Integrating Preventive Health Services within Community Health Centers: Lessons from WISEWOMAN

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ABSTRACT

Background: Well-Integrated Screening and Evaluation for Women Across the Nation (WISE-WOMAN) provides low-income, underserved women ages 40–64 with risk factor screening and lifestyle intervention and referral services to prevent cardiovascular disease (CVD). Integrating WISEWOMAN's services with the culturally appropriate medical care and support services offered by community health centers may improve the program's ability to reduce CVD burden among underserved women.

Methods: We conducted a formative assessment of the perceived opportunities, challenges, and strategies associated with integrating WISEWOMAN into community health center settings. A panel of stakeholders that included health center and WISEWOMAN representatives was convened in 2002, and a semistructured discussion guide was used to elicit perspectives about integration. We also conducted an in-depth review of WISEWOMAN's history of collaboration with health centers in North Carolina.

Results: Stakeholders perceived a clear need for integrating WISEWOMAN within health center settings, indicating that centers have few other resources to expand preventive services delivery and offer effective lifestyle interventions for underserved populations. Perceived barriers to integration included competing demands on health center resources, difficulties hiring staff for new programs, and administrative burdens associated with data collection and reporting. Experiences within North Carolina's WISEWOMAN project demonstrate, however, that lifestyle interventions can be designed in ways that facilitate integration by health centers.

Conclusions: Integration strategies need to be tailored to the resources, skills, and capacities available within health centers. As health centers and WISEWOMAN projects gain more experience in collaborating, additional research should be conducted to identify how best to achieve integration within specific institutional and community contexts.

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INTRODUCTION

ARDIOVASCULAR DISEASE (CVD) is one of the leading causes of death among women in the United States. Low-income women without adequate health insurance coverage often lack access to screening, prevention, and treatment services that can address the risk factors for CVD.¹ Recognizing this problem, Congress established the Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) demonstration program in 1993 to provide additional preventive health services to underserved women who receive cancer screening and diagnostic services through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).² As a public health program, WISE-WOMAN provides many of the elements needed to reduce the burden of CVD among underserved women, including risk factor screening, health education, and lifestyle interventions targeted at behavioral risk factors, such as poor diet, physical inactivity, and tobacco use. To succeed in reducing CVD burden, however, preventive services must be integrated with other core elements of chronic care management, including evidencebased medical and pharmaceutical treatment, disease and case management, community outreach, cultural and linguistic competence, and longitudinal tracking of healthcare delivery and health outcomes.³ A key task for WISEWOMAN, therefore, lies in linking the program with other community providers to ensure provision of a comprehensive array of chronic care services for underserved women at risk of CVD.

Community health centers are key components of the nation's healthcare safety net for the uninsured and other underserved populations and, as such, can play a critical role in advancing WISE-WOMAN's objectives. Health centers offer community-based, culturally appropriate primary care services, along with outreach and support services and links to specialty care, for populations who lack access to mainstream medical providers.⁴ One promising strategy for establishing comprehensive chronic care systems for CVD, therefore, is to integrate WISEWOMAN's screening services and lifestyle interventions with the diagnostic, treatment, and disease management services offered through community health centers. Barriers may exist, however, in integrating a public health program, such as WISEWOMAN, into health center settings, including competing demands placed on health center staff and infrastructure, the administrative complexities of WISEWOMAN projects, and the philosophical and operational differences that exist between public health and medical care programs.^{5–7} Consequently, although the conceptual rationale for pursuing integration appears strong, healthcare professionals and policymakers need to develop a better understanding of the feasibility and value of integration.

We present findings from a formative assessment undertaken to explore the opportunities and challenges associated with integrating WISE-WOMAN into community health center settings and to identify strategies that health centers and WISEWOMAN projects may use to facilitate integration. The findings of this assessment are intended to assist clinicians, administrators, and policymakers in determining whether integrating WISEWOMAN within community health centers can benefit their organizations, programs, and patients. Our findings have implications not only for WISEWOMAN but also for other efforts to introduce preventive health interventions into community settings.

