Defining a Successful Community-Based Doula Replication Site

BY

MICHELE L. SHADE B.S., University of Illinois at Urbana-Champaign, 1998 M.P.H., University of Illinois at Chicago, 2000

THESIS

Submitted as partial fulfillment of the requirements for the degree of Doctor of Public Health in Leadership in the Department of Public Health Sciences of the University of Illinois at Chicago, 2011

Chicago, Illinois

TABLE OF CONTENTS

<u>CI</u>	<u>CHAPTER</u>			
I. INTRODUCTION		ODUCTION	1	
	A.	HealthConnect One	1	
	B.	Community-Based Doula Work	4	
		1. Community-based doulas as community health workers	4	
		2. Community-based doula model	7	
	C.	Statement of the Problem	10	
	D.	Intellectual Puzzle	14	
II.	LITERATURE REVIEW		16	
	A.	What is a Doula?	16	
	B.	Compensation for Doula Work	21	
	C.	Importance of Doula Work	22	
		1. Brief history of birth	22	
		2. Anesthesia/pain relief	25	
		3. Breastfeeding	26	
		4. Duration of labor and delivery	28	
		5. Positive view of birth experience	28	
		6. Other labor and delivery augmentation	29	
		7. Fewer cesarean sections	30	
III.	METH	HODOLOGY	34	
	A.			
	B.	Program Evaluation		
	C.	Study Design		
	D.	Data Collection	37	
		Development of the interview guide	37	
		2. Sampling and recruitment		
		3. Key informant interviews		

TABLE OF CONTENTS (continued)

<u>CH</u>	<u>CHAPTER</u>			<u>PAGE</u>
	E.	Data I	Management	43
		1.	Data preparation	43
	F.	Data A	Analysis	44
		1.	Coding	44
		2.	What to expect in the results section	47
IV.	RESU	JLTS		48
	A.	Descr	ription of Program Sites	49
		1.	The Midwestern city program	49
		2.	The Southern city program	49
		3.	The Western city program	51
	B.	Chara	acteristics of Key Informants	53
		1.	Doulas	53
		2.	Doula supervisors	54
		3.	Program administrators	55
		4.	Stakeholders	56
		5.	HealthConnect One leadership staff	56
	C.	Persp	ectives on Defining Success	57
		1.	A successful community-based doula	57
		2.	A successful community-based doula program	63
	D.	Conce	ptual Framework Applied to Community-Based Doula Work	67
		1.	Information resources	67
			a. informing and enhancing doula programs through data	68
		2.	Organizational resources	72
			a. culture and mission	72
			b. leadership	72
			c. collaborative relationships	
		3.	Physical resources	76

TABLE OF CONTENTS (continued)

<u>CH</u>	APTE	<u>R</u>		<u>PAGE</u>
		4.	Human resources.	79
			a. team needs	79
			b. challenges of the doula team	80
			c. doula self-care	84
		5.	Fiscal resources	85
	E.	Comn	nunity-Based Doula Work and the Ten Essential Public Health Services	386
		1.	Informing, educating, and empowering moms	86
	F.	Weste	ern City Site	88
		1.	Perspectives on defining success	88
			a. a successful community-based doula	88
			b. a successful community-based doula program	89
		2.	Conceptual framework applied to community-based doula work	89
			a. information resources	89
			b. organizational resources	89
			c. physical resources	90
			d. human resources	90
			e. fiscal resources	92
		3.	Community-based doula work and the ten essential public health servi	ices92
V.	DISC	USSIO	N	94
	A.	Refle	ctions on the Five Essential Components	95
		1.	Employ women who are trusted members of the target community	95
		2.	Extend and intensify the role of the doula with families from early pre	gnancy
			through the first months postpartum	96
		3.	Collaborate with community stakeholders/institutions and use a divers	se team
			approach	97
		4.	Facilitate experiential learning using popular education techniques and	d the
			HC One training curriculum	97
		5.	Value the doulas' work with salary, supervision and support	98

TABLE OF CONTENTS (continued)

CHAPTI	ER		PAGE
В	. Refle	ections on Structural Capacity and Processes	100
	1.	Human resources	100
	2.	Information resources	101
	3.	Organizational resources	102
	4.	Physical resources	102
	5.	Fiscal resources	102
	6.	Processes	103
VI. LI	MITATI	ONS	104
VII. RE	COMMI	ENDATIONS AND CONCLUSIONS	107
A	. Infor	ming the Community-Based Doula Model	107
	1.	Data	107
	2.	Compensation	108
	3.	Cell phones as necessary supplies	109
	4.	Team dynamics	109
	5.	Calling the doula for the birth	109
	6.	Continuing education	110
REFERE	NCES		113
APPEND	OICES		125
A	ppendix	A	126
A	ppendix	B	127
A	ppendix	C	128
A	ppendix	D	132
A	ppendix	E	136
A	ppendix	F	140
A	ppendix	G	142
A	ppendix	H	143
A	ppendix	I	144
A	ppendix	J	148
VITA			150

LIST OF TABLES

<u>TABLE</u>		<u>AGE</u>
I.	COMMUNITY-BASED DOULA REPLICATION SITES AND HEALTHCONNECT	
	ONE	41
II.	DOULA INTERACTION WITH MOMS	52
III.	SUMMARY OF THEMES	93

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
1.	Conceptual Framework to Measure Performance of Public Health System	126
2.	Conceptual Framework to Measure Performance of Public Health System Applied to	
	Community-Based Doula Work	127

LIST OF ABBREVIATIONS

CHC Chicago Health Connection

HC One HealthConnect One

CHW Community Health Worker

DONA Doulas of North America, International

The Act Patient Protection and Affordable Care Act Public Law 111-148, HR3590 of 2010

WIC Special Supplemental Nutrition Program for Women, Infants, and Children

OL Onset of lactogenesis

C-section Cesarean section

WHO World Health Organization

ACOG American College of Obstetricians and Gynecologists

IRB Institutional Review Board

SUMMARY

The purpose of this qualitative study was to illuminate how community-based doula programs that replicate the HealthConnect One community-based doula model define success. As creators of the model, perspectives of HealthConnect One staff are considered the standard to which perspectives of community program staff should be compared. Community-based doulas are a subset of community health workers who provide continuous labor support in addition to building early, intensive, long term relationships with women to develop strong families.

Twenty-one key informant interviews were conducted with three community-based doula programs and HealthConnect One. Fifteen interviews based on site visits to a Midwestern city program (3 Doulas, 1 Supervisor, 2 Administrators, and 1 Stakeholder), a Southern city program (2 Doulas, 1 Supervisor, 1 Administrator, and 1 Stakeholder), and HealthConnect One (1 executive director, 1 doula program replication manager, and 1 senior trainer) were transcribed and analyzed. The data collected from these interviews plus a summary of the interviews from a Western city program (3 doulas, 1 doula supervisor, and 2 administrators) were compared with the perspectives and definitions of success provided by the HealthConnect One staff.

The intellectual puzzle for this study centered on how community-based doula program staff defined success for the doulas and the community doula program relative to the components of the HealthConnect One community-based doula model, as well as the conceptual framework for performance measurement in public health systems proposed by Handler, Issel and Turnock (2001). Key informant responses reveal how information, organizational, physical, human, and fiscal resources promote or impede the success of doulas and community-based doula programs. Key informant perspectives on how doulas educate and empower moms to identify and address

SUMMARY (continued)

their health needs are also discussed. Based on the study's insights, recommendations for further model development are presented to HealthConnect One.

Key informant interviews reflected congruency with the Health Connect One model in the following areas: the doulas should be representative of the community they serve, adequately compensated for their time during long labors, collaborative relationships in the community can be very helpful to doula work, and data is important to program quality assurance and can inform the field of community-based doula work. The interviews also reiterated the importance of a community-based doula programs being integrated into an existing agency program. The existing program helps provide the funding, stability and structure that aid the sustainability of the community-based doula program. New ideas that emerged from this study that can inform the model include the following: involve doulas in some of the budget development to ensure their needs are considered; provide access to a business cell phone so the doulas and the women they serve can communicate with each other; consider how team dynamics impact doula services when recruiting for the doula team; constantly assess and troubleshoot the reasons some women do not call their doulas when they go into labor; and ensure a firm plan during program development for doula continuing education.

I. INTRODUCTION

The history of the word "doula" can be traced to ancient Greece when female servants helped care for the woman of the house and her children. One of the earliest uses of the word "doula" as a birth attendant can be found in the text "The Tender Gift: Breastfeeding" by Dana Raphael (1973). For centuries across the world, a supportive person, usually another woman has been present during childbirth to aid the birthing woman during this process. Even now informal doulas exist without anyone taking much notice; anecdotally, it is commonplace that a birthing woman, whether partnered or not, requests that her own mother, sister, or girlfriend be present at the birth for support. Additionally, there is the expectation that the postpartum woman's own mother will be on hand for a few days, weeks, or even months after the birth to help the new mother acclimate to her new role and help care for the newborn. This thesis examines a particular type of doula work, where doulas have an intense, intimate and long-term relationship with underserved women (the "community-based doula model"). For the purpose of this thesis, "mom" will be used to refer to the pregnant or newly parenting client of a doula.

