

**SUMA/Orchard Social Marketing, Inc.**  
**Final Report on Pilot Project**  
**WIC Breastfeeding Promotion Outreach Campaign**  
**Targeted to African Americans**

**Executive Summary**

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) piloted a breastfeeding campaign targeted to African American women in Beaumont, Port Arthur, and Orange and Hardin counties. National and state research shows that African Americans are less likely to breastfeed than other ethnic groups. In the Texas WIC population, average breastfeeding rates are: Caucasian 59.2%, African American 47.7%, Hispanic 68.1%, and other 67.8%. The goal of the campaign is to raise awareness of the benefits of breastfeeding and ultimately to increase breastfeeding rates among African American WIC participants. The pilot campaign time period was January 2004 through September 2004. WIC conducted the pilot project to test the effectiveness of campaign elements and strategy before launching the campaign statewide.

Campaign elements included radio and television advertising as well as gift bags distributed to physicians' offices and hospitals to offer to African American patients expressing interest in breastfeeding. The bags were designed to contain the following items:

- ◆ Brochures promoting the benefits of breastfeeding, targeted to pregnant women
- ◆ Brochures targeted to their mothers and partners promoting the benefits of breastfeeding and describing how to offer support
- ◆ A refrigerator magnet touting the benefits of breastfeeding
- ◆ A baby bib with the message *Breast Milk: 100% Natural Ingredients*

Additional collateral print materials included two office posters featuring an African American woman with her baby and a promotional message from a female African American health-care provider. A variety of community-outreach activities during the time the campaign spots were aired augmented the campaign messages. During the pilot, WIC offices throughout the region also displayed posters and distributed brochures to pregnant African American women at certification. Selected physicians' offices in the region received a recommended protocol for discussing breastfeeding with expectant mothers, along with the breastfeeding gift bag and the posters. Hospitals received posters and gift bags to distribute to mothers who said they were going to breastfeed.

## Methodology

SUMA/Orchard Social Marketing, Inc. was contracted to evaluate the effectiveness of the campaign through pre- and post-campaign research. Campaign research included pre- and post-campaign interviews with 15 health-care providers at physicians' offices and hospitals that participated in the campaign; interviews with WIC staff in Beaumont, Port Arthur, and Orange and Hardin counties; and one-on-one in-depth interviews with 43 WIC clients during pregnancy and after giving birth about their infant feeding choices and their exposure to campaign elements. This report features a comparison of baseline and post-campaign findings.

A random sample of 150 pilot-area African American WIC participants also took part in shorter telephone interviews conducted during August 2004 to determine their recall of receiving campaign print materials while attending WIC certification. Respondents were selected from a universe of 600 African American WIC participants who were pregnant and certified at WIC during the time period of the campaign. Of the sample, 65% (n=97) were from Beaumont, 33% (n=50) from Port Arthur, and 2% (n=3) from Orange.

## Summary Findings

*Heightened awareness of the benefits of breastfeeding.* In post-campaign interviews, women were more likely to say that one of the reasons breastfeeding is best for your baby is that it can make your baby smarter as well as healthier. They were also more aware that breastfeeding can help them lose weight. All three messages are stressed in the campaign advertisements and materials.

*Recall of campaign advertisements and materials.* Of the 43 WIC clients participating in in-depth interviews, 50% remembered hearing the radio advertisements and 48% remembered seeing the television commercials. Participants indicated a high recall of the breastfeeding promotional posters, displayed in WIC offices, local hospitals, and participating physicians' offices. The poster featuring the mother and her infant was remembered by 74% of all participants, and the poster featuring a female African American doctor was recalled by 37%.

*Attitude shifts noticed by health-care providers and WIC staff.* A majority of health-care providers and WIC staff reported a noticeable change in African American patients' attitudes toward breastfeeding. They not only reported that more pregnant African American patients expressed an interest in breastfeeding,

but also noticed a marked difference in the number and types of questions that patients asked about breastfeeding. They often expressed the opinion that this change was sparked by the campaign's television and radio advertisements. Many remarked that the most notable change in attitude, surprisingly, was among African American teen mothers, who generally have shown little interest in breastfeeding.

***High quality of materials.*** WIC staff said the brochures distributed at clinics were especially well-received because of the quality of the materials. They also praised the campaign approach of providing specific materials for fathers and grandmothers and indicated that they had noted that these were appreciated by the target audiences.

***About half of telephone-survey respondents recalled receiving materials at WIC.*** More than half (53%) of telephone-survey respondents remembered receiving campaign brochures at WIC. Of those, 52% recalled a WIC staff member reviewing brochures with them, although this varied by clinic (48% at the Beaumont clinic, 28% at the Port Arthur clinic). Only 19% and 28% remembered receiving the brochures for their mothers and partners, respectively, but 79% of those who did receive the brochures passed them on to the intended recipients.

***Incomplete distribution of campaign materials.*** Some physicians' offices did not receive the complete set of materials. At other offices, only a few staff members were aware that the materials were available to distribute to patients. Hospital staff reported that they gave the gift bags to all African American women who expressed an interest in breastfeeding. However, very few of the 43 WIC in-depth study participants recalled receiving the gift bags, associated items, or brochures.

***Mixed distribution of campaign materials.*** Some physicians' offices and hospitals that did distribute the materials mixed them with promotional items from formula and other baby-product companies in bags they normally distribute to pregnant patients. Physicians' offices received some campaign materials separately and added them to their existing gift bags. Researchers noted that at least one health-care provider office produced a box of unused campaign gift bags; staff said they had received the materials but had been uncertain how to use them and had simply mixed them in their own version of a gift bag.

***Need for breastfeeding support at the hospital.*** While a majority of women were open to breastfeeding, complications at the hospital often created unforeseen barriers. Of the 43 participants in one-on-one pre-and post-campaign interviews,

three-fourths breastfed, planned to breastfeed, considered breastfeeding, or fed their babies both breast milk and formula. Of these, 37% did not breastfeed because of complications at the hospital, such as an unexpected Caesarian section, pain, inability to get the baby to latch on correctly, or a last-minute change of mind. These findings indicate that a large number of African American women are willing to breastfeed but need additional support at the hospital.

## Conclusions

While it is difficult to prove that behavior change occurred strictly because of a nine-month media campaign, reports from health-care providers and WIC staff substantiate a notable attitude change in the target population. In addition, from November 2003 to August 2004, breastfeeding rates had risen from 30.8% to 40.8% in Hardin County and from 15.4% to 23.4% in Orange County based on Texas WIC breastfeeding initiation rates among African American women, further evidence of the campaign's effectiveness.

The campaign's impact may have been weakened by the fact that WIC staff gave the brochures only to women who said they were going to breastfeed rather than to all pregnant African American women certified at WIC, as stated in the protocol. Incomplete distribution of the gift bags by physicians should also be taken into consideration as findings are reviewed.

As the campaign moves forward, WIC may want to prioritize spending on media, paying close attention to strategic radio placement on local hip-hop stations that appeal to young African Americans, as well as on gospel stations. Gift bags should be distributed at WIC offices and possibly hospitals, rather than doctors' offices, though doctors should continue to be included with an announcement about the campaign and posters for their offices. To increase knowledge and excitement about the campaign, WIC staff and health-care providers need a personalized campaign kickoff along with a protocol for use. This could occur in regional or local gatherings to promote the campaign to WIC staff and hospital staff. Occasional follow-up should monitor their efforts.

## FULL REPORT

### Background

The Texas Women, Infants and Children (WIC) Program piloted a breastfeeding campaign targeted to African American women in Beaumont, Port Arthur, and Orange and Hardin counties. The goal of the campaign is to raise awareness of the benefits of breastfeeding and ultimately to increase breastfeeding rates among African American WIC participants. Campaign elements included brochures promoting the benefits of breastfeeding, targeted to pregnant women and their mothers and partners; gift bags containing the brochures, a refrigerator magnet touting the benefits of breastfeeding, and a baby bib with the message *Breast Milk: 100% Natural Ingredients*; two office posters; radio and television advertisements; and a variety of community-outreach activities. During the pilot, WIC offices throughout the region displayed posters and distributed the brochures. Selected physicians' offices in the region received a letter from the Texas Commissioner of Health asking for their support and participation in the campaign, two protocols, one for making their practice breastfeeding friendly and one for discussing breastfeeding with expectant mothers, along with the breastfeeding gift bag and the posters. Hospitals received posters and gift bags to distribute to mothers who said they were going to breastfeed.

SUMA/Orchard Social Marketing, Inc. was contracted to evaluate the effectiveness of the campaign through pre- and post-campaign research. This report provides final findings of this research. It includes a comparison of baseline data and results gathered from 43 WIC clients who were interviewed during pregnancy and after giving birth about their infant feeding choices and their exposure to campaign elements. Eighty-eight percent (n=38) of participants were from Beaumont, 7% (n=3) from Port Arthur, 2% (n=1) from Orange and 2% (n=1) from Kountze (Hardin County). This report also contains findings from pre- and post-campaign interviews with 15 health-care providers who participated in the campaign and with WIC staff from clinics in the four cities in the pilot area. Pre-campaign interviews were conducted in December 2003; the campaign rolled out in January 2004 and ran through September 2004; and post-interviews were conducted in June and July 2004.

In addition to the 43 in-depth one-on-one interviews, a random sample of 150 pilot-area African American WIC participants took part in shorter telephone interviews conducted during August 2004 to determine their recall of receiving the campaign print materials while attending WIC certification.

## Findings From Health-Care Providers

Pre-campaign findings indicated some of the participating health-care providers support breastfeeding and take the time to explain the benefits to women, while others simply ask the expectant mother on the first visit how she plans to feed her baby. Neither of the two physicians who care for the vast majority of study participants went beyond asking women how they plan to feed their babies. They provided little, if any, educational materials on breastfeeding, but both were open to participating in the study and distributing materials. Campaign materials were distributed to five hospitals and thirty-seven health-care providers.

Post-campaign interviews were conducted with 15 health-care providers representing seven obstetricians, two University of Texas Medical Branch (UTMB) midwives and two hospitals. The participating doctors' offices are the providers for all but one of the 43 women who participated in the in-depth interviews for this study. The interviews explored whether the providers received the campaign materials, how the materials were delivered to them, how they were used and distributed to patients, the providers' opinions of them, and whether they perceived that the campaign created a "buzz" in the community or prompted patients to ask questions. Providers were also asked whether they had any recommendations for the Department of State Health Services as it moves forward with the campaign.

### *Campaign Impact*

Several providers said the campaign had a positive impact on community members' attitudes toward breastfeeding and prompted African American patients to ask questions they have not typically asked. The shift in attitude was most noticeable among young African American women, many providers said. Their comments about the campaign, represented by the following quotes, were consistent:

*They are more informed. They come in and say, "I want to breastfeed." (Nurse from a doctor's office that sees more than 50% of study participants)*

*I'm really surprised – we have a lot more young girls trying to breastfeed than I ever remember before, and I've been here 13 years. They used to say, "No, I'm not doing that." (Nurse from a doctor's office)*

*The media has softened the attitudes. Our clients are more receptive. They've heard it is good and are more willing to try it. I'm fielding more questions than I*



used to. People are trying to confirm what they have heard on the radio. (Midwife, UTMB)

*I've noticed that more women are considering it. I've noticed an increase in African American mothers in my prenatal classes. Now they are talking about it more and are open to it more. I think it is the ads. (Nurse/lactation consultant)*