BACKGROUND

The WISEWOMAN program

WISEWOMAN builds on the established NBCCEDP, which funds states, territories, and tribal organizations to provide underserved women with early detection screening for breast and cervical cancer. Low-income, uninsured and underinsured women aged 40–64 who are enrolled in NBCCEDP are eligible to participate in WISE-WOMAN. The WISEWOMAN program works through the same network of healthcare providers used in NBCCEDP, including private physician practices, hospitals, local health departments, and community clinics.

WISEWOMAN's lifestyle interventions may be provided at the screening site, or participants may be referred to another community-based partner, such as a nutritionist, health educator, or community health worker. As of 2003, 14 WISE-WOMAN demonstration projects are underway within 13 states.

Community health centers

Community health centers are natural partners for WISEWOMAN projects because their mission is to provide comprehensive, culturally appropriate primary healthcare for underserved populations. The Health Resources and Services Administration (HRSA) plays an important role in helping federally funded community health centers achieve this mission and can facilitate partnerships between WISEWOMAN projects and health centers. HRSA's Bureau of Primary Health Care (BPHC) provides funding and federal oversight to more than 800 community-based healthcare organizations serving more than 11.3 million Americans annually (Table 1). During 2002, the BPHC served over 1 million underserved women between the ages of 40 and 64 years^{8,9} at urban, rural, and migrant health centers.

Currently, HRSA is pursuing the goal of serving an additional 6 million people through the President's Health Center Growth Initiative, which is expanding the number and capacity of community health centers in 1200 communities. As part of this initiative, HRSA supports health centers' efforts to improve health outcomes for underserved and vulnerable populations. Among the most promising efforts are HRSA's Health Disparities Collaboratives, which use a chronic care model developed at the MacColl Institute for Healthcare Innovation,³ together with a learning and improvement model developed by the Institute for Healthcare Improvement,¹⁰ to delay or decrease the complications of such chronic diseases as CVD, diabetes, asthma, and depression. The Collaboratives bring together evidencebased processes for disease management, clinical information systems, multidisciplinary leadership teams, and strategic partnerships with other community organizations.¹⁰

WISEWOMAN is another potential resource for helping health centers improve health out-

TABLE 1. SUMMARY OF COMMUNITY HEALTH CENTERS

	Number
Organizations funded to operate	843
health centers	
Health center sites	3317
Health centers participating in	11
WISEWOMAN projects ^a	
Individuals served by health centers	11.3 million
Women in midlife (ages 40–64)	1.2 million
served by health centers	

Source: 2002 Uniform Data System for the Bureau of Primary Health Care at HRSA.

^aNumber participating as of 2002.

comes among underserved populations. As of 2002, 11 health centers in six states have participated in WISEWOMAN projects. To become WISEWOMAN providers, health centers must first become providers in their state's BCCEDP program. Nationally, most health centers offer breast and cervical cancer screening services and, therefore, should be eligible for participation in NBCCEDP.¹¹ As the number and capacity of health centers increase and as WISEWOMAN projects are introduced in additional states and communities across the nation, opportunities for health center participation in WISEWOMAN are likely to grow significantly.

A model of integration

Studies of chronic disease care conducted over the past two decades suggest that health outcomes and quality of life can be enhanced through the use of a healthcare delivery model that integrates all the major components of disease prevention and management.3,12-14 These components include age-appropriate preventive and screening services, evidence-based medical and pharmaceutical treatment, support for disease self-management and self-care strategies, and links with community health resources. This chronic care model is designed to improve health outcomes and quality of life by engaging patients and providers in informed and productive interactions and by coordinating healthcare resources and services throughout the course of a chronic disease.

Application of the chronic care model to underserved populations is complicated by barriers to healthcare and by the diverse cultural norms and values that influence disease risks and healthcare needs. Because a single program or provider may find it difficult to offer the full complement of resources and services required for a successful chronic care model, the best approach may be to integrate programs and services from multiple sources.^{15–18} Integrating the WISEWOMAN program into community health center settings may help bring together the essential components of a chronic care model and focus these components on the health needs of underserved women.

MATERIALS AND METHODS

In collaboration with the Centers for Disease Control and Prevention (CDC), the Office of Minority and Women's Health within HRSA's BPHC convened a panel of key stakeholders in 2002 to explore operational and policy issues associated with integrating WISEWOMAN into community health center settings. Members of the panel were selected by HRSA and CDC to obtain representation from all the major stakeholders relevant to WISEWOMAN projects and community health centers and to achieve diversity with respect to the geographic areas and populations served by these projects and centers. The 21 participants included 4 state coordinators from currently funded WISEWOMAN projects, 5 administrators from community health centers located in states with WISEWOMAN projects, 5 representatives from state primary care associations, 2 officials from CDC's Division of Nutrition and Physical Activity, 4 HRSA officials, and 1 representative from the National Association of Community Health Centers. The eight states represented were Alaska, California, Massachusetts, Michigan, Nebraska, North Carolina, South Dakota, and Vermont. Among the health center representatives, two were in the early stages of WISEWOMAN participation and three had not yet begun to participate.

Using an expert panel process, meeting facilitators from Mathematica Policy Research (G.P.M. and H.A.H.) used a semistructured discussion guide to elicit perspectives about the opportunities and challenges of integrating WISEWOMAN into community health center settings. The meeting included approximately 2 hours of facilitated discussion with the full panel on integration opportunities and challenges and another 2 hours of facilitated discussion in four small groups (five to six participants each) concerning specific integration topics. During the small group discussions, two facilitators rotated among the groups. The topics covered in the small groups included delivering and paying for WISEWOMAN services, administrative challenges, coordination of WISEWOMAN with other health center programs and services, and strategies for ensuring cultural competence and access to care. Detailed notes from the discussions were analyzed by the facilitators to identify dominant themes and perspectives as well as areas of uncertainty.

To gain an additional perspective, we conducted an in-depth review of one WISEWOMAN project's history of collaboration with health centers. North Carolina's project was selected for this review because it was one of the first to explore integration with community health centers. This review—gleaned from existing studies, project documents, and observations—provides a more detailed view of how integration occurs in actual practice settings.

RESULTS

Our assessment identified themes and issues in three substantive areas: the perceived need for integrating WISEWOMAN within health center settings, the types of integration possible, and factors affecting integration. Through our review of North Carolina's WISEWOMAN project, we also identified several key design elements that have facilitated integration into health center settings.

Perceived need for integration

Both health center administrators and WISE-WOMAN project coordinators identified potential benefits of integrating WISEWOMAN services into health center settings (Table 2). Health center administrators viewed WISEWOMAN as an important avenue for providing an expanded array of reimbursable preventive services and lifestyle interventions to their clients, noting that there are very few other programs available to support provision of preventive services to uninsured women. Similarly, some administrators viewed WISEWOMAN as a resource for helping

TABLE 2. PERCEIVED BENEFITS OF INTEGRATING WISEWOMAN WITHIN COMMUNITY HEALTH CENTER SETTINGS

- Benefits perceived by community health centers Patient access to an expanded array of preventive services
 - A source of reimbursement for delivering preventive services
 - Opportunities to move beyond a focus on maternal and child health services and strengthen services for women at midlife
 - Opportunities to learn about lifestyle interventions that work for underserved populations
- Benefits perceived by WISEWOMAN projects Expanded outreach to underserved populations Coordination of CVD prevention, treatment, and disease management services
 - Access to providers who are experienced in culturally appropriate methods of delivering health services
 - Links between WISEWOMAN and other community health resources

health centers expand services for women at midlife, recognizing that many centers traditionally have focused on serving younger population groups. Additionally, health center administrators noted that WISEWOMAN projects offered their organizations opportunities for learning about what lifestyle interventions are feasible, acceptable, and effective in populations of uninsured women.