A. <u>HealthConnect One</u>

The community-based doula model examined in this study has its roots in Chicago

Health Connection's breastfeeding promotion activities. Community-based doula work through

HealthConnect One began more than twenty-five years ago. In the mid-1980's, a volunteer

breastfeeding coalition made up of parents, clinicians, and professionals, called the Chicago

Breastfeeding Task Force, was created to address low breastfeeding rates in Chicago's low

income neighborhoods. They noticed that communities with low breastfeeding rates were the

same low income, underserved communities that also had high rates of infant mortality and

morbidity (Abramson, Breedlove, Isaacs, 2006). Working with women in these areas, the Chicago Breastfeeding Task Force realized that breastfeeding initiation and maintenance was not solely dependent upon sharing good information about breastfeeding. They understood that successful breastfeeding was dependent upon who modeled and related this information with the women. This insight launched the Breastfeeding Peer Counselor Program at Cook County Hospital (now John H. Stroger, Jr., Hospital of Cook County Perinatal Center) which continues to this day. The program's first breastfeeding counselors were women recruited from the postpartum wards of the hospital. The peer counselors provided significant insights into the many issues women were facing along with breastfeeding, including caring for a newborn in an environment riddled with violence, coping with few resources, and dealing with other health needs. They informed the Chicago Breastfeeding Task Force that the curriculum they had established did not fully address the needs of the women they intended to serve. The Chicago Breastfeeding Task Force responded by broadening their training and services and in 1995, they changed their name to the Chicago Health Connection. With this change, although the peer counselors primarily served the breastfeeding needs of the women they served, they also responded to many other physical and psychosocial issues that emerge for women during pregnancy and in the postpartum period. Chicago Health Connection (CHC) also realized that in order to best influence breastfeeding initiation and duration, the peer counselors needed to participate and be present when the women they served gave birth. This initiative became the Chicago Doula Project.

The Chicago Doula Project implemented between 1996-2000 followed a community health worker model using lay persons to provide health education and support for women and

families, especially during childbirth. Therefore, the Chicago Doula Project developed and piloted a community-based doula program with funding from the Irving B. Harris and Robert Wood Johnson Foundations. There were three Chicago pilot sites serving pregnant and parenting teens; Marillac House, Christopher House and Alivio Medical Center. An evaluation of the pilot project was conducted by Dr. Susan Altfeld through the Ounce of Prevention Fund and is described in further detail elsewhere in this Literature Review.

In 2001, CHC began replicating their community-based doula model outside of Illinois. Currently, there are 43 community-based doula replication sites across 14 states

(www.healthconnect.org, accessed May 19, 2010). Through an intensive strategic planning process in 2007, the organization decided to change its name and brand in order to reflect its broad focus on maternal and child health education, training, and empowerment on a national scale rather than direct service at the local level. In 2008, CHC became HealthConnect One (HC One). Their mission is advertised through the tagline "Engage. Train. Change." The basis for the community-based doula model is summarized best by Rachel Abramson, Executive Director of HealthConnect One: "the community-based doula program recreates the ongoing, continuous fabric of support that was a part of the traditional birthing and parenting experience" (Abramson, 2004). HealthConnect One continues to focus on serving the needs of women and their children through the provision of trained and supportive breastfeeding counselors, community-based doulas, and other community health workers.

B. Community-Based Doula Work

1. Community-based doulas as community health workers

Community-based doulas are members of the larger category of community health workers (CHW's). Community health workers traditionally connect underprivileged, low income or at risk groups to health care (Witmer, Seifer, Finocchio, Lelsie, & O'Neil, 1995). According to a recent national workforce study, CHW's are defined as:

"... lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experience with the community members they serve." (Health Resources and Services Administration (HRSA), 2007).

Community health workers may supply culturally appropriate health education, conduct basic health screenings, provide social support, and link community members to the local health care system (Rosenthal et al., 2010). As a member of the community, the CHW is usually able to develop a peer-to-peer relationship that fosters trust and open communication with other community members. It is estimated that there are more than 121,000 CHW's serving mostly Latino, African American and underserved communities (HRSA), 2007). While CHW's deal with a number of health issues, they are often involved in short-term projects related to women's health, nutrition and child health issues (HRSA, 2007). Community health workers may serve one of several roles in their community. They may serve as a member of a health care delivery team, performing duties as assigned by the team or they may serve as a "navigator" helping people to negotiate health care systems and helping them communicate with their health care providers. Some CHW's administer basic health screens and provide health education

information while others conduct outreach and enrollment of hard-to-reach populations. A CHW may also be an activist for specific community health issues and will advocate for health and service improvement in their community.

There are many benefits to the use of CHW's. Systematic reviews have shown that community health worker interventions are effective in improving childhood immunization rates, preventing child deaths for those under the age of five, and increasing the number of parents who seek care for their sick child (Lewin et al., 2005; Lewin et al., 2010). Likewise, chronic disease management, knowledge about health screening and disease prevention are positively affected by CHW interventions (Viswanathan et al., 2009). An integrative literature review of 19 community health worker interventions showed an increased use of cancer screenings such as mammograms, self-breast exams, pap smears, but mixed results for prenatal care (Swider, 2002). In terms of prenatal care utilization, a positive association was found between women's enrollment and accessing prenatal care earlier and being in contact with a CHW (Swider, 2002). Likewise, a randomized trial of depressed pregnant women in Pakistan using CHW workers to provide a cognitive behavioral therapy intervention during home visits, while the control group of women received the standard home visit by a CHW (Rahman, Malik, Sikander, Robers & Creed, 2008). Women in the intervention group had lower depression scores at six months and 12 months post-intervention that were statistically significantly lower than the control group's scores. Community health worker interventions are also associated with increases in the number of women who initiate breastfeeding, as well as those who breastfeed exclusively (Lewin et al., 2010).

Growing evidence is establishing the CHW model as a cost effective strategy for improving community health. Community health workers improve access to primary and preventive care and encourage better self-care leading to fewer costly emergency room visits and hospitalizations. One study reported reducing 38% drop in emergency room visits with the use of CHW's (Goodwin & Tobbler, 2008). Others reported cost savings ranging from more than \$2 for every \$1 invested in a CHW-staffed program. Additionally, a cost savings of \$15-\$20 for every \$1 invested in a CHW intervention as a result of connections and community networking which generated free services, free health care and free medications (Goodwin & Tobbler, 2008).

Research by Low, Moffat and Brennan (2006) describes the perspectives of doulas as CHW's regarding the education and training they need to best serve their clients. They found that the doulas referred to their work as more than simply assisting the mother during labor and delivery. Being a doula involves addressing a wide range of issues such as domestic violence, lack of social support, and housing problems. They also found that a successful doula demonstrated strength in the areas of education, support, patience, respect of the birth process and experience with birth (Low, Moffat and Brennan, 2006). These traits are congruent with the findings of this thesis project and will be discussed in the Discussion section.

A study published in the Zero to Three Journal, a journal for early childhood professionals, outlined some of the challenges and benefits of using paraprofessionals and community health workers such as community-based doulas as early childhood interventionists (Hans & Korfmacher, 2002). Community health workers bridge the gap between social services and the community being served. An important feature of community health work is that the community benefit from having some of its members employed. Not only does employment

promote the economic health and development of that community but it helps community members become role models that may positively influence others in their employment pursuits. Community health workers are also cost effective; programs can hire CHW's for less because they do not have formal training and in turn, programs can hire more CHW's on the whole to serve the community. On the other hand, studies have shown mixed results for their impact on communities and staff turnover can be quite high (Hans & Korfmacher, 2002). Community health workers are usually from the same community they serve and they are likely struggling with the same issues as their clients such as difficulty finding adequate transportation or childcare while they are working. The authors suggest that adequate support, training and supervision will help CHW's manage some of these issues. Being able to maintain a balance between personal needs and community-based doula work, as well as how supervisors play an important role in this process, are some of the keys to success detailed in the Results by the key informants in this thesis.

Community health workers are becoming increasingly important in the provision of health care in local areas. In fact, wording in the H.R. 3590, 111th Congress: Patient Protection and Affordable Care Act (2010) recognizes the influence of CHW's on positive health behaviors and encourages the use of CHW's as a part of the healthcare workforce. Public health practitioners should begin to increase efforts to incorporate CHW services into their public health interventions, where feasible.

2. Community-based doula model

The HealthConnect One community-based doula model focuses on promoting longlasting, supportive relationships between women prenatally, during birth, and into the early postpartum period (Abramson et al., 2006). Community-based doulas are employed by a local community agency and are indigenous to the community so they "look like" and "sound like" the women they serve. Community-based doulas usually provide services to underserved women in need of special social support such as teen mothers, immigrant women, incarcerated women and even women in recovery from substance abuse.

