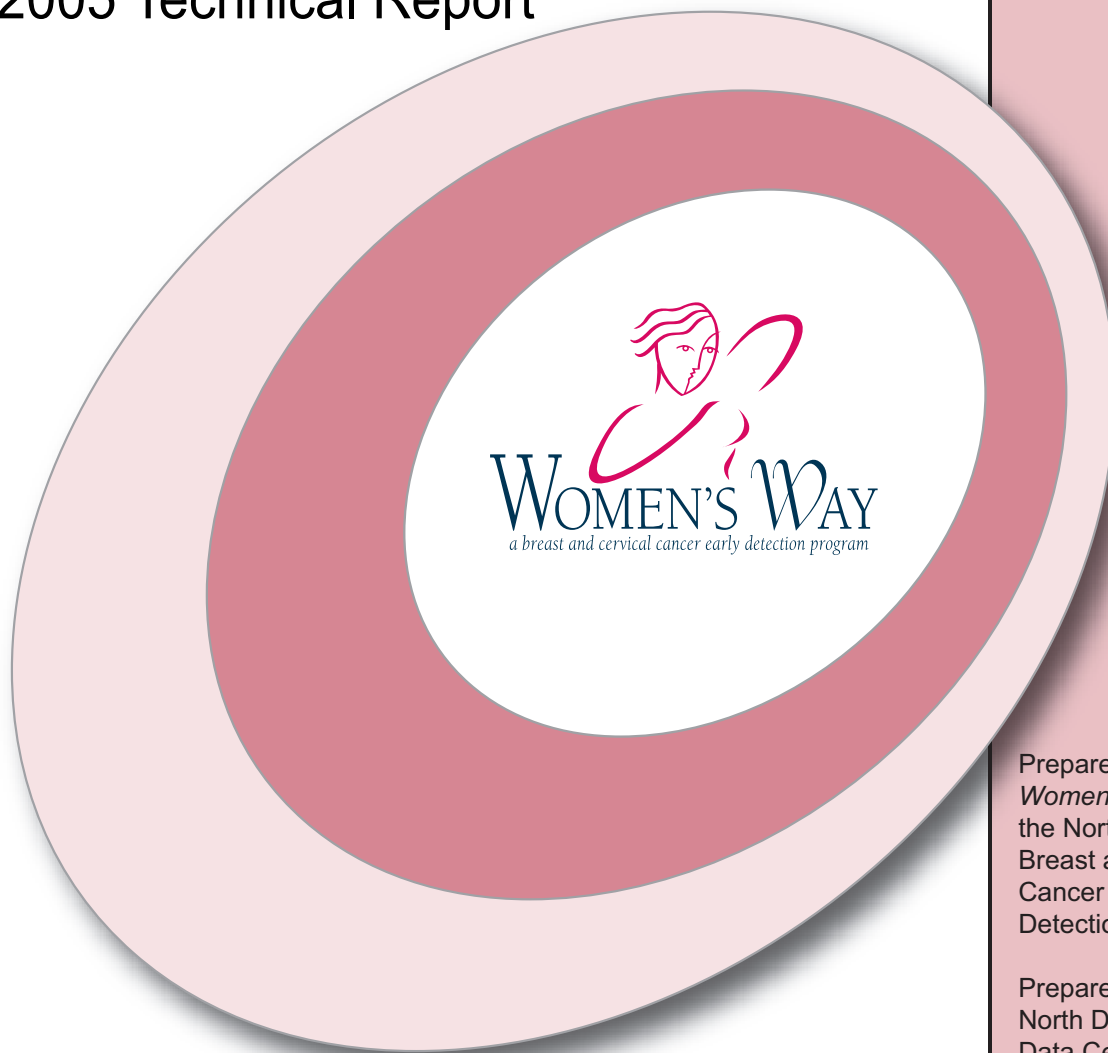


# Women's Way Direct Mail Project:

Issued:  
December 2005

## 2005 Technical Report



Prepared for:  
*Women's Way*,  
the North Dakota  
Breast and Cervical  
Cancer Early  
Detection Program

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**NORTH DAKOTA**  
DEPARTMENT of HEALTH



# FORWARD

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This direct mail project was conducted by the North Dakota State Data Center at North Dakota State University (NDSU) and Reach Partners, Inc., for *Women's Way*, the North Dakota Breast and Cervical Cancer Early Detection Program (<http://www.ndhealth.gov/womensway>), and the North Dakota Department of Health (<http://www.ndhealth.gov>). Funded by the Centers for Disease Control and Prevention, *Women's Way* works to reduce mortality from breast and cervical cancer by increasing education and screening among low-income, underserved, high-risk and minority women. *Women's Way* statewide recruitment projects are facilitated by consultants at Reach Partners, Inc., and Cowden Communications. The results of the project are presented in detail in this document, *Women's Way Direct Mail Project: 2005 Technical Report*. The results are summarized in a second document, *Women's Way Direct Mail Project: 2005 Summary*. Both documents are available on the North Dakota Department of Health website at [www.ndhealth.gov/cancer/publications.asp?DivisionID=2](http://www.ndhealth.gov/cancer/publications.asp?DivisionID=2).

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**December 2005**

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# EXECUTIVE SUMMARY

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- Results of the direct mail campaign are presented in five main sections. *Section 1: Project Overview* presents an overview of the project's study objectives and timeline, as well as a description of the *Women's Way* intended audience, the purchased list and sampling frame, the geographic groups used for analysis, and PRIZM clusters. *Section 2: Project Implementation* presents details of the three main phases of the project: the baseline survey, the direct mail campaign, and evaluation. *Section 3: Project Conclusions* discusses conclusions about the project, including the success of the direct mail campaign, characteristics of the intended audience, the overall reliability of the sampling frame, and feedback for future message and campaign design. *Section 4: Detailed Baseline Survey Results* and *Section 5: Detailed Evaluation Survey Results* offer detailed results of the baseline and evaluation surveys. Finally, Appendices A through E provide Appendix Tables of data supplementing the detailed survey results, the baseline and evaluation survey instruments, and images of the cards used in the direct mail campaign.
- A summary of the report is presented here in the Executive Summary.

## PROJECT OVERVIEW

### Study Objectives

- The focus of *Women's Way*, the North Dakota Breast and Cervical Cancer Early Detection Program, is to enable eligible medically underserved women to obtain regular breast and cervical cancer screening services.
- The primary objective of the direct mail project was to evaluate the effectiveness of direct mail in recruiting women into *Women's Way*. The objective had the following four components:
  - To evaluate the success of the direct mail campaign
  - To examine characteristics of the intended audience
  - To examine the overall reliability of the sampling frame
  - To provide feedback for future message and campaign design
- The project designed to accomplish the primary objective included:
  - A baseline survey
  - A direct mail campaign
  - An evaluation survey
  - Analysis of new enrollees
  - Documentation of the sampling frame

### Timeline

- **9/2003:** A list was purchased by *Women's Way* from Medstat late September 2003. The purchased list became the sampling frame for the direct mail project.
- **2/2004-3/2004:** A baseline survey was conducted in February and March of 2004 using a random selection of women from the sampling frame living in "urban" and "rural" locations. The survey was designed to determine characteristics of the intended audience.
- **5/2004-6/2004:** Three different cards were developed by *Women's Way* for the direct mail campaign. Cards were mailed in May and June of 2004.
- **10/2004:** An evaluation survey, designed to follow up with women who completed the baseline survey, was conducted in October 2004, approximately five months after they were sent a card.
- **5/2004-12/2004:** Enrollee data were monitored from May 4, 2004, through December 1, 2004. The names of new *Women's Way* enrollees were matched to names on the sampling frame, paying specific attention to tracking women who had been sent a card.

## EXECUTIVE SUMMARY (CONTINUED)

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### Intended Audience

- The *Women's Way* intended audience is North Dakota women between the ages of 40 and 64, who qualify based on household income, and who do not have health insurance, do not have breast or cervical cancer screenings covered by their health insurance, or cannot afford high deductibles and co-payments.
- Using Census 2000 data, our best estimate of the number of women in North Dakota matching the age and household income eligibility criteria is 21,000 (i.e., 6.5 percent of all women in North Dakota or 22.2 percent of all women ages 40 to 64). The data do not allow a determination of how many of these women have health insurance. Of the 21,000 women, one-fourth are living alone. Half of these women are living with a spouse, and one-fifth are single women who live with a family member, of which half are single mothers. Half of the women are ages 40 to 49 and half are ages 50 to 64.

### Purchased List and Sampling Frame

- The list purchased by *Women's Way* from Medstat for the purpose of a direct mail campaign was intended to be a list of the names of women ages 40 to 64 in North Dakota with annual household incomes of \$35,000 or less.
- Of the original 27,214 names, 1,338 names matched *Women's Way* records and were removed. The list of 25,876 names was used as the overall sampling frame. Of these names, 5,766 did not have phone numbers.

### Geographic Groups

- The sampling frame was separated into three groups according to geography: Group 1 was women living in larger "targeted urban" communities, Group 2 was women living in smaller "other urban" communities, and Group 3 was women living in "rural" areas of North Dakota (see page 5 for a detailed description of the geographic groups).

### PRIZM Clusters

- The PRIZM lifestyle segmentation system by Claritas offers profiles for groups of people based on demographic and lifestyle dimensions. The purchased list from Medstat included a PRIZM cluster for each woman, and it was one of the selling points for the list. Analysis of clusters did not occur in this study, however, because it would have required a much larger overall number of completed surveys.

## PROJECT IMPLEMENTATION

### **Phase One: Baseline**

#### Baseline Survey Design

- The baseline survey was designed to determine characteristics of the intended audience. Two independent random samples were pulled from the baseline sampling frame, one for "urban" locations and one for "rural" locations. Participants were screened based on age and household income criteria only, not health insurance status, and thus are referred to as "potentially eligible" for *Women's Way*.
- To accommodate a separate study being planned by *Women's Way* in conjunction with the North Dakota State University Department of Communication, a portion of the "targeted urban" women were removed from the baseline survey sampling frame. These names were excluded from the evaluation survey sampling frame but were included in the direct mail campaign.

## EXECUTIVE SUMMARY (CONTINUED)

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- The baseline survey was conducted in February and March of 2004. There were a total of 742 completed surveys (376 “urban” and 366 “rural”), all women who were determined to be potentially eligible based on the criteria of age and household income. The refusal rate among women we talked to was low at 27.2 percent. Nearly two in five phone numbers called resulted in a determination of being ineligible.
- Background, opinions regarding cancer, and breast and cervical cancer screening behavior and intentions were explored in the baseline survey along with demographics of the women. Three theoretical models which can help provide insight into future message development were also explored (see Appendix C for survey instrument).

### Summary of Baseline Survey Results (see pages 10-12 and *Section 4: Detailed Baseline Survey Results*)

- Most women say they know doctors’ recommendations regarding mammograms for women 40 years and older (88.8 percent), though their perceptions of the recommendations were not verified.
- The vast majority of women have had a mammogram (83.8 percent). Most are not at all nervous about getting a mammogram (65.0 percent), though approximately one-third of women indicated there was something that made it difficult for them to get a mammogram (31.4 percent).
- Emphasis in analysis has been placed on the woman’s experiences with and intentions regarding mammogram screenings. The proportion of women who have had a Pap test is very high (98.8 percent) and, therefore, Pap test behavior was not a research priority in this project.
- Nearly half of the women had a Pap test in the last year (46.1 percent). The majority of women were very likely to get a Pap test in the next 12 months (60.8 percent).
- One-fourth of respondents had some kind of degree beyond high school (26.0 percent). More than one-fourth of women had an annual household income of \$15,000 or less (27.4 percent). One-fourth of women were not employed or actively seeking employment (26.0 percent), and 70.9 percent were employed. More than half of women were married and lived with their spouse (59.1 percent). Three-fourths of women had health insurance (77.8 percent).
- The three theoretical models explored in the baseline survey were: Stages of Change, Self-Regulation, and Reasoned Action (see pages 52-56 in *Section 4: Detailed Baseline Survey Results* for a description of the theories and the overall results). Two-thirds of women were at the action/maintenance stage of change, meaning they have had a mammogram and have plans for following a regular schedule (66.6 percent). Women overall had high self-efficacy, meaning they were confident that mammograms could detect cancer early and prevent dying from breast cancer (68.9 percent). Nearly three-fourths of women were influenced in their decisions regarding mammograms by at least one of the three subjective norms measured in the baseline survey (72.8 percent): 64.0 percent by the opinions of health care providers, 39.4 percent by the opinions of friends/family, and 35.3 percent by information from the media.

### Breast and Cervical Cancer Screening Recommendations

- *Women’s Way* follows the American Cancer Society’s guidelines that: 1) women ages 40 and older should have a mammogram every year, and 2) all sexually active women or women ages 21 and older should have Pap tests every one to three years, depending on doctors’ recommendations and risk factors.

## EXECUTIVE SUMMARY (CONTINUED)

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### Phase Two: Direct Mail Campaign

#### Checking Addresses

- *Women's Way* used the services of Melissa Data to check the addresses of women on the sampling frame, and eliminate or update incorrect addresses before the direct mail campaign.
- All 25,876 addresses in the sampling frame were checked. A total of 2,713 incorrect addresses were excluded from the direct mail campaign and another 1,172 addresses were incorrect but could be updated. Therefore, 15.0 percent of the sampling frame had address problems.

#### Implementing the Campaign

- Three different cards were developed by *Women's Way* for the direct mail campaign: Card 1, the "Anderson" card; Card 2, the "Little Voice" card; and Card 3, the "Poster" card (see Appendix E for images of the cards).
- The "Anderson" card and the "Little Voice" card were adapted by *Women's Way* from cards developed and researched by SAGE – Minnesota's Cancer Screening Program. The "Poster" card was an adaptation of a *Women's Way* poster message that was previously tested with the intended audience.
- A total of 7,212 names were randomly divided among the three cards, and cards were sent in four waves in May and June of 2004. The women who received a card included women who completed the baseline survey and had correct addresses as well as others with phone numbers whose addresses had been verified.

### Phase Three: Evaluation

#### Evaluation Survey Design

- The evaluation survey was designed to follow up with women who completed the baseline survey. The survey was conducted in October 2004, approximately five months after the baseline women were sent a card. There were a total of 457 completed evaluation surveys.
- The women were asked their recall of *Women's Way* and the direct mail campaign, and asked questions about the card they received. They were also asked their reasons for calling, or not calling, *Women's Way* (see Appendix D for survey instrument).

#### Summary of Evaluation Survey Results (see pages 15-16 and *Section 5: Detailed Evaluation Survey Results*)

- More than three-fourths of women had heard of *Women's Way* (80.3 percent). Brochures were the most common way women had heard of the program (33.0 percent). One-fifth of women heard of the program through something they received in the mail (19.1 percent).
- Just over half of the women who answered the survey remembered receiving a card in the mail in May or June of 2004 (51.6 percent). Of the women who remembered, a large majority opened and read the card (84.3 percent). Approximately two in five of these women who read the card said they remembered something about the card (43.7 percent), two in five said they remembered something about eligibility requirements (41.2 percent), and one in five said they remembered something about an incentive (19.6 percent).

## EXECUTIVE SUMMARY (CONTINUED)

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- Among the women who remembered receiving a card and read it, nearly one in 10 called to learn about enrolling in *Women's Way* (9.0 percent), or 18 women. An additional 25 women who had heard of *Women's Way* called to learn about the program; these were women who did not remember the card, or remembered the card but did not read it. The 43 women together represent 9.4 percent of all evaluation survey respondents.
- A larger proportion of the 43 women who called, compared to the overall distribution of women, were influenced by the media (58.1 percent) and a larger proportion had a high level of risk perception (37.2 percent). Among the three theoretical models explored, therefore, the Self-Regulation model and the Reasoned Action model may be good predictors of who will call *Women's Way* to learn about the program.

### New Enrollees

- One component of evaluating the success of the direct mail campaign was matching the names of new enrollees to the list of women who received cards. Doing so allowed us to determine the proportion of women who received cards and then became enrolled in the program. Enrollee data were monitored from May 4, 2004, through December 1, 2004. There were 538 new *Women's Way* enrollees in that timeframe.
- A total of 106 of the new enrollees' names matched names on the sampling frame. Of the 106, 62 had been sent a card.

### Rate of Enrollment

- Of the 7,212 cards sent, the 62 enrollees represent an enrollment rate of 0.9 percent. Of the 660 baseline survey respondents, all of whom were determined to be potentially eligible and were mailed a card, 23 enrolled, representing an enrollment rate of 3.5 percent.
- Therefore, while the overall enrollment rate of 0.9 percent is consistent with the enrollment rates of other direct mail campaigns, the sampling frame purchased from Medstat was not successful in achieving a higher enrollment rate. Among women determined to be potentially eligible (i.e., through the screening process for the baseline survey), the enrollment rate of 3.5 percent was four times as high as the overall enrollment rate achieved in the campaign, indicating that the list was not limited to women potentially eligible for *Women's Way*.

### Incentive for Participation, Screening Rate, and Cost Effectiveness

- Tracking the names of new enrollees and matching them to the sampling frame also allowed us to determine the names of women who should receive the \$10 incentive. Of the 62 new enrollees who received a card, a total of 47 completed a breast or cervical cancer screening by December 1, 2004, and therefore received an incentive, representing a screening rate of 75.8 percent.
- The direct mail campaign did not result in a cost effective method of getting women to enroll in *Women's Way* and complete a breast or cervical cancer screening. A general guideline is \$100 per woman for recruitment and public education for a recruitment strategy to be considered effective. The cost per woman in this campaign was \$138.

### Estimating the Number of Inquiries

- An estimate of the number of inquiries about the program due to the direct mail campaign between May 4, 2004, and December 1, 2004, is 93, resulting in 62 enrollments. This estimate uses the same proportion of calls to enrollments as found in the evaluation survey (i.e., 18 calls resulting in 12 enrollments). However, the number of women in the evaluation survey who called the program is small and caution regarding this estimate should be used.

## EXECUTIVE SUMMARY (CONTINUED)

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### PROJECT CONCLUSIONS

- The direct mail project had four objectives. Conclusions can be drawn about each: the success of the direct mail campaign, characteristics of the intended audience, the overall reliability of the sampling frame, and future message and campaign design.

#### Success of the Direct Mail Campaign

- Determining the success of the direct mail campaign was accomplished through 1) the follow up evaluation survey, and 2) tracking women who enrolled in *Women's Way*.
- Four in five women who completed the evaluation survey had heard of *Women's Way*. Half of these women remembered receiving a card (all of whom were sent a card in May or June of 2004). The vast majority of women who remembered the card, opened and read it. The women who read the card represent 43.5 percent of all evaluation survey respondents.
- Of the women who opened and read the card, approximately two in five remember something about the card (43.7 percent) and something about the eligibility requirements (41.2 percent), and one in five remembers something about the incentive (19.6 percent).
- A total of 43 of the 457 survey respondents called to learn about the program (18 due to the card and 25 due to other influences). More than two-thirds (68.2 percent) of the women who did not call to learn about the program self-screened and concluded they would not be eligible for the program. Their conclusions were not necessarily an accurate assessment of their actual eligibility.
- Of the 538 women who enrolled in *Women's Way* from the time of the initial wave of the direct mail campaign (starting May 4, 2004) until December 1, 2004, 62 had received a card.
- The 62 new enrollees who received a card represent 0.9 percent of the 7,212 women who were sent cards. While this overall enrollment rate is consistent with enrollment rates of other direct mail campaigns, the sampling frame purchased from Medstat was not successful in achieving a higher enrollment rate, indicating that the list was not limited to women potentially eligible for the *Women's Way* program. The enrollment rate among women determined to be potentially eligible (i.e., through screening for the baseline survey) was 3.5 percent.

#### Characteristics of the Intended Audience

- Examining characteristics of the intended audience was accomplished through the baseline survey.
- The baseline survey provides insight into unique segments of the intended audience. Specifically, mammogram status, age, and health insurance status are important dimensions of which to be mindful. Whether or not a woman has had a mammogram reflects her experience with behavior *Women's Way* hopes to influence. The large proportion of women who are younger than age 50 represents a group of women who may be getting mixed messages from the medical community regarding mammograms. The large proportion of women who have health insurance represents a group of women who are not calling to learn about the program because they are self-screening their eligibility. A segmented audience allows us to think of different approaches to use for targeting different audiences.



## EXECUTIVE SUMMARY (CONTINUED)

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### Overall Reliability of the Sampling Frame

- Determining the overall reliability of the sampling frame (i.e., purchased list from Medstat) was accomplished through detailed documentation of the status of the names on the list through each phase of the project: sampling frame design, baseline survey, address matching, direct mail campaign, evaluation survey, and tracking of new enrollees.
- The original purchased list from Medstat of 27,214 names included 1,338 women who were already in the *Women's Way* records and were thus excluded from the project. The remaining 25,876 names were used as the sampling frame. Nearly one-fourth of the women on the sampling frame did not have phone numbers. These women had to be excluded from the sampling frame for the baseline survey, which was administered by telephone, and were also excluded from the direct mail campaign. When addresses were checked using Melissa Data, 15.0 percent had address problems.
- Of the 11,155 phone numbers that were verified through phone contacts in the baseline survey, nearly half were bad phone numbers or were not eligible. By looking at the 5,005 women on the sampling frame whose eligibility was determined (i.e., the 749 women verified as potentially eligible and the 4,256 women verified as not eligible), a generous overall estimate of the proportion of potentially eligible women on the sampling frame purchased from Medstat is 15.0 percent. The proportion of potentially eligible women on the sampling frame should have been approximately 87.7 percent (see Table B and discussion on page 4).
- The geographic distribution of the sampling frame was skewed in that it included a larger proportion of women in "rural" locations and women in "other urban" locations than is found in the geographic distribution for North Dakota from Census 2000 or among *Women's Way* enrollees.
- Problems with the list may have arisen because of the high rate of mobility in our society. In addition, since a purchased list of this type relies on multiple databases, its limitations may reflect difficulties in maintaining current lists.

### Future Message and Campaign Design

- The direct mail campaign did not achieve an above-average enrollment rate. The sampling frame achieved an enrollment rate consistent with the enrollment rates for many direct mail campaigns (0.9 percent). However, if the list had consisted of more women potentially eligible for *Women's Way* as was intended, the enrollment rate could have been closer to the one achieved among women who completed the baseline survey (3.5 percent).
- Though 51.6 percent of women who completed the evaluation survey remember receiving a card, no one card stood out above the other two, and the cards did not achieve an above-average rate of enrollment. When a list of potentially eligible women was used, however, the same three cards did produce an improved rate of enrollment. While no card worked better than the others when directed to a homogeneous audience, one of the messages could be directed to a segment of the intended audience and might produce a better response rate.
- Though incentives can be an important component in improving the response rates to, and therefore the success of, direct mail campaigns, the incentive used in this direct mail campaign did not contribute to a successful project. Enrollment rates were not higher than the average rates achieved in direct mail campaigns and the incentive was not recalled at a high rate among women in the evaluation survey who read the card. In addition, the incentive did not result in a higher proportion of women who were enrolled completing a breast or cervical cancer screening. Finally, nearly half of the women who received a card did not complete a breast or cervical cancer screening by the deadline on the card for getting the incentive (August 31, 2004) though they were given the incentive if they completed one by the end of the monitoring period (December 1, 2004).

- For the future, the goal is to better target the *Women's Way* intended audience and tailor the messaging and campaign design. This includes looking at distributions of women using Geographic Information Systems (GIS) mapping and Census 2000 data. It also includes focusing on important characteristics of the women, such as household type or whether they have had a mammogram. A mixed approach of messages and media types will continue to be the most effective approach to getting women to enroll in *Women's Way*.



*Section 1:*  
**PROJECT OVERVIEW**

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## Introduction

- *Section 1: Project Overview* presents an overview of the project, including study objectives and timeline, as well as a description of the *Women's Way* intended audience, the purchased list and sampling frame, the geographic groups used for analysis, and PRIZM clusters.

## Study Objectives

- The focus of *Women's Way*, the North Dakota Breast and Cervical Cancer Early Detection Program, is to enable eligible medically underserved women to obtain regular breast and cervical cancer screening services. Efforts to recruit women include determining the most effective messages that will resonate with women in the intended audience as well as the most effective methods of message delivery. Media for message delivery include television, radio, posters, brochures and pamphlets, table tents, and direct mail cards.
- A list purchased by *Women's Way* from Medstat was intended to be a list of women in North Dakota approximating certain *Women's Way* criteria, specifically women between the ages of 40 and 64 with incomes less than \$35,000. *Women's Way* determined that they wanted to develop and send three separate direct mail cards and mail them to women on the purchased list. They consulted with staff at the North Dakota State Data Center to evaluate the success of this direct mail campaign.
- The primary objective of the direct mail project was to evaluate the effectiveness of direct mail in recruiting women into *Women's Way*. The objective had the following four components:
  - To evaluate the success of the direct mail campaign
  - To examine characteristics of the intended audience
  - To examine the overall reliability of the sampling frame
  - To provide feedback for future message and campaign design
- The project designed to accomplish the primary objective included:
  - Conducting a baseline survey of women in order to determine characteristics of the intended audience.
  - Implementing the direct mail campaign, conducted by *Women's Way*, in which the three cards were mailed to names on the sampling frame derived from the purchased list.
  - Determining the impact of the cards by calling women who completed the baseline survey in order to conduct an evaluation survey.
  - Monitoring the list of new *Women's Way* enrollees by matching names to the sampling frame to determine which had received a card, as well as which should receive the incentive offered in each card.
  - Closely documenting what was learned about the names and addresses on the sampling frame.

## Timeline

- **9/2003:** A list was purchased by *Women's Way* from Medstat late September 2003. This purchased list was intended to be a list of women in North Dakota approximating certain *Women's Way* criteria, specifically women between the ages of 40 and 64 with incomes less than \$35,000. The purchased list became the sampling frame for the direct mail project.
- **2/2004-3/2004:** A baseline survey was conducted in February and March of 2004 using a random selection of women from the sampling frame living in "urban" and "rural" locations. The survey was designed to determine characteristics of the intended audience.
- **5/2004-6/2004:** Three different cards were developed by *Women's Way* for the direct mail campaign. Cards were mailed in May and June of 2004. The women who received a card included those who completed the baseline survey as well as others with phone numbers whose addresses had been verified.

- **10/2004:** An evaluation survey, designed to follow up with women who completed the baseline survey, was conducted in October 2004, approximately five months after they were sent a card. The survey asked questions about the women's recall of the direct mail campaign.
- **5/2004-12/2004:** Enrollee data were monitored from May 4, 2004, through December 1, 2004. The names of new *Women's Way* enrollees were matched to names on the sampling frame, paying specific attention to tracking women who had been sent a card.

### Intended Audience

- *Women's Way* efforts are targeted to a segment of women matching specific eligibility criteria. The *Women's Way* intended audience is North Dakota women who:
  - Are age 40 to 64.
  - Qualify based on household income.
  - Do not have health insurance, do not have breast or cervical cancer screenings covered by their health insurance, or cannot afford high deductibles and co-payments.
- Household income eligibility is a factor of income in relationship to the household size. Thus, larger families can have larger household incomes and still be eligible for the program.
- For the baseline survey, which was conducted in February and March of 2004, household income eligibility was screened based on 2003 guidelines (see Table A).
- Screening for the purposes of the baseline survey in this study included age and household income only, not health insurance status.

**Table A. 2003 Income Guidelines for Participation in *Women's Way*, Used to Screen Eligibility for the Baseline Survey**

Number of People in Woman's Household	Household Income Before Taxes*	
	Yearly	Monthly
1	\$17,960	\$1,497
2	\$24,240	\$2,020
3	\$30,520	\$2,543
4	\$36,800	\$3,067
5	\$43,080	\$3,590
6	\$49,360	\$4,113
7	\$55,640	\$4,637
8	\$61,920	\$5,160
9	\$68,200	\$5,683
10	\$74,480	\$6,207

\*For the baseline survey, eligibility was screened based on 2003 household income guidelines. Current household income guidelines for the program can be found at <http://www.ndhealth.gov/womensway>.

- Public Use Micro-Data Samples (PUMS) from Census 2000 offer a way to estimate the number of women eligible for *Women's Way*. These data allow us to determine the number of women in North Dakota households by age and household income criteria that match the program's eligibility requirements (excluding health insurance guidelines). If one assumes that the profile of women by age and household income has not changed dramatically since 2000, then our best estimate of the number of eligible women in North Dakota is 21,000 (see Table B). This number represents 6.5 percent of all women in North Dakota or 22.2 percent of all women ages 40 to 64.
- PUMS data also offer insight into household type. Looking at these 21,000 women, one-fourth are women living alone. Half of these women are living with a spouse. One-fifth are single women who live with a family member, of which half are single mothers.

**Table B. Estimate of the Number of Women Who Meet *Women's Way* Age and Household Income Eligibility Requirements in North Dakota Using Census 2000 PUMS Data**

Number of People in Woman's Household	Yearly Household Income	Women Ages 40 to 64 in Households	
		Number	Percent
1	\$0-19,999	5,065	24.3
2	\$0-24,999	7,533	36.1
3	\$0-29,999	2,893	13.9
4	\$0-34,999	2,791	13.4
5	\$0-44,999	1,497	7.2
6	\$0-49,999	835	4.0
7	\$0-59,999	178	0.9
8	\$0-59,999	0	0.0
9	\$0-74,999	50	0.2
Total number of women		20,842	100.0

- Using PUMS data to estimate the number of eligible North Dakota women by age, half are younger than age 50 and half are 50 years and older. Overall, the age distribution is fairly even (see Table C).

**Table C. Estimate of the Number of Potentially Eligible Women by Age in North Dakota Using Census 2000 PUMS Data**

Woman's Age	Women Who Meet <i>Women's Way</i> Age and Household Income Eligibility Requirements in North Dakota	
	Number	Percent
40 to 44	6,465	31.0
45 to 49	3,853	18.5
50 to 54	2,990	14.3
55 to 59	4,312	20.7
60 to 64	3,222	15.5
Total number of women	20,842	100.0

### Purchased List and Sampling Frame

- Lists from Medstat were suggested to *Women's Way* by the National Cancer Institute as being able to offer names, addresses, and phone numbers of women matching certain eligibility criteria. A list was purchased by *Women's Way* from Medstat (<http://www.medstat.com>) which was supposed to approximate the program's intended audience by limiting names to only those North Dakota women between the ages of 40 and 64 who had household incomes of \$35,000 or less. The list became the sampling frame for the direct mail project.
- The idea of capping household incomes at \$35,000 on the purchased list works for 87.7 percent of the estimated number of eligible women based on Census 2000 data (see Table B above).
- Evaluation of the reliability of the sampling frame was a major component of the direct mail study. If the direct mail campaign was not successful, or above-average enrollment rates were not achieved, it would be essential to be able to determine the extent to which the problem was the content of the cards or the reliability of the list used.
- The original list purchased from Medstat had 27,214 names. Because the primary objective of the project was to evaluate the effectiveness of direct mail for recruiting, women on the purchased list whose names were already in *Women's Way* records were excluded from the study. This was done to reduce the possible confusion of women already enrolled in the program if they were contacted for the project. In order to identify these women, the *Women's Way* Data Manager compared the purchased list against the list of *Women's Way* enrollees. She found and eliminated 1,338 names that matched (4.9 percent of the original purchased list). These women were of the following statuses in the *Women's Way* records: 979 were listed as active, 352 were listed as inactive, three were listed

as deceased, and four were listed as having moved out of the area. Some of the women had incorrect addresses and some were no longer eligible for the program. Thus, the overall impact of removing these names from the purchased list on the determination of the list's reliability was negligible.

- At the time this matching was done, there were 6,355 names in the *Women's Way* records, of which 5,017 were not on the purchased list.
- The overall Medstat list was reduced to a total of 25,876 names and this was the number used as the overall sampling frame. However, phone numbers were missing for 5,766 names. These names were excluded, so the total remaining sampling frame became 20,110 names (see Table D).

### Geographic Groups

- *Women's Way* was interested in learning more specifically about larger urban areas in North Dakota. Thus, the sampling frame was separated into three groups according to geography. Group 1 was "targeted urban" cities in North Dakota, including women whose addresses were in Bismarck, Fargo, Grand Forks, Mandan, Minot, or West Fargo. Group 2 was "other urban" communities with populations greater than 2,500 in Census 2000, including women whose addresses were in Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, or Williston. Group 3 was "rural" and consisted of the remaining women. The distribution of the sampling frame according to group and phone number status is found in Table D.

**Table D. Distribution of Sampling Frame by Geographic Group and Phone Number Status**

Geographic Group*	Total Sampling Frame		Names Without a Phone Number		Names Available for Baseline Sampling	
	Number	Percent	Number	Percent	Number	Percent
Urban (Group 1 and 2)	10,222	39.5	2,057	35.7	8,165	40.6
Group 1	4,623	17.9	1,044	18.1	3,579	17.8
Group 2	5,599	21.6	1,013	17.6	4,586	22.8
Rural (Group 3)	15,654	60.5	3,709	64.3	11,945	59.4
Total	25,876	100.0	5,766	100.0	20,110	100.0

\*Group 1 - "targeted urban": women with addresses in Bismarck, Fargo, Grand Forks, Mandan, Minot, or West Fargo; Group 2 - "other urban" communities with populations greater than 2,500 in Census 2000: women with addresses in Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, or Williston; Group 3 - "rural": the remaining women on the sampling frame.

- According to Census 2000 data, 53.5 percent of North Dakotans live in the "urban" geographic locations as defined for this study (41.1 percent in "targeted urban" areas and 12.4 percent in "other urban" areas). The other 46.5 percent live in "rural" geographic locations as defined for this study. The sampling frame had a greater proportion of women in "rural" locations than the actual state distribution. In addition, the sampling frame had a larger proportion of "other urban" compared to "targeted urban" than is found in the state's distribution. The distribution of *Women's Way* enrollees was much more similar to the actual state distribution. Thus, the skewed geographic distribution of the sampling frame can be seen as a factor of the purchased list, not as a reflection of women in the intended audience living more in "rural" areas and "other urban" areas than "targeted urban" areas (see Table M and discussion page 27).

### PRIZM Clusters

- One resource provided to *Women's Way* by the Cancer Information Service, a program of the National Cancer Institute, was a binder offering descriptions of PRIZM clusters which had been matched to health data. The PRIZM lifestyle segmentation system by Claritas (<http://www.claritas.com>) provides nicknames and profiles for groups (i.e., "clusters") of people based on demographic and lifestyle dimensions.

- The list purchased from Medstat was intended to be able to provide a broad understanding of each woman’s health and lifestyle characteristics by including the name of the PRIZM cluster each woman belonged to, and the inclusion of the PRIZM clusters was one of the selling points for the list. Ideally, the list would allow *Women’s Way* to know characteristics about the women on the list which would allow them to tailor market to these women. The distribution of women on the sampling frame according to cluster and geographic group is found in Table E.
- Because stratified sampling based on the 14 clusters would have resulted in the need for a much larger overall number of completed surveys, the clusters were not included in the sampling design and were not included in analysis.

**Table E. Number of Names in Sampling Frame in Each PRIZM Cluster by Geographic Group**

PRIZM Cluster*	Geographic Group**			Total Sampling Frame
	Group 1	Group 2	Group 3	
Agribusiness	42	687	3,136	3,865
Blue Highways	1	384	1,223	1,608
Golden Ponds	115	1,590	5	1,710
Grain Belt	12	404	7,776	8,192
Hard Scramble	0	250	1,019	1,269
Middle America	181	0	0	181
Mines and Mills	252	1,136	0	1,388
Red, White, and Blues	447	406	0	853
River City	228	178	736	1,142
Rural Industrial	308	228	0	536
Rustic Elders	1	336	1,759	2,096
Smalltown Downtown	1,312	0	0	1,312
Starter Families	914	0	0	914
Sunset City Blues	810	0	0	810
Total	4,623	5,599	15,654	25,876

\*A brief description of these PRIZM clusters can be found at: <http://www.andreas.com/downloads/geodemographic-clusters.pdf>

\*\*Group 1 - "targeted urban": women with addresses in Bismarck, Fargo, Grand Forks, Mandan, Minot, or West Fargo; Group 2 - "other urban" communities with populations greater than 2,500 in Census 2000: women with addresses in Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, or Williston; Group 3 - "rural": the remaining women on the sampling frame. Throughout the report, the term "urban" refers to the combined "targeted urban" and "other urban" women.d

*Section 2:*  
**PROJECT IMPLEMENTATION**

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## Introduction

- *Section 2: Project Implementation* presents details of the three main phases of the project. Phase One: Baseline explains the baseline survey design and provides a summary of the baseline survey results found in *Section 4: Detailed Baseline Survey Results*. A brief discussion of breast and cervical cancer screening recommendations is also included. Phase Two: Direct Mail Campaign describes the process and results of checking addresses before discussing implementation of the campaign. Phase Three: Evaluation includes a discussion of the evaluation survey design and a summary of evaluation survey results. New enrollees, the rate of enrollment, the incentive for participation in *Women's Way*, the screening rate, cost effectiveness of the campaign, and estimating the number of inquiries about *Women's Way* due to a card are also discussed.