WISEWOMAN project coordinators indicated that the need for integrating their projects into health center settings stems from the challenges that prevention programs face in reaching underserved women and linking them with other needed health services. WISEWOMAN projects that rely solely on private physician practices, hospital clinics, or local health departments to deliver screening and lifestyle intervention services may not reach the uninsured populations traditionally served by health centers. Coordinators also noted that because health centers are experienced in serving diverse population groups, they could help WISEWOMAN projects identify culturally appropriate methods of delivering screening services and lifestyle interventions.

WISEWOMAN coordinators further noted that underserved women served by integrated programs may have better access to the full complement of health services needed to improve health. The need to ensure such access was viewed as critically important because WISEWOMAN focuses on prevention and screening but is precluded from covering the medical treatment, pharmaceutical therapy, and follow-up care that may be needed by women diagnosed with CVD. Health centers potentially could help underserved women obtain access to these noncovered services. Consequently, WISEWOMAN coordinators and health center representatives agreed that integrating WISEWOMAN into health center settings could establish a one-stop source for preventing, treating, and managing CVD among underserved women.

Types of integration

Community health centers differ in their ability to integrate WISEWOMAN into their existing operations. Participants identified several characteristics likely to make a health center a good candidate for participation in WISEWOMAN, including established participation in NBCCEDP, a desire to expand the delivery of preventive health services, the capacity to serve midlife women and to offer chronic disease services and extended hours for working patients, and the flexibility to add a program with new administrative and service delivery requirements.

Formal cooperation. Participants recommended that WISEWOMAN projects and health centers pursue an appropriate type of integration based on the degree to which these characteristics are met (Table 3). One alternative is formal cooperation, wherein health centers perform one or more key activities of the WISEWOMAN screening and lifestyle intervention (Table 3). This alternative should be reserved for health centers with sufficient clinical and administrative capacity to take on new program responsibilities. Participants suggested that health centers begin with clinical activities, such as screening services or medical referrals, that they may already provide to their clients, gradually taking on additional WISE-WOMAN responsibilities, such as support and enabling services, case management, and participation in lifestyle interventions.

Informal cooperation. Another alternative is informal cooperation, in which health centers and state WISEWOMAN projects pursue less structured methods of coordinating their programs and services for underserved women (Table 3). For example, health centers may agree to serve as informal referral sources for WISEWOMAN partic-

TABLE 3. TYPES OF COOPERATION POSSIBLE BETWEEN COMMUNITY HEALTH CENTERS AND WISEWOMAN PROJECTS

Formal cooperation
Health centers participate as WISEWOMAN providers
for one or more types of services:
Screening services
Medical referrals and follow-up care
Case management and support services
Lifestyle interventions
Informal cooperation
Health centers and WISEWOMAN projects coordinate
their activities informally by:
Referring eligible patients to WISEWOMAN projects
Referring patients to health centers for services
outside the scope of WISEWOMAN (e.g.,
treatment for other chronic diseases)
Sharing information on best practices for outreach,
screening, and case management
Conducting joint planning, needs assessment, and
policy development activities for women's health

ipants who need additional medical care or for women ineligible for WISEWOMAN services. This alternative may be most appropriate for health centers limited in their ability to add new programs and services and for centers that do not participate in NBCCEDP. Informal cooperation allows health centers and WISEWOMAN projects to collaborate without imposing substantial burdens on the centers' clinical and administrative infrastructures. Ultimately, decisions concerning integration approach and the degree of engagement will hinge on the specific resources, skills, and capacities available to health centers and to WISEWOMAN projects in a given state and community.

Factors affecting integration

Although the potential benefits of integration are compelling, health center administrators identified several potential challenges in integrating WISEWOMAN's multifaceted services and interventions into their clinical settings. Many health centers operate at full capacity, face excess demand for existing programs and services, and have difficulty hiring staff to support new programs (Table 4). Additionally, health centers typically participate in multiple healthcare and public health programs, each with different responsibilities and requirements, which generates considerable administrative costs and complexities. In view of these challenges, participants indicated that a health center's clinical and administrative infrastructure would likely determine its ability to integrate WISEWOMAN activities.