The HC One community-based doula training is based on popular (empowerment) education, imaginal education, and transformative learning (Abramson et al., 2006). Paulo Freire's "empowerment education" theory states that adults can learn that they have the power to solve their own problems (2000). A community can not only define their own problems but can solve those problems using their own skills, experiences, and resources. This empowerment focuses on the community having self-awareness of the problems and solutions, and the competency to address those problems (Kar, Pascual, & Chickering, 1999). Imaginal education is based on the theory that our behavior is directed by images or a certain mindset; changing images leads to changes in your behavior (Boulding, 1956). Lastly, transformative learning respects the experiences of the adult learner (Mezirow, 2003). Similar to Freire's theory and imaginal education, transformative learning helps the learner reflect on their experiences, have a new understanding of their experiences and use such to impact their future behavior. HealthConnect One's community-based doula training helps draw up new, self-empowering images about pregnancy, labor, and postpartum experiences allow the doulas to help the women they serve develop new images of the birth process.

HealthConnect One's community-based doula model is the only community-based doula model known to be replicated across the U.S. As of June 30, 2010 the community-based doula

model has been "replicated" in more than 45 sites in 14 states

p, accessed December 5, 2010). Agencies that are interested in replicating the program contract with HC One to cater the 20-session replication curriculum to fit their specific service population. The curriculum covers topics such as communication skills, beliefs and values of doula work, physiological phases of labor and delivery, and addressing the physical, social and emotional needs of the mother and newborn in the postpartum period. The cornerstones of the replication process are the Five Essential Components:

- 1. Employ women who are trusted members of the target community
- 2. Extend and intensify the role of doula with families from early pregnancy through the first months postpartum.
- 3. Collaborate with community stakeholders/institutions and use a diverse team approach
- 4. Facilitate experiential learning using popular education techniques and the HC One training curriculum
- 5. Value the doulas' work with salary, supervision and support

As the name implies, the Five Essential Components are considered non-negotiable, critical components for successful replication of the community-based doula model. Discussed later in this thesis is how this point is emphasized in the interviews with the HealthConnect One.

HealthConnect One will replicate the community-based doula model either as a standalone program or a program that is integrated with another agency program such as an early childhood home visitation program. The cost of a standalone HC One community-based doula program is estimated to be \$100,000 in the first year and \$75,000 each subsequent year. The cost includes training and technical assistance from HC One, space for the doulas, supplies, two employed doulas and a project coordinator. While it is possible for a doula program to be a standalone program, it is not the recommendation of HC One that the program do so. A doula

program integrated into another program will have the fiscal and administrative structure and backing to support the community-based doula program. If a community-based doula program is integrated into an existing program, the first year cost is approximately \$75,000 with subsequent years costing about \$65,000. The reduced cost for the integrated program is based on the assumption that some supervisory and overhead costs will be covered by the home agency and the existing program. Since program costs and administrative functions are important to the existence and functionality of the doula program, the interview guide included questions around the fiscal aspects of the community-based doula programs. As explained in the Results section, most of the key informants had no direct or intimate knowledge of the budget.

C. Statement of the Problem

Never before has a study examined how first line staff in HC One's community-based doula programs define success for themselves and their program. This thesis aimed to provide insight into the key components for successful community-based doula work and subsequently informing the implementation of the community-based doula model.

This thesis used the voices of doulas, doula supervisors, administrators and stakeholders, to inform and begin the creation of a definition of a successful community-based doula and a successful community-based doula program. The HC One community-based doula program model is replicated in several sites across the country. As such, it was of interest to gather information from staff at different sites to compare and contrast the components of success. Investigating success for the doula and the doula program was couched within the public health performance measurement model and therefore involved looking at each program's structural capacity and processes (Handler, Issel and Turnock, 2001). The frontline staff is important to

this investigation because they have not previously shared their input about the model or their work but they are uniquely positioned to provide direct and current reflections on this topic.

While this is not the first study about the HC One community based doula work (e.g., Breedlove, 2005; Altfeld, 2002; Behnke & Hans, 2002), it is the first qualitative study of how a successful community-based doula and program is defined. Previous studies have examined how moms felt about the social support they received from doulas, have described the many benefits of doula-assisted births for teens, have presented information on what leads to a woman completing doula training and becoming a doula, as well as have described why community health workers work well in underserved communities and what they need to serve these communities. The significance of this study is its focus on the perspectives of key staff involved in replicating HC One's community-based doula model. It is anticipated that this input will identify common themes and issues from the key informants that may lead to the addition of performance measures and outcomes for the HC One model.

Previously, a mixed methods evaluation study about the Chicago Doula Project was conducted by Dr. Susan Altfeld through the Ounce of Prevention Fund (2002). This study provides positive evidence from community-based doula work through the HealthConnect One model. The study demonstrated a number of benefits related to HC One's community-based doula support of teens during pregnancy and childbirth. These benefits include:

- Project participants were significantly less likely to have low birth weight babies when compared to the general Chicago teen population.
- Project participants were significantly less likely to have preterm births when compared to the general Chicago teen population.

- Project participants with doula supported births were significantly less likely to have a cesarean section when compared to the general Chicago teen population.
- Vaginal births compared to C-sections were estimated to save more than \$7,400 in hospitals charges per birth according to healthcare costs available at the time of the study; using 2008 national statistics, the mean hospital charges associated with C-section deliveries are more than \$16,000 while a normal pregnancy and birth have charges of more than \$8,700. Today's estimated costs savings for vaginal births would be almost \$8,000.
- The percentage of teen project participants initiating breastfeeding at birth was 80.1%, nearly twice the rate of American teens overall who initiated breastfeeding at birth.
 Similarly, almost 21.8% of participants were still breastfeeding at 6 months postpartum; this is almost double the percentage at the national level.

Another evaluation of the Chicago Doula Project used qualitative methods to examine participant perceptions of social support from their community-based doula (Breedlove, 2005). This study examined the supportive characteristics of networks or systems, the supportive characteristics of doulas, doula support versus other support and the value of doula support. The study found that the teens' primary source of network support was the agency from which they were receiving the doula services. The teens reported that the doulas provided support by providing continuous labor support, prenatal education, childbirth education and parenting education. The teens noted additional support from their doulas included helping the teens define steps towards a better future. Interestingly, the teens noted that their doula was the only adult caregiver who initiated discussions about goals and encouraged the teens about those goals

throughout the pregnancy and postpartum period. Doulas were seen as different from other types of support because they were of the same ethnicity as the teens, were from the same community, served as positive role models, were the teen's primary support and provided relationship-based care. Overall, the teens were appreciative of the doula support they received and felt that it was a good life experience.

Behnke and Hans (2002) conducted a qualitative study to examine what factors influenced a woman to complete her training and become a doula. The qualitative study explored what differentiating factors led five women undergoing doula training to become a doulas or not. Behnke and Hans (2002) defined 'success' as completing training and becoming a doula. Six characteristics were found to distinguish 'success' for three women in the study who became doulas:

- 1. The women were motivated to help others and make a difference in their lives
- 2. The women had open-minded, non-judgmental attitudes toward teen moms
- 3. The women were able to find creative solutions to the difficult interpersonal interactions that occur during labor and delivery
- 4. The women had the ability to work effectively on a team; giving and receiving help well
- 5. The women were able to embrace and be enthusiastic about their new roles and responsibilities as doulas
- 6. The women were able to turn negative past experiences into sources of positive, powerful inspiration in their doula work

This study demonstrated that it was not possible to predict which woman would become a doula by looking at their employment history, educational attainment or age. Those that were successful in becoming doulas had a strong desire to help and were emotionally open to their clients. Finally, for doula program activities such as training and supervision of doulas, the study highlighted how important it is to acknowledge that becoming a doula is an emotional transition and therefore the doulas need supportive training and supervision. Interestingly, these points

around supportive supervision are similar to what the doulas in this thesis research stated and are discussed further in the Results.

We know some important aspects about the impact on HealthConnect One's community-based doula work on women and their newborns. This thesis looks at the processes around HC One's community-based doula model implementation that fosters success. The HC One model is particularly important since it has recently become a nationally replicated and federally funded and evaluated initiative. The HC One community-based doula model has implications for strengthening the public health system with the use of community health workers that serve the maternal and child population. Providing insight into the definition of a successful doula and a successful doula program will aid implementation activities by HealthConnect One and therefore the doula program that they replicate.