## PHASE ONE: BASELINE

### Baseline Survey Design

- The first step in the direct mail study was to conduct a survey of a random selection of women from the sampling frame in order to examine characteristics of the intended audience of the *Women's Way* program. At the beginning of each interview, women were screened for participation in the survey based on age and income eligibility criteria only, not health insurance status, and thus are referred to as "potentially eligible" for *Women's Way*. This survey, referred to as the baseline survey, was conducted in February and March of 2004.
- In addition to the baseline survey being conducted by the North Dakota State Data Center at North Dakota State University (NDSU), a separate survey was being planned by *Women's Way* in conjunction with the NDSU Department of Communication. The NDSU Department of Communication's survey, which also used the sampling frame purchased from Medstat, targeted only the larger urban areas.
  - To accommodate both surveys without introducing contamination into the sampling frames, the women in Group 1, "targeted urban" cities, were randomly divided in half for the NDSU Department of Communication's survey and the baseline survey being done for this study. Group 1 women in the NDSU Department of Communication's sample were not called for the baseline or evaluation surveys; however, these women were included in the sampling frame for the direct mail campaign.
- The baseline sampling frame was as follows (see Table F):
  - The baseline survey had two independent random samples of names with phone numbers on the sampling frame: 1) an "urban" group consisting of half of Group 1 and all of Group 2, for a total of 6,378 names, and 2) the "rural" group, Group 3, with a total of 11,945 names.
  - Total baseline sampling frame=18,323.
- The baseline survey instrument was designed to determine characteristics of the intended audience (see Appendix C for survey instrument). After screening for eligibility based on age and household income considerations, women were asked their background and opinions regarding cancer, their breast and cervical cancer screening behavior and intentions, and demographics. Three theoretical frameworks were also incorporated to help provide insight into future message development. Though *Women's Way* covers cervical as well as breast cancer screenings, compliance with getting Pap tests is much higher than getting mammograms and thus the focus of the survey was more on breast cancer.
- A total of 11,155 names were called with 742 completed baseline surveys (376 "urban" and 366 "rural"). This is a completion rate of 6.7 percent (6.2 percent "urban" and 7.2 percent "rural"). The refusal rate (the proportion of women we talked to who said no) was fairly low at 27.2 percent (see Table F).



- Nearly two in five phone numbers called resulted in a determination of being ineligible (38.2 percent), based on self-reported information. Reasons for being determined ineligible were not collected on the survey. However, the telephone interviewers separately documented the reasons for the majority of ineligible women (81.5 percent). The reasons for ineligibility included (see Table F):
  - Household income (too high) – 51.8 percent
  - Age (younger than 40 as well as older than 64) – 18.0 percent
  - No woman in the household – 11.7 percent
- An overall estimate of the proportion of potentially eligible women on the sampling frame purchased from Medstat is 15.0 percent.
  - This estimate is based on comparing the number of women in the baseline survey who were determined to be potentially eligible (i.e., the 742 women who completed the baseline survey and the 7 women who started the baseline survey but did not complete it) to those women determined to be ineligible (i.e., a total of 4,256 women called for the baseline survey).
  - The eligibility status, therefore, was determined for a total of 5,005 women; the 749 eligible women represent 15.0 percent of that total.
  - This estimate is generous because it does not account for the women on the sampling frame who did not have phone numbers, or who had bad phone numbers or incorrect addresses.

**Table F. Distribution of Baseline Survey Calls**

	Urban		Rural		Total	
	Number	Percent	Number	Percent	Number	Percent
Total sampling frame*	10,222	100.0	15,654	100.0	25,876	100.0
Baseline survey sampling frame	6,378	62.4	11,945	76.3	18,323	70.8
Department of Communication's survey sampling frame	1,787	17.5	0	0.0	1,787	6.9
No phone number	2,057	20.1	3,709	23.7	5,766	22.3
Total baseline survey sampling frame*	6,378	100.0	11,945	100.0	18,323	100.0
Called	6,080	95.3	5,075	42.5	11,155	60.9
Not called	298	4.7	6,870	57.5	7,168	39.1
Total called in baseline survey	6,080	100.1	5,075	100.0	11,155	100.1
Bad phone number**	528	8.7	367	7.2	895	8.0
Not eligible**	2,247	37.0	2,009	39.6	4,256	38.2
Completed survey	376	6.2	366	7.2	742	6.7
Incomplete	4	0.1	3	0.1	7	0.1
Call back	383	6.3	404	8.0	787	7.1
Refused	1,230	20.2	936	18.4	2,166	19.4
Hung up	412	6.8	262	5.2	674	6.0
No contact**	900	14.8	728	14.3	1,628	14.6
Total numbers determined to be <i>not eligible</i>	2,247	100.1	2,009	100.0	4,256	100.0
No reason documented	417	18.6	362	18.0	779	18.3
Household income	1,151	51.2	1,054	52.5	2,205	51.8
Age	388	17.3	376	18.7	764	18.0
No woman in household	285	12.7	213	10.6	498	11.7
Other	6	0.3	4	0.2	10	0.2

\*The total sampling frame used for analysis was 25,876 names. The "baseline sampling frame" excluded names which did not have phone numbers and 1,787 names from Group 1 ("targeted urban") used in the NDSU Department of Communication's survey.

\*\**Bad phone number* refers to phone numbers that had been disconnected; *Not eligible* includes phone numbers where there was no woman in the household, or where the woman did not fit the age or household income criteria; *No contact* includes "no answer," "answering machine," and "busy signal."

## Summary of Baseline Survey Results (see Section 4: Detailed Baseline Survey Results)

### Background and Opinions Regarding Cancer

- One-third of women had a family history of breast cancer (32.8 percent). The majority was not worried about getting breast cancer (52.0 percent); one in five women was worried about getting breast cancer (17.5 percent).
- The vast majority of women said they knew doctors' recommendations regarding mammograms for women 40 years and older (88.8 percent). However, among women who had not had a mammogram, only seven in 10 said they knew the recommendations (69.2 percent). The women's perceptions of the recommendations were not verified to see if they were accurate.
- More than half of women were very confident that mammograms could provide early detection of breast cancer (53.8 percent) and could prevent dying from breast cancer (56.8 percent).
- Half of women were influenced a great deal in their decisions about getting a mammogram by the opinions of health care providers (48.2 percent). Three in 10 women were influenced by friends and family (30.0 percent) and one in five was influenced by information from the media (21.5 percent).
- Half of the women had heard of "a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota" (50.2 percent). A little more than half of these women said they recalled the name of the program (55.7 percent). For the most part, these women knew the correct name: *Women's Way*.

### Breast and Cervical Cancer Screening Behavior and Intentions

- The vast majority of women had had a mammogram (83.8 percent). Nearly two-thirds of women said they were not at all nervous about getting a mammogram (65.0 percent).
- The majority of women who had had a mammogram had it within the last year (52.6 percent). The majority of women were very likely to get a mammogram in the next 12 months (62.1 percent).
- Approximately one-third of women indicated there was something that made it difficult for them to get a mammogram (31.4 percent).
- Among women with a barrier, half said they were not likely to overcome the barrier (51.2 percent). The single largest barrier named was not having health insurance (20.5 percent). Financial factors were also important: 16.4 percent of responses were regarding money/finances and 15.3 percent were regarding cost/not being able to afford a mammogram.
- Nearly all the women had had a Pap test (98.8 percent). Nearly half of the women had a Pap test in the last year (46.1 percent). The majority of women were very likely to get a Pap test in the next 12 months (60.8 percent).

### Demographics

- The age distribution among baseline survey respondents was nearly even: 22.7 percent were 40 to 44 years of age, 21.1 percent were 45 to 49 years of age, 18.9 percent were 50 to 54 years of age, 17.0 percent were 55 to 59 years of age, and 20.1 percent were 60 to 64 years of age.
- The largest single proportion of respondents, two in five (39.1 percent), was women with a high school degree. One-fourth of respondents had some kind of degree beyond high school (26.0 percent).
- More than one-fourth of women had an annual household income of \$15,000 or less (27.4 percent).

- Seven in 10 women were employed (70.9 percent). One-fourth of women were considered “not in the labor force,” meaning they were not employed and were not actively seeking employment (26.0 percent).
- More than half of women were married and lived with their spouse (59.1 percent). One in five was divorced (20.8 percent), and one in 10 was widowed (10.8 percent). Nine out of 10 women had children (90.2 percent).
- Three-fourths of women had health insurance (77.8 percent). Among all women who had not had a mammogram, however, only 57.5 percent had health insurance.
- Respondents were split nearly evenly between “urban” (14.6 percent “targeted urban” and 36.1 percent “other urban”) and “rural” (49.3 percent) geographic areas. In most cases, the women’s responses did not differ by geographic location, but a few differences did exist.
  - Compared to the other two groups, women in the “targeted urban” group were somewhat more likely to indicate they were highly nervous about getting a mammogram (18.5 percent), more likely to indicate they would overcome barriers to getting a mammogram (45.7 percent), and more likely to not have health insurance (31.7 percent).
  - Compared to the other two groups, a larger proportion of women in the “other urban” group was not in the labor force (32.1 percent).

#### Discussion of Theoretical Framework

- Theoretical models can help provide insight into future message development. Three models were taken into consideration when questions for the baseline survey were developed: Stages of Change, Self-Regulation, and Reasoned Action.
- The Stages of Change theoretical model sees behavior change as a process, not a single event. Women can be at different points in a continuum of stages: pre-contemplative, contemplative, ready for action, action/maintenance, and relapse. Two-thirds of women were at the action/maintenance stage of change (66.6 percent), meaning they had had a mammogram and had plans for following a regular schedule.
- The Self-Regulation theoretical model says that in the context of a health threat, women will try to control the danger as well as the negative feelings that result from the threat, contributing to behavior to protect their health. The components of this model include self-efficacy, risk perception, and worry/anxiety. Women overall did have high self-efficacy (68.9 percent), meaning they were confident that mammograms could detect cancer early and prevent dying from breast cancer. Women did not have very high levels of risk perception (30.6 percent) or worry/anxiety (17.1 percent).
- The Reasoned Action theoretical model sees behavior intent as the predictor of actual behavior. Intent is a combination of the attitude about doing a behavior, or how much a woman believes that the outcome from a behavior is going to be positive, and the influence of subjective norms, or what others who are important to the woman think about her performing the behavior. More than two-thirds of women had a positive attitude (68.9 percent), meaning they saw mammograms as effective in the goal of preventing cancer. Nearly three-fourths of women were influenced in their decisions regarding mammograms by at least one of the three subjective norms measured in the baseline survey (72.8 percent): 64.0 percent were influenced by the opinions of health care providers, 39.4 percent by the opinions of friends/family, and 35.3 percent by information from the media. An underlying assumption to the Reasoned Action model is the woman’s sense of perceived control, or her perception of how successfully she can perform the behavior. Overall, more than three-fourths of women had a strong sense of perceived control in being able to get a mammogram if they wanted one (78.4 percent).
- Highlights of results from the baseline survey are presented in Table G. The number of women who fit the category is presented as well as the percent that number represents of all baseline survey respondents.

**Table G. Highlights of Baseline Survey Results as a Proportion of All the Women Who Answered the Survey**

Among ALL women who answered the survey	Number of Women	Percent of Total Respondents
Completed the survey	742	100.0
Had family history of breast cancer	243	32.7
Said they knew doctors' recommendations regarding mammograms	659	88.8
Had heard of "a program that may provide a way to pay"	368	49.6
Correctly recalled the name of the program	188	25.3
Had had a mammogram	622	83.8
Were likely to get a mammogram in the next year	497	67.0
Had barriers to getting a mammogram	233	31.4
Were likely to overcome the barriers to getting a mammogram	73	9.8
Had had a Pap test	733	98.8
Were likely to get a Pap test in the next year	481	64.8
Had health insurance	567	76.4

### Breast and Cervical Cancer Screening Recommendations

- One of the issues involved in promoting breast and cervical cancer screenings is a lack of clear, consistent recommendations from the health care community on this issue. While the baseline survey asked women if they knew doctors' recommendations about mammograms, it did not confirm among women who said "yes," what they believed those recommendations to be.
- Recommendations regarding mammograms often vary from one doctor to the next, and coverage for mammograms often varies from one insurance company to another. While the American Cancer Society recommends yearly mammograms for women ages 40 and older ([http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_4\\_3X\\_Can\\_breast\\_cancer\\_be\\_found\\_early\\_5.asp](http://www.cancer.org/docroot/CRI/content/CRI_2_4_3X_Can_breast_cancer_be_found_early_5.asp)), the National Cancer Institute recommends that women ages 40 and older get a mammogram every one to two years (<http://www.cancer.gov/cancertopics/factsheet/Detection/screening-mammograms>).
- *Women's Way* follows the American Cancer Society's guidelines that: 1) women ages 40 and older should have a mammogram every year, and 2) all sexually active women or women ages 21 and older should have Pap tests every one to three years, depending on doctors' recommendations and risk factors.

### PHASE TWO: DIRECT MAIL CAMPAIGN

#### Checking Addresses

- *Women's Way* used the services of Melissa Data (<http://www.melissadata.com>) in May and June of 2004 to check the addresses of names on the sampling frame using the most current U.S. Postal Service records. This process allowed incorrect addresses to be culled or updated before cards were mailed.
- The matching from Melissa Data provided information about the addresses on the sampling frame according to three statuses:
  - It was a correct address. Therefore, no adjustment was needed and it was good to mail to.
  - The address was incorrect but had been updated. Therefore, it was good to mail to.
  - It was an incorrect address that could not be updated. Therefore, it was not good to mail to.
- All 25,876 addresses were checked. There were a total of 2,713 incorrect addresses excluded from the direct mail campaign (10.5 percent of the sampling frame). Another 1,172 addresses were incorrect but updated (4.5 percent of the sampling frame). Thus, 15.0 percent of the sampling frame purchased from Medstat had address problems.

## Implementing the Campaign

- Three different cards were developed for the direct mail campaign (see Appendix E for images of the cards). For the purpose of the study, the cards were referred to as Card 1 – the “Anderson” card, Card 2 – the “Little Voice” card, and Card 3 – the “Poster” card.
- The “Anderson” card and the “Little Voice” card were adapted by *Women’s Way* from cards developed and researched by SAGE – Minnesota’s Cancer Screening Program. The “Poster” card was an adaptation of a *Women’s Way* poster message that was previously tested with the intended audience.
- The envelopes used for the three cards were identical except that the envelope for Card 1, the “Anderson” card, was slightly larger (see Appendix E for an image of the envelope). Each envelope showed the *Women’s Way* logo and the North Dakota Department of Health address as the return address. There were, however, a few slight differences in how the envelopes were labeled and sealed by the mailhouse contracted to send the cards.
- A total of 7,212 names were randomly divided among the three cards. The total sent per card in the direct mail campaign was:
  - Card 1 – the “Anderson” card: 2,402
  - Card 2 – the “Little Voice” card: 2,410
  - Card 3 – the “Poster” card: 2,400
- The cards were mailed as one wave for each card plus a residual fourth wave with enough of all three cards to reach the desired total number of mailed cards:
  - Wave 1 – 1,977 of the “Anderson” card: May 3, 2004
  - Wave 2 – 1,985 of the “Little Voice” card: May 12, 2004
  - Wave 3 – 1,975 of the “Poster” card: May 19, 2004
  - Wave 4 – 1,275 (425 of each of the three cards): June 14, 2004
- The women who were called for the baseline survey who then received a card in Waves 1, 2, and 3 included those with correct addresses who completed the baseline survey as well as others whose phone numbers we had verified (incomplete, hang up, refusal, call back, no answer, answering machine, and busy). Bad phone numbers and women determined to be ineligible were excluded.
  - A total of 5,392 women
  - Of the 742 women who completed the baseline survey, 660 were determined to have correct addresses and were sent a card.
- The same categories of women in the NDSU Department of Communication’s survey received a card in Waves 1, 2, 3, and 4.
  - A total of 1,076 women
- In order to achieve the desired total number of cards to be sent out, Wave 4 included additional names from the baseline sampling frame that had been selected from those women who had not been called but who did have phone numbers and correct addresses.
  - A total of 744 women
- Despite addresses being confirmed before the direct mail campaign, a certain proportion of residents moved. When cards could not be forwarded, they were returned to the North Dakota Department of Health. In total, 155 cards were returned (2.1 percent of the total number mailed).

## PHASE THREE: EVALUATION

### Evaluation Survey Design

- The evaluation survey was conducted after the direct mail campaign, and was part of efforts to evaluate the effectiveness of direct mail in recruiting women into *Women's Way*.
- The evaluation sampling frame was as follows (see Table H):
  - As a follow up to the baseline survey, the 742 women who completed the baseline survey were considered the sampling frame for the evaluation survey. However, 96 baseline survey respondents were excluded from the evaluation survey sampling frame because of incorrect addresses that could not be updated. Most of these addresses were identified prior to the direct mail campaign, but there were 14 women who were sent a card and it was returned.
  - Total evaluation sampling frame=646.
- The evaluation survey instrument was designed to follow up with women who answered the baseline survey approximately five months after sending them a card (see Appendix D for survey instrument). The women were asked their recall of *Women's Way* and the direct mail campaign, and asked questions about the card they received. They were also asked their reasons for calling, or not calling, to learn about *Women's Way*. These women were also asked their willingness to be included in a future qualitative study by *Women's Way* about the direct mail campaign, and the 318 women who agreed provided their current phone and address information.
- The evaluation survey was conducted in October of 2004. All 646 women were called with 457 completed evaluation surveys (see Table H).
- Women called to participate in this survey were asked for by the name provided on the sampling frame. This process differed from the baseline survey because, at that time, the woman who fit the age and household income criteria was asked to participate in the survey. Of the 21 phone numbers that were marked as "not eligible," the main reason was because the woman no longer lived there.

**Table H. Distribution of Evaluation Survey Calls**

	Number	Percent
Total baseline completed surveys	742	100.0
Included in evaluation survey sampling frame	646	87.1
Not included in evaluation survey sampling frame	96	12.9
Total called in evaluation survey	646	100.0
Bad phone number*	19	2.9
Not eligible	21	3.3
Completed survey	457	70.7
Incomplete	1	0.2
Refused	35	5.4
Hung up	11	1.7
Call back	44	6.8
No contact*	58	9.0

\**Bad phone number* refers to phone numbers that had been disconnected; *No contact* includes "no answer," "answering machine," and "busy signal."

## Summary of Evaluation Survey Results (see Section 5: Detailed Evaluation Survey Results)

### Recall of Women's Way

- More than three-fourths of women had heard of *Women's Way* (80.3 percent). Brochures were the most common way that women heard of *Women's Way* (33.0 percent), followed by newspapers (28.3 percent), television ads (27.8 percent), and health care workers (24.8 percent). One-fifth of women heard of the program through something they received in the mail (19.1 percent).

### Recall of the Direct Mail Campaign

- The distribution of respondents according to which of the three cards they received was fairly even: Card 1 – the “Anderson” card (35.0 percent), Card 2 – the “Little Voice” card (30.9 percent), or Card 3 – the “Poster” card (34.1 percent). Just over half of respondents remembered receiving a card in the mail in May or June of 2004 (51.6 percent). A larger proportion of women who received the “Anderson” card and the “Poster” card remembered receiving the card (56.9 percent and 51.9 percent, respectively) compared to women who received the “Little Voice” card (45.4 percent).
- Among women who remembered receiving a card, a large majority opened and read the card (84.3 percent). Regarding those who did not open the card, some threw it away (5.5 percent) and some set the card aside (4.2 percent). A smaller proportion of women who received the “Anderson” card opened and read the card (78.0 percent) compared to the “Little Voice” card and the “Poster” card (89.1 percent and 87.7 percent, respectively).
- Among women who remembered receiving a card and read it, when asked what prompted the woman to read the card, the most common response was that she always reads her mail (19.2 percent). Because she recognized the name of the program (14.1 percent) and curiosity (10.8 percent) were other common responses. Approximately two in five women said they remembered something about the card (43.7 percent), two in five women said they remembered something about the eligibility requirements (41.2 percent), and one in five said they remembered something about an incentive (19.6 percent).
- When asked what the woman remembered about the card, the most common responses were that it was pink (18.6 percent) and the *Women's Way* logo (17.8 percent). Regarding the incentive specifically, the most common responses were money/\$10 (46.2 percent) and help with a mammogram or Pap test if eligible (35.9 percent). Regarding eligibility requirements specifically, the most common response was that you had to be of a certain income (45.9 percent). Age and not having health insurance were the next two most common responses (19.7 percent and 18.0 percent, respectively).
- Among the women who remembered receiving a card and read it, nearly one in 10 called to learn about enrolling in *Women's Way* (9.0 percent), more than one-fourth set the card aside without calling (28.6 percent), and more than half threw the card away (52.8 percent). The women who remembered receiving a card, read it, and then called, represent 3.9 percent of all evaluation survey respondents, or 18 women. Of these 18 women who called because of the card, 12 became enrolled in the program. Another 25 women called to learn about the program due to other influences and either did not remember receiving the card, or remembered receiving the card but did not read it.
- Three-fourths of women who answered the survey and had heard of *Women's Way* had not called to learn about the program (76.4 percent). When asked their reasons for not calling, the largest response was that they had health insurance coverage (60.7 percent). Other reasons included that they made too much money to qualify (23.5 percent), they did not need help paying for breast or cervical cancer screenings (13.5 percent), and they just did not have time (9.7 percent).
- More than two-thirds of women did not call to learn about the program because they self-screened and concluded they would not be eligible for the program (68.2 percent) (i.e., by answering they did not need breast or cervical cancer screenings, they were too young or too old, made too much money, or had health insurance coverage).

## Discussion of Women Who Called to Learn About *Women's Way*

- The 43 women who called *Women's Way* in total, or 9.4 percent of all women who answered the evaluation survey, were asked what influenced them to call to learn about *Women's Way*. Approximately one in two women said someone close to them having dealt with cancer influenced them to call (53.5 percent). However, *Women's Way* marketing materials were most influential, cited by nearly three-fourths of women (72.1 percent). A brochure or pamphlet was the material cited most often (47.1 percent), primarily by women whose reason for calling was not a card. The card in the mail was the second most common response (20.6 percent).
- The three theoretical frameworks explored in the baseline survey were matched to each of the 43 women in the evaluation survey who called to learn about *Women's Way* (see pages 52-56 in *Section 4: Detailed Baseline Survey Results* for a description of the theories and the overall results). In brief, the Stages of Change model sees behavior change as a process, not a single event. Women can be at different points in a continuum of stages: pre-contemplative, contemplative, ready for action, action/maintenance, and relapse. The Self-Regulation model says that in the context of a health threat, women will try to control the danger as well as the negative feelings that result from the threat, contributing to behavior to protect their health. The components of this model include self-efficacy, risk perception, and worry/anxiety. The Reasoned Action model sees behavior intent as the predictor of actual behavior. Intent is a combination of the attitude about doing a behavior, or how much a woman believes that the outcome from a behavior is going to be positive, and the influence of subjective norms, or what others who are important to the woman think about her performing the behavior.
- Among the three theoretical models explored, the Self-Regulation model and the Reasoned Action model may be good predictors of who will call *Women's Way* to learn about the program. Findings include that, compared to the overall distribution of women, a larger proportion of the women who called had a high level of risk perception and a larger proportion was influenced by information from the media.
- Highlights of results from the evaluation survey are presented in Table I. The number of women who fit the category is presented as well as the percent that number represents of all evaluation survey respondents.

**Table I. Highlights of Evaluation Survey Results as a Proportion of All the Women Who Answered the Survey**

<b>Among ALL women who answered the survey</b>	<b>Number of Women</b>	<b>Percent of Total Respondents</b>
Completed the survey	457	100.0
Had heard of <i>Women's Way</i>	367	80.3
Remembered receiving a card	236	51.6
Opened and read the card	199	43.5
Remembered something about the card they received	87	19.0
Remembered the incentive	39	8.5
Remembered eligibility requirements	82	17.9
Called to learn about enrolling – who read the card	18	3.9
Read the card, called, and became enrolled in <i>Women's Way</i>	12	2.6
Called to learn about enrolling – who did not remember/read the card, but had heard of <i>Women's Way</i>	25	5.5
Did not call because they self-screened their own eligibility	238	52.1



## New Enrollees

- One component of evaluating the success of the direct mail campaign was matching the names of new enrollees to the list of women who received cards. This allowed us to determine the proportion of women who received cards who then enrolled in the program.
- Between May 4, 2004, and December 1, 2004, 538 women enrolled in *Women’s Way*.
- The geographic distribution of the 538 new enrollees was relatively similar to the state’s distribution (see Table M and discussion on page 27).
  - “Targeted urban” = 34.2 percent
  - “Other urban” = 11.7 percent
  - “Rural” = 54.1 percent
- Of the 538 new enrollees’ names, 106 matched names on the sampling frame. However, 44 of these women did not receive a card, so they enrolled in the program due to other factors. The reasons these 44 women who were on the sampling frame did not receive a card include:
  - The woman was part of the “rural” group of phone numbers who were never called and were also not selected to be part of the direct mail campaign (N=18).
  - The woman did not have a phone number on the sampling frame so was not included in the sampling frame for the direct mail campaign (N=15).
  - The woman was determined by Melissa Data to have an incorrect address on the sampling frame that could not be updated (N=6).
  - The woman (i.e., the person who answered the phone at that phone number, since the women were not asked for by name) was determined to be ineligible in the baseline survey so was not included in the sampling frame for the direct mail campaign (N=4).
  - The woman was determined to have a bad phone number when called as part of the NDSU Department of Communication’s survey so was not included in the sampling frame for the direct mail campaign (N=1).
- A total of 62 of the new enrollees were women on the sampling frame who had received a card.
- The number of new enrollees who received each card is as follows:
  - Card 1 – the “Anderson” card: 21 women
  - Card 2 – the “Little Voice” card: 18 women
  - Card 3 – the “Poster” card: 22 women
  - Unknown: 1 woman referenced the card when she enrolled but her name did not match the sampling frame (i.e., she was given the card by someone on the list)
- Enrollment as a result of the cards was greatest in May, but continued through November. Overall enrollment was greatest in June (see Table J).

**Table J. New Enrollees According to Month of Enrollment**

Month of Enrollment	Number of Women	
	All New Enrollees	New Enrollees Who Received a card
May 4, 2004 through May 31, 2004	75	18
June 2004	94	10
July 2004	54	5
August 2004	60	7
September 2004	78	7
October 2004	84	6
November 2004	87	9
December 1, 2004	6	0
Total	538	62

- Of the 660 women who completed the baseline survey and were sent a card, 23 became enrolled in the program. A detailed discussion of the characteristics of these 23 women is limited by the small number. Therefore, caution should be used when interpreting these data.
  - The women lived in “targeted urban,” “other urban,” and “rural” locations.
  - According to the baseline survey, some women had insurance and some did not, most had had a mammogram, and some had a history of breast cancer in the family. The majority of the women said they had a barrier to getting a mammogram, and a large proportion said they were not likely to overcome the barrier.
  - Nearly half of these women, all who became enrolled in the program, said on the baseline survey that they were not likely to get a mammogram in the next 12 months. Nineteen of the 23 enrolled women had completed a cervical or breast cancer screening by December 1, 2004, and received the incentive; most of these women received a breast cancer screening procedure.
  - Twenty of the 23 women who completed the baseline survey also participated in the evaluation survey. Eleven received the “Anderson” card, five received the “Little Voice” card, and four received the “Poster” card. Only about half of these women remembered receiving a card, and it did not matter which card they received. Anecdotally, this provides an illustration of the effect time can have on a person’s recall of certain events. The women who do not remember the card still reported calling the program, but cited other influences. Though those other influences may now be what the woman remembers, the card may still have been an influential factor in helping her to decide to make the call.

### Rate of Enrollment

- Of the 538 new enrollees, the 62 new enrollees who received a card represent 11.5 percent of all new enrollees between May 4, 2004, and December 1, 2004.
- Out of the 7,212 cards sent, the 62 enrollees represent an overall enrollment rate of 0.9 percent. This rate is consistent with the enrollment rates of other direct mail campaigns. Within the context of this definition of success, the sampling frame purchased from Medstat resulted in a successful direct mail campaign.
- However, the sampling frame was intended to offer the names of North Dakota women between the ages of 40 and 64 who had household incomes of \$35,000 or less, thus offering a list that should have a higher proportion of women potentially eligible for *Women’s Way* than would be found in a random selection of names from a phone directory.
- The enrollment rate among women determined to be potentially eligible was higher than typical direct mail campaign rates. A total of 23 of the 62 new enrollees were women who participated in the baseline survey. Participation in the baseline survey means that these women were determined to be potentially eligible for *Women’s Way*. Of the 660 baseline survey respondents who were mailed a card (with the others excluded due to incorrect addresses), this represents an enrollment rate of women determined to be potentially eligible of 3.5 percent.
- Among women determined to be potentially eligible (i.e., through the screening process for the baseline survey), the enrollment rate (3.5 percent) was four times as high as the overall enrollment rate achieved in the campaign (0.9 percent). Therefore, the sampling frame purchased from Medstat was not successful in achieving a higher-than-average enrollment rate. Since the baseline survey was a representative sample of the overall sampling frame, but screened to ensure potential eligibility, one can conclude that the lower enrollment rate achieved by the overall sampling frame was a result of its limitations.

## Incentive for Participation, Screening Rate, and Cost Effectiveness

- In addition to determining the rate of enrollment off the card, a second reason that tracking the names of new enrollees was important was to identify women who should receive the \$10 incentive promised in the card. The directions for receiving a \$10 monetary incentive were the same for each card. Specifically, women were directed to call the program to see if they were eligible for *Women's Way*. If they were eligible, they were to enroll and then complete a cervical or breast cancer screening procedure by August 31, 2004. Because the *Women's Way* budget allowed for the payout of more incentives, women who missed the August 31 deadline but were screened before the end of the monitoring period on December 1 were still sent the \$10. The women who missed the deadline represent nearly half of the women who received an incentive.
- A total of 47 of the 62 women received the card, enrolled, and completed a screening by December 1, 2004, and therefore received an incentive, representing a screening rate of 75.8 percent.
  - The incentive did not change the proportion of new enrollees who got screened. Among the 476 new enrollees who did not receive a card, 102 were not screened, representing a screening rate of 78.6 percent.
  - In addition, 21 of the 47 women, or 44.7 percent, did not complete the screening by August 31, 2004, which were the directions on the card for getting the incentive. They were still given the incentive if they completed the screening before the end of the monitoring period on December 1, 2004.
- The number of women who received the incentive by card is:
  - Card 1 – the “Anderson” card: 15 incentives
  - Card 2 – the “Little Voice” card: 14 incentives
  - Card 3 – the “Poster” card: 18 incentives
- The direct mail campaign did not result in a cost effective method of getting women to enroll in *Women's Way* and complete a breast or cervical cancer screening.
  - The cost of the direct mail campaign to *Women's Way* was \$8,560, including the purchase price of the Medstat list, graphic design of the three cards, photo royalty fees, printing of the cards and envelopes, the address checking by Melissa Data, postage, and the incentive.
  - A general guideline is to spend an average of \$100 for recruitment and public education for a recruitment strategy to be considered effective.
  - The cost of each of the 62 new enrollees who received a card was \$138 per woman.
  - Potentially eligible women, such as those who completed the baseline survey, responded to the direct mail at a rate of 3.5 percent. With a more accurate sampling frame, a 3.5 percent response rate would result in a cost to enroll as low as \$34 per woman and would more closely match the expectations of a purchased list of potentially eligible women.
  - The cost of each of the 47 new enrollees who received the card and completed a breast or cervical cancer screening was \$182 per woman.

## Estimating the Number of Inquiries

- Knowing the actual number of inquiries that resulted from the direct mail campaign would be a helpful way to evaluate the campaign's success. Tracking the actual number of inquiries due to the direct mail campaign would require that every phone call made by a woman to *Women's Way* was documented consistently, including the reason that made her call.
- Beginning in May 2003, *Women's Way* implemented a call tracking system for LCUs to track program inquiries including the reason that prompted the person to call. Inquiry calls to *Women's Way* do not ring to a central phone number. Rather, they are routed to one of 10 Local Coordinating Units (LCUs) based on the caller's telephone prefix. These 10 LCUs across the state handle *Women's Way* inquiries, enrollment, and case management. From May 2003 to February 2005, the call tracking reports documented 89 inquiries about *Women's Way* because of direct mail. Several of the inquiries were due to small direct mail projects that took place prior to May 2004. Among the 89 inquiries due to direct mail, 53 were documented to have occurred during the timeframe of the study.

- Unfortunately, *Women's Way* does not have confidence that the number of inquiries is accurate as there continue to be compliance and consistency problems in gathering the call tracking data. These problems are evident in the fact that the 53 calls that were documented during the study's timeframe are fewer than the actual number of women who enrolled after receiving a card, 62. In addition, the number of calls documented does not account for women who would have inquired about the program because of the card but were not eligible.
- Therefore, since the actual number of calls is not known, an estimate of inquiries based on the evaluation survey results can serve as a proxy measure to provide some insight into the total number of inquiries *Women's Way* may have received due to the direct mail campaign. A total of 18 women in the evaluation survey reported calling to inquire about the program due to the card, and 12 of those women became enrolled in the program. This ratio of calls to enrollments can be used to estimate inquiries. However, the number of women in the evaluation survey who called the program is small and caution should be used when interpreting these data.
- Using the proportion of calls to enrollments found in the evaluation survey (i.e., 18 calls resulting in 12 enrollments), the number of inquiries about the program due to the direct mail campaign between May 4, 2004, and December 1, 2004, can be estimated at 93, resulting in 62 enrollments. This number of inquiries would represent a response rate of 1.3 percent of 7,212 mailed cards, a rate only slightly larger than the documented enrollment rate for the campaign of 0.9 percent.

*Section 3:*  
**PROJECT CONCLUSIONS**

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## Introduction

- *Section 3: Project Conclusions* provides a discussion of the project, including the success of the direct mail campaign, characteristics of the intended audience, the overall reliability of the sampling frame, and feedback for future message and campaign design.

## Success of the Direct Mail Campaign

- Determining the success of the direct mail campaign was accomplished through the follow up evaluation survey, and tracking women who enrolled in *Women's Way*.
- Of the 742 women who completed the baseline survey, 646 were contacted for the evaluation survey and 457 completed the survey (61.6 percent of the baseline).
- Of the 457 women who completed the evaluation survey:
  - 80.3 percent had heard of *Women's Way* (N=367).
  - 51.6 percent remember receiving the card, all of whom were sent a card (N=236).
- Of the 236 women who remember receiving the card:
  - 84.3 percent opened and read the card (N=199).
- The 199 women who opened and read the card represent 43.5 percent of evaluation survey respondents. Of the 199 women:
  - 43.7 percent remember something about the card (N=87).
  - 19.6 percent remember something about the incentive (N=39).
  - 41.2 percent remember something about the eligibility requirements (N=82).
  - 9.0 percent called *Women's Way* (N=18); 12 women became enrolled.
  - 52.8 percent threw the card away (N=105).
- The women who remembered receiving a card, read it, and then called to learn about enrolling in *Women's Way* represent 3.9 percent of all evaluation survey respondents, a total of 18 women.
- Even among respondents who do not remember receiving the card or received it and did not read it, but had heard of *Women's Way*, 13.0 percent had called to learn about enrolling in the program (N=25).
- Among women who were asked if they had called to learn about *Women's Way* and had not called (N=349), the most prominent reason was that they had self-screened their own eligibility due to having health insurance coverage (60.7 percent; N=212).
- A total of 538 women enrolled in *Women's Way* from the time of the initial wave of the direct mail campaign (starting May 4, 2004) until December 1, 2004.
  - Of these 538 women, 62 women received the card, accounting for 11.5 percent of enrollment during the designated time period.
  - Thus, of the 7,212 households that were sent cards, 62 women enrolled in *Women's Way* for an overall success rate for the campaign of 0.9 percent.
- Of the 7,212 cards sent, the 62 enrollees represent an enrollment rate of 0.9 percent. While achieving an enrollment rate consistent with the enrollment rates of many direct mail campaigns, the sampling frame purchased from Medstat was not successful in achieving a higher enrollment rate, indicating that the list was not limited to women potentially eligible for *Women's Way*. In contrast, of the 660 baseline survey respondents, all of whom were determined to be potentially eligible and were mailed a card, 23 enrolled, representing an enrollment rate of 3.5 percent.