### ***Dissemination of Campaign Materials to Health-Care Providers***

Representatives from WIC and the advertising agency responsible for outreach attempted to schedule meetings with thirty-seven health-care providers (mostly doctors) and five hospitals to introduce the campaign elements. Although the doctors agreed their offices would participate in the campaign they typically had the WIC team meet with their office staff instead. At the meetings with office staff materials were hand delivered and reviewed. They included:

- 1) A letter from the Texas Commissioner of Health asking for their support in the campaign
- 2) Two protocols: *Doctors Make the Difference: Incorporating Breastfeeding into Prenatal Care* and *Steps to a Breastfeeding Friendly Practice*
- 3) Two office posters for waiting or exam rooms
- 4) 50 patient gift bags containing:
  - A brochure for expectant mothers
  - A brochure for the partners of expectant mothers
  - A brochure for the parents of the expectant mother

The bags were also suppose to contain a refrigerator magnet touting the benefits of breast milk and a *BreastMilk: 100% Natural Ingredients* baby bib that were later hand delivered because of a production delay.

The distribution process was challenging because any attempt to meet with health-care providers to introduce the campaign materials was competing with pharmaceutical companies and formula companies who often provide luncheons or other benefits that a state agency effort can not. Therefore health care staff, particularly doctors, were less likely to take the time to meet with WIC staff.

In spite of the fact the materials were hand delivered to most offices, in the post interviews with participating health-care providers, several did not remember receiving all of the campaign materials. A few physicians' offices and the hospitals reported they received the gift bags and gave them out as intended. Almost all remembered receiving and posting the posters. Three doctors' offices reported they received selected campaign items rather than the complete

package. One had the brochure for mothers and posters but none of the other materials. Another reported receiving only bibs. One clinic did not receive any of the materials and had no knowledge of the campaign.

Post-campaign interviews sparked the interest of the nursing staff at two clinics that had not received complete packages; they called other satellite clinics and found the other materials but expressed disappointment that the materials had not made it to their offices, where the majority of clients are seen. In some cases, the head nurse or office manager who responded to the interview had no knowledge of the materials and didn't become aware of them until the time of the interview, when she asked around the office and found the person who had received them. None of the respondents recalled seeing the protocol or the magnets.

In general, the health-care providers interviewed were unsure how they had received the materials. Only one provider remembered someone coming by and explaining the contents of the packages and how to use the materials. Conclusions drawn from this information must take into consideration the apparent lack of communication between related offices, as well as within offices.

All respondents wanted more materials and consistently described them as attractive and informative. They were particularly appreciative of materials on breastfeeding, because they said there aren't many available to give clients. They also liked the combination of materials targeted to mothers, fathers and grandmothers. Several said the bib was the most popular item; one health-care provider reported that she used it as a wall hanging in her examination room.

### *Distribution by Health-Care Providers to Clients*

Clinics and hospitals differed in how they distributed the materials to clients. At one clinic, providers gave out the gift bag when they were discussing breastfeeding during the client's breast exam. At another, they gave the gift bag to every new obstetrics patient regardless of race. At the two hospitals, the gift bags were given to women during labor or at discharge if they indicated they were going to breastfeed or were considering it. The hospitals also made the bags available during prenatal classes. One provider made a special presentation for teen mothers at a local high school and gave each student a gift bag. Others combined the materials with other goody bags for expectant mothers that they distribute. When asked what other items their standard goody bags contained, they often reported that they contained promotional items provided by formula and other baby-product companies.



## *Health-Care Providers' Recommendations for Statewide Rollout*

*Schedule face-to-face meetings at which WIC staff introduce the campaign and protocol.* One-on-one meetings with health-care providers like the ones conducted by WIC state staff and outreach representatives during the pilot can be done by local WIC staff to local health-care providers as the campaign rolls out statewide. A face to face meeting will increase the possibility that a physician's office or health-care provider will support the campaign.

*Provide monthly reminders of the campaign, perhaps in a newsletter or follow-up telephone call.* One head nurse at a hospital said the campaign served as a reminder to her staff about the importance of breastfeeding, but that frequent reminders are needed. She reported that her staff was enthusiastic about the breastfeeding campaign, but "it went wayside after a couple of months." She said her staff would benefit from monthly reminders about the importance of breastfeeding. She suggested a calendar or a monthly poster with a message promoting breastfeeding.

*Create an extended, long-term campaign effort.* Providers recommended an ongoing campaign rather than a one-shot, short-term campaign. They said a continued effort is needed to build and sustain the more receptive attitude toward breastfeeding that they witnessed in the African American population. Most providers requested additional materials.

*Explore other avenues for distribution.* As additional distribution avenues, providers recommended childbirth classes and public school classes for teen mothers.

## Findings From WIC Staff

### *Protocol*

The campaign protocol for WIC staff suggested that the three core brochures be given as a set to all African American participants and their families as part of the individual counseling provided during pregnancy certification. The materials could also be used for individual counseling in lieu of a group class for women certified prior to the campaign. Clinics followed the suggested protocol, but with some variations. Some clinics gave the brochures only to women who expressed an interest in breastfeeding rather than to all African American women, because they did not want to run out of brochures and wanted to make sure the women who were most likely to benefit from the information received the materials. At one clinic, the brochures were also handed out in breastfeeding classes for participants to review on their own, rather than being integrated into the existing curriculum. One clinic passed out the brochures with vouchers to pregnant African American women.

### *Campaign Impact*

WIC staff consistently said they thought the campaign had made a difference. During the campaign, they said African American women asked more questions about breastfeeding and in general seemed more open to the idea of breastfeeding than before. Every clinic reported that the most significant change they noticed was in younger women, many still in their teens. As one staff member said, "In the past all you'd hear was 'It hurts.' Now they say it is best for the baby."

Staff expressed concern that the advertisements would stop and that they wouldn't receive more materials. They were eager to know whether the campaign was going to continue. Some said the TV ads were particularly appealing, because they show peers and focus on family. It was one counselor's opinion that by focusing on a family reunion, an ad conveys the message that a breastfeeding mom can still be with her family. As she said, "Women think that someone who is breastfeeding might not be able to get out and do these things, so it is good for them to see someone who breastfeeds enjoying life."

Staff reported that the quality of the brochures made a difference in their clients' receptiveness to the information. They observed that women were likely to hold on to the brochures. "They are proud of the materials," one staff member said. "They don't leave them behind. They are interested." Another staff member called these the nicest materials she had seen in her 16 years at WIC.

Staff members said that playing the radio ads on the local hip-hop station (FM 102.5), which also featured a call-in discussion about breastfeeding prompted by the campaign, had a positive impact, particularly on young women. As one counselor said, "If it can be said on that station, it must be cool."

Asked whether clients mentioned the radio or TV ads, staff members said some did, especially after the radio talk show and again after the local newspaper ran a story about breastfeeding. A counselor said she introduced her breastfeeding class with a question about what people had heard lately about breastfeeding, which opened the door for participants to discuss the advertisements.

One clinic reported an increase in attendance by African Americans in breastfeeding classes, from 14 in April to 31 in August. Staff also reported an increase in the number of grandmothers and fathers attending these classes. One clinic reported that its most recent breastfeeding class had contained three fathers and three grandmothers, which is more than normal.

All of the clinics reported that fathers who received the brochures were appreciative and receptive to the information.

### *Recommendations*

*WIC staff recommended only one change to the print materials, to more fully address the issue of pain and the need to ask for support at the hospital.* They suggested the materials include a message preparing women for the challenges of breastfeeding, including the possibility of pain and the need to ask for assistance in getting the baby to latch on correctly.

*A letter from the state WIC office to physicians announcing the campaign is helpful.* When asked whether they would be willing to introduce the materials to local physicians' offices, WIC staff members were agreeable but stressed the importance of the state sending a letter to doctors like the one used in the pilot campaign from the Commissioner of Health announcing the campaign.

## Findings From WIC Participants

### *Campaign Impact*

Statistical data captured by WIC indicate that breastfeeding rates in two of the pilot communities increased. Table 1 shows the breastfeeding rates among African American women at local WIC agencies in the campaign pilot areas before and during the campaign. Beaumont, the local agency with the highest breastfeeding rates, and Port Arthur recorded slight decreases during the campaign, while rates rose significantly in Hardin and Orange counties. In the absence of other known factors that might have influenced these increases, the WIC breastfeeding rates suggest that the campaign efforts have made an impact.

**Table 1**  
**Breastfeeding Rates Among African American Women Enrolled in WIC Who Breastfed at Birth in Local WIC Agencies in the Campaign Pilot Region**

	% LA 30 (Port Arthur)	% LA 40 (Beaumont)	% LA 63 (Hardin)	% LA 66 (Orange)
Nov 03	20.7	37.1	30.8	15.4
Dec 03	20.5	36.7	29.6	16.7
Jan 04	20.9	36.1	24.5	17.8
Feb 04	20.5	36.3	26.0	19.4
Mar 04	20.1	36.4	28.0	21.2
Apr 04	21.4	35.6	29.8	21.9
May 04	21.6	35.8	31.1	23.4
June 04	20.4	35.3	35.4	23.3
July 04	20.6	36.4	38.8	21.9
Aug 04	19.5	36.3	40.8	23.4

The ultimate success of the campaign cannot be measured simply by looking at breastfeeding rates during the campaign. Many factors contribute to a woman's decision to breastfeed her baby, and these will be discussed below. Another measure of the campaign's impact is respondents' levels of knowledge about breastfeeding facts. As Table 2 shows, basic knowledge of breastfeeding facts increased in several areas during the campaign.

**Table 2**  
**Pre- and Post-Test Knowledge About Breastfeeding**

Question	Pre-test			Post-test		
	% True	% False	% Don't Know	% True	% False	% Don't Know
Breastfeeding is healthier for your baby than formula feeding.	92	8	-0-	98	2	-0-
Some formulas are as nutritious as breast milk.	25	68	7	37	60	3
Breastfeeding helps you lose weight after the baby is born.	63	27	10	75	25	-0-
Breastfeeding is relaxing.	51	34	15	70	26	4
Breastfeeding can help prevent a child from growing up to be obese.	37	56	7	49	46	5
Breastfed babies are sick less often.	86	12	2	93	7	-0-
Working women can't breastfeed.	3	95	2	12	88	-0-
WIC provides free breast pumps.	48	20	32	72	18	10
Breast milk can be frozen.	61	25	14	67	25	8
Breastfeeding saves money.	97	3	-0-	86	14	-0-

***Barriers to Successful Breastfeeding***

In the 43 interviews conducted for this study, SUMA/Orchard Social Marketing, Inc. found a large proportion of respondents who wanted to breastfeed but did not due to a variety of circumstances. Three-fourths of the study population reported that they breastfed, planned to breastfeed, considered breastfeeding, or fed their babies both breast milk and formula. Of the 43 study participants, 10 (23%) breastfed their babies, six (14%) fed both breast milk and formula, 16 (37%) planned to breastfeed or thought about breastfeeding but chose formula after delivery for a variety of reasons, and 11 (26%) fed only formula. Of the participants who successfully breastfed, four had originally planned to use formula. (For purposes of this study, successful breastfeeding is defined as breastfeeding at least three weeks.)

These findings suggest that even when a respondent had decided to breastfeed, events during labor or immediately postpartum were critical to her implementation of her decision or her ultimate success. Several women had “emergency” Caesarean sections. Others changed their minds at the last minute because they were “scared” or “intimidated” by breastfeeding. WIC staff also reported some women do not say they are going to breastfeed for fear that they will not receive formula at WIC if they change their minds. In such cases, they do not receive breastfeeding education at WIC and therefore lack the knowledge

needed for a successful breastfeeding experience. The problems that may result in not sharing the decision with WIC staff are illustrated by the following story, told by a woman who expressed to researchers her intention to breastfeed in the pre-campaign evaluation.

*I planned to breastfeed but I had an emergency C-section. My placenta was aging and they had to take her early. She weighed 4 pounds and 11 ounces, and I was on so much medication that they gave her a bottle. She was in the hospital a week, and I bottle fed her. Then I tried to breastfeed her when I got home, but she wouldn't take it....The nurse at the hospital later told me I could have breastfed her, but I didn't know, no one told me.*

When probed further about what she had learned about breastfeeding at WIC to help her through this time, she said, *I never talked to no one at WIC. Well, once I tried, but it didn't work. So I tried it on my own.* According to the Beaumont WIC process, if she had expressed her intention to breastfeed, she would have taken a class. The fact that she had so little knowledge upon which to draw at the hospital indicates that she did not reveal her intentions at WIC in order to keep her options for formula open.

Still other women reported pain in breastfeeding attempts; difficulties with the baby, such as not latching on correctly or crying; or, in a very few cases, spouses or partners who pressured them to use formula. In some cases, women were told by the nursing staff that their milk had not come in, rather than that they would be producing colostrum first, followed by milk. Some study participants did not appear knowledgeable about colostrum and gave up on breastfeeding because they believed they weren't producing milk. The quotes below are typical of many stories told by respondents.

*I tried to breastfeed. The lady at the hospital helped, but he wouldn't latch on, and it hurt. They recommended that I pump, but they were out of pumps. They gave him a bottle in the nursery ... before they asked me.*

*My husband was convinced that if I breastfed, he wouldn't get to feed the baby. I didn't realize until I went back to the WIC office when my baby was 2 months old and the person at WIC told me I could have done both.*

*I wanted to breastfeed, but the nurse said my milk hadn't come in, so they gave her a bottle.*

*I was going to breastfeed. I did for a little while, for the first three weeks. It was traumatic. They said it wasn't supposed to hurt. It hurt. They whitewashed it, like*



*it was going to be a beautiful, wonderful thing. They should warn us it might be a little hard at first. I was expecting one thing and getting another. I was emotionally not ready. I felt like a failure. My mother and the lactation consultant tried to help me.*

Caesarean rates in the pilot area were considerably higher than the state average for WIC breastfeeding or postpartum women. In June 18.9% of WIC breastfeeding or postpartum women were risk code 359, which indicates a women has had major surgery including a caesarean in the past two months. Of the 16 women in this study who planned to breastfeed or considered breastfeeding but chose formula instead, half had undergone unexpected Caesarean sections. By comparison, women who successfully breastfed or breast-and formula-fed, only 30% had had Caesarean sections. Among women who chose formula from the outset, 63% had had Caesarean sections, including two who delivered twins. Further research would be needed to draw definitive conclusions regarding the impact of having a Caesarean section on the decision to breastfeed, but qualitative findings from this study suggest that it seemed to play a detrimental role. Women said they were sometimes told that they had to wait for their medication to wear off before they breastfed, and during that time the baby often received a bottle in the nursery, creating nipple confusion when the mother finally attempted to breastfeed.

*I was on so much medication, and she wouldn't eat. They gave her a bottle.*

*The medication they gave me knocked me out. I wanted to breastfeed, and they asked me right after birth if I wanted him, but I was too sleepy. I delivered at 9 that night, and they brought him back at 6 the next morning, and he wouldn't take my breast.*

*I engorged so bad, and it hurt. They said it was the medication. I was all set up to pump and everything, but I had to give her a bottle.*

Two women who successfully breastfed despite having had Caesarean sections described having to fight for the opportunity. One woman gave her delivery team a notice from WIC saying she wanted to breastfeed immediately after the birth. In both cases, the babies were placed in ICU immediately after birth, and the women had to walk down to ICU within hours of having Caesarean sections to reinforce the message to the health-care team that they wanted to breastfeed, only to find that their babies had been given formula. Both persevered and eventually breastfed, but they expressed frustration that their wishes were ignored or thwarted.

These findings suggest the possibility that a higher percentage of African American women would successfully breastfeed if they were prepared for problems or challenges at the hospital, or if hospital staff were better trained to facilitate breastfeeding, especially after a Caesarean section.

### *The Role of WIC and Physicians*

Both pre- and post-campaign interviews show that within this sample, close to 50% of women had not received any breastfeeding education from their physicians, while more than three-fourths (78%) had seen a brochure at WIC.

During the five-month period between pre- and post-campaign interviews, the percentage of women in this sample exposed to various breastfeeding education opportunities at WIC increased notably, as shown in Table 3. There was a 21% increase in the number of participants who said they saw a video and received booklets; 23% more said they saw posters; 27% more attended classroom education; and 16% more said they attended counseling. At doctors' offices, posters were the only educational item that showed a notable increase (15%).

The increase in the percentage of women who recalled seeing posters promoting breastfeeding at both the WIC office and their doctor's office closely mirrors the number of women who reported seeing campaign posters at WIC (74%) and at their doctor's office (34%) (See table 5).

**Table 3**  
**Breastfeeding Education Materials Received/Seen at Physicians and WIC**

	Pre-campaign Physicians' Office % of YES Responses	Post-campaign Physicians' Office % of YES Responses	Pre-campaign WIC % of YES Responses	Post-campaign WIC % of YES Responses
Brochure	47	48	78	77
Video	3	5	44	65
Booklet	42	44	32	53
Poster	29	44	54	77
Counseling	9	3	24	30
Classroom education	5	3	29	56
Other <sup>1</sup>	22	12	17	3

<sup>1</sup>Magazines were the most frequently mentioned item in the "Other" category.

*Findings on the Impact of Media and Specific Campaign Items*

Post-campaign findings show a significant increase in the percentage of women who said they heard information about breastfeeding on television or the radio. The increase in unaided recall suggests the campaign advertisements were responsible for women’s knowledge of messages the ads delivered. During the interviews, several participants referred to the radio and TV ads as “the WIC ads.”

**Table 4  
Other Sources of Information on Breastfeeding**

	<b>Pre-campaign % of YES Responses</b>	<b>Post- campaign % of YES Responses</b>
Television	59	81
Radio	9	28
Internet	29	32
Books	39	33
Magazines	81	70
Other	3	3

To test the effectiveness of specific campaign elements, participants were shown or played all of the campaign items one at a time. Researchers asked whether respondents remembered seeing or hearing the campaign items. For some items, such as posters, brochures, gift bags, bibs, and other educational materials, they were asked whether they remembered where they received or saw them. Tables 4 and 5 show the findings. Of all the campaign elements, participants were most likely to remember seeing the poster featuring a mother and her infant. A significant number of respondents also remembered the radio and TV spots.

**Table 5  
Participant Recall of Posters**

<b>Item</b>	<b>Total %</b>	<b>% Doctor’s office</b>	<b>% WIC office</b>	<b>% Unsure</b>
Mother and baby poster	74	15	45	15
Doctor poster	37	20	18	-0-

**Table 6**  
**Participant Recall of Radio & Television Spots**

Item	Total %	% Mother Radio Spot	% Grandmother Radio Spot	% Father Radio Spot
Radio spot	50	37	16	11
TV spot	48	NA	NA	NA

Very few participants remembered receiving the gift bags or materials at their doctors' offices; in a few cases, participants received individual materials without a gift bag. This may be related to the uneven distribution and knowledge of materials reported by health-care providers. As mentioned previously, some physicians' offices reported mixing the materials into other gift bags. About 30% of participants said they received a different gift bag from their doctors' offices and did not remember the bags containing the specific campaign materials.

A majority of respondents who participated in the pre- and post-campaign interviews were certified at WIC prior to the campaign launch, attended WIC classroom education, and therefore, according to the protocol targeting the brochures to pregnant women who were being certified and their families, would not have received the brochures. This may account for why so few study participants said they received the brochures, as shown in Table 5.

Hospitals also were given the breastfeeding gift bags containing the brochures, bibs, and magnets to distribute to African American women. About half (51%) of participants reported receiving information on breastfeeding at the hospital, including 47% who said they received a hospital specific gift bag, but only a small percentage recalled receiving specific campaign items, as reflected in Table 7.

Although only a few women remembered receiving the brochure for fathers, those who did said their partners were happy to receive the materials.

*I got the brochure for fathers at the hospital.  
 My husband was like, "All right, something for me"*

*The hospital gave the brochure for fathers to me. It was in my goody bag. My partner picked it up and said, "Support your partner. Let me see what I can do." He didn't feel so left out anymore.*

**Table 7**  
**Receipt of Specific Campaign Materials**

	Total % Received	% Received at WIC	% Given by Friend	% Doctor's Office	% Health Fair	% Hospital
Mother's breastfeeding brochure	16	9	1	1	-0-	-0-
Grandmother's brochure	11	7	1	1	-0-	-0-
Father's brochure	16	7	1	1	-0-	1
Bib	13	1	1	1	1	-0-
Gift bag	5	-0-	1	1	-0-	2
Magnet	5	1	-0-	1	1	-0-

*Findings From Telephone Survey*

In addition to the 43 one-on-one in-depth interviews, a telephone survey was conducted among a random sample of 150 African American WIC participants who were certified at WIC as pregnant during the campaign. Respondents were drawn from a universe of 600 WIC participants in the area certified as pregnant at that time. Of survey participants, 65% (n=97) were from Beaumont, 33% (n=50) from Port Arthur, and 2% (n=3) from Orange.

The campaign protocol for WIC staff suggested an individualized review of the materials with all pregnant African American women during certification. This telephone survey was conducted to determine participant recall of receiving the materials and the review. As these findings reflect, about half (53%) remembered receiving the brochures at WIC. Of those, about half (52%) remembered a WIC staff member reviewing it with them, although this varied according to which clinic they attended. Participants from the Beaumont clinic were more likely to remember someone reviewing the brochure (48%) than Port Arthur respondents (28%). Although only 19% and 28% remembered receiving the brochure for their mothers or partners, respectively, 79% of those who did receive these brochures reported passing them on to the intended recipients.

Overall findings from the telephone survey are as follows:

- Of the 150 respondents, 53% (n=79) remembered receiving the materials during a visit to a WIC clinic in the previous six months.
- Of those who received them, 52% (n=41) said the WIC counselor reviewed the materials with them.

- Of the 97 respondents from the Beaumont clinic, 48% (n=47) said they had a staff member review the breastfeeding brochure with them, and 52% (n=50) said they did not remember any breastfeeding instruction.
- Of the 50 respondents from Port Arthur, 28% (n=14) said they received breastfeeding instruction, and 72% (n=36) said they did not remember receiving any breastfeeding instruction.
- Of all respondents, 19% (n=29) said they remembered receiving a brochure for grandmothers at a WIC clinic in the previous six months. Of those, 79% (n=23) said they gave the brochure to their mothers or older women in their lives.
- Of all respondents, 28% (n=43) said they remembered receiving a brochure for fathers at a WIC clinic in the previous six months. Of those, 79% (n=34) said they gave it to the father of their baby.

## RECOMMENDATIONS

As the campaign moves forward, the following recommendations should be considered:

- Continue to broadcast the television and radio advertisements. Findings support that they resonate with the audience and promote interest in breastfeeding. Media placement is particularly important to the success of the radio advertisements. They should be placed on local hip-hop or gospel radio stations that may not be considered in a general media buy.
- Continue to distribute the print materials. Findings indicate that they were valued and, when distributed to WIC clients, used as intended. A slight modification to the materials is recommended: They should include a statement about the potential challenges of breastfeeding as well as a suggestion to seek support.
- Stress the importance to WIC staff of following the protocol and giving the materials in a set to every pregnant African American woman. Field testing of the materials indicates that even woman who said they were not going to breastfeed were surprised and interested in some of the benefits such as faster weight loss or reducing the infants risk of obesity or diabetes.



- Distribute the gift bags at WIC and interested hospitals rather than doctors' offices, where staff at pilot sites generally knew little about the bags even though they had been hand delivered.
- Empower local WIC staff with knowledge and skills to successfully implement the campaign. This should include training to prepare breastfeeding counselors and other key WIC staff for the opportunities and challenges of the campaign. Offer a campaign kickoff to generate enthusiasm and understanding.
- Use the campaign as an opportunity to build relations between WIC staff and local doctors' offices. State staff should send doctors' offices an announcement about the campaign, followed by a personal visit from WIC staff, which could deliver the protocol to nursing staff and provide posters for doctors' offices.
- Expand breastfeeding education at WIC to include ways to overcome barriers women may encounter after delivery, such as a lack of knowledge about the presence of colostrum before breast milk and lack of communication skills to prevent hospital staff from giving the baby a bottle.
- Stress the importance of giving the three brochures as a set. A large percentage of women (79%) who were given a brochure for their partner or mother passed them on and findings show that the fathers and grandmothers were grateful for the information. Preliminary research showed that partners and mothers are important influencers in a women's infant feeding choice. In pre-campaign findings 61% of the participants consulted with their mother about infant feeding choices and 56% consulted with their partner/husband.

**Appendix A**  
**Pre Women's Interview Guide**  
**Breastfeeding Perspectives of African American Women**

1. When are you expecting your baby?

2. What thoughts and feelings do you have about being pregnant?

**Probe:** What do you look forward to after you have the baby?

3. When you think ahead about feeding the baby, what do you expect to do?

4. What has your doctor or nurse told you about feeding your baby?

5. What have you learned at WIC about feeding your baby?

6. What have you learned about breastfeeding?

7. What materials or information have you received from or seen at your doctor's office about breastfeeding? Please describe.

\_\_\_\_ Brochures

\_\_\_\_ Videos

\_\_\_\_ Booklets

\_\_\_\_ Posters

\_\_\_\_ Counseling

\_\_\_\_ Classroom Education

\_\_\_\_ Other

8. What materials or information have you received from, or seen at WIC about breastfeeding? Please describe.

\_\_\_\_ Brochures

\_\_\_\_ Videos

\_\_\_\_ Booklets

\_\_\_\_ Posters

\_\_\_\_\_ Counseling

\_\_\_\_\_ Classroom Education

\_\_\_\_\_ Other

9. Other than the doctor's office or the WIC clinic, who else have you talked to or about how you will feed your baby?

	YES	NO
Mother		
Grandmother		
Sister		
Other relatives		
Partner/husband		
Girlfriends		
Other		

10. Tell me about those conversations. What did they say that has helped you decide about how to feed your baby?

11. What other kinds of information have you seen or heard about breastfeeding?

	YES	NO
Television		
Radio		
Internet		
Books		
Magazines		
Other		

12. Of all the people and information you have received or seen or heard, what has been most important in helping you decide about infant feeding?

13. Based on what you have learned, what do you think is best for you: formula feeding or breastfeeding or both? What is best for the baby?

14. How do people in your family generally feed babies?

**Probe:** Have you ever seen anyone breastfeed? How were you fed as a baby?

**15. Please tell me if you think the following statements are TRUE or FALSE.**

	<b>TRUE</b>	<b>FALSE</b>
Breastfeeding is healthier for your baby than formula feeding.		
Some formulas are as equally nutritious as breast milk.		
Breastfeeding helps you lose weight after the baby is born.		
Breastfeeding is relaxing.		
Breastfeeding can help prevent a child from growing up to be obese.		
Breastfed babies are sick less often.		
Working women can't breastfeed.		
WIC provides free breast pumps.		
Breast milk can be frozen.		
Breastfeeding saves money.		

Thank you for your time.

**Appendix B**  
**Post Women's Interview Guide**  
**Breastfeeding Perspectives of African American Women**

**Name of participant:**

1. When did you have your baby
2. Was this your first baby?
3. Who was your doctor?
4. What hospital did you deliver your baby at?
5. How did it go?
6. When you thought ahead about feeding your baby, what did you expect to do?
7. What have you ended up doing?
8. What did your doctor or nurse tell you about feeding your baby (either bottle or breast)?
9. What did you learn at WIC about feeding your baby (either bottle or breast)?
10. What did you learn at the hospital about feeding your baby (either bottle or breast)?

11. What materials or information did you receive from, or see at **WIC** about breastfeeding? Please describe.

\_\_\_ Brochures

\_\_\_ Brochure which features African American women

\_\_\_ A brochure for your mother

\_\_\_ A brochure for the father of your baby

\_\_\_ Videos

\_\_\_ Booklets

- Posters
- Counseling
- Classroom Education
- Other

12. What materials or information did you receive from or see at your **doctor's office** about breastfeeding? Please describe.