D. Intellectual Puzzle

Qualitative methods were selected for this study; the rationale and more details about the study design are found in the Methodology section. In this study, the statement of the problem is connected to the intellectual puzzle. In qualitative methods, the intellectual puzzle is simply a description of what the researcher is motivated to examine and attempting to explain through their research (Mason, 1996). The intellectual puzzle is the question or questions that the researcher is asking and trying to solve. The intellectual puzzle and statement of the problem are connected because the statement of the problem discusses what is to be investigated and why this is important and the intellectual puzzle speaks about the issue of interest to the researcher and the questions that the researcher has about the issue. There are different types of intellectual puzzles and the intellectual puzzle for this study most closely resembles a comparative puzzle which is a

type of puzzle that focuses on what one can learn from comparing items of interest (Mason, 2002). There are also developmental puzzles (examining how or why something developed), mechanical puzzles (how something works), and causal puzzles (what causes something or influences something). In this comparative intellectual puzzle, the items of interest in this study are the themes from the key informant interviews on defining a successful doula and successful doula program. In the broadest sense, as a researcher I am asking questions such as whether success for a doula means that the mother delivers at full-term; that the mother uses no pharmacological pain relief during the labor; that the mother initiates breastfeeding at the hospital; or something else altogether? Regarding the processes of community-based doula work for instance, how does the data collected by doulas help them to be successful; how does an agency's mission and culture contribute to their success; what are the tools that help doulas achieve success; in what ways is camaraderie amongst doula team members important to success; and what about the financial aspects of the program help or hinder doula success? The themes that emerged from the staff interviews were compared to the themes that emerged from the HealthConnect One interviews because the HC One staff is considered the standard. HealthConnect One is considered the standard because they are the creators and implementers of this community-based doula model. In a more focused way, the intellectual puzzle centered around how the community-based doula program staff's ideas of a successful doula and a successful doula program differ or are congruent with the ideas from the staff and leadership of HealthConnect One. From there, the information gathered is used to inform the communitybased doula model since this aspect of the model has not previously been explored.

II. LITERATURE REVIEW

The benefits of doula-supported births, especially for low-income girls and women, are many and the following literature review provides details on this evidence. To be clear, there is little research specifically on community-based doula work and its benefits. Most of the research on doulas reflects continuous labor support by birth doulas. Thus, the literature review speaks to the impact of doula supported births and the provision of continuous labor support. The literature review also examines the role of doulas as community health worker. Community health workers, including doulas, contribute to the care of women and children in underserved and resource poor areas. By examining the multiple facets of doula work and the aspects that contribute and hinder success, this thesis is expected to add to the body of literature about community-based doula work.

A. What is a Doula?

The term "doula" was popularized by early labor support researchers Klaus, Kennell, Marshall and Simpkin. They were also amongst the leading researchers to identify positive outcomes associated with continuous labor support (Sosa et al., 1980). Researchers discovered early on that women who received labor support had shorter labors and a reduced likelihood of medical interventions during the birth process (Sosa, et al., 1980). Doulas are experienced labor companions who provide emotional, physical and informational support to the laboring and postpartum woman and her family (Klaus, Kennell, & Klaus, 1993). They are trained labor support persons and do not provide clinical services.

There are several organizations that provide birth doula certification. However, Doulas of North America, International (DONA) is the largest international doula membership

organization that trains and certifies birth and postpartum doulas. The birth doula is trained in child birth education and lactation consultation and provides continuous labor support (Doulas of North America, International (DONA), 2005). There are nearly 7,000 doula members of DONA in the world and more than 2,500 DONA certified birth doulas in the United States. In Illinois, there are more than 148 DONA certified birth doulas. Doulas of North America, International birth doula certification is a comprehensive and multi-step process ensuring certified doulas have undergone rigorous, standardized training. The DONA certification process can be lengthy; often taking up to two years to complete. However, it is not a requirement that practicing doulas, even HC One community-based doulas, be certified to serve a woman and her family. The DONA certification process is comprised of several activities such as: participating in 16 hours of DONA-approved birth doula training; reading several texts and articles on birth and labor assistance; being trained as a breastfeeding educator or lactation consultant; and providing a detailed written account of the three birth experiences. A DONA certified doula is trained to know and understand the stages of labor as well as the common terminology used in a labor and delivery setting. The doula helps the mother be an advocate for her own healthcare and the care of her baby. This advocacy usually takes the form of the development of a birth plan that outlines the mother's preferences around medication during labor, birthing positions and breastfeeding initiation. Trained doulas do not interfere with the work of the clinicians in the birth setting. However, they do ensure a sort of "checks-and-balances" by promoting and supporting ongoing communication between the laboring woman, her family, and the clinical providers. To be clear, doulas who are not certified by DONA may have varying levels of training ranging from little more than the initial workshop, being in the early stages of

completing the tasks towards to DONA certification, or even completing training and certification through other non-DONA local or national doula training agencies.

Data on the use of doulas for American births is limited. In 2002, the Childbirth Connection organization, formerly the Maternity Care Association, conducted the first national survey on pregnancy and birth experiences of American women; the second survey was conducted more recently in 2005 (Declercq, Sakala, Corry & Applebaum, 2002; Declercq, Sakala, Corry, Risher & Applebaum, 2006). The studies queried women about their childbearing experiences, including supportive care during labor and delivery. When the women were asked about the supportive care they received during labor, most women stated that they used their partner/husband followed by nursing staff. Only 5% of women in 2002 and only 3% in 2005 stated that they utilized a birth doula for supportive care during their labor. Of those women who did not use a doula, 81% stated that they had heard about doulas and 61% stated that they understood what a doula's role was and the services she could provide. Despite a low usage of doulas in the overall population, both the 2002 and 2005 national study of maternity care in the U.S. revealed that women who used doulas overwhelmingly rated them as providing the highest quality of care.

There are different roles for doulas to fill based on their employer (agency or private contractor) and their specific role (birth, postpartum, or community-based doula). The responsibilities for each of these roles can overlap and further details on the difference between each type of doula role are explained below.

A doula who is a private contractor makes arrangements directly with a mom and her family to provide doula services for an agreed upon cost for a specific period of time such as the

birth period or the postpartum period. If not a private contractor, a doula may be employed by an agency or hospital. These doulas are usually salaried staff and provide doula services to the mother and her family through the facilitation of the agency or hospital. The model of service provided by agency or hospital-based doulas can vary widely (DONA, 2005).

Birth doulas are present early during the labor process and their hallmark is providing continuous labor support through the birth of the baby. Birth doulas become intimately and physically involved with the birthing mother during the labor and birth process through a variety of comfort measures that emphasize appropriate breathing, relaxation techniques, and positions to help ease pain during labor and motivate the fetus into an optimal birthing position (DONA, 2005). For example, a doula may hold a "rice sock," literally a sock filled with warmed uncooked rice, and use it as a warm compress against the mother's lower back to relieve intense back pain. As a mother ambulates during labor, the doula may physically cradle her, supporting all of the birthing mother's weight as she pauses to work through a contraction. The doula may implement other supportive measures including using aromatherapy scents, playing soothing music, and leading the mother in deep breathing and calming imagery exercises. A birth doula may be employed by an agency or as a private contractor. The hallmark of a birth doula is continuous labor support and the relationship with the family ends with one or two postpartum visits by the birth doula.

Different from birth doulas, postpartum doulas provide care to the new family through support and education after the baby is born, promoting breastfeeding as well as completing light chores and childcare (DONA, 2005). These duties may also include postpartum physical care, but not clinical care, for the mother and infant. The postpartum doula will provide assistance to

the mother with any other activity that will help the family adjust to life with the newborn. A postpartum doula may be employed with by an agency or as a private contractor. The relationship with the new mother is focused specifically on the postpartum period.

The community-based doula role explored in this thesis performs the work responsibilities of both a birth doula and a postpartum doula, and more! Community-based doulas are employed by a local agency and serve a specific population of women in a uniquely close and long term relationship. Like most community health workers, the populations served by community-based doulas are usually low-income, underserved women. For example, the community-based doula may serve teens, single mothers, or special populations such as incarcerated women or women recovering from substance abuse. Unlike birth or postpartum doulas, community-based doulas have an intense relationship with the mother from as early in the pregnancy as possible, throughout labor and delivery and well into the postpartum period. Depending on the community-based agency, the postpartum relationship may extend from three months, to one year postpartum, and sometimes longer. The community-based doula provides prenatal care information, infant care information, breastfeeding assistance and parenting education. The doula integrates these lessons into the home visits, prenatal care appointments and prenatal care group sessions lessons from a specific program curriculum, often from the integrated early childhood program at the agency. Community-based doulas usually provide some level of case management and thus link the pregnant and parenting women they serve with local healthcare and social services.

B. Compensation for Doula Work

From the first national survey of doulas, the average annual income in 2002 was \$3,645; nearly half of the study participants reported that they made less than \$1,000 in 2002 from their doula work (Lantz, Low & Watson, 2004). Less than 10% of the participants made more than 10,000. Additionally, 71% of the study participants noted that they worked at least a part time job in addition to their doula work. Anecdotally, some beginning doulas may only charge \$50 per birth while a more experienced doula may charge upwards of \$1,500 for a birth. Interestingly, during the DONA certification process doulas must provide their services free of charge.

Per the DONA eDoula Special Issue from September 2009, charges associated with services provided by a doula can be submitted to third party payers such as insurance companies and Medicaid using a service code that allows reimbursement for doula services paid by families beginning October 1, 2009. However, there are no standards to date on how much families will be reimbursed and the code does not guarantee that third party payers will indeed reimburse for doula service costs. Not surprising, the majority of certified doulas believe that there should be third party reimbursement for the doula services they provide to women (Lantz, Low, Varkey & Watson, 2005). Data on code usage and reimbursement rates are not yet available because the code is so new.

