Assessment of the Train the
Trainer Project Using the Helping
You Take Care of Yourself Curriculum

Final Report
March 25, 2010

Melanie Besculides
Lisa Trebino
Sarah Jones
Jung Kim

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Submitted to:
Women's Health Network
Massachusetts Department
of Public Health
250 Washington St.
Boston, MA 02108
Project Officer: Heather Nelson
Submitted by:
Mathematica Policy Research
P.O. Box 2393

Princeton, NJ 08543-2393
Telephone: (609) 799-3535
Facsimile: (609) 799-0005
Project Director: Melanie Besculides

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## CONTENTS

Chapter ..... Page
I Introduction ..... 1
II Methods ..... 7
III Results ..... 15
IV Recommendations for Project Improvement. ..... 41
V Conclusions ..... 47
References ..... 49
Appendix A: Data Collection Forms ..... A. 3
Appendix B: Interview And Focus Group Protocols ..... B. 3
Appendix C: Demographic Characteristics Of Women Educated, By Type Of Training ..... C. 3
Appendix D: Cardiovascular Health Knowledge, By Demographic Characteristics Among Women Who Filled Out Forms In English, Portuguese, And Khmer ..... D. 3
Appendix E: Pre- And Posttest Knowledge By Question And By Age, Race/Ethnicity, And Education ..... E. 3
Appendix F: Revised Data Collection Forms ..... F. 3

## TABLES

Table Page
1 Data Collection Methods Used in the Evaluation of the Helping You Take Care of Yourself Curriculum ..... 7
2 DESCRIPTION OF COMMUNITY-BASED ORGANIZATIONS THAT Participated in the Qualitative Evaluation. ..... 12
3
Demographic Characteristics of the Trainers ..... 17
4 Breast, Cervical, and Cardiovascular Health Knowledge on the Pretests and Posttests, by Demographic Characteristics of Trainers ..... 18
567 Demographic Characteristics of Women Educated.................................. 25
8 Demographic Characteristics of Women Educated, by Region ofTraining28
910 Receipt of Pap Smears Among Population Served, byDemographic Characteristics32
11 Breast, Cervical, and Cardiovascular Health Knowledge on the Pretests and Posttests, by Demographic Characteristics ..... 34
12 Breast, Cervical, and Cardiovascular Health Knowledge, by Pretest and Posttest Question ..... 36
13 Summary of Responses to Evaluation Questions Among Community Women ..... 38

## Figures

Figure
Page
1 Flow Chart of Project Implementation and Evaluation ......................... 5
2 Number of Women Educated in Each Unit of the Curriculum ............... 24

## Chapter I

## INTRODUCTION

Cardiovascular disease, breast cancer, and cervical cancer cause significant morbidity and mortality among women in the United States. Cardiovascular disease comprises heart disease and stroke, which are the first and third leading causes of death among women in the United States, respectively (CDC 2006a; CDC 2007a). In 2005, the cardiovascular disease mortality rate was 172.3 per 100,000 women (Kaiser Family Foundation 2005). Although its incidence is far lower than that of cardiovascular disease, breast cancer is also a significant health problem for women in the United States. It is the second most common type of cancer diagnosed among women, exceeded only by skin cancer. In 2004, the breast cancer incidence rate was 117.7 per 100,000 women, and the mortality rate was 24.4 per 100,000 . Cervical cancer is also an important health issue. In 2004, the cervical cancer incidence rate was 7.9 per 100,000 women, and the mortality rate was 2.4 per 100,000 women (U.S. Cancer Statistics Working Group 2007).

Research has shown that preventive care can reduce the risk of all three diseases. For cardiovascular disease, increasing physical activity, eating a "heart-healthy" diet, reducing or maintaining weight, evaluating and treating depression, and quitting smoking have all been proven to reduce risk (CDC 2008a). Healthy eating and physical activity have also been shown to reduce the risk of breast cancer, while alcohol use can increase the risk (CDC 2008b). Lifestyle choices such as not smoking, limiting sexual partners, using condoms, and being vaccinated, can reduce the risk of cervical cancer (CDC 2009).

When disease occurs, early disease detection through screening can improve health outcomes for cardiovascular disease, breast cancer, and cervical cancer. For cardiovascular disease, the Centers for Disease Control and Prevention (CDC) recommend routine monitoring of risk factors such as high blood pressure and cholesterol. For adults, blood pressure should be checked regularly and cholesterol should be checked every five years (CDC 2008a). For breast cancer, the American College of Obstetrics and Gynecology (ACOG) recommends that women ages 40 to 49 have a mammogram every one to two years and women ages 50 and older have one annually. Routine screening with mammography is recommended to begin at earlier ages for women with certain risk factors (ACOG 2008). For cervical cancer, ACOG recommends that annual screening using a Pap smear begin
within three years after first sexual relations or at age 21, whichever comes first (ACOG 2003). Annual screening should continue until a woman is at least 30 . Screening can typically be done every two to three years after age 30 if a woman has had three negative Pap tests in a row.

To increase awareness of these diseases, make screening widely available, and ultimately reduce morbidity and mortality, the U.S. Congress has passed various pieces of legislation authorizing the development of programs aimed at prevention, early detection, and treatment. Two such programs, both operated through CDC, are the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and the Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) program. Established under the Breast and Cervical Cancer Mortality Prevention Act of 1990 (Public Law 101354), NBCCEDP offers screenings, diagnostic services, surgical consultations, and referrals for treatment for breast and cervical cancers in every state, the District of Columbia, and five U.S. territories and for 12 American Indian/Alaska Native tribes or tribal organizations. Services are provided to uninsured and underinsured women whose earnings are at or below 250 percent of the federal poverty level; services are provided to women ages 40 to 64 for breast screening and to women ages 18 to 64 for cervical screening (CDC 2008c). In 2000 Congress passed the Breast and Cervical Cancer Prevention and Treatment Act to ensure that women in the program with cancer receive appropriate treatment. The act gave states the option of offering women enrolled in the NBCCEDP access to treatment through Medicaid. All states and the District of Columbia have exercised this option (CDC 2007b).

In 1993, to piggyback the NBCCEDP, Congress authorized the CDC to set up the WISEWOMAN program. The WISEWOMAN program offers NBCCEDP participants ages 40 to 64 (1) screening for cardiovascular disease risk factors and referrals to appropriate medical and community resources; (2) risk reduction counseling to inform women of their screening results and provide interpretation and recommendations; (3) lifestyle interventions to help women eat more healthfully, increase physical activity, and quit smoking; and (4) rescreening to provide feedback to participants and their providers about changes in risk factor profiles.

Both the NBCCEDP and WISEWOMAN operate at local levels either through states or tribal organizations. In Massachusetts, both programs operate through the Massachusetts Department of Public Health (MDPH). MDPH has been involved in the NBCCEDP since 1991 and was funded to set up one of the three original WISEWOMAN projects in 1995. In 1998, in an effort to offer comprehensive services through WISEWOMAN and BCCEDP, the MDPH formed the Women's Health Network (WHN), which emphasizes connecting women to primary care. In addition to clinical services, the WHN provides health education to the community. Until recently, education was provided through an Outreach and Education team which consisted of six Regional Community Outreach Specialists located in the Massachusetts Executive Office of Health and Human Services Regions and was
overseen by MDPH's Director of Community Services. ${ }^{1}$ The Helping You Take Care of Yourself curriculum, developed in 2006 by the Outreach and Education team, is one type of education the WHN uses. The curriculum has three separate units, one on breast health, one on cervical health, and one on cardiovascular health. It was designed as a "train-the-trainer model," whereby MDPH Outreach Specialists train community members and community health workers with the intention that they will then educate other women in the community about the issues presented. ${ }^{2}$ Each unit of the curriculum consists of PowerPoint presentations, flip charts, and models and has been translated into Spanish, Portuguese, and Khmer. The topics covered in the breast, cervical, and cardiovascular health units are listed here:

| Breast Health Unit Topic | Cervical Health Unit Topics | Cardiovascular Health Unit Topics |
| :---: | :---: | :---: |
| - Breast anatomy | - Female reproductive anatom | - What is cardiovascular disease? |
| - What is breast cancer? | -What is cervical cancer? | - Heart attack warning signs |
| - Benign conditions of breast cancer | - What is Human Papilloma Virus (HPV)? | - Stroke warning signs |
| - Risk factors for breast cancer | - Risk factors for HPV and cervical cancer | - Heart disease and stroke risk factors |
| - Warning signs of breast cancer | - Pap test | - Eating and living "heart healthy" |
| - Breast cancer detection methods | - HPV test | - Knowing your numbers (cholesterol triclycerides, blood pressure, glucose, height, weight) |

To expand the reach of the Helping You Take Care of Yourself curriculum beyond women whom WHN staff could educate, WHN sought to train community-based organization (CBO) staff who would in turn educate women in their communities using the curriculum. In 2007, WHN contracted with Mathematica Policy Research, Inc. (MPR) to administer funds to 18 CBOs to carry out the first phase of this education, which lasted from February 2007 through June 2007. ${ }^{3}$ Only the breast and cervical health units had been developed at this time. In late 2007, WHN again contracted with MPR to administer funds to 29 CBOs (including some CBOs that had participated in the first phase and some new ones) to carry out the second phase of the education, which also included cardiovascular health. ${ }^{4}$ The second phase of the project lasted from August 2007 through November 2008. Women who were educated during the first phase of the project could be educated again during the second phase, provided that they were not educated in the same unit (breast, cervical, or cardiovascular health) more than once. During both phases of the project, the MDPH

[^0]Outreach Specialists selected the organizations based on expertise with WHN-designated target populations and worked with them to identify the target number of women to educate. The MDPH Outreach Specialists held day-long sessions in their regions to train CBO staff to use the curriculum and provided technical assistance to the CBOs throughout the length of the project. MPR developed memoranda of understanding (MOUs) with each participating CBO that described the project and outlined expectations for participation. The MOUs stated that organizations would be paid $\$ 30$ per unit (breast, cervical, or cardiovascular health) for each woman who was educated. Organizations were able to choose whether to educate women in one, two, or all three units of the curriculum, but were advised to conduct no more than two units in the same session.

The MOUs also outlined requirements for payment. Specifically, CBOs were asked to collect data from each woman educated using four standardized forms and to submit the forms to MPR by specified dates. At the beginning of each educational session, women were asked to fill out a demographic form and a pretest of their knowledge of breast and/or cervical and/or cardiovascular health. After completing the educational session(s), they were asked to fill out a posttest that was identical to the pretest and an evaluation form of the education received. All data collection forms were developed by MDPH. Copies of the four forms are included in Appendix A.

MPR analyzed the data to describe the population served, assess the women's breast and cervical cancer screening health behaviors, determine baseline knowledge on breast, cervical, and cardiovascular health, assess whether the educational sessions improved knowledge, and assess satisfaction with the education. MPR also analyzed data submitted on forms to MDPH that were filled out by CBO staff who were trained to educate women in their communities. To supplement the analysis of data collected during educational sessions, MPR qualitatively evaluated the curriculum by conducting (1) interviews with MDPH Outreach Specialists who trained educators at CBOs, (2) interviews with CBO educators and directors, and (3) focus groups with women who were educated.

Figure 1 summarizes the flow of project implementation and evaluation. There are four sections of the flowchart: project implementation, reach, effectiveness, and maintenance. This organization is loosely based on the RE-AIM framework, which assesses Reach, Effectiveness/Efficacy, Adoption, Implementation, and Maintenance of public health interventions to determine program impact (Glasgow et al. 1999).

Figure 1. Flow Chart of Project Implementation and Evaluation


This report summarizes the findings from MPR's assessment of project implementation, reach, effectiveness, and maintenance using a mix of quantitative and qualitative data. Quantitative data presented are from both phases of the project combined, while qualitative data were gathered after the second phase only. The report supplements a report on the quantitative findings of the first phase of the project, which was completed in August of 2008 (see Trebino et al. 2008). An overarching goal of this report is to identify ways to improve the project before it is expanded further in terms of the number of health topics covered and the number of individuals educated. The project will likely be expanded in mid2009. This report is organized as follows: Chapter II: Methods (quantitative, qualitative); Chapter III: Results (project implementation, project reach, project effectiveness, and maintenance); Chapter IV: Recommendations for Project Improvement; and Chapter V: Conclusions.

## Chapter II

## METHODS

To comprehensively evaluate the effectiveness of the Helping You Take Care of Yourself curriculum and identify ways to improve it, MPR collected and analyzed both quantitative and qualitative data. The quantitative assessment involved the analysis of (1) data forms submitted by CBOs filled out by women in their communities who were educated using the curriculum, and (2) data forms filled out by CBO staff who were trained by MDPH to educate women in their communities. The assessment combines data from both phases of the project. The qualitative assessment involved the analysis of information gathered through interviews with MDPH Outreach Specialists who trained staff at CBOs to conduct the educational sessions, interviews with CBO staff, and focus groups with women who were educated at CBOs. The qualitative assessment only analyzed information from the second phase of the project. Table 1 provides an overview of the data collection methods used in both the quantitative and qualitative analyses. Then, both the data collection methods and data analysis methods are described in greater detail.

Table 1. Data Collection Methods Used in the Evaluation of the Helping You Take Care of Yourself Curriculum

| Data Collection Method | Description of Respondents | Timing of Data Collection |
| :---: | :---: | :---: |
| Quantitative Evaluation |  |  |
| Surveys of CBO staff trained to educate women <br> - Demographic form <br> - Pretest <br> - Posttest <br> - Evaluation form | 101 CBO staff members trained to educate women in breast health, and/or cervical health, and/or cardiovascular disease | Phase 1: February-April 2007 Phase 2: SeptemberDecember 2007 |
| Surveys of women educated by CBOs <br> - Demographic form <br> - Pretest <br> - Posttest <br> - Evaluation form | 2,526 women in the community educated by CBOs in breast health, and/or cervical health, and/or cardiovascular disease | Phase 1: February-June 2007 Phase 2: August 2007November 2008 |


| Data Collection Method | Description of Respondents | Timing of Data Collection |
| :--- | :---: | :--- |
| Qualitative Evaluation |  |  |
| Interviews with MDPH <br> Outreach Specialists | 5 MDPH Outreach Specialists | June-July 2008 |
| Interviews with CBO <br> educators and staff | 9 CBO educators <br> 2 CBO directors | July-August 2008 |
| Focus groups with <br> women educated by <br> CBOs | 33 women in 5 focus groups (each <br> focus group corresponded to a <br> different CBO) | August-September 2008 |

Source: Analysis of those trained and educated by the Helping You Take Care of Yourself curriculum

## Quantitative Methods

## Data Collection

In the first phase of the project, the 18 participating CBOs submitted data forms for a total of 872 women who were educated during 96 educational sessions on breast and/or cervical health. In the second phase of the project, the 29 participating CBOs submitted data forms for a total of 1,654 women who were educated during 168 educational sessions on breast and/or cervical and/or cardiovascular health. Data on the 101 CBO educators trained by MDPH were also collected and sent to MPR. These data were combined with data on community women educated so they could be cleaned and coded using the same methods. Data forms were identical in the first and second phases of the project with one exception; forms used in the second phase included an additional question on the type of health insurance that women had.

## Data Entry, Cleaning and Coding

Submitted data forms were reviewed, entered, and coded in the same way as they were during the analysis of the first phase of the project (see Trebino et al. 2008 for details). This section only describes the cleaning and recoding of the health insurance question, which was added in the project's second phase. For this question, some women checked off multiple responses. In these cases, the full response was entered under the "Health Insurance Other" category. Then the "Other" category was re-coded using the following hierarchy: (1) Medicaid, MassHealth, CommonHealth or MassHealth HMOs offered through Neighborhood Health Plan, Fallon Community Health Plan, Boston Medical Center HealthNet or Network Health or Commonwealth Care; (2) a plan that you or someone else buys; (3) your employer or someone else's employer; (4) Medicare; (5) other; (6) Free Care or Safety Net. Ninety-two women reported having multiple types of health insurance. Of these, 44 checked off both Medicaid and Medicare. Of the 44, 24 were ages 65 and over and were coded as having Medicare and the other 20 were under 65 and coded as having Medicaid. For persons who checked "Other" but did not indicate having multiple types of insurance, data were re-coded into existing categories whenever possible.

After cleaning and re-coding, two SAS data sets were created: (1) an education data set containing information on the educational session attended, demographic sheet responses, pretest responses, and posttest responses for each person educated, and (2) an evaluation data set containing information on the educational session attended and responses to the evaluation forms for each person educated. Datasets were cleaned using the same methods employed in the first phase of the project (see Trebino et al. 2008 for details).

## Data Analysis

Data from community women who were educated by CBOs were analyzed separately from data on CBO educators. Analysis of data from women educated by CBOs was a threestep process. First, data from the demographic forms were analyzed to gain an understanding of the population served by the program. Then, analysis focused on the changes in knowledge before and after the educational sessions. Finally, satisfaction with the education was examined (see Trebino et al. 2008 for further details on the analytic methods). As part of the analysis of the women served by the program, frequencies were run on responses to questions related to screening for breast and cervical cancer. Participants were asked if they had ever had a mammogram. If a participant answered "yes," she was asked when her most recent mammogram occurred. Response choices included "less than one year ago," "one to three years ago," "four to five years ago," and "more than five years ago." The same questions were asked regarding Pap smears. We ran frequencies on these health behavior questions and then we ran cross-tabs with select demographic variables (age, race/ethnicity, health insurance status, and education) to determine whether behaviors varied by demographic group. Chi-squared tests were used to assess the significance of differences within each demographic group. In addition, to serve as a benchmark comparison, we ran frequencies on the receipt of mammograms and Pap smears using data from the Massachusetts Behavioral Risk Factor Surveillance System (BRFSS). Ninety-five percent confidence intervals were calculated to determine whether women educated by the Helping You Take Care of Yourself curriculum received mammograms and Pap smears in proportions significantly different from women in Massachusetts overall.

To assess knowledge of breast and cervical health before and after the educational sessions, responses on the pre- and posttests were examined. The pre- and posttests for the breast and cervical health units contained five questions each. Each test was scored on a five-point scale for which a score of 0 indicates that the participant responded incorrectly to all test questions and a score of 5 indicates that the participant responded correctly to all test questions. On the cardiovascular health unit, one of the five pre- and posttest questions was translated incorrectly on the Spanish data collection forms, making analysis on this question impossible for anyone filling out a pre- and posttest in Spanish. ${ }^{5}$ As a result, knowledge of cardiovascular health was analyzed for all women using only four questions so differences across groups could be assessed. However, knowledge of cardiovascular health using all five questions was analyzed for women who completed data collection forms in English,

[^1]Portuguese, or Khmer. To determine whether knowledge changed as a result of attending the educational session, average pre- and posttest scores were calculated for all participants. Additionally, the percentage of participants who increased their scores between the pre- and posttests was calculated. Paired t-tests were used to assess the significance of the change among those who took both the pre- and posttests.

Apart from the addition of the cardiovascular health unit, there was one other difference in the data analysis methods between this report and the first report-a frequency of the type of health insurance that women had was included for those educated during the second phase of the project, while for the first phase, only the presence or absence of health insurance (yes, no) was analyzed.