## Characteristics of the Intended Audience

- The baseline survey provides insight into unique segments of the intended audience. Segmenting the intended audience is a powerful tool for determining the best approaches to use for targeting different categories of women. In examining the baseline data, mammogram status, age, and health insurance status are three segments which we see as important categories of women in the intended audience.
- Firstly, whether or not a woman has had a mammogram reflects her experience with one of the cancer screening behaviors that *Women's Way* hopes to influence. The proportion of the intended audience that has had a mammogram is 83.8 percent. In contrast, the proportion that has had a Pap test is very high (98.8 percent).
- Secondly, women younger than age 50 are more likely to be receiving mixed messages from the health community, especially regarding how often doctors recommend women ages 40 to 49 should get a mammogram.
- Thirdly, health insurance has proven to be the criterion women use most to self-screen their eligibility for *Women's Way*. In addition, there may be some ambiguity in women's understanding of how they fit into the program with respect to whether or not they have health insurance.
- Using baseline data, Table K shows characteristics for these three important categories of women: 1) women who have not had a mammogram, 2) women who are younger than age 50, and 3) women who do not have health insurance. Analysis of the important differences between these three groups and the overall proportion of women follows.

**Table K. Characteristics of the Intended Audience of Women by Three Unique Segments**

Characteristics of the Intended Audience of Women	Percent of Women			
	Have not had a mammogram (N=120)	Are younger than age 50 (N=322)	Do not have health insurance (N=162)	Total overall (N=742)
1. Have a family history of breast cancer	25.8	28.8	32.7	32.8
2. Highly worried about getting breast cancer	8.4	16.9	14.4	17.5
3. Know when to get a mammogram	69.2	86.0	83.3	88.8
4. Not confident in early detection	12.2	5.4	12.0	7.2
5. Not confident in preventing dying	7.0	4.4	8.2	6.3
6. Health care providers highly influence	49.6	70.4	55.9	64.5
7. Friends/family highly influence	38.8	44.4	37.9	39.8
8. Information from the media highly influences	33.3	35.8	29.6	35.6
9. Heard of a program that provides a way to pay	50.8	50.5	51.2	49.8
10. Have had a mammogram	--	77.3	68.5	83.8
11. Highly nervous about getting a mammogram	45.4	17.1	20.4	13.5
12. Not likely to get a mammogram in the next year	54.1	28.7	50.9	25.4
13. Have barriers to getting a mammogram	51.7	37.9	61.7	31.4
14. Not likely to overcome barriers	57.9	47.4	62.5	51.2
15. Have had a Pap test	95.0	99.1	98.1	98.8
16. Not likely to get a Pap test in the next year	43.2	22.4	52.5	28.1
17. Are younger than age 50	61.9	--	43.5	43.8
18. Do not have health insurance	42.5	21.8	--	22.2

1. Have a family history of breast cancer - compared to the overall proportion of women (32.8 percent):
  - A somewhat smaller proportion of women who have not had a mammogram have a family history of breast cancer (25.8 percent).
2. Highly worried about getting breast cancer - compared to the overall proportion of women (17.5 percent):
  - A somewhat smaller proportion of women who have not had a mammogram are highly worried (8.4 percent).
3. Know when to get a mammogram according to doctors' recommendations - compared to the overall proportion of women (88.8 percent):
  - A smaller proportion of women who have not had a mammogram know when to get a mammogram (69.2 percent).
4. Not confident in early detection of breast cancer - compared to the overall proportion of women (7.2 percent):
  - There is not a big difference in confidence for women who have not had a mammogram, who are younger than age 50, or who do not have health insurance.
  - However, a somewhat smaller proportion of women who are younger than age 50 are not confident (5.4 percent) compared to women who have not had a mammogram (12.2 percent) and women who do not have health insurance (12.0 percent).
5. Not confident in preventing dying from breast cancer - compared to the overall proportion of women (6.3 percent):
  - There is not a big difference in confidence for women who have not had a mammogram, who are younger than age 50, or who do not have health insurance.
6. Health care providers highly influence mammogram decisions - compared to the overall proportion of women (64.5 percent):
  - A smaller proportion of women who have not had a mammogram are highly influenced by health care providers (49.6 percent). A somewhat smaller proportion of women without health insurance are highly influenced by health care providers (55.9 percent).
7. Friends/family highly influence mammogram decisions - compared to the overall proportion of women (39.8 percent):
  - There is not a big difference in how much women are influenced by friends/family for women who have not had a mammogram, who are younger than age 50, or who do not have health insurance.
  - However, a somewhat larger proportion of women who are younger than age 50 are highly influenced by friends/family (44.4 percent) compared to women who have not had a mammogram (38.8 percent) and women who do not have health insurance (37.9 percent).
8. Information from the media highly influences mammogram decisions - compared to the overall proportion of women (35.6 percent):
  - A somewhat smaller proportion of women who do not have health insurance are highly influenced by information from the media (29.6 percent).
9. Heard of a program that provides a way to pay for breast or cervical cancer screenings - compared to the overall proportion of women (49.8 percent):
  - There is no difference in having heard of a program that provides a way to pay for women who have not had a mammogram, who are younger than age 50, or who do not have health insurance.
10. Have had a mammogram - compared to the overall proportion of women (83.8 percent):
  - A somewhat smaller proportion of women younger than age 50 have had a mammogram (77.3 percent). A smaller proportion of women who do not have health insurance have had a mammogram (68.5 percent).



11. Highly nervous about getting a mammogram - compared to the overall proportion of women (13.5 percent):
  - A much larger proportion of women who have never had a mammogram are highly nervous (45.4 percent).
12. Not likely to get a mammogram in the next year - compared to the overall proportion of women (25.4 percent):
  - Much larger proportions of women who have never had a mammogram (54.1 percent) and women who do not have health insurance (50.9 percent) are not likely to get a mammogram in the next year.
13. Have barriers to getting a mammogram - compared to the overall proportion of women (31.4 percent):
  - A much larger proportion of women without health insurance have barriers (61.7 percent). A larger proportion of women who have not had a mammogram have barriers (51.7 percent).
14. Not likely to overcome barriers to getting a mammogram - compared to the overall proportion of women (51.2 percent):
  - A larger proportion of women without health insurance are not likely to overcome the barriers (62.5 percent).
15. Have had a Pap test - compared to the overall proportion of women (98.8 percent):
  - A slightly smaller proportion of women who have not had a mammogram have had a Pap test (95.0 percent).
16. Not likely to get a Pap test in the next year - compared to the overall proportion of women (28.1 percent):
  - A much larger proportion of women without health insurance are not likely to get a Pap test in the next year (52.5 percent). A larger proportion of women who have not had a mammogram are not likely to get a Pap test in the next year (43.2 percent).
17. Are younger than age 50 - compared to the overall proportion of women (43.8 percent):
  - A larger proportion of women who have not had a mammogram are younger than age 50 (61.9 percent).
18. Do not have health insurance - compared to the overall proportion of women (22.2 percent):
  - A larger proportion of women who have not had a mammogram do not have health insurance (42.5 percent).

### **Overall Reliability of the Sampling Frame**

- Determining the overall reliability of the sampling frame (i.e., the list purchased from Medstat) was accomplished through detailed documentation of the status of the names on the list through each phase of the project: sampling frame design, baseline survey, address matching, direct mail campaign, evaluation survey, and tracking of new enrollees.
- A detailed documentation of the list purchased from Medstat is found in Table L.

**Table L. Detailed Documentation of the Purchased List**

	Number	Percent
Total list purchased from Medstat	27,214	100.0
Included in sampling frame	25,876	95.1
Not included in sampling frame	1,338	4.9
Total sampling frame	25,876	100.0
Included in baseline survey sampling frame	18,323	70.8
Included in Department of Communication's sampling frame	1,787	6.9
No phone number (not included in surveys or campaign)	5,766	22.3
Total addresses checked using Melissa Data	25,876	100.0
Correct address	21,991	85.0
Incorrect address that could be updated	1,172	4.5
Incorrect address that could not be updated	2,713	10.5
Total number of cards sent in direct mail campaign	7,212	100.0
Card 1 – the “Anderson” card	2,402	33.3
Card 2 – the “Little Voice” card	2,410	33.4
Card 3 – the “Poster” card	2,400	33.3
Total baseline completed surveys	742	100.0
Included in direct mail campaign	660	88.9
Not included in direct mail campaign	82	11.1
Total baseline completed surveys	742	100.0
Included in evaluation survey sampling frame	646	87.1
Not included in evaluation survey sampling frame	96	12.9
Total new enrollees (May 4 - December 1, 2004)	538	100.0
Names matched sampling frame and were sent a card	62	11.5
Names matched sampling frame but were not sent a card	44	8.2
Names did not match sampling frame	432	80.3
Total enrollees who received a card	62	100.0
Completed a breast or cervical cancer screening and received the incentive	47	75.8
Did not complete a breast or cervical cancer screening	15	24.2

- Because the primary objective of the project was to evaluate the effectiveness of direct mail in recruiting new women into *Women's Way*, women on the purchased list whose names were already in *Women's Way* records were excluded from the study. This was also done to reduce the possible confusion of women already enrolled in the program if they were contacted for the project. Of the original 27,214 names, 1,338 names (4.9 percent) matched *Women's Way* records and were removed. Because the 1,338 names included women with incorrect addresses, women who were no longer eligible, and women who were deceased, along with women who were active enrollees, the overall impact on the analysis of the list's reliability was negligible. At the time this matching was done, there were 6,355 names in the *Women's Way* records, of which 5,017 were not on the list purchased from Medstat.
- The sampling frame was the revised Medstat list of 25,876 names, and was used for the baseline survey, the direct mail campaign, and the evaluation survey.

- Nearly one-fourth (22.3 percent) of the women on the sampling frame did not have phone numbers. These women had to be excluded from the sampling frame for the baseline survey, which was administered by telephone, and were also excluded from the direct mail campaign.
- Of the 25,876 addresses checked using Melissa Data, 2,713 were incorrect addresses and 1,172 addresses were incorrect but had been updated. Therefore, 15.0 percent of the sampling frame had address problems.
- These problems with the list may have arisen because of the high rate of mobility in our society. In addition, since a sampling frame of this type relies on multiple databases, its limitations may reflect difficulties in maintaining current lists.
- Of the 11,155 women in the baseline sampling frame who were called (95.3 percent of “urban” and 42.5 percent of “rural”):
  - Nearly half were bad phone numbers or were not eligible (46.2 percent).
  - Only 6.7 percent of all of the women who were called could be accurately identified as potentially eligible for *Women’s Way* (6.2 percent of “urban” and 7.2 percent of “rural”).
- The sampling frame was sold as a list of the *Women’s Way* intended audience in North Dakota, and therefore should have included approximately 87.7 percent potentially eligible women (see Table B and discussion on page 4). Only 6.7 percent of all the women who were called could be identified as potentially eligible for *Women’s Way*, however. Another way of estimating the proportion of potentially eligible women on the sampling frame is to look at the 5,005 women whose eligibility was determined (i.e., the 749 women verified as potentially eligible and the 4,256 women verified as not eligible). Using those figures, a generous overall estimate of the proportion of potentially eligible women on the sampling frame is 15.0 percent.
- The geographic distribution of the sampling frame was skewed in that it included a larger proportion of women in “rural” locations (Group 3) and women in “other urban” locations (Group 2) than is found in the geographic distribution for North Dakota from Census 2000 or among *Women’s Way* enrollees. In contrast, the distribution of *Women’s Way* enrollees was very similar to the state’s overall distribution. The sampling frame’s skewed geographic distribution was a reflection of the purchased list itself and was not a factor of characteristics of the *Women’s Way* intended audience (see Table M).

**Table M. Urban/Rural Geographic Distributions**

Geographic Group*	Percent of People			
	Sampling Frame	Census 2000 for North Dakota	Baseline Survey Respondents	<i>Women’s Way</i> Enrollees**
Urban (Group 1 and 2)	40.6	53.5	50.7	45.9
<i>Group 1</i>	17.8	41.1	14.6	34.2
<i>Group 2</i>	22.8	12.4	36.1	11.7
Rural (Group 3)	59.4	46.5	49.3	54.1
Total	100.0	100.0	100.0	100.0

\*Group 1 - “targeted urban”: women with addresses in Bismarck, Fargo, Grand Forks, Mandan, Minot, or West Fargo; Group 2 - “other urban” communities with populations greater than 2,500 in Census 2000: women with addresses in Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, or Williston; Group 3 - “rural”: the remaining women.

\*\*Based on the geographic locations of the 538 new *Women’s Way* enrollees from May 4, 2004, through December 1, 2004.

### Future Message and Campaign Design

- The direct mail campaign did not achieve an above-average enrollment rate. The sampling frame achieved an enrollment rate consistent with the average rates for direct mail campaigns (0.9 percent). However, if the purchased list had been limited to women potentially eligible for *Women’s Way* as was intended, the enrollment rate may have been closer to the one achieved among women who completed the baseline survey (3.5 percent).

- Though 51.6 percent of women who completed the evaluation survey remember receiving a card, no one card stood out above the other two, and the cards did not achieve an above-average rate of enrollment. When a list of potentially eligible women was used, however, the same three cards did produce an improved rate of enrollment. While no card worked better than the others when directed to a homogeneous audience, one of the messages could be directed to a segment of the intended audience and might produce a better response rate.
- Though incentives can be an important component in improving the response or enrollment rates, and therefore the success of, direct mail campaigns, the incentive used in this direct mail campaign did not contribute to a successful project. The \$10 incentive upon completion of a breast or cervical cancer screening did not work as a recruiting device because enrollment rates were not higher than the average rates achieved in direct mail campaigns.
- Additionally, the incentive did not stand out as a feature of the card when women were asked to recall details of the card they received. Women in the evaluation survey did not remember the incentive at a high rate. Only 19.6 percent of the women who remembered the card could remember anything about the incentive; women remembered something about the eligibility requirements at twice the rate (41.2 percent). Only 18 responses came from women who correctly remembered the incentive.
- Finally, screening rates offer additional insight into the lack of influence the incentive had on the direct mail campaign. The incentive did not impact the proportion of women who got screened. Among the 62 women who enrolled in the program after receiving a card, 15 women (24.2 percent) did not complete a breast or cervical cancer screening and therefore did not get the incentive (compared to 21.4 percent of new enrollees who did not receive a card and who were, therefore, not impacted by the offer of an incentive to get screened). Among those who did complete a breast or cervical cancer screening, nearly half did not complete it by the deadline on the card for getting the incentive (August 31, 2004), though they were given the incentive if they completed it before the end of the monitoring period (December 1, 2004).
- For the future, the goal is to better target the *Women's Way* intended audience and tailor the messaging and campaign design. One approach includes looking at distributions of women using Geographic Information Systems (GIS) mapping and Census 2000 data. The goal would be to develop estimates of the location of women with certain characteristics, a process that could lend itself well to targeting the *Women's Way* intended audience.
- Another approach is to focus on important characteristics. One example is to look at household type, such as women living alone, women living with their spouse, or single mothers. Other examples suggested by baseline survey findings include looking at women who have had a mammogram compared to women who have not, younger women compared to older women, and women with health insurance compared to women without health insurance. It is reasonable to think that messages would likely be different for those different categories of women, so a universal message would not be as useful an approach as segmenting and targeting the intended audience would be. Focus groups could be valuable tools for learning more about each of these segmented groups. By identifying important groupings of characteristics, we point to the need to try to find a message that resonates with a more unique audience.
- Finally, a mixed approach of messages and media types will continue to be the most effective approach to getting women to enroll in *Women's Way*. There is evidence that a direct mail campaign can work (i.e., there were women who opened and read the card) but the current messages and one method of delivery will not resonate for everyone. It is important to not assume a homogeneous audience. Future mass mailings will be more effective when focused on a segmented audience based on characteristic data. Using existing data sources like the Census Bureau to find geographies with concentrations of important characteristics, rather than mailing to a homogeneous list of women, then finding out the best message and delivery approaches, may also be effective. Vendor lists like the list purchased from Medstat by *Women's Way* seem to not produce a higher-than-normal enrollment rate in North Dakota and seem to not provide a cost-effective method for recruiting women. To make future mass mailings cost effective, the campaign would have to ensure an accurate purchased list of potentially eligible women.

*Section 4:*  
*DETAILED BASELINE*  
*SURVEY RESULTS*

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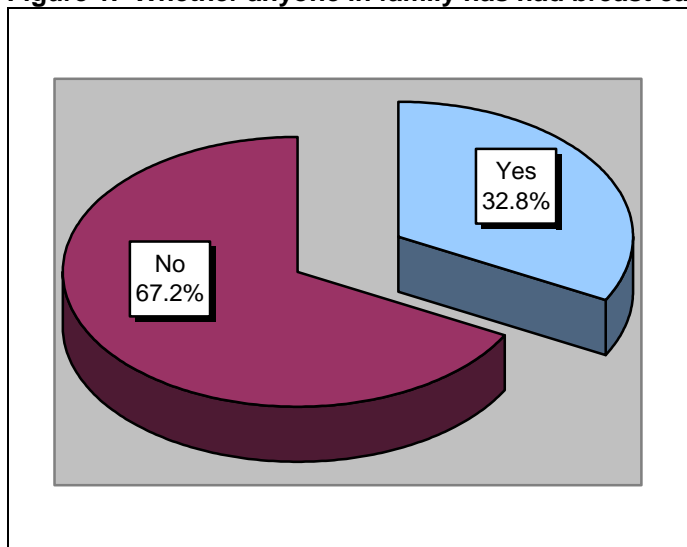
## Overview of Baseline Survey

- The first step in the direct mail project was to conduct a survey of a random selection of women from the baseline sampling frame in order to establish an understanding of characteristics of the intended audience of *Women's Way*. The survey was conducted in February and March of 2004. There were a total of 742 completed baseline surveys.
- At the beginning of each interview, women were screened for participation in the survey based on age and income eligibility criteria only, not health insurance status. Women were asked their background and opinions regarding cancer, their breast and cervical cancer screening behavior and intentions, and demographics. Three theoretical frameworks were also incorporated to help provide insight into future message development: 1) Stages of Change, 2) Self-Regulation, and 3) Reasoned Action.
- Several open-ended questions were asked on the baseline and evaluation surveys, and the women's responses needed to be coded for purposes of analysis. Thematic coding entails finding and grouping similar responses to create a list of a limited number of themes. The unit of analysis is the response when dealing with open-ended questions, because one woman could provide a response which includes multiple themes.
- Presentation of the survey results includes a general distribution of responses as well as sub-bullets which look more in-depth at three important segments of women in the intended audience: mammogram status, age, and health insurance status. Appendix A includes Appendix Tables that present more detailed data. Appendix C has the survey instrument.

## Background and Opinions Regarding Cancer

- One-third of women had a family history of breast cancer (32.8 percent) (see Figure 1, Appendix Table 1).
  - One-fourth of women who had never had a mammogram had a history of breast cancer in their family (25.8 percent). One-third of women who had had a mammogram had a history of breast cancer in their family (34.2 percent).
  - While 28.8 percent of women 40 to 49 years of age had a history of breast cancer in their family, 36.2 percent of women 50 years and older had a history of breast cancer in their family.
  - Whether the woman had a family history of breast cancer did not differ by whether the woman had health insurance.

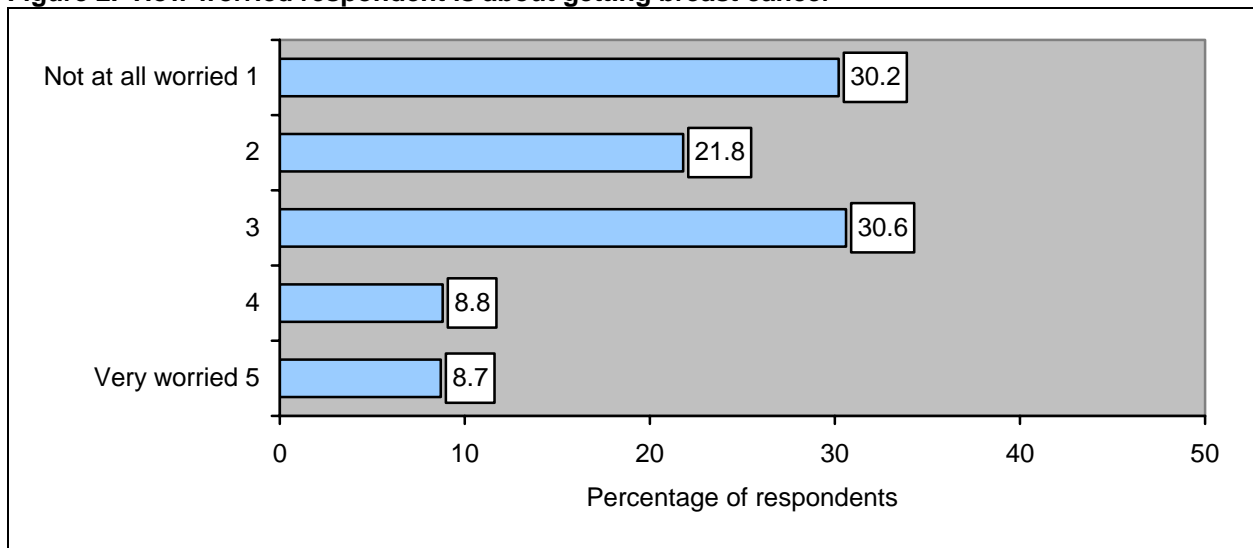
**Figure 1. Whether anyone in family has had breast cancer**



N=740

- The majority of women were not worried about getting breast cancer (52.0 percent). However, nearly one in five women was worried about getting breast cancer (17.5 percent) (see Figure 2, Appendix Table 2).
  - Among women who had not had a mammogram, only 8.4 percent were worried about getting breast cancer compared to 19.3 percent of women who had had a mammogram.
  - A larger proportion of women 50 years and older were not at all worried about getting breast cancer (35.8 percent), compared to women 40 to 49 years of age (22.6 percent).
  - A larger proportion of women who did not have health insurance were not at all worried about getting breast cancer (39.0 percent), compared to women with health insurance (28.0 percent).
- The average level of worry women had about getting breast cancer was not high (mean=2.50).

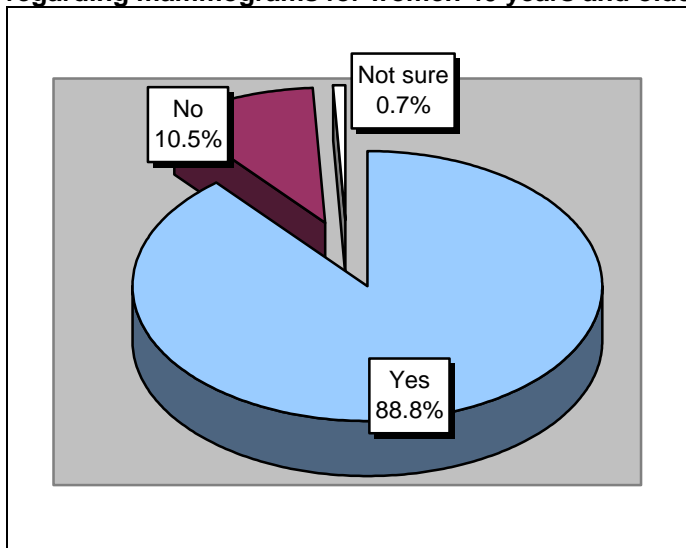
**Figure 2. How worried respondent is about getting breast cancer**



N=726

- The vast majority of women (88.8 percent) said they knew doctors' recommendations regarding mammograms for women 40 years and older (see Figure 3, Appendix Table 3).
  - However, among women who had not had a mammogram, the proportion drops to 69.2 percent who knew doctors' recommendations, compared to 92.6 percent of women who had had a mammogram.
  - Whether the woman knew the recommendations did not differ by whether the woman was younger or older than 50.
  - Women without health insurance were somewhat less likely to know the recommendations (83.3 percent), compared to women with health insurance (90.3 percent).
- Among women who said they knew doctors' recommendations about mammogram screenings, what they believed those recommendations to be was not explored.

**Figure 3. Whether respondent knows doctors' recommendations regarding mammograms for women 40 years and older**

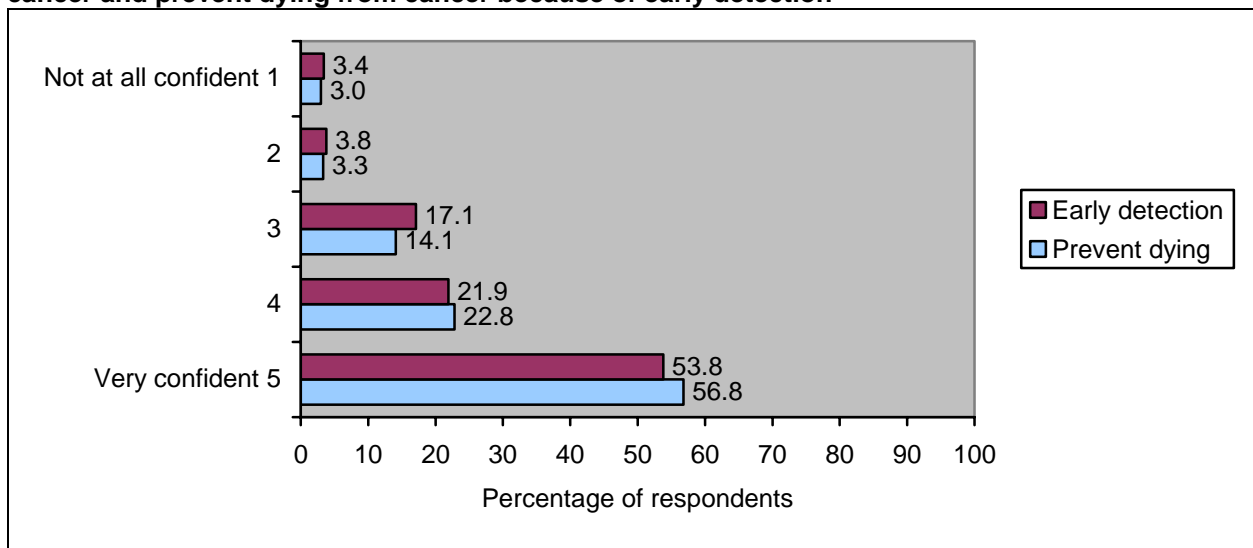


N=742



- More than half of women were very confident that mammograms could provide early detection of breast cancer (53.8 percent) (see Figure 4, Appendix Table 4).
  - A somewhat larger proportion of women who had not had a mammogram were less confident (12.2 percent) compared to women who had had a mammogram (6.3 percent).
  - The level of confidence did not differ by whether the woman was younger or older than age 50.
  - A somewhat larger proportion of women who did not have health insurance were less confident (12.0 percent) compared to women who did have health insurance (5.9 percent).
- The average level of confidence women had about mammograms providing early detection of breast cancer was very high (mean=4.19).
- More than half of women were very confident that mammograms could prevent dying of breast cancer because of early detection (56.8 percent) (see Figure 4, Appendix Table 5).
  - The level of confidence did not differ depending on whether the woman had ever had a mammogram. It also did not differ by age or whether the woman had health insurance.
- The average level of confidence women had that mammograms could prevent dying of breast cancer because of early detection was very high (mean=4.27).

**Figure 4. How confident respondent is that mammograms can provide early detection of breast cancer and prevent dying from cancer because of early detection**



N=732

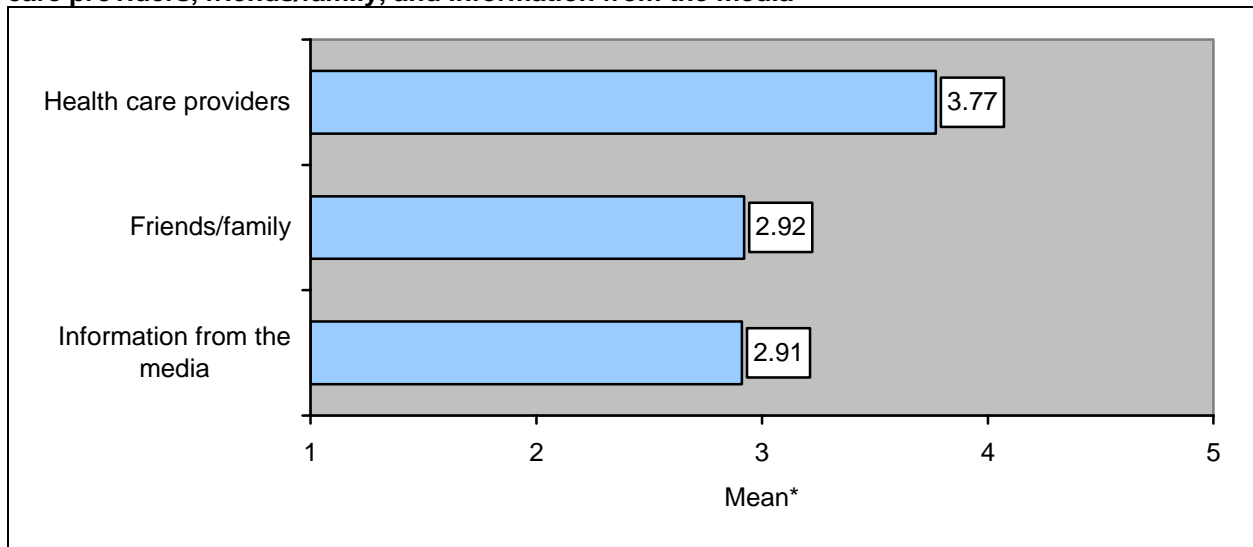
- Half of women were influenced a great deal in their decisions about mammogram screenings by the opinions of health care providers (48.2 percent). The opinions of friends and family greatly influenced decisions for 30.0 percent of women, and information from the media greatly influenced decisions for 21.5 percent (see Table 1, Appendix Tables 6-8).
  - The opinions of health care providers had less of an influence on women who had not had a mammogram; 28.6 percent said health care providers had a great deal of impact on their decisions, compared to 51.9 percent of women who had had a mammogram. A larger proportion of women who had had a mammogram said friends/family did not influence their decisions at all, 35.8 percent compared to 25.9 percent of women who had not had a mammogram.
  - Women 50 years and older were more likely to say that they were not at all influenced by any of the factors: 20.0 percent said they were not at all influenced by health care providers compared to 10.0 percent of women 40 to 49 years of age; 40.8 percent said they were not at all influenced by friends/family compared to 26.3 percent of women 40 to 49 years of age; 34.6 percent said they were not at all influenced by information from the media compared to 19.9 percent of women 40 to 49 years of age.
  - Women who had health insurance were more likely to say the opinions of health care providers influenced them a great deal, 51.0 percent compared to 37.3 percent of women without health insurance.

**Table 1. How much respondent's decisions about mammogram screenings are impacted by health care providers, friends/family, and information from the media**

Influence	Percentage of respondents					
	Amount of impact					Total
	Not at all 1	2	3	4	A great deal 5	
Opinions of health care providers (N=737)	15.5	4.9	15.2	16.3	48.2	100.1
Opinions of friends/family (N=733)	34.2	9.1	16.8	9.8	30.0	99.9
Information from the media (N=735)	28.0	10.1	26.3	14.1	21.5	100.0

- Overall, health care providers had the greatest impact on women's decisions about mammogram screenings (mean=3.77). The importance of this group on women's decisions underscores the significance of a lack of clear, consistent recommendations from the health care community regarding mammogram screenings. Friends/family and information from the media had similar degrees of influence on women's decisions (mean=2.92 and mean=2.91, respectively) (see Figure 5, Appendix Table 9).
  - Among women who had not had a mammogram, the opinions of health care providers ranked lower than the overall average (mean=3.25). Friends/family had a little more influence than information from the media (mean=3.03 and mean=2.81, respectively).
  - Among younger women, those 40 to 49 years of age, the opinions of health care providers rated higher than the overall average (mean=3.96). Friends/family and information from the media also rated higher than the overall averages (mean=3.13 and mean=3.03, respectively).
  - Among women who did not have health insurance, all three of the areas of influence ranked lower than the overall averages. Health care providers (mean=3.42) were still highest, followed by friends/family (mean=2.84) and information from the media (mean=2.71).

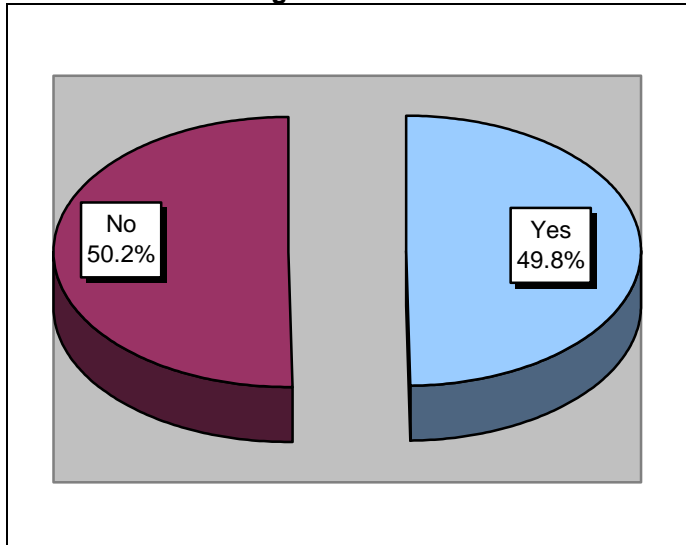
**Figure 5. Average of how much decisions about mammogram screenings are impacted by health care providers, friends/family, and information from the media**



\*Means were based on a one to five scale describing amount of impact, with one being "Not at all" and five being "A great deal."

- Half of the women had heard of “a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota” and half had not (see Figure 6, Appendix Table 10).
  - Whether a woman had heard of the program did not differ by whether she had had a mammogram, whether she was younger or older than 50, or whether she had health insurance.

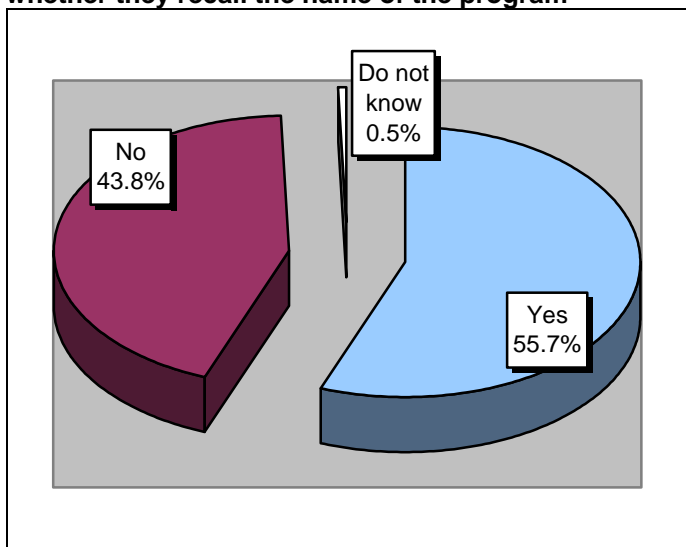
**Figure 6. Whether respondent has heard of “a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota”**



N=739

- Of the women who had heard of the program, 55.7 percent said they recalled the name of the program (see Figure 7).
  - The vast majority of women who said they recalled the name of the program knew the correct name (89.1 percent). Among those who had an incorrect name, some included a reference to women, such as “Women’s Health,” “Healthy Woman’s Way,” “Women’s Wellness,” and “Women’s Choice.” Other names included “Aflac,” “REACH,” “breast awareness,” “medical assistance,” “right to life,” and “family planning” (see Appendix Table 11).