Issues around third party payments will become more important for community health workers such as doulas as this type of work comes to the forefront of strengthening the public health care system through the Patient Protection and Affordable Care Act. Specific sections of the Act address improving the health of underserved women and children through community

health workers and home visiting. The Act considers community health workers to be a part of the healthcare workforce and lists them amongst public health professionals and primary care providers as healthcare professionals (http://frwebgate.access.gpo.gov/cgibin/getdoc.cgi?dbname=111_cong_bills&docid=f:h3590enr.txt.pdf, accessed December 9, 2010). The Centers for Disease Control will award grants for community health workers to promote positive health behaviors and outcomes. There is an emphasis for the CHW's to serve medically underserved communities, especially communities of ethnic and racial minorities. The CHW work will focus on discouraging risky health behaviors and enrolling populations in appropriate health care service programs. Although it is not required, the Act suggests providing payment incentives to CHW programs that are able to connect people to appropriate health care at the appropriate time. Wording is included to fund early childhood home visitation initiatives to provide maternal and prenatal services to at-risk pregnant women and their young families. With such monumental legislation, training, supervision and third party payments for CHW's will become increasingly important to sustain these programs.

C. Importance of Doula Work

1. Brief history of birth

For centuries, birth happened in the home with the woman surrounded by other women; this scenario was considered normal and regular part of a married women's life. Over time, trained male physicians began to attend births, births were eventually moved to hospitals settings and technological advances around labor and delivery grew at a rapid pace. All of these changes have created a medical model of childbirth. This medical model for birth has led to what some consider a restrictive birthing process. One feminist theory purports that childbirth has turned

from a natural and awe-inspiring event to a medicalized, male-guided, solution to the problem of being pregnant: "the fact that women need to be supported emotionally and physically through labor was mistaken for a need to see the process taken over and taken care of" (Bergeron, 2007).

As detailed by authors McCool and Simeone (2002), birth in the U.S. as we know it today started with the influence of Europeans during the colonization of North America. At that time, married women spent most of their lives bearing and raising children. Labor and delivery in the 1700's involved the pregnant woman, female friends and relatives and a midwife. Surrounded by these women, the mother was assisted, supported, and comforted as she gave birth at home. The midwife used little to no direct interventions or tools unless the mother was having a particularly lengthy or difficult labor. Minimal interventions such as herbs, enemas, and emotional encouragement were given to women to aid in managing labor pain.

Despite minimal interventions, birth was not without its risks. Throughout the 18th and 19th centuries, maternal mortality from infectious diseases such as puerperal fever was devastating. Preventing disease transmission was not well understood and deadly contamination from doctors between their work with corpses and their work with laboring women was common (Epstein, 2010). Minimal interventions are believed to have contributed greatly to the far fewer maternal deaths seen in the US compared to the maternal deaths in Europe (McCool & Simeone, 2002).

Relief from labor pains became a priority for American women in the late 1800's and early 1900's. Some women continued to rely upon folk remedies but opium and chloroform were soon added to the list of pain relief options (McCool & Simeone, 2002). Giving birth with pharmacology was in fact a form of feminism; women had the right to demand it and were

encouraged to do so (Epstein, 2010). As the pursuit of pain relief grew, births moved from the home to the hospital. Doctors in hospitals boasted that they had the most current tools to help with difficult births, the most effective pain relief and the remedies to reduce maternal mortality.

Doctors worked very hard to promote medical care and birthing in hospitals instead of the home-based midwife service women had been using for centuries. Articles and ads promulgated that "dirty midwives" caused more harm than good and that the best maternity care was available by a doctor in a hospital; an inaccurate smear campaign against midwives that worked (Epstein, 2010). By the 1960's, most women gave birth in the hospital assisted by male doctors with fancy new tools. Access and use of doctor's tools was easiest when the mother was laying on her back on a table and so came the birthing position we most commonly recognize as the way women give birth in the U.S.

Accessing labor pain relief as a form of women's independence and freedom of choice for her birth experience sadly landed women in a system that actually restricted the mother's birth experience. For instance, epidurals relieved the labor pains but confined the mother to a bed. In the 1970's, a focus on psychology and the mind-body connection emerged in society (Epstein, 2010). Women began opting for natural births (without medications) using mental exercises to alleviate birth anxiety and pain. With this new frame of reference for life, came a new an assertion by women for natural childbirth, free of medications and invasive interventions. By the 1990's, some women returned to home births but some labor and delivery hospital units began creating birthing suites and birthing rooms to include the comforts of home such as couches and curtains (McCool & Simeone, 2002). Midwives never completely disappeared but their use increased in the 1990's along with the use of labor assistants such as birth doulas.

Midwives attended less than 1% of in-hospital births in 1975, up to 2.3% in 1985, 5.47% in 1995 and 7.5% of in-hospital births in 2003 (National Center for Health Statistics, Centers for Disease Control (CDC), 2003). As described earlier, the use of a birth doula has also increased over the years with more evidence of the favorable impact doula-assisted births have on the mother and infant.

The use of a doula during labor and delivery has had a positive effect on lessening some of the medicalized portions of the birth process. For instance, research demonstrates that continuous support by a doula, from hospital admission through birth, has a greater positive effect on labor and delivery than when no support is provided (Scott, Berkowitz & Klaus, 1999; Scott, Klaus, & Klaus, 1999). More specifically, continuous support leads to positive effects such as shorter labors, reduced odds for the use of analgesia, forceps, cesarean section and oxytocin augmentation (Scott et al., 1999; Scott et al., 1999). The benefits of doula-assisted births and their impact on labor and delivery procedures are briefly described in the following sections.

2. Anesthesia/pain relief

Epidural anesthesia is routinely given in hospitals to relieve labor pain for the laboring mother. However, use of regional anesthesia such as epidurals has shown to have negative impacts on the newborn's initial breastfeeding activities (Ransjö-Arvidson et al., 2001).

Newborns whose mothers were administered anesthesia for labor pain relief suffered statistically significant differences in suckling, crying after birth, and higher skin temperature compared to newborns whose mothers were not administered anesthesia.

Studies have demonstrated that pain relief is used less when a woman is assisted by a doula; specifically, doula assisted births have been shown to lower the use of epidural analgesia (McGrath, Kennell, Suresh, Moise, & Hinkley, 1999; McGrath & Kennell, 2008). Through a Cochrane systematic review, Hodnett, Gates, Hofmeyr and Sakala (2011) reviewed 21 studies, with more than 15,000 women in randomized control trials. Women in the studies were randomly assigned to either usual care or continuous supportive care for labor and delivery. The review found that women with continuous, one-on-one labor support had statistically significant reduced risks for the use of anesthesia/analgesia during childbirth. Another study found that for women using analgesia, women with doula care were more likely to use the analgesia for less than the median amount of time (median=5.7 hours) used by women without doula care (Nommsen-Rivers et al., 2009).

3. Breastfeeding

Breastfeeding is the preferred method of infant feeding because it has many direct benefits for both the infant and mother. For the infant, breastfeeding reduces the incidence and/or severity of infectious diseases and reduces infant mortality (American Academy of Pediatrics (AAP), 2005). More specifically, evidence suggests that breastfeeding reduces the incidence of sudden infant death syndrome and chronic diseases such as asthma and diabetes in in the breastfeed infant (AAP, 2005). For the mother, it has been reported that breastfeeding decreases the risk of type 2 diabetes; increased breastfeeding duration was also directly related to an increased risk reduction of type 2 diabetes (Stuebe, 2005). Breastfeeding helps to shrink the mother's uterus after birth, and aids in pregnancy prevention during the postpartum period by suppressing ovulation. It also decreases the risk of ovarian and breast cancer (AAP, 2005;

Collaborative Group on Hormonal Factors in Breast Cancer, Breast cancer and Breastfeeding, 2002). Nevertheless, breastfeeding as a preferred method of infant feeding is challenged by a readily available source of infant formula, especially in the hospital setting, and surprisingly provided by the Special Supplemental Nutrition Program for Women, Infants, and Children (more commonly referred to as WIC). In fact, WIC accounts for more than half of the infant formula purchases in the United States and distributes the formula freely to WIC clients (Kent, 2006). This is especially disturbing as the clients served by community based doulas are low income women usually served by resources such as WIC.

Women that use a doula are significantly more likely to both intend to breastfeed and initiate breastfeeding within 1 hour post-delivery (Mottl-Santiago et al., 2008). Lactogenesis is the marked increase in the production of breast milk after giving birth (sometimes called "milk coming in" in lay terms). Timely onset of lactogenesis (OL) is considered to be within 72 hours postpartum. In a 2009 prospective cohort study by Nommsen-Rivers, et al., those that received doula care were significantly more likely to experience timely onset of lactogenesis compared to the standard care group (no doula care available). Timely onset of lactogenesis is considered a positive birth outcome because delayed OL has been shown to lead to a greater risk of weight loss for neonates and shorter durations of breastfeeding amongst women who previously committed to breastfeeding for at least 6 months (Nommsen-Rivers et al., 2009). Studies have shown that women supported by doulas during the labor process had a statistically significant higher likelihood of exclusive breastfeeding one month postpartum compared to women with usual labor care (Langer, Campero, Garcia, & Reynoso, 1998). Another direct benefit of breastfeeding for new families is the savings gained by not purchasing supplemental formulas.

From a larger economic perspective, given that breastfed babies have fewer illnesses, using 2001 data, the potential annual national healthcare cost savings are estimated to be nearly \$4 billion (Weimer, 2001). The savings would presumably increase if one were to use more recent healthcare cost data.

4. <u>Duration of labor and delivery</u>

Almost certainly, most women want the shortest labor possible. The mean duration of labor for doula supported births compared to non-doula supported births is significantly shorter (Kennell, Klaus, McGrath, Robertson & Hinkley, 1991; Campbell, Lake, Falk, & Backstrand, 2006). In a previously mentioned study by Nommsen-Rivers, et al., (2009) amongst women who had a vaginal birth, those under doula care had a significant adjusted odds of having a spontaneous birth that was 4.68 times higher than those under standard care (Nommsen-Rivers, 2009). A meta-analysis by Zhang, Bernasko, Leybovich, Fahs and Hatch (1996) found that women who had continuous labor support had a significant difference in the length of labor; women with continuous labor support had labors that were on average 2.8 hours shorter than women who were unsupported by a doula (Zhang et al., 1996).

5. Positive view of birth experience

Studies have shown that compared to women with usual labor care, women supported by doulas during the labor process perceived that they had a high level of control over their labor experience (Langer et al., 1998). More control translates into more satisfaction. Women with continuous labor support also report feeling more satisfied with their labor and delivery experience and less fatigued during as well as after labor and delivery (Zhang et al., 1996).

Women with continuous, one-to-one labor support were significantly less likely to report

dissatisfaction with their childbirth experience (Hodnett, et al., 2011). Women who gave birth vaginally and had doula care were less likely to report dissatisfaction with their childbirth experience or less likely to negatively rate their childbirth experience (Nommsen-Rivers et al., 2009). A systematic review of five non-pharmacologic measures for pain relief during labor found that women with continuous labor support by a trained lay person such as a doula, and not a nurse, reported more positive birth experiences (Simkin & O'Hara, 2002). Community-based doula work often involves women from a lower socioeconomic status. Research has shown that low-income women, who would have otherwise labored alone, benefited more from the support of a doula than middle-class women with a partner (Simkin & O'Hara, 2002).

6. Other labor and delivery augmentation

A practice that has accompanied the medicalization of childbirth is the use of a synthetic oxytocin to induce and augment labor (Shyken & Petrie, 1995). Synthetic oxytocin is used to both start and increase uterine contractions in order to speed up the labor process. Using a doula has been shown to lower the use of synthetic oxytocin, such as Pitocin, during labor (McGrath et al., 1999; Trueba, Contreras, Velazco, Lara & Martinez, 2000). A meta-analysis of randomized control studies around continuous labor support showed that women with continuous labor support were administered oxytocin less than half as often as women who had no labor companion (Zhang et al., 1996). The same meta-analysis indicated that women with a doula were 50% less likely to have forceps-assisted deliveries (Zhang et al., 1996). In general, forceps are used significantly less in doula assisted births compared to non-doula assisted births (Kennell et al., 1991).

7. Fewer cesarean sections

The increase in Cesarean sections (C-sections) has been a topic of much debate in recent years amongst the general public as well as researchers. Some believe that C-sections are generally unnecessary and harmful while others are equally convinced that they are indeed wanted and beneficial.

Since C-sections are major surgery and appropriate anesthesia and surgical techniques have only been established in the last century, Cesarean sections were originally considered to be a last resort before impending death of the mother or infant (Epstein, 2010). The cesarean rate is defined as the number of cesarean births per 100 live births. In 1985, the World Health Organization (WHO) postulated that there was no justification for C-sections representing more than 10-15% of all deliveries. Similarly, the Healthy People 2010 Objective, 16-9, is to "reduce cesarean births among low-risk (full term, singleton, vertex presentation) women" to 15% of live births (U.S. Department of Health and Human Services (HHS), 2000). The most recent data available on U.S. C-section rates indicates that in 2007, the U.S. C-section rate reached an all time reported high of 32%; rising from 20.7% in 1996 (Menacker & Hamilton, 2010). Two of the sites involved in this study are in states with have cesarean rates that are twice the recommended maximum rate of 15%; that is at 29.4% (Midwestern city) and 33.7% (Southern city) (Menacker & Hamilton, 2010). As rates continue to rise above the WHO recommendation they have become thought of as excessive and problematic.

A C-section is a major surgical procedure and the occurrence of this surgical event should not be taken lightly. In fact, a C-section can be considered a maternal morbidity; a maternal morbidity is a condition that adversely affects a woman's physical health during childbirth

beyond what would be expected (Danel, Berg, Johnson, & Atrash, 2003). Based on the National Hospital Discharge Survey, nearly 43% of birthing women for study years 1993-1997 and 48.5% of birthing women for study years 2001-2005 experienced at least one maternal morbidity or some combination of the following maternal morbidities: obstetric complications such as preeclampsia, pre-existing conditions such as chronic hypertension, or a cesarean section (Danel et al., 2003; Berg, Mackay, Qin, & Callaghan, 2009). Of importance here is that C-sections are not meant to be a normal part of delivery; they are considered morbidities, or an obstetrical complication. Available data on C-sections reveals that there are far more risks associated with C-sections than with vaginal births. Some of these risks are listed below in no particular order (Sakala, 2006):

- Maternal mortality from anesthesia and/or surgery
- Longer hospital stays
- Blood clots
- Less time with the newborn directly after birth
- Less positive view of birth experience
- Delayed breastfeeding initiation
- Psychological trauma
- Maternal infections
- Problems with the placenta in future pregnancies
- Respiratory difficulties for the newborn
- Accidental surgical cuts to the newborn
 Despite these harmful risks, women are requesting elective C-sections. According to the

American College of Obstetricians and Gynecologists (ACOG): "cesarean delivery on maternal request is defined as a primary cesarean delivery at maternal request in the absence of any medical or obstetric indication" (American College of Obstetricians and Gynecologists (ACOG), 2007). Elective C-sections are not easily measured since there is no place on the birth certificate to indicate whether the C-section was elective. Studies that have examined the pros and cons of

elective C-sections versus vaginal delivery have had to use proxy data from birth certificates such as when "No" is marked on the birth certificate for the question: "If cesarean, was a trial of labor attempted?" and/or there is no risk listed that would indicate the need for a C-section (CDC, 2003). The actual impact of elective C-sections on the overall increase in total C-sections over the past several years is difficult to determine but they are estimated to represent between 4% and 18% of all C-sections (National Institute of Health (NIH), 2006). Women request Csections for a variety of reasons including concerns over incontinence, pressure from their clinician, and fear of childbirth (Miesnik & Reale, 2006). Incontinence problems after vaginal births are difficult to measure, but the evidence around this issue shows that any incontinence was short-lived and disappeared quickly in the postpartum period (Sakala, 2006). Another concern around vaginal births is that the newborn will suffer an injury such as a brachial plexus injury (Sakala, 2006). A brachial plexus injury is an injury to the nerves that send signals from your spine to your shoulder, arm and hand (http://www.mayoclinic.com/health/brachial-plexus- <u>injury/DS00897</u>, accessed December 13, 2010). This type of injury can occur during difficult births or even during a traumatic incident like a car accident or playing sports. The brachial plexus injuries were found to be temporary injuries for most occurrences (Sakala, 2006).

The evidence shows that the costs of a C-section for both mother and infant outweigh the benefits and should be used only when deemed medically necessary. Employing continuous labor support just as community-based doulas do reduces the number of C-sections when compared to unsupported births (Kennell, et al., 1991; McGrath, et al., 1999; Trueba, et al., 2000; Hodnett, et al., 2011; McGrath & Kennell, 2008). With the harm of c-sections most often overshadowing the possible benefits, doula assisted births are a safer option for women and their

newborns. Community-based doulas provide the continuous labor support that may reduce c-sections and promote healthier labor deliveries amongst some of the most vulnerable populations. Similar to other community health workers, the community-based doula bridges an important gap in health promotion and disease prevention, and particularly for the most underserved communities.

This literature review provides evidence in support of community-based doula work in general, and more specifically for the community-based doula work initiated by HealthConnect One. However, more work needs to be done to explore the specific benefits of community-based doula work. The community-based doula is a unique role that provides an early, intensive and long-term relationship with underserved women, particularly teens. The community health worker model suggests that using women who are of similar backgrounds as the women they are serving fosters an environment of trust between the doula and the moms. Community-based doulas impact the physical health of the moms and newborns through comprehensive care that addresses the diverse needs in their client's sometimes very complicated lives. This thesis examined how the community-based doulas and their program staff define a successful doula as well as a successful community-based doula program success in order to add to the evidence base on community-based doula work and to inform the HealthConnect One model. As the only nationally replicated community-based doula model, it is important that the HC One model be examined quantitatively and qualitatively. More evidence around what makes these kinds of cost-effective, locally based models of maternal and child health care programs work will contribute to the development of a strong public health system that responds to and benefits women, children and their communities.

III. METHODOLOGY

A. Conceptual Framework-Measuring Public Health Performance

Community-based doula programs blend both health information and comprehensive, locally based community health care for pregnant and laboring women. Population-based evaluation techniques are most appropriate for evaluating the community-based doula programs in this thesis.

Handler, Issel and Turnock (2001) developed the conceptual framework for performance measurement in public health systems which calls for an examination of the mission, structural capacity, processes and outcomes of a public health system within its macro context. The authors of this conceptual framework assert that it can be applied to public health systems and public health programs (Handler et al., 2001). See Figure 1, Appendix A for the original conceptual framework and Figure 2, Appendix B for an adaptation of this framework specifically for HealthConnect One's community-based doula programs.

This framework of public health performance measurement was selected to study the unique characteristics of community-based doula work. The framework is appropriate for evaluating community-based doula work because it examines the influence of external forces, and program resources, on mission implementation, as well as and the interaction of the multiple systems.

A qualitative approach was chosen for this study to gather information from frontline staff about their community-based doula work in a manner that has the potential to uncover nuances of community-based doula work that would not be easily revealed by a quantitative

approach. Quantitative methods are not appropriate for capturing individual feedback, opinions, and insight the key informants have regarding defining success in their doula work.

This project looked at the perceptions of the structural capacity, and process and outcome components of a successful community-based doula program as described by the communitybased doula program staff and the HealthConnect One staff. As displayed in Figure 2, Appendix B, the community-based doula program model exists in the macro context of the medicalization of child birth as discussed in the Literature Review. An organization or program's mission is based on its goals and how these goals are operationalized. HealthConnect One's mission for its community-based doula programs is to provide support to the mother before, during and after birth in a manner that is decidedly based on a non-medicalized model for pregnancy and childbirth. According to the conceptual framework, measuring public health performance includes assessing the structural capacity, which includes resources and relationships that interact with the public health systems, and its processes and how they in turn influence public health outcomes. The HealthConnect One model of community-based doula work does not focus on clinical care but uses a large system of resources, services, and social support. Specifically, this would include the information resources (data on the program population), fiscal resources (the inputs to finance public health activities), physical resources (equipment and facilities for public health programs), organizational resources (organizational culture and mission, leadership within the organization and collaborations outside the agency) and human resources (public health workforce) (Turnock, 1997; Handler et al., 2001). The Ten Essential Services reflect the processes of a public health system (Harrell & Baker, 1994). This study investigated three of the Ten Essential Services as they relate to community-based doula processes; Essential Public

Health Service #3: informing, educating and empowering people about their birth experience, Essential Public Health Service #5: developing agency policies and plans that support doula work, and Essential Public Health Service #7: connecting women with health services that they may not otherwise access such as prenatal care. The three Essential Public Health Services that guided this study were chosen because they best exemplified the services most relevant to HC One's community-based doula work. The outcomes are the public health impact on women and their families served by the community-based doula program. This study examines the processes of community-based doula work and not the impact. In order to contribute to the evidence base on what needs to happen to reach the desired outcomes, I decided to examine what the necessary resources and processes are for success as a doula and a successful doula program.

B. Program Evaluation

There are various types of program evaluation for public health programs. One common approach is for the evaluator to specify in advance the key processes and outcomes that are important to document. An alternative approach, the one this study is based upon in part, is known as responsive evaluation. In responsive evaluation, the researcher observes and responds to the feedback of those participating in the study (Shadish, Cook, & Leviton, 1995). One advantage of responsive evaluation is the opportunity to allow those who are intimately and intensely involved with the program to inform questions and solutions to program issues and problems. Similarly, responsive evaluation gives control of the intervention back to those involved in the program and allows them to search and find solutions to their own problems. The researcher must understand that each stakeholder will have a particular and unique perspective on the issues being examined (Abma & Stake, 2001). This type of evaluation is

congruent with the HealthConnect One's community-based doula model because HC One based its community-based doula work on the knowledge and experience of the doulas. This evaluation is relevant to the conceptual framework for this study because it uses the input and experience of those closely involved in the program to investigate and describe the various parts of community-based doula work.

C. Study Design

As noted earlier, the intellectual puzzle for this thesis questioned how the community-based doula replication staff's ideas of a successful doula and a successful program differ or are congruent with the ideas of HealthConnect One's staff. This project involved key informant interviews with program staff at three community-based doula replication sites in 1) a Midwestern City, 2) a Southern City, and 3) a Western City; the criteria for selecting these sites are explained later in this chapter. The HealthConnect One replication staff members in Chicago were also interviewed for this study in order to clarify and establish and operational definition of a successful doula replication program. The similarities and differences from the interviews will be cultivated into recommendations for HealthConnect One with the intent of contributing to the development of national standards for the replication of community-based doula programs, through their role as the lead national training and technical assistance agency.

D. <u>Data Collection</u>

1. Development of the interview guide

The semi-structured interview guide developed for this study had the interview questions predetermined, including the wording and order in which the questions would be asked.

However, the guide still allowed for flexibility in both the wording of the questions and the order

in which they were presented to the key informants. The intellectual puzzle primarily led the development of the semi-structured interview guide. The interview guide questions for each key informant role were also based on the conceptual framework for performance measurement in public health systems with a focus on inquiring about the mission, structural capacity, and processes. I sought to investigate the current versus desired state of the multiple structural capacity components such as personnel matters and data collection. I also incorporated my own experience as a private doula in the development of questions with an eye towards relevance for doula work. Copies of the interview guides are included in Appendices C-F.

2. Sampling and recruitment

Criterion sampling, a sampling method in which all of the sites needed to meet particular criteria, was used to select the study sites (Miles and Huberman, 1994). The criteria for the study sites were:

- Community-based doula replication program that was trained by and currently followed
 the HealthConnect One replication model. The programs that fit this criterion were
 identified through discussions with the HC One National Replication Manager.
- Site must have completed at least two years of the replication model. The programs that
 fit this criterion were identified through discussions with the HC One National
 Replication Manager.
- 3. Site must not currently be involved in the Community-Based Doula Leadership Institute.
 The sites that fit this criterion were identified through discussions with the HC One
 National Replication Manager as well as the HRSA published list of Community-Based
 Doula Leadership Institute grantees. The Community-Based Doula Leadership Institute

is a grant awarded to HC One to provide training, technical assistance, and cross-site evaluation to a cohort of six HRSA-funded community-based doula programs across the country (http://archive.hrsa.gov/newsroom/releases/2008/doulastraining.htm, accessed May 3, 2010). Participation of a site in the Community-Based Doula Leadership Institute involves other evaluation activities.

The third criterion was added after determining that it may be difficult for a program that is participating in the Community-Based Doula Leadership Institute to also participate in this thesis project.

According to personal communications with the National Replication Manager for HealthConnect One, there were four sites that met the initial two criteria and they were a Southeastern City, a Midwestern City, a Southern City and a Western City. The Southeastern City was eliminated from consideration because it was involved in the Community-Based Doula Leadership Institute. The Western City was originally excluded, since unlike other sites it employs and serves women recovering from substance abuse addiction; it was suspected that this site would be anomalous and therefore not reflective of a typical community-based doula program. However, the decision was ultimately made to include the Western City's program in the interviews in order to make an informed decision about its degree of anomaly. However, due to the late addition of the Western City site, only a summary of the interviews is provided in the Results section. It was important to try to include the Western city program in the interviews and provide a summary to be able to assess whether the experiences of the doulas at this site were very different or similar to the other sites. I expected that the Western city doulas' experiences would either greatly differ from the other doulas or show that the core processes and resources

for success were the same across the populations doulas serve. This was an important distinction to at least quickly access from the Western city program. A chart detailing the doula program pseudonyms, the program's focus, when the project was established and the key informants interviewed is in Table 1.

TABLE I

COMMUNITY-BASED DOULA REPLICATION SITES AND HEALTHCONNECT ONE

Site Name	Site Focus	Clients Served	Established^	Key Informants*
HealthConnect One	Training and technical	Direct service	1986	1 Executive Director
(formerly Chicago	assistance	providers across the		1 National
Health Connection)		U.S. that serve		Replication Manager
		women, infants and		1 Senior Trainer
		families		
Midwestern city	Improving the health	High risk participants	2004	3 Doulas
	of mothers and babies	home visiting		1 Supervisor
		program, African-		2 Administrators
		American pregnant		1 Stakeholder
		women, 24 years old		
		and under		
Couthorn oity	Improved infant	African-American	2007	2 Doulas
Southern city	Improved infant mortality and infant		2007	
	health outcomes	women, regardless of income or		1 Supervisor 1 Administrator
	meanin outcomes	educational level		1 Stakeholder
		educational level		1 Stakeholder
Western city	Address the	Women recovering	2005	3 Doulas
	comprehensive needs	from substance abuse		1 Supervisor
	of women recovering			2 Administrators
	from substance abuse			

[^]The column of "Established" refers to the year the community-based doulas services were established at that site. HealthConnect One's "Established" date refers to the when the agency itself was established.

^{*}Twenty-one (21) key informant interviews were conducted; 15 interviews were fully transcribed and analyzed. This is explained further in the Methodology Section.

Key informants from the community-based doula sites include the doulas, their supervisor, an administrator such as the project director, and an executive director or project coordinator. Key informants from HC One include the Executive Director, National Replication Manager, and the Senior Trainer, who is also a doula. It was anticipated that interviewees would include all three Health Connect One staff plus at least two staff persons at each replication site, providing an expected minimum of 12 interviews and up to 30 interviews. A total of 21 key informant interviews were conducted. Of those, 15 interviews from HealthConnect One, the Midwestern city and the Southern city were transcribed and analyzed for this study. A summary of the Western city program interviews and key themes are discussed in the Results section.

It was decided that it would be important to include not only the voices of the doulas, their supervisors and administrators but to conduct additional interviews with stakeholders at each program, in order to gain their perspectives on how success is defined. The stakeholders are those community members and representatives of community agencies that serve on a sort of advisory committee which provides advice, assistance and oversight to the community-based doula program. They are called "stakeholders" instead of "board members" because the stakeholder role involves collaboration, advocacy and resource sharing for the doula program instead of just providing program direction.

3. Key informant interviews

The study used standardized open-ended data collection techniques (Ulin, Robinson & Tolley, 2005). This technique allows the researcher to predetermine the questions to be asked, including the order in which they will be asked even though the questions are open-ended. The semi-structured interviews were developed to allow probing and follow-up questions. The

University of Illinois at Chicago's Institutional Review Board (IRB) approved recruitment email was sent to the potential study participants and was followed up by phone calls which utilized the IRB approved telephone script for recruitment and visit scheduling. The first interviews were scheduled with the HealthConnect One staff in mid-October 2009. The interviews for the Midwestern City site were conducted from November 3-4, 2009, the interviews for the Southern City site were conducted from November 5-6, 2009 and the interviews for the Western City site were conducted on April 6, 2010. The Principal Investigator traveled to the physical sites to conduct the interviews face-to-face. Informed consent was obtained immediately prior to each interview.

The interviews that were fully analyzed lasted an average of 67 minutes; the shortest interview was 34 minutes long and the longest interview was 92 minutes long. The shortest interviews were with informants that appeared either anxious about the interview or provided very brief responses. When probed, these informants tended to not elaborate on their responses. The longest interviews were often interrupted by the site activities/visitors leading to a longer interview time. Additionally, the lengthier interviews were also from informants that were observably excited about sharing the work that they do or the services provided by their program.

E. Data Management

1. <u>Data preparation</u>

The key informant interviews were audiotaped using a microcassette recorder. For the Midwestern City site, the interviews took place in a closed conference room at the project office which is in a shared social service agency building. One interview in the Midwestern City site was held in a local food cafe due to the project office being closed. The Southern City site

interviews were held in a closed conference room in the building where the project maintains its office space along with other child health agencies. One interview from this site took place via telephone as it was scheduled after the original site visit dates. In addition to the recorded interviews, detailed handwritten notes were taken following the interview guide. Fifteen (15) tapes were transcribed verbatim by the Principal Investigator over the course of several weeks into Microsoft Word. The audiocassette tapes remain locked in a home office cabinet. The transcripts remain in locked files on a personal laptop. A Contact Summary Form was used in the initial interviews, though its use was inconsistent due to the hurried, back-to-back nature of the subsequent interviews. The Contact Summary Form (Appendix G) was created to help capture critical details from the data collection process that may be lost, forgotten or confused as more data is collected (Miles & Huberman, 1994). Only one site, the Midwestern City site, provided documents related to their site and a Document Summary Form (Appendix H) was used with this material. The Document Summary Form was developed to help sort through the supplemental materials and determine their significance to the research study (Miles & Huberman, 1994).

F. Data Analysis

1. Coding

The data were analyzed using AtlasTI software, version 6.0. AtlasTI is a qualitative data analysis software tool that allows the user to manage, organize and manipulate qualitative data (Muhr & Friese, 2004). Primary documents are the text, graphics, or audio that one wants to analyze; for the purposes of this study, the primary documents were the interview transcripts (Muhr & Friese, 2004). The hermeneutic unit is the data structure that holds all the data related

to a given study, specifically the primary documents along with codes, memos and other analytic products created within the program (Muhr & Friese, 2004). The 15 interview transcripts became the primary documents assigned to one hermeneutic unit called "All15Interviews." Each primary document was coded using the developed codebook. Codes are short phrases to reference pieces of text (Muhr & Friese, 2004). For example, the code "Continuing Ed" referred to any text in the transcripts that described the things doulas did to maintain doula skills (i.e., massage technique class for their comfort measure skill set). A codebook is a guide that provides a reference for the researcher conducting the analysis for codes and their definitions (MacQueen, McLellan, Kay & Milstein, 1998). The codebook was designed through the steps described below.

- 1. Keeping the intellectual puzzle in mind and reading through the problem statement and the interview questions again for the salient points of the research.
- Reading through each of the transcribed interviews and writing notes in the physical margins of the transcripts. These notes were ideas and comments about the text that helped formulate codes.

The ideas that appeared to repeat themselves were included in the first draft of the codebook with brief definitions of what each code meant. The original codebook contained 41 codes; the final codebook has 52 codes (see Appendix I for the codebook). With more than fifty codes, the number of codes is in the recommended range of 40 to 80 codes (Auerbach & Silverstein, 2003). The codebook was revised over the course of the analysis as codes were renamed, merged and added in order to make better sense of the data. For instance, the original code "Processes Policy Doula" was intended to capture the policies that helped doulas take care

of themselves. The code evolved into a broader code, "Doula Self Care" to encompass not only the formal or semi-formal practices from the agency that encourage doula self-care but also those things that are initiated by the doulas themselves to care for themselves. A few codes were merged because their definitions overlapped considerably. For example, there was the code "Mission" and "Agency Mission"; the codes were combined into the target code "Mission." The code "Stories" was added later to encompass the anecdotes of client victory and/or trials that the doula's clients experience both within and outside of labor and delivery. The anecdotes illuminate the challenges that doulas face in caring for their birthing mothers in a holistic fashion. The codes include operational definitions attached as "comments" that help to maintain transparency and consistency of use. As there is only one Principal Investigator collecting, coding and analyzing all of the data, the primary documents were coded twice; a first run through and then secondary coding sessions to make sure that the items were coded consistently. Discrepancies between the two coding sessions were scrutinized, and a decision was made about which should be preserved.

AtlasTI includes a search function known as a "query" that allows for the retrieval of sets of text segments coded with a given code or group of codes united by Boolean connectors.

Before queries were run, Code Families and Primary Document Families were created for the hermeneutic unit. Code Families represent a set of codes grouped together under a name that can be used in a query (Muhr& Friese, 2004). Primary Document Families are used to restrict the scope of the query (Muhr& Friese, 2004). For instance, the Primary Document Family of "Doulas" was used in a query to look at the Code Family "Background". This allowed the researcher to examine all of the text associated with background information for the doulas only.

2. What to expect in the results section

As this is a qualitative study, the Results section will reflect a narrative synthesis of the interview responses. The narrative reflects aggregate responses from the study sites and therefore the site locations are not connected to individual responses. As mentioned earlier, the Results are based on the responses from the 15 interviews from a Midwestern City and a Southern City and there is a summary of my impressions from the Western City site visit. The Results will demonstrate how community-based doula program staff and HealthConnect One staff define success.

IV. RESULTS

An analysis of the study's key informant interviews on their perspectives of what contributes to or hinders the success of community-based doula work is presented below. In addition, this section includes a brief description of each study site and the key informant categories used. Twenty-one key informant interviews were conducted with three communitybased doula programs and HealthConnect One. However, only 15 interviews based on the visits at the Midwestern city program (3 Doulas, 1 Supervisor, 2 Administrators, and 1 Stakeholder), the Southern city program (2 Doulas, 1 Supervisor, 1 Administrator, and 1 Stakeholder), and HealthConnect One (1 executive director, 1 doula program replication manager, and 1 senior trainer who is also a doula) were transcribed and analyzed. A chart detailing all of the study sites is found in Table 1. Six key informant interviews were conducted at the Western city program including 3 doulas, 1 doula supervisor, and 2 administrators. Interviews were conducted and recorded according to the same protocol as the Midwestern and Southern city programs but the Western city program tapes were not transcribed or analyzed for this thesis. As an alternative to a full analysis, a summary of the themes gleaned from the interviews are presented. It was important to include the Western city site in the data collection in order to determine if there were any immediately noticeable, critical components for success that may have not been uncovered in the other two sites. Future work may include analysis of the data from the Western city program. As discussed in the Introduction, the study's intellectual puzzle focused on investigating community-based doulas and other doