

The NC Latina BEAUTY Salon Project

(North Carolina Latina Bringing Education And Understanding To You)

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We have abided by the Honor Code of the University of North Carolina in completing this report.

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ABSTRACT

Background: Latino beauty salons have the potential to provide a unique opportunity to reach the U.S. Latino population with information and activities that will promote healthy behaviors, reduce risk, prevent chronic disease and improve quality of life. **Methods:** By conducting a pilot test in a Latino salon, the Capstone team explored the feasibility of a physical activity intervention, adapted from a previous physical activity campaign included as part of the NC BEAUTY and Health Project. The adaptation was informed by engaging with multiple community members, conducting formative research, and a literature review. **Results:** The formative research aided the team in developing an intervention and evaluation plan including: evaluation and intervention materials and trainings of lay health educators and salon stylists. Results from the implementation of the pilot intervention, which includes 3 weeks of recruitment and baseline assessment, 6 weeks of intervention activities, and 2-3 weeks of post-intervention assessment, will likely be used in the development of a grant proposal and a manuscript, helping to fill the gap in evidence-based literature about health interventions in Latino beauty salons. **Discussion:** Although this Capstone project succeeded at developing a pilot test study and engaging with a Latino beauty salon, ongoing challenges include time constraints, insufficient formative research, language barriers, lack of entrée into the community, and threats to sustainability. Recommendations for next steps are discussed.

Deliverables:

1. Formative Research Report to Inform NC Latina BEAUTY Salon Intervention Development
2. Literature Review on Community Health Interventions
3. NC BEAUTY Advisory Board Presentation
4. Latino Beauty Salon Intervention and Evaluation Manual
5. Latino Beauty Salon Intervention and Evaluation Materials
6. Latino Beauty Salon Intervention *Promotora*¹ (Lay Health Advisor) Training Materials
7. Latino Beauty Salon Intervention Stylist Orientation Training Materials
8. Latino Beauty Salon Recruitment Data Summary Report

¹ *Promotora* is the Spanish word for a lay health educator.

Table of Contents

INTRODUCTION	6
Capstone Overview	6
Community Partner Organization.....	6
Faculty Advisers, Team Members, and Research Assistants	7
Project Overview	7
Report	8
BACKGROUND	8
Intervention Setting	9
Intervention Topic	10
Previous NC BEAUTY Interventions	11
Intervention Justification	11
METHODS.....	11
Logic Model	12
Planning for Sustainability	14
Engagement and Assessment Activities	15
Work Plan Deliverables.....	17
RESULTS	18
Sustainability Findings	18
Project Design & Implementation Factors	18
Factors within the Organizational Setting	19
Factors within the Broader Community Environment	19
Institutionalization.....	20
Capacity-building	20
Engagement and Assessment Findings	21
Central intercept interviews	21
Windshield Tour.....	21
Salon Visits	22
Key Informant Interviews	22
Enumerated List of Salons	23
Interviews with salon owners, stylists and customers	23

Summary	24
Summary of Deliverables	24
DISCUSSION	32
Strengths and Limitations	32
Information Gaps.....	33
Potential Impact and Benefits.....	33
Considerations for Sustainability	34
CONCLUSION AND RECOMMENDED NEXT STEPS	36
REFERENCES.....	38
APPENDIX 1.....	38
APPENDIX 2.....	45

INTRODUCTION

Latinos in the United States (U.S.) are at high risk for many chronic diseases, including heart disease, diabetes, and certain types of cancer (Kochanek, Xu, Murphy, Minino, & Kung, 2011). As Latinos acculturate, critical health behaviors such as consuming high fat/calorie diets, alcohol abuse, and physical inactivity are associated with increased risk of being overweight and experiencing many chronic diseases (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005). Beauty salons are one potential place for reaching this population with information and activities that will promote healthy behaviors, reduce risk, prevent chronic disease and improve quality of life. This potential intervention location was explored by a group of Master of Public Health (MPH) students in the Department of Health Behavior and Health Education (HBHE) at the University of North Carolina at Chapel Hill (UNC) MPH as part of their culminating field experience in HBHE.

Capstone Overview

The Capstone project is one of the core components of the Master of Public Health degree in Health Behavior and Health Education at the University of North Carolina at Chapel Hill. The purpose of Capstone is to provide an applied learning experience in which students use the skills and knowledge developed during year one of the MPH program to work with, and develop public health solutions for, a Capstone partner organization. A community partner associated with the Capstone partner organization and HBHE faculty advisers guide this work. Capstone projects range in length between 8-12 months and combines both in-class instruction and a fieldwork component.

Community Partner Organization

The Capstone community partner organization for this project was the NC BEAUTY & Barbershop Advisory Board. The Board is composed of approximately a dozen academic researchers and salon and barbershop professionals from the Raleigh-Durham-Chapel Hill Triangle area who use their expertise to advise and contribute to the development of health interventions for the local community,

delivered in collaboration with local beauty salons. Over the last 12 years, the Advisory Board has been working primarily with the African-American population in North Carolina and the success of those activities led the Advisory Board to consider expanding to the Latino community. For this Capstone project, Advisory Board member Florence Simán was the primary liaison between the Advisory Board and the Capstone team. Ms. Simán is also the Health Program Director at El Pueblo, Inc., a non-profit advocacy and public policy organization based in North Carolina and focused on strengthening the Latino community.

Faculty Advisers, Team Members, and Research Assistants

The faculty advisers for this project were Laura Linnan, ScD, CHES and Barbara Baquero, PhD, MPH. The student team comprised of Sivan Goobich, Julie Hasken, Adrianna (A.C.) Rothenbuecher, and Ryan Rowe. The team also included three additional personnel who were instrumental in the implementation of the intervention: Sadiya Muqueeth, a HBHE MPH candidate and current research assistant working with Dr. Laura Linnan; Karen Roque and Aubrey Delaney, research assistants working with Dr. Barbara Baquero.

Project Overview

The student team worked collaboratively with beauty salon owners, stylists, their customers, and the NC BEAUTY & Barbershop Advisory Board members to plan, design, implement, and evaluate an intervention to be conducted in a Latino beauty salon in Wake, Durham, or Orange County. The main goals of the project were 1) to determine health topics of interest to NC Latinos; 2) to understand what strategies (e.g. materials and messages) might work well in reaching this population; and 3) to document what type of intervention might be successful in delivering messages related to these health topics through local beauty salons.

This salon intervention was based on Social Cognitive Theory with an aim toward increasing Latino salon customer minutes of physical activity per week. Intervention components included: weekly group walking sessions, weekly educational and encouragement phone calls, self-monitoring using

physical activity logs and pedometers, weekly goal setting opportunities, and stylists' endorsement, encouragement, and participation in the intervention.

Report

This report satisfies the UNC Graduate School Masters thesis requirement and summarizes the NC Latina BEAUTY Capstone experience and the work produced by the team from August 2011-April 2012. Sections of this report include: background; methods and findings for sustainability and engagement and assessment activities; a list of deliverables; potential impacts and benefits; lessons learned and challenges; and recommendations for next steps.

BACKGROUND

In the past decade, the U.S. Latino population grew by 43% and Latinos now account for 16.3% of total US population (Ennis, Rios-Vargas, & Albert, May 2011). Between 2000 and 2010, North Carolina had the 6th largest Latino population growth with the addition of 421,157 Latinos (Ennis et al., May 2011). In 2010, there were 414,000 foreign-born Latinos living in North Carolina with the majority (83.2%) emigrating from Mexico (Acosta & de la Cruz, G. Patricia, September 2011). Regardless of being foreign-born or U.S.-born, Latinos suffer disproportionately from many chronic diseases compared to their non-Latino counterparts (Centers for Disease Control and Prevention, 2004). Acculturation (the process of adopting new cultural behavior and thinking) has been linked to adverse health outcomes such as increased risk for strokes, diabetes, colorectal cancer, and cardiovascular disease (Carter-Pokras et al., 2008; Farley, Galves, Dickinson, & Perez Mde, 2005; Hunt et al., 2003; Stern & Wei, 1999). As Latino immigrants live longer in the United States, they become more likely to become victims of physical abuse, less likely to breastfeed, less likely to meet US dietary guidelines, increase tobacco use and substance abuse, and become less physically active (Carter-Pokras et al., 2008).

In 2007, the leading causes of death among Latinos nationally included: heart disease, cancer, unintentional injuries, stroke, diabetes, liver disease, chronic lower respiratory disease, homicide, birth defects, and influenza/pneumonia (National Center for Health Statistics, 2011). In North Carolina in

2010, the leading causes of death among Latinos were: cancer, motor vehicle injuries, heart disease, homicide, other unintentional injuries, birth defects, stroke, suicide, and diabetes (State Center for Health Statistics and Office of Minority Health and Health Disparities, 2010). Many deaths could be prevented with lifestyle changes, such as eating at least five fruits and vegetables per day, being physically active, avoiding smoking, maintaining a healthy weight, and seeking preventive medical services (American Cancer Society, 2008). Barriers to preventative healthcare among Latinos are financial costs, lack of insurance coverage, insufficient free time to seek medical attention, the necessity to take care of family members before oneself, general cultural health beliefs, language barriers, lack of trust in the U.S. healthcare system, racism, and fear of deportation (Sanchez, 2007).

Intervention Setting

While addressing these barriers, programs delivered through traditional settings (e.g. schools, medical care facilities, worksites, churches) have achieved some success, but each of these locations has specific strengths and limitations for reaching Latinos (Bright et al., 2005; Bright, 2005; Cavazos-Rehg, Zayas, & Spitznagel, 2007). There is growing evidence that in order to eliminate health disparities, community-based intervention developed in collaboration with academic and non-academic partners is an effective strategy (Kennedy et al., 2011). Interventions in non-traditional community settings where high-risk populations live, work, play, or socialize such as churches and salons and barbershops have been shown to be effective (Johnson, Ralston, & Jones, 2010; Linnan & Ferguson, 2007; Linnan et al., 2011). Beauty salons represent a promising yet under-explored setting for promoting health for the Latino population. Women regularly visit beauty salons; spend time waiting for hair services; and consider salons a safe place where they can socialize and can discuss all types of topics, including health (Bright, 2005). Factors such as geographic locations of salons, frequency of customer visits, length of salon visits, and health-enhancing conversations already naturally occurring in salons, which contributed to the effectiveness of salon-based interventions in African-American communities, may also translate to Latino salons. Specifically, Latino salons are numerous and serve a small geographic region; families visit the

salon frequently; and stylists and customers have a unique rapport. This intervention will try to emulate the successes in African-American salons (Linnan et al., 2005; Linnan & Ferguson, 2007; Linnan et al., 2011) by adapting a culturally appropriate intervention for a Latino salon.