**Figure 7. Among respondents who have heard of the program, whether they recall the name of the program**

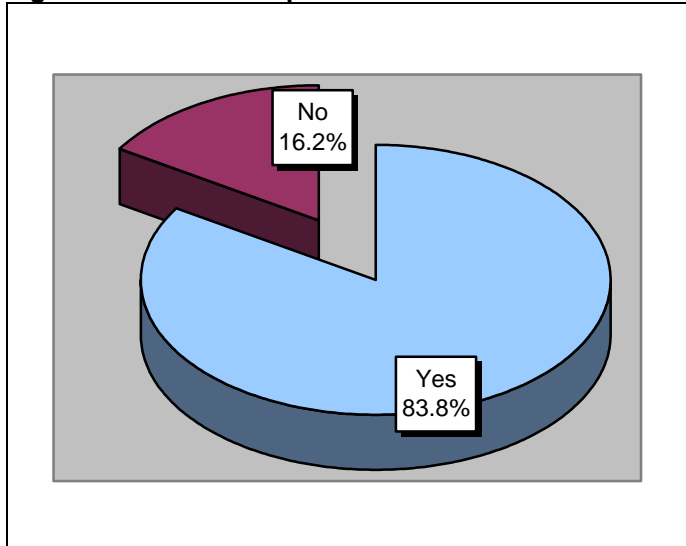


N=368

### Breast and Cervical Cancer Screening Behavior and Intentions

- The vast majority of women had had a mammogram (83.8 percent) (see Figure 8, Appendix Table 12).
  - A larger proportion of women 40 to 49 years of age had not had a mammogram (22.7 percent) compared to women 50 years and older (10.9 percent).
  - A larger proportion of women who lacked health insurance had not had a mammogram, 31.5 percent compared to 12.2 percent of women who had health insurance.
- Most of the women who had had a mammogram had more than one (81.3 percent).

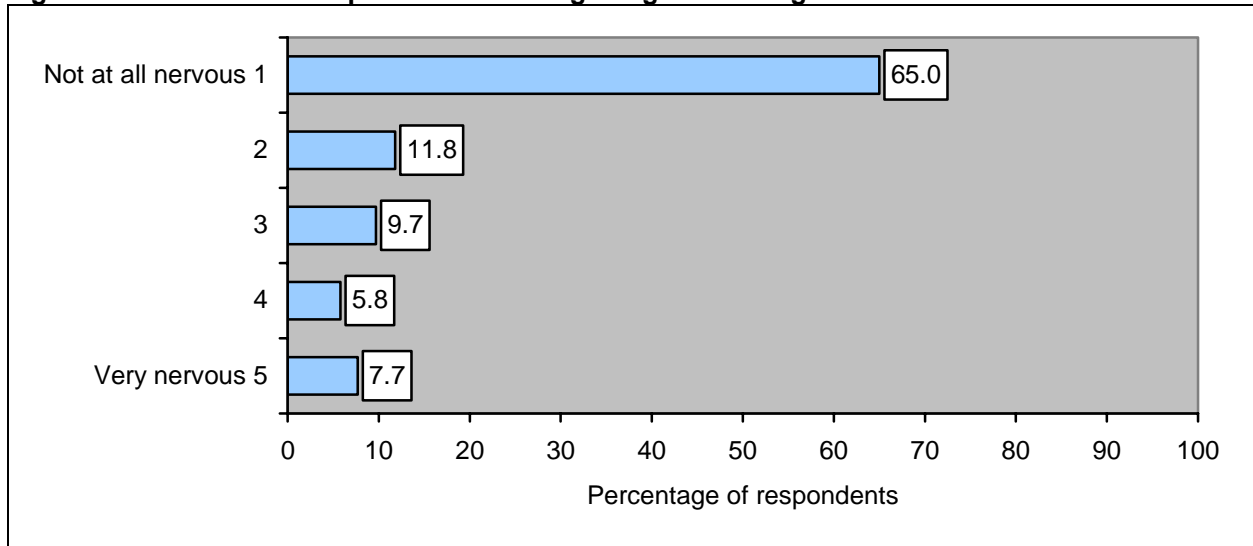
**Figure 8. Whether respondent has ever had a mammogram**



N=742

- Nearly two-thirds of women said they were not at all nervous about getting a mammogram (65.0 percent) (see Figure 9, Appendix Table 13).
  - A much larger proportion of women who had had a mammogram were not at all nervous about getting a mammogram compared to women who had not had a mammogram (71.2 percent and 32.8 percent, respectively). In fact, while 28.6 percent of women who had not had a mammogram were very nervous about getting a mammogram, only 3.7 percent of women who had had a mammogram were very nervous.
  - A larger proportion of women 50 years and older were not at all nervous about getting a mammogram compared to women 40 to 49 years of age (71.9 percent and 56.7 percent, respectively).
  - While the majority of women with health insurance and without health insurance were not at all nervous about getting a mammogram (65.3 percent and 63.0 percent, respectively), a somewhat larger proportion of women without health insurance were very nervous compared to women who had health insurance (13.6 percent and 6.2 percent, respectively).
- On average, women were not too nervous about getting a mammogram (mean=1.79).

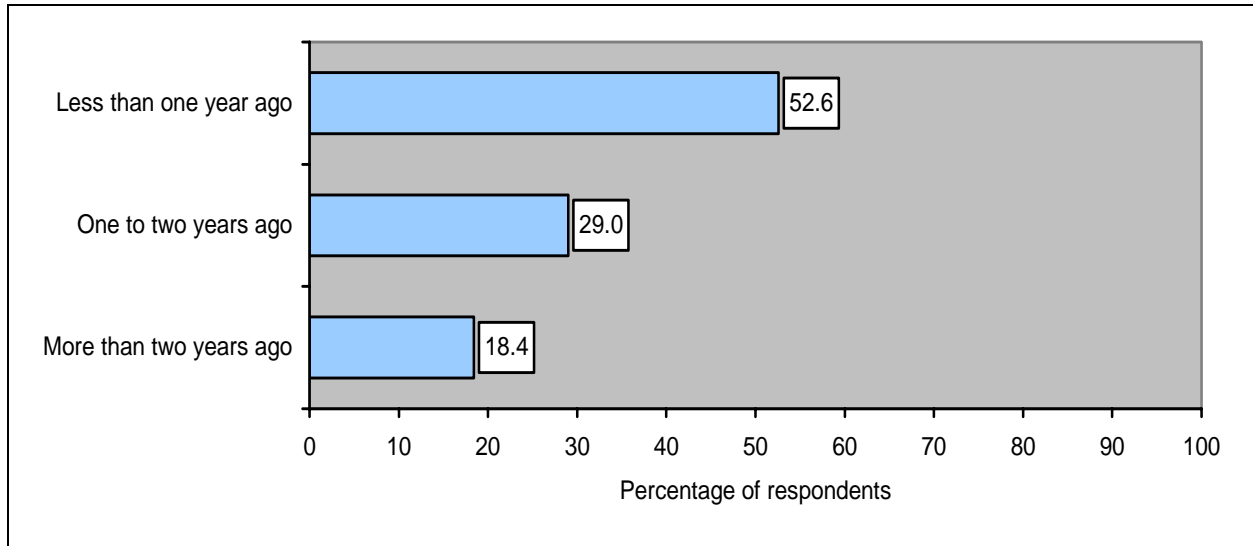
**Figure 9. How nervous respondent is about getting a mammogram**



N=740

- Among the 83.8 percent of women who had had a mammogram, more than half had one within the last year (52.6 percent). Only one in five (18.4 percent) had gone more than two years since their most recent mammogram (see Figure 10, Appendix Table 14).
  - A somewhat larger proportion of women 50 years and older had their most recent mammogram less than one year ago compared to women 40 to 49 years of age (55.6 percent and 47.8 percent, respectively).
  - More than twice the proportion of women with health insurance had their most recent mammogram less than one year ago compared to women without health insurance (59.0 percent and 27.3 percent, respectively).

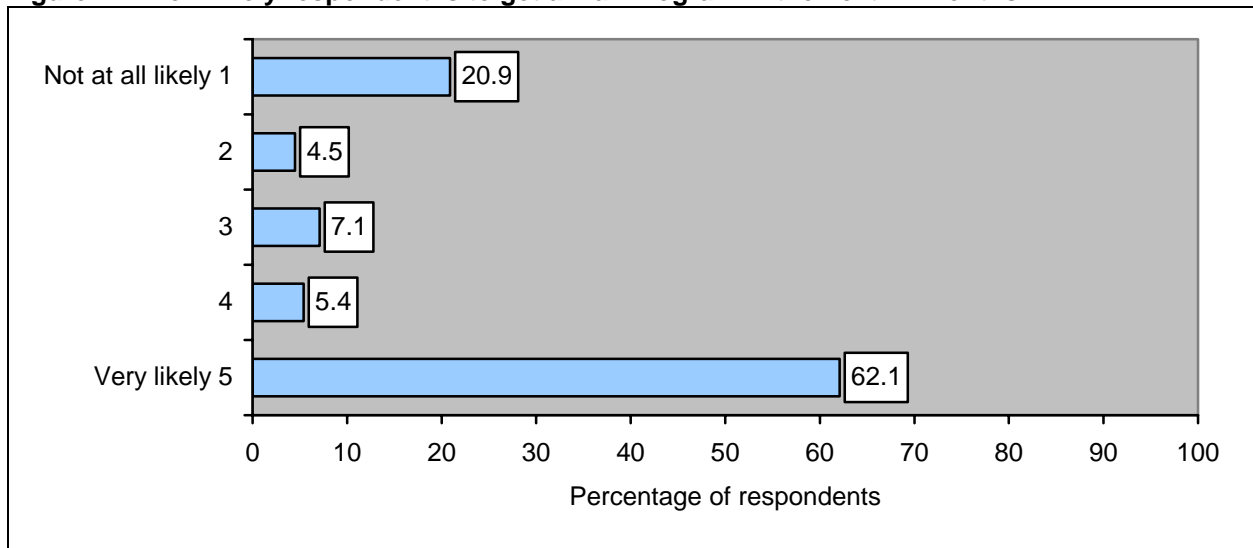
**Figure 10. Among respondents who have had a mammogram, when the most recent mammogram was**



N=620

- The majority of women were very likely to get a mammogram in the next 12 months (62.1 percent). However, one in five women was not at all likely to get a mammogram in the next year (20.9 percent) (see Figure 11, Appendix Table 15).
  - A much larger proportion of women who had not had a mammogram were not at all likely to get a mammogram in the next 12 months, 45.8 percent compared to 16.1 percent of women who had had a mammogram. Only 22.5 percent of women who had not had a mammogram were very likely to get one in the next 12 months, compared to 69.8 percent of women who had had a mammogram.
  - A larger proportion of women 50 years and older were very likely to get a mammogram in the next 12 months, 67.7 percent compared to 55.8 percent of women 40 to 49 years of age.
  - A much larger proportion of women who did not have health insurance were not at all likely to get a mammogram in the next year, 41.6 percent compared to 14.9 percent of women who had health insurance. The proportion of women with health insurance who were very likely to get a mammogram in the next year was twice that of women without health insurance (70.5 percent and 34.2 percent, respectively).
- On average, women were likely to get a mammogram in the next 12 months (mean=3.85).

**Figure 11. How likely respondent is to get a mammogram in the next 12 months**

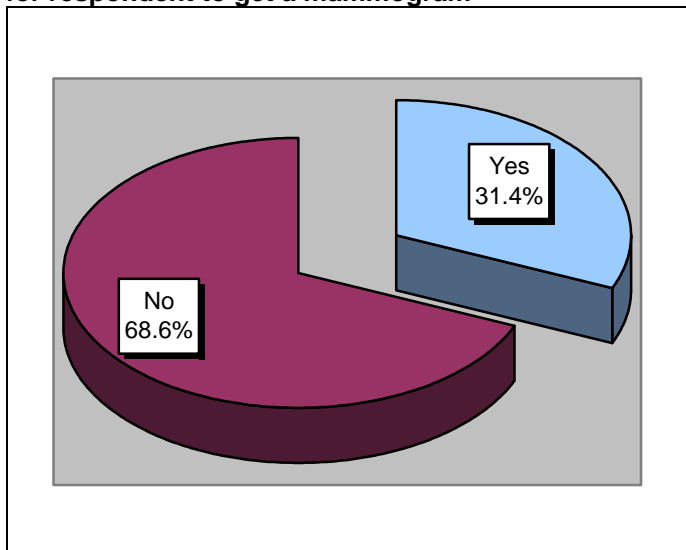


N=736



- Approximately one-third of women indicated that there was something that made it difficult for them to get a mammogram (31.4 percent) (see Figure 12, Appendix Table 16).
  - A much larger proportion of women who had not had a mammogram said there was something that made it difficult for them to get a mammogram, 51.7 percent compared to 27.5 percent of women who had had a mammogram.
  - A larger proportion of women 40 to 49 years of age said there was a barrier (37.9 percent) compared to women 50 years and older (26.8 percent).
  - A much larger proportion of women who did not have health insurance said there was something that made it difficult for them to get a mammogram, 61.7 percent compared to 22.9 percent with health insurance.

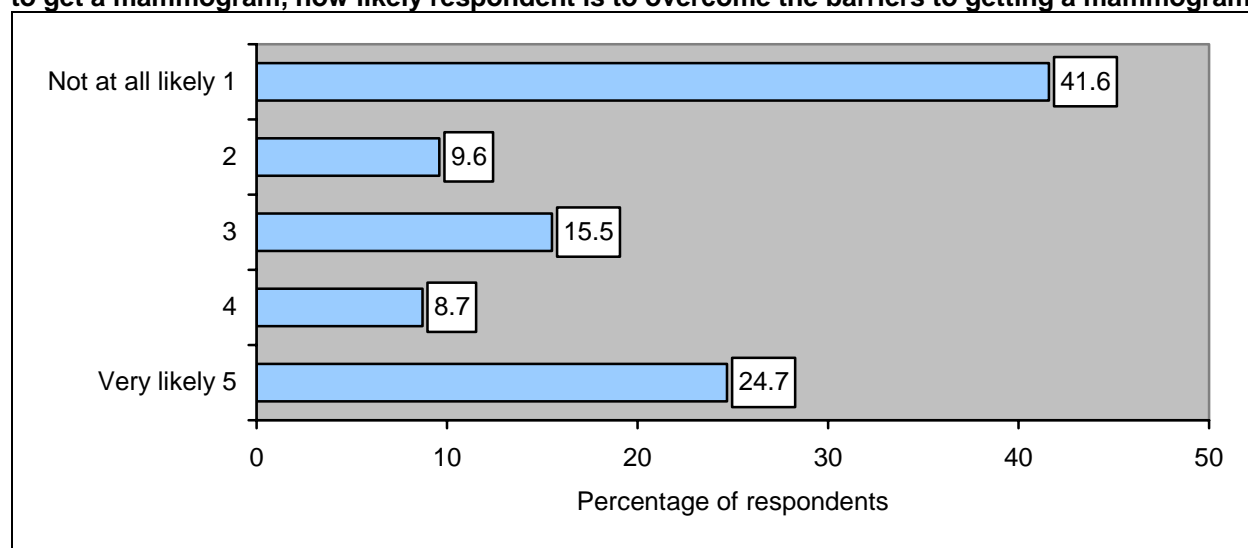
**Figure 12. Whether there is anything that makes it difficult for respondent to get a mammogram**



N=742

- The single largest response regarding what makes it difficult for the woman to get a mammogram was not having health insurance (20.5 percent). Financial factors were also important; 16.4 percent of responses related to money/finances and 15.3 percent of responses related to the cost/not being able to afford a mammogram. Other factors included not wanting to know if they have cancer, not liking the whole experience, being nervous/scared about getting a mammogram, that it hurts to get a mammogram, and that they are embarrassed/too private of a person. A few responses were from women who read there is no difference in survival rate and that mammograms are not safe. For some women, large breasts were an issue and for others, small breasts were an issue. Some responses revolved around not wanting to go to the doctor and having had bad experiences with doctors. Other responses had to do with scheduling problems, taking too long to get an appointment when they do call, being too busy, and not being able to get out of work. Having a disability, transportation issues, and also the distance to a place to get a mammogram were barriers for some women. Timing was an issue for some, including health insurance allowing mammograms only once every two years, or not knowing how often to get them (see Appendix Table 17).
- Among women who indicated there was a barrier, half said they were not likely to overcome the barrier (51.2 percent). However, one in four women said they were very likely to overcome the barrier to getting a mammogram (24.7 percent) (see Figure 13, Appendix Table 18).
  - A larger proportion of women who had had a mammogram were very likely to overcome the barriers to getting a mammogram, 29.0 percent compared to 12.3 percent of women who had not had a mammogram.
  - A somewhat larger proportion of women 50 years and older were not at all likely to overcome the barriers to getting a mammogram, 46.6 percent compared to 37.1 percent of women 40 to 49 years of age.
  - A larger proportion of women who did not have health insurance were not at all likely to overcome the barriers to getting a mammogram, 50.0 percent compared to 34.2 percent of women with health insurance.
- On average, women were somewhat unlikely to overcome barriers to getting a mammogram (mean=2.65).

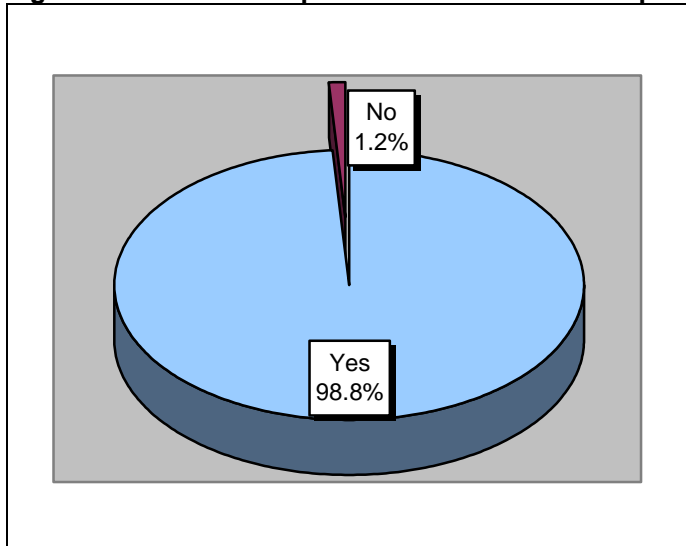
**Figure 13. Among respondents who indicated there is something that makes it difficult for them to get a mammogram, how likely respondent is to overcome the barriers to getting a mammogram**



N=219

- Nearly all the women had had a Pap test (98.8 percent) (see Figure 14, Appendix Table 19).
  - A slightly smaller proportion of women who had not had a mammogram had had a Pap test, 95.0 percent compared to 99.5 percent of women who had had a mammogram.
  - The proportion of women who had had a Pap test did not differ by age or whether she had health insurance.

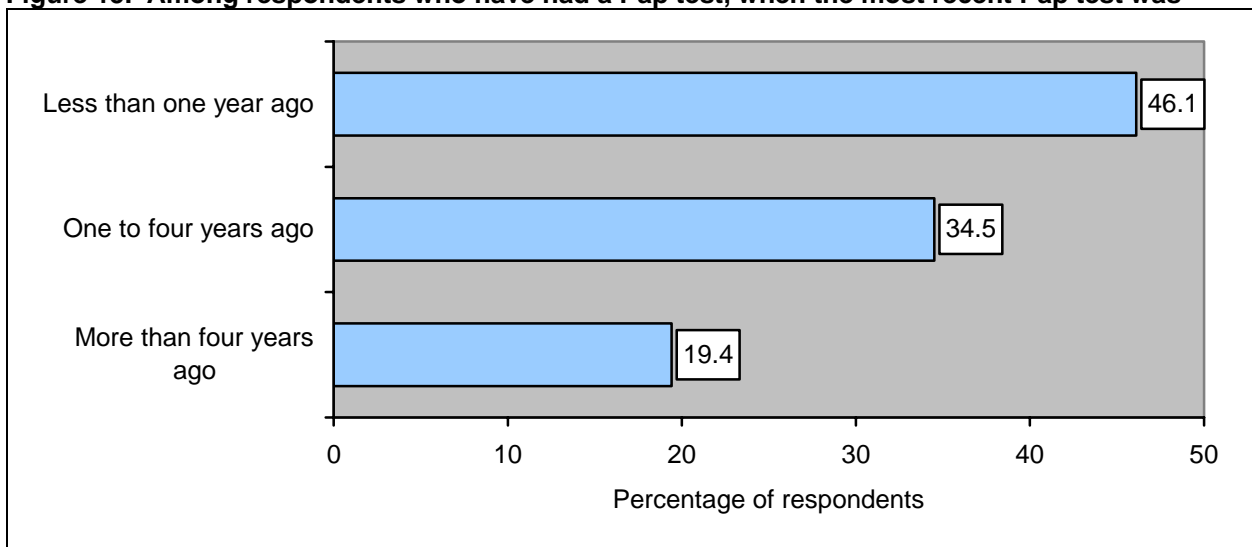
**Figure 14. Whether respondent has ever had a Pap test**



N=742

- Nearly half of the women had a Pap test in the last year (46.1 percent), one-third had a Pap test between one and four years ago (34.5 percent), and one-fifth had a Pap test more than four years ago (19.4 percent) (see Figure 15, Appendix Table 20).
  - A much larger proportion of women who had not had a mammogram had their most recent Pap test more than four years ago (48.2 percent) compared to women who had had a mammogram (14.1 percent).
  - A somewhat larger proportion of women 50 years and older had their most recent Pap test more than four years ago (23.5 percent) compared to women 40 to 49 years of age (14.5 percent).
  - A much larger proportion of women without health insurance had their most recent Pap test more than four years ago (42.7 percent) compared to women with health insurance (12.4 percent).

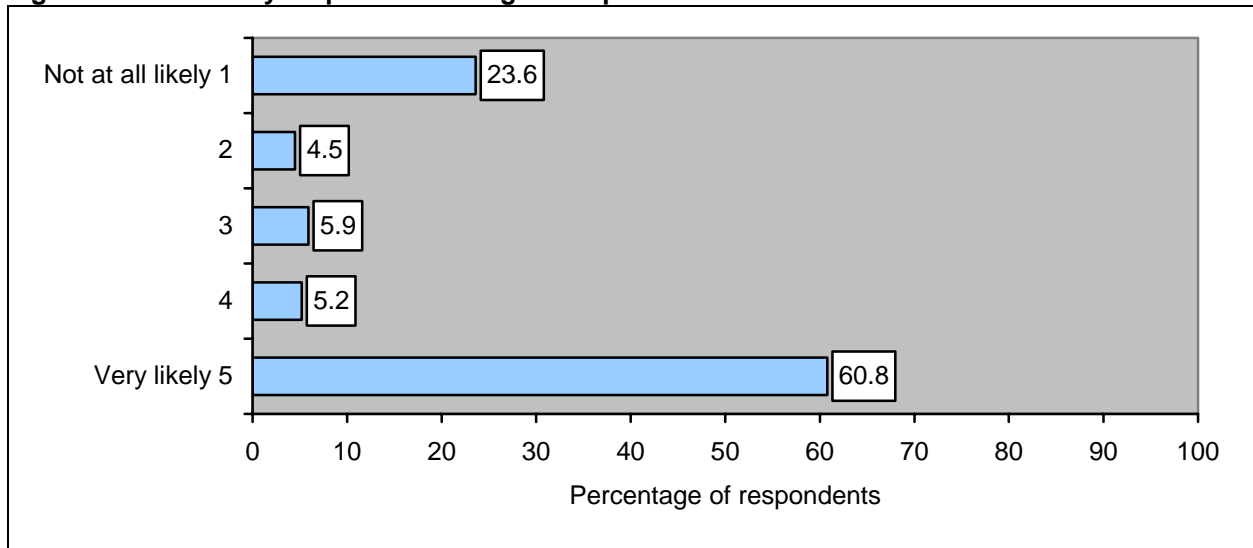
**Figure 15. Among respondents who have had a Pap test, when the most recent Pap test was**



N=727

- The majority of women were very likely to get a Pap test in the next 12 months (60.8 percent). However, nearly one-fourth of women were not at all likely (23.6 percent) (see Figure 16, Appendix Table 21).
  - A larger proportion of women who had not had a mammogram were not at all likely to get a Pap test in the next 12 months, 34.7 percent compared to 21.4 percent who had had a mammogram.
  - A larger proportion of women 50 years and older were not at all likely to get a Pap test in the next year, 27.9 percent compared to 18.4 percent of women 40 to 49 years of age.
  - A much larger proportion of women who did not have health insurance were not at all likely to get a Pap test in the next year, 45.7 percent compared to 16.8 percent who did have health insurance.
- On average, women were likely to get a Pap test in the next year (mean=3.75).

**Figure 16. How likely respondent is to get a Pap test in the next 12 months**

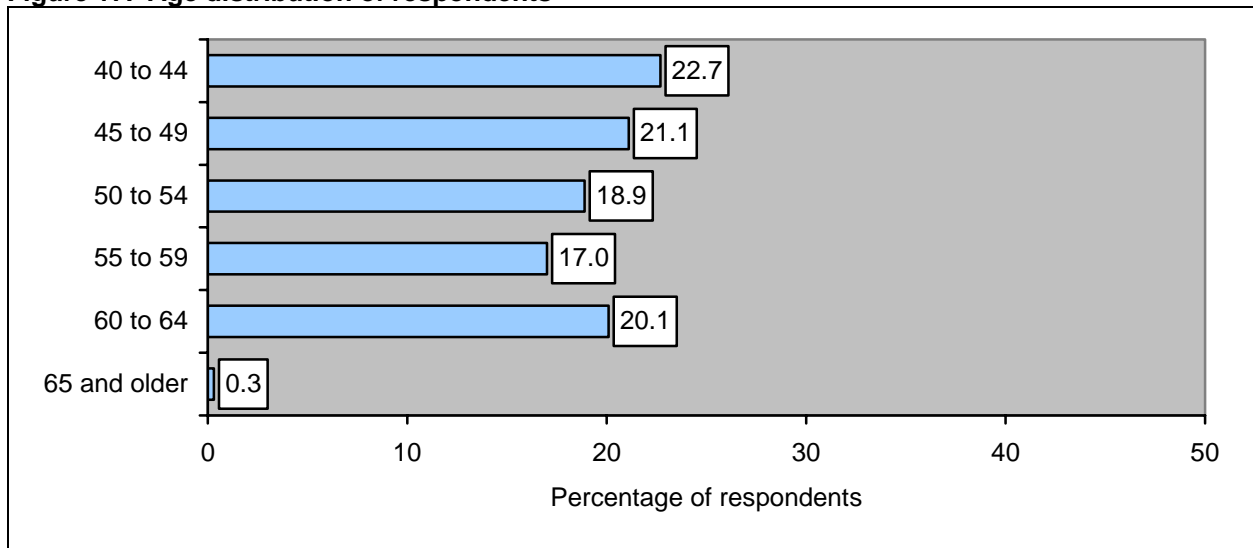


N=729

## Demographics

- The age distribution of women was fairly even (see Figure 17). The age distribution is relatively similar to the age distribution of the estimated number of potentially eligible women in North Dakota using PUMS data (see Table C on page 4).
- The average age of women who answered the survey was 52 years old.
- Women 40 to 49 years of age were a sizable proportion of all women, at 43.8 percent (Appendix Table 22).
  - A larger proportion of women who had not had a mammogram were 40 to 49 years of age (61.9 percent) compared to women who had had a mammogram (40.3 percent).
  - The age distribution did not differ by whether or not the women had health insurance.
- A very small proportion of women who answered the survey fall outside the intended audience age range of 40 to 64 years old. Although women were screened for age prior to beginning the baseline survey, if a woman refused to give her age but was willing to do the survey, she was allowed to. This age question was asked near the end of the survey.

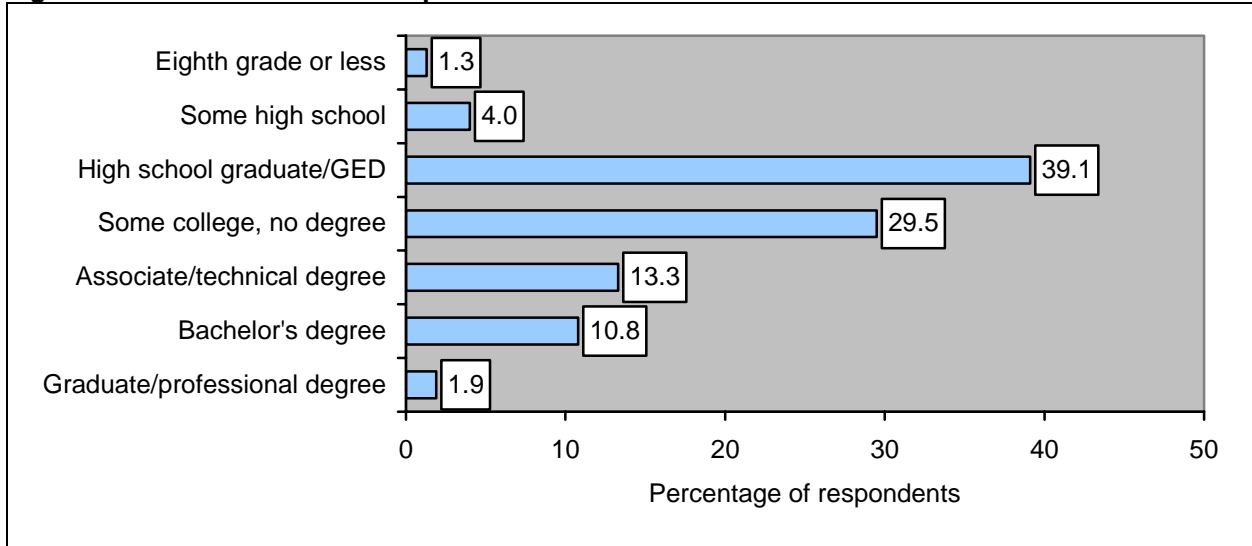
**Figure 17. Age distribution of respondents**



N=736

- The largest single proportion of respondents was women with a high school diploma (or general equivalency degree), at 39.1 percent. One-fourth of respondents had some kind of degree beyond high school, including associate/technical degrees (13.3 percent), bachelor's degrees (10.8 percent) and graduate/professional degrees (1.9 percent) (see Figure 18).

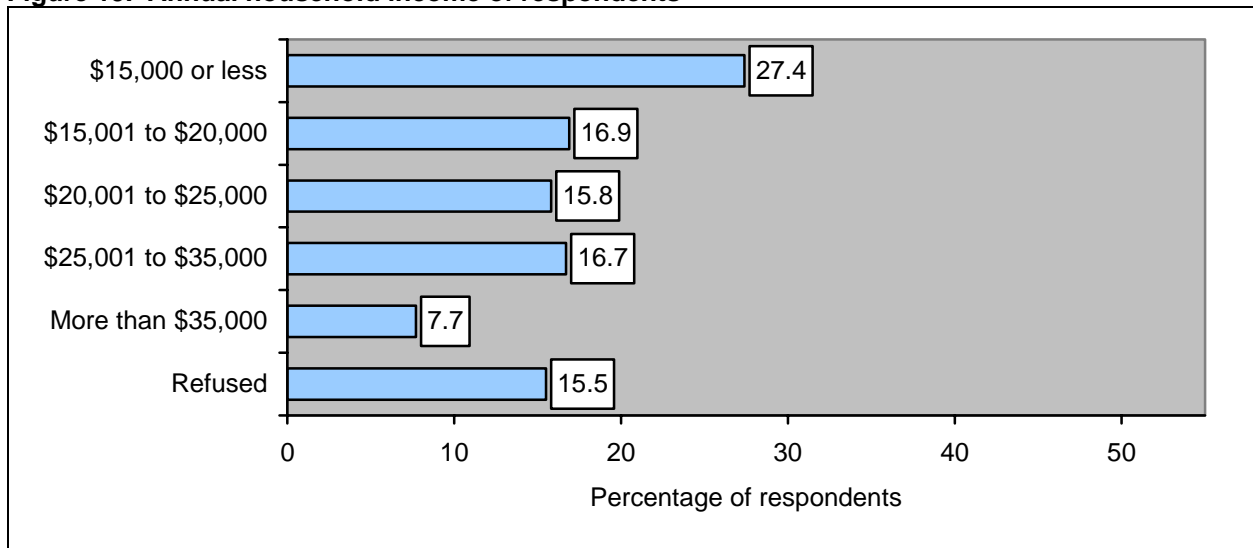
**Figure 18. Education level of respondents**



N=742

- While household size and income eligibility were screened at the beginning of each interview, the data were not saved. This question on annual household income was asked at the end of the survey along with the other demographic variables.
- More than one-fourth of women had an annual household income of \$15,000 or less (27.4 percent). A sizeable proportion of women preferred not to answer the income question (15.5 percent) (see Figure 19).
- The purchased list was supposed to be limited to women with household incomes of \$35,000 or less. However, we filtered participation based on eligibility for the program, which allowed for a small proportion of women to have incomes beyond \$35,000. A woman with a household size greater than three people could legitimately have a household income of more than \$35,000 and still be eligible for the program, and thus these women were allowed to participate in the baseline survey (see Table B on page 4).
- In addition, though women were screened according to household income prior to beginning the baseline survey, if a woman refused to give her household income during screening but was willing to do the survey, she was allowed to.

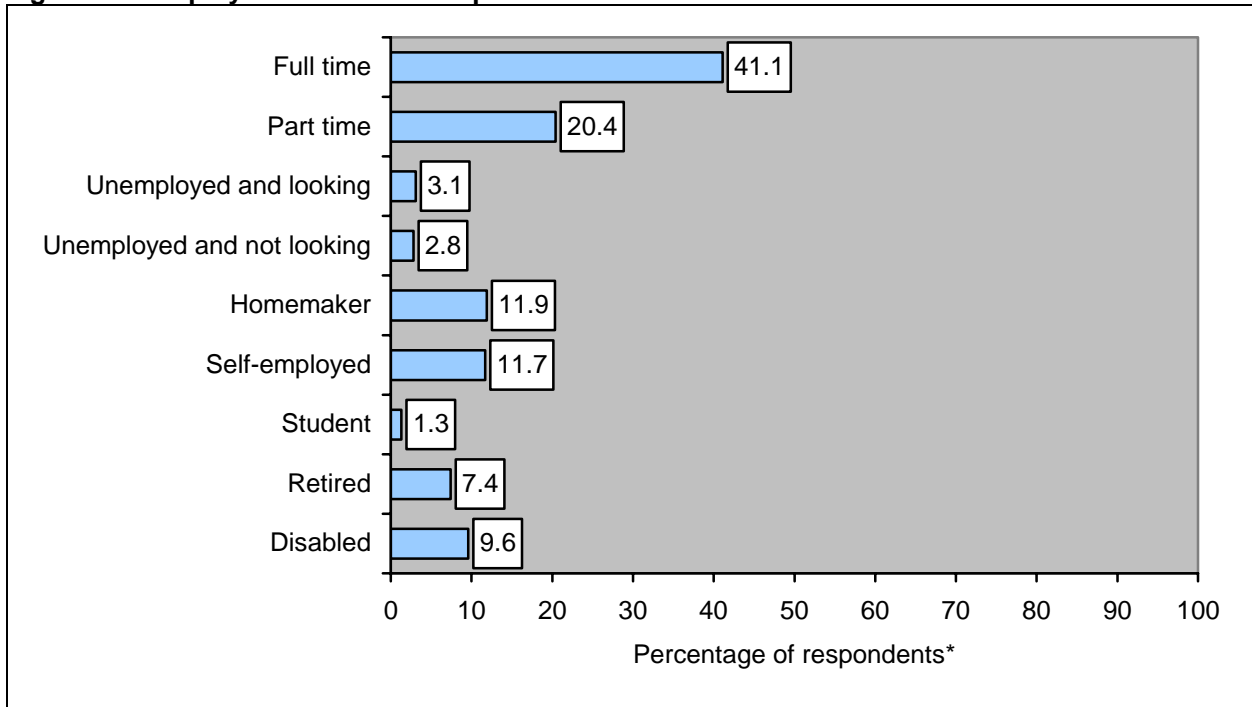
**Figure 19. Annual household income of respondents**



N=741

- Two in five women worked full time (41.1 percent); one in five women worked part time.
- Respondents were able to indicate more than one employment status, e.g., a retired person could also be disabled, and a student could also be a homemaker and working part time (see Figure 20).

**Figure 20. Employment status of respondents**

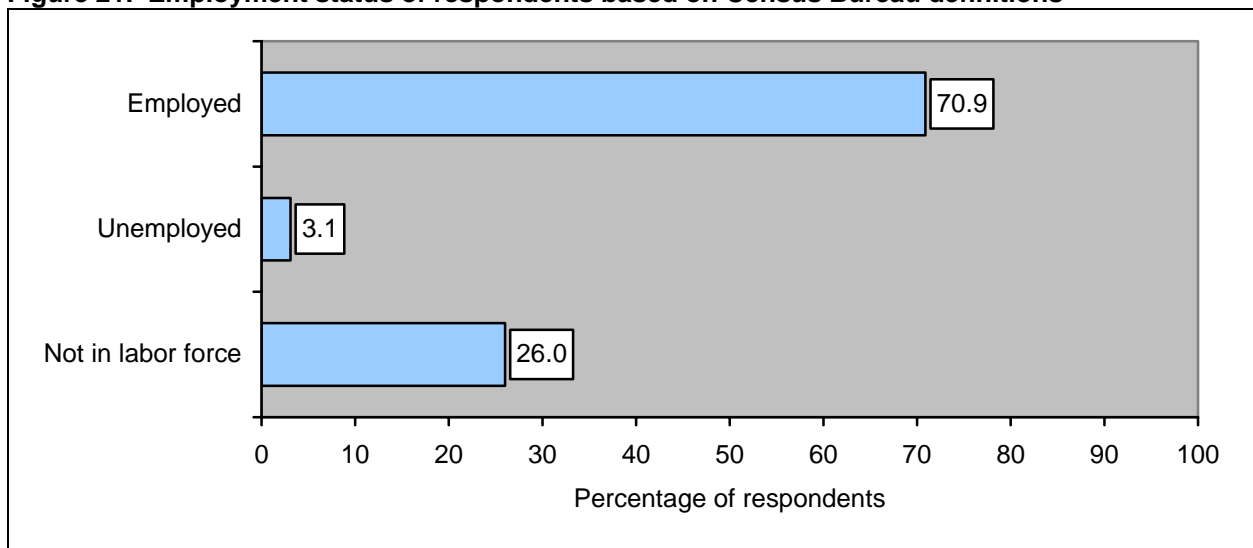


\*Percentages do not add to 100 because of multiple responses.  
N=742



- Based on Census Bureau definitions, “employed” includes women in the labor force (i.e., women who indicated full time, part time, and/or self-employed), “unemployed” includes women who were unemployed and actively looking for a job (i.e., women who indicated unemployed and looking), and “not in the labor force” includes women who were not employed and not actively looking for employment (i.e., women who indicated unemployed and not looking, homemaker, student, retired, and/or disabled). Because women could indicate more than one status, they were categorized according to whether they indicated employment (e.g., if a woman indicated she was a student and working part time, she was categorized as “employed”).
- The majority of women were employed (70.9 percent), 3.1 percent were unemployed, and one-fourth were considered not in the labor force (26.0 percent) (see Figure 21).

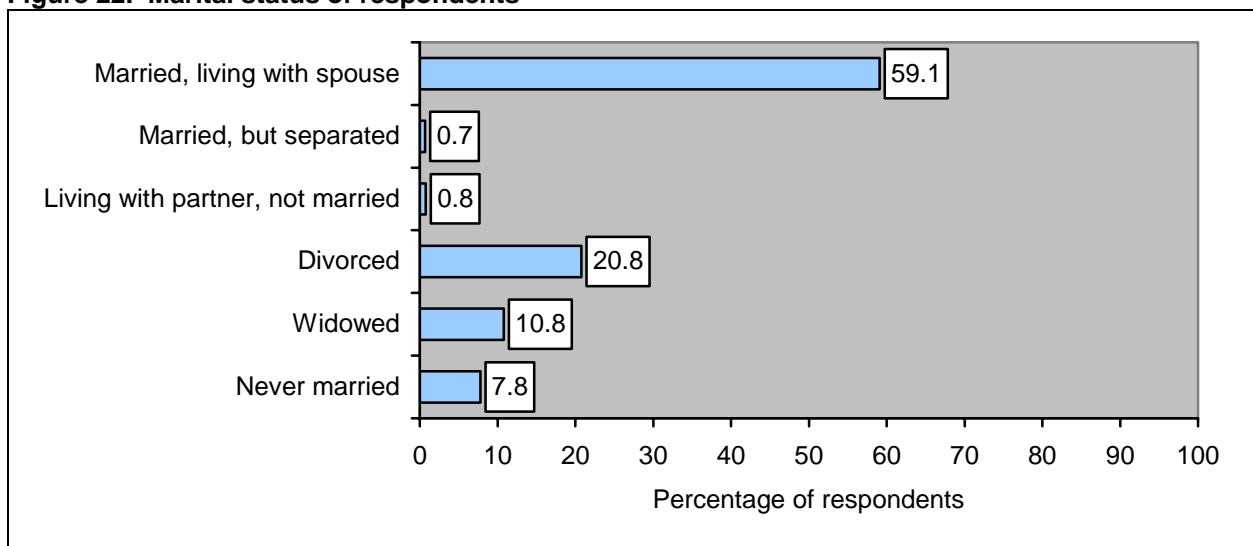
**Figure 21. Employment status of respondents based on Census Bureau definitions**



N=741

- More than half of women were married and lived with their spouse (59.1 percent). Another 20.8 percent were divorced, and 10.8 were widowed (see Figure 22).

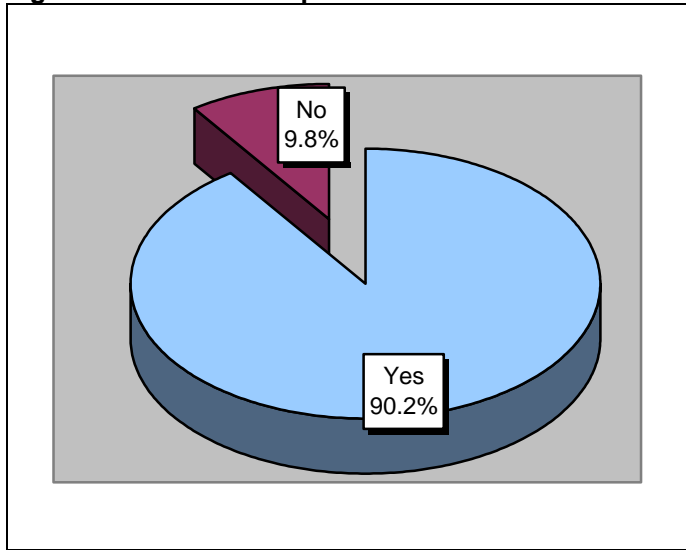
**Figure 22. Marital status of respondents**



N=740

- Nine out of 10 women had children (either biological, adopted, or through marriage) (see Figure 23).

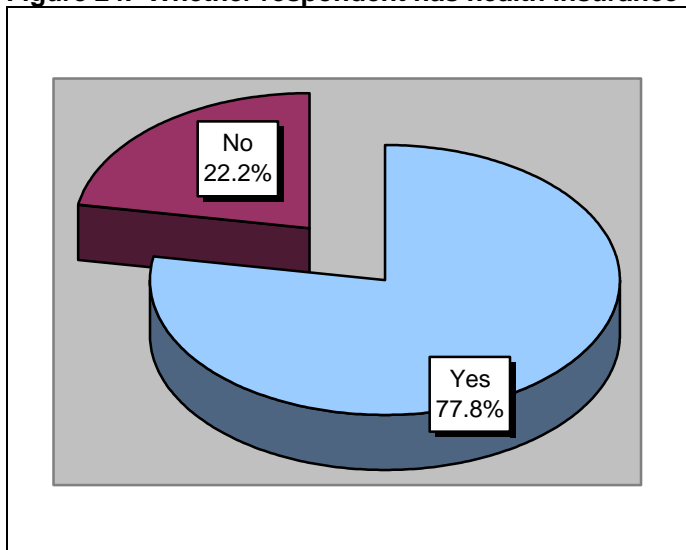
**Figure 23. Whether respondent has children**



N=742

- Three-fourths of women had health insurance, including Medicaid (77.8 percent) (see Figure 24, Appendix Table 23).
  - Among women who had had a mammogram, 81.8 percent had health insurance compared to 57.5 percent of women who had not had a mammogram.
  - The proportion of women with health insurance did not differ by age.

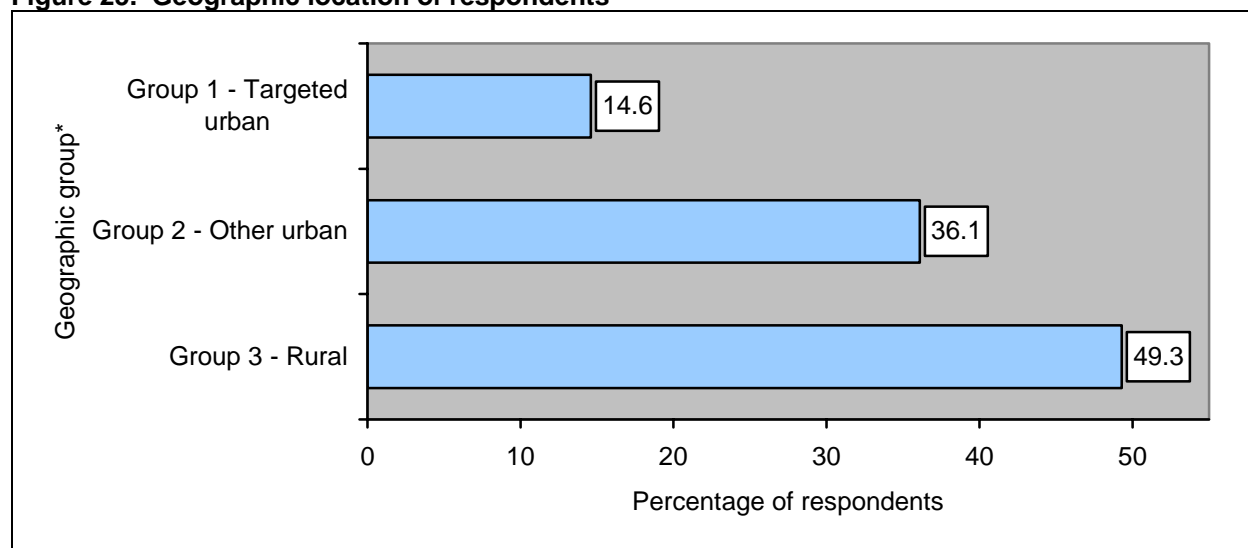
**Figure 24. Whether respondent has health insurance**



N=729

- Respondents were split nearly evenly between “urban” and “rural” geographic locations; 14.6 percent lived in the “targeted urban” areas in North Dakota (i.e., Bismarck, Fargo, Grand Forks, Mandan, Minot, and West Fargo), 36.1 percent lived in the “other urban” areas (i.e., Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, and Williston), and 49.3 percent lived in the “rural” areas (i.e., the remaining women) (see Figure 25).
- In most cases, the women’s responses did not differ according to their geographic location. However, a few differences did exist (see Appendix Table 24).
  - Women in the “targeted urban” group were somewhat more likely to indicate they were highly nervous about getting a mammogram (18.5 percent) compared to women in the “other urban” group (12.0 percent) and women in the “rural” group (13.2 percent).
  - Women in the “targeted urban” group were more likely to indicate they would overcome barriers to getting a mammogram (45.7 percent), followed by women in the “other urban” group (36.4 percent) and women in the “rural” group (27.1 percent).
  - A larger proportion of women in the “other urban” group were not in the labor force (32.1 percent) compared to women in the “targeted urban” group (21.3 percent) and women in the “rural” group (23.0 percent).
  - Women in the “targeted urban” group were more likely to not have health insurance (31.7 percent) compared to women in the “other urban” group (22.7 percent) and women in the “rural” group (19.1 percent).
- The geographic distribution of the sampling frame was skewed in that it included a larger proportion of women in “rural” locations and women in “other urban” locations than is found in the geographic distribution for North Dakota from Census 2000 (see Table M and discussion on page 27).
- Among baseline respondents, the proportion of women in “rural” locations became closer to the state’s distribution than was the case for the overall sampling frame. However, the distribution among urban locations became further skewed with even more women in the “other urban” group, reflecting the fact that half of the sample of women in “targeted urban” locations was split off to be used by the NDSU Department of Communication in a separate survey. Since the baseline survey used an independent “urban” sample and an independent “rural” sample, and there are large enough numbers, there is no concern in generalizing the results of the baseline data to the general intended audience in North Dakota.

**Figure 25. Geographic location of respondents**



\*Group 1 - “targeted urban”: women with addresses in Bismarck, Fargo, Grand Forks, Mandan, Minot, or West Fargo; Group 2 - “other urban” communities with populations greater than 2,500 in Census 2000: women with addresses in Beulah, Devils Lake, Dickinson, Grafton, Hazen, Jamestown, Rugby, Valley City, Wahpeton, or Williston; Group 3 - “rural”: the remaining women. N=742

## Discussion of Theoretical Framework

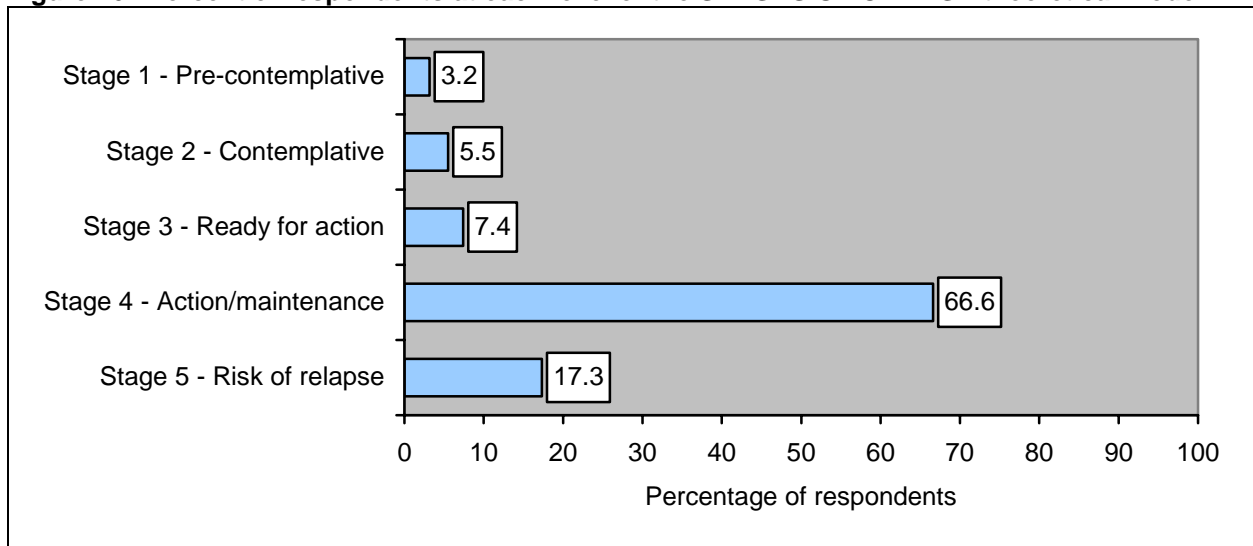
- Three different theoretical models were taken into consideration when questions for the baseline survey were developed. They were: 1) Stages of Change, 2) Self-Regulation, and 3) Reasoned Action.
- A brief summary of each of the models is offered along with the questions on the baseline survey (see Appendix C for baseline survey instrument) that were used to address the components of each model, and the distribution of women in the baseline survey according to each model.

### 1. Stages of Change

- This theoretical model sees behavior change as a process, not a single event. Women can be at different points in a continuum of stages, and as such, will benefit from and respond differently to different interventions.
- Stage 1 – Pre-contemplative: Women at this stage are generally unaware of the problem and have not thought about the need to change. They don't know what the recommended requirements are, they have never had a mammogram, and have no plans for getting one.
  - Baseline survey questions: don't know mammogram requirements (q3=no), and have not had a mammogram (q4=no), and are not likely to get a mammogram in the next year (q5b=1 or 2)
- Stage 2 – Contemplative: Women at this stage are thinking about change in the future. They know the recommended requirements, but have not had a mammogram and are not yet planning on getting one.
  - Baseline survey questions: know mammogram requirements (q3=yes), and have not had a mammogram (q4=no), and are not likely to get a mammogram in the next year (q5b=1 or 2)
- Stage 3 – Ready for action: Women at this stage have decided they need to make a change and are making a plan to change. Though they have not had a mammogram before, they have decided to get a mammogram.
  - Baseline survey questions: have not had a mammogram (q4=no), and are likely to get a mammogram in the next year (q5b=3, 4, or 5)
- Stage 4 – Action/maintenance: Women at this stage are implementing specific actions and continuing those actions. These are women who have gotten a mammogram and have plans for following a regular schedule.
  - Baseline survey questions: have had a mammogram (q4=yes), and are likely to get a mammogram in the next year (q5b=3, 4, or 5)
- Stage 5 – Relapse: Women who have relapsed have regressed to an earlier stage. They have had a mammogram in the past but are not currently planning to get another one.
  - Baseline survey questions: have had a mammogram (q4=yes), and are not likely to get a mammogram in the next year (q5b=1 or 2 or 6)

- Women overall were in the action/maintenance stage, meaning they had a mammogram and had plans for following a regular schedule (see Figure 26).
- Two-thirds of women were at the action/maintenance stage of change (66.6 percent). Approximately one in six women was at risk of relapse (17.3 percent). Smaller proportions of women were in the pre-contemplative stage (3.2 percent), contemplative stage (5.5 percent), and ready for action stage (7.4 percent) (see Figure 26, Appendix Table 25).
  - Women who had not had a mammogram were divided between the pre-contemplative (20.0 percent), contemplative (34.2 percent), and ready for action (45.8 percent) stages.
  - Compared to the overall proportion of women (17.3 percent), a larger proportion of women without health insurance (30.9 percent) were in the risk of relapse stage.

**Figure 26. Percent of respondents at each level of the STAGES OF CHANGE theoretical model**



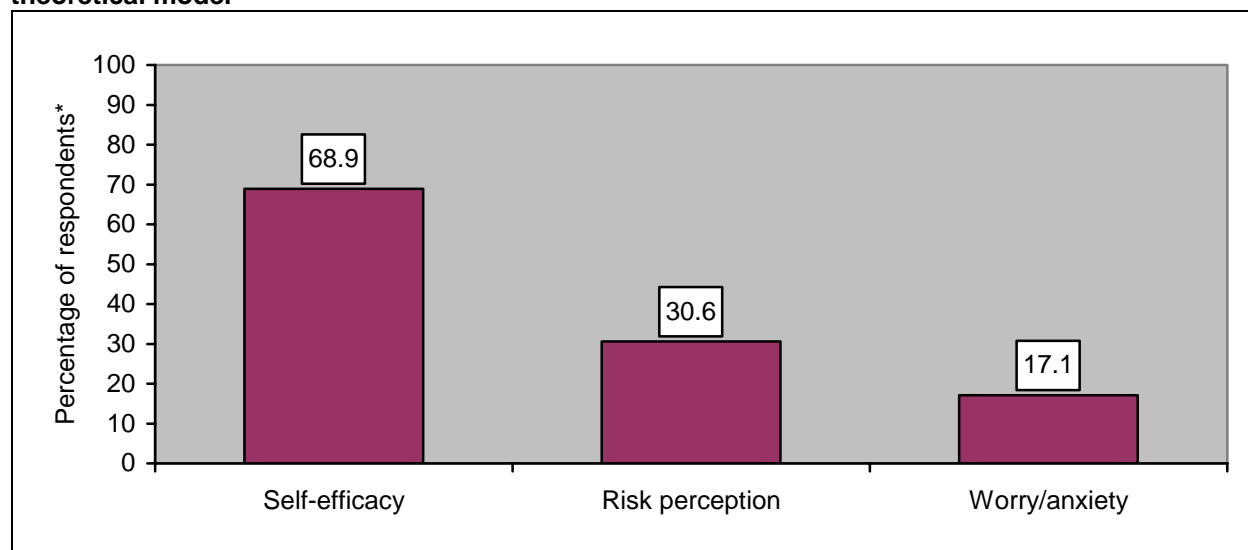
N=742

## 2. Self-Regulation

- This theoretical model says that in the context of a health threat, women will try to control the danger and attempt to control the negative feelings that result from the threat. These two reactions help lead to self-regulating behavior to protect their health.
- **Self-efficacy:** Self-efficacy is a woman's assessment of her own ability to succeed in achieving a desired end result. Women with high self-efficacy are confident that mammograms can detect cancer early, and that they can prevent dying from breast cancer. They believe that getting mammograms regularly will decrease the likelihood that they will die from breast cancer.
  - Baseline survey questions: have confidence in detection of cancer (q7=4 or 5), and have confidence in prevention of death (q8=4 or 5)
- **Risk perception:** Stronger risk perceptions are reflected positively in breast and cervical cancer screening behavior. The more at risk the woman feels she is of getting breast cancer and the more aware she is of the recommendations for being screened, the more likely she is to get a mammogram.
  - Baseline survey questions: have a background of cancer in the family (q1=yes), and know mammogram requirements (q3=yes)
- **Worry/anxiety:** Worry can bring about behavior to mitigate a health threat by making the woman more aware of the issue, helping to maintain the importance of the issue, and serving as a motivator to manage the negative feelings of worry. If the woman is highly worried about getting cancer, she is more likely to get a mammogram.
  - Baseline survey question: highly worried about cancer (q2=4 or 5)

- Women overall did have high self-efficacy, meaning they were confident that mammograms could detect cancer early and prevent dying from breast cancer. Women did not have very high levels of risk perception or worry/anxiety (see Figure 27).
- More than two-thirds of women showed high self-efficacy (68.9 percent). Approximately one-third showed high risk perception (30.6 percent), and fewer than one in five showed high worry/anxiety (17.1 percent) (see Figure 27, Appendix Table 26).
  - Compared to the overall proportion of women (68.9 percent), a smaller proportion of women who had not had a mammogram (55.8 percent) had a feeling of self-efficacy regarding mammograms.
  - Compared to the overall proportion of women (30.6 percent), a somewhat smaller proportion of women who had not had a mammogram (21.7 percent) had high levels of risk perception.
  - Compared to the overall proportion of women (17.1 percent), a somewhat smaller proportion of women who had not had a mammogram (8.3 percent) had a feeling of worry/anxiety regarding mammograms.

**Figure 27. Percent of respondents experiencing a component of the SELF-REGULATION theoretical model**



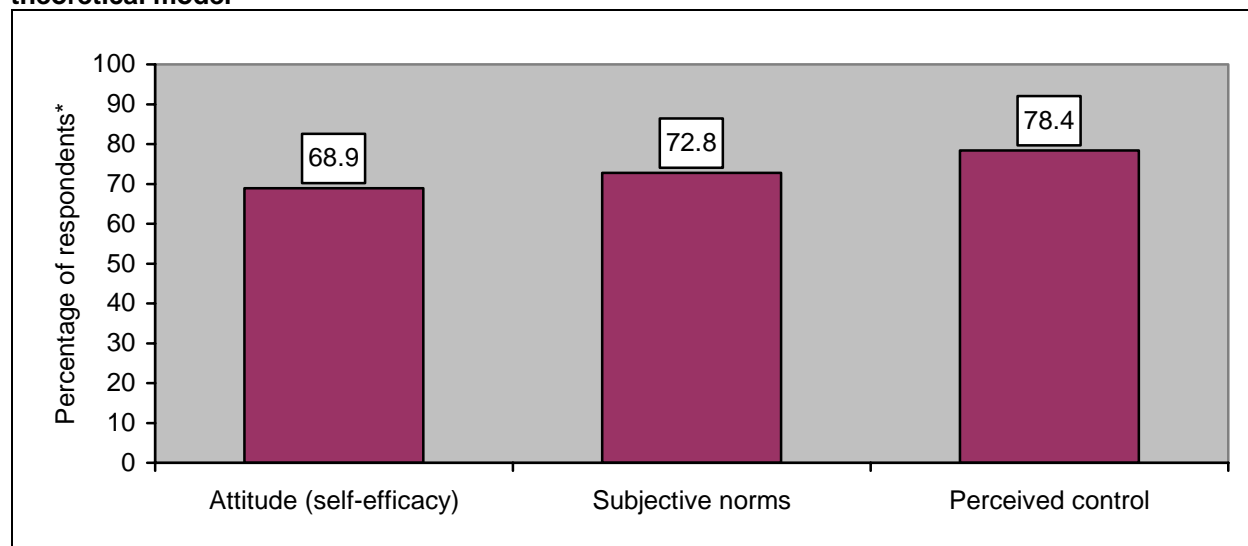
\*Percentages do not add to 100 because the figure reflects multiple variables.  
N=742

### 3. Reasoned Action

- This theoretical model sees behavior intent as the predictor of actual behavior. The intent to do something is a combination of the attitude about doing that action and the influence of subjective norms. The stronger the intention to perform the behavior, the more successful the woman is expected to be in actually doing the action. Perceived control is an underlying concept of this model
- Attitude: This is a woman's evaluation of a behavior. If a woman believes that the outcome from the behavior is going to be positive, she will have a positive attitude about performing that behavior. Like self-efficacy (in the Self-Regulation model above), a woman with a positive attitude about getting a mammogram is confident that a mammogram can detect cancer early and prevent dying from breast cancer.
  - Baseline survey questions (this was measured the same as "self-efficacy" in the Self-Regulation model above): have confidence in detection of cancer (q7=4 or 5), and have confidence in prevention of death (q8=4 or 5)

- **Subjective norms:** These reflect the influence of social pressures as perceived by the woman. If other people see performing a behavior as positive and the woman is motivated to meet their expectations, then a positive subjective norm exists. If a woman thinks that others who are important to her think she should perform a behavior, she is more likely to intend to do so.
    - Baseline survey questions: are influenced by *friends/family* (q9a=4 or 5), or *health care providers* (q9b=4 or 5), or *information from the media* (q9c=4 or 5)
  - **Perceived control:** The woman's perceived control, or her perception of how successfully she can perform the activity in question, reflects her behavioral intention. Women who do not see themselves as having barriers to getting a mammogram, or who do have barriers but are likely to overcome them, have a high level of perceived control. Even if she has a positive attitude about the behavior and believes that important others in her life would approve of doing the behavior, if the woman does not believe she has the resources or opportunity to do the behavior, she is unlikely to intend to do so. Therefore, when a woman sees her behavior as not being fully under her control, a modified version of the Theory of Reasoned Action, called the Theory of Planned Behavior, would be applied.
    - Baseline survey questions: do not have barriers to getting a mammogram (q6=no), or do have barriers to getting a mammogram (q6=yes) and are likely to overcome the barriers (q6b=4 or 5)
- Women overall had a positive attitude, seeing mammograms as effective in the goal of preventing cancer. Women overall were also influenced by at least one of the subjective norms, and had a strong sense of perceived control in being able to get a mammogram if they wanted one (see Figure 28).
  - Subjective norms were an important factor for 72.8 percent of women, and positive attitudes were an important factor for 68.9 percent (see Figure 28, Appendix Table 27). The majority of women had a sense of perceived control (78.4 percent).
    - Compared to the overall proportion of women (68.9 percent), a smaller proportion of women who had not had a mammogram (55.8 percent) had a positive attitude (self-efficacy) regarding mammograms.
    - Compared to the proportion of women who had not had a mammogram (63.3 percent) and women without health insurance (64.8 percent), a larger proportion of women younger than age 50 were influenced by subjective norms (78.9 percent).
    - Compared to the overall proportion of women (78.4 percent), a smaller proportion of women who had not had a mammogram (56.7 percent) and a much smaller proportion of women without health insurance (48.1 percent) had a sense of perceived control.

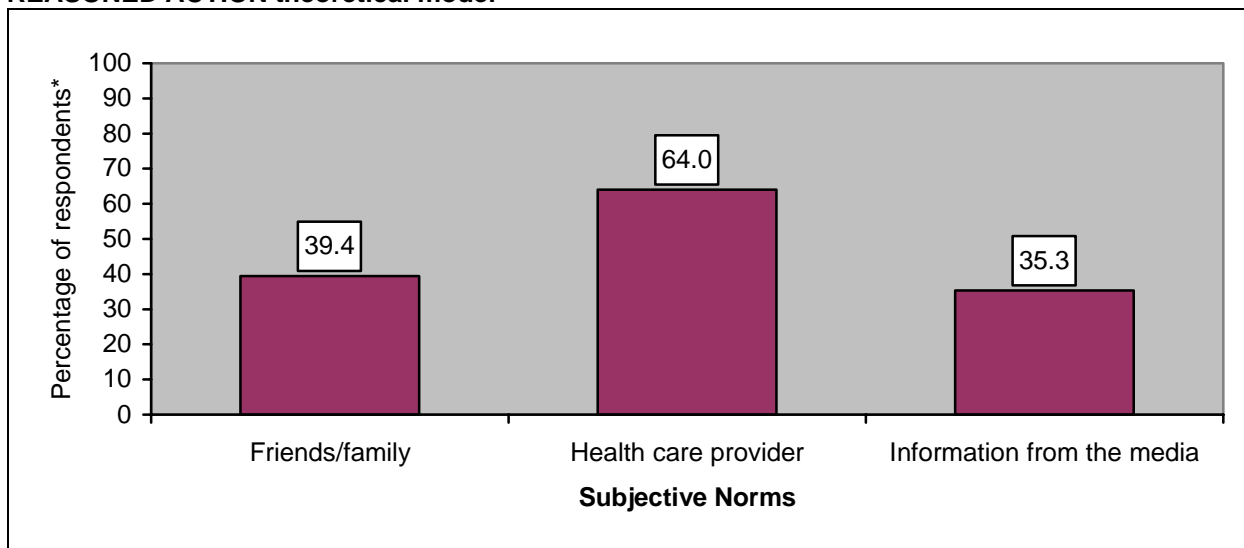
**Figure 28. Percent of respondents experiencing a component of the REASONED ACTION theoretical model**



\*Percentages do not add to 100 because the figure reflects multiple variables.  
N=742

- Examining subjective norms in more detail, women’s decisions about getting a mammogram were influenced by health care providers, and to a lesser extent friends/family and information from the media (see Figure 29).
- Nearly three-fourths of women were influenced in their decisions regarding mammograms by at least one of the three subjective norms measured in the baseline survey (72.8 percent). Health care providers were the most influential subjective norm (64.0 percent). The importance of this subjective norm on women’s decisions underscores the significance of a lack of clear, consistent recommendations from the health care community regarding mammogram screenings. Friends/family (39.4 percent) and information from the media (35.3 percent) were each influential for more than one-third of women (see Figure 29, Appendix Table 28).
  - There was not a big difference in the influence of friends/family as a subjective norm for women who had not had a mammogram, who were younger than age 50, or who did not have health insurance.
  - Compared to the proportion of women who were younger than age 50 (69.9 percent) and to the overall proportion of women (64.0 percent), a smaller proportion of women who had not had a mammogram (49.2 percent) and women without health insurance (55.6 percent) were influenced by health care providers.
  - There was not a big difference in the influence of information from the media as a subjective norm for women who had not had a mammogram, who were younger than age 50, or who did not have health insurance.

**Figure 29. Percent of respondents experiencing each of the subjective norms from the REASONED ACTION theoretical model**



\*Percentages do not add to 100 because the figure reflects multiple variables.  
N=742



*Section 5:*  
*DETAILED EVALUATION*  
*SURVEY RESULTS*

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## Overview of Evaluation Survey

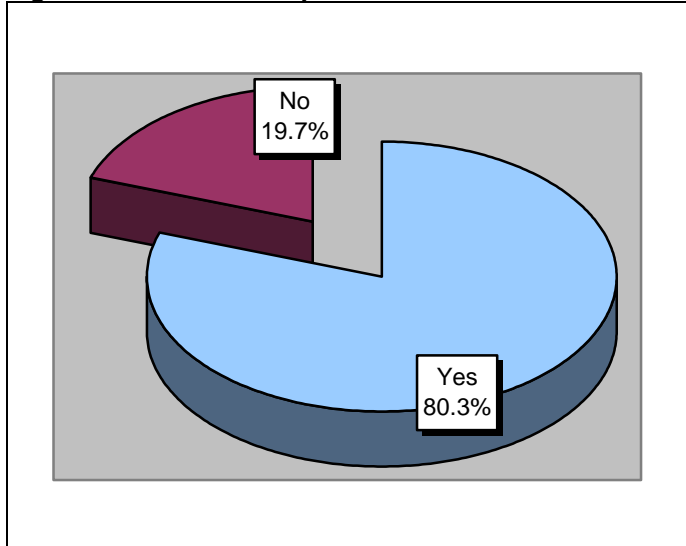
- The evaluation survey was conducted after the direct mail campaign, and was part of efforts to evaluate the effectiveness of direct mail in recruiting women into *Women's Way*. Women who completed the baseline survey were called approximately five months after being sent a card.
- The survey was conducted in October of 2004. There were a total of 457 completed evaluation surveys.
- Women called to participate in this survey were asked for by the name provided on the sampling frame. This process differed from the baseline survey because, at that time, a woman who fit the age and household income criteria was asked to participate in the survey but was not asked for by name.
- Women were asked their recall of *Women's Way* and the direct mail campaign, and asked questions about the card they received. They were also asked their reasons for calling, or not calling, to learn about becoming enrolled in *Women's Way*.
- Several open-ended questions were asked on the baseline and evaluation surveys, and the women's responses needed to be coded for purposes of analysis. Thematic coding entails finding and grouping similar responses to create a list of a limited number of themes. The unit of analysis is the response when dealing with open-ended questions, because one woman could provide a response which includes multiple themes.
- Where applicable for evaluation survey questions, the responses are grouped according to which card the woman received. Analysis for open-ended questions is reported in the narrative where appropriate. Appendix B has Appendix Tables that present more detailed data. Appendix D has the survey instrument. Images of the cards used in the direct mail campaign can be seen in Appendix E.

## Recall of *Women's Way*

- The women who completed the baseline survey became the sampling frame for the evaluation survey, with the exception of 96 baseline respondents who did not receive the card because of incorrect addresses.
- In the baseline survey, respondents were told that the sponsor of the survey was the North Dakota State Health Department's Division of Cancer Prevention and Control, rather than *Women's Way*. This was done primarily to avoid influencing the women's natural likelihood later of responding to the direct mail campaign when it was conducted. Toward the end of the baseline survey, respondents were asked if they had "heard of a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota." If the woman said she had, she was asked to identify the name of the program. However, her answer was not confirmed and, if she had not heard of the program, she was not told what the name of the program was.
- For the evaluation survey, we wanted to determine the proportion of women who recognized the name *Women's Way*.

- More than three-fourths of women answering the evaluation survey had heard of *Women's Way* (80.3 percent) (see Figure 30, Appendix Table 29).
  - A larger proportion of women who received Card 1, the "Anderson" card, said they had heard of *Women's Way* (86.3 percent) compared to Card 2, the "Little Voice" card, and Card 3, the "Poster" card (79.4 percent and 75.0 percent, respectively).

