to encourage exercise in safe environments (e.g., YWCA, local indoor swimming pools) or discount coupons that help women attend community weight loss programs.

As WISEWOMAN projects explore ways to participate as agents of social change, they are building alliances among disadvantaged women and their families, healthcare providers, and neighborhoods. Eliminating social-group disparities in CVD incidence and mortality will likely depend on the strength of these alliances. Our goal in promoting more comprehensive interventions is to empower women to use all available services to facilitate the adoption of a healthier lifestyle. We also hope to garner the social support needed for behavior change, raise providers' expectations, build trust between patients and providers, ensure that healthcare environments effectively address the needs of culturally diverse populations, remove community barriers to a healthy lifestyle, and create advocates

for better healthcare coverage. If WISEWOMAN projects can successfully implement multilevel interventions and demonstrate their effectiveness, this approach is likely to be adopted on a much broader scale. As progress is made toward this goal, the WISEWOMAN program will begin to realize its vision of a world where any woman can access preventive health services and gain the wisdom to improve her health.

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Address reprint requests to:
Julie C. Will, Ph.D.
Division of Nutrition and Physical Activity
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, N.E.
MS K-26
Atlanta, GA 30341

E-mail: JWill@cdc.gov