Intervention Topic

There are many evidence-based interventions specifically designed for Latinos. Common topics for Latino-specific interventions include: nutrition, physical activity, cancer prevention, sexual/reproductive health, and depression/stress. Many of these interventions take a holistic approach and address multiple health behaviors during a single intervention. However, formative research with the Latino community demonstrated that stress was the most salient health issue for both men and women. Likewise, physical activity ranked high as a salient issue.

Physical activity has been shown to moderate the levels of cortisol hormone, which is responsible for the physiological symptoms experienced while stressed (Puterman et al., 2011). When experiencing a stressor, people who engage in regular activity release less cortisol hormone resulting a milder stress response (Rimmele et al., 2009). Increasing physical activity may reduce negative thoughts, increase social support, promote normal hormone regulation, and improve both physical and mental health (Brumby et al., 2011). People who are depressed tend to engage in less physical activity than people who are not depressed while increasing physical activity has been shown to alleviate both depression and anxiety (Dunn, Trivedi, Kampert, Clark, & Chambliss, 2005). Given the substantial evidence for using physical activity as a mechanism to reduce stress (Anderson, King, Stewart, Camacho, & Rejeski, 2005; Brumby et al., 2011; Dunn et al., 2005; Mier et al., 2011; Ricanati et al., 2011; Taylor-Piliae, Haskell, Waters, & Froelicher, 2006), the Capstone team decided to develop an intervention which focused increasing physical activity as the primary outcome and stress reduction as a secondary outcome. Furthermore, the NC BEAUTY Advisory Board had previous experience developing salon-based physical activity interventions and key informants assented to the intervention topic and concept.

Previous NC BEAUTY Interventions

For over 12 years, the NC BEAUTY Advisory Board has been working with North Carolina salons to improve health. In collaboration with African-American barbers and licensed stylists, the Board has developed physical activity and nutrition interventions for men and women. As part of previous work, the NC BEAUTY team has developed health campaigns for salons and barbershops that included training manuals to train stylists to serve as lay health educators, print materials such as interactive, educational displays and targeted health magazines. Topics of the health campaigns included cancer prevention, physical activity, and nutrition. A major activity in these interventions was a FITStop assessment, which was completed in the shop or salon, included: seated heart rate, blood pressure, hand grip strength, height and weight measurement, waist circumference, and a 3 minute cardiovascular fitness step test. FITStop was developed and piloted in African-American barbershops (Linnan et al., 2011). These intervention components served as a springboard for the development of the Latino physical activity and stress reduction intervention.

Intervention Justification

Research shows that significant barriers for Latinos to engage in physical activity is lack of self-motivation to want to engage in physical activity, lack of social support, and limited knowledge on how to engage in physical activity (Bautista, Reininger, Gay, Barroso, & McCormick, 2011; Martinez, Arredondo, Perez, & Baquero, 2009; Parra-Medina & Hilfinger Messias, 2011; Ramirez, Chalela, Gallion, & Velez, 2007). A salon-based intervention has the potential to address these barriers by providing stylists and *promotoras* to provide physical activity knowledge and increased social support and accountability (motivation) through group physical activity sessions.

METHODS

The primary methods to achieve the goals of this project included: formative research; a literature review; two-way engagement with the NC BEAUTY & Barbershop Advisory Board through an advisory board meeting; engagement with Latina *promotoras*, customers, owners and stylists of Latino beauty

salons; an intervention and evaluation plan for a pilot intervention; and the planning of a six week pilot intervention. The formative research component began with reviewing previous formative research from 2009-2011 and identifying any gaps in information needed to move forward. Additional formative research by the team included in-depth interviews with key informants, observations in salons, and central intercept interviews² with Latinos at a community event to aid in the selection of the health issue(s) and to inform the development of an intervention and evaluation plan before piloting the intervention in one Latino beauty salon. A literature review further supplemented the information on health issues and the development of the intervention. The Capstone team developed a program and evaluation plan for a 6-week physical activity intervention, began implementing the plan, and analyzed preliminary recruitment data. A logic model guided this process.

Logic Model

The NC Latina BEAUTY Project planning and implementation was guided by a logic model (Figure 1 in the Appendix), a visual guide that explains all of the components necessary to complete a project from start to finish. The Capstone team used the logic model to guide the work and the decision-making process. Additionally, the logic model helped to orient the project towards strategic health impact goals.

A logic model is a “systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve” (W.K. Kellogg Foundation, 2004). Commonly used in public health interventions, a logic model is a tool used to describe in pictures and words how a program is intended to work. It illustrates a series of activities, which follow a logical path from beginning to end, from inputs to outputs, from work to results. There are five stages of the logic model: 1) inputs, 2) activities, 3) outputs, 4) outcomes, and 5) impact (W.K. Kellogg Foundation, 2004).

² A short questionnaire that is given to respondents in a high traffic area, such as a fair or shopping center.

The NC Latina BEAUTY project was implemented with input from multiple stakeholders, including the Capstone team, faculty advisers, community partner, research assistants, volunteers, health *promotoras*, salon owners, and stylists. Funds from the HBHE department and Lineberger Comprehensive Cancer Research Center also contributed to the project. Other resources used in this project include car transportation, printing supplies, FITStop supplies, and the use of the salon. Finally, the NC BEAUTY project's previous formative research and mentorship from the NC Beauty Advisory board were necessary for the project's success.

The Capstone team used these inputs to undertake several activities to support the pilot project's creation and implementation. Using past formative research and advice from the community partner and faculty advisers, the Capstone team carried out additional formative research including creating in-depth interview guides, conducting intercept interview survey, and visiting salons. The team intended to do in-depth interviews and focus groups with stakeholders but were limited by time constraints, and as such, the interviews/focus groups did not take place. The team also held a formative research retreat to inform stakeholders of formative research results and brainstorm ideas for the intervention. The next activity was creating the intervention itself which consisted of several components. First, creating all of the materials, including those for three evaluation timepoints (baseline, process, and post evaluation), adapting FITStop materials, creating talking points and weekly activity guides for the *promotoras*, creating training and orientation materials, and creating advertising for the salon-based intervention. Additional activities included two *promotora* training sessions, a stylist orientation, a FITStop training for the Capstone team, volunteers, and research assistants. See Summary of Deliverables table in the Results section for more detail.

The next part of the logic model is the outputs section. Outputs consist of the main deliverables that are created as a result of the activities. They included: a formative research report, literature review report, a presentation to the NC BEAUTY advisory board, intervention and evaluation materials, *promotora* training materials, stylist orientation materials, and an intervention and evaluation plan

manual³, and recruitment data summary report. Most importantly, these will contribute to the output of a completed pilot physical activity intervention for Latino beauty salons. See Summary of Deliverables table in the Results section for more detail.

The outputs are intended to lead to several short- and long-term changes for salon customers. Short-term changes, called outcomes, included increased minutes of physical activity; increased steps walked, and increased awareness of physical activity among salon customers. These short-term outcomes will eventually lead to long-term impacts, such as a reduction in the body mass index (BMI), lower levels of stress, improved physical fitness, and increased self-efficacy for physical activity among salon customers. As these health outcomes are quite distal from the intervention, it may not be possible to record significant changes in these impacts in a short time frame. However, including long-term impacts in the logic model helped guide the evaluation and provided a goal for the overall project.

Planning for Sustainability

After outlining the planned project work and its intended results in a logic model, the team assessed for the sustainability of the Capstone team's work. Sustainability of public health interventions is of vital importance to ensure efficient use of limited public health resources for maximum benefit and to optimize the opportunity for long-term success. According to Rabin et al. (2008), "sustainability describes the extent to which an evidence-based intervention can deliver its intended benefits over an extended period of time after external support from the donor agency is terminated." Not all health programs should endure, but there are three main reasons why some health programs should be sustained over the long term (Shediac-Rizkallah & Bone, 1998). First, programs that address the control of chronic or infectious diseases must be sustainable so as to control or eradicate the given disease. Second, many community health programs incur significant start-up costs in human, fiscal, and technical resources before even beginning. Thus, ensuring self-sufficiency and integration of the program into the community over the long-term will help to make these initial costs worthwhile. Third, when a program encourages

³ The manual, developed by the Capstone team, contains instructions on how to implement the intervention.

and sustains community support and trust in communities where there has been a history of programs that were abruptly or inappropriately terminated. Consequently, sustainability has been an important consideration for the Capstone team, and indeed, has been emphasized and prioritized from the beginning.

It is important to plan for sustainability well in advance of intervention implementation. Sustainability of public health programs can be influenced by project design and implementation factors, factors within the organizational setting, and factors in the broader community environment, a framework outlined by Shediac-Rizkallah & Bone (1998). Further, three indicators are used to assess sustainability: 1) the maintenance of health benefits achieved through the initial program, 2) the level of institutionalization of the program within an organization, and 3) measures of capacity building in the recipient community (Shediac-Rizkallah & Bone, 1998). The Capstone team used these factors and indicators to guide an assessment of the project's potential for sustainability. The following sections will discuss the methods for the Capstone team's engagement and assessment activities and work plan deliverables.

Engagement and Assessment Activities

A community can be defined in a variety of ways. It can be a group of people who are united by social ties, geographic location, or shared common perspectives, values, and beliefs (MacQueen et al., 2001). Community engagement can enhance a community's ability to identify and strategize solutions for their own health problems, thus helping to reduce health disparities (Ahmed & Palermo, 2010). As outsiders, public health practitioners, who are not members of the community they work in, may experience difficulty in gaining *entrée*⁴ and may not fully understand a community's health issues and the root causes of the health concern (Kauffman, 1994).

To effectively engage a community, practitioners must collect, analyze, and mobilize efforts to act on community priorities (Friedman & Parrish, 2009). Then practitioners are able to build upon community assets as well as provide their outsider perspective. By combining both the community's input

⁴ *Entrée* refers to a process whereby an outsider gains access to relevant community leaders and informants in a way that allows for significant insight into local context and culture.

and the practitioner's perspective, the result is a more comprehensive understanding of the health priorities and knowledge, which can inform the future development of action steps to address a health concern (Eng et al., 2005).

The most proximal intended beneficiaries of the Capstone team's community intervention were the owners and stylists of Latino salons while the distal intended beneficiaries are the customers of Latino salons. Based on the formative research and needs and wants of the target population, the Capstone team derived the goals and activities based on the Social Cognitive Theory (SCT) for a physical activity intervention. Specific SCT constructs addressed in this intervention included: observational learning (through *promotoras* leading weekly group physical activity sessions), reinforcement (through weekly phone calls from *promotoras*), reinforcement (through the use of pedometers), and self-efficacy (through educational information provided by *promotoras*). By participating in the intervention, salon owners and stylists may improve their own health in addition to providing health education information to customers. Owners, stylists, and customers may see increases in health knowledge, attitudes, and beliefs as well as improved self-efficacy to engage in a specific behavior change. Additionally, if this feasibility study proved to have a positive impact on physical activity levels, the intervention may be implemented in more Latino salons. If the intervention is successfully replicated, it may ultimately improve the health of Triangle-area Latinos and reduce health disparities in North Carolina.

Previous formative research for this project occurred in 2009-2011 and consisted of salon observations, stylist interviews, and customer focus groups. The Capstone team added to this formative research. The additional formative research was conducted to determine the priority health issues facing the community, to identify interventions already in place by other entities, and to obtain community buy-in.

Methods used by the Capstone team consisted of 1) 80 central intercept interviews at a public event in September 2011, 2) windshield tours⁵ of six salons in Wake, Durham, and Orange Counties

⁵ A windshield tour is a descriptive account of observations of events, activities, social situations and interactions related to the context of everyday life of a community. In this case, the Capstone team visited salons in Wake,

conducted in October 2011, 3) Nine in-person salon meet-and-greet observations⁶ completed in October 2011, 4) Four key informant interviews conducted in November 2011, 5) and enumerated list of salons and 6) obtained approval for additional owner, stylists, and customers interviews (however, due to time constraints, these additional interviews were not actually conducted). Key informant interviews occurred with Florence Simán from El Pueblo, Inc., a Durham based salon owner named Alberto, Maritza Chirinos (Health Program) and Colleen Blue (Director of Programs) from El Centro Hispano, and three *promotoras* from El Pueblo, Inc.

In addition to intercept interviews at the La Fiesta event in September 2011, in-depth formative research with salon owners, stylists, and customers was originally planned to inform the content of the salon-based health intervention; however, due to time and logistical constraints, these plans were abandoned. Since the Capstone team had access to previously completed formative research, the intervention was developed on the basis of those findings which were conducted primarily with female salon stylists and customers.

Work Plan Deliverables

The deliverables for this Capstone project were chosen because the end goal was to determine feasibility of a Latino salon-based health intervention and for the eventual creation of a grant proposal and manuscript. The formative research summary report describes the formative research which was completed by the Capstone team to better understand the Latino population in North Carolina that frequent beauty salons and to determine the health issue(s) of focus. The literature review identified evidence-based interventions done in beauty salons and barbershops as well as those done with Latinos for key health risk behaviors. Both of these deliverables, in addition to a presentation to the NC BEAUTY Advisory Board, informed the development of the intervention and evaluation plan, the intervention and

Durham, and Orange counties in a vehicle, observing and taking notes on the Latino salon business community. For more information, see the Deliverable 1, methods section of the Work Plan Deliverables table(Eng, September 7, 2011).

⁶ During the salon recruitment phase, members of the Capstone team briefly met with salon owners and observed the salon's physical and social environment.

evaluation materials, and the pilot test intervention. The *promotora* training and stylist orientation materials are components necessary for the preparation of the pilot test intervention. Each of these deliverables is described in more detail in the results section.

RESULTS

Sustainability Findings

Project Design & Implementation Factors

As a pilot intervention program, this will ideally be scaled up to provide health education and promotion in additional Triangle-area Latino salons. The purpose of the pilot is to test the intervention in a small group and provide a valuable opportunity to monitor the implementation process and outcomes, and to gain community feedback for improvement.

The formative research completed by the Capstone team was essential for creating a sustainable design. Engaging the community is important in creating a high-quality, effective program in that it builds buy-in and support for implementation. In order to be sustainable and successful, the project must address real needs of the community in ways that are relevant and effective. The salon selected for this pilot project was chosen because the physical size of the salon could accommodate the recruitment staff and equipment; was located in a Latino-serving commercial strip mall; was surrounded by a residential neighborhood; had an open grassy field with two soccer goals located behind the salon; was recommended by Latinos during formative research; geographical proximity to *promotoras*; and the owner reported all customers were Latinos. As the salon is the primary setting for the project, a strong and positive partnership with the salon's owner and staff is essential for sustainability. As a native speaker of Spanish, the faculty adviser helped strengthen and secure the relationship with the salon staff, although there were initially challenges in contacting salon owners. An additional strength is that funding for a pilot program has been secured, and there are plans to seek additional funding for a larger trial using the results of this first pilot study.

Factors within the Organizational Setting

In the absence of a community-based organization leading this project, the Board serves as a community surrogate by reviewing and pre-testing ideas as the NC BEAUTY Model is adapted to meet the needs of the Latino community. Consequently, representation from the Latino community is important to ensure that socio-cultural and contextual factors are taken into account. The Capstone team proposed assisting with identification and recruitment of Latino community members for the Board, and engaged in initial efforts to establish relationships with organizations such as El Centro Hispano, The Durham County Hispanic Council, and a local church with strong attendance from Latinos. The Capstone team arranged and attended a meeting with El Centro Hispano but no further discussions have been held. At the instruction of the faculty advisers, the Capstone team focused its efforts on other project activities. At present, Latino representation on the Board remains limited.

Florence Simán, a Board representative and member of the Latino community, facilitated the recruitment of a team of health *promotoras* from El Pueblo, Inc, a non-profit North Carolina advocacy organization dedicated to serving the Latino community. The team of three *promotoras* was an essential component of the recruitment and intervention activities, serving as a bridge between the salon, stylists, customers, and the Capstone team.

Factors within the Broader Community Environment

Health promotion programs in salons and barbershops serving the African-American community have been shown to be effective (Linnan et al., 2011; Reiter & Linnan, 2011). Adapting the intervention strategy for the Latino community may have several challenges including the larger socioeconomic factors that may affect Latino communities differently than African-American communities, such as problems with legal documentation/status and cultural/linguistic barriers. These factors may affect the ability to recruit participants for the intervention and may make salon interventions potentially less suitable for the Latino community which can negatively affect sustainability.

Maintenance of Health Benefits

As NC Latina BEAUTY is primarily in a formative research and pilot stage, the maintenance of health benefits is not within the scope of the project at the current time. However, the project did strongly emphasize weekly participation in the intervention so as to increase the dose during the six-week pilot stage.

Institutionalization

Institutionalization can be measured by assessing the partner organization implementing the program in the community. This organization could be El Pueblo, El Centro Hispano or another organization that has not yet been identified. Given the crucial involvement of the El Pueblo *promotoras* in the implementation of the pilot project, the Capstone team assumed that El Pueblo is the most likely community partner going forward. While the Capstone team has had limited interaction with El Pueblo's senior management, the *promotoras* have identified a strong interest in participating, which could be due to a number of factors, including interest in the program and helping the community, opportunity for financial compensation, and gaining practical experience in public health programs. Sustainability may be enhanced if these incentives are entrenched at the organizational level, either through an organizational budget or strategic plan, as suggested by (Rabin, Brownson, Haire-Joshu, Kreuter, & Weaver, 2008).

Capacity-building

Finally, capacity-building in the recipient community is intended to strengthen the abilities of local community partners or the community itself to continue the program once external support has ended which in this case is support from the Capstone team and faculty advisers at UNC. Capacity-building activities focused primarily on the *promotoras* and the program participants themselves for both assessing ownership for and competence in taking the program forward. *Promotoras* were trained in participant recruitment and customer interaction techniques, but needed occasional refresher courses. This enabled them to recruit participants and potentially be able to train other *promotoras* over time. Participants' capacity-building related to the concept of self-efficacy, one of the core constructs being emphasized through this project. *Promotoras* engaged participants by tapping into their motivation to reduce stress levels and sharing tips and reminders for increasing physical activity.

Engagement and Assessment Findings

Central intercept interviews

The Capstone team obtained important information from the 80 central intercept interviews conducted in September 2011. The Capstone team learned that men get their haircut more often than women and that 77.5% of those interviewed receive hair cuts at a salon as opposed to someone's home. This was promising as it suggested that the salon might be a good setting to access Latinos. The team also learned that a large proportion (46.3%) of Latinos interviewed get their hair cut less frequently than once every two months, suggesting that the pilot intervention was unlikely to engage customers more than once during the six-week pilot test intervention. Additionally, the Capstone team was able to identify 16 salons that respondents had patronized in the past. These salons were cross-checked with the list of salons the Capstone team obtained from the state and were used to triangulate data for an enumerated list of Latino salons. Informants also ranked the top three health topics most of interest to them. For males, stress (1st), cancer prevention (2nd) and children's health (3rd) were listed as the most important whereas the ranking for females were stress (1st), reproductive health, children's health, and obesity (tied for 2nd), and physical activity (3rd).

Windshield Tour

The windshield tour conducted by the Capstone team in October 2011 resulted in two primary findings. First, the tour provided the Capstone team with a context for Latino salons in the NC triangle area. Visiting potential Latino salons, documenting the physical environment and discussing observations as a team allowed the team to have a similar perspective on the context of Latino salons in NC. Secondly, the windshield tour assisted with triangulation of data for the enumerated list of Latino salons initially based on information from the intercept interviews and list of licensed salons provided by the state. A number of salons we visited were determined to be salons that serve primarily Latinos and confirmed findings from the state list of salons. The tour also revealed that some of the salons did not serve a primarily Latino customers and these salons were removed from the list.

Salon Visits

In-person salon visits were made in order to better understand the community and salons as intervention settings as well as to identify potential salons key informants. During the visit, an overview of the NC BEAUTY and Health project and an explanation of the the research team was given.