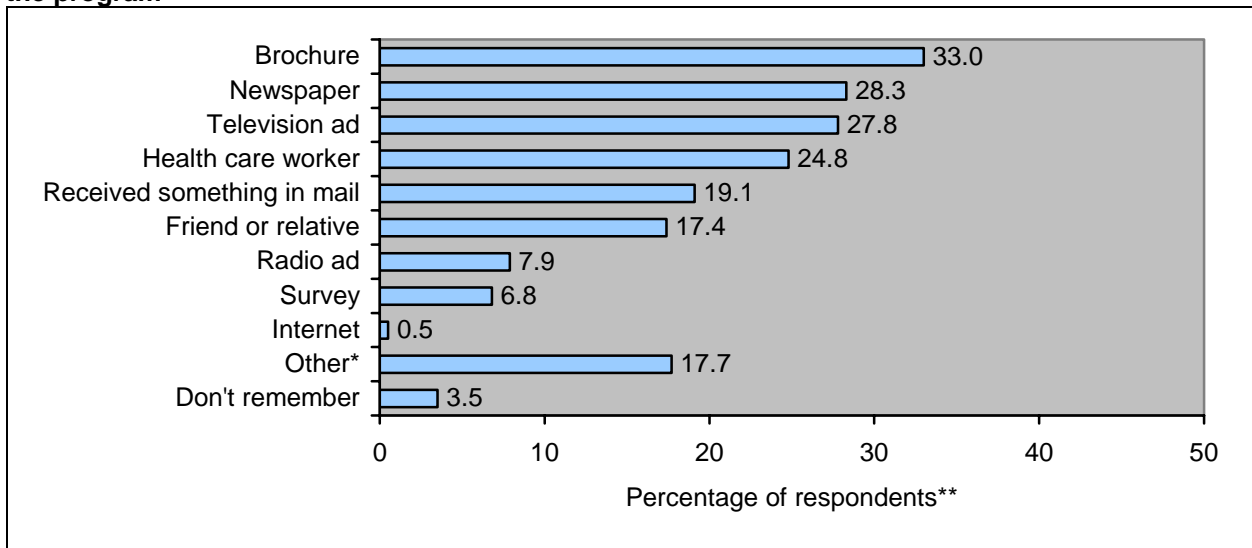
**Figure 30. Whether respondent has ever heard of *Women's Way***



N=457

- Brochures were the most common way that women heard of *Women's Way* (33.0 percent). Newspapers (28.3 percent), television ads (27.8 percent), and health care workers (24.8 percent) were the next most common ways. Approximately one-fifth heard of *Women's Way* through something they received in the mail (19.1 percent) and 6.8 percent heard of *Women's Way* through a survey (see Figure 31).
- Women heard of *Women's Way* through a variety of other channels. At work, at a clinic or doctor's office, posters, booths, and through the mail were some of the other responses regarding how women heard of *Women's Way*. Some women knew of the program because they were employed in a health field, others had involvement with *Women's Way* as a volunteer or former enrollee, and others knew someone who had used the program. Women also heard about *Women's Way* at church, rummage sales, bar bathrooms, and 4H (see Appendix Table 30).

**Figure 31. Among respondents who have heard of *Women's Way*, how respondent has heard of the program**



\*See Appendix Table 30 for "other" responses.

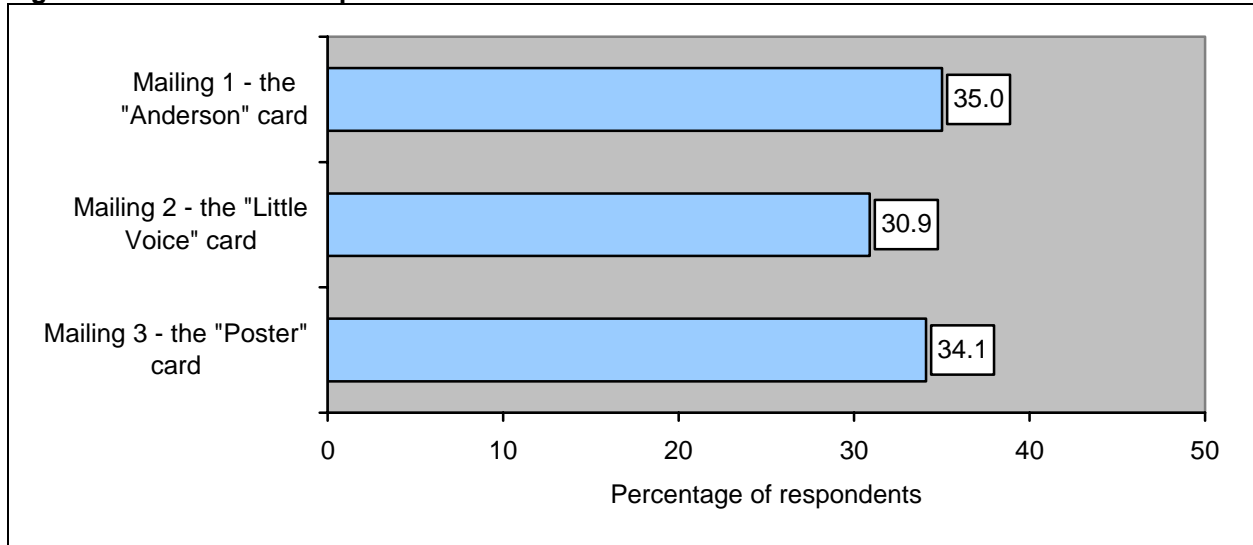
\*\*Percentages do not add to 100 because of multiple responses.

N=367

## Recall of the Direct Mail Campaign

- Each evaluation survey respondent was sent a card, and which card they were sent was documented. Women whose cards had been returned in the mail were not included in the evaluation sampling frame. The distribution of respondents was fairly even according to which of the three cards they were sent: 35.0 percent were sent Card 1, the “Anderson” card; 30.9 percent were sent Card 2, the “Little Voice” card; and 34.1 percent were sent Card 3, the “Poster” card (see Figure 32).

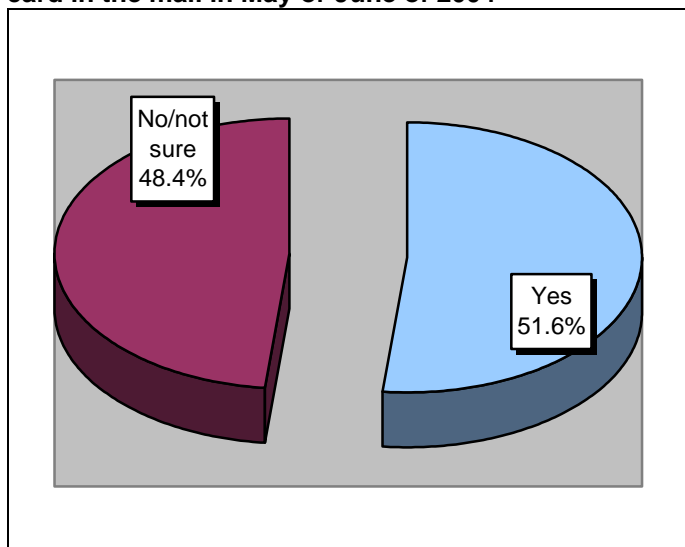
**Figure 32. Which card respondent was sent**



N=457

- While all the women who participated in the evaluation survey had been sent a card in the mail in May or June of 2004, just over half of the women remembered receiving a card in the mail in May or June of 2004 (51.6 percent) (see Figure 33, Appendix Table 31).
  - More than half of the women who were sent Card 1, the “Anderson” card, remembered receiving it (56.9 percent), and more than half of the women who were sent Card 3, the “Poster” card, remembered receiving it (51.9 percent). Less than half of the women who were sent Card 2, the “Little Voice” card, remembered receiving it (45.4 percent).

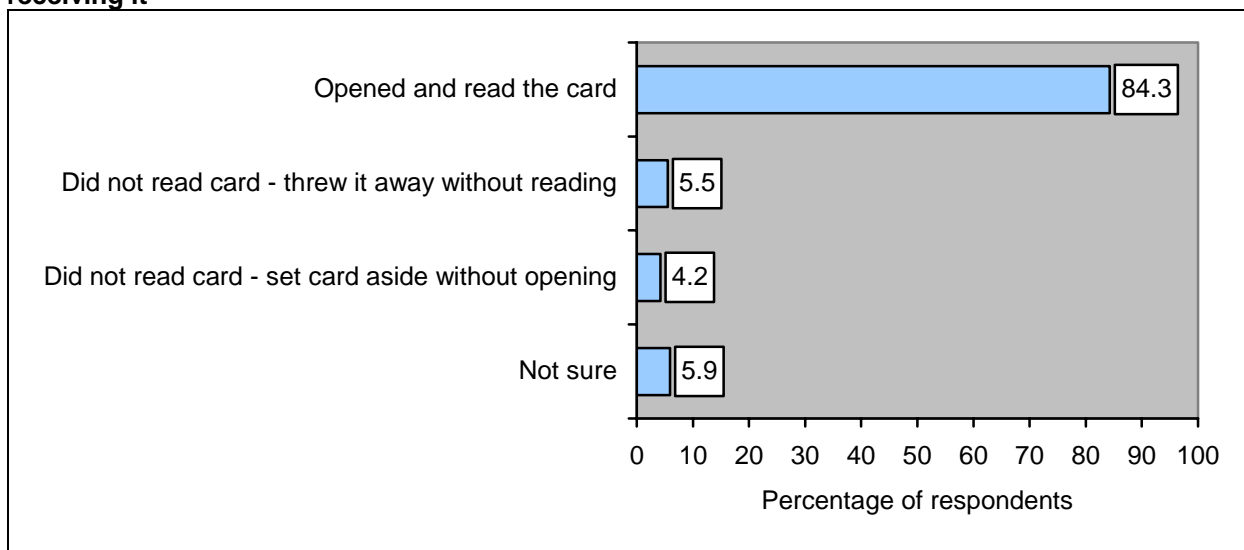
**Figure 33. Whether respondent remembers receiving a card in the mail in May or June of 2004**



N=457

- Among women who remembered receiving a card, a large majority opened and read the card (84.3 percent). Regarding those who did not open and read the card, approximately half threw it away (5.5 percent) and the other half set the card aside without opening it (4.2 percent) (see Figure 34, Appendix Table 32).
  - With respect to Card 1, the “Anderson” card, 78.0 percent opened and read the card; with respect to Card 2, the “Little Voice” card, 89.1 percent opened and read the card; with respect to Card 3, the “Poster” card, 87.7 percent opened and read the card.
- When asked what prompted the woman to read the card, the most common response was that she always reads her mail (19.2 percent). Because she recognized the name of the program (14.1 percent), not remembering what prompted her to read the card (13.6 percent), and curiosity (10.8 percent) were other common responses. Other responses regarding what prompted the woman to read the card included because it was addressed to her, because it was for women or about women’s tests, because she knew she was due for a mammogram, because she has friends or family who have had cancer, because it said something about free services, because of the logo, because she had cancer, because she wanted to know if she was eligible, and because she was expecting the card (see Appendix Table 33).
  - There were slightly fewer responses from women who received Card 2, the “Little Voice” card, compared to Card 1, the “Anderson” card, and Card 3, the “Poster” card. The total distribution of responses, as well as the distribution according to which card the respondent received, can be found in Appendix Table 33.

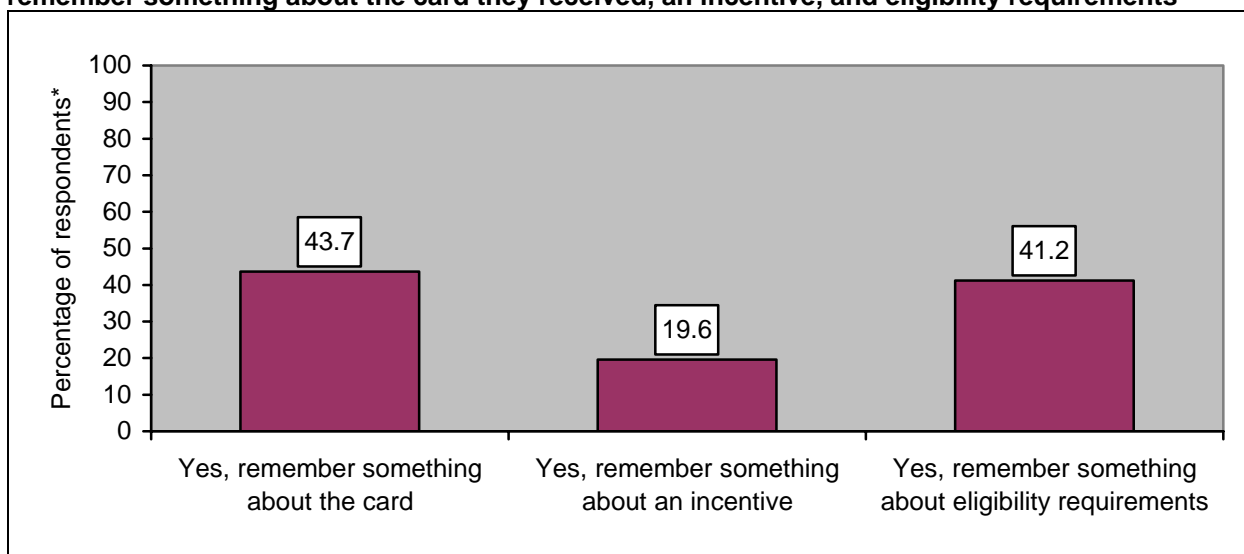
**Figure 34. Among respondents who remember receiving a card, what they did with the card after receiving it**



N=236

- Approximately two in five women said they remembered something about the card (43.7 percent) and a similar proportion said they remembered something about the eligibility requirements (41.2 percent). Half that proportion, one in five, remembered something about an incentive (19.6 percent) (see Figure 35, Appendix Tables 34-36).
  - With respect to Card 1, the “Anderson” card: 38.0 percent remembered something about the card, 19.7 percent remembered something about an incentive, and 39.4 percent remembered something about eligibility requirements.
  - With respect to Card 2, the “Little Voice” card: 54.4 percent remembered something about the card, 28.1 percent remembered something about an incentive, and 40.4 percent remembered something about eligibility requirements. Women who received the “Little Voice” card had the highest proportion who remembered something about the card and also the highest proportion who remembered something about an incentive.
  - With respect to Card 3, the “Poster” card: 40.8 percent remembered something about the card, 12.7 percent remembered something about an incentive, and 43.7 percent remembered something about eligibility requirements. Women who received the “Poster” card had the highest proportion who remembered something about eligibility requirements.

**Figure 35. Among respondents who remember receiving a card and read it, proportions who remember something about the card they received, an incentive, and eligibility requirements**



\*Percentages do not add to 100 because the figure reflects multiple variables.  
N=199 each

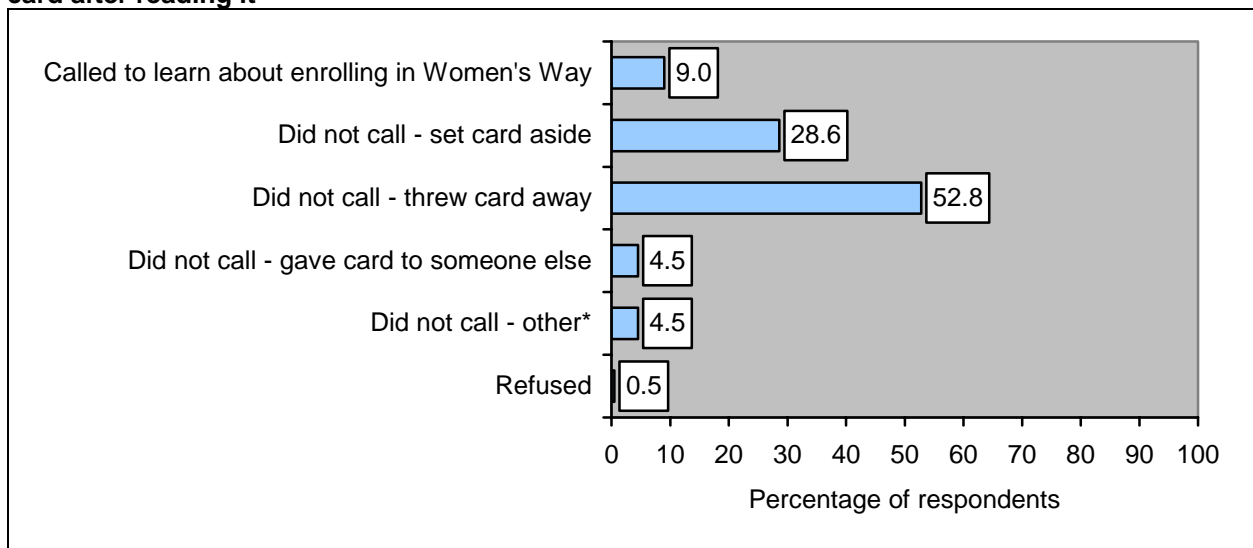
- When asked what the woman remembered about the card, the most common responses were that it was pink (18.6 percent) and the *Women’s Way* logo (17.8 percent). Other common responses regarding what they remembered included that it talked about help with mammograms (such as being free, low cost, reduced price) (11.6 percent) and design elements of the card (such as being well done, easy to read, attractive) (10.9 percent). Other responses included that it was about women and women’s tests, that it talked about the goal of the program and why mammograms were important, that it mentioned guidelines for qualifying (such as low income or not having health insurance), that it gave a phone number to call to contact *Women’s Way*, that there was a picture of a family, and the large size of the card (see Appendix Table 37).
  - More women mentioned the guidelines for qualifying and the picture of a family for Card 1, the “Anderson” card. More women mentioned the phone number to call and the *Women’s Way* logo for Card 2, the “Little Voice” card. More women mentioned the design of the card for Card 3, the “Poster” card. The total distribution of responses, as well as the distribution according to which card the respondent received, can be found in Appendix Table 37.

- When asked what the woman remembered specifically about an incentive, the most common responses were money or \$10 (46.2 percent) and help with a mammogram or Pap test if eligible (35.9 percent). Other responses included a discount (such as \$10 off), a \$10 gift certificate, money if the woman referred someone else, a \$10 refund or rebate, and something personal or cosmetic (see Appendix Table 38).
  - There were somewhat fewer responses from women who received Card 3, the “Poster” card, compared to Card 1, the “Anderson” card, and Card 2, the “Little Voice” card. The total distribution of responses, as well as the distribution according to which card the respondent received, can be found in Appendix Table 38.
  
- When asked what the woman remembered specifically about the eligibility requirements, the most common response by far was that you had to be of a certain (e.g., low) income (45.9 percent). Age (19.7 percent) and not having health insurance (18.0 percent) were the next two most common responses. Other responses regarding eligibility requirements included being a woman, being high risk, not being able to afford it, and not having health insurance coverage of mammograms (see Appendix Table 39).
  - There were somewhat fewer responses from women who received Card 2, the “Little Voice” card, compared to Card 1, the “Anderson” card, and Card 3, the “Poster” card. The total distribution of responses, as well as the distribution according to which card the respondent received, can be found in Appendix Table 39.



- Among the women who remembered receiving a card and read it, 9.0 percent called to learn about enrolling in *Women's Way*. More than one-fourth of women set the card aside without calling (28.6 percent), and more than half threw the card away without calling (52.8 percent) (see Figure 36, Appendix Table 40).
  - With respect to Card 1, the "Anderson" card: 14.1 percent called to learn about enrolling, 21.1 percent set the card aside, and 54.9 percent threw the card away. The proportion of women receiving the "Anderson" card who called was somewhat higher than the other two cards.
  - With respect to Card 2, the "Little Voice" card: 8.8 percent called to learn about enrolling, 28.1 percent set the card aside, and 54.4 percent threw the card away.
  - With respect to Card 3, the "Poster" card: 4.2 percent called to learn about enrolling, 36.6 percent set the card aside, and 49.3 percent threw the card away. The proportion of women who set the "Poster" card aside was higher than the other two cards.
- Among women who remembered receiving the card and read it, but did not call, responses from women indicating "other" things they did were varied. The responses included that they were already enrolled in the program, that they already had a mammogram scheduled, that they called but the timeframe did not work for her, that they had health insurance so they threw the card away, that they lost it during a move, and that someone else threw the card away (see Appendix Table 41).

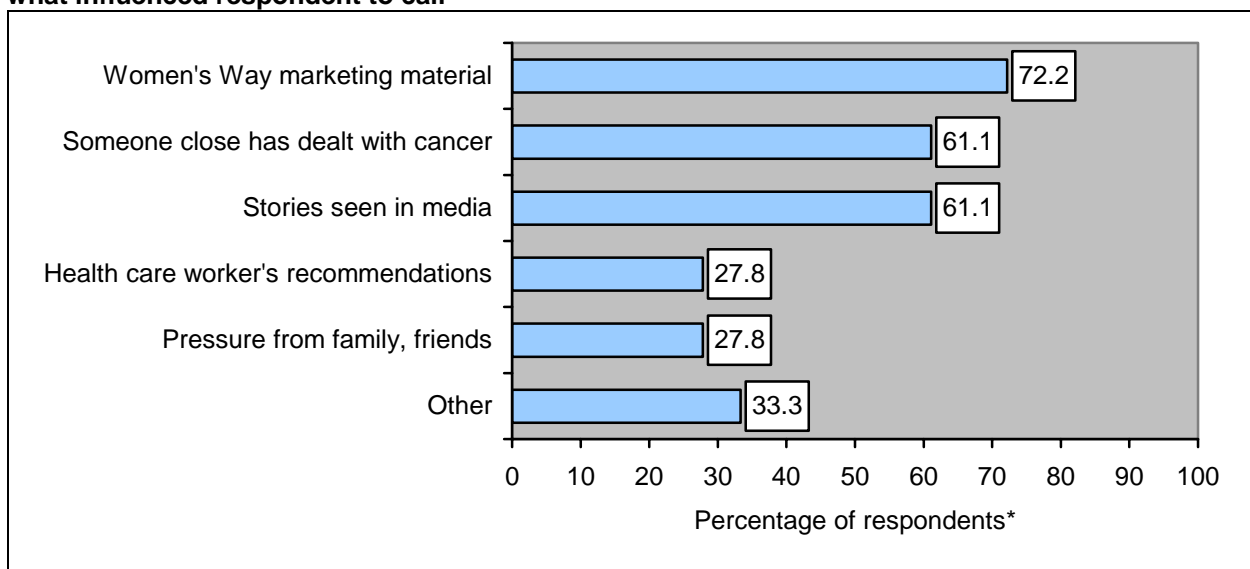
**Figure 36. Among respondents who remember receiving a card and read it, what they did with the card after reading it**



\*See Appendix Table 41 for "other" responses.  
N=199

- Because the number of women who remembered receiving a card, read it, and called to learn about the program was only 18, caution should be used when interpreting the data because of the small number (see Figure 37).
- The 18 women who remembered receiving a card, read it, and then called to learn about enrolling in *Women's Way* represent 3.9 percent of all evaluation survey respondents.
- These 18 respondents were asked if the card influenced them to call the program, and all of them said yes.
- The respondents were then asked if anything else influenced them to call. *Women's Way* marketing materials were cited as an influence by the most respondents (72.2 percent/13 women). Someone close having dealt with cancer (61.1 percent/11 women) and stories seen in the media (61.1 percent/11 women) were other reasons cited by respondents. Health care workers' recommendations (27.8 percent/5 women) and pressure from friends/family (27.8 percent/5 women) were cited the least. Six of the 18 respondents mentioned other things that influenced them to call.
- This information is discussed more with Figure 43.

**Figure 37. Among respondents who remember receiving a card, read it, and called *Women's Way*, what influenced respondent to call**

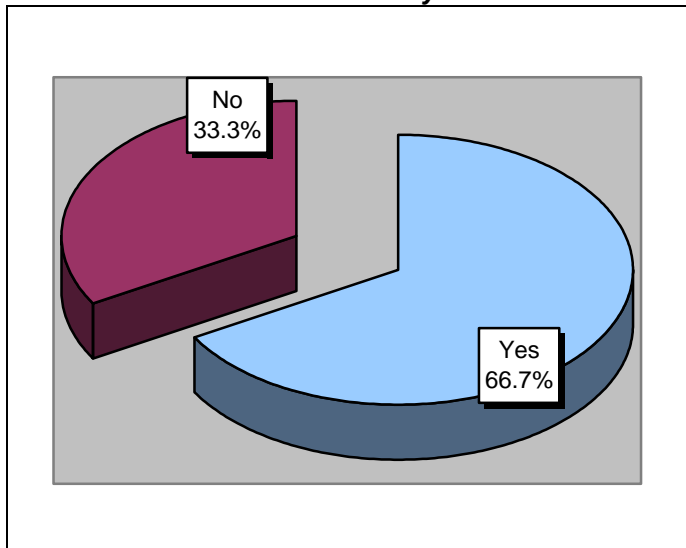


\*Percentages do not add to 100 because of multiple responses.

CAUTION should be used when interpreting these data due to small numbers; N=18

- Two-thirds of the respondents who called about the program, 12 of 18 women, became enrolled in the program (see Figure 38).
- The respondents who were not enrolled were asked why they were not enrolled: three said they had health insurance that covers cervical cancer screenings, two said they did not know, and one said she had already had a Pap test.

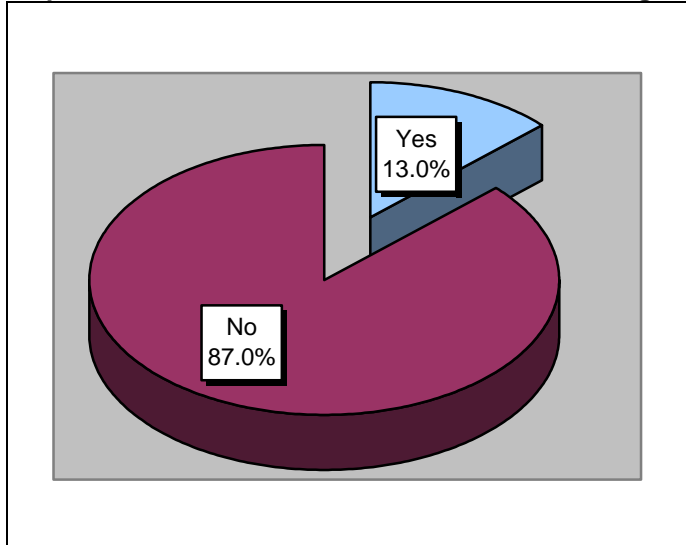
**Figure 38. Among respondents who remember receiving a card, read it, and called *Women's Way*, whether respondent became enrolled in *Women's Way***



CAUTION should be used when interpreting these data due to small numbers; N=18

- Respondents who remembered receiving the card but did not read it were asked if they had ever called to learn about enrolling in *Women's Way*. Respondents who did not remember receiving the card but had heard of *Women's Way* were also asked if they had called to learn about enrolling in *Women's Way*. Combined, these two groups of respondents represented 42.2 percent of all women who completed the evaluation survey, and 13.0 percent of these women, or 25 women, had called to learn about the program (see Figure 39).

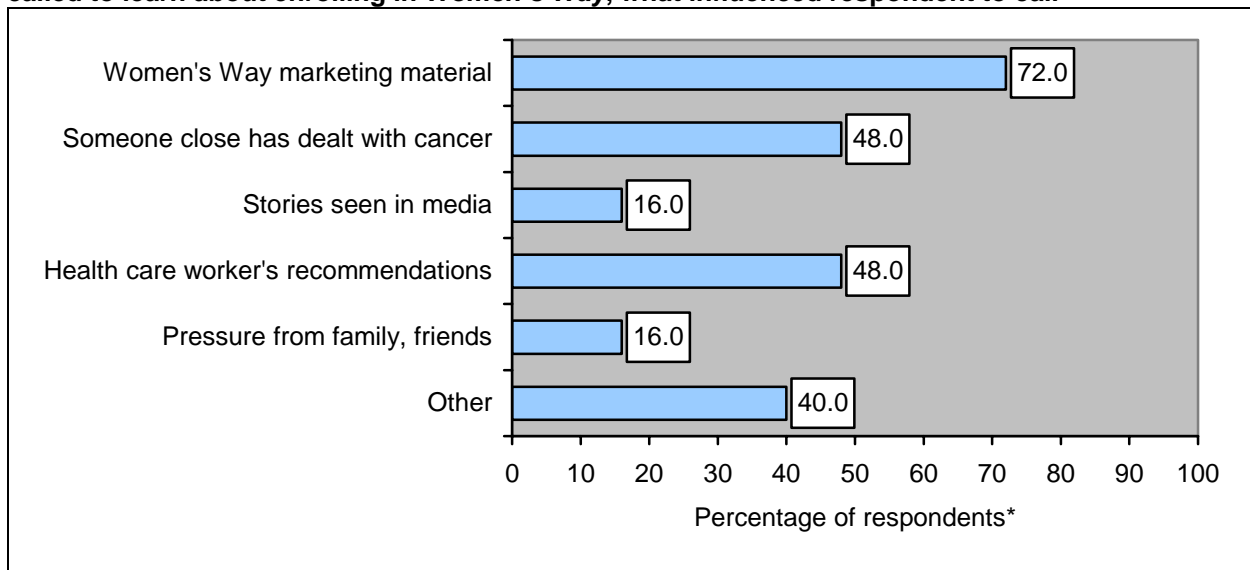
**Figure 39. Among respondents who remember receiving a card but did not read it, or respondents who don't remember receiving a card but have heard of *Women's Way*, whether respondent has ever called to learn about enrolling in *Women's Way***



N=193

- The number of respondents who called to learn about the program but did not remember receiving the card, or remembered receiving it but did not read it, was only 25. Therefore, caution should be used when interpreting the data because of the small number (see Figure 40).
- These respondents were asked what influenced them to call the program. *Women's Way* marketing materials were cited as an influence by the most respondents, 72.0 percent or 18 women. Someone close having dealt with cancer and health care workers' recommendations were reasons for 48.0 percent of respondents each, or 12 women each. Stories seen in the media and pressure from friends/family were cited the least, by 16.0 percent of respondents each or four women each. Ten of the 18 respondents mentioned other things that influenced them to call.
- This information is discussed more with Figure 43.

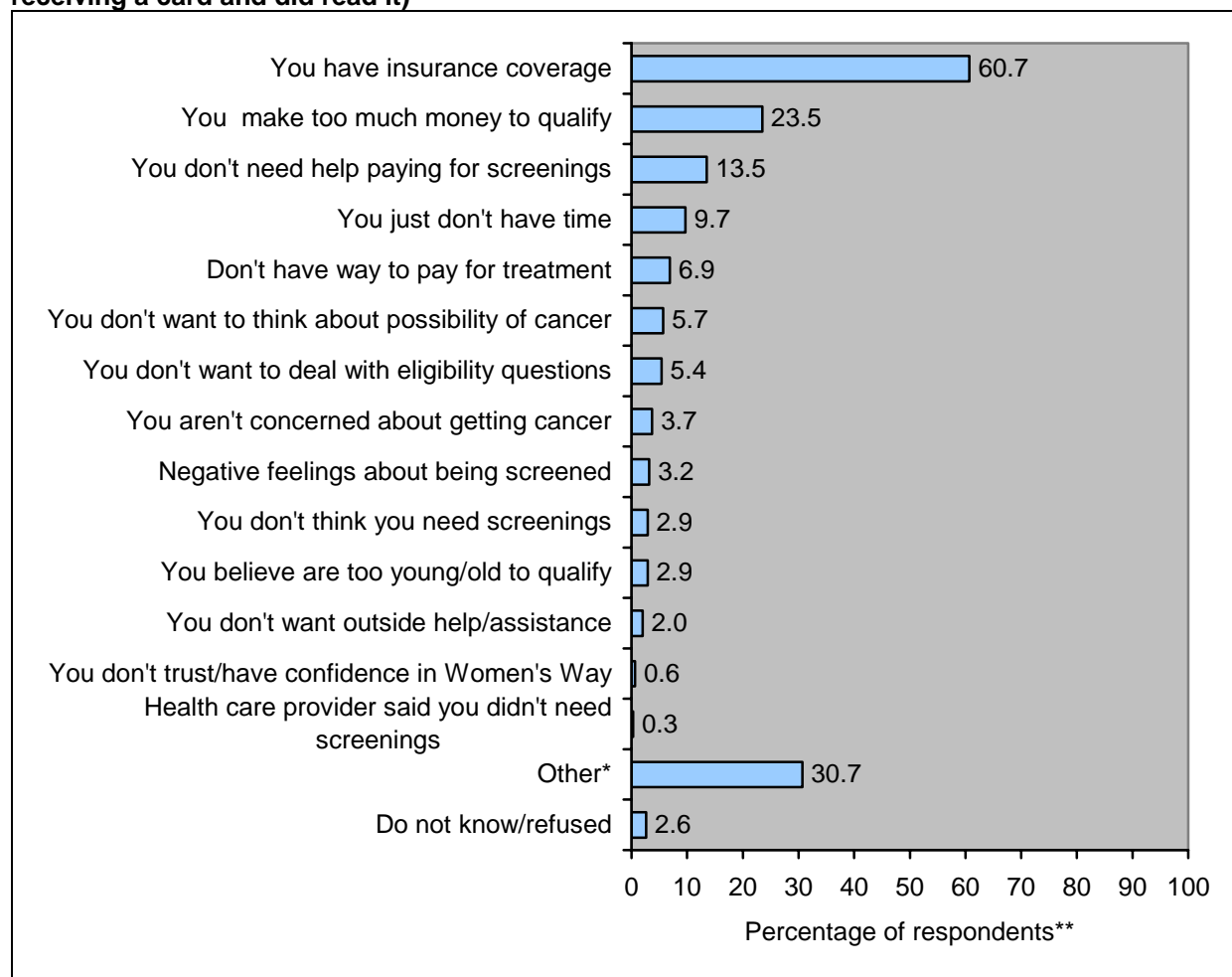
**Figure 40. Among respondents who remember receiving a card but did not read it, or respondent's who don't remember receiving a card but have heard of *Women's Way*, and had called to learn about enrolling in *Women's Way*, what influenced respondent to call**



\*Percentages do not add to 100 because of multiple responses.  
CAUTION should be used when interpreting these data due to small numbers; N=25

- Women who 1) remembered receiving a card but did not read it, or 2) did not remember receiving a card but have heard of *Women's Way*, or 3) remembered receiving a card and did read it, and had not called to learn about enrolling in *Women's Way*, represented 76.4 percent of all women who answered the survey (another 9.4 percent called and 14.2 percent were not asked because they had not heard of *Women's Way* and did not remember receiving a card). These women who had not called were asked to select any of the reasons that helped explain why they had not called to learn about the program (see Figure 41).
- The largest proportion of women said they had not called to learn about the program because they had health insurance coverage (60.7 percent). They believed they made too much money to qualify (23.5 percent), they did not need help paying for breast or cervical cancer screenings (13.5 percent), and they just did not have time (9.7 percent) were other reasons some women cited for not calling. The other reasons explaining why the woman did not call included not having a way to pay for treatment (6.9 percent), not wanting to think about the possibility of cancer (5.7 percent), and not wanting to deal with eligibility questions (5.4 percent). Three in 10 women also offered other reasons regarding why they have not inquired about the program (30.7 percent).

**Figure 41. Among respondents who have not called to learn about *Women's Way*, why respondent has not called (among respondents who remember receiving a card but did not read it, who don't remember receiving a card but have heard of *Women's Way*, or who remember receiving a card and did read it)**



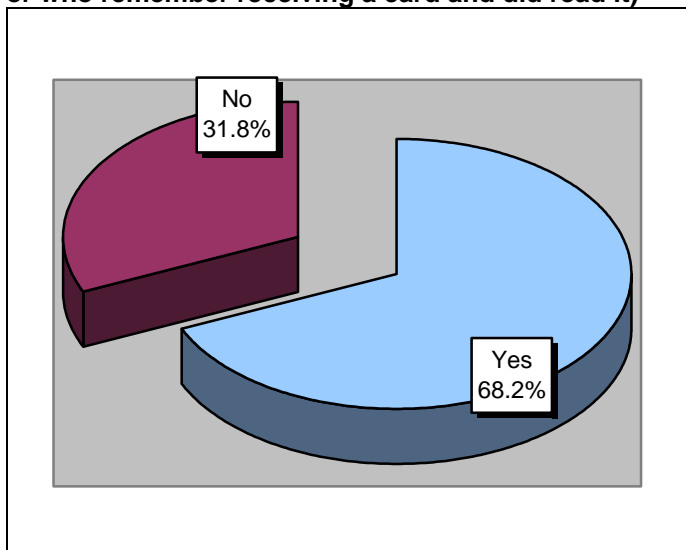
\*See Appendix Table 42 for "other" responses.

\*\*Percentages do not add to 100 because of multiple responses.

N=349

- A variety of responses explained other reasons why women hadn't inquired about *Women's Way*. Some women who already get regular breast or cervical cancer screenings assumed the invitation to call to learn about the program did not apply to them: 8.8 percent of responses were from women who didn't call because they already get mammograms once per year and 8.8 percent were from women who didn't call because they already had a breast or cervical cancer screening this year. Some other responses for why they didn't call included that they just hadn't thought about it (15.0 percent), that they had health insurance (8.0 percent), that they didn't think they were eligible (8.0 percent), and no particular reason (8.0 percent). Other reasons included that they already were or had been in *Women's Way*, that they didn't know enough about the program, that they forgot, that they already got help through another source, that they lost the card, procrastination, and that they were too busy (see Appendix Table 42).
- One challenge for *Women's Way* is women who are self-screening their own eligibility for the program and therefore not calling to find out more about the program. Self-screening women were determined to be those who did not call because they thought they did not need breast or cervical cancer screenings, believed they were too young or too old, believed they made too much money, or had health insurance coverage. More than two-thirds of women gave one or more of these responses (68.2 percent), and thus did not call to learn about the program because they self-screened and concluded they would not be eligible (see Figure 42).

**Figure 42. Among respondents who have not called to learn about *Women's Way*, what proportion of women are self-screening their eligibility (among respondents who remember receiving a card but did not read it, who don't remember receiving a card but have heard of *Women's Way*, or who remember receiving a card and did read it)**

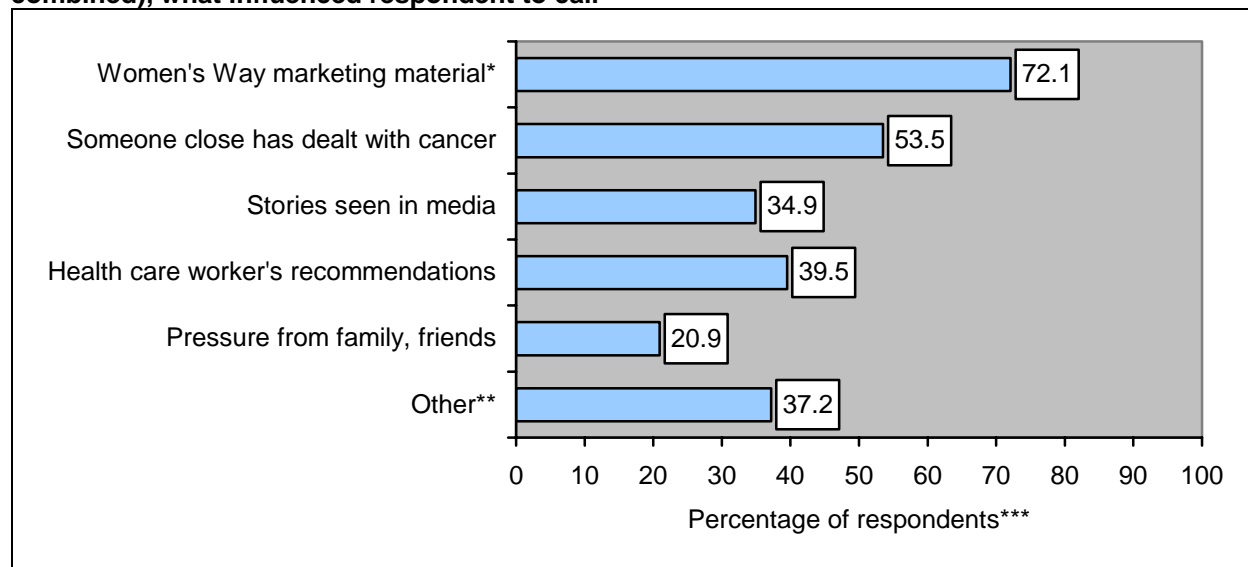


N=349

## Discussion of Women Who Called to Learn About *Women's Way*

- Respondents who called to learn about *Women's Way* can be categorized in two groups: Group A includes respondents who remembered receiving the card, read it, and called to learn about *Women's Way* (see Figure 37); Group B includes respondents who either remembered receiving the card but did not read it or respondents who did not remember receiving the card but had heard of *Women's Way*, and called to learn about the program (see Figure 40).
- A total of 43 women (18 women in Group A and 25 women in Group B), or 9.4 percent of all women who answered the evaluation survey, said they had called to learn about *Women's Way*. This N is larger than either group individually and allows for greater confidence in the analysis of what influenced women to call.
- The responses from both groups were combined to see an overall picture of what influenced the women who called to learn about *Women's Way*, as seen in Figure 43. With respect to influence, there were some differences between women who remembered receiving the card, read it, and called to learn about *Women's Way* (Group A) and women who either remembered receiving the card but did not read it or did not remember receiving the card but had heard of *Women's Way* (Group B), but there were also many similarities. The combined overall responses can be compared to the individual responses for Group A in Figure 37 and the individual responses for Group B in Figure 40.
  - Group A and Group B both rated *Women's Way* marketing material as most influential; combined, the proportion is 72.1 percent.
  - A larger proportion of respondents in Group A cited someone close dealing with cancer as an influence compared to Group B; combined, the proportion is 53.5 percent.
  - A much larger proportion of respondents in Group A cited stories seen in the media as an influence compared to Group B; combined, the proportion is 34.9 percent.
  - A smaller proportion of respondents in Group A cited health care workers' recommendations as an influence compared to Group B; combined, the proportion is 39.5 percent.
  - A larger proportion of respondents in Group A cited pressure from friends/family as an influence compared to Group B; combined, the proportion is 20.9 percent.
  - Respondents in both Group A and Group B offered other things that influenced them to call; combined, the proportion is 37.2 percent.

**Figure 43. Among all respondents who called to learn about *Women's Way* (Group A and Group B combined), what influenced respondent to call**



\*See Appendix Table 43 for marketing materials.

\*\*See Appendix Table 44 for "other" responses.

\*\*\*Percentages do not add to 100 because of multiple responses.

N=43



- Women who said *Women's Way* marketing material influenced them to call were asked about what the marketing material was. This included both women who remembered receiving a card, read it and called, as well as women who had not read or did not remember receiving a card but had called *Women's Way*. A brochure or pamphlet was the material cited most often (47.1 percent), primarily by women who did not call because of the card. The card in the mail was the second most common response (20.6 percent). The other responses included a cup, a booklet, a colored pen, a necklace, TV, breast awareness information at a clinic, and a women's health effort at Wal-Mart (see Appendix Table 43).
- Regarding what things other than what were listed influenced them to call, the responses were varied. Responses included their age, that they had cancer in the family, that they had had cancer, that money was an issue, that they did not have health insurance, that they were due for a mammogram, and that they wanted to know how eligibility was determined. Other responses included that a co-worker had used the program, that a public health nurse had influenced them, and that social services had influenced their decision to call (see Appendix Table 44).
- The three theoretical frameworks explored in the baseline survey were matched to each of the 43 women in the evaluation survey who called to learn about *Women's Way* (see pages 52-56 in *Section 4: Detailed Baseline Survey Results* for a description of the theories and the overall results).
- Stages of Change model:
  - Compared to the overall proportion of women (66.6 percent), a similar proportion of women who called were in the action/maintenance stage of change (67.4 percent).
- Self-Regulation model:
  - Compared to the overall proportion of women (68.9 percent), a somewhat smaller proportion of the women who called had a feeling of self-efficacy regarding mammograms (60.5 percent).
  - Compared to the overall proportion of women (30.6 percent), a somewhat larger proportion of the women who called had high levels of risk perception (37.2 percent).
  - Compared to the overall proportion of women (17.1 percent), a similar proportion of women who called had a feeling of worry/anxiety regarding mammograms (14.0 percent).
- Reasoned Action model:
  - Compared to the overall proportion of women (68.9 percent), a somewhat smaller proportion of the women who called had a positive attitude (self-efficacy) regarding mammograms (60.5 percent).
  - Compared to the overall proportion of women (72.8 percent), a somewhat larger proportion of women who called were influenced by at least one subjective norm (81.4 percent).
  - Compared to the overall proportion of women (39.4 percent), a slightly larger proportion of women who called were influenced by family/friends (44.2 percent).
  - Compared to the overall proportion of women (64.0 percent), a similar proportion of women who called were influenced by health care providers (65.1 percent).
  - Compared to the overall proportion of women (35.3 percent), a much larger proportion of women who called were influenced by information from the media (58.1 percent).
  - Compared to the overall proportion of women (78.4 percent), a much smaller proportion of the women who called had a sense of perceived control (55.8 percent).
- The data indicate that there may be a difference between the overall distribution of women and the distribution of the women who called with respect to the theoretical models, though this conclusion is drawn from a relatively small number of women and it should be interpreted with caution. Primarily, among women who called, a larger proportion was influenced by the media and a larger proportion had a high level of risk perception. In addition, a smaller proportion had a high level of self-efficacy and perceived control.
- Therefore, among the three theoretical models explored, the Self-Regulation model and the Reasoned Action model may be good predictors of who will call *Women's Way* to learn about the program.



*Appendix A:*  
*BASELINE SURVEY*  
*APPENDIX TABLES*

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**Appendix Table 1. Whether anyone in family has had breast cancer**

	Percent						Overall Total (N=740)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=620)	Have not had a mamm. (N=120)	40 to 49 years (N=320)	50 years and older (N=414)	Have insurance (N=565)	Do not have insurance (N=162)	
Yes	34.2	25.8	28.8	36.2	32.6	32.7	32.8
No	65.8	74.2	71.3	63.8	67.4	67.3	67.2
Total	100.0	100.0	100.1	100.0	100.0	100.0	100.0

**Appendix Table 2. How worried respondent is about getting breast cancer**

	Percent						Overall Total (N=726)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=607)	Have not had a mamm. (N=119)	40 to 49 years (N=318)	50 years and older (N=402)	Have insurance (N=554)	Do not have insurance (N=159)	
1 – Not at all worried	28.5	38.7	22.6	35.8	28.0	39.0	30.2
2	21.4	23.5	23.3	20.6	21.8	22.0	21.8
3	30.8	29.4	37.1	25.6	32.7	24.5	30.6
4	9.9	3.4	9.7	8.2	9.2	5.0	8.8
5 – Very worried	9.4	5.0	7.2	9.7	8.3	9.4	8.7
Total	100.0	100.0	99.9	99.9	100.0	99.9	100.1

**Appendix Table 3. Whether respondent knows doctors' recommendations regarding mammograms for women 40 years and older**

	Percent						Overall Total (N=742)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=622)	Have not had a mamm. (N=120)	40 to 49 years (N=322)	50 years and older (N=414)	Have insurance (N=567)	Do not have insurance (N=162)	
Yes	92.6	69.2	86.0	91.3	90.3	83.3	88.8
No	6.8	30.0	13.0	8.2	8.8	16.7	10.5
Not sure	0.6	0.8	0.9	0.5	0.9	0.0	0.7
Total	100.0	100.0	99.9	100.0	100.0	100.0	100.0

**Appendix Table 4. How confident respondent is that mammograms can provide early detection of breast cancer**

	Percent						Overall Total (N=732)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=618)	Have not had a mamm. (N=114)	40 to 49 years (N=319)	50 years and older (N=407)	Have insurance (N=561)	Do not have insurance (N=158)	
1 – Not at all confident	2.9	6.1	1.3	4.9	2.0	8.2	3.4
2	3.4	6.1	4.1	3.7	3.9	3.8	3.8
3	16.3	21.1	16.9	17.4	18.2	14.6	17.1
4	22.7	17.5	22.6	21.4	23.7	14.6	21.9
5 – Very confident	54.7	49.1	55.2	52.6	52.2	58.9	53.8
Total	100.0	99.9	100.1	100.0	100.0	100.1	100.0

**Appendix Table 5. How confident respondent is that mammograms can prevent dying from cancer because of early detection**

	Percent						Overall Total (N=732)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=618)	Have not had a mamm. (N=114)	40 to 49 years (N=318)	50 years and older (N=408)	Have insurance (N=560)	Do not have insurance (N=159)	
1 – Not at all confident	3.1	2.6	0.9	4.4	1.8	6.9	3.0
2	3.1	4.4	3.5	3.2	3.9	1.3	3.3
3	12.6	21.9	15.7	13.0	14.3	13.8	14.1
4	23.1	21.1	25.2	21.1	24.5	15.7	22.8
5 – Very confident	58.1	50.0	54.7	58.3	55.5	62.3	56.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Appendix Table 6. How much respondent's decisions about mammogram screenings are impacted by the opinions of health care providers**

	Percent						Overall Total (N=737)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=618)	Have not had a mamm. (N=119)	40 to 49 years (N=320)	50 years and older (N=411)	Have insurance (N=563)	Do not have insurance (N=161)	
1 – Not at all	13.9	23.5	10.0	20.0	13.3	23.0	15.5
2	4.7	5.9	3.4	6.1	4.6	5.6	4.9
3	14.1	21.0	16.3	14.4	15.5	15.5	15.2
4	15.4	21.0	21.6	11.9	15.6	18.6	16.3
5 – A great deal	51.9	28.6	48.8	47.7	51.0	37.3	48.2
Total	100.0	100.0	100.1	100.1	100.0	100.0	100.1

**Appendix Table 7. How much respondent's decisions about mammogram screenings are impacted by the opinions of friends and family**

	Percent						Overall Total (N=733)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=617)	Have not had a mamm. (N=116)	40 to 49 years (N=320)	50 years and older (N=407)	Have insurance (N=559)	Do not have insurance (N=161)	
1 – Not at all	35.8	25.9	26.3	40.8	33.5	36.6	34.2
2	8.9	10.3	9.7	8.8	9.1	8.7	9.1
3	15.2	25.0	19.7	14.5	16.8	16.8	16.8
4	9.4	12.1	14.1	6.4	10.0	9.9	9.8
5 – A great deal	30.6	26.7	30.3	29.5	30.6	28.0	30.0
Total	99.9	100.0	100.1	100.0	100.0	100.0	99.9

**Appendix Table 8. How much respondent's decisions about mammogram screenings are impacted by information from the media**

	Percent						Overall Total (N=735)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=618)	Have not had a mamm. (N=117)	40 to 49 years (N=321)	50 years and older (N=408)	Have insurance (N=563)	Do not have insurance (N=159)	
1 – Not at all	28.2	27.4	19.9	34.6	26.3	35.2	28.0
2	9.2	14.5	12.5	8.3	10.5	8.8	10.1
3	26.5	24.8	31.8	21.8	26.3	26.4	26.3
4	13.8	16.2	16.5	12.5	15.6	8.8	14.1
5 – A great deal	22.3	17.1	19.3	22.8	21.3	20.8	21.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Appendix Table 9. Average of how much respondent's decisions about mammogram screenings are impacted by health care providers, friends/family, and information from the media**

Influence	Mean						Overall Total
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm.	Have not had a mamm.	40 to 49 years	50 years and older	Have insurance	Do not have insurance	
Health care providers	3.87	3.25	3.96	3.61	3.86	3.42	3.77
Friends/family	2.90	3.03	3.13	2.75	2.95	2.84	2.92
Information from media	2.93	2.81	3.03	2.81	2.95	2.71	2.91

Note: See Appendix Tables 6, 7, and 8 for Ns

**Appendix Table 10. Whether respondent has heard of “a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota”**

	Percent						Overall Total (N=739)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=619)	Have not had a mamm. (N=120)	40 to 49 years (N=321)	50 years and older (N=412)	Have insurance (N=564)	Do not have insurance (N=162)	
Yes	49.6	50.8	50.5	49.5	49.3	51.2	49.8
No	50.4	49.2	49.5	50.5	50.7	48.8	50.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Appendix Table 11. Among respondents who have heard of a program that may provide a way to pay, what they recall the name of the program to be**

Theme (N=205)	Number of Responses
Aflac	2
Other names with word “woman”	3
Other names without word “woman”	8
<i>Women's Way</i>	188
Women's Health	3
General comments	7
Total responses	211

**Appendix Table 12. Whether respondent has ever had a mammogram**

	Percent						Overall Total (N=742)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm.	Have not had a mamm.	40 to 49 years (N=322)	50 years and older (N=414)	Have insurance (N=567)	Do not have insurance (N=162)	
Yes	--	--	77.3	89.1	87.8	68.5	83.8
No	--	--	22.7	10.9	12.2	31.5	16.2
Total	--	--	100.0	100.0	100.0	100.0	100.0

**Appendix Table 13. How nervous respondent is about getting a mammogram**

	Percent						Overall Total (N=740)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=621)	Have not had a mamm. (N=119)	40 to 49 years (N=321)	50 years and older (N=413)	Have insurance (N=565)	Do not have insurance (N=162)	
1 – Not at all nervous	71.2	32.8	56.7	71.9	65.3	63.0	65.0
2	11.8	11.8	15.3	9.2	12.4	9.9	11.8
3	9.7	10.1	10.9	8.5	10.6	6.8	9.7
4	3.7	16.8	9.0	3.4	5.5	6.8	5.8
5 – Very nervous	3.7	28.6	8.1	7.0	6.2	13.6	7.7
Total	100.1	100.1	100.0	100.0	100.0	100.1	100.0

**Appendix Table 14. Among respondents who have had a mammogram, when most recent mammogram was**

	Percent						Overall Total (N=620)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm.	Have not had a mamm.	40 to 49 years (N=249)	50 years and older (N=367)	Have insurance (N=497)	Do not have insurance (N=110)	
Less than one year ago	--	--	47.8	55.6	59.0	27.3	52.6
One to two years ago	--	--	32.9	26.4	29.8	25.5	29.0
More than two years ago	--	--	19.3	18.0	11.3	47.3	18.4
Total	--	--	100.0	100.0	100.1	100.1	100.0

**Appendix Table 15. How likely respondent is to get a mammogram in the next 12 months**

	Percent						Overall Total (N=736)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=616)	Have not had a mamm. (N=120)	40 to 49 years (N=321)	50 years and older (N=409)	Have insurance (N=562)	Do not have insurance (N=161)	
1 – Not at all likely	16.1	45.8	21.5	20.8	14.9	41.6	20.9
2	3.7	8.3	7.2	2.2	3.2	9.3	4.5
3	5.2	16.7	8.1	6.1	5.9	10.6	7.1
4	5.2	6.7	7.5	3.2	5.5	4.3	5.4
5 – Very likely	69.8	22.5	55.8	67.7	70.5	34.2	62.1
Total	100.0	100.0	100.1	100.0	100.0	100.0	100.0

**Appendix Table 16. Whether there is anything that makes it difficult for respondent to get a mammogram**

	Percent						Overall Total (N=742)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=622)	Have not had a mamm. (N=120)	40 to 49 years (N=322)	50 years and older (N=414)	Have insurance (N=567)	Do not have insurance (N=162)	
Yes	27.5	51.7	37.9	26.8	22.9	61.7	31.4
No	72.5	48.3	62.1	73.2	77.1	38.3	68.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Appendix Table 17. Among respondents who indicated there is something that makes it difficult for them to get a mammogram, what the barriers are**

Theme (N=233)	Number of Responses
Bad experience with doctors	2
Can't afford co-pay/large deductible	10
Chest/breast size too large	4
Chest/breast size too small	2
Cost/can't afford it	41
Disabled	5
Discomfort/it hurts	16
Distance to a place to get a mammogram	10
Don't like whole experience	3
Don't want to go to doctor	2
Don't want to know if has cancer	2
Embarrassment/too private of a person	4
Health insurance (or Medicaid) only allows every two years	2
Heard aren't necessary yearly/don't know how often to get them	2
Issues with health insurance she has	4
Money/finances	44
Nervous/scared	3
No convenient times for appointments	1
No health insurance	55
Procrastination	1
Read there is no difference in survival rate	1
Schedules/scheduling	8
Takes too long to get an appointment	2
They are not safe (e.g., radiation)	2
Too busy/no time	8
Transportation	11
Work schedule/hard to get away from work	13
General comments	10
Total responses	268



**Appendix Table 18. Among respondents who indicated there is something that makes it difficult for them to get a mammogram, how likely respondent is to overcome the barriers to getting a mammogram**

	Percent						Overall Total (N=219)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=162)	Have not had a mamm. (N=57)	40 to 49 years (N=116)	50 years and older (N=103)	Have insurance (N=120)	Do not have insurance (N=96)	
1 – Not at all likely	40.1	45.6	37.1	46.6	34.2	50.0	41.6
2	8.6	12.3	10.3	8.7	7.5	12.5	9.6
3	12.3	24.6	14.7	16.5	10.8	20.8	15.5
4	9.9	5.3	11.2	5.8	10.8	6.3	8.7
5 – Very likely	29.0	12.3	26.7	22.3	36.7	10.4	24.7
Total	99.9	100.1	100.0	99.9	100.0	100.0	100.1

**Appendix Table 19. Whether respondents has ever had a Pap test**

	Percent						Overall Total (N=742)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=622)	Have not had a mamm. (N=120)	40 to 49 years (N=322)	50 years and older (N=414)	Have insurance (N=567)	Do not have insurance (N=162)	
Yes	99.5	95.0	99.1	98.8	98.9	98.1	98.8
No	0.5	5.0	0.9	1.2	1.1	1.9	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Appendix Table 20. Among respondents who have had a Pap test, when most recent Pap test was**

	Percent						Overall Total (N=727)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=615)	Have not had a mamm. (N=112)	40 to 49 years (N=318)	50 years and older (N=404)	Have insurance (N=557)	Do not have insurance (N=157)	
Less than one year ago	51.4	17.0	46.9	45.3	53.1	22.3	46.1
One to four years ago	34.5	34.8	38.7	31.2	34.5	35.0	34.5
More than four years ago	14.1	48.2	14.5	23.5	12.4	42.7	19.4
Total	100.0	100.0	100.1	100.0	100.0	100.0	100.0

**Appendix Table 21. How likely respondent is to get a Pap test in the next 12 months**

	Percent						Overall Total (N=729)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=611)	Have not had a mamm. (N=118)	40 to 49 years (N=321)	50 years and older (N=402)	Have insurance (N=554)	Do not have insurance (N=162)	
1 – Not at all likely	21.4	34.7	18.4	27.9	16.8	45.7	23.6
2	3.8	8.5	4.0	4.5	3.8	6.8	4.5
3	5.2	9.3	5.3	6.5	4.5	11.1	5.9
4	3.6	13.6	8.1	3.0	4.5	7.4	5.2
5 – Very likely	66.0	33.9	64.2	58.2	70.4	29.0	60.8
Total	100.0	100.0	100.0	100.1	100.0	100.0	100.0

**Appendix Table 22. Age of respondents**

	Percent						Overall Total (N=736)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=618)	Have not had a mamm. (N=118)	40 to 49 years	50 years and older	Have insurance (N=563)	Do not have insurance (N=161)	
40 to 49 years of age	40.3	61.9	--	--	44.6	43.5	43.8
50 years and older	59.7	38.1	--	--	55.4	56.5	56.3
Total	100.0	100.0	--	--	100.0	100.0	100.1

**Appendix Table 23. Whether respondent has health insurance**

	Percent						Overall Total (N=729)
	Mammogram Status		Age		Health Insurance Status		
	Have had a mamm. (N=609)	Have not had a mamm. (N=120)	40 to 49 years (N=321)	50 years and older (N=403)	Have insurance	Do not have insurance	
Yes	81.8	57.5	78.2	77.4	--	--	77.8
No	18.2	42.5	21.8	22.6	--	--	22.2
Total	100.0	100.0	100.0	100.0	--	--	100.0

**Appendix Table 24. Impact of geographic location for a) nervousness about getting a mammogram, b) barriers to getting a mammogram, c) employment status, and d) health insurance**

24a. How nervous respondent is about getting a mammogram	Percent			
	Geographic Group*			Overall Total (N=740)
	1 - targeted urban (N=108)	2 - other urban (N=268)	3 - rural (N=364)	
1 – Not at all nervous	52.8	70.5	64.6	65.0
2	11.1	9.7	13.5	11.8
3	17.6	7.8	8.8	9.7
4	11.1	6.0	4.1	5.8
5 – Very nervous	7.4	6.0	9.1	7.7
Total	100.0	100.0	100.1	100.0

24b. Among respondents who indicated there is something that makes it difficult for them to get a mammogram, how likely respondent is to overcome the barriers to getting a mammogram	Percent			
	Geographic Group*			Overall Total (N=219)
	1 - targeted urban (N=35)	2 - other urban (N=77)	3 - rural (N=107)	
1 – Not at all likely	40.0	39.0	43.9	41.6
2	11.4	7.8	10.3	9.6
3	2.9	16.9	18.7	15.5
4	20.0	3.9	8.4	8.7
5 – Very likely	25.7	32.5	18.7	24.7
Total	100.0	100.1	100.0	100.1

24c. Employment status of respondents based on Census Bureau definitions**	Percent			
	Geographic Group*			Overall Total (N=741)
	1 - targeted urban (N=108)	2 - other urban (N=268)	3 - rural (N=365)	
Employed	74.1	64.6	74.5	70.9
Unemployed	4.6	3.4	2.5	3.1
Not in labor force	21.3	32.1	23.0	26.0
Total	100.0	100.1	100.0	100.0

24d. Whether respondent has health insurance	Percent			
	Geographic Group*			Overall Total (N=729)
	1 - targeted urban (N=104)	2 - other urban (N=264)	3 - rural (N=361)	
Yes	68.3	77.3	80.9	77.8
No	31.7	22.7	19.1	22.2
Total	100.0	100.0	100.0	100.0

\*See page 5 for description of geographic groups

\*\*See page 49 for description of employment status based on Census Bureau definitions

**Appendix Table 25. Percent of respondents at each level of the STAGES OF CHANGE theoretical model**

Level	Percent			
	Have not had a mammogram (N=120)	Are younger than age 50 (N=322)	Do not have health insurance (N=162)	Total overall (N=742)
Stage 1 – Pre-contemplative	20.0	5.0	8.6	3.2
Stage 2 – Contemplative	34.2	6.8	11.7	5.5
Stage 3 – Ready for action	45.8	10.9	11.1	7.4
Stage 4 – Action/maintenance	0.0	60.2	37.7	66.6
Stage 5 – Risk of relapse	0.0	17.1	30.9	17.3
Total	100.0	100.0	100.0	100.0

**Appendix Table 26. Percent of respondents experiencing a component of the SELF-REGULATION theoretical model**

Component	Percent*			
	Have not had a mammogram (N=120)	Are younger than age 50 (N=322)	Do not have health insurance (N=162)	Total overall (N=742)
Self-efficacy	55.8	70.2	65.4	68.9
Risk perception	21.7	27.0	30.2	30.6
Worry/anxiety	8.3	16.8	14.2	17.1

\*Percentages do not add to 100 because the Appendix Table reflects multiple variables.

**Appendix Table 27. Percent of respondents experiencing a component of the REASONED ACTION theoretical model**

Component	Percent*			
	Have not had a mammogram (N=120)	Are younger than age 50 (N=322)	Do not have health insurance (N=162)	Total overall (N=742)
Attitude (self-efficacy)	55.8	70.2	65.4	68.9
Subjective norms	63.3	78.9	64.8	72.8
Perceived control	56.7	75.8	48.1	78.4

\*Percentages do not add to 100 because the Appendix Table reflects multiple variables.

**Appendix Table 28. Percent of respondents experiencing each of the subjective norms from the REASONED ACTION theoretical model**

Subjective Norm	Percent*			
	Have not had a mammogram (N=120)	Are younger than age 50 (N=322)	Do not have health insurance (N=162)	Total overall (N=742)
Friends/family	37.5	44.1	37.7	39.4
Health care provider	49.2	69.9	55.6	64.0
Information from the media	32.5	35.7	29.0	35.3

\*Percentages do not add to 100 because the Appendix Table reflects multiple variables.

*Appendix B:*  
*EVALUATION SURVEY*  
*APPENDIX TABLES*

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**Appendix Table 29. Whether respondent has ever heard of *Women's Way***

	Percent			
	Card 1* (N=160)	Card 2* (N=141)	Card 3* (N=156)	Overall (N=457)
Yes	86.3	79.4	75.0	80.3
No	13.8	20.6	25.0	19.7
Total	100.1	100.0	100.0	100.0

\*Three different cards were developed for the direct mail campaign (see Appendix E): Card 1 – the “Anderson” card; Card 2 – the “Little Voice” card; Card 3 – the “Poster” card.

**Appendix Table 30. Among respondents who have heard of *Women's Way*, “other” ways respondent has heard of the program**

Theme (N=62)	Number of Responses
At a conference	3
At work	8
Booth	6
Health care provider	1
In a bathroom	3
In mail	7
Involvement with <i>Women's Way</i>	2
Is employed in health field/works with health issues	6
Knows someone who uses it	2
Miscellaneous materials	4
Miscellaneous places (church, rummage sales, bar bathrooms, 4H)	6
Phone	4
Posters	7
Saw at a clinic/doctor's office	8
General comments	1
Total responses	68

**Appendix Table 31. Whether respondent remembers receiving a card in the mail in May or June**

	Percent			
	Card 1 (N=160)	Card 2 (N=141)	Card 3 (N=156)	Overall (N=457)
Yes	56.9	45.4	51.9	51.6
No/not sure	43.1	54.6	48.1	48.4
Total	100.0	100.0	100.0	100.0

**Appendix Table 32. Among respondents who remember receiving a card, what they did with the card after receiving it**

	Percent			
	Card 1 (N=91)	Card 2 (N=64)	Card 3 (N=81)	Overall (N=236)
Opened and read the card	78.0	89.1	87.7	84.3
Did not read card – threw it away without reading	7.7	4.7	3.7	5.5
Did not read card – set card aside without opening	3.3	4.7	4.9	4.2
Not sure	11.0	1.6	3.7	5.9
Total	100.0	100.1	100.0	99.9

**Appendix Table 33. Among respondents who remember receiving a card and read it, what prompted the respondent to read the card**

Theme	Number of Responses			
	Card 1 (N=71)	Card 2 (N=57)	Card 3 (N=71)	Total (N=199)
A source of information as a professional	1	3	0	4
Always reads her mail	16	6	19	41
Because it was addressed to me	1	1	2	4
Because it was for women/was about women's tests	2	4	1	7
Because of the word "cancer"	1	2	0	3
Because she knew she was due for one; does them yearly	2	1	7	10
Curious	7	4	12	23
Dealing with taking care of yourself/health	0	7	2	9
Don't remember	11	7	11	29
Had inquired before/knew others who used <i>Women's Way</i>	2	1	1	4
Has friends/family who've had cancer	2	1	4	7
It said something about free services	6	3	3	12
Just read it	1	1	0	2
Logo	5	3	1	9
Must be important, since she is enrolled	0	1	0	1
She has/had cancer	2	1	2	5
She recognized name of program/ <i>Women's Way</i>	8	12	10	30
Wanted to know if eligible	2	1	1	4
Was expecting it/they called first/did the survey	5	1	0	6
General comments	2	1	0	3
Total responses	76	61	76	213

**Appendix Table 34. Among respondents who remember receiving a card and read it, whether the respondent remembers something about the card**

	Percent			
	Card 1 (N=71)	Card 2 (N=57)	Card 3 (N=71)	Overall (N=199)
Yes	38.0	54.4	40.8	43.7
No	62.0	45.6	59.2	56.3
Total	100.0	100.0	100.0	100.0

**Appendix Table 35. Among respondents who remember receiving a card and read it, whether the respondent remembers something about the incentive**

	Percent			
	Card 1 (N=71)	Card 2 (N=57)	Card 3 (N=71)	Overall (N=199)
Yes	19.7	28.1	12.7	19.6
No	80.3	71.9	87.3	80.4
Total	100.0	100.0	100.0	100.0

**Appendix Table 36. Among respondents who remember receiving a card and read it, whether the respondent remembers something about eligibility requirements**

	Percent			
	Card 1 (N=71)	Card 2 (N=57)	Card 3 (N=71)	Overall (N=199)
Yes	39.4	40.4	43.7	41.2
No	60.6	59.6	56.3	58.8
Total	100.0	100.0	100.0	100.0

**Appendix Table 37. Among respondents who remember receiving a card and read it, what the respondent remembers about the card**

Theme	Number of Responses			
	Card 1 (N=27)	Card 2 (N=31)	Card 3 (N=29)	Total (N=87)
About women/women's tests	2	4	2	8
Can't remember	0	1	0	1
Design (well done, easy to read, attractive, etc.)	3	4	7	14
Free/low cost/reduced/help with mammograms	4	5	6	15
Goal of program/why it is important	2	1	3	6
Guidelines for qualifying/low income/health insurance	5	2	3	10
Phone number to call/contact <i>Women's Way</i>	1	4	1	6
Other color (red, purple)	2	1	0	3
Picture of a family	5	1	1	7
Pink	7	9	8	24
Receive \$10 if have mammogram before data	0	1	0	1
Recognize as similar to other ad efforts (tv, poster)	1	1	0	2
Size (like big postcard, long)	1	1	2	4
Suggestions for improvement	0	1	0	1
<i>Women's Way</i> logo (pink ribbon, wrapped arms)	5	11	7	23
General comments	1	1	2	4
Total responses	39	48	42	129

**Appendix Table 38. Among respondents who remember receiving a card and read it, what the respondent remembers about the incentive**

Theme	Number of Responses			
	Card 1 (N=13)	Card 2 (N=16)	Card 3 (N=9)	Total (N=38)
Discount (\$10 off)	1	0	0	1
Didn't pay attention	1	0	0	1
Free mammogram and Pap/reduced/if eligible	4	6	4	14
Gift certificate (\$10)	0	1	0	1
Money (\$10)	7	7	4	18
Money if referred someone else (\$5)	0	1	0	1
Refund/rebate (\$10)	0	0	1	1
Something personal/cosmetic	0	1	0	1
General comments	0	1	0	1
Total responses	13	17	9	39



**Appendix Table 39. Among respondents who remember receiving a card and read it, what the respondent remembers about eligibility requirements**

Theme	Number of Responses			
	Card 1 (N=28)	Card 2 (N=22)	Card 3 (N=31)	Total (N=81)
Age (general or mentioned specific criteria)	11	7	6	24
Be a woman	2	0	0	2
High risk	0	0	3	3
If you can't afford it	0	2	2	4
Low income/certain income	22	14	21	56
No coverage of mammograms	1	0	0	1
No health insurance	10	6	6	22
Talked about getting (yearly) mammogram	0	2	0	2
General comments	2	3	2	8
Total responses	48	34	40	122

**Appendix Table 40. Among respondents who remember receiving a card and read it, what they did with the card after reading it**

	Percent			
	Card 1 (N=71)	Card 2 (N=57)	Card 3 (N=71)	Overall (N=199)
Called to learn about enrolling in <i>Women's Way</i>	14.1	8.8	4.2	9.0
Did not call – set card aside	21.1	28.1	36.6	28.6
Did not call – threw card away	54.9	54.4	49.3	52.8
Did not call – gave card to someone else	5.6	3.5	4.2	4.5
Did not call – other*	4.2	5.3	4.2	4.5
Refused	0.0	0.0	1.4	0.5
Total	99.9	100.1	99.9	99.9

\*See Appendix Table 41 for "other" responses.