- Brochures
- Brochures featuring African American women
- A brochure for your mother
- A brochure for the father of your baby
- Videos
- Booklets
- Posters
- Counseling
- Classroom Education
- A goody bag with information about breastfeeding including a bib
- other

13. What materials or information did you receive from, or see at the **hospital** about breastfeeding? Please describe.

- Brochures
- Brochures featuring African American women
  - (if yes, show brochure to confirm/record any comments)
- A brochure for your mother
  - (if yes, show brochure to confirm/record any comments)



\_\_\_ A brochure for the father of your baby

(if yes, show brochure to confirm/record any comments)

\_\_\_ Goody bag with information on breastfeeding including a bib

\_\_\_ Videos

\_\_\_ Booklets

\_\_\_ Posters

\_\_\_ Counseling

\_\_\_ Classroom Education

\_\_\_ Other

14. Other than the doctor's office or the WIC clinic, who else did you talk to about how you will feed your baby?

	YES	NO
Mother		
Grandmother		
Sister		
Other relatives		
Partner/husband		
Girlfriends		
Hospital		
Other		

15. Tell me about those conversations. What did they say that has helped you decide about how to feed your baby

16. What other kinds of information have you seen or heard about breastfeeding?

	YES	NO
Television – women's channel		
Radio		

Internet		
Books		
Magazines		
Other		

17. Of all the people and information you have received or seen or heard, what has been most important in helping you decide about infant feeding?

18. Based on what you have learned, what do you think is best for you: formula feeding or breastfeeding or both?

What is best for the baby?

**19. Please tell me if you think the following statements are TRUE or FALSE.**

	TRUE	FALSE
Breastfeeding is healthier for your baby than formula feeding.		
Some formulas are as equally nutritious as breast milk.		
Breastfeeding helps you lose weight after the baby is born.		
Breastfeeding is relaxing.		
Breastfeeding is always painful.		
Breastfeeding can help prevent a child from growing up to be obese.		
Breastfed babies are sick less often.		
Working women can't breastfeed.		
WIC provides free breast pumps.		
Breast milk can be frozen.		
Breastfeeding saves money.		

Now I would like to show you some specific materials and ask if you've seen them and where:

Breastfeeding brochure                      yes    no

If yes, where she received (if doctor which doctor ObGyn or Pedi)

Brochure for mother                      yes    no  
If yes, where did she receive?

Brochure for baby's father              yes    no  
If yes, where did she receive?

Bib    yes    no  
Where: (if doctor which doctor ObGyn or Pedi)

Magnet    yes    no  
Where:

Support Sister                                  yes    no  
where

Pledge Card                                      yes    no  
where

Poster 1 two faces                              yes    no  
Where

Poster 2 MD                                      yes    no  
Where

Radio Ads    yes    no

TV    yes    no

Thank you for your time.

## **Appendix C**

### **Pre Health-Care Providers Interview Guide**

#### **General Information:**

1. Name & Position:
2. Number of years working in area:
3. Avg. number of patients per year:
4. Avg. number of babies delivered per year:
5. General characteristics of patient population.

**Probe:** Age, ethnicity, low-income, African-American specifically

#### **Instructing New Mothers about Infant Feeding Options**

6. What is your office protocol about talking to women about their infant feeding choice?
7. How do you approach the subject?

**Probe:** What do you say?

8. What do you recommend?

**Probe:** What do you say if a woman asks for your opinion about infant feeding? Are you more likely to encourage breastfeeding or remain neutral?

9. What information do you think is most important for a woman to have when she is making the choice about infant feeding?

#### **Barriers to Breastfeeding**

10. As a general rule, what kind of response do you get from African-American women when you talk about breastfeeding?

**Probe:** Is it different than other ethnic groups? What differences, if any, do you notice between young mothers (under 19) and those older than 20?

11. What kinds of resistance do you detect, if any, to the idea of breastfeeding?

12. What kinds of questions do they ask you about breastfeeding vs. formula feeding?

13. When women offer their own opinions about breastfeeding, what are they likely to say?

**Probe:** Positive things? Negative things?

14. How do you respond when someone is misinformed or anxious about perceived obstacles?

**Probe:** For example:

- ◆ If someone says they have to return to work soon, and don't have time.
- ◆ If someone says that formula has the same content as mother's milk.

### **Availability of Materials**

15. What materials or brochures do you have available? What books or web sites do you recommend?

**Probe:** If materials are available, where do you get them?

16. What do you generally find to be missing from those materials? What would you like to have available?

17. In follow-up care post-partum, do you deal with issues a woman may have with breastfeeding? If not, who does?

18. During a hospital stay, who tends to take care of problems that may arise if a woman decides to breastfeed and experiences pain or discomfort?

**Probe:** If the doctor or nurse: what do you do? Say? Do you have someone you recommend? Do you offer encouragement or remain neutral?

19. Based on your years of experience, what characteristics have you noted anecdotally that may determine whether or not a woman will persevere in her efforts to establish breastfeeding?

### **Attitudes & Experiences with WIC**

20. What has been your association with the local WIC program?

21. What are your impressions of the WIC program?

**Probe:** What do you hear from your patients? Other doctors?

22. If WIC or the Texas Department of Health provided you with materials, would you provide them for patients? Where would you put them?

23. If WIC or the Texas Department of Health provided you with materials, would you ever use them as part of your introduction to infant feeding?

## **Appendix D**

### **Post Health-Care Provider's Interview Guide**

1. What campaign materials did you receive?
2. How did you use them
3. How were they distributed?
4. What did you they think of the campaign materials?
5. What about the buzz?

Probe: Did it provoke their patients to ask questions?

6. Do they have any recommendations for DSHS as they move forward with the campaign?