Clinical infrastructure. Participants noted that the WISEWOMAN program may represent a significant change in practice for health centers that historically have focused on providing services

 TABLE 4.
 PERCEIVED CHALLENGES OF INTEGRATING

 WISEWOMAN WITHIN HEALTH CENTER SETTINGS

- Excess demand for currently existing health center services; limited capacity to take on new activities
- Difficult to hire qualified staff to support new programs
- Difficult to perform the administrative requirements of multiple programs: data collection and reporting, patient tracking, and follow-up care
- Need for participation in NBCCEDP
- Difficult to pay for services not covered by WISEWOMAN but needed by participants

for women of childbearing age and their children. To effectively implement WISEWOMAN, some health centers may need to strengthen their chronic care and disease management services. Respondents noted that health centers with limited experience in managing the healthcare needs of adults with chronic disease might experience difficulties in taking on long-term, ongoing healthcare responsibilities and costs. However, a growing number of centers are improving their capacity to serve people with chronic diseases through the Health Disparities Collaboratives, which have involved over 240 health centers to date.

Respondents noted that health centers may need to free clinical staff time, equipment, and clinic space from existing services, or secure additional staff and space from other sources in order to implement WISEWOMAN. In some cases, it may be possible to free clinical resources by transferring administrative responsibilities from clinical to nonclinical staff, streamlining clinical responsibilities, or partnering with other community organizations for the delivery of some services. In other cases, health centers may need to secure additional clinical resources and support from external sources. For example, participants suggested that health centers apply to HRSA's Drug Pricing Program, which provides eligible institutions with reduced-price prescription drugs, if they are not already participating.

Administrative infrastructure. Participants noted that integrating WISEWOMAN can add new administrative responsibilities for health centers, including conducting outreach and recruitment activities, determining patients' eligibility for WISEWOMAN and NBCCEDP, collecting and reporting data, tracking women who obtain abnormal screening values, and providing follow-up care. Health center representatives indicated that performing these responsibilities could consume substantial time and resources, particularly during the initial phases of integration when centers must establish new administrative processes and information systems. WISEWOMAN projects generally provide startup funds for this purpose, but health centers that lack strong administrative infrastructure and information systems may need additional resources.

Respondents suggested several possibilities for acquiring the needed administrative infrastructure for successful integration of WISEWOMAN. One suggestion was to coordinate and standardize the data collection and reporting requirements of WISEWOMAN with those of NBCCEDP and related federal programs in order to reduce the administrative burden on health centers. Respondents also noted that participation in HRSA's Health Disparities Collaboratives could help health centers develop the information systems and administrative infrastructure needed for WISEWOMAN. Finally, health centers might form partnerships with local public health departments and other community organizations that can help carry out the administrative responsibilities associated with WISEWOMAN. Under such arrangements, health centers could assume primary responsibility for delivery of clinical services while local health departments could help with outreach and recruitment, eligibility determination, patient tracking, and data collection.

Coordination with other health center programs. Participants identified several opportunities for integrating WISEWOMAN projects into health center settings by coordinating project activities with other health center programs and services. For example, health centers may wish to become involved in HRSA's Health Disparity Collaboratives in order to develop the clinical and administrative capacities needed to perform key WISE-WOMAN activities. Health centers participating in the Collaboratives use a chronic care model that involves many of the activities required for successful participation in WISEWOMAN, including use of clinical information systems for longitudinal patient tracking and follow-up, adherence to evidence-based clinical guidelines, patient self-management of disease risks, and linkages with community resources.

Participants also noted that state primary care associations (PCAs) can play an important role in helping health centers integrate WISEWOMAN program components into their operations. In Michigan, for example, the state PCA director and staff meet regularly with the state WISE-WOMAN coordinator to identify ways of collaborating on women's health initiatives. North Carolina's PCA functions as a liaison between health centers and the state WISEWOMAN coordinator and facilitates collaboration with other women's health organizations through North Carolina's Statewide Partnership in Women's Health, a demonstration project sponsored by HRSA that includes the state WISEWOMAN project. In other states, relationships between WISEWOMAN projects and PCAs are still developing.

Facilitating integration: The North Carolina experience

One of the biggest challenges of implementing a chronic care model in clinical practices serving underserved populations is linking high-risk patients with affordable and culturally sensitive interventions that promote changes in dietary habits and physical activity. As North Carolina's experiences in community health centers suggest, WISEWOMAN resources and intervention materials can help bridge this gap. A structured assessment and counseling guide called A New Leaf . . . Choices for Healthy Living was developed in North Carolina and has been used since 1995 as the basis of the North Carolina WISEWOMAN project.¹⁹ The New Leaf materials, which facilitate lifestyle self-management and linkages with community resources, have been culturally adapted for Alaska Native women, Latina women, and women living in other states. Studies of interventions based on New Leaf materials have documented significant reductions in CVD risk factors among underserved women.^{20–25}

The New Leaf intervention is designed for implementation in busy clinical environments where health promotion services are generally not available, time is very limited, and patients often have limited literacy skills. As a component of a WISEWOMAN project, the intervention can be implemented by community health center staff, by county health department staff, or by other public health providers to whom WISE-WOMAN participants are referred. The New Leaf intervention includes a brief assessment of nutrition and physical activity behaviors and barriers to healthy lifestyles, that can be self-administered in the waiting room or with limited help from clerical staff or nurses. Assessments and color-coordinated practical tips are based on foods and types of activity rather than on nutrients or metabolic equivalents.

A concern sometimes expressed by community health centers is that WISEWOMAN's lifestyle interventions reach only a limited segment of their patient population: low-income, uninsured and underinsured women in midlife who are enrolled in the NBCCEDP. Although WISEWOMAN funding indeed is targeted to these women, North Carolina's experiences in health centers suggest that the interventions and resources used by WISE-WOMAN projects can be leveraged to benefit a broader clinic population. For example, health centers can use the screening and administrative systems implemented for WISEWOMAN and the staff training for behavioral interventions to benefit other health center patients. For health centers interested in using *New Leaf*, additional materials can be purchased at minimal cost, and many can be downloaded directly from the North Carolina WISEWOMAN website or copied from a master.

North Carolina's WISEWOMAN project is currently testing approaches to enhance linkages between community health centers and other community-based resources. After completing pilot testing, the project will develop materials to guide community health centers and other WISE-WOMAN providers in identifying community resources (e.g., parks and recreation programs, walking trails, exercise facilities, sources of affordable fruits and vegetables) and barriers (e.g., proximity to fast food restaurants, poor sidewalks and street lights, bad traffic, unsafe streets for walking) and presenting the information in a useful form for WISEWOMAN participants. Materials are also being tested that will help individual WISEWOMAN participants play more active roles in building community resources and circumventing barriers to healthy lifestyles.

DISCUSSION

Community health centers are key components of the nation's healthcare safety net for underserved populations, and, as such, they can play an important role in expanding access to health promotion and disease prevention services, such as those offered through WISEWOMAN. The health center representatives who participated in our assessment perceived a clear need to integrate preventive services within their settings and expressed a strong interest in pursuing integration in conjunction with available resources. Our findings suggest that achieving integration will require flexibility and sustained efforts over time to address the challenges posed by competing demands on health center resources and the administrative burdens associated with new projects. Integration strategies should be tailored to the specific resources, skills, and capacities available to health centers and to the prevention programs considered for integration.

Because WISEWOMAN is just beginning to collaborate with community health centers, this assessment describes only the initial expectations and experiences of selected health centers and projects. The number of health centers participating in WISEWOMAN projects continues to grow, thereby creating additional opportunities for learning how to achieve integration within specific institutional and community contexts and for understanding how integration affects the health and disease risks of underserved women. Additional research not only will inform efforts to integrate WISEWOMAN into health centers but also will produce insights for integrating other types of preventive health services into community health settings.

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