**Appendix Table 41. Among respondents who remember receiving a card and read it, but did not call, what "other" thing they did with the card**

Theme	Number of Responses			
	Card 1 (N=2)	Card 2 (N=3)	Card 3 (N=3)	Total (N=8)
Already enrolled in the program	0	1	0	1
Already had mammogram scheduled	0	0	1	1
Called but timeframe did not work for her	0	1	0	1
Had health insurance so threw card away	0	0	1	1
Lost it (during a move)	1	0	0	1
Not sure	0	0	1	1
Personal	1	0	0	1
Someone else threw it away	0	1	0	1
Total responses	2	3	3	8

**Appendix Table 42. Among respondents who have not called to learn about *Women’s Way*, “other” reason for why they have not called (among respondents who remember receiving a card but did not read it, who don’t remember receiving card but have heard of *Women’s Way*, or who remember receiving a card and did read it)**

<b>Theme (N=106)</b>	<b>Number of Responses</b>
Already get mammograms once per year	10
Already has had breast or cervical cancer screenings this year (not time for them again)	10
Already in <i>Women’s Way</i> /was in <i>Women’s Way</i>	4
Because has health insurance/Medicare/military benefits	9
Can’t afford	2
Didn’t know (enough) about program	6
Didn’t/doesn’t think is eligible	9
Forgot	3
Getting help through another source	3
Just haven’t thought about it	17
Lost card	3
No reason	9
Procrastination	3
Too busy	4
Too high of income	1
General comments	20
<b>Total responses</b>	<b>113</b>

**Appendix Table 43. Among all respondents who called to learn about *Women’s Way* and said *Women’s Way* marketing material influenced them to call, what the marketing material was**

<b>Theme</b>	<b>Number of Responses</b>				
	<b>Group A*</b>			<b>Group B*</b> (N=18)	<b>Total</b> (N=31)
	<b>Card 1</b> (N=9)	<b>Card 2</b> (N=3)	<b>Card 3</b> (N=1)		
A cup	0	0	0	1	1
Booklet	0	1	0	0	1
Breast awareness information at the clinic	1	0	0	0	1
Brochures/pamphlets	3	1	0	12	16
Card in mail	4	2	1	0	7
Does not remember	1	0	0	0	1
Hot pink colored pen with information	0	1	0	0	1
Necklace	1	0	0	0	1
Survey	0	0	0	1	1
TV	0	0	0	2	2
Women’s health at Wal-Mart	0	0	0	1	1
General comments	0	0	0	1	1
<b>Total responses</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>18</b>	<b>34</b>

\*Group A includes respondents who remembered receiving the card, read it, and called to learn about *Women’s Way*; Group B includes respondents who either remembered receiving the card but did not read it or respondents who did not remember receiving the card but had heard of *Women’s Way*, and called to learn about *Women’s Way*.

**Appendix Table 44. Among respondents who called to learn about *Women’s Way*, what “other” thing influenced them to call**

<b>Theme (N=15)</b>	<b>Number of Responses</b>
Age	1
Cancer in family (wanted to for husband)	2
Cost/money	3
Co-worker had gotten on to program	1
Has/had cancer	2
Haven’t had one in long time/due for one	3
No health insurance	2
Public health nurse	1
Social services	1
Wanted to know how eligibility is determined	1
Total responses	17



*Appendix C:*  
**BASELINE SURVEY  
INSTRUMENT**

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Women's Way Baseline Survey  
February 17-March 11, 2004

Hello, my name is \_\_\_\_\_ and I'm calling from the North Dakota Center for Social Research in regards to a women's health survey.

- IF MALE: Is there a woman in your household who is between 40 and 64 years of age?
  - If "NO, there is no woman fitting the category who lives here," DO NOT CALL BACK-mark call sheet NE
  - If "YES, a woman fitting that description lives here, but is not home," establish a call-back time.
  - If "YES, a woman fitting the category lives here and is home," ask to speak to her.

-IF FEMALE: The survey is designed specifically for women who are between 40 and 64 years of age, and who may qualify for women's health programs if they are of a certain income. Is now a good time to talk?

1. Yes
2. No - If possible establish a call-back time. If refused, "thank-you anyway."

For verification purposes, are you between the ages of 40 and 64?

1. Yes
2. No-I'm sorry, but our survey is designed for women between 40 and 64. Thank you anyway.

In order to help determine eligibility based on income guidelines, could you tell me how many people live in your household?

Is your annual household income less than \$\_\_\_\_\_ before taxes?

HOUSEHOLD #	YEARLY INCOME
1.....	\$18,000
2.....	\$24,500
3.....	\$30,500
4.....	\$37,000
5.....	\$43,000
6.....	\$49,500
7.....	\$56,000
8.....	\$62,000
9.....	\$68,500
10.....	\$74,500

1. Yes
2. No-I'm sorry, but our survey is designed for women whose households earn less than that amount. Thank you anyway.

This study is sponsored by the North Dakota State Health Department's Division of Cancer Prevention and Control in collaboration with Reach Partners. The survey should take about 10 minutes. Your participation is voluntary and you may quit at any time. The survey is strictly confidential and your answers will be combined with those of other women. If you have questions about the survey, please contact Bev Martinson at 701-271-8158. If you have questions about your rights as a human research subject, please call the North Dakota State University Institutional Review Board at 701-231-8908.

*To begin, I'd like to ask you about topics concerning women's health care. I'd like to start with some questions about breast cancer.*

Q1. Has anyone in your family had breast cancer?

1. Yes
2. No
3. [Do not know/refused]

Q2. On a one to five scale, with one being "not at all worried," and five being "very worried," please tell me how worried you are about getting breast cancer.

1. Not at all worried
- 2.
- 3.
- 4.
5. Very worried
6. [Do not know/refused]
7. [Have or have had breast cancer]

Q3. This is a yes or no question. Do you know how often doctors recommend getting mammograms for women 40 and older? [A mammogram is an x-ray of the breast to detect any changes. It involves a machine that presses the breast while the picture is taken.]

1. Yes
2. No
3. [Do not know/refused]

Q4. Have you ever had a mammogram? [A mammogram is an x-ray of the breast to detect any changes. It involves a machine that presses the breast while the picture is taken.]

1. Yes
2. No – Skip to Q5a
3. [Do not know/refused] – Skip to Q5a

Q4a. Have you had more than one?

1. Yes
2. No
3. [Do not know/refused]

Q4b. When was your most recent mammogram?

1. Less than one year ago
2. One to two years ago
3. More than two years ago
4. [Do not know/refused]

Q5a. On a one to five scale, with one being "not at all nervous," and five being "very nervous," how nervous are you about getting a mammogram?

1. Not at all nervous
- 2.
- 3.
- 4.
5. Very nervous
6. [Do not know/refused]

Q5b. On a one to five scale, with one being "not at all likely," and five being "very likely," how likely are you to get a mammogram within the next 12 months?

1. Not at all likely
- 2.
- 3.
- 4.
5. Very likely
6. [Do not know/refused]

Q6. Is there anything that makes it difficult for you to get a mammogram?

1. Yes
2. No – Skip to Q7
3. [Do not know/refused] – Skip to Q7

Q6a. What makes it difficult for you to have a mammogram? \_\_\_\_\_

Q6b. On a one to five scale, with one being "not at all likely," and five being "very likely," how likely are you to overcome the barrier(s) to getting a mammogram?

1. Not at all likely
- 2.
- 3.
- 4.
5. Very likely
6. [Do not know/refused]

Q7. On a one to five scale, with one being "not at all confident," and five being "very confident," how confident are you that mammograms can provide early detection of breast cancer?

1. Not at all confident
- 2.
- 3.
- 4.
5. Very confident
6. [Do not know/refused]

Q8. On a one to five scale, with one being "not at all confident," and five being "very confident," how confident are you that a mammogram can prevent death from breast cancer because of early detection?

1. Not at all confident
- 2.
- 3.
- 4.
5. Very confident
6. [Do not know/refused]

Q9a. On a one to five scale, with one being "not at all," and five being "a great deal," how much do the opinions of people close to you, such as family members or friends, influence your decision about mammogram screenings?

1. Not at all
- 2.
- 3.
- 4.
5. A great deal
6. [Do not know/refused]

Q9b. How much do the opinions of health care providers influence your decision about mammogram screenings?

1. Not at all
- 2.
- 3.
- 4.
5. A great deal
6. [Do not know/refused]

Q9c. How much does information from the media influence your decision about mammogram screenings? [Newspapers, T.V., radio, brochures, Internet, magazines, etc.]

1. Not at all
- 2.
- 3.
- 4.
5. A great deal
6. [Do not know/refused]

*Now, I'd like to ask you a few questions regarding other types of screenings.*



Q10. Have you ever had a Pap test? [A Pap test checks the cells of the cervix (the opening of the uterus) for changes that could lead to cancer.]

1. Yes
2. No – Skip to Q11
3. [Do not know/refused] – Skip to Q11

Q10a. When was your most recent Pap test?

1. Less than one year ago
2. One to four years ago
3. More than four years ago
4. [Do not know/refused]

Q11. On a one to five scale, with one being "not at all likely" and five being "very likely," how likely are you to get a Pap test within the next 12 months?

1. Not at all likely
- 2.
- 3.
- 4.
5. Very likely
6. [Do not know/refused]

Q12. Have you heard of a program that may provide a way to pay for mammograms and Pap tests for women living in North Dakota?

1. Yes
2. No – Skip to Q13
3. [Do not know/refused] – Skip to Q13

Q12a. Do you recall the name of the program?

1. Yes
2. No – Skip to Q13
3. [Do not know/refused] – Skip to Q13

Q12b. What is the name of the program? \_\_\_\_\_

*Finally, I would like to finish with a few questions about your background.*

Q13. Would you mind telling me your age? \_\_\_\_\_ [if REFUSED, type 11]

Q14. What is the highest level of education you have completed?

1. Eighth grade or less
2. Some high school
3. High school graduate or GED
4. Some college, no degree
5. Associate or Technical degree
6. Bachelor's degree
7. Graduate or professional degree
8. [Do not know/refused]

Q15. What is your current employment status? [Check all that apply]

- Full time employment
- Part time employment
- Unemployed and looking for work
- Unemployed and not looking for work
- Homemaker
- Self-employed
- Student
- Retired
- Disabled

\_\_\_ [Refused]

Q16. What is your current marital status?

1. Married [living with spouse]
2. Married, but separated
3. Living with partner, not married
4. Divorced
5. Widowed
6. Never married
7. [Refused]

Q17. Do you have children (biological, adopted, through marriage)?

1. Yes
2. No
3. [Do not know/refused]

Q18. Do you currently have health insurance (including Medicaid)?

1. Yes
2. No
3. [Do not know/refused]

Q19. Would you mind telling me your annual household income before taxes? Please stop me when I get to your income category?

1. Less than \$5,000
2. \$5,000 to \$10,000
3. \$10,001 to \$15,000
4. \$15,001 to \$20,000
5. \$20,001 to \$25,000
6. \$25,001 to \$35,000
7. \$35,001 to \$50,000
8. More than \$50,000
9. [Refused]

*That concludes our survey. Thank you so much for helping us with this important study. Goodnight.*

Q20. Record group code from calling sheet.

1. Group 1
2. Group 2
3. Group 3

Q21. Record cluster code from calling sheet.

1. Agribusiness
2. Blue Highways
3. Golden Ponds
4. Grain Belt
5. Hard Scramble
6. Middle America
7. Mines and Mills
8. Red, White, and Blues
9. River City
10. Rural Industrial
11. Rustic Elders
12. Smalltown Downtown
13. Starter Families
14. Sunset City Blues

Q22. Record respondent's ID from calling sheet.

*Appendix D:*  
*EVALUATION SURVEY*  
*INSTRUMENT*

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*Women's Way* Evaluation Survey  
October 13-25, 2004

Hello, my name is \_\_\_\_\_ and I'm calling from the North Dakota Center for Social Research in regards to a women's health survey. Is \_\_\_\_\_ there? [If not there, establish call-back time].

We are conducting a short survey sponsored by the North Dakota State Health Department's Division of Cancer Prevention and Control in collaboration with *Women's Way*. Do you have a few minutes?

The survey should take about 5 minutes. Your participation is voluntary and you may quit at any time. The survey is strictly confidential and your answers will be combined with those of other women who answer the survey. Your assistance is important in helping us design educational programs for women. If you have questions about the survey, please call Bev Martinson at 701-271-8158. If you have questions about your rights as a human research subject, please call the North Dakota State University Institutional Review Board at 701-231-8908.

1. Yes
2. No – If possible establish a call-back time. If refused, "thank-you anyway."

Q1. Have you ever heard of *Women's Way*, a program that offers low-or no-cost mammograms and Pap tests to eligible women?

1. Yes
2. No/not sure – Skip to Q3
3. [Refused] – Skip to Q3

Q2. How have you heard of *Women's Way*? [check all that apply]

- Health care worker (doctor, nurse, etc.)
- Brochure
- Newspaper
- Television ad
- Radio ad
- Received something in the mail
- Survey
- Friend or relative
- Internet
- Other: \_\_\_\_\_
- [Don't remember]
- [Refused]

Q3. Do you remember receiving a card in the mail in May or June that talked about getting a low- or no-cost mammogram or Pap test (from *Women's Way*)?

1. Yes
2. No/not sure – If Q1=2 or 3, skip to Qcontact; if Q1=1, skip to Q11
3. [Refused] – If Q1=2 or 3, skip to Qcontact; if Q1=1, skip to Q11

Q4. Which of the following best describes what you did with the card?

1. You OPENED and READ the card
2. You DID NOT read the card--you threw the card away without opening it. – Skip to Q11
3. You DID NOT read the card--you set the card aside without opening it. – Skip to Q11
4. Not sure – Skip to Q11
5. [Refused] – Skip to Q11

Q4a. Can you recall anything about what prompted you to open and read the card?

\_\_\_\_\_

Q5. Do you remember anything about the card you received? (e.g., message, text, design of the card)

1. Yes
2. No – Skip to Q5\_1

3. [Refused] – Skip to Q5\_1

Q5a. What do you remember about the card? (e.g., message, text, design of the card) \_\_\_\_\_

Q5\_1. An incentive (e.g., a reward) was offered to get enrolled in the program. Do you remember what the incentive was?

1. Yes: \_\_\_\_\_
2. No
3. [Refused]

Q5\_2. There were eligibility requirements to enroll in the program. Do you remember what any of the requirements were?

1. Yes: \_\_\_\_\_
2. No
3. [Refused]

Q6. Which of the following best describes what you did after reading the card?

1. You called to learn about enrolling in the *Women's Way* program
2. You did not call – you set the card aside – Skip to Q13
3. You did not call – you threw the card away – Skip to Q13
4. You did not call – gave the card to someone who might be interested – Skip to Q13
5. You did not call – other: \_\_\_\_\_ – Skip to Q13
6. [Refused] – Skip to Q13

Q7. Did the card influence you to call?

1. Yes
2. No
3. [Refused]

*Did any of the following influence you to call Women's Way?*

Q8\_1. Health care worker's recommendations about getting screened (mammogram or Pap test)

1. Yes
2. No
3. [Refused]

Q8\_2. Someone close to you has dealt with cancer

1. Yes
2. No
3. [Refused]

Q8\_3. Stories you've seen in the media (e.g., news story, movie)

1. Yes
2. No
3. [Refused]

Q8\_4. *Women's Way* marketing material

1. Yes
2. No
3. [Refused]

Q8\_4a. What was the material? \_\_\_\_\_

Q8\_5. Pressure from family or friends

1. Yes
2. No
3. [Refused]

Q8\_6. Was there anything else that I haven't already mentioned that influenced you to call *Women's Way*?

1. Yes: \_\_\_\_\_
2. No
3. [Refused]

Q9. Were you enrolled in *Women's Way*?

1. Yes – Skip to Qcontact
2. No
3. [Refused] – Skip to Qcontact

Q10. Why were you not enrolled in *Women's Way*? [Check all that apply] – Skip to Qcontact

- Didn't qualify-you were too young
- Didn't qualify-you were too old
- Didn't qualify-your income exceeded their guidelines
- Didn't qualify-you have insurance that covers screenings
- Other reason: \_\_\_\_\_
- [Do not know/refused]

Q11. Have you ever called to learn about enrolling in the *Women's Way* program?

1. Yes
2. No – Skip to Q13
3. [Refused] – Skip to Qcontact

*Did any of the following influence you to call Women's Way?*

Q12\_1. Health care worker's recommendations about getting screened (mammogram or Pap test)

1. Yes
2. No
3. [Refused]

Q12\_2. Someone close to you has dealt with cancer

1. Yes
2. No
3. [Refused]

Q12\_3. Stories you've seen in the media (e.g., news story, movie)

1. Yes
2. No
3. [Refused]

Q12\_4. *Women's Way* marketing material

1. Yes
2. No
3. [Refused]

Q12\_4a. What was the material? \_\_\_\_\_

Q12\_5. Pressure from family or friends

1. Yes
2. No
3. [Refused]

Q12\_6. Was there anything else that I haven't already mentioned that influenced you to call *Women's Way*? – Skip to Qcontact

1. Yes
2. No
3. [Refused]

Q13. Why haven't you inquired about enrolling in *Women's Way*? [check all that apply]

- You were told by a health care provider that you didn't need screenings
- You don't think you need screenings
- You don't need help paying for screenings
- Because of negative feelings you have about being screened (discomfort)
- You don't want to deal with questions about your eligibility
- You believe you are too young/old to qualify
- You believe you make too much money to qualify
- You have insurance coverage
- You just don't have time
- You don't have a way to pay for treatment if you were to be diagnosed
- You are not concerned about getting cancer
- You don't want to think about the possibility of getting cancer
- You don't want outside help/assistance
- You don't trust/have confidence in *Women's Way*
- Other: \_\_\_\_\_
- [Do not know/refused]

Qcontact. Would you be interested in being contacted again in the next couple of months to participate in a follow-up interview? This would be arranged at a later time at your convenience and there would be a monetary incentive if you participated. If you have any questions you may contact Bev Martinson at 701-271-8158.

1. Yes
2. No, I do not want to be contacted again. – Skip to End

Qname. For our contact information I'd like to verify your name. [Check spelling]

Qaddress. What is your address? [street, city, zip-code]

Qphone. What is your phone number?

Qcounty. What county do you live in?

*That concludes our survey. Thank you so much for helping us with this important study. Goodnight.*

QUniqueID. Record respondent's unique ID from calling sheet.

QMailing. Record which mailing/card respondent received from calling sheet.

1. Mailing/card 1
2. Mailing/card 2
3. Mailing/card 3





*Appendix E:*  
*CARDS USED IN THE*  
*DIRECT MAIL CAMPAIGN*

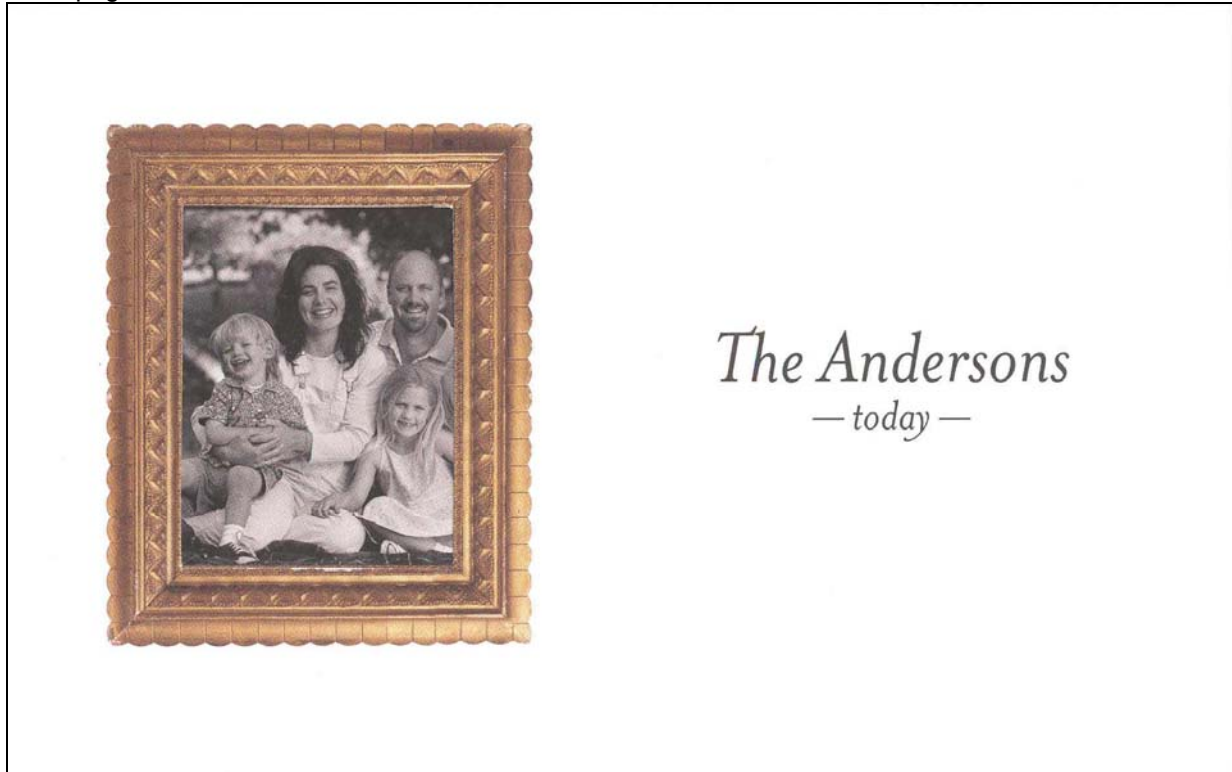
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**Card 1 – the “Anderson” Card**

9.25” W x 5.75” H; the “Anderson” card was adapted by *Women’s Way* from cards developed and researched by SAGE – Minnesota’s Cancer Screening Program.

Front page



Back page



Card 1 – the “Anderson” Card continued

Page 2 and Page 3

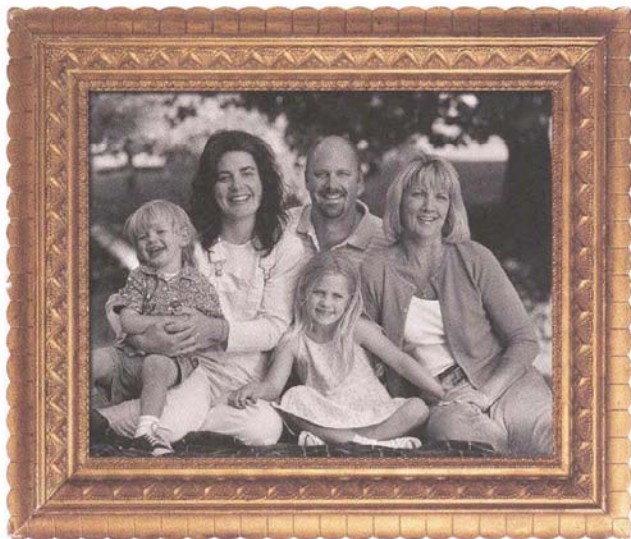


*High deductibles? No insurance?  
Women's Way may provide a way to pay for your  
mammogram and Pap test.*

Simply call us today at 1-800-44 WOMEN  
to see if you are eligible.

*It's that easy!*

Plus, get \$10 when you receive a low or no cost  
mammogram or Pap test with North Dakota's *Women's Way*  
program! Once you've enrolled, complete your screening  
by August 31, 2004, and we'll send you \$10.

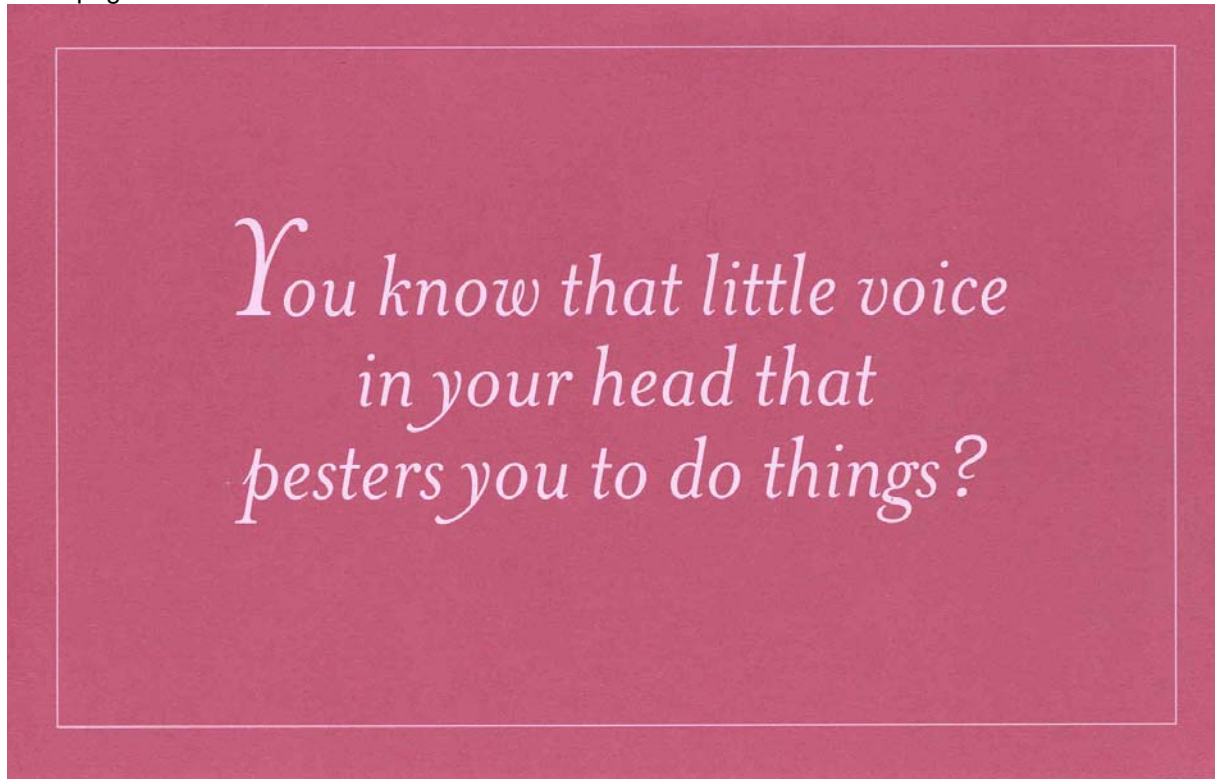


*The Andersons  
— eighteen months ago —*

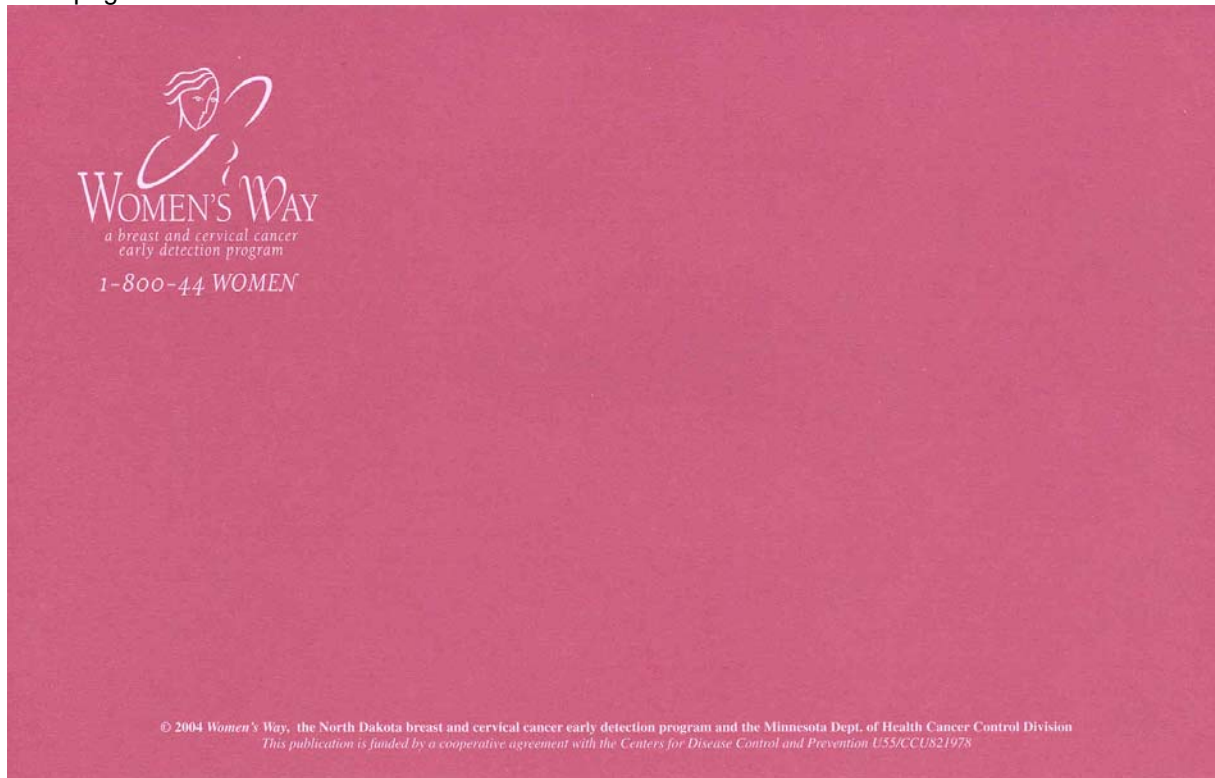
**Card 2 – the “Little Voice” card**

8.5” W x 5.5” H; the “Little Voice” card was adapted by *Women’s Way* from cards developed and researched by SAGE – Minnesota’s Cancer Screening Program.

Front page



Back page



*We'll give you \$10  
to listen to it.*

Get \$10 when you receive a low or no cost mammogram  
or Pap test with North Dakota's *Women's Way* program!

*High deductibles? No insurance? Women's Way may provide  
a way to pay for your mammogram and Pap test.*

*Simply call us today at 1-800-44 WOMEN  
to see if you are eligible.*

Once you've enrolled in *Women's Way*, complete your  
screening by August 31, 2004, and we'll send you \$10.

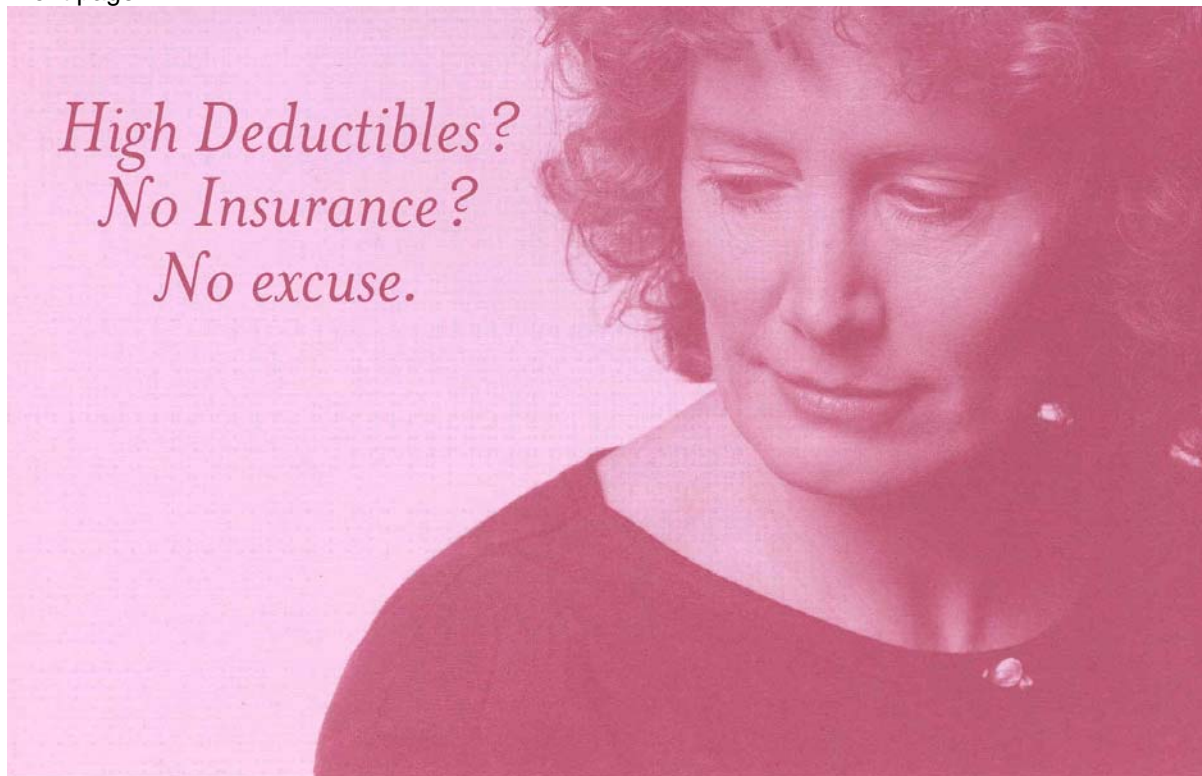
*It's that easy!*



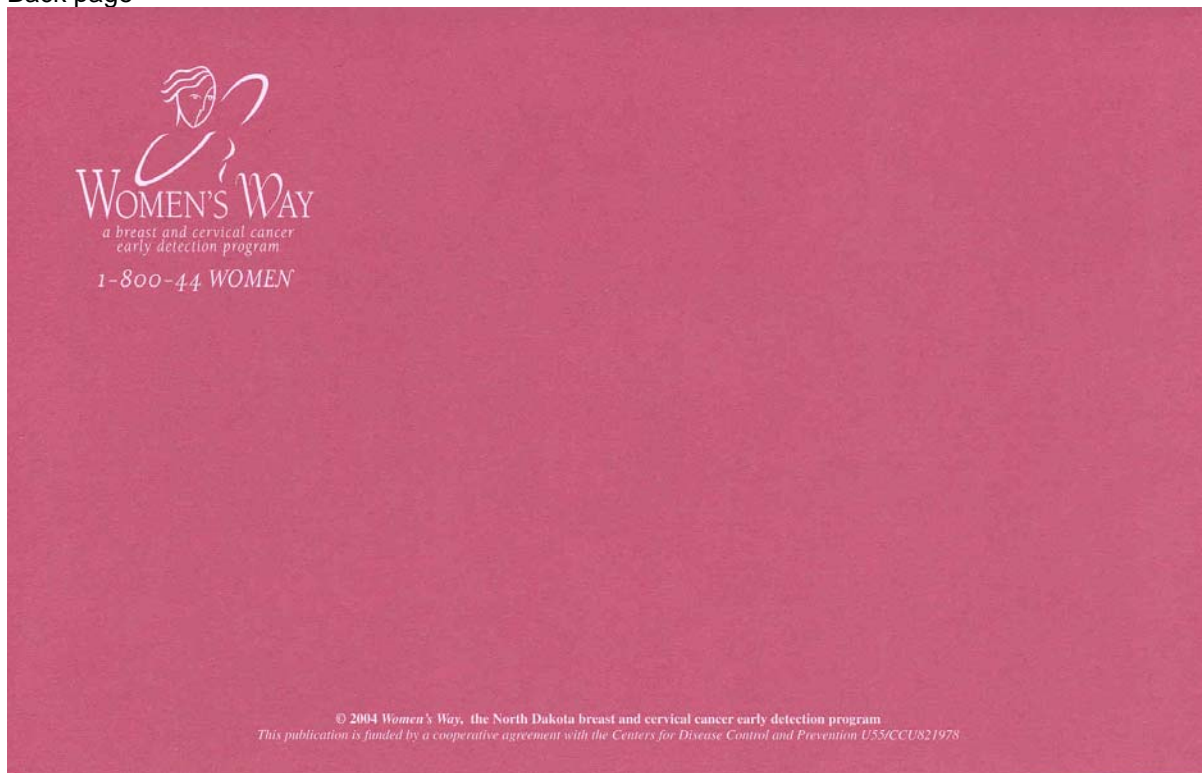
**Card 3 – the “Poster” card**

8.5” W x 5.5” H; the “Poster” card was an adaptation of a *Women’s Way* poster message that was previously tested with the intended audience.

Front page



Back page



*There's a way with  
Women's Way.*

*High deductibles? No insurance? Women's Way may provide  
a way to pay for your mammogram and Pap test.*

*Simply call us today at 1-800-44 WOMEN  
to see if you are eligible.*

Plus, get \$10 when you receive a low or no cost mammogram or Pap test with North Dakota's Women's Way program! Once you've enrolled, complete your screening by August 31, 2004, and we'll send you \$10.

*It's that easy!*

**Envelope Used in the Direct Mail Campaign**

9.5" W x 6.0" H for Card 1, the "Anderson" card

9.0" W x 6.0" H for Card 2, the "Little Voice" card, and Card 3, the "Poster" card

The envelopes used for the three cards were identical except that the envelope for Card 1, the "Anderson" card, was slightly larger. Each envelope showed the *Women's Way* logo and the North Dakota Department of Health address as the return address. There were, however, a few slight differences in how the envelopes were addressed (i.e., directly on the envelope versus labeled) and sealed (i.e., using glue versus using a sticker) by the mailhouse contracted to send the cards.

Front