As noted above, MDPH provided a small data set with records that had been entered from training sessions its staff conducted with educators at CBOs. Analyses of these data were conducted separately and involved frequencies of demographic information and an assessment of knowledge on the three units of the curriculum, conducted in the same way that knowledge was assessed for community members who received the educational sessions. In addition, frequencies of the educators' responses to the evaluation form questions were run.

## Qualitative Data Collection Methods

To supplement the quantitative data received, data collection for the qualitative evaluation was carried out in the late summer and fall of 2008. The qualitative evaluation involved interviews with MDPH Outreach Specialists, interviews with CBO staff, and focus groups with women who were educated by CBOs on the topics of breast cancer, cervical cancer, and cardiovascular disease. The qualitative evaluation assessed the implementation of the "train-the-trainer" model as well as the effectiveness of the Helping You Take Care of Yourself curriculum on improving knowledge on the three health topics. Specifically, the qualitative evaluation sought to assess:

- The quality of the training the CBO educators received from MDPH.
- The quality of the curriculum used to train the CBO educators and educate the women from the community.
- The quality of the data collection forms.
- The information women in the community learned and were able to retain.
- Receipt of services following the education.

To conduct the evaluation, MPR staff developed interview and focus group protocols that were unique to each stakeholder group, but that also had reoccurring themes that could be tracked across each stakeholder group. Complete protocols are located in Appendix B.

Interviews with MDPH Outreach Specialists. Interviews were conducted by telephone with MDPH Outreach Specialists from five of six ${ }^{6}$ Massachusetts regions (Central, Metrowest, Northeast, Southeast, and West). These semi-structured interviews focused on experiences recruiting and working with CBOs, training CBO educators to educate women, educating women in the community, the curriculum itself, and data collection forms. Interviews lasted about one hour. To assist with planning the CBO interviews and focus groups, MDPH Outreach Specialists were asked to provide recommendations for CBO educators to participate in interviews and focus groups (including those who were successful at implementing the project and those who had struggled) and to indicate any who might be capable of organizing a focus group of women for our evaluation and willing to do so.

Interviews with CBOs. Interviews were conducted by telephone with representatives from 7 of the 29 CBOs involved in the project and lasted about one hour. CBOs were selected to represent each of the six regions of the state, a mix by size of organization, and a mix of languages in which they conducted educational sessions. MDPH Outreach Specialists were asked to identify the person(s) most appropriate to speak with at each of the selected organizations and to contact them by email or phone to provide entrée for MPR. Within one week, MPR sent selected CBOs an email that described the evaluation effort and asked if the organization would be willing to be interviewed. Representatives from all contacted CBOs agreed to participate in the interviews. At a minimum, one educator from each organization was interviewed and in some cases multiple educators and the CBO director were interviewed. Typically, multiple interviews at the same organization were conducted when the first person interviewed recommended we speak with another person to provide a more comprehensive picture of the program; in one case, the initial person interviewed invited two of her staff to the interview. A total of nine educators and two CBO directors were interviewed. Table 2 lists the organizations interviewed, the region the CBO is located in, the number of women educated by the CBO, languages the CBO educated women in, the people interviewed at the CBO , and whether or not a focus group was held through the CBO. Semi-structured interviews with CBO staff focused on the structure, content, and quality of the training received from MDPH as well as experiences with recruiting and educating women, the curriculum, data collection forms, and working with MDPH. At the end of the interview, CBOs were asked about their willingness and ability to organize a focus group of women who attended educational sessions held by their CBO. All CBOs were willing to organize focus groups.

Focus Groups. A total of five CBOs were selected to participate in focus groups. They were selected in a way that would achieve a mix of regions, CBO sizes, and the languages of those educated. The availability of contact information for the women was another consideration. The five focus groups were conducted with women who attended educational sessions at one of the five selected CBOs. All focus groups were conducted at the CBO where women were educated or a nearby location. To recruit focus group participants, MPR

[^2]Table 2. Description of Community-Based Organizations that Participated in the Qualitative Evaluation

| CBO | Geographic Region | CBO's Target Number of Women to Educate (Actual Number Educated by CBO) ${ }^{\text {a }}$ | Language(s) of Forms Submitted by $\mathrm{CBO}^{\text {a }}$ | People Interviewed as Part of Qualitative Evaluation | Whether CBO Held a Focus Group(Language of Focus Group) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gandara Center | Western | 100 (120) | Spanish | 1 Educator | Yes (Spanish) |
| La Alianza Hispana | Boston | 200 (154) | English, Spanish | 2 Educators | Yes <br> (English with some translation to Spanish) |
| National Asian Women's Association | Metrowest | 155 (156) | English | 1 Educator | No |
| Southeast Asian <br> Coalition of Central Massachusetts | Central | 40 (26) | English | 1 Educator 1 CBO Director | Yes (Vietnamese through translator) |
| Spanish American Center | Central | 70 (86) | Spanish | 1 Educator | No |
| YWCA of Southeastern Massachusetts | Southeast | 255 (279) | English, Portuguese | 2 Educators 1 CBO Director | Yes <br> (English with translation to Spanish and Portuguese for some participants) |
| YWCA of Greater Lawrence | Northeast | 100 (106) | English, Spanish | 1 Educator | Yes (Spanish) |

${ }^{\text {a }}$ The information in these columns represents only the women educated during the second phase of the project because the qualitative evaluation was conducted during this phase.
$\mathrm{CBO}=$ community-based organization.
gave selected CBOs a list of approximately 20 women they had educated and asked them to recruit 10 to 12 of the women for a focus group by contacting women on the list. If they were unable to recruit enough women, they were given another list of five women. ${ }^{7}$ To recruit women, CBO staff telephoned the women and, in one case, visited women at home to ask for their participation. Typically, recruitment was completed by the CBO educator. This individual or the CBO (depending on the preference of the individual recruiting) received an honorarium of $\$ 250$ to recruit women and organize the group. Recruitment was conducted by CBOs because it was thought that they would be more effective, being known within their communities.

The focus groups were organized at times that were most convenient for women. A meal was provided during the focus group, and women were given a $\$ 30$ gift card to a local supermarket for their participation. Two focus groups were held in English, two in Spanish, and one in Vietnamese. ${ }^{8}$ A total of 33 women participated in the five groups, with an average of 6.6 women per group, ranging from 4 to 9 women per group.

Semi-structured focus group guides were used to facilitate the discussion and questions focused on how women were recruited for the education session(s), what they learned and their level of comprehension, the usefulness of the information received, issues with the data collection forms, appropriateness of translation (if applicable), and evaluation of the session(s). Maintenance of knowledge and receipt of services were also assessed at the start of the focus group using written forms (Appendix B). The focus groups lasted about an hour and were all led by an experienced moderator who is fluent in English and Spanish. The focus group held in Vietnamese was also led by this individual with the help of a translator.

[^3]
## Chapter III

## RESULTS

The combination of quantitative data collected from women educated and qualitative information from interviews and focus groups allowed for a comprehensive evaluation of the project. Below, the main findings and limitations are presented, organized in the following areas: project implementation, project reach, project effectiveness, maintenance (longer-term effect of the program), and limitations of the analysis.

## Project Implementation

On the whole, project implementation was reportedly smooth. MDPH Outreach Specialists were able to recruit CBOs, build successful relationships with them, and help them throughout the project. Key results regarding (1) the relationship between MDPH and CBOs and (2) training CBO educators appear below.

## Relationship between MDPH and CBOs

To recruit CBOs, MDPH Outreach Specialists typically contacted those with whom they had previous relationships and those who had ties in the community and had an interest in providing health education. They also recruited CBOs they had not worked with previously, but who targeted hard-to-reach priority populations. MDPH Outreach Specialists explained to CBOs how the project worked and asked if they were interested in participating. One concern with the CBO recruitment process raised by some MDPH staff was that the lack of a clear and transparent CBO selection process could cause problems if more CBOs wanted to participate than the funding allowed. For example, one MDPH Outreach Specialist noted that she used a semi-structured request for proposal process to make the selection of CBOs more objective.

Working with CBOs to expand program reach had several advantages. One major advantage was that CBOs had established ties in the community and, to be effective, understanding the community was vital. As one MDPH Outreach Specialist commented, "I can't just show up at a bousing building and conduct an education session. Connecting with the key players in
the community is how to get the women there." Another advantage of working with CBOs was the formation of new relationships. The project established relationships between MDPH and CBOs that had not existed previously, which could be tapped into for future projects. Moreover, CBOs benefitted from the relationship on this project, as it allowed them to use the additional funding to recruit community members who are typically more difficult to reach. All CBO staff interviewed reported having a good relationship with their MDPH Outreach Specialist, although the amount of contact and level of support varied. Some had minimal contact with their MDPH Outreach Specialists but would have felt comfortable contacting them had they needed to. Others had more regular contact. As one MDPH Outreach Specialist said, "Given all the challenges that our communities face, I think that we worked really well together, and it was very cobesive. Everyone followed through. They know the communities very well."

## Training CBO Educators

A total of 101 CBO staff members were trained by MDPH Outreach Specialists to conduct educational sessions with women in their communities. Below, we discuss the demographic characteristics of the educators; the educators' knowledge of breast, cervical, and cardiovascular health before and after being trained; and educators' satisfaction with the training received.

Demographic Characteristics of Educators. Most CBO educators were trained on both the breast health and cervical health units ( 57 percent) or on all three units ( 37 percent) (Table 3). Those trained represented a diverse population. Educators ranged in age from 20 to 73 . More than one-third ( 42 percent) of the educators were Hispanic, about one-third were white ( 33 percent), and 14 percent were black. The percentage of educators who were Hispanic was lower than the percentage of women educated who were Hispanic (51 percent), but much higher than the percentage of Hispanics in the state ( 8 percent). The percentage of educators who were black was higher than both the percentage educated who were black ( 8 percent) and the state average ( 7 percent) (U.S. Census Bureau 2007). More than half of the educators were born outside the United States, lower than the percentage of women educated who were foreign born (about two-thirds).

Educators' Knowledge of Breast, Cervical, and Cardiovascular Health. Table 4 provides a snapshot of educators' knowledge of breast, cervical, and cardiovascular health before and after their training sessions. Baseline knowledge was high for all three units of the curriculum, although knowledge increased for all units after the trainings. Specifically, for breast health average scores of educators increased from 4.7 to 4.8 on a five-point scale, a statistically significant increase based on a paired t-test (p-value $<0.05$ ). Between the preand posttests, 19 percent of educators increased their scores on the breast health unit. Similarly, for those trained in cervical health, average scores increased from 4.1 to 4.9 on a five-point scale. This increase was also statistically significant using a paired t-test ( p -value $<$ 0.01 ). Between the pre- and posttests, 67 percent of educators increased their scores on the cervical health unit. Finally, average scores increased from 3.6 to 3.8 on a four-point scale for

Table 3. Demographic Characteristics of the Trainers

| Characteristics | Total |  |
| :---: | :---: | :---: |
|  | Number | Percentage |
| Breast cancer education only | 3 | 3.0 |
| Cervical cancer education only | 0 | 0.0 |
| Cardiovascular disease education only | 1 | 1.0 |
| Breast and cervical cancer only | 58 | 57.4 |
| Breast and cardiovascular disease only | 0 | 0.0 |
| Cervical cancer and cardiovascular disease only | 2 | 2.0 |
| All three curricula | 37 | 36.6 |
| Total | 101 | 100.0 |
| Age |  |  |
| Under 40 | 46 | 45.5 |
| 40-64 | 53 | 52.5 |
| 65 and over | 2 | 2.0 |
| Missing | 0 | 0.0 |
| Race/Ethnicity |  |  |
| White | 33 | 32.7 |
| Black | 14 | 13.9 |
| Asian | 4 | 4.0 |
| Hispanic | 42 | 41.6 |
| Other | 0 | 0.0 |
| Refused/Missing | 8 | 7.9 |
| Language of Form Completed |  |  |
| English | 98 | 97.0 |
| Spanish | 3 | 3.0 |
| Portuguese | 0 | 0.0 |
| Khmer | 0 | 0.0 |
| Country of Birth |  |  |
| Born in U.S.A. | 48 | 47.5 |
| Foreign | 52 | 51.5 |
| $<1$ year in U.S. | 1 | 1.9 |
| 1-5 years in U.S. | 9 | 17.3 |
| More than 5 years in U.S. | 42 | 80.8 |
| Missing | 1 | 1.0 |
| Health Insurance |  |  |
| Yes | 99 | 98.0 |
| No | 2 | 2.0 |
| Missing | 0 | 0.0 |
| Education |  |  |
| Less than high school | 3 | 3.0 |
| High school or equivalent | 15 | 14.9 |
| Training program | 11 | 10.9 |
| College | 70 | 69.3 |
| Missing | 2 | 2.0 |
| Region of Training |  |  |
| Boston | 17 | 16.8 |
| Central | 9 | 8.9 |
| Metrowest | 17 | 16.8 |
| Northeast | 19 | 18.8 |
| Southeast | 6 | 5.9 |
| Western | 33 | 32.7 |

Source: Analysis of data collected from educators trained by the Helping You Take Care of Yourself curriculum.

Note: Information reflects data collected from educators who were trained to educate at 31 different community-based organizations during both phases of the project.

Table 4. Breast, Cervical, and Cardiovascular Health Knowledge on the Pretests and Posttests, by Demographic Characteristics of Trainers


Source: Analysis of data collected from educators trained by the Helping You Take Care of Yourself curriculum.
Note: The first row of the table shows statistics for participants who completed both the pretests and posttests. A paired t-test was conducted for these participants in each unit of the curriculum to determine whether the increase in average scores was statistically significant. Paired t-tests were not conducted for individual demographic groups due to the small sample sizes.

Note: Information reflects data collected from educators who were trained to educate at 31 different community-based organizations during both phases of the project.
** The difference between the average pretest score and average posttest score is statistically significant at the .01 level among women who completed both the pretest and posttest.

* The difference between the average pretest score and average posttest score is statistically significant at the .05 level among women who completed both the pretest and the posttest.
the cardiovascular health unit. ${ }^{9}$ This was a statistically significant increase using a paired t-test ( p -value $<0.01$ ). Between the pre- and posttests, 36 percent of educators increased their scores on the cardiovascular health unit.

Table 5 displays the percentage of educators correctly answering each of the pre- and posttest questions. The percentage increased for all questions in all three units of the curriculum after the educational sessions. On the breast health unit, the question most commonly answered incorrectly by educators on both the pretest and the posttest was "You should have a clinical breast exam done by a health care provider every 5 years" (correct answer is false). More than 10 percent of educators responded incorrectly to this question on the posttest. On the cervical cancer unit, upwards of 95 percent of educators responded correctly to each question on the posttest. On the cardiovascular health unit, the question most commonly answered incorrectly by educators on both the pretest and posttest was "Lung cancer is the number 1 killer of women in the United States" (correct answer false). Over 20 percent of educators trained in English, Portuguese, or Khmer answered this question incorrectly on the posttest. A close examination of the posttest questions that educators answered incorrectly may suggest items that need to be conveyed more clearly to them during their training so that they can convey them clearly to the women they educate.

Satisfaction with Training Sessions. Satisfaction with the training sessions was high among educators (Table 6). Specifically, 99 percent of educators said that they would recommend that family members and friends attend the health education sessions. Moreover, 98 percent of educators rated the health session as either "good" or "excellent," and 99 percent rated their group leader as either "good" or "excellent." Suggestions for improvements among this group included allowing more time to ask questions and share experiences, presenting each unit separately or including a break between units, allowing educators to practice, providing food and drink, and adding other topics such as men's health or how to get health insurance.

## Project Reach

During the project, a total of 2,526 women were reached by CBO educators in the six regions of Massachusetts. Quantitative and qualitative data collected during this evaluation suggest that (1) the curriculum reached a diverse population, (2) the population educated by the curriculum was less likely than the overall Massachusetts population to have received mammograms and Pap smears within the last year, and (3) women were satisfied with how the educational sessions went. Key findings on the following topics are discussed below: (1) recruiting women, (2) educating women, and (3) description of women educated.

[^4]Table 5. Breast, Cervical, and Cardiovascular Health Knowledge, by Pretest and Posttest Question Among Trainers

|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question (Correct Response) |  |  |  |  |  |
| Breast Health Unit |  |  |  |  |  |
| 1. If you have a lump in your breast you absolutely have breast cancer (false) | 98 | 96.9 | 98 | 98.0 | 1.1 |
| 2. Starting at the age of 40, you should get a mammogram once a year (true) | 98 | 98.0 | 98 | 100.0 | 2.1 |
| 3. Mammograms cause breast cancer (false) | 98 | 96.9 | 98 | 100.0 | 3.2 |
| 4. As women get older, their risk of breast cancer increases (true) | 98 | 90.8 | 98 | 95.9 | 5.6 |
| 5. You should have a clinical breast exam done by a health care provider every 5 years (false) | 98 | 84.7 | 98 | 88.8 | 4.8 |
| Cervical Health Unit |  |  |  |  |  |
| 1. If you get an abnormal Pap test, it means you have cervical cancer (false) | 96 | 99.0 | 97 | 99.0 | 0.0 |
| 2. Women should get their first Pap test at age 21 or three years after they become sexually active (true) | 96 | 46.9 | 97 | 96.9 | 106.7 |
| 3. Cervical cancer is preventable through routine screening (true) | 96 | 91.7 | 97 | 97.9 | 6.8 |
| 4. Getting a positive HPV test means you have cervical cancer (false) | 96 | 89.6 | 97 | 97.9 | 9.3 |
| 5. Most women have been exposed to the Human Papilloma Virus (HPV) (true) | 96 | 78.1 | 97 | 100.0 | 28.0 |
| Cardiovascular Health Unit |  |  |  |  |  |
| 1. Men and women have the exact same heart attack warning signs (false) | 46 | 60.9 | 42 | 90.5 | 48.6 |
| 2. Quitting smoking can help reduce the risk for cardiovascular disease (true) | 46 | 100.0 | 42 | 100.0 | 0.0 |
| 3. LDL (bad) cholesterol can clog your blood vessels and cause damage to your heart and brain (true) | 46 | 97.8 | 42 | 100.0 | 2.2 |
| 4. Lung cancer is the number one killer of women in the United States (false) ${ }^{\text {a }}$ | 43 | 54.3 | 39 | 78.6 | 44.6 |
| 5. High blood pressure forces your heart to work harder than normal and raises your risk for heart attack and stroke (true) | 46 | 97.8 | 42 | 97.6 | -0.2 |

Source: Analysis of data collected from educators trained by the Helping You Take Care of Yourself curriculum.

Note: Information reflects data collected from educators who were trained to educate at 31 different community-based organizations during both phases of the project.
${ }^{\text {a }}$ The sample size is smaller for this question because it was translated incorrectly on the Spanish data collection forms. Only educators trained in English, Portuguese, and Khmer are included in this table.

Table 6. Summary of Responses to Evaluation Questions Among Trainers

| Question | Frequency | Percentage |
| :--- | ---: | ---: |
| Would you suggest that your |  |  |
| family or friends come to this |  |  |
| health session? |  |  |
| Yes | 120 | 99.0 |
| No | 1 | 1.0 |
| Missing | $\mathbf{1 2 1}$ | 0.0 |
| Total |  | 100.0 |
|  |  |  |
| Overall, how would you rate | 89 |  |
| this health session? | 30 | 74.0 |
| Excellent | 1 | 25.0 |
| Good | 0 | 1.0 |
| Average | 0 | 0.0 |
| Fair | 1 | 0.0 |
| Poor | $\mathbf{1 2 1}$ | 1.0 |
| $\quad$ Missing |  |  |
| Total |  |  |
|  |  |  |
| Overall, how would you rate | 97 | 80.0 |
| the group leader? | 03 | 19.0 |
| Excellent | 1 | 0.0 |
| Good | 0 | 1.0 |
| Average | 0 | 0.0 |
| Fair | $\mathbf{1 2 1}$ | $\mathbf{1 0 0 . 0}$ |
| Poor |  |  |
| Missing |  |  |
| Total |  |  |

Source: Analysis of data collected from educators trained by the Helping You Take Care of Yourself curriculum.

Nore: Information reflects data collected from educators who were trained to educate at 31 different community-based organizations during both phases of the project.

## Recruiting Women

CBOs used a variety of strategies to recruit women including: contacting women with whom they have had previous contacts (for example, through other programs their organization offered, such as workshops or other education classes); advertising through radio, newspaper, and other printed media; and outreach and handing out flyers at community centers, churches, and local businesses such as hair salons, flower shops, temp agencies, and laundromats. At least one CBO did not recruit women, but rather trained other organizations (e.g., churches) to recruit and train women, and then oversaw the education these organizations provided. Other women were recruited by women who had already attended or were planning on attending an educational session. As one woman noted, "There were many other people who didn't even know about these educational talks. I told others about it who otherwise would not have known.... I brought along other women who happened to be free that night; women who I thought were at risk."

Recruitment was reportedly easier among women who were members of organizations or attended formal classes on other topics. According to MDPH Outreach Specialists and CBO educators, common barriers to recruitment and session attendance included lack of transportation, time constraints, and fear of immigration status being revealed. Many CBOs reported that it was a challenge to reach their target in the timeframe allotted. Many described that they had only four or five months, including the major holiday season, from the time the training curriculum and materials were available to the time all of the education had to be completed. CBOs suggested a longer time period for the project to account for start-up time and to provide more scheduling flexibility. For example, they wanted to schedule sessions around national health months and events they routinely host, which was not always possible given the restricted timeline. On the flip side, a couple of CBOs noted that, after they reached their target, they continued to carry out a few educational sessions that they knew they would not be paid for because the sessions were scheduled much earlier and they did not want to back out of their commitment.

## Educating Women

On the whole, qualitative information gathered suggests that the educating process went smoothly. Many CBOs used educators with previous experience in health education, though a few educators had little or no previous related experience.

The PowerPoint presentations developed by MDPH were used by all CBO educators we spoke with, but were modified to varying degrees. While less experienced educators often followed the curriculum strictly, more experienced educators used the curriculum as the core of their education sessions and used additional tools or did additional research to fill in the gaps they perceived in the materials and to better prepare them to answer questions, for instance about the Human Papilloma Virus (HPV) vaccine. They also modified their methods for curriculum delivery based on the women being educated. As one MDPH Outreach Specialist noted, "The community organizations liked that they were able to pick up the curriculum and run with it. The coordinator at one organization after receiving the training went backe into the curriculum with her students... and they were able to break down the language a little more simply."

Educators stressed the importance of knowing the audience being educated. For instance, many noted that younger women found cardiovascular disease to be a less salient topic than both breast cancer and cervical cancer. Latina women responded better to visual aids than slides, and flip charts and videos worked well for low-literacy groups. Knowing this in advance helped them tailor their education sessions. CBOs used food and other strategies to engage women. Many CBOs provided food during their education sessions because, as one educator noted, "talking over food engages women." Some provided incentives and prizes to women to engage them and make them feel appreciated. One CBO gave the funding they received directly to the women they educated ( $\$ 30$ per woman).

Educators remarked that identifying and dispelling myths (such as, "mammograms cause cancer") were particularly well-received. One MDPH Outreach Specialist stated, "A lot of the educators have a good sense of the community they work in. They know there are a lot of myths out there, so they were excited about dispelling those myths." Another educator noted, "People have the idea that if they don't have symptoms, or aren't sexually active, or are married, then they don't need to go. There is fear, shame, no one to take them, no time to go, and too many responsibilities. These classes teach you different."

MDPH provided the curriculum and data collection forms in English and in Spanish, Portuguese, and Khmer translations. One organization also translated the training materials, but not the forms, into Vietnamese. During some sessions, ad hoc translations were also made, but the extent to which this occurred was not quantifiable through our evaluation. Educators interviewed suggested the materials and forms additionally be translated into Chinese, Cape Verdean Creole, and Russian.

## Description of Women Educated

Figure 2 displays the number of women who received each unit of the Helping You Take Care of Yourself curriculum, and Table 7 shows the characteristics of the population served. ${ }^{10}$ There were 2,526 women educated using the Helping You Take Care of Yourself curriculum during 264 educational sessions. However, most women were educated in more than one health education unit, which results in 4,959 units administered during the course of the project. Specifically, 318 women were educated in the breast health unit only, 121 women in cervical health only, and 364 in cardiovascular disease only. Many women (710) were educated in all three units of the curriculum, and 1,013 were educated in some combination of two of the three units. Below, the demographic characteristics and health behaviors of those educated are described.

[^5]Figure 2. Number of Women Educated in Each Unit of the Curriculum


Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
Note: Information reflects data collected from women who were educated at 31 different community-based phases of the project.

Table 7. Demographic Characteristics of Women Educated

| Characteristics | Total |  |
| :---: | :---: | :---: |
|  | Number | Percentage |
| Age |  |  |
| Under 40 | 1,195 | 47.3 |
| 40-64 | 1,046 | 41.4 |
| 65 and over | 270 | 10.7 |
| Missing | 15 | 0.6 |
| Race/Ethnicity |  |  |
| White | 499 | 19.8 |
| Black | 204 | 8.1 |
| Asian | 331 | 13.1 |
| Hispanic | 1,281 | 50.7 |
| Other | 18 | 0.7 |
| Refused/Missing | 193 | 7.6 |
| Language of Form Completed |  |  |
| English | 1,162 | 46.0 |
| Spanish | 999 | 39.5 |
| Portuguese | 317 | 12.5 |
| Khmer | 48 | 1.9 |
| Country of Birth |  |  |
| Born in U.S.A. | 643 | 25.5 |
| Foreign | 1,779 | 70.4 |
| < 1 year in U.S. | 116 | 6.5 |
| 1-5 years in U.S. | 427 | 24.0 |
| More than 5 years in U.S. | 1,236 | 69.5 |
| Missing | 104 | 4.1 |
| Health Insurance |  |  |
| Yes | 2,137 | 84.6 |
| Through an employer | 319 | $22.6{ }^{\text {a }}$ |
| Through purchase | 61 | $4.3{ }^{\text {a }}$ |
| Medicare | 122 | $8.6{ }^{\text {a }}$ |
| Medicaid, MassHealth, etc. ${ }^{\text {b }}$ | 642 | $45.5{ }^{\text {a }}$ |
| Free Care or Safety Net | 160 | $11.3^{\text {a }}$ |
| Other | 37 | $2.6{ }^{\text {a }}$ |
| Missing | 70 | $5.0^{\text {a }}$ |
| Not asked ${ }^{\text {c }}$ | 726 | - |
| No | 274 | 10.8 |
| Missing | 115 | 4.6 |
| Education |  |  |
| Less than high school | 762 | 30.2 |
| High school or equivalent | 849 | 33.6 |
| Training program | 138 | 5.5 |
| College | 602 | 23.8 |
| Missing | 175 | 6.9 |
| Total | 2,526 | 100.0 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum

Note: Information reflects data collected from women who were educated at 31 different communitybased organizations during both phases of the project.
${ }^{\text {a }}$ Percentages are among only those respondents who were asked the question on type of health insurance because this question was included only for the second phase of the project.
${ }^{\text {b }}$ Also includes CommonHealth or MassHealth HMOs offered through Neighborhood Health Plan, Fallon Community Health Plan, Boston Medical Center HealthNet, or Network Health or Commonwealth Care.
${ }^{\mathrm{C}}$ This question was not asked to a high number of respondents because this question was included only for the second phase of the project.

Demographic Characteristics. The women educated represented a diverse population. They ranged in age from 10 to $93 .{ }^{11}$ This wide age range suggests that women may have attended the sessions with family members, perhaps children and mothers. ${ }^{12}$ The race/ethnicity breakdown of the women educated was as follows: Hispanic or Latina (51 percent), white ( 20 percent), Asian ( 13 percent), black ( 8 percent), and other ( 1 percent). Notably, the majority of women were not born in the United States (70 percent). However, most of the foreign-born women ( 70 percent) had been in the United States for more than five years. Almost half ( 46 percent) of the women educated completed forms in English, 40 percent completed the forms in Spanish, 13 percent in Portuguese, and 2 percent in Khmer. ${ }^{13}$ The highest level of education attained by women varied considerably with almost one-third not completing high school, one-third with a high school degree or equivalent, and nearly one-fourth completing some or all of a college degree. Another 6 percent had completed a training program. Although 85 percent of women reported having health insurance, 46 percent of them relied on Medicaid or MassHealth and another 11 percent on Free Care or Safety Net care. Another 11 percent reported having no insurance. ${ }^{14}$

Women were educated using the Helping You Take Care of Yourself curriculum in all six regions of Massachusetts (Boston, Central, Metrowest, Northeast, Southeast, and West). Table 8 shows the demographic characteristics of the women who attended educational sessions by region of the session. ${ }^{15}$ The number of women educated in each region ranged from 313 in the Southeast region to 601 in the Northeast region. The characteristics of the women educated varied across regions of the state. For example, the women educated in the Southeast region tended to be slightly older than those educated in other regions while the Boston region educated the highest percentage of women under 40 ( 65 percent). CBOs in the Southeast region educated the highest proportion of whites ( 57 percent), and CBOs in the Central region educated the highest proportion of blacks (13 percent) and Asians (30 percent). CBOs in the Boston region educated the highest proportion of Hispanics (70 percent). The Metrowest region had the lowest proportion of women who were born in the United States ( 6 percent), and the Southeast region had the highest ( 42 percent). The Western region had the highest percentage of women completing the forms in English (66

[^6]Table 8. Demographic Characteristics of Women Educated, by Region of Training

|  | Boston |  | Central |  | Metrowest |  | Northeast |  | Southeast |  | West |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 233 | 64.5 | 187 | 53.0 | 176 | 42.8 | 317 | 52.7 | 109 | 34.8 | 173 | 35.5 |
| 40-64 | 95 | 26.3 | 151 | 42.8 | 188 | 45.7 | 251 | 41.8 | 114 | 36.4 | 247 | 50.7 |
| 65 and over | 31 | 8.6 | 10 | 2.8 | 46 | 11.2 | 28 | 4.7 | 90 | 28.8 | 65 | 13.3 |
| Missing | 2 | 0.6 | 5 | 1.4 | 1 | 0.2 | 5 | 0.8 | . | . | 2 | 0.4 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 7 | 1.9 | 7 | 2.0 | 30 | 7.3 | 70 | 11.6 | 178 | 56.9 | 207 | 42.5 |
| Black | 35 | 9.7 | 46 | 13.0 | 7 | 1.7 | 51 | 8.5 | 20 | 6.4 | 45 | 9.2 |
| Asian | 1 | 0.3 | 107 | 30.3 | 85 | 20.7 | 132 | 22.0 | . | . | 6 | 1.2 |
| Hispanic | 251 | 69.5 | 187 | 53.0 | 229 | 55.7 | 308 | 51.2 | 98 | 31.3 | 208 | 42.7 |
| Other | 1 | 0.3 | 1 | 0.3 | 3 | 0.7 | . | . | 7 | 2.2 | 6 | 1.2 |
| Refused/Missing | 66 | 18.3 | 5 | 1.4 | 57 | 13.9 | 40 | 6.7 | 10 | 3.2 | 15 | 3.1 |
| Language of Form |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed |  |  |  |  |  |  |  |  |  |  |  |  |
| English | 82 | 22.7 | 209 | 59.2 | 104 | 25.3 | 281 | 46.8 | 167 | 53.4 | 319 | 65.5 |
| Spanish | 254 | 70.4 | 137 | 38.8 | 159 | 38.7 | 211 | 35.1 | 70 | 22.4 | 168 | 34.5 |
| Portuguese | 25 | 6.9 | 7 | 2.0 | 148 | 36.0 | 61 | 10.1 | 76 | 24.3 |  | . |
| Khmer | . | . | . | . | . | . | 48 | 8.0 | . | . |  | . |
| Country of Birth |  |  |  |  |  |  |  |  |  |  |  |  |
| Born in U.S.A. | 55 | 15.2 | 74 | 21.0 | 24 | 5.8 | 52 | 8.7 | 131 | 41.9 | 307 | 63.0 |
| Foreign | 291 | 80.6 | 268 | 75.9 | 376 | 91.5 | 515 | 85.7 | 174 | 55.6 | 155 | 31.8 |
| < 1 year in U.S. | 20 | 6.9 | 20 | 7.5 | 7 | 1.9 | 47 | 9.1 | 7 | 4.0 | 15 | 9.7 |
| 1-5 years in U.S. | 82 | 28.2 | 65 | 24.3 | 70 | 18.6 | 166 | 32.2 | 21 | 12.1 | 23 | 14.8 |
| More than 5 years in U.S. | 189 | 64.9 | 183 | 68.3 | 299 | 79.5 | 302 | 58.6 | 146 | 83.9 | 117 | 75.5 |
| Missing | 15 | 4.2 | 11 | 3.1 | 11 | 2.7 | 34 | 5.7 | 8 | 2.6 | 25 | 5.1 |
| Health Insurance |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 314 | 87.0 | 298 | 84.4 | 340 | 82.7 | 488 | 81.2 | 266 | 85.0 | 430 | 88.3 |
| No | 27 | 7.5 | 36 | 10.2 | 58 | 14.1 | 97 | 16.1 | 26 | 8.3 | 30 | 6.2 |
| Missing | 20 | 5.5 | 19 | 5.4 | 13 | 3.2 | 16 | 2.7 | 21 | 6.7 | 27 | 5.5 |

TABLE 8 (continued)

|  | Boston |  | Central |  | Metrowest |  | Northeast |  | Southeast |  | West |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 133 | 36.8 | 109 | 30.9 | 121 | 29.4 | 197 | 32.8 | 102 | 32.6 | 100 | 20.5 |
| High school or equivalent | 117 | 32.4 | 118 | 33.4 | 115 | 28.0 | 232 | 38.6 | 98 | 31.3 | 169 | 34.7 |
| Training program | 13 | 3.6 | 17 | 4.8 | 30 | 7.3 | 27 | 4.5 | 24 | 7.7 | 27 | 5.5 |
| College | 72 | 19.9 | 84 | 23.8 | 121 | 29.4 | 105 | 17.5 | 67 | 21.4 | 153 | 31.4 |
| Missing | 26 | 7.2 | 25 | 7.1 | 24 | 5.8 | 40 | 6.7 | 22 | 7.0 | 38 | 7.8 |
| Total | 361 | 100.0 | 353 | 100.0 | 411 | 100.0 | 601 | 100.0 | 313 | 100.0 | 487 | 100.0 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.
percent), and the Metrowest region had the highest percentage of women completing the forms in Portuguese ( 36 percent). Consistent with the highest percentage of Hispanics educated, the Boston region had the highest percentage of women completing the forms in Spanish ( 70 percent). The Northeast region accounted for all women completing forms in Khmer. The percentage of women with a high school degree or equivalent or higher (including a training program) ranged from 56 percent in the Boston region to 72 percent in the Western region.

Differences in the characteristics of women educated across regions likely reflect a combination of demographic differences that exist in the state by region and the selection of CBOs participating in each region. For example, it is known that the Northeast region of Massachusetts has a large Cambodian population, which may account for all of the women educated in Khmer being in that region. In other cases, differences across regions may result from the selection of CBOs participating in the project. For example, regions with an organization geared toward Hispanic or Latina women may show a higher proportion of Hispanics than do other regions.

Health Behaviors Related to Mammograms. Table 9 displays the findings related to women's receipt of mammograms. Among women ages 40 and older, 50.4 percent reported having received a mammogram within the past year ( 95 percent confidence interval was 47.7 to 53.1 ), and 10.1 percent reported never having received a mammogram ( 95 percent confidence interval was 8.5 to 11.7). By comparison, CDC's Behavioral Risk Factor Surveillance System (BRFSS) shows that 71.0 percent of women ages 40 and older in Massachusetts received a mammogram within the past year ( 95 percent confidence interval was 69.8 to 72.2 ), and 5.4 percent had never received a mammogram ( 95 percent confidence interval was 4.8 to 6.0 ) (CDC 2006b). This comparison suggests that those who were age 40 and older and educated by the Helping You Take Care of Yourself curriculum were less likely to have received mammograms within the recommended time frame of one year and more likely to have never received mammograms than were women of the same age in Massachusetts overall.

Based on the results of chi-squared tests, significant differences in the receipt of mammograms existed across age groups, race categories, and between women with and without health insurance. In comparison with the age 65 and older population, women ages 40 to 64 appeared to be more likely to never have received mammograms and slightly less likely to have received mammograms in the past year. Moreover, in comparison to the other racial/ethnic categories, it appears that blacks and Asians were slightly less likely to have received a mammogram in the last year and more likely to have never received a mammogram. As can be expected, those without health insurance were less likely to have received mammograms in the past year ( 21 percent compared to 55 percent) and more likely to have never received a mammogram in the past year ( 33 percent compared to 8 percent) than were those with health insurance. Receipt of mammograms did not vary significantly among those in different education groups.

Health Behaviors Related to Pap Smears. Table 10 presents information related to the receipt of Pap smears. Fifty percent of women reported having received a Pap smear

Table 9. Receipt of Mammograms Among Population Served, by Demographic Characteristics

|  | $\begin{gathered} <1 \text { Year } \\ \text { Ago } \end{gathered}$ | Percentage with Most Recent Mammogram ${ }^{\text {a }}$ |  |  | Never | Missing | Row Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1-3 <br> Years <br> Ago | 4-5 Years Ago | $>5$ <br> Years <br> Ago |  |  |  |
| Age** |  |  |  |  |  |  |  |
| Under 40 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 100.0 |
| 40-64 | 49.2 | 29.2 | 2.3 | 2.4 | 12.0 | 4.9 | 100.0 |
| 65 and over | 54.8 | 31.9 | 3.7 | 1.9 | 2.6 | 5.2 | 100.0 |
| Missing | . | . | . | . | . | . |  |
| Race/Ethnicity** |  |  |  |  |  |  |  |
| White | 53.6 | 29.5 | 3.9 | 2.7 | 3.9 | 6.3 | 100.0 |
| Black | 37.8 | 26.7 | 2.2 | . | 21.1 | 12.2 | 100.0 |
| Asian | 41.0 | 29.5 | 3.3 | 3.8 | 20.8 | 1.6 | 100.0 |
| Hispanic | 53.4 | 31.0 | 2.1 | 1.7 | 7.5 | 4.3 | 100.0 |
| Other | 66.7 | 25.0 | . | . |  | 8.3 | 100.0 |
| Refused/Missing | 49.2 | 27.0 | 0.8 | 3.3 | 16.4 | 3.3 | 100.0 |
| Health Insurance** |  |  |  |  |  |  |  |
| Yes | 55.1 | 30.9 | 2.2 | 2.2 | 7.9 | 1.8 | 100.0 |
| No | 21.4 | 31.6 | 7.7 | 4.3 | 33.3 | 1.7 | 100.0 |
| Missing | 16.9 | 3.4 | . | . | 6.8 | 72.9 | 100.0 |
| Education |  |  |  |  |  |  |  |
| Less than high school | 50.5 | 30.3 | 3.6 | 2.0 | 11.8 | 1.8 | 100.0 |
| High school or equivalent | 48.8 | 32.4 | 2.8 | 2.8 | 11.1 | 2.1 | 100.0 |
| Training program | 58.2 | 23.6 | 3.6 | 1.8 | 10.9 | 1.8 | 100.0 |
| College | 58.4 | 29.7 | 1.2 | 1.5 | 8.0 | 1.2 | 100.0 |
| Missing | 26.2 | 20.4 | 1.0 | 3.9 | 5.8 | 42.7 | 100.0 |
| Total | 50.4 | 29.7 | 2.6 | 2.3 | 10.1 | 4.9 | 100.0 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
${ }^{\text {a }}$ Among women ages 40 and older.
*Differences in the receipt of mammograms across category are statistically significant at the . 05 level.
**Differences in the receipt of mammograms across category are statistically significant at the . 01 level.
n.a. $=$ not applicable.

Table 10. Receipt of Pap Smears Among Population Served, by Demographic Characteristics

|  | $\begin{gathered} <1 \text { Year } \\ \text { Ago } \end{gathered}$ | Percentage with Most Recent Mammogram ${ }^{\text {a }}$ |  |  | Never | Missing | Row <br> Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 1-3 } \\ \text { Years } \\ \text { Ago } \end{gathered}$ | $\begin{gathered} 4-5 \\ \text { Years } \\ \text { Ago } \\ \hline \end{gathered}$ | $>5$ <br> Years <br> Ago |  |  |  |
| Age** |  |  |  |  |  |  |  |
| Under 40 | 54.8 | 22.8 | 1.3 | 1.2 | 14.0 | 6.0 | 100.0 |
| 40-64 | 50.5 | 28.4 | 3.7 | 3.6 | 8.1 | 5.6 | 100.0 |
| 65 and over | 29.3 | 28.5 | 6.7 | 12.2 | 16.7 | 6.7 | 100.0 |
| Missing | 46.7 | 20.0 | 6.7 | 6.7 | 13.3 | 6.7 | 100.0 |
| Race/Ethnicity** |  |  |  |  |  |  |  |
| White | 45.9 | 27.9 | 5.0 | 7.6 | 6.6 | 7.0 | 100.0 |
| Black | 45.1 | 24.0 | 2.0 | 2.0 | 14.7 | 12.3 | 100.0 |
| Asian | 37.5 | 22.1 | 0.9 | 3.6 | 32.9 | 3.0 | 100.0 |
| Hispanic | 56.8 | 25.5 | 2.6 | 2.1 | 7.7 | 5.3 | 100.0 |
| Other | 55.6 | 22.2 | 11.1 | 5.6 | 5.6 | . | 100.0 |
| Refused/Missing | 44.6 | 29.5 | 3.1 | 2.1 | 14.5 | 6.2 | 100.0 |
| Health Insurance** |  |  |  |  |  |  |  |
| Yes | 54.7 | 26.4 | 2.7 | 3.3 | 10.6 | 2.4 | 100.0 |
| No | 31.0 | 29.2 | 5.5 | 5.1 | 23.7 | 5.5 | 100.0 |
| Missing | 12.9 | 5.2 | 0.9 | 1.7 | 6.9 | 72.4 | 100.0 |
| Education |  |  |  |  |  |  |  |
| Less than high school | 46.7 | 26.4 | 3.4 | 5.0 | 15.5 | 3.0 | 100.0 |
| High school or equivalent | 51.9 | 25.8 | 2.9 | 3.3 | 13.5 | 2.5 | 100.0 |
| Training program | 52.2 | 30.4 | 2.9 | 3.6 | 8.7 | 2.2 | 100.0 |
| College | 59.5 | 28.6 | 2.0 | 2.0 | 6.3 | 1.7 | 100.0 |
| Missing | 24.0 | 8.6 | 3.4 | 1.2 | 14.0 | 6.0 | 100.0 |
| Total | 50.2 | 25.7 | 2.9 | 3.4 | 11.8 | 5.9 | 100.0 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.

Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.
${ }^{\mathrm{a}}$ Among women ages 40 and older.
*Differences in the receipt of mammograms across category are statistically significant at the . 05 level.
**Differences in the receipt of mammograms across category are statistically significant at the . 01 level.
within one year ( 95 percent confidence interval was 48.3 to 52.2 ), and 11.8 percent reported never having received a Pap smear ( 95 percent confidence interval was 10.6 to 13.1). In comparison, BRFSS data show that 65.0 percent of women ages 18 and older in Massachusetts received a Pap smear within the past year ( 95 percent confidence interval was 63.9 to 66.1 ), and 5.8 percent had never received a Pap smear ( 95 percent confidence interval was 5.3 to 6.3 ) (CDC 2006a). ${ }^{16}$ These differences suggest that women educated by the Helping You Take Care of Yourself curriculum were less likely to have received Pap smears within the past year and more likely to never have received a Pap smear. Based on the results of chi-squared tests, there were significant differences in the receipt of Pap smears by age, race/ethnicity, health insurance status, and education. Women ages 65 and older appeared to be less likely than those under 65 to have received a Pap smear within the past year. Asians were less likely than the other racial/ethnic groups to have received Pap smears in the past year and more likely to never have received Pap smears. Those without health insurance were less likely to have received Pap smears in the past year ( 31 percent compared to 55 percent) and more likely to have never received a Pap smear ( 24 percent compared to 11 percent) than were those with insurance. Women who had completed less than a high school degree appeared less likely than those who had completed a high school degree or higher to have received a Pap smear in the past year and more likely to never have received a Pap smear, although we did not test to see if this effect was independent of age.

## Project Effectiveness

Analysis of quantitative and qualitative data gathered suggests that (1) the curriculum was effective at increasing knowledge about breast health, cervical health, and cardiovascular disease; and (2) those educated were satisfied with the education they received. Below, we discuss key findings related to project effectiveness organized by the following topic areas: (1) knowledge of breast, cervical, and cardiovascular health; and (2) satisfaction with the educational sessions.

## Knowledge of Breast, Cervical, and Cardiovascular Disease Health

Quantitative data suggest that knowledge increased significantly after attending an educational session on the breast health, cervical health, and cardiovascular disease units of the Helping You Take Care of Yourself curriculum (Table 11). After the educational session on breast health, average scores increased from 3.9 to 4.5 on a five-point scale, a statistically significant increase based on a paired t-test ( p -value $<0.01$ ). Between the pre- and posttests, 48 percent of women increased their scores on the breast health unit. Similarly, for those educated in cervical health, average scores increased from 3.4 to 4.5 on a five-point scale. This increase was also statistically significant using a paired t -test ( p -value $<0.01$ ). Between the pre- and posttests, 63 percent of women increased their scores on the cervical health unit. Finally, average scores increased from 3.2 to 3.7 on a four-point scale for the

[^7]Table 11. Breast, Cervical, and Cardiovascular Health Knowledge on the Pretests and Posttests, by Demographic Characteristics

|  | Breast Cancer (Maximum Score is 5.0 ) |  |  |  |  | Cervical Cancer (Maximum Score is 5.0) |  |  |  |  | Cardiovascular Diseasel (Maximum Score is 4.0) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pretest |  | Posttest |  |  | Pretest |  | Posttest |  |  | Pretest |  | Posttest |  |  |
|  | Sample Size | Average Score | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Average Score | Percentage w/Increased Score | Sample Size | Average Score | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Average Score | Percentage w/Increased Score | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Average Score | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Average Score | Percentage w/Increased Score |
| Total completing both pretests and posttests | 1,942 | 3.91 | 1,942 | 4.54** | 47.7 | 1,623 | 3.43 | 1,623 | 4.45** | 63.5 | 1,238 | 3.24 | 1,238 | 3.67** | 41.6 |
| Total completing either test | 1,979 | 3.92 | 1,957 | 4.53 | 47.7 | 1,661 | 3.42 | 1,637 | 4.44 | 63.5 | 1,280 | 3.23 | 1,249 | 3.67 | 41.6 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 907 | 3.93 | 894 | 4.49 | 45.4 | 788 | 3.46 | 772 | 4.42 | 61.1 | 608 | 3.22 | 593 | 3.66 | 42.4 |
| 40-64 | 822 | 4.01 | 814 | 4.58 | 46.2 | 689 | 3.37 | 681 | 4.44 | 66.1 | 525 | 3.27 | 514 | 3.67 | 38.9 |
| 65 and over | 238 | 3.58 | 237 | 4.51 | 60.9 | 174 | 3.43 | 174 | 4.52 | 64.2 | 142 | 3.15 | 138 | 3.67 | 47.8 |
| Missing | 12 | 3.17 | 12 | 4.33 | 66.7 | 10 | 3.00 | 10 | 4.30 | 50.0 | 5 | 3.60 | 4 | 4.00 | 50.0 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 415 | 4.05 | 408 | 4.68 | 47.4 | 324 | 3.44 | 315 | 4.62 | 69.5 | 235 | 3.52 | 226 | 3.89 | 31.9 |
| Black | 177 | 4.05 | 173 | 4.60 | 45.7 | 156 | 3.55 | 150 | 4.31 | 49.7 | 92 | 3.36 | 89 | 3.51 | 25.0 |
| Asian | 222 | 3.34 | 221 | 4.20 | 60.6 | 174 | 2.98 | 177 | 4.18 | 67.6 | 195 | 2.96 | 193 | 3.38 | 47.2 |
| Hispanic | 981 | 3.95 | 970 | 4.53 | 46.3 | 829 | 3.51 | 817 | 4.42 | 60.9 | 669 | 3.21 | 651 | 3.70 | 43.9 |
| Other | 16 | 4.44 | 16 | 4.50 | 31.3 | 13 | 3.31 | 13 | 4.46 | 69.2 | 9 | 3.78 | 9 | 3.78 | 22.2 |
| Refused/Missing | 168 | 3.99 | 169 | 4.55 | 43.6 | 165 | 3.23 | 165 | 4.56 | 72.4 | 80 | 3.08 | 81 | 3.65 | 57.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 590 | 3.56 | 590 | 4.36 | 54.9 | 500 | 3.24 | 501 | 4.37 | 65.3 | 419 | 3.04 | 417 | 3.58 | 51.8 |
| High school or equivalent | 647 | 3.99 | 638 | 4.58 | 46.5 | 544 | 3.37 | 533 | 4.41 | 64.6 | 424 | 3.31 | 411 | 3.68 | 37.9 |
| Training program | 116 | 4.07 | 115 | 4.70 | 47.0 | 102 | 3.54 | 101 | 4.51 | 65.3 | 66 | 3.32 | 65 | 3.78 | 33.8 |
| College | 488 | 4.24 | 481 | 4.69 | 40.3 | 413 | 3.69 | 403 | 4.57 | 59.2 | 289 | 3.44 | 278 | 3.74 | 32.1 |
| Missing | 138 | 3.84 | 133 | 4.32 | 49.6 | 102 | 3.32 | 99 | 4.29 | 63.9 | 82 | 3.05 | 78 | 3.67 | 47.4 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
 significant. Paired t -tests were not conducted for individual demographic groups due to the small sample sizes.
**The difference between the average pretest score and average posttest score is statistically significant at the .01 level among women who completed both the pretest and posttest.
cardiovascular health unit. ${ }^{17}$ This was a statistically significant increase using a paired t-test ( p -value $<0.01$ ). Between the pre- and posttests, 42 percent of women increased their scores on the cardiovascular health unit. The increase in scores between the pre- and posttests for all units indicates that the curriculum was successful at increasing knowledge in breast health, cervical health, and cardiovascular disease at least in the short term. Moreover, scores increased for all units for women in all age, race/ethnicity, and education groups. The stratified analysis is shown in Appendix E. As expected pre- and posttest scores were lower among community women than they were for the educators in all three units of the curriculum.

Notably, average pretest scores on the cervical health unit were lower than average pretest scores on the breast health unit and the cardiovascular disease unit, whereas average posttest scores for the three units were similar. ${ }^{18}$ This finding suggests that women have lower baseline knowledge of cervical health than they do for the other health issues, that the cervical health questions were more challenging, or both. Interview information from CBO educators also suggests that baseline knowledge for cervical health was lower.

Table 12 shows the percentage of women correctly answering each of the pre- and posttest questions. The percentage of women who correctly answered each question increased for all questions in all three units of the curriculum after the educational sessions. On the breast health unit, the question most commonly answered incorrectly on both the pretest and the posttest was "You should have a clinical breast exam done by a health care provider every 5 years" (correct answer is false). Although this question exhibited the greatest percentage change in correct answers, 20 percent of women still answered it incorrectly on the posttest. Notably, this question was also the most difficult for the educators who were trained to conduct the educational sessions.

The pretest and posttest questions most commonly answered incorrectly on the cervical health unit included (1) "Women should get their first Pap test at age 21 or 3 years after they become sexually active" (correct answer is true); (2) "Most women have been exposed to the Human Papilloma Virus (HPV)" (correct answer is true); and (3) "Getting a positive HPV test means you have cervical cancer" (correct answer is false). Although knowledge increased for each of these questions after the education, more than 10 percent of women continued to respond incorrectly to all three of these questions on the posttest.

[^8]Table 12. Breast, Cervical, and Cardiovascular Health Knowledge, by Pretest and Posttest Question

|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question (Correct Response) |  |  |  |  |  |
| Breast Health Unit |  |  |  |  |  |
| 1. If you have a lump in your breast you absolutely have breast cancer (false) | 1,979 | 80.7 | 1,957 | 91.8 | 13.7 |
| 2. Starting at the age of 40 , you should get a mammogram once a year (true) | 1,979 | 87.7 | 1,957 | 95.9 | 9.3 |
| 3. Mammograms cause breast cancer (false) | 1,979 | 85.9 | 1,957 | 94.0 | 9.5 |
| 4. As women get older, their risk of breast cancer increases (true) | 1,979 | 73.6 | 1,957 | 90.7 | 23.3 |
| 5. You should have a clinical breast exam done by a health care provider every five years (false) | 1,979 | 64.0 | 1,957 | 80.5 | 25.7 |
| Cervical Health Unit1. If you get an abnormal Pap test, it means |  |  |  |  |  |
| 1. If you get an abnormal Pap test, it means you have cervical cancer (false) | 1,661 | 81.6 | 1,637 | 93.4 | 14.5 |
| 2. Women should get their first Pap test at age 21 or three years after they become sexually active (true) | 1,661 | 52.9 | 1,637 | 83.9 | 58.7 |
| 3. Cervical cancer is preventable through routine screening (true) | 1,661 | 79.6 | 1,637 | 91.8 | 15.4 |
| 4. Getting a positive HPV test means you have cervical cancer (false) | 1,661 | 67.0 | 1,637 | 87.3 | 30.3 |
| 5. Most women have been exposed to the Human Papilloma Virus (HPV) (true) | 1,661 | 60.7 | 1,637 | 87.4 | 44.0 |
| Cardiovascular Health Unit |  |  |  |  |  |
| 1. Men and women have the exact same heart attack warning signs (false) | 1,280 | 44.4 | 1,249 | 74.1 | 67.1 |
| 2. Quitting smoking can help reduce the risk for cardiovascular disease (true) | 1,280 | 91.6 | 1,249 | 97.8 | 6.7 |
| 3. LDL (bad) cholesterol can clog your blood vessels and cause damage to your heart and brain (true) | 1,280 | 92.8 | 1,249 | 97.9 | 5.5 |
| 4. Lung cancer is the number one killer of women in the United States (false) ${ }^{\text {a }}$ | 802 | 54.8 | 802 | 71.3 | 29.9 |
| 5. High blood pressure forces your heart to work harder than normal and raises your risk for heart attack and stroke (true) | 1,280 | 94.5 | 1,249 | 96.9 | 2.5 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.

Note: Information reflects data collected from women who were educated at 31 different communitybased organizations during both phases of the project.
${ }^{\text {a }}$ The sample size is smaller for this question because it was translated incorrectly on the Spanish data collection forms. Only women educated in English, Portuguese, and Khmer are included in this table.

On the cardiovascular disease unit, the question most commonly answered incorrectly on the pretest was "Men and women have the same exact heart attack warning signs" (correct answer is false). Although this question exhibited the greatest percentage change in correct answers, 26 percent of women answered it incorrectly on the posttest. The question most commonly answered incorrectly on the posttest was "Lung cancer is the number 1 killer of women in the United States" (correct answer false). Twenty-nine percent of women who filled out forms in English, Portuguese, or Khmer answered it incorrectly. Again, this is the same question that educators were most likely to get wrong. On the posttest, at least 97 percent of women answered each of the remaining three questions correctly. A closer examination of posttest questions that women continued to answer incorrectly on all three curriculum units may suggest items that need to be conveyed more clearly during educational sessions.

## Satisfaction with the Education

Table 13 shows the quantitative results of the participant evaluation of the educational sessions. The vast majority of women were satisfied with the Helping You Take Care of Yourself curriculum. Specifically, 98 percent of women said that they would recommend that family members and friends attend the health education sessions. Moreover, 96 percent of women rated the health session as either "good" or "excellent," and 96 percent rated their group leader as either "good" or "excellent." Satisfaction by unit of health education was not assessed because most women attended more than one session on the same day and filled out a single evaluation form. Few respondents suggested ideas for program improvement. Many used the space to note that they found the educational session very useful or to thank the education leader. Some responded that expanding the education to other health topics and to more locations would be helpful. Popular suggestions for program improvement included making the sessions longer, having more visual and hands-on materials, bringing in speakers (both doctors and women who have experience with breast and/or cervical cancer), and offering food. This overwhelming satisfaction with the educational sessions suggests that women value the education provided and that the curriculum is worth expanding to more women and more health topics.

Information from focus groups further confirms that women were extremely satisfied with the education they received. Women repeatedly shared their excitement about receiving education and noted that the information was new to them. Some women had never heard of mammograms or Pap Smears before the education. As one focus group participant said, "I used to live in New York, but nobody there gave out this information for free." As stated by another woman, 'It was extremely useful. There were things I'd initially thought were good for your bealth that I learned are not. It was good to learn." Remarking on what she liked about attending a session, another woman stated, "Learning what's good and what's not good, and the support we got from the session. Being able to gain knowledge and bring it back to your family. It's best to do it [the session] as a group."

Women responded positively to the interactive structure of the curriculum, noting that it offered an open space to talk. Women were happy to realize during the educational sessions that they had each other for support. As one focus group participant said, "It was

Table 13. Summary of Responses to Evaluation Questions Among Community Women

| Question | Frequency | Percentage |
| :--- | ---: | ---: |
|  |  |  |
| Would you suggest that your |  |  |
| family or friends come to this |  |  |
| health session? | 2,652 | 98.0 |
| Yes | 35 | 1.0 |
| No | 20 | 1.0 |
| Missing | $\mathbf{2 , 7 0 7}$ | $\mathbf{1 0 0 . 0}$ |
| Total |  |  |
|  |  |  |
| Overall, how would you rate this health session? | 1,666 | 62.0 |
| $\quad$ Excellent | 925 | 34.0 |
| $\quad$ Good | 67 | 2.0 |
| Average | 21 | 1.0 |
| Fair | 8 | $<1$ |
| Poor | 20 | 1.0 |
| $\quad$ Missing | 2,707 | 100.0 |
| Total |  |  |
|  | 1,757 | 65.0 |
| Overall, how would you rate the group leader? | 847 | 31.0 |
| Excellent | 20 | 2.0 |
| Good | 18 | 1.0 |
| Average | 7 | $<1$ |
| Fair | 28 | 1.0 |
| Poor | $\mathbf{2 , 6 7 7}$ | $\mathbf{1 0 0 . 0}$ |
| Missing |  |  |
| Total |  |  |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.

Note: Information reflects data collected from women who were educated 31 different community-based organizations during both phases of the project.
like a support group. When you bave a problem, you can talke to others about it. It's like a family, and I really like that." One focus group made up of Latina women also mentioned creating a support group following the session. They felt a "sisterhood" attending the session together. Women also felt the educators did a good job presenting the information in a way they understood. One focus group participant remarked, "The girls did a good job breaking down the language (the complex words). They used personal examples and gave situations to think about. They asked questions."

## Maintenance (Longer-term Effect of Program)

Women who participated in the focus groups were asked to summarize what they learned from each unit of the Helping You Take Care of Yourself curriculum. Beyond what the quantitative data showed, their responses indicated that they knew the age at which to begin screening, that family history can play a role in risk, and the importance of self examination. In terms of cervical health, focus group participants understood the need for routine Pap Smears, that sexual behavior can affect risk, and that an HPV vaccine exists. For cardiovascular health, they could state the basic facts about the importance of eating healthy, drinking water, not smoking, and exercising to prevent cardiovascular disease. They also knew the difference between good and bad cholesterol and were able to list some of the signs of heart attack and stroke and remembered that these varied by gender. Finally, for all diseases, women highlighted the importance of taking care of themselves and not just their spouses and families and explained the importance of getting second opinions from health care providers.

The education was also effective in getting many women to take action. Focus group participants described how to properly do self breast exams; some women had sought mammograms, and one had found lumps which were being followed up on. Those who had been educated in the cervical health unit reported having received Pap smears; one had been diagnosed with fibroids. In addition, at least one woman reported talking with her daughters about cervical cancer and taking them to get vaccinated. In terms of cardiovascular disease, focus group participants had made lifestyle changes, such as taking the stairs more often and trying to eat healthier foods. Some women also reported being screened for cardiovascular disease risk factors such as high blood pressure.

Focus group participants also said that they felt empowered by having the health information they gained from the sessions and had used it to advocate for themselves. For instance, a woman in one of the Spanish-language focus groups pushed her doctor to do further testing for a lump she found in her breast. She noted that she would not have felt comfortable doing this before attending the educational session. Another woman advocated for herself by fighting with her insurance company to pay for her mammogram.

At the start of each focus group, participants were also asked to complete posttests on the units in which they were educated. In linking posttest results at the initial education with those during the focus groups (conducted 9 to 18 months later), we found that some knowledge was maintained. For breast cancer, the average score at the focus groups was 3.91 on a five-point scale. This value was slightly higher than the average pretest score of 3.76,
but lower than the average posttest score immediately after the education (4.76). For cervical health and cervical cancer, the average score at the focus groups was 4.17 on a five-point scale. This value was higher than the average pretest score of 3.92 , but lower than the average posttest score of 4.58 immediately after the education. For cardiovascular disease, the average score at the focus groups was 3.07 on a four-point scale. Again, this value was higher than the average pretest score of 2.89 , but lower than the average posttest score of 3.89.

## Limitations of the Analysis

One limitation of the quantitative analysis is related to the evaluation forms for the curriculum. Most women who were educated in more than one unit of the curriculum attended one educational session in which all of the units were presented. These women filled out one demographic sheet and one evaluation sheet for all units they attended. In contrast, women who attended the units of the curriculum on two or three separate days filled out data forms for each session. These women thus have multiple demographic and evaluation sheets, whereas those educated in more than one unit in the same day have one evaluation sheet that summarizes their feedback on all of the sessions together. We omitted any duplicate demographic forms for these women during analysis. However, because the evaluation forms were not linked to the other three forms, all evaluation forms that these women filled out remained in the data set.

A second limitation is related to the qualitative evaluation. The qualitative analysis is based on the information gathered from educators at seven CBOs participating in the project and 33 educated women who were able to attend focus groups. This report presents information from these individuals only. As a result, it is unclear whether the information can be generalized to the entire population that participated in the project.

# CHAPTERIV <br> RECOMMENDATIONS FOR PROJECT IMPROVEMENT 

Because the Helping You Take Care of Yourself curriculum will be expanded beginning in the summer of 2009 in terms of the number of health topics covered and the number of individuals educated, one of the main purposes of the qualitative evaluation was to identify areas in which the project could be improved. In this chapter, we summarize our recommendations for improvement on the following topics: recommendations for improving training sessions, recommendations for improving educational sessions, and recommendations for improving the data collection forms. Recommendations for improving training sessions and educational sessions include recommendations for improving the quality of the curriculum.

## Recommendations for Improving Training Sessions

Based on the information collected in interviews with MDPH staff and CBO staff, the feedback about the training process was positive. Those trained remarked that the information presented was clear and of high quality. Most trainees noted that they felt prepared to educate women. However, MDPH Outreach Specialists and CBO staff made several recommendations to improve the training of educators. Some of the key recommendations are described in bullets below.

Five general recommendations were made to improve the training sessions. First, conducting separate trainings for people with and without previous experience was suggested to best meet the needs of those receiving training. Educators had a range of experience providing health education. Those who had significant experience thought the training could focus more on the content of the health materials, while those with less experience liked the focus on how to conduct trainings and wanted more guidance on how to structure the trainings (e.g., how many units to cover; when to use breaks/refreshments to keep the audience engaged). Second, it was suggested that role playing be made part of the training to make educators more comfortable with conveying the information and identifying areas that need further clarification. This process could also be helpful for MDPH Outreach Specialists, some of whom were not completely comfortable with sensitive
pieces of the curriculum like the reproductive organs model. Third, it was suggested that no more than two training units be covered at a time and that there be refresher trainings, if the project continues, to remind educators of the information and to provide updated information without having to go through the entire training session. Some CBO educators felt overwhelmed by the amount of information that was presented and had trouble remembering the details of the last unit covered (cardiovascular disease). A representative from one CBO stated "All three curricula were stuck together in one day. Having the three different sessions on three different days would bave been better. There was only a short time for questions and answers because the group was so big. The group had 10-15 people." Fourth, respondents suggested developing a Frequently Asked Questions fact sheet with resources to answer additional questions about the education. During the training, educators were told to refer women to their physicians when they were unable to answer questions. CBO staff and women noted that this is not always a good option because the women either do not have physicians or do not always get accurate information from their physicians. Finally, revising the facilitator notes to indicate when to flip slides for all units was mentioned as a possible improvement.

Specific suggestions for improving the cervical health unit and the cardiovascular disease unit were also made. First, on the cervical health unit, educators recommended adding information to the curriculum on the HPV vaccine, Gardasil.®, because they received so many questions from women on this topic. Many of the educators found information on the vaccine to supplement their trainings, but thought having standardized information would be helpful. Second, although the cardiovascular disease unit brought awareness to women that heart disease and stroke are important women's issues, there was a consensus that this was the weakest of the units and would benefit from having more handson materials such as models and handouts. One educator found a model of a clogged artery that could be a helpful addition to the curriculum. Others used the Know Your Numbers worksheet. Third, making the cardiovascular disease unit more relevant to young populations by focusing on prevention, such as the importance of eating healthy and not smoking, was also mentioned as an area for improvement. Simplifying complex terms like triglycerides (fat in the blood) was also recommended.

## Recommendations for Improving Education Sessions

The models and visuals used during the breast and cervical education sessions were very helpful for both the educators and the women educated. However, at least one educator noted that the breast model made some women uncomfortable due to cultural taboos, and presenting sensitive information in a church setting also cause negative feedback from one woman. Some educators made finding the lumps in the breast a game to lighten up a sensitive topic. Many women remembered this and noted that the hands-on experience of knowing what small and large lumps feel like was helpful. Women who attended the cardiovascular health education unit remarked that using similar models, such as a heart model, would be beneficial.

Some educators and women suggested that bringing in cancer survivors or health care professionals might improve the health education sessions. In addition, some women noted
that providing a list of places to obtain free services, such as mammograms, would be helpful.

Expanding the number of topics covered by the curriculum and adding topics for men were also recommended. During a focus group one woman said. "Have sessions for men as well, for example on prostate and colon cancer. Some women will just do whatever their busband tells them to do. Then if their busband leaves them it's a problem. You could offer sessions for men, or could have people come in with their partners." One of the women further explained, "Each time I went to the sessions, my busband would want to come with me. He was jealous." The most common topics of interest mentioned were diabetes, colon cancer, and prostate cancer. Other topics noted were childhood obesity, domestic violence, HIV and sexually-transmitted diseases, health insurance and how to sign up for Mass Health, lung cancer, nutrition, skin cancer, and teen pregnancy. When asked about additional topics of interest, one woman said, "Cbildbood obesity—what to do and where to go. Children spend their days eating, watching TV, and sleeping. There could be an educational session where you include the mom and the child and you talk, about food and activity." Another woman remarked, "Having health insurance. People don't understand the importance. There could be a bow-to guide on how to sign up for MassHealth and how to find a PCP." Women noted that they would find the time to attend additional educational sessions.

Although some women in the focus groups stated that having joint education sessions with men was important, this desire varied among different groups of women we spoke with. For instance, many Spanish-speaking women stated that they wanted men to participate in all types of education and noted that their partners/families/friends would believe the information if it came from an authoritative source (namely, the educator) rather than from their wife/mother/friend. In contrast, the Vietnamese-speaking women we spoke with preferred that women be educated in topics that affect women (e.g., cervical cancer) and that men and women be educated jointly in health topics affecting both groups (e.g., cardiovascular disease).

Finally, offering refresher education sessions for women may be beneficial based on the loss of knowledge over time we found among women attending focus groups.

## Recommendations for Improving Data Collection Forms

A large part of the qualitative evaluation addressed the data collection forms. Educators reported that it took women 20 to 35 minutes to complete the data collection forms. Those interviewed had various suggestions on how to improve the data collection process. The suggestions are summarized below.

First, there was a general consensus from all parties interviewed that the data collection forms were too long and should be pared back. One focus group participant remarked, ' $I t$ was a lot of forms because I have bad no formal education." If all of the information on these forms is vital for MDPH to collect, strategies such as reading forms aloud should be developed to lessen the burden on women. This is discussed below as an option.

Second, many people we spoke with, including both educators and women, noted that language, literacy, and comprehension were issues on all forms. Within one language, such as Spanish, there are many different dialects. For example, the word for breast is different depending on the dialect or country of origin. Developing a guide that includes the technical and lay terms for such words would be helpful. To overcome language issues, ad hoc translations were made either by educators or other women attending the sessions. To address literacy issues, in some cases educators read the questions aloud to all women, provided one-on-one help, or asked women the questions and completed the forms for them. Because women may not feel comfortable stating that they are unable to read some questions, putting the forms on an overhead projector and reading them aloud was recommended. Women in focus groups also recommended having translators present. The problem, however, may extend beyond language and literacy to comprehension. This is evidenced by our experience with women completing posttests during the focus groups. Many women, primarily Spanish speakers, had difficulty with the true/false structure of the questions. After several attempts to explain the questions in different ways, some women did not understand what the question was getting at. For instance, some women would respond to the statement if it was true for them but were not able to respond to whether it was true in general.

Third, educators raised concerns about the demographic form, which was the most problematic. Many women did not feel comfortable reporting their names and dates of birth due to immigration status or if they were recruited through a domestic violence program, and educators often struggled to assure women that this information would be kept confidential. In addition, the groupings of age on the demographic form did not include age 40 , which is the age at which most women should begin getting annual mammograms. The question regarding whether women were born in the United States also caused problems, particularly for women born in Puerto Rico, who did not know how to answer, and for those who were not legal immigrants. The use of multilevel questions such as "were you born in the US?...if yes, how many years..." was also challenging for some women. Reporting race and ethnicity was also a major problem area of the demographic form. Women, particularly Hispanic women, did not feel that the race and ethnicity categories appropriately captured their backgrounds. For instance, women may consider themselves fair skinned, but not white. The term "negro" was reportedly offensive. The grouping of Hispanic, Latina, and Spanish was not well received; women did not like a category combining those from Spain with those from Central or South America. The demographic form also asked questions about whether women had ever received a mammogram or a Pap (Papanicolaou) smear and this assumed women were familiar with these screening tests.

Appendix F contains a revised demographic form and a revised pre/posttest form that incorporates many of the recommendations mentioned above, as well as MPR's suggestions for survey format and layout, and input from MDPH.

Fourth, educators suggested numbering each form, separating and color coding forms by unit, and stapling forms. Flipping forms back and forth was confusing for women during education sessions that covered more than one unit, and forms occasionally got separated and lost if women did not write their name on all forms. There was a consensus that the
evaluation form should be kept separate from the other forms and should not have identification numbers.

Finally, it was recommended that separate evaluation forms be filled out for each unit because feedback could vary by session and the educator may vary by unit. In addition, at least one person reported feeling uncomfortable completing the evaluation form with the educator in the room. However, if educators leave the room while the evaluation forms are being filled out, the risk of having incomplete forms increases. Allowing the educator to remain in the room, but having women put the completed forms in an envelope, was recommended as an alternative.

## Chapter V

## Conclusions

卫he Women's Health Network, a program run through the Massachusetts Department of Public Health, developed the Helping You Take Care of Yourself curriculum in 2006 in an effort to provide accurate health information about breast cancer, cervical cancer, and cardiovascular disease to women in the state's diverse communities. Beginning in 2007, MDPH trained staff at CBOs throughout the state to educate women in their communities using the curriculum. The idea behind this "train-the-trainer" approach was that CBOs would be able to reach more women than MDPH could alone and educate populations that are often difficult to reach.

This quantitative and qualitative evaluation revealed that CBOs successfully expanded the reach of the curriculum and educated a diverse population in Massachusetts. The curriculum was effective in improving knowledge about breast, cervical, and cardiovascular health. Although some knowledge was lost over time, suggesting the potential need for refresher educational sessions, there was evidence of longer-term program effects. For instance, focus group participants interviewed 9 to 18 months after education reported taking action to improve their health through better nutrition and increased physical activity. They also reported performing self breast exams and receiving appropriate screenings for breast cancer, cervical cancer, and cardiovascular risk factors. Moreover, they felt empowered in health care settings and were overwhelmingly satisfied with the education received in both the short and long term.

Although the Helping You Take Care of Yourself curriculum was effective and well implemented, this evaluation identified many areas for improvement. Specific recommendations were made to improve the training sessions for CBO educators, the education sessions for women in the community, and the data collection forms. These recommendations will be implemented before the project is expanded further, which is slated to occur in the summer of 2009. Through this project expansion, MDPH's Women's Health Network will continue to play an important role in providing accurate health information to individuals in Massachusetts.

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APPENDIX A
DATA COLLECTION FORMS
$\qquad$
$\qquad$

## WHN Health Education - Demographics Form

The answers provided on this sheet will be used to improve future programs. Please fill it out and return it to the group leader. Thank you.

1. Name: $\qquad$
2. What is your date of birth? $\qquad$
3. How old are you? $\square$ under 40

- 41-64
- 65 and over

4. What city or town do you live in? $\qquad$
5. Were you born in the United States? $\quad$ Yes

5a. If no, how long have you been in the United States?
less than 1 year
$\square 1-5$ years
$\square$ more than 5 years
6. Are you Spanish/Hispanic/Latina?

- Yes $\square$ No

7. How do you describe your race?

- White

Black, African American, Negro

- Asian
- Native Hawaiian or other Pacific Islander
- Native American/Alaskan Native
- Refused

8. Language spoken most often in your home: $\qquad$

Organization Name
Trainer Name
$\qquad$
$\qquad$
9. Did you go to school? Yes
$\square$ No

9a. If yes, what is the last grade you finished?
$\square$ Grade $\qquad$
$\square$ High School
Training Program
College
10. What is your job? $\qquad$
11. Do you have health insurance?

11a. If yes, what type of health care coverage (insurance) do you use to pay for most of your medical care? Is it coverage through:

- Your employer or someone else's employer

A plan that you or someone else buys
$\square$ Medicare
. Medicaid, MassHealth, CommonHealth or MassHealth HMOs offered through Neighborhood Health Plan, Fallon Community Health Plan, Boston Medical Center HealthNet or Network Health or Commonwealth Care

- Free Care or Safety Net
$\square$ Other $\qquad$

12. Have you ever had a mammogram? Yes No

12a. If yes, when was your most recent mammogram? less than 1 year ago
-1-3 years ago

- 4-5 years ago
$\square$ more than 5 years ago

13. Have you ever had a Pap smear? $\square$ Yes No

13a. If yes, when was your most recent Pap smear?
$\square$ less than 1 year ago
$1-3$ years ago
$4-5$ years ago
$\square$ more than 5 years ago
$\qquad$
$\qquad$

## WHN Health Education <br> Pre-test

Breast Health and Breast Cancer Screening UnitFor the following statements below, please CIRCLE if they are TRUE or FALSE.

1. If you have a lump in your breast you absolutely have breast cancer

$\qquad$
.TRUE FALSE
2. Starting at the age of 40 , you should get a mammogram once a year
$\qquad$ .TRUE3. Mammograms cause breast cancer.
$\qquad$TRUE
FALSE
4. As women get older, their risk of breast cancer increases.

$\qquad$
TRUE ..... FALSE
5. You should have a clinical breast exam done by a healthcare provider every 5 years

$\qquad$
TRUE FALSE
Cervical Health and Cervical Cancer Screening UnitFor the following statements below, please CIRCLE if they are TRUE or FALSE.1. If you get an abnormal Pap test, it means you have cervical cancer.
$\qquad$TRUE2. Women should get their first Pap test at age 21 or 3 years after theybecome sexually active.TRUEFALSE
3. Cervical cancer is preventable through routine screening. TRUE FALSE
4. Getting a positive HPV test means you have cervical cancer. ..... TRUE
$\qquad$
$\qquad$

## WHN Health Education <br> Pre-test

## Women and Cardiovascular Disease Unit

For the following statements below, please CIRCLE if they are TRUE or FALSE.

1. Men and women have the exact same heart attack warning signs $\qquad$ TRUE

FALSE
2. Quitting smoking can help reduce the risk for cardiovascular disease. $\qquad$ TRUE

FALSE
3. LDL (bad) cholesterol can clog your blood vessels and cause damage to your heart and brain. $\qquad$ TRUE

FALSE
4. Lung cancer is the number 1 killer of women in the United States.

TRUE
FALSE
5. High blood pressure forces your heart to work harder than normal and raises your risk for heart attack and stroke. $\qquad$ TRUE

FALSE
$\qquad$
$\qquad$

## WHN Health Education <br> Post-test

Breast Health and Breast Cancer Screening Unit
For the following statements below, please CIRCLE if they are TRUE or FALSE.

1. If you have a lump in your breast you absolutely have breast cancer
$\qquad$TRUE
FALSE
2. Starting at the age of 40 , you should get a mammogram once a year. ..... TRUE
FALSE
3. Mammograms cause breast cancer. .TRUE FALSE
4. As women get older, their risk of breast cancer increases.

$\qquad$
.TRUE ..... FALSE
5. You should have a clinical breast exam done by a healthcare provider every 5 years .TRUE FALSE
Cervical Health and Cervical Cancer Screening Unit
For the following statements below, please CIRCLE if they are TRUE or FALSE.1. If you get an abnormal Pap test, it means you have cervical cancer
$\qquad$.TRUEFALSE
2. Women should get their first Pap test at age 21 or 3 years after they become sexually active ..... TRUE
FALSE
3. Cervical cancer is preventable through routine screening ..... TRUE4. Getting a positive HPV test means you have cervical cancer.TRUE
FALSE
5. Most women have been exposed to the Human Papilloma Virus (HPV)
$\qquad$ .TRUE
$\qquad$
Location: $\qquad$

## WHN Health Education <br> Post-test

## Women and Cardiovascular Disease Unit

For the following statements below, please CIRCLE if they are TRUE or FALSE.

1. Men and women have the exact same heart attack warning signs $\qquad$ FALSE
2. Quitting smoking can help reduce the risk for cardiovascular disease $\qquad$ .TRUE

FALSE
3. LDL (bad) cholesterol can clog your blood vessels and cause damage to your heart and brain.

TRUE
FALSE
4. Lung cancer is the number 1 killer of women in the United States. $\qquad$ TRUE
FALSE
5. High blood pressure forces your heart to work harder than normal and raises your risk for heart attack and stroke $\qquad$ TRUE
FALSE
$\qquad$
Location: $\qquad$

## WHN Health Education Participant Evaluation

Please take a minute to let us know how you liked this Women's Health session.

1. Would you suggest that your family or friends come to this health session?
$\square$ Yes
$\square$ No
2. Overall, how would you rate this health session?

| Poor | Fair | Average | Good | Excellent |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

3. Overall, how would you rate the group leader?

| Poor | Fair | Average | Good | Excellent |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

4. Do you have any ideas about how to make the sessions better? $\qquad$
$\qquad$
$\qquad$
$\qquad$

Thank you for filling out this form! Please pass it in before you leave.

## APPENDIX B

## INTERVIEW AND FOCUS GROUP PROTOCOLS

## Interview Guide for MDPH Regional Coordinators

Name of Regional Coordinator:
Phone Number:
Date of Discussion:
Interviewer:
Hi, my name is [NAME] and I am with Mathematica Policy Research, Inc. As you may know, we are working with the Massachusetts Department of Public Health (MDPH) to evaluate the Helping You Take Care of Yourself curriculum, data collection forms, and process of implementing the project. As part of the evaluation, we are talking to MDPH regional coordinators, trainers at community organizations, and women who were educated. The goal of talking with these groups of people is to identify areas for improvement before the project is expanded further. Our conversation should take about one hour. Do you have time to talk now? [If not, schedule a time.]

As we talk today, please keep in mind that you don't have to answer any questions that make you uncomfortable.

## The first set of questions I am going to ask you are about your work with community-

 based organizations and how your partnerships formed.1. How did you identify the community-based organizations (CBOs) in your region to participate in the project?
2. Please tell me a little bit about the process of forming a partnership with the CBOs.
a. How did you initiate contact?
b. Did you have previous relationships with them?
c. How did planning take place?
d. How did you get CBOs to agree to participate?
3. How was the target number of women that each organization should educate determined?
4. I understand that in the second round of the project that took place in the fall of 2007, you were able to work with different CBOs if you wanted to. Did you work with the same CBOs? Why or why not?
a. Did you use the same strategy for recruiting CBOs in the second round of the project (Fall 2007) as you used in the first round of the project (Spring 2007)?
b. Did you use the same strategy for selecting CBOs in the second round of the project (Fall 2007) as you used in the first round of the project (Spring 2007)?
5. Were there any challenges to recruiting organizations in the first round of the project (Spring 2007)? If so, what were they?
a. How about in the second round of the project (Fall 2007)? If so, what were they?
6. What were some of the things that went particularly well working with the community organizations?
7. What did you find challenging?
a. (If there were challenges,) how did you address them?
b. Were you able to overcome them?

Next, I would like to ask you about the training process. First, I will ask you about training the community organization trainers, and then I will ask about training the women in the community.
8. Please tell me a little bit about the process of training the community organization trainers.
a. How were the trainers from each organization chosen?
b. Briefly describe the structure and format of the training. (Probe: lecture, interactive, group work, and so on.)
c. What aspects of the training do you feel went particularly well?
d. What aspects did you find challenging?
i. (If there were challenges,) how did you address them?
ii. Were you able to overcome them?
9. What were the most common questions asked during the trainings with community trainers? (Probe: questions about the content of the curricula, the forms women have to complete, submitting data, payment)
10. How well did they understand the training?
11. How were the curricula received by the community trainers? (Probe: Did they seem ready to educate the women? Were they nervous? Excited?)

These next questions are about the community women that you have educated outside of this project with Mathematica, not the trainers themselves.
12. Please tell me a little bit about the process of recruiting and training women in the community.
a. How were women selected/recruited to participate in the trainings? Did this change over time? Were there any challenges in recruitment?
b. For those women who you recruited and who did not attend, why did they not attend?
i. About how many didn't attend?
c. Were you able to train all of the women who wished to attend? If not, why not?
d. Briefly describe the structure and format of the training. (Probe: lecture, interactive, group work, and so on.)
e. What aspects of the training do you feel went particularly well? Why?
f. What aspects did you find challenging? Why?
i. (If there were challenges,) how did you address them?
ii. Were you able to overcome them?
13. What were the most common questions asked during the trainings with women in the community?
14. How were the curricula received by women in the community? (Probes: Were they eager to participate? Happy about what they were learning? Bored with what they were learning?)
15. Do you have any suggestions to improve the training process either for training the community organizations or the women? If so, what are they?

## The next questions are about the training curricula. I will ask you a bit later about the data collection forms.

16. Were you involved in developing any of the curricula?
a. If yes, which curriculum? (breast, cervical, cardiovascular)
b. If yes, what was your involvement?
17. Do you conduct trainings in languages other than English? If yes, which languages?
18. About how many trainings for community trainers have you conducted?
19. About how many trainings for women in the community have you conducted?
20. Have you encountered any problems with the materials during trainings? (Probe: which training materials?)
a. What are the most common problems?
b. Are the problems/questions different among different demographic groups (trainers, women, education, language, income, and so on)?
c. Are there materials or information you wished you had but did not?
21. Are there aspects of the curricula that you felt were particularly effective?
22. Do you have any ideas for how to improve the curricula materials? (If they conduct trainings in language other than English, probe about problems with translation of materials.)

During each training session women are supposed to complete four forms: a demographic form, a pretest of knowledge, a posttest of knowledge, and an evaluation form. The last set of questions $I$ have is about the data collection forms.
23. What guidance if any, do you give trainers on how to have women complete the data collection forms?
a. (If not mentioned in answer above,) Do you give any specific guidance to trainers on how to administer the evaluation forms? What do you tell them?
24. Have you encountered any problems with the data collection forms? (Probe: which forms?)
a. What are the most common problems/questions?
b. How did you answer these questions?
c. Do different challenges arise for different demographic groups? If yes, please explain.
25. Did you help women complete the forms? If so, why and how did you help? [We are trying get at whether educators completed the forms for certain women if, for example, they were illiterate.]
26. Did you give guidance to community trainers on what to do if women needed help completing forms? If so, what did you tell them?
27. Do you have any ideas for how to improve the forms?
a. Material that is not on the form, that needs to be collected?
b. Length?
c. Language?
28. Do you have any other recommendations to improve the program?
29. As you may know, we will also be talking to some community organizations to gather their feedback on the program. We are hoping to talk with a mix of organizations, some of which did very well and some of which struggled. Are there any organizations to which you would suggest we talk? Why is talking to this organization important?
30. We were planning to talk with trainers at the organizations. Are there other people we should consider talking to? If so, why? Is there anything in particular we should ask them?
31. We will also be conducting focus groups with women who attended trainings. We will hold focus groups in most regions of the state and we will likely choose women who attended sessions held by one organization in that region. Do you have any recommendations for organizations we should consider working with to conduct focus groups?
32. Is there anything else you'd like to share with me about working with community organizations, the training process, or the forms that we use for data collection?

Those are all of the questions I have for you today. As I sort through what you have told me I might think of one or two follow-up questions or points of clarification. If this happens, would you mind if I call you again or send you an email?
Thanks so much for your time.

## Interview Guide for Community Organization Trainers

Name of Trainer:
Organization:
Phone Number:
Date of Discussion:
Interviewer:
Hi, my name is [NAME] and I am with Mathematica Policy Research, Inc. We are working with the Massachusetts Department of Public Health (MDPH) to evaluate the Helping You Take Care of Yourself curriculum, data collection forms, and process of program implementation. As part of the evaluation, we are talking to the staff at the MDPH, trainers at community organizations who used the curricula, and women who were educated. [ORGANIZATION NAME] used the curricula to train women on breast and cervical cancer and/or cardiovascular disease and I am hoping you would be willing to talk with me about your experiences with it. The input you provide will help us improve the program materials before they are used more extensively. Our conversation should take about an hour. Do you have time to talk now? [If not, schedule a time.]

As we talk today, please keep in mind that you don't have to answer any questions that make you uncomfortable.

## Before I begin asking questions about the Helping You Take Care of Yourself curriculum, I would first like to get some background information about you.

1. How/When did you first become involved with [ORGANIZATION NAME]?
2. What did you do prior to working at [ORGANIZATION NAME]?
3. How did you become involved in the Helping You Take Care of Yourself initiative?
4. Did you have previous training on heart health, cervical cancer, or breast cancer? If so, can you please tell me about that training/background?
5. Do you work with any other programs run by MDPH? If yes, which ones?

Now I would like to ask you a little bit about your experiences with the MDPH training and your thoughts on the curricula.
6. There are three units on which you could be trained: breast cancer, cervical cancer, and cardiovascular disease. Which unit or units were you trained to use?
7. Please tell me a little bit about the training.
a. How long did the training take?
b. Were there others trained at the same time as you? If yes, please tell me how many and how that affected the training (if at all).
c. What were some of the activities you did during the training?
d. What format did the training take? (Probe: Lecture, interactive, group work, and so on.)
8. What did you think about the amount of information presented to you during the training you received from MDPH? (Probe: too much, too little, just about right.)
a. If trained on more than one unit, did each of the units present a similar amount of information?
b. If not, please explain the differences.
c. Which was the most effective unit?
d. Why?
9. What did you think about the quality of the material? Was there anything in the curricula you were unclear about? (For example, which unit?)
10. Following the training, did you feel prepared to train women from the community on the topics in which you were trained? [We are trying to get at comfort level when they first started.]
a. If no, what would you have liked to learn to help you feel better prepared?
11. Do you have any suggestions for improving the training process?
12. How much time elapsed between the time that you were trained and the time when you offered the first session to women in the community?

## The next questions I would like to ask you are about recruiting and educating women.

## Recruiting Women

13. Were you involved in recruiting women to participate in the Helping You Take Care of Yourself sessions?
a. If yes, what role did you play in the recruitment?
14. How did you or your organization go about recruiting women for your education sessions?
a. Was there a process for reminding women about sessions? (Please explain.)
b. Were there any challenges?
c. Did you change your methods of recruitment over time? (If so, how/why?)
15. How many women did you intend to train (goal)? How many women did you recruit to the sessions? (Clarify that we are talking about number recruited, not number who attended).
16. For those women who you recruited and who did not attend, why did they not attend?
17. Were you able to train all of the women who wished to participate? If not, why not?

## Training Women

18. About how many trainings did you hold?
a. About how many women were educated per training? Did you find this number to be manageable?
b. How many curricula did you cover per training? Was this manageable?
19. What languages did you conduct trainings in?
20. Were there women you were unable to train because of a language barrier? Please explain.
21. Briefly describe the training process. [We are trying to understand how the training was structured, get an overview of structure.]
22. What aspects of the training do you feel went particularly well? Why?
23. What aspects of the training do you think were challenging?
24. How was the education received by the women? (Probe: Did the women seem interested? Were they excited about what they were learning?)
25. Do you have any recommendations to improve the training process?

## Now I would like to ask you a few questions about the training curricula and the data collection forms.

26. Have you encountered any problems with the training materials during sessions? (Probe: which materials?)
a. What were the most common problems?
b. Were the problems/questions different among different demographic groups (trainers, women, education, language, income, and so on)?
c. Were there materials or information you wished you had but did not?
27. Did you help women complete the forms? If so, why and how did you help? [We are trying to get at whether educators completed the forms for certain women, if, for example, they were illiterate.]
28. Do you have any ideas for how to improve the training materials?
29. During each training session women were supposed to complete four forms: a demographic form, a pretest of knowledge, a posttest of knowledge, and an evaluation form. Have you encountered any problems with the data collection forms? (Probe: which forms?)
a. What were the most common problems/questions?
b. How did you answer these questions?
c. Did different challenges arise for different demographic groups?
30. Can you describe how the evaluation form was administered?
31. Do you have any ideas for how to improve the forms?
a. Material that is not on the forms that needs to be collected?
b. Length?
c. Language?

## The next questions are about your relationship with MDPH staff.

32. Please describe to me your working relationship with [REGIONAL COORDINATOR].
a. How frequently were you in contact?
b. Did you hold regular meetings?
33. Did you feel comfortable contacting [REGIONAL COORDINATOR] if you had any problems or questions? Why or why not?
34. Was [REGIONAL COORDINATOR] easily accessible if you had a question or needed assistance?
35. Have you worked with [REGIONAL COORDINATOR] on previous occasions? Please explain.

## The final set of questions I would like to ask is about submitting data in order to get paid for educating women

36. Please describe the process you followed for submitting the forms you collected from women to Mathematica. (Demographic, pretest, posttest, evaluation forms.)
a. Was there any aspect of this that was challenging? If so, please explain.
b. Do you have recommendation as to how we might improve the data collection procedures to make it easier for you?
37. Would you participate in the project again?
a. If no, why not?
38. Is there anything else you want to share about the program, relationships with the regional coordinator or MDPH, training material, or the training itself?
39. Do you have any other recommendations to improve the program?

Those are all of the questions I have for you today. As I sort through what you have told me I might think of one or two follow-up questions or points of clarification. If this happens, would you mind if I call you again?
Thanks so much for your time.

# Focus Group Guide for Women Educated Using MDPH's <br> Helping You Take Care of Yourself Curriculum 

## As women enter the room

- introduce yourself
- ask their names and invite them to have refreshments
- check your list for the sessions they attended and ask them to complete the appropriate posttest form(s) before the session begins


## Introduction

- My name is $\qquad$ and I have with me $\qquad$ .
- We are from Mathematica Policy Research, an independent research company in Princeton, New Jersey.
- We were hired by the Massachusetts Department of Public Health to evaluate its breast cancer, cervical cancer, and cardiovascular disease educational sessions in which we understand you participated [through X organization].
- We are talking with lots of different people involved in the program, including the people who developed the educational materials, the people who conducted the trainings, and women such as you who were educated.
- The information and opinions you share will help us improve the educational sessions in the future.
- It is important for you to be open and honest. There are no right or wrong answers and everything you say is confidential. No names will be associated with anything anyone says and no one will be quoted by name. We have scheduled about one hour for this discussion.
- In addition, we will be giving you a gift certificate [for the local supermarket, or similar store] to show our appreciation for the time you are spending with us today. After we are done with our session, we'll give each of you a gift certificate, and ask you to sign a receipt.

Does anyone have any questions?

We will be taping the discussion to make sure we capture everything everyone says, so we need everybody to be sure to speak one at a time, speak loudly, and speak clearly. The purpose of this recording is so that we can refer to the tape to make sure our notes are accurate. No one outside of the Mathematica research team will have access to these tapes and they will be stored in a locked file.

- We have a number of topics we want to discuss. At times, I might need to move the conversation along to be sure we cover everything.
- Again, there are no right or wrong answers. People may disagree and that's OK. Please feel free to speak your mind. We want to hear both positive and negative comments, whatever you want to share.


## **********START TAPE *************

$* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$

If we could first go around the room and have everyone introduce themselves, just first names and tell us which session or sessions you attended (breast cancer, cervical cancer, cardiovascular disease)

## Recruitment

1. How did you find out about the educational session?
2. What made you decide to go to the session?

## Content and Format of the Session

3. For those of you who attended the information session on cervical cancer:
a. What information did you learn?
b. Was the information useful? Why or why not?
c. What did you like the most about the session?
d. What did you like the least about the session?
e. What format did the session take (lecture, interactive, video, discussion, and so on)?
f. Did you understand everything that the instructor spoke about? Why or why not?
4. For those of you who attended the information session on cardiovascular disease (heart health):
a. What information did you learn?
b. Was the information useful? Why or why not?
c. What did you like the most about the session?
d. What did you like the least about the session?
e. What format did the session take (lecture, interactive, video, discussion, and so on)?
f. Did you understand everything that the instructor spoke about? Why or why not?
5. For those of you who attended the information session on breast cancer:
a. What information did you learn?
b. Was the information useful? Why or why not?
c. What did you like the most about the session?
d. What did you like the least about the session?
e. What format did the session take (lecture, interactive, video, discussion, and so on)?
f. Did you understand everything that the instructor spoke about? Why or why not?
6. Did you share the information with any of your friends and family? Please explain.

Forms. You were asked to fill out several forms during the session. One form asked about things such as your age, educational level, and race/ethnicity. Another was a short quiz (like the one you filled out when you walked in today) that you took before and after the session. And then you filled out an evaluation form. I would like to ask you some questions about the forms that you filled out.
7. Were the forms difficult or easy to follow? [show each form one by one and get feedback] Please explain.
8. How long did it to take you to complete each of the forms? (We are trying to get at how burdened they felt, not the length of time for each form.)
9. Did you have any questions as you filled them out?
a. If yes, did you ask the educator?
b. Was the educator able to answer your questions?
c. Did you ask anyone else?
10. Were there any questions on the forms that made you feel uncomfortable?
a. If yes, did you tell the educator? If yes, what did they say?
11. Did you feel you could be open and honest on the forms [Go through each form.]
12. Was the educator in the room when you filled out the evaluation form?
13. What did you do with the evaluation form when you were done filling it out? (Probe: gave it to the educator, put it in an envelope.)
14. How appropriate is the translation? [Meaning, how was the readability? Could they understand it - the level of the language?] Are there things you would change about the translation? [We want to know about the translations of both the forms and the curriculum in general. These questions may not be relevant at some focus groups.]

## Other

I just have a few more questions for you.
15. Would you tell a friend to go to the educational session? Why or why not?
16. What other types of education would be helpful to you?
17. Is there anything else that we haven't talked about that you want to share?
[Thank them for their time.]

## APPENDIX C

## DEMOGRAPHIC CHARACTERISTICS OF WOMEN EDUCATED, BY TYPE OF TRAINING

Demographic Characteristics of Women Educated, by Type of Training

|  | Breast Cancer |  | Cervical Cancer |  | Cardiovascular Disease |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percentage | Number | Percentage | Number | Percentage |
| Total | 1,941 | 100.0 | 1,575 | 100.0 | 1,197 | 100.0 |
| Age |  |  |  |  |  |  |
| Under 40 | 877 | 45.2 | 734 | 46.6 | 578 | 48.3 |
| 40-64 | 812 | 41.8 | 656 | 41.7 | 493 | 41.2 |
| 65 and over | 240 | 12.4 | 175 | 11.1 | 121 | 10.1 |
| Missing | 12 | 0.6 | 10 | 0.6 | 5 | 0.4 |
| Race/Ethnicity |  |  |  |  |  |  |
| White | 407 | 21.0 | 306 | 19.4 | 222 | 18.5 |
| Black | 172 | 8.9 | 151 | 9.6 | 91 | 7.6 |
| Asian* | 213 | 11.0 | 167 | 10.6 | 163 | 13.6 |
| Hispanic | 962 | 49.6 | 775 | 49.2 | 631 | 52.7 |
| Other | 16 | 0.8 | 12 | 0.8 | 9 | 0.8 |
| Refused/Missing* | 171 | 8.8 | 164 | 10.4 | 81 | 6.8 |
| Language of FormCompleted |  |  |  |  |  |  |
| English | 850 | 43.8 | 686 | 43.6 | 539 | 45.0 |
| Spanish | 742 | 38.2 | 582 | 37.0 | 457 | 38.2 |
| Portuguese | 309 | 15.9 | 287 | 18.2 | 193 | 16.1 |
| Khmer* | 40 | 2.1 | 20 | 1.3 | 8 | 0.7 |
| Country of Birth |  |  |  |  |  |  |
| Born in U.S.A. | 476 | 24.5 | 351 | 22.3 | 302 | 25.2 |
| Foreign | 1,372 | 70.7 | 1,150 | 73.0 | 866 | 72.3 |
| < 1 year in U.S. | 77 | 5.6 | 66 | 5.7 | 42 | 4.8 |
| 1-5 years in U.S. | 312 | 22.7 | 267 | 23.2 | 218 | 25.2 |
| More than 5 years in U.S. | 983 | 71.6 | 817 | 71.0 | 606 | 70.0 |
| Missing* | 93 | 4.8 | 74 | 4.7 | 29 | 2.4 |
| Health Insurance |  |  |  |  |  |  |
| Yes* | 1,622 | 83.6 | 1,329 | 84.4 | 1,051 | 87.8 |
| No* | 232 | 12.0 | 189 | 12.0 | 95 | 7.9 |
| Missing | 87 | 4.5 | 57 | 3.6 | 51 | 4.3 |
| Education |  |  |  |  |  |  |
| Less than high school | 577 | 29.7 | 485 | 30.8 | 388 | 32.4 |
| High school or equivalent | 633 | 32.6 | 520 | 33.0 | 403 | 33.7 |
| Training program | 114 | 5.9 | 95 | 6.0 | 61 | 5.1 |
| College | 477 | 24.6 | 375 | 23.8 | 265 | 22.1 |
| Missing | 140 | 7.2 | 100 | 6.3 | 80 | 6.7 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.
*Statistically significant differences $(p<.05)$ between women educated in the three units of the curriculum were found in these variables using a chi-squared test for the equality of multiple proportions.
C. 3

## APPENDIX D

CARDIOVASCULAR HEALTH KNOWLEDGE, BY DEMOGRAPHIC CHARACTERISTICS AMONG WOMEN WHO FILLED OUT FORMS IN ENGLISH, PORTUGUESE, AND KHMER

Cardiovascular Health Knowledge on The Pretests and Posttests, by Demographic Characteristics Among Women Who Filled Out Forms In English, Portuguese, and Khmer

|  | Cardiovascular Disease (Maximum Score is 4.0) |  |  |  | Percentage w/Increased Score |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pretest |  | Posttest |  |  |
|  | Sample <br> Size | Average Pretest Score (out of 5.0) | Sample Size | Average Posttest Score (out of 5.0) |  |
| Total Completing Both |  |  |  |  |  |
| Pretests and Posttests | 765 | 3.84 | 765 | 4.40** | 46.3 |
| Total Completing Either |  |  |  |  |  |
| Test | 800 | 3.83 | 767 | 4.40 | 46.3 |
| Age |  |  |  |  |  |
| Under 40 | 349 | 3.86 | 333 | 4.35 | 41.9 |
| 40-64 | 338 | 3.88 | 325 | 4.43 | 46.3 |
| 65 and over | 109 | 3.57 | 105 | 4.46 | 60.0 |
| Missing | 4 | 3.75 | 4 | 4.25 | 50.0 |
| Race/Ethnicity |  |  |  |  |  |
| White | 221 | 4.20 | 212 | 4.78 | 41.0 |
| Black | 91 | 3.87 | 88 | 4.17 | 33.3 |
| Asian | 195 | 3.38 | 193 | 4.09 | 59.1 |
| Hispanic | 211 | 3.89 | 191 | 4.35 | 38.7 |
| Other | 9 | 4.56 | 9 | 4.67 | 33.3 |
| Refused/Missing | 73 | 3.58 | 74 | 4.45 | 64.4 |
| Education |  |  |  |  |  |
| Less than high school | 247 | 3.54 | 243 | 4.27 | 53.9 |
| High school or equivalent | 254 | 3.93 | 241 | 4.38 | 41.1 |
| Training program | 46 | 3.93 | 45 | 4.40 | 33.3 |
| College | 198 | 4.12 | 189 | 4.60 | 44.4 |
| Missing | 55 | 3.51 | 49 | 4.33 | 53.1 |


|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question 1 | 800 | 48.38 | 767 | 73.14 | 51.20 |
| Question 2 | 800 | 92.00 | 767 | 97.91 | 6.43 |
| Question 3 | 800 | 92.88 | 767 | 97.13 | 4.58 |
| Question 4 | 800 | 54.88 | 767 | 75.49 | 37.57 |
| Question 5 | 800 | 94.63 | 767 | 96.09 | 51.20 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.
**The difference between the average pretest score and average posttest score is statistically significant at the .01 .

## APPENDIX E

PRE- AND POSTTEST KNOWLEDGE BY QUESTION AND BY AGE, RACE/ETHNICITY, AND EDUCATION

Appendix E. 1 Pretest and Posttest Knowledge by Age

|  | Breast Cancer |  |  |  |  | Cervical Cancer |  |  |  |  | Cardiovascular Disease |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change |
| Question 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,597 | 80.7 | 1,796 | 91.8 | 13.7 | 1,355 | 81.6 | 1,529 | 93.4 | 14.5 | 568 | 44.4 | 926 | 74.1 | 67.1 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 743 | 81.9 | 816 | 91.3 | 11.4 | 660 | 83.8 | 727 | 94.2 | 12.4 | 264 | 43.4 | 442 | 74.5 | 71.7 |
| 40-64 | 673 | 81.9 | 757 | 93.0 | 13.6 | 554 | 80.4 | 631 | 92.7 | 15.2 | 239 | 45.5 | 378 | 73.5 | 61.5 |
| 65 and over | 174 | 73.1 | 214 | 90.3 | 23.5 | 134 | 77.0 | 162 | 93.1 | 20.9 | 61 | 43.0 | 102 | 73.9 | 72.1 |
| Missing | 7 | 58.3 | 9 | 75.0 | 28.6 | 7 | 70.0 | 9 | 90.0 | 28.6 | 4 | 80.0 | 4 | 100.0 | 25.0 |
| Question 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,736 | 87.7 | 1,877 | 95.9 | 9.3 | 878 | 52.9 | 1,373 | 83.9 | 58.7 | 1,173 | 91.6 | 1,221 | 97.8 | 6.7 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 785 | 86.5 | 850 | 95.1 | 9.9 | 403 | 51.1 | 640 | 82.9 | 62.1 | 554 | 91.1 | 577 | 97.3 | 6.8 |
| 40-64 | 737 | 89.7 | 786 | 96.6 | 7.7 | 359 | 52.1 | 576 | 84.6 | 62.3 | 485 | 92.4 | 504 | 98.1 | 6.1 |
| 65 and over | 204 | 85.7 | 229 | 96.6 | 12.7 | 112 | 64.4 | 150 | 86.2 | 33.9 | 130 | 91.5 | 136 | 98.6 | 7.6 |
| Missing | 10 | 83.3 | 12 | 100.0 | 20.0 | 4 | 40.0 | 7 | 70.0 | 75.0 | 4 | 80.0 | 4 | 100.0 | 25.0 |
| Question 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,699 | 85.9 | 1,840 | 94.0 | 9.5 | 1,322 | 79.6 | 1,503 | 91.8 | 15.4 | 1,188 | 92.8 | 1,223 | 97.9 | 5.5 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 792 | 87.3 | 847 | 94.7 | 8.5 | 618 | 78.4 | 704 | 91.2 | 16.3 | 566 | 93.1 | 581 | 98.0 | 5.2 |
| 40-64 | 719 | 87.5 | 772 | 94.8 | 8.4 | 548 | 79.5 | 626 | 91.9 | 15.6 | 493 | 93.9 | 504 | 98.1 | 4.4 |
| 65 and over | 181 | 76.1 | 211 | 89.0 | 17.1 | 149 | 85.6 | 164 | 94.3 | 10.1 | 124 | 87.3 | 134 | 97.1 | 11.2 |
| Missing | 7 | 58.3 | 10 | 83.3 | 42.9 | 7 | 70.0 | 9 | 90.0 | 28.6 | 5 | 100.0 | 4 | 100.0 | 0.0 |
| Question 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,456 | 73.6 | 1,775 | 90.7 | 23.3 | 1,113 | 67.0 | 1,429 | 87.3 | 30.3 | 702 | 54.8 | 890 | 71.3 | 29.9 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 680 | 75.0 | 816 | 91.3 | 21.7 | 522 | 66.2 | 658 | 85.2 | 28.7 | 340 | 55.9 | 387 | 65.3 | 16.7 |
| 40-64 | 604 | 73.5 | 727 | 89.3 | 21.5 | 467 | 67.8 | 607 | 89.1 | 31.5 | 288 | 54.9 | 383 | 74.5 | 35.8 |
| 65 and over | 166 | 69.7 | 221 | 93.2 | 33.7 | 120 | 69.0 | 156 | 89.7 | 30.0 | 73 | 51.4 | 119 | 86.2 | 67.7 |
| Missing | 6 | 50.0 | 11 | 91.7 | 83.3 | 4 | 40.0 | 8 | 80.0 | 100.0 | 1 | 20.0 | 1 | 25.0 | 25.0 |
| Question 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,267 | 64.0 | 1,575 | 80.5 | 25.7 | 1,008 | 60.7 | 1,431 | 87.4 | 44.0 | 1,210 | 94.5 | 1,210 | 96.9 | 2.5 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 40 | 567 | 62.5 | 683 | 76.4 | 22.2 | 525 | 66.6 | 680 | 88.1 | 32.2 | 572 | 94.1 | 571 | 96.3 | 2.4 |
| 40-64 | 566 | 68.9 | 689 | 84.6 | 22.9 | 394 | 57.2 | 587 | 86.2 | 50.7 | 501 | 95.4 | 500 | 97.3 | 1.9 |
| 65 and over | 126 | 52.9 | 193 | 81.4 | 53.8 | 81 | 46.6 | 154 | 88.5 | 90.1 | 132 | 93.0 | 135 | 97.8 | 5.2 |
| Missing | 8 | 66.7 | 10 | 83.3 | 25.0 | 8 | 80.0 | 10 | 100.0 | 25.0 | 5 | 100.0 | 4 | 100.0 | 0.0 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.

|  | Breast Cancer |  |  |  |  | Cervical Cancer |  |  |  |  | Cardiovascular Disease |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change |
| Question 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,597 | 80.7 | 1,796 | 91.8 | 13.7 | 1,355 | 81.6 | 1,529 | 93.4 | 14.5 | 568 | 44.4 | 926 | 74.1 | 67.1 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 387 | 93.3 | 398 | 97.5 | 4.6 | 280 | 86.4 | 309 | 98.1 | 13.5 | 160 | 68.1 | 207 | 91.6 | 34.5 |
| Black | 147 | 83.1 | 160 | 92.5 | 11.4 | 134 | 85.9 | 139 | 92.7 | 7.9 | 47 | 51.1 | 58 | 65.2 | 27.6 |
| Asian | 117 | 52.7 | 164 | 74.2 | 40.8 | 106 | 60.9 | 144 | 81.4 | 33.5 | 50 | 25.6 | 102 | 52.8 | 106.1 |
| Hispanic | 799 | 81.4 | 906 | 93.4 | 14.7 | 692 | 83.5 | 766 | 93.8 | 12.3 | 278 | 41.6 | 491 | 75.4 | 81.5 |
| Other | 16 | 100.0 | 15 | 93.8 | -6.3 | 10 | 76.9 | 12 | 92.3 | 20.0 | 8 | 88.9 | 7 | 77.8 | -12.5 |
| Refused/ 120 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missing | 131 | 78.0 | 153 | 90.5 | 16.1 | 133 | 80.6 | 159 | 96.4 | 19.5 | 25 | 31.3 | 61 | 75.3 | 141.0 |
| Question 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,736 | 87.7 | 1,877 | 95.9 | 9.3 | 878 | 52.9 | 1,373 | 83.9 | 58.7 | 1,173 | 91.6 | 1,221 | 97.8 | 6.7 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 363 | 87.5 | 398 | 97.5 | 11.5 | 164 | 50.6 | 260 | 82.5 | 63.1 | 222 | 94.5 | 225 | 99.6 | 5.4 |
| Black | 150 | 84.7 | 166 | 96.0 | 13.2 | 92 | 59.0 | 126 | 84.0 | 42.4 | 85 | 92.4 | 86 | 96.6 | 4.6 |
| Asian | 194 | 87.4 | 212 | 95.9 | 9.8 | 108 | 62.1 | 166 | 93.8 | 51.1 | 169 | 86.7 | 185 | 95.9 | 10.6 |
| Hispanic | 867 | 88.4 | 922 | 95.1 | 7.5 | 429 | 51.7 | 671 | 82.1 | 58.7 | 614 | 91.8 | 636 | 97.7 | 6.4 |
| Other | 13 | 81.3 | 16 | 100.0 | 23.1 | 5 | 38.5 | 10 | 76.9 | 100.0 | 9 | 100.0 | 9 | 100.0 | 0.0 |
| Refused/ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missing | 149 | 88.7 | 163 | 96.4 | 8.7 | 80 | 48.5 | 140 | 84.8 | 75.0 | 74 | 92.5 | 80 | 98.8 | 6.8 |
| Question 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,699 | 85.9 | 1,840 | 94.0 | 9.5 | 1,322 | 79.6 | 1,503 | 91.8 | 15.4 | 1,188 | 92.8 | 1,223 | 97.9 | 5.5 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 377 | 90.8 | 400 | 98.0 | 7.9 | 243 | 75.0 | 295 | 93.7 | 24.9 | 218 | 92.8 | 224 | 99.1 | 6.8 |
| Black | 154 | 87.0 | 161 | 93.1 | 7.0 | 116 | 74.4 | 128 | 85.3 | 14.8 | 87 | 94.6 | 83 | 93.3 | -1.4 |
| Asian | 147 | 66.2 | 186 | 84.2 | 27.1 | 136 | 78.2 | 160 | 90.4 | 15.7 | 178 | 91.3 | 186 | 96.4 | 5.6 |
| Hispanic | 858 | 87.5 | 920 | 94.8 | 8.4 | 681 | 82.1 | 747 | 91.4 | 11.3 | 624 | 93.3 | 643 | 98.8 | 5.9 |
| Other | 16 | 100.0 | 16 | 100.0 | 0.0 | 9 | 69.2 | 12 | 92.3 | 33.3 | 9 | 100.0 | 9 | 100.0 | 0.0 |
| Refused/ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missing | 147 | 87.5 | 157 | 92.9 | 6.2 | 137 | 83.0 | 161 | 97.6 | 17.5 | 72 | 90.0 | 78 | 96.3 | 7.0 |
| Question 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,456 | 73.6 | 1,775 | 90.7 | 23.3 | 1,113 | 67.0 | 1,429 | 87.3 | 30.3 | 702 | 54.8 | 890 | 71.3 | 29.9 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 310 | 74.7 | 386 | 94.6 | 26.7 | 250 | 77.2 | 301 | 95.6 | 23.8 | 157 | 66.8 | 200 | 88.5 | 32.5 |
| Black | 146 | 82.5 | 161 | 93.1 | 12.8 | 117 | 75.0 | 129 | 86.0 | 14.7 | 47 | 51.1 | 60 | 67.4 | 32.0 |
| Asian | 170 | 76.6 | 200 | 90.5 | 18.2 | 95 | 54.6 | 139 | 78.5 | 43.8 | 82 | 42.1 | 138 | 71.5 | 70.0 |
| Hispanic | 676 | 68.9 | 852 | 87.8 | 27.5 | 546 | 65.9 | 703 | 86.0 | 30.6 | 372 | 55.6 | 421 | 64.7 | 16.3 |
| Other | 14 | 87.5 | 14 | 87.5 | 0.0 | 11 | 84.6 | 12 | 92.3 | 9.1 | 7 | 77.8 | 8 | 88.9 | 14.3 |
| Refused/ Missing | 140 | 83.3 | 162 | 95.9 | 15.0 | 94 | 57.0 | 145 | 87.9 | 54.3 | 37 | 46.3 | 63 | 77.8 | 68.2 |


|  | Breast Cancer |  |  |  |  | Cervical Cancer |  |  |  |  | Cardiovascular Disease |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | Sample Size <br> Size | Posttest Percentage Correct | Percentage Change |
| Question 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,267 | 64.0 | 1,575 | 80.5 | 25.7 | 1,008 | 60.7 | 1,431 | 87.4 | 44.0 | 1,210 | 94.5 | 1,210 | 96.9 | 2.5 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 243 | 58.6 | 326 | 79.9 | 36.5 | 179 | 55.2 | 291 | 92.4 | 67.2 | 227 | 96.6 | 224 | 99.1 | 2.6 |
| Black | 119 | 67.2 | 147 | 85.0 | 26.4 | 95 | 60.9 | 124 | 82.7 | 35.7 | 90 | 97.8 | 85 | 95.5 | -2.4 |
| Asian | 113 | 50.9 | 167 | 75.6 | 48.5 | 73 | 42.0 | 130 | 73.4 | 75.1 | 180 | 92.3 | 179 | 92.7 | 0.5 |
| Hispanic | 676 | 68.9 | 790 | 81.4 | 18.2 | 564 | 68.0 | 727 | 89.0 | 30.8 | 630 | 94.2 | 636 | 97.7 | 3.7 |
| Other | 12 | 75.0 | 11 | 68.8 | -8.3 | 8 | 61.5 | 12 | 92.3 | 50.0 | 8 | 88.9 | 9 | 100.0 | 12.5 |
| Refused/ Missing | 104 | 61.9 | 134 | 79.3 | 28.1 | 89 | 53.9 | 147 | 89.1 | 65.2 | 75 | 93.8 | 77 | 95.1 | 1.4 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.

Appendix E. 3 Pretest and Posttest Knowledge, by Education Level

|  | Breast Cancer |  |  |  |  | Cervical Cancer |  |  |  |  | Cardiovascular Disease |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Pretest Percentage Correct | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Posttest Percentage Correct | Percentage Change | Sample Size | Pretest Percentage Correct | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Posttest Percentage Correct | Percentage Change |
| Question 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,597 | 80.7 | 1,796 | 91.8 | 13.7 | 1,355 | 81.6 | 1,529 | 93.4 | 14.5 | 568 | 44.4 | 926 | 74.1 | 67.1 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| school <br> High school or equivalent | 405 | 68.6 | 517 | 87.6 | 27.7 | 365 | 73.0 | 457 | 91.2 | 25.0 | 137 | 32.7 | 281 | 67.4 | 106.1 |
|  | 539 | 83.3 | 589 | 92.3 | 10.8 | 449 | 82.5 | 499 | 93.6 | 13.4 | 206 | 48.6 | 311 | 75.7 | 55.7 |
| Training program | 100 | 86.2 | 108 | 93.9 | 8.9 | 86 | 84.3 | 96 | 95.0 | 12.7 | 31 | 47.0 | 54 | 83.1 | 76.9 |
| College | 444 | 91.0 | 463 | 96.3 | 5.8 | 380 | 92.0 | 387 | 96.0 | 4.4 | 160 | 55.4 | 221 | 79.5 | 43.6 |
| Missing | 109 | 79.0 | 119 | 89.5 | 13.3 | 75 | 73.5 | 90 | 90.9 | 23.6 | 34 | 41.5 | 59 | 75.6 | 82.4 |
| Question 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,736 | 87.7 | 1,877 | 95.9 | 9.3 | 878 | 52.9 | 1,373 | 83.9 | 58.7 | 1,173 | 91.6 | 1,221 | 97.8 | 6.7 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 511 | 86.6 | 558 | 94.6 | 9.2 | 286 | 57.2 | 425 | 84.8 | 48.3 | 372 | 88.8 | 404 | 96.9 | 9.1 |
| High school or equivalent | 567 | 87.6 | 613 | 96.1 | 9.6 | 276 | 50.7 | 437 | 82.0 | 61.6 | 386 | 91.0 | 403 | 98.1 | 7.7 |
| Training program | 101 | 87.1 | 113 | 98.3 | 12.9 | 53 | 52.0 | 84 | 83.2 | 60.1 | 61 | 92.4 | 64 | 98.5 | 6.5 |
| College | 437 | 89.5 | 465 | 96.7 | 8.0 | 201 | 48.7 | 346 | 85.9 | 76.4 | 283 | 97.9 | 275 | 98.9 | 1.0 |
| Missing | 120 | 87.0 | 128 | 96.2 | 10.7 | 62 | 60.8 | 81 | 81.8 | 34.6 | 71 | 86.6 | 75 | 96.2 | 11.1 |
| Question 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Education | 1,699 | 85.9 | 1,840 | 94.0 | 9.5 | 1,322 | 79.6 | 1,503 | 91.8 | 15.4 | 1,188 | 92.8 | 1,223 | 97.9 | 5.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 455 | 77.1 | 531 | 90.0 | 16.7 | 396 | 79.2 | 456 | 91.0 | 14.9 | 376 | 89.7 | 405 | 97.1 | 8.2 |
| High school or equivalent | 561 | 86.7 | 604 | 94.7 | 16.2 9.2 | 432 | 79.4 | 488 | 91.6 | 15.3 | 405 | 95.5 | 403 | 98.1 | 8.7 |
| Training programCollege | 103 | 88.8 | 114 | 99.1 | 11.6 | 84 | 82.4 | 97 | 96.0 | 16.6 | 63 | 95.5 | 64 | 98.5 | 3.2 |
|  | 464 | 95.1 | 476 | 99.0 | 4.1 | 337 | 81.6 | 374 | 92.8 | 13.7 | 275 | 95.2 | 276 | 99.3 | 4.3 |
| College <br> Missing | 116 | 84.1 | 115 | 86.5 | 2.9 | 73 | 71.6 | 88 | 88.9 | 24.2 | 69 | 84.1 | 75 | 96.2 | 14.3 |
| Question 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1,456 | 73.6 | 1,775 | 90.7 | 23.3 | 1,113 | 67.0 | 1,429 | 87.3 | 30.3 | 702 | 54.8 | 890 | 71.3 | 29.9 |
| Total Education Less than high school |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 410 | 69.5 | 523 | 88.6 | 27.6 | 295 | 59.0 | 426 | 85.0 | 44.1 | 199 | 47.5 | 281 | 67.4 | 41.9 |
| High school or equivalent | 485 | 75.0 | 585 | 91.7 | 22.3 | 347 | 63.8 | 454 | 85.2 | 33.5 | 243 | 57.3 | 286 | 69.6 | 21.4 |
| Training program | 87 | 75.0 | 110 | 95.7 | 27.5 | 74 | 72.5 | 89 | 88.1 | 21.5 | 39 | 59.1 | 45 | 69.2 | 17.2 |
| CollegeMissing | 375 | 76.8 | 437 | 90.9 | 18.2 | 328 | 79.4 | 378 | 93.8 | 18.1 | 182 | 63.0 | 225 | 80.9 | 28.5 |
|  | 99 | 71.7 | 120 | 90.2 | 25.8 | 69 | 67.6 | 82 | 82.8 | 22.4 | 39 | 47.6 | 53 | 67.9 | 42.9 |

Appendix E. 3 (continued)

|  | Breast Cancer |  |  |  |  | Cervical Cancer |  |  |  |  | Cardiovascular Disease |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Size | Pretest Percentage Correct | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Posttest Percentage Correct | Percentage Change | Sample | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change | $\begin{aligned} & \text { Sample } \\ & \text { Size } \end{aligned}$ | Pretest Percentage Correct | Sample Size | Posttest Percentage Correct | Percentage Change |
| Question 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1,267 | 64.0 | 1,575 | 80.5 | 25.7 | 1,008 | 60.7 | 1,431 | 87.4 | 44.0 | 1,210 | 94.5 | 1,210 | 96.9 | 2.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 321 | 54.4 | 441 | 74.7 | 37.4 | 278 | 55.6 | 426 | 85.0 | 52.9 | 387 | 92.4 | 403 | 96.6 | 4.6 |
| High school or equivalent | 428 | 66.2 | 530 | 83.1 | 25.6 | 327 | 60.1 | 474 | 88.9 | 47.9 | 406 | 95.8 | 397 | 96.6 | 0.9 |
| Training program | 81 | 69.8 | 96 | 83.5 | 19.5 | 64 | 62.7 | 90 | 89.1 | 42.0 | 64 | 97.0 | 64 | 98.5 | 1.5 |
| College | 351 | 71.9 | 416 | 86.5 | 20.2 | 279 | 67.6 | 357 | 88.6 | 31.1 | 277 | 95.8 | 269 | 96.8 | 1.0 |
| Missing | 86 | 62.3 | 92 | 69.2 | 11.0 | 60 | 58.8 | 84 | 84.8 | 44.2 | 76 | 92.7 | 77 | 98.7 | 6.5 |

Source: Analysis of data collected from women educated by the Helping You Take Care of Yourself curriculum.
Note: Information reflects data collected from women who were educated at 31 different community-based organizations during both phases of the project.

## APPENDIX F

## REVISED DATA COLLECTION FORMS

Date: $\qquad$ Location: $\qquad$

1. Name:
2. What is your date of birth? $\qquad$ month $\qquad$ day ___year
3. How old are you?
$\square$ Under 40
$\square$ 40-64 $\square 5$ or over
4. What city or town do you live in? $\qquad$
5. Were you born in ...

One of the 50 states or the District of Columbia
One of the U.S. territories (Puerto Rico, Guam, American Samoa, US Virgin Islands, Mariana Islands, Solomon Islands) $\square$ Some other country $\rightarrow$ How old were you when you first moved to the United States?
$\qquad$ Age $\qquad$ Don't know
7. Are you of Hispanic or Latino origin?
$\square$ No
Yes $\rightarrow$ Which one of these groups best describes your origin? Are you....
$\square$ Brazilian $\square$ Cuban $\square$ Dominican $\square$ Puerto Rican $\square$ Mexican, Chicana, Mexican American $\square$ Some other Hispanic or Latino origin (please specify): $\qquad$
8. What is your race? (You may check more than one.) Are you ...
$\square$ Alaska Native or American Indian $\square$ Asian
Black or African American
Native Hawaiian or other Pacific IslanderWhite $\square$ Other (please specify): $\qquad$
9. What is the highest grade or level of school you have finished?
$\square$ I didn't go to school8th grade or lessSome high school but did not graduateHigh school graduate or GED
Training program
$\square$ College
$\square$ Other: (please specify): $\qquad$
10. What type of health care coverage (insurance) do you use to pay for most of your medical care? Is it coverage through:
$\square$ Your employer or someone else's employer
A plan that you or someone else buys

- Medicare

Medicaid, MassHealth, CommonHealth or MassHealth HMOs offered through Neighborhood Health Plan, Fallon Community Health Plan, Boston Medical Center HealthNet or Network Health or Commonwealth Care
$\square$ Free Care or Safety Net
$\square$ Other (please specify): $\qquad$
$\square$ I don't have any health care coverage (insurance)

## Health Questions (for women and men):

11. Blood cholesterol is a fatty substance found in the blood. About how long has it been since you last had your blood cholesterol checked?
Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 5 years (2 years but less than 5 years ago)
5 or more years ago
$\square$ I have never had my blood cholesterol checked
12. A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. When was your most recent blood stool test using a home kit?
Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years (2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
5 or more years ago
$\square$ I have never had a blood stool test using a home kit
13. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. When was your most recent sigmoidoscopy or colonoscopy?
Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years (2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
Within the past 10 years (5 years but less than 10 years ago)
10 or more years ago
$\square$ I have never had a sigmoidoscopy or colonoscopy

## WOMEN ONLY Health Questions

14. A mammogram is an X-ray of each breast to look for breast cancer. When was your most recent mammogram?
Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years ( 2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
$\square 5$ or more years ago
$\square$ I have never had a mammogram
15. A Pap test (smear) is a test for cancer of the cervix. When was your most recent Pap test?
$\square$ Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years (2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
$\square 5$ or more years ago
$\square$ I have never had a Pap test

## MEN ONLY Health Questions

16. A digital rectal exam (DRE) is an exam in which a doctor, nurse, or other health professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland. When was your most recent DRE?
Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years (2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
$\square 5$ or more years ago
$\square$ I have never had a DRE
17. A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. When was your most recent PSA test?
$\square$ Within the past year (any time less than 12 months ago)
$\square$ Within the past 2 years ( 1 year but less than 2 years ago)
Within the past 3 years (2 years but less than 3 years ago)
Within the past 5 years (3 years but less than 5 years ago)
$\square 5$ or more years ago
$\square$ I have never had a PSA test
$\qquad$
$\qquad$

## Women's Health Network Health Education Pretest

## Breast Health and Breast Cancer Screening Unit <br> For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. If a woman discovers a lump in her breast, she absolutely has breast cancer $\qquad$ YES
2. Starting at the age of 40 , women should get a mammogram once a year. $\qquad$ YES

NO
3. Mammograms cause breast cancer.

YES
NO
4. As women get older, their risk of breast cancer increases. YES
5. Women need to have a clinical breast exam done by a healthcare provider every five years YES
$\qquad$
$\qquad$

## Women's Health Network Health Education Pretest

## Cervical Health and Cervical Cancer Screening Unit

For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. If a woman has an abnormal Pap test, it means she has cervical cancer. $\qquad$ YES
2. Women should get their first Pap tests at age 21 or three years after they become sexually active. $\qquad$ YES NO
3. Cervical cancer is preventable through routine screening. .YES
4. When a woman gets a positive HPV test, it means she has cervical cancer. $\qquad$ YES
5. Most women have been exposed to the Human Papilloma Virus (HPV) YES

Date: $\qquad$
$\qquad$

## Women's Health Network Health Education Pretest

## Women and Cardiovascular Disease Unit <br> For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. Men and women have the exact same heart attack warning signs.

YES
NO
2. Quitting smoking can help reduce the risk for cardiovascular disease YES

NO
3. LDL (bad) cholesterol can clog the blood vessels and cause damage to the heart and brain. $\qquad$ YES

NO
4. Lung cancer is the number one killer of women in the United States $\qquad$ .YES

NO
5. High blood pressure forces the heart to work harder than normal and raises the risk for heart attack and stroke YES

NO
$\qquad$
$\qquad$

# Women's Health Network Health Education Posttest 

## Breast Health and Breast Cancer Screening Unit <br> For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. If a woman discovers a lump in her breast, she absolutely has breast cancer $\qquad$ YES
2. Starting at the age of 40 , women should get a mammogram once a year. YES

NO
3. Mammograms cause breast cancer.

YES NO
4. As women get older, their risk of breast cancer increases. YES
5. Women need to have a clinical breast exam done by a health care provider every five years. YES
$\qquad$
$\qquad$

## Women's Health Network Health Education Posttest

## Cervical Health and Cervical Cancer Screening Unit

For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. If a woman has an abnormal Pap test, it means she has cervical cancer. $\qquad$ YES
2. Women should get their first Pap tests at age 21 or three years after they become sexually active $\qquad$ YES
3. Cervical cancer is preventable through routine screening. YES
4. When a woman gets a positive HPV test, it means she has cervical cancer. $\qquad$ YES
5. Most women have been exposed to the Human Papilloma Virus (HPV) YES

Date: $\qquad$
$\qquad$

## Women's Health Network Health Education Posttest

## Women and Cardiovascular Disease Unit

For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

1. Men and women have the exact same heart attack warning signs

YES
NO
2. Quitting smoking can help reduce the risk for cardiovascular disease YES

NO
3. LDL (bad) cholesterol can clog the blood vessels and cause damage to the heart and brain $\qquad$ YES

NO
4. Lung cancer is the number one killer of women in the United States $\qquad$ YES

NO
5. High blood pressure forces the heart to work harder than normal and raises the risk for heart attack and stroke YES

NO

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[^0]:    ${ }^{1}$ In the summer of 2008, Massachusetts cut funding for the WHN program and the MDPH Outreach Specialists were moved to other positions within MDPH. MDPH has hired a contractor to train CBO educators to continue the project in the future.
    ${ }^{2}$ The WHN plans to expand the Helping You Take Care of Yourself curriculum in 2009 by adding units on prostate cancer and colorectal cancer. Men will be able to be educated on these topics.
    ${ }^{3}$ MPR contracted with 21 organizations, but only 18 organizations participated in the project.
    ${ }^{4}$ MPR contracted with 31 organizations, but only 29 organizations participated in the project.

[^1]:    ${ }^{5}$ The question on the English, Portuguese, and Khmer pre- and posttests was "Lung cancer is the number 1 killer of women in the United States" (correct answer is false). On the versions of the pre- and posttests that had been translated into Spanish, the question was "Lung cancer is the type of cancer that kills the most women in the United States" (correct answer is true).

[^2]:    ${ }^{6}$ The MDPH Outreach Specialist for the Boston region was no longer employed by MDPH at the time of the qualitative evaluation and could not be interviewed.

[^3]:    ${ }^{7}$ Only one CBO could not recruit enough women with the initial list and needed a second list.
    ${ }^{8} \mathrm{An}$ ad hoc translation to Portuguese was also done for a woman in one group.

[^4]:    ${ }^{9}$ The cardiovascular health unit was analyzed on a four-point scale for all educators because one of the questions on the pre- and posttest was translated incorrectly on the Spanish data collection forms. We thus took this question out of the analysis.

[^5]:    ${ }^{10}$ The sample for Tables 7 through 10 is the total number of women educated by one, two, or three units of the curriculum $(2,526)$. We present this information for all three units combined. However, Appendix C presents the demographic characteristics of the women educated, broken out by unit of the curriculum.

[^6]:    ${ }^{11}$ Fifty-two of the 2,526 women ( 2 percent) were under 18 years of age and 281 (11 percent) did not report a birth date.
    ${ }^{12}$ In some cases, organizations told us that men accompanied women to the educational sessions and filled out forms; in a handful of other cases, the names on the forms were obviously male names. In both cases, data were not entered for men.
    ${ }^{13}$ Although nearly half of the forms were completed in English, interviews with educators indicated that not all these trainings were held in English. For instance, at least one CBO translated the educational materials into Vietnamese and had women complete the forms in English. The translation was done in advance of the training, but it was not checked by translators external to the CBO. It is unclear if the women educated in Vietnamese could read English or if educators helped them complete the forms in some way. This is addressed more fully in the section on the results from the qualitative analysis.
    ${ }^{14}$ A very high number of individuals were not asked the question on the type of health insurance because this question was included for only the second phase of the project.
    ${ }^{15}$ It was possible for women to attend educational sessions outside their region of residence.

[^7]:    ${ }^{16}$ Our sample includes a small number of women less than age 18, so the comparison group is not completely matched to the sample; but the small number of women less than age 18 is unlikely to change the results drastically.

[^8]:    ${ }^{17}$ The cardiovascular health unit was analyzed on a four-point scale for all participants because one of the questions on the pre- and posttest was translated incorrectly on the Spanish version of the data collection forms. We thus took this question out of the analysis for all participants. Knowledge of cardiovascular health using all five questions was analyzed for participants who used data collection forms in English, Portuguese, and Khmer only. These results are shown in Appendix D.
    ${ }^{18}$ Because knowledge of breast and cervical health was analyzed on a five-point scale and knowledge of cardiovascular health was an analyzed on a four-point scale, scores were calculated as percentiles (for each woman, the number of correct answers was divided by the number of questions the test had) to reach this conclusion.