Owners/managers were asked if they would be interested in possibly being involved in the study. Because salon visits occurred on the weekend when salons were busy, the Capstone team briefly observed the ebb and flow of customers as well as the structural layout of the various salons. During the busy weekend, salon employees had limited time to engage in long conversations with non-customers especially since a single salon may see up to 80 customers in single day. Of the nine salons, none had an employee monitoring the cash register/front desk and all had a television, which was tuned to *telenovelas* (soap operas). Many salons seemed to have a family-friendly atmosphere, with families sitting in the waiting areas while one member of the family was receiving services, and some salons had toys available for children.

Key Informant Interviews

The Capstone team conducted four key informant interviews as follows: 1) Florence Simán from El Pueblo, Inc.; 2) a Durham based salon owner named Alberto Ramirez; 3) Maritza Chirinos and Colleen Blue, senior staff from El Centro Hispano; and, 4) promotoras from El Pueblo, Inc. During the meeting with Florence Simán, it was decided to try a salon-based physical activity intervention such as a walking club or zumba. It was also recognized that there were challenges in engaging the broader family, which would be ideal for a Latino-focused intervention. The salon owner, Alberto Ramirez, suggested that stress and overweight were concerns for his clients but he had not observed them taking steps to address the issues such as dieting or physical activity. He was very supportive of piloting a physical activity intervention with a FITStop component and in particular a walking club. He also mentioned that a directory of health services would be useful for Latinos who are often not sure where to find this information. El Centro Hispano said that word of mouth and culturally-targeted mass media campaigns through radio and newspapers had been effective in sharing news of their work with the Latino

community. They mentioned that stress and mental health issues had not arisen during a recent health forum they had hosted and they would be interested to see the results of the central intercept interviews conducted by the Capstone team in September 2011. Finally, El Centro Hispano said salon stylists receive educational credits from the NC Board of Barber Examiners for their trainings, and this could potentially be eligible. The El Pueblo promotoras were supportive of a zumba or walking club intervention, and in fact mentioned they had previously been interested in a walking club but had not been able to organize one. They also suggested that men be connected to soccer leagues. The promotoras also suggested a salon located closer to where they lived, and one of the promotoras assisted with successful engagement and recruitment efforts to bring that salon on board as the intervention site.

Enumerated List of Salons

The original list from the state contained 13,563 salons. After excluding all counties except Orange, Wake and Durham, the list of salons totalled 1,649. Franchise salons were excluded which left a list of 1,281 salons. After excluding salons that did not have a Spanish sounding name of the salon and/or name of the salon owner, 61 salons remained on the list. Nine salons were added from a website that lists local Latino businesses; 46 salons were excluded because we were unable to find a phone number, the number was disconnected, there was no answer even after multiple attempts, or the salon was listed multiple times on the list under different names. Four salons reported that they did not serve a primarily Latino clientele. The final list was 20 salons. This enumerated list of Latino/a salons may not be a complete list. By excluding salons that did not have a Latino “sounding” salon name and/or Latino “sounding” salon owner we may have missed out on some Latino salons. Additionally, this list does not include unlicensed salons in the tri-county area. Even with these limitations, this list will be helpful in future intervention work with Latino salons in the NC Triangle-area.

Interviews with salon owners, stylists and customers

There are no results from interviews with salon owners, stylists, and customers as they were not conducted due to time constraints of the project. However, based on initial meetings with several salon

owners in the area, the Capstone team did identify four salons that were interested in learning more about the project and potentially becoming involved.

Summary

By conducting additional formative research (intercept interviews, windshield tour, salon visits, and key informant interviews), assessing program sustainability as well as engagement and assessment activities, the Capstone team was able to develop an intervention plan that avoided duplicating efforts of other community-based organizations and identified the potential for collaboration among stakeholders. Additionally, these assessments informed the project deliverables which are explained in detail below.

Summary of Deliverables

Deliverable 1: Formative Research Report to Inform NC Latina BEAUTY Salon Intervention Development	
<i>Purpose:</i> To engage and better understand the Latino population in North Carolina and the extent to which they frequent beauty salons, to identify potential intervention beauty salons in the Triangle area, to determine the health issue(s) that will be the focus of the intervention, and to inform the intervention and evaluation plan.	
<i>Timeline:</i> The formative research was conducted between September and December 2011.	
Methods	Key Findings
<p>Methods used by the student team consisted of 1) central intercept interviews at a public event in September 2011, 2) 1 windshield tour conducted in October 2011, 3) salon visits, and 4) an enumerated list of Latino salons, 5) key informant interviews, and 6) the development of interview guides and an observation checklist.</p> <p>1. Central intercept interviews were conducted at La Fiesta del Pueblo, in Raleigh, NC on September 18, 2011. The Capstone team conducted intercept interviews by approaching potential participants who entered the health fair-designated area at La Fiesta del Pueblo. The Capstone team approached 104 people to complete the interview questionnaire during the 4 hours of interviewing. A total of 80 people completed the interview, a completion rate of 77%. Given a list of 8 health topics, participants were asked to select their health concerns and rank the three most important to them. Interviews were completed in English or Spanish depending on the preference of the participant.</p> <p>2. On the morning of October 11, 2011, the Capstone team conducted a Windshield Tour of beauty salons in three North Carolina counties: Orange, Wake, and Durham. Salons were selected based on a method of triangulation using results of the central intercept interviews, cross-checking them against a list of all licensed salons in the tri-county area, and then being able to validate their location using Google Maps. Using the licensed list, we also added additional salons by</p>	<ul style="list-style-type: none"> • Customers will likely only have one contact with a stylist during the 6-week intervention. Based on this information we have decided to do a low stylist involvement intervention and instead focus on <i>promotoras</i> as the primary health educators. • The physical size constraints of the salon were considered and guided the decision for the main intervention activity, the walking club, taking place outside of the salon. • The formative research aided us in narrowing down the focus of the intervention to increasing physical activity, which may have a long-term impact on stress reduction.

selecting those, which contained the word *peluqueria* (hair salon) or *salon de belleza* (beauty salon) and looked them up in Google Maps. Via these two methods we aimed to identify salons that serve the Latino community. We ended up with a list of 16 salons, which enabled us to visit multiple salons in each of the 3 counties, Wake, Durham, and Orange. Over a three and a half hour period, we surveyed six of the 16 beauty salons. This list was specifically used for the windshield tour but influenced the enumeration of salons. The six salons were selected based on ability to observe from an outside location (some were located inside apartment complexes) and geographic proximity to Chapel Hill due to being faced with tight time constraints. We developed a semi-structured windshield tour checklist of 17 yes/no and open-ended questions to guide our thinking and act as triggers for things to look for. Methods of observation included parking and watching, walking tours, and neighborhood driving tours.

3. Sivan, Ryan, and Barbara visited nine salons in Durham and Raleigh on a Saturday in October. All conversations were conducted in Spanish. The group members took turns leading conversation and doing introductions.

4. To create an enumerated list of Latino salons in the tri-county area of North Carolina, we began with a list of NC licensed salons that we received from the state in an excel spreadsheet. We came up with enumeration and exclusion criteria, looked up phone numbers, made phone calls and created a final list of 20 salons. We began with enumeration criteria. To be considered eligible, a salon had to:

- Be owned by a Latino
- Be located in Orange, Durham, or Wake counties
- Serve primarily Latinos

5. We have had four successful meetings with key informants to discuss our formative research and intervention plans. These include a meeting with Florence Simán from El Pueblo, Inc., a Durham based salon owner named Alberto, Maritza Chirinos (Health Program) and Colleen Blue (Director of Programs) from El Centro Hispano and *promotoras* from El Pueblo, Inc.

6. In addition to these methods, additional activities/products created include two Internal Review Board (IRB) modifications, development of central intercept interview surveys, developing interview guides for salon owners, stylists and customers and an observation checklist that were never used due to time constraints. All materials had to be translated into Spanish.

- We prioritized *promotora* involvement as the primary method for selecting the salon since they are essential to the intervention. One of the main *promotoras*, Griselda, has a relationship with Salon Alis and the location of the salon makes transportation to the salon for *promotoras* less of a barrier as it is closer to many of their homes.
- Entrée to the community is extremely important for a successful project such as this.
- Customers will likely be coming to the salon and this Latino business area to accomplish multiple tasks such as grocery shopping. This may limit their time in the salon the time they may be able to participate in the intervention. Additionally, customers may be bringing multiple family members with them on these outings, which may increase the opportunity to reach men, women, and children in this intervention.
- A list of 20 Latino salons was developed.

Deliverable 2: Literature Review on Community Health Interventions

Purpose: To identify other salon-based interventions including their effectiveness on specific health outcomes and identify evidence-based interventions for Latinos and Latino families on key health risk behaviors: tobacco use, physical inactivity, eating habits, alcohol use, weight management (and other topics that arise from formative research), and to inform the intervention plan.

Timeline: September 2011- February 2012

Methods	Key Findings
<p>1. Salon-based review of the literature To build upon the salon-based literature review, a search completed September 15, 2011 through October 1, 2011 in PubMed, Web of Science, Google Scholar, and EBSCO Host yielded 426 results (including duplicates). Search terms included “(Latino or Hispanic Americans or black or African-Americans) and/or (Health or obesity or nutrition or depression or reproductive health or physical activity or cancer prevention or children’s health or stress or violence prevention or alcohol or hypertension) and/or (Beauty salons or hair salons or barber shops or nail salons or stylists or estheticians or cosmetologists or manicurists).” Articles were excluded if they were non-peer reviewed or assessed knowledge/attitudes/beliefs/ behaviors of non-Latino population or primary outcomes were not a health-specific outcome or not a salon-based intervention. After cross-checking the 21 remaining articles for duplicates with D’Angelo’s original literature review, only 3 new articles were reviewed.</p> <p>2. Non salon-based Latino Interventions Search queries consisted of “(Latino or Latina or Hispanic) and (Intervention) and a specific health topic including: (depression), (stress), (reproductive health or sexual health), (“child health”), (“weight control”), (“cancer prevention”), (“physical activity”).” Parentheses were use to ensure the query resulted in articles that contained the phrase within the quotes rather than articles that merely had one of the words within the quotes. A search completed in PubMed resulted in 960 results (including duplicates). To be included in the review, articles must have had the target population be the general Hispanic adult population, must have a primary health outcome, and not be school-based nor be medical-provider based. After exclusion, 42 were deemed relevant.</p> <p>3. Physical Activity Interventions as a Mechanism for Stress Reduction A final literature search was conducted for (walking and intervention and stress). The search resulted in 88 articles; however, only one article was deemed relevant; thus a second search of (walk and intervention) resulted in four additional articles to review. To be included, an article’s sample had to be non-disease US adults and the primary intervention activity had to be walking.</p>	<ul style="list-style-type: none"> • Salons are a promising yet under-explored setting. • Although no Latino-salon-based interventions have been implemented, the idea seems plausible. • When designing a salon-based intervention for the Latino community, stylists should be involved in the planning and implementing of the health education campaign. • Lay health workers (<i>promotoras</i>) are an effective mechanism to promote behavior change among Latinos. • The presence of <i>promotoras</i> helps establish the credibility and trust of external researchers working within the community • There are cultural ideas such as <i>familismo</i>, <i>personalismo</i>, that must be considered when designing an intervention. • Community-based physical activity interventions have been shown to be an effective way to improve the mental health of participants. • Additional research is needed to determine the feasibility of recruiting participants in a Latino salon as well as the extent to which certain intervention topics and strategies are more or less suited for salon-based interventions.

Deliverable 3: NC BEAUTY Advisory Board Presentation	
<i>Purpose:</i> To summarize Phase 1 formative research and present Phase 2 pilot study plan to the Advisory Board members and get feedback	
<i>Timeline:</i> Preparation of slides – September – October 3, 2011. Presentation on October 3, 2011	
Methods	Key Findings
October 3, 2012: Dr. Barbara Baquero presented the Phase 1 formative research results and Julie Hasken and A.C. Rothenbuecher presented the Phase 2 plan. There was a short question and answer section.	The Advisory Board approved of the Phase 2 plan.

Deliverable 4: Latino Beauty Salon Intervention and Evaluation Manual	
<i>Purpose:</i> To develop a multi-level intervention and evaluation plan addressing physical activity and stress target that is culturally/contextually appropriate for use with Latinos in a beauty salon setting, using PRECEDE-PROCEED the planning process.	
<i>Timeline:</i> January – April 2012	
Methods	Key Findings
<p>Use health behavior theory and the PRECEDE – PROCEED model to develop an intervention and evaluation manual. The manual describes the protocol for implementing a six week physical activity and stress reduction intervention. It contains instructions for on-boarding salons, training <i>promotoras</i>, recruiting participants, performing initial assessments, delivering the intervention, and follow-up assessments. The manual consists of a written document and all accompanying materials needed for the intervention and evaluation, attached in a series of folders by way of CD, thumb drive, or ZIP folder.</p> <p>This deliverable, in addition to serving as a written guide for future endeavors, is the Capstone team’s record of the intervention and evaluation activities completed in the spring of 2012. This phase of the project began with promotora and stylist trainings in February, four weeks of participant recruitment in a salon, six weeks of intervention activities, and two weeks of follow-up data collection.</p> <ul style="list-style-type: none"> • Stylist orientation: 1 hour-long session held at Salon Alis • <i>Promotora</i> training: 2 three-hour long training sessions • Recruitment: Four hour shifts on Friday afternoons, six hour shifts each on Saturdays and Sundays, three weekends in a row • Intervention: Phone calls throughout the week, one hour physical activity session on Saturdays • Follow-up: Four hour shifts on Friday afternoons, six hour shifts each on Saturdays and Sundays, two weekends in a row <p>The Capstone team planned and prepared materials for all of these components, and directly participated in the training and recruitment phase. The intervention and post assessment phases were continued by Barbara Baquero, Karen Roque, Laura Linnan and other members of Laura Linnan’s research team.</p>	<p>Findings from the manual:</p> <ul style="list-style-type: none"> • Determine the purpose of the manual and decide on what components to include based on this purpose. • Prioritize brevity and ease-of-use over lengthy explanations. • Make materials easy to locate and reproduce. <p>Findings from recruitment:</p> <ul style="list-style-type: none"> • Ebb and flow of salon customers. • Be mindful of resources and time. • Stylist buy-in is important. • One project manager for the complete recruitment process and someone to ensure protocol is followed. • Main reason participants did not participate is lack of time. • It takes 30 minutes to complete the baseline interview and FITStop assessment. • Involve target audience (customers) from the beginning to ensure all materials are appropriate.

Deliverable 5: Latino Beauty Salon Intervention and Evaluation Materials	
<i>Purpose:</i> To develop intervention and evaluation materials to be used in the 6 week pilot intervention.	
<i>Timeline:</i> January – April 2012	
Methods	Key Findings
Adapted and created intervention and evaluation materials. Activities for this deliverable include 2 IRB modifications and one full electronic IRB renewal. All materials were adapted from previous work done by Drs. Barbara Baquero and Laura Linnan, reviewed and revised and translated into Spanish by two of the team members and Karen Roque.	<ul style="list-style-type: none"> • Should have pre-tested with customers at Latino salons not just Latinos • All materials should have multiple revisions • Need sufficient time to review materials • Adapting materials to another community is a lengthy process and needs input from many people and time and resources • Adaptation vs. tailoring vs. creating a new intervention • Lack of fidelity to the protocol. • Need to have a background in physical education and physical activity • Speaking Spanish is essential for this population. • Not all Spanish is the same and need to use the words that the community uses

Deliverable 6: Latino Beauty Salon Intervention <i>Promotora</i> (Lay Health Advisor) Training Materials	
<i>Purpose:</i> To develop a training guide and accompanying materials to inform the <i>promotoras</i> of the intervention, get their feedback and input, provide them with CITI training, and train them in multiple roles.	
<i>Timeline:</i> January – April 2012	
Methods	Key Findings
<p>We created a Spanish-language <i>promotora</i> training guide, which includes a facilitator’s guide, training materials, sample intervention materials, and an accompanying PowerPoint presentation. Some of the materials had first been created in English and thus were translated into Spanish by two Capstone team members and Karen Roque. Dr. Baquero and the Capstone team trained two <i>promotoras</i> in February at El Pueblo Inc. offices in Raleigh, NC. Two <i>promotoras</i> attended an additional training facilitated by Dr. Baquero in February 2012 but not all materials could be reviewed due to time constraints. Thus, a third and final training was held in the salon during the recruitment phase by one Capstone team member to complete the review of all materials. During these separate trainings, feedback was taken on board from the participants so as to improve and refine the materials resulting in this final version.</p>	<ul style="list-style-type: none"> • Schedule and design training according to participants’ needs • Should be participatory and involve a two-way dialogue so that both facilitators and participants can learn from each other • CITI training tends to be more of a one-way dialogue and should be conducted separately so as not to throw off the dynamic • Multiple sessions and even refreshers may be required as not everyone may show up the first time, nor remember everything that has been discussed • Participants in the training were primarily Spanish-speaking thus it was not necessary to have a fully bilingual set of materials

Deliverable 7: Latino Beauty Salon Intervention Stylist Orientation Training Materials	
<i>Purpose:</i> To develop orientation materials to provide the stylists at the intervention salon with an overview of the intervention, explain their role in the intervention, and get their feedback and consent.	
<i>Timeline:</i> January – April 2012	
Methods	Key Findings
<p>We created a Spanish and English language stylist orientation guide which includes a calendar of activities, an overview of the intervention and the types of promotional and informational materials used, and consent forms. The stylist orientation took place in February 2012 in the intervention salon in Raleigh, NC and was administered by the Capstone team members and Dr. Baquero.</p>	<ul style="list-style-type: none"> • Approach the orientation as a participatory, ongoing two-way dialogue during which to engage and learn from the stylists • Schedule the orientation according to participants’ needs and be prepared for further follow-up • Engage the stylists early in the process of intervention design so as to take on board their expertise • Hold the orientation as soon after the intervention has been designed so that the stylists are aware of what is involved, and may provide feedback on potential challenges with implementation • Be prepared to clearly explain the goals of the intervention, the stylists’ involvement, and what will be done with the results of the intervention and how it will benefit the community • Budget time for the stylists to review the materials and the consent forms (i.e. do not expect them to sign the consent forms on the spot)

Deliverable 8: Latino Beauty Salon Recruitment Data Summary Report	
<i>Purpose:</i> To summarize data from the pilot test that will allow us to determine the feasibility and initial impact of the intervention on owner, stylist, customer and salon-level outcomes.	
<i>Timeline:</i> March – April 2012	
Methods	Key Findings
Developed a SPSS database for the data. Prior to analysis, data was coded, entered, verified, and cleaned. Analyzed data as outlined by the evaluation. This analysis focused on the recruitment data and not pre/post intervention data. Prepared a summary report containing summary of demographic data about participants, recruitment rate, baseline physical characteristics (FITStop assessments) of participants.	<ul style="list-style-type: none"> • The <i>promotoras</i> spent a total of 53-hours in the salon, recruiting participants. During the 53-hours, at least two <i>promotoras</i> were present. <i>Promotoras</i> approached a total of 133 customers (56 females and 77 males). • Of the 77 males approached, 18% were enrolled into the study. Of the 56 females approached, 34% were enrolled into the study. • All eligible individuals enrolled into the study and opted to complete FITStop. • The mean BMI was 27.5 (SD = 4.8), with 21% classified as normal or underweight, 52% as overweight, and 15% as obese class I and 12% as obese class II/III. • Almost all (93%) of male participants and 75% of female participants reported visiting the salon at least once a month. • While nearly three-quarters intend to engage in at least 150 minutes of physical activity in the next week, only a quarter reported doing 150 minutes in the previous week. • Overall, recruiting in a Latino salon is feasible

DISCUSSION

Strengths and Limitations

In future implementation efforts, effective engagement of salons should be a key consideration in the implementation of the intervention and sustainability. Though this project did include attempts to engage the target community, these efforts could be strengthened considerably to ensure appropriateness and community ownership.

The original NC BEAUTY intervention consisted of 6 behavior change campaigns developed for African American salon customers, stylists, and owners. This Capstone project sought to adapt one of these campaigns, “Every Little Move Counts,” for Latino populations. This process required data and knowledge about the community’s needs in order to make it culturally and contextually appropriate. The Capstone project was significantly strengthened by the prior formative research and data collected in 2009-2011, which provided insight into the relationship between stylists and customers, customer demographics, and whether stylists and customers might be interested in such an intervention. Still, gaps existed and due to time constraints on the part of the Capstone team as well as the need to take into account the schedules of salon owners, not all community engagement activities were implemented as planned.

Particular challenges included going beyond observational methods to more interactive methods such as focus groups and face-to-face interviews. Though previous formative research provided information on the potential salience of a salon-based intervention and potential health topics, the Capstone project would have benefited from more detailed information on the types of intervention activities and additional demographic information about customers. For example, a few weeks before the intervention began, the team found out that the chosen salon had a mostly young, male clientele, not the family-oriented, primarily female audience the intervention had been designed for. This may have resulted in a less appropriate intervention.

Furthermore, as outsiders (and non-native Spanish speakers), the Capstone team struggled in navigating the language and cultural barriers and building trust with the community. For example, several

phone calls were needed to schedule an appointment with one salon's management. Then, at the appointed time, the salon owner did not show up, and the Capstone team was not able to re-establish interest. Although it may not be possible to know the precise reasons for this, it may be due to cultural misunderstandings, insufficient incentives, concern about participating related to legal or immigration issues, and busy schedules. Eventually, the Capstone team sought assistance from one of the faculty advisers, a native Spanish speaker, to assist in gaining entrée and securing a salon for the pilot stage. The faculty adviser's past experience in working with the Latino community proved essential to recruiting the salon and was a key strength of the project.

Overall, the truncated timeline for formative research and community engagement presents a risk that the final intervention design may be neither reflective of the services desired by the community nor relevant to the target population.

Information Gaps

Had additional resources and time been available, further engagement may have been beneficial to the intervention design. Specifically, additional engagement may have allowed the Capstone team to gain more first-hand knowledge and understanding of the community rather than relying on previous formative research conducted by others. Furthermore, additional engagement would have allowed more collaborative intervention development among stakeholders. Specifically, earlier involvement of the pilot intervention salon's owner may have resulted in a more appropriate and relevant intervention for the salon's customers. Earlier involvement would have also facilitated more co-ownership among the stakeholders.

Potential Impact and Benefits

The NC Latina BEAUTY project has had several important impacts for multiple parties. First, the primary intended beneficiaries of the project, salon customers, received access to health assessments, targeted health education, peer support through the *promotoras*, and opportunities to engage in physical

activity. Additional longer-term benefits may include: increased physical activity, reductions in BMI and stress levels, improved physical fitness, and self-efficacy to perform physical activity.

Other beneficiaries included the *promotoras*, who received training on physical activity and stress, and may use this knowledge in their other activities. In addition, the NC BEAUTY Advisory board now has a comprehensive salon-based physical activity promotion and stress reduction pilot intervention to consider for possible use in other Latino beauty salons. The documentation of lessons learned from this experience will also add to institutional knowledge and capacity for future implementation efforts of this project and other adaptations of the original NC BEAUTY project.

Finally, the Capstone team members gained significant experience in planning, implementing, and evaluating a community-based research project. Skills developed include conducting formative research, building and maintaining relationships with community stakeholders, creating a multi-component intervention, managing a research team of over ten individuals, coordinating complex timelines, documenting project plans with multiple components, and speaking and writing in Spanish. Consistent with the goal of the Capstone program, these experiences built on the lessons learned during two years of MPH coursework and will be invaluable to the team in their future public health careers.

Considerations for Sustainability

In this section, the Capstone team has outlined a set of strategies intended to address the limitations of the project and how to best build on its strengths in order to enhance sustainability. These strategies have been developed in line with recommendations by Shediac-Rizkallah & Bone (1998).

The first strategy is to continue using and further development of the materials and intervention strategy developed by the Capstone team. These materials and guidance documents can provide a strong basis and starting point for moving forward from the pilot stage. The promotional materials, *promotora* training guide, and the walking club strategy can be tested with community members through focus groups and consultations and interviews with key informants, namely the stylists, *promotoras*, and customers. Modifications could be made as necessary to increase their relevance to the target population

and any community stakeholders that may be involved in future implementation efforts. Such formative research will also help to identify whether and what types of capacity-building measures might be appropriate. Capacity building through skill-development can be an important contributing factor to sustainability (Shediac-Rizkallah & Bone, 1998).

However there are certain threats to sustainability, which need to be addressed such as: the need to conduct further formative research on intervention design, the identification of a more involved community partner for the implementation of the full intervention, and the appropriateness of the intervention for the target audience, as discussed above.

Secondly, the Capstone team recommends greater community ownership of the project. The university researchers and majority of members of the NC BEAUTY Advisory Board are not representative of the local Latino community. One significant advantage is that one of the faculty advisers became the main liaison with the salon and *promotoras* during the course of this Capstone project and a strong institutional or organizational champion within the university system and research community. This could significantly help in engaging other community-based, Latino-focused organizations that the Capstone team has previously identified and contacted in relation to this project. Continuing to engage with these organizations may spark interest from additional community partners. The Capstone team hopes that the faculty adviser will continue to remain involved in the project. Continued engagement with the community may also lead to other potential community partners emerging in a leadership role, championing it locally, and ultimately institutionalizing it within the organization. This process will also inform the development of a culturally linked and relevant Advisory Board. In these ways, the Capstone team hopes future modification of the intervention be driven by the needs of the community and creates a greater sense of ownership, which is a critical element to sustainability as per Shediac-Rizkallah & Bone (1998).

Thirdly, the main intervention activity of a weekly walking club was developed for a target audience of families and women. During the implementation of the intervention, it emerged that the salon chosen for the pilot project counts young, single men as the majority of its customers. It is unclear

whether the opportunity to participate in a walking club is likely to resonate as effectively with young men as it might with young women, but results from the intervention evaluation will shed light on participation and behavior change among both genders. Research shows that high-stylist involvement (e.g. training stylists to serve as “natural helpers”) is an effective way to promote behavior change (Linnan & Ferguson, 2007; Linnan et al., 2011). Although high stylist involvement was not a strategy that was possible for this project, it may be possible in a future iteration of this work. Furthermore, continuing to use or expanding on the natural helper strategy may also be effective. Utilizing the *promotoras* in this project appeared effective in the recruitment stage. Perhaps through the use of multiple natural helpers, such as stylists or even individuals in alternate environments such as local churches, social support can be strengthened and reinforce key intervention messages. *Promotoras* could be invited to share thoughts on how this might be possible in future implementation efforts.

Finally, the Capstone team anticipates that the products of this project will contribute to the evidence base on the health nexus between salon stylists and their customers. There is already a significant evidence base as a result of NC BEAUTY’s work in the African-American community (Linnan et al., 2005; Linnan & Ferguson, 2007; Linnan et al., 2011; Reiter & Linnan, 2011). By adapting the intervention to a different ethnic community and documenting it in the published literature, other researchers may seek to develop the work further in other populations and places. If enough evidence were accumulated, simple measures for health improvement of salon customers could potentially be included in cosmetologist or stylist training programs at the state level, creating the potential to strengthen community competence as suggested by Shediak-Rizkallah & Bone (1998). Through a number of written deliverables, the Capstone team is informing the development of manuscripts for publication on the activities and results of the project.

CONCLUSION AND RECOMMENDED NEXT STEPS

Options for funding after the initial intervention will need to be explored. In line with the definition of sustainability outlined by Rabin et al. (2008), the Capstone team recommends that the

project explore additional community-based funding sources, not only those tied to university-based research, so as to improve the sustainability and community involvement in the project.

If the project moves past a pilot stage, it would be advisable to explore means of monitoring health behaviors and health benefits for program participants over time, through surveys and/or intermittent FITStop assessments. In this way, participant feedback can help to modify the intervention dose frequency or the implementation process in a way that may be more effective.

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APPENDIX 1

Figure 1: NC Latina BEAUTY Project Logic Model

Inputs →	Activities →	Outputs →	Outcomes →	Impact
<ul style="list-style-type: none"> • Capstone student team time and effort • Faculty adviser and community partner time and experience • Volunteer time • \$100 from HBHE • \$ (tba) from Lineberger Comprehensive Cancer Research Center • Research Assistant time • NC BEAUTY advisory board mentorship • Health <i>promotora</i> time • Car transportation • Printing supplies • Previous formative research • FITStop supplies • Salon location • Salon owner and stylists' time 	<ul style="list-style-type: none"> • Formative research <ul style="list-style-type: none"> • Key informant interviews • Intercept interviews • Retreat • Create or adapt all intervention and evaluation materials • <i>Promotora</i> training • Stylist orientation • FITStop training • Weekly walking activities • <i>Promotora</i> weekly calls 	<ul style="list-style-type: none"> • Literature review • NC BEAUTY advisory board presentation • Intervention and evaluation materials: <ul style="list-style-type: none"> • Walking logs • <i>Promotora</i> calling logs • Baseline and follow-up surveys • FITStop assessments • <i>Promotora</i> training materials • Stylist orientation materials • Manualized intervention and evaluation plan • Completed pilot physical activity intervention for Latino beauty salons 	<ul style="list-style-type: none"> • Increased minutes of physical activity among salon customers • Increased steps walked among salon customers • Increased awareness of physical activity among salon customers • Increase in self-efficacy for physical activity among salon customers 	<ul style="list-style-type: none"> • Reduction in BMI of salon customers • Lower levels of stress among salon customers • Improved physical fitness among salon customers

APPENDIX 2
Final NC BEAUTY Capstone Work Plan

A. Capstone Team Members

Community Partner

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(on behalf of
BEAUTY & Barbershop Advisory
Board)

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Working Title

Please provide a working title that describes the population, setting, health topic(s), and major deliverable(s) you will be working on. E.g., Evaluation and Adaptation of a Reproductive Health Peer Education Curriculum for NC Latina Youth.

North Carolina Latina Bringing Education And Understanding To You (BEAUTY) Salon Project: *Formative Research, Design, Implementation and Evaluation of a salon-based health promotion pilot program for Latinos.*

B. Capstone Project Description

*In narrative format, please describe the significance of the **health problem(s)** the Capstone project aims to address. Describe the **population** that will benefit from the Capstone project work. Describe the **setting** that will be impacted by the Capstone project work. Describe the **methods** that the Capstone team will use to address the health problems. (1-2 paragraphs)*

Latinos in the US are at high risk for many chronic diseases, including heart disease, diabetes and certain types of cancer (Kochanek et al., 2009). As Latinos acculturate, critical health behaviors such as high fat/calorie diets, alcohol abuse and physical inactivity are associated with increased risk of overweight and many chronic diseases (Lara et al., 2005). Finding ways to reach this population with information and activities that will promote healthy behaviors will reduce risk, prevent chronic disease and improve quality of life.

This project will work collaboratively with beauty salon owners, stylists, their customers and the BEAUTY Advisory Board members to plan, design, implement, and evaluate a culturally and contextually appropriate intervention to be conducted in Triangle-area Latino beauty salons. Formative research from 2009-2011 will be reviewed and the team will look for gaps in information. Additional formative research by the team will include in-depth interviews with key informants, focus groups, observations in salons, and short surveys with Latinos at community events to aid in the selection of the health issue(s) and to inform the development of an intervention and evaluation plan before piloting the intervention in one Latino beauty salon. The findings from this project will be summarized in a final report. Throughout the project, contributions will be made as needed to a manuscript and a grant proposal which will be directed by the faculty advisers.

References

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C. Deliverables & Activities

Please list all Capstone deliverables and their purposes; the activities necessary to complete them; and the timeline for completing them.

Deliverable I: Formative Research Report to Inform NC Latina BEAUTY Salon Intervention Development

Purpose: To engage and better understand the Latino population in North Carolina and the extent to which they frequent beauty salons, to identify potential intervention beauty salons in the Triangle area, to determine the health issue(s) that will be the focus of the intervention, and to inform the intervention and evaluation plan.

Project Leader: A.C. Rothenbuecher

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Develop intercept interview guide / survey to conduct during the annual El Pueblo Inc, <i>La Fiesta</i>	September 2011
Submit IRB Modification Form for intercept interviews	September 2011
Conduct surveys with Latinos at <i>La Fiesta</i>	September 18, 2011
Develop Interview Guide for salon owners, stylists and customers and observation checklist materials	October, 2011
Submit IRB Modification Form for interviews and observations	October 2011
Conduct windshield tour	October 2011
Conduct salon visits	October-November 2011
Present results to faculty advisors and community partner at community retreat	November 2011
Conduct meeting with <i>promotoras</i> from El Pueblo	December 2011
Finalize list of potential intervention salons	December 2011
Submit deliverable	February 2012

Product Review: FAs reviewed all materials as and when needed. CP gave input at Advisory Board meeting and community retreat.

Deliverable II: Literature Review on Community Health Interventions

Purpose: To identify other salon-based interventions including their effectiveness on specific health outcomes and identify evidence-based interventions for Latinos and Latino families on key health risk behaviors: tobacco use, physical inactivity, eating habits, alcohol use, weight management (and other topics that arise from formative research), and to inform the intervention plan.

Project Leader: Julie Hasken

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Develop an abstraction form	September 2011
Search scientific databases and governmental clearing house	September – October 2011
Search in multiple databases for articles on community engagement methods with Latino population	September – October 2011
Review articles	October 2011- February 2012
Prepare summary report	October 2011- April 2012
Present results to faculty advisors	April 2012
Submit deliverable	April 2012

Product Review: FAs reviewed all materials as and when needed. CP gave input at community retreat.

Deliverable III: NC BEAUTY Advisory Board Presentation

Purpose: To summarize Phase 1 formative research and present Phase 2 pilot study plan to the Advisory Board members and get feedback

Project Leader: A.C. Rothenbuecher

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Draft presentation and give to faculty advisors for review	September – October 2011
Revise presentation as required	October 2011
Presentation of results to NC Beauty Advisory Board	October 3, 2011
Submit deliverable	February 2012

Product Review: FAs reviewed presentation slides. CP did not review the slides but assented to plan at the meeting.

Deliverable IV: Latino Beauty Salon Intervention and Evaluation Manual

Purpose: To develop a multi-level intervention and evaluation plan addressing physical activity and stress target that is culturally/contextually appropriate for use with Latinos in a beauty salon setting, informed by the PRECEDE-PROCEED the planning process.

Project Leader: Sivan Goobich

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Draft Manual	January 2012 –April 2012
Salon Activities – Recruitment	March 2012
Send Manual to FA’s for feedback	April 2012
Revise Manual	April 2012
Submit deliverable	April 18, 2012

Product Review: FAs reviewed deliverable. CP did not review the deliverable.

Deliverable V: Latino Beauty Salon Intervention and Evaluation Materials

Purpose: To develop intervention and evaluation materials to be used in the 6 week pilot intervention.

Project Leader: Sivan Goobich

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Develop and adapt needed intervention materials	December 2011-April 2012
Review first draft of intervention materials with faculty advisors	December 2011-March 2012
Revise intervention as required	December 2011– March 2012
Submit IRB modification – English materials only	December 2011 – January 2012
Translation of materials	December 2011- January 2012
Revise intervention as required based on IRB comments	January 2012 –February 2012
Submit IRB modification - Spanish	February 2012
Submit third IRB modification	March 2012
Create and Submit Electronic Renewal for entire project	March –April 2012
Submit deliverable	April 18, 2012

Product Review: FAs reviewed deliverable. CP did not review the deliverable.

Deliverable VI: Latino Beauty Salon Intervention *Promotora* (Lay Health Advisor) Training Materials

Purpose: To develop a *promotora* training and materials to inform the *promotoras* of the intervention, get their feedback and input, provide them with CITI training, and train them in multiple roles.

Project Leader: Ryan Rowe

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Develop, adapt, and translate training materials	February 2012
Send to FA’s for review	February 2012
Conduct Promotora training	February 2012
Revise training materials	March 2012 – April 2012
Submit deliverable	April 18, 2012

Product Review: FAs reviewed deliverable. CP did not review the deliverable.

Deliverable VII: Latino Beauty Salon Intervention Stylist Orientation Training Materials

Purpose: To develop stylist orientation materials to provide the stylists at the intervention salon with an overview of the intervention, explain their role in the intervention and get their feedback and consent.

Project Leader: Ryan Rowe

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Develop, adapt, and translate orientation materials	January 2012
Send to FA's for review	January 2012
Conduct orientation	February 2012
Revise orientation materials	February 2012 – April 2012
Submit deliverable	April 18, 2012

Product Review: FAs reviewed deliverable. CP did not review the deliverable.

Deliverable VIII: Latino Beauty Salon Recruitment Data Summary Report

Purpose: To summarize data from the pilot test that will allow us to determine the feasibility and initial impact of the intervention on owner, stylist, customer and salon-level outcomes.

Project Leader: Julie Hasken

Activities/Timeline:

ACTIVITIES	DUE DATES / STATUS
Create database	April 2012
Input data	April 2012
Verify data	April 2012
Clean data	April 2012
Analyze data gathered as outlined by evaluation plan	April 2012
Prepare summary report	April 2012
Revise report as required	April 2012
Submit deliverable	April 18, 2012

Product Review: FAs reviewed deliverable. CP did not review the deliverable.

D. Important HBHE Principles

a. Theory-Grounded

Please explain how the Capstone project work will be grounded in theory.

Theory will be used to inform the intervention components. We will use PRECEDE-PROCEED to develop a multi-level intervention based on the social and epidemiological assessments in addition to a literature review and formative research gathered by the team. We will also incorporate behavior change theories when designing intervention components.

b. Evidence-Based

Please explain how the Capstone project efforts will be evidence-based.

This project is based on techniques that were developed in the NC African-American population and implemented through beauty salons over a number of years. Research showed the techniques to be effective, results which were published in a number of articles (Linnan et al., 2001; Solomon et al., 2004; Linnan & Ferguson, 2007; Kim et al., 2007).

In addition to the above, we will conduct a literature review on health interventions targeting the Latino community in a variety of settings. The epidemiology of health issues in the Latino community will also be reviewed to identify those of greatest concern in this population.

References

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c. Participatory

Please explain how the Capstone project efforts will involve the intended audience.

We will present at scheduled NC BEAUTY and Barbershop Advisory Board meetings to get member input on all aspects of our planning process. If a meeting is not scheduled, we will seek feedback from Advisory Board members individually for their insights on our plans. Ms. Florence Simàn is our liaison with the Advisory Board and will attend meetings in person or by phone as requested by the team. She will serve as a representative of the Advisory Board to assist with day-to-day work on the project. We will also conduct short surveys with Latinos at community events, engage salon owners in the initial formative research of the project, in addition to hosting interviews with clients to vet the planned intervention. Based on the feedback of key stakeholders, we will modify intervention ideas and components.

d. Public Health-Oriented

Please explain how the Capstone project work will impact public health.

Latinos experience health disparities. Intervening outside of the traditional clinic setting will provide additional avenues for the collection and delivery of health-related information in order to improve health outcomes in this population.

e. Attention to the Potential for Sustainability and Dissemination

Which project outputs should be sustained after the Capstone project ends, how, and by whom? How will you share outcomes with stakeholders, relevant institutions, organizations, and individuals?

The results of the study may be disseminated through presentations at national/local meetings, in a publication in a peer-review journal, and/or to inform development of a research grant proposal to extend this work beyond this initial project.

E. IRB Implications

Will you be conducting secondary data analysis or primary data collection? Do you plan to pursue additional activities with the same information for dissemination (e.g., conference paper, article)? Please refer to the IRB Guidance for Student Research and Class Projects document to determine whether or not you will need to do an IRB.

The 2011-2012 Capstone team will submit IRB modification forms with respect to Deliverables I, II, IV, V, VII and VIII.

F. Roles & Responsibilities

The Capstone has four stakeholder groups: students, community partners, faculty advisers, and the HBHE Department, as represented by the Capstone teaching team. The roles and responsibilities for each of these groups are outlined in Appendix A. The student team has identified the following team members for the roles listed below:

- a. Teaching Team Liaison: Sivan Goobich
- b. Mentor (Community Partner and Faculty Adviser) Liaison/ Project Manager:
A.C. Rothenbuecher
- c. Department Liaison: Ryan Rowe
- d. Scribe: Julie Hasken

G. Resources

a. Capstone Site Resources

The HBHE department will reimburse up to \$100 of expenses relating to the direct activities necessary to carry out the established deliverables of the Capstone team.

What materials/resources will the Capstone partner supply to support this Capstone project (e.g., work space; transportation costs; long distance phone and faxes; data sources; data processing; printing; postage; clerical support; supplies for focus groups/meetings; etc.)? Does this Capstone team have all of the resources (e.g., money, space, technology, etc.) necessary to produce the deliverables outlined in the work plan? If no, explain how the resources will be obtained.

Printing costs of intervention materials, participation incentives, and FITStop staff assistance will be paid for by the faculty adviser as part of available grant funds for this project.

b. Capstone Partner Key Personnel

Please use the table below to identify key personnel (besides the community partner) at the Capstone organization/agency who will interact with the Capstone team.

Name, Degree(s)	Title	Relationship to Capstone Team	Communication Plan
NC BEAUTY Advisory Board	Members	Periodic input sessions during board meetings	As needed at scheduled board meetings

c. Consultants on Call

Do you require any special expertise beyond what will be provided by your community partner, faculty, adviser, and the teaching team? If so, please use the table below to identify any faculty, adjunct faculty, alumni, PhD students, or other public health professionals who might be able to lend their expertise to the project.

Name, Degree(s)	Title	Area(s) of Expertise
Clare Barrington, PhD	Assistant Professor	Qualitative research methods, Latino populations
Karen Roque	Research Assistant Volunteer	Spanish translation; research implementation

d. Other

Please describe any other assets available to the team.

N/A

H. Logistical Considerations

a. Timing

Are there any timing considerations that will be important for the student team to be aware of when working on this project and its deliverables?

- The student team will require a schedule of Advisory Board meetings for the period of the work plan: August 2011 – April 2012. This will enable the student team to plan for presentations and required approvals accordingly.

b. Travel

What special travel considerations exist for the student team? If travel is required, who is covering that expense?

- Travel to salons and interviews/focus groups will be done using the students' vehicles. Reimbursements for mileage and gas expected.

c. Other

Are there any other important issues that the Capstone team (students, faculty adviser, and community partner) or teaching team should know about this Capstone project and/or the deliverables?

- The due dates reflected in this work plan and attached timeline may need to be adjusted in order to accommodate changes in scope and deliverables that may be unforeseeable at this time. At the end of the fall semester, we will reevaluate the team's progress and make changes accordingly.

I. Permissible Uses of Information

a. Ownership of the Deliverables

The Capstone partner owns the final deliverables. However, HBHE reserves the right to publicly list the organization as a Capstone partner, to keep copies of all Capstone teams' final deliverables for review by the HBHE community, and to include a brief project description in Capstone promotional materials. Please explain the degree to which students will be allowed to use the work produced in pursuit of their educational or professional careers (e.g., thesis, dissertation, manuscript). Describe the procedures for obtaining approval to disseminate the Capstone project deliverables. If there are certain data or products that cannot be disseminated, please list them here.

Students will be allowed limited use of the work produced in pursuit of their educational and professional careers. Dissemination in any form (including a publication or abstract) will require approval by the faculty advisors.

b. Authorship

What are your plans for authorship if you produce publishable materials?

All issues of co-authorship will be handled using the "instructions for author guidelines" established by the American Journal of Public Health (or related journals). If co-authorship requirements are met, all capstone team students will have the opportunity to serve in that capacity. All authorship discussions will be held between faculty advisers and capstone team members as the publication planning process is undertaken. Students will be allowed to present aspects of the capstone process and specific deliverables at professional meetings with prior approval from faculty advisers.

c. Use of Recorded Materials

Who (e.g., Capstone partner, HBHE, students) can use the photographs, recordings, interviews, or auditory recording created by HBHE MPH Students during their Capstone projects?

In accordance with IRB requirements, IRB-approved staff will have access to these materials for project purposes only. NC BEAUTY research team members will have ownership over any recorded materials generated from Capstone project work.

Agreement

I reviewed this updated work plan and read through the updated *Roles and Responsibilities* document (Appendix A). I agree to my responsibilities as team member and as an individual within this timeline. This contract may be amended with the consent of all parties named below.

Florence Siman
Community Partner

Laura Linnan, ScD, CHES
Faculty Adviser

Barbara Baquero, PhD, MPH
Faculty Adviser

Sivan Goobich
Student

Julie Hasken
Student

A.C. Rothenbuecher
Student

Ryan Rowe
Student

Approved by : _____

Date: _____

Teaching Team Member

Appendix A: Roles & Responsibilities

Individual students are responsible for:

- Indicating how (s)he will contribute to the work plan deliverables
- Contributing equitably to team activities and deliverables
- Providing professional, constructive feedback to teammates, community partner(s), faculty adviser, and teaching team as needed
- Being familiar with department policies and procedures as they relate to Capstone
- Attending Capstone Celebration Day

The **student team** is responsible for:

- Assisting in the development of mutually agreed upon specific, tangible, substantive, timely, and feasible activities and deliverables activities be achieved during the Capstone
- Drafting the initial team work plan and updating the document throughout the Capstone process
- Obtaining approval from the community partner for team work plan
- Become oriented to political, cultural, and social norms that relate to the community partner and Capstone experience
- Exhibiting professional and ethical behavior and seeking mentorship from community partner
- Maintaining confidentiality of all Capstone information and deliverables
- Implementing the team work plan in a way that equitably involves each student in each major deliverable
- Facilitating team development (e.g., establishing team ground rules, providing constructive feedback, division of labor, etc.) and decision-making
- Meeting regularly as a team to decide on activities and tasks to be completed as part of the Capstone process
- Participating in progress meetings with the faculty adviser(s), teaching team, and community partner three times in the fall semester and three times in the spring semester (roughly once per month)
- Participating in a feedback session with the faculty adviser(s), all community partners, and the Capstone teaching team at least once a semester
- Determining whether or not an IRB is necessary and if so, managing the IRB process
- Ensuring that applicable practice and research ethics guide group conduct
- Providing professional, constructive feedback to the community partner(s), the faculty adviser, and teaching team as needed
- Producing team deliverables that advance the mission of the Capstone partner
- Obtaining approval of deliverables as they are produced from the lead community partner and faculty adviser
- Renegotiating and revising the project activities and deliverables as necessary
- Identifying a *mentor (community partner/faculty adviser) liaison* who is responsible for:
 - communicating with the community partner AND faculty adviser
 - making requests to the community partner and faculty adviser when guidance is needed
 - fielding needs/questions from the community partner and faculty adviser
 - soliciting feedback on Capstone activities and deliverables from the community partner and faculty adviser
 - ensuring that both the community partner and faculty adviser approve all deliverables
- Identifying a *teaching team liaison* who is responsible for:

- communicating with members of the teaching team on behalf of his/her Capstone team
- providing weekly updates summarizing the team's progress on the Capstone project work (community partners and faculty advisers should be copied on these emails)
- maintaining group records on Blackboard/Sakai
- updating the teaching team if contact information for the community partner or faculty adviser changes
- turning in group coursework assignments
- Identifying a *department liaison* who is responsible for:
 - Serving as a liaison between the front office and members of their Capstone team
 - Serving as their team's resident expert on all Capstone policies and procedures
 - Contacting the TAs and/or HBHE staff with questions about policies and procedures
 - Submitting all receipts and the necessary paperwork (reimbursement forms, agenda and participant list for food purchases) to the TAs
 - Coordinating resources needed to complete the project(s) (e.g. , work space, equipment, access to data, etc.)
 - Attending all department liaison meetings

The **community partner** is responsible for:

- Mentoring and facilitating the work of the student team
- Developing mutually agreed upon specific, tangible, substantive, timely, and feasible activities and deliverables activities to achieve during Capstone
- Approving the team work plan
- Orienting students to the Capstone partner's people, projects, and resources
- Orienting students to political, cultural, and social norms that relate to the Capstone team experience
- Modeling professional, ethical behavior
- Respecting the student team's obligation to uphold Federal and University guidelines on conducting research
- Providing resources needed to complete the project(s) as needed (e.g. work space, equipment, access to data, etc.)
- Meeting with the student team in person or by conference call and maintaining regular communication with students outside of scheduled meetings
- Participating in progress meetings with the faculty adviser and student team at least three times in the fall semester and at least three times in the spring semester (roughly once per month)
- Participating in a feedback session with other community partners, the faculty advisers, and the Capstone teaching team at least once a semester
- Providing timely, specific, and constructive feedback to the student team as needed
- Renegotiating and revising the project activities and deliverables as necessary
- Reviewing Capstone deliverables as they are produced
- Completing an evaluation form for the student team at the end of each semester
- Attending Capstone Celebration Day
- Identifying a suitable replacement to serve in the role of community partner if unable to continue as a community partner or unable to fulfill any of these specific responsibilities

The **faculty adviser** is responsible for:

- Reviewing and approving team work plans

- Providing advice to students on the team work plan (e.g., tasks, timelines, scope of work, adjustments)
- Providing intellectual and technical expertise and experience to the Capstone team
- Directing students to TAs, teaching team, Consultants on Call, or other resources as appropriate
- Supporting the Capstone partner and student team, as necessary, to ensure that the deliverables are moving forward to a successful conclusion
- Reviewing Capstone deliverables as they are produced
- Participating in progress meetings with the student team and community partner at least three times in the fall semester and at least three times in the spring semester
- Participating in a feedback session with other faculty advisers, all community partners, and the Capstone teaching team at least once a semester
- Providing useful feedback during and at the end of the project in addition to a final grade
- Attending Capstone Celebration Day and helping to evaluate teams

The **teaching team** is responsible for:

- Reviewing and approving team work plans
- Conducting feedback sessions with community partners and faculty advisers at least once a semester and as needed to provide updates on course activities, discuss issues of relevance to the Capstone experience, and provide support for challenges encountered during the Capstone experience
- Advising student teams via e-mail and meetings as requested by students
- Maintaining regular communication with community partners, faculty advisers, and students related to Capstone activities, particularly with feedback on what is working and what is not working
- Facilitating the resolution of conflicts that may arise between community partners and students or within the student team regarding Capstone activities and materials
- Coordinating feedback sessions with community partners and faculty advisers
- Assessing the performance of individual students and student teams as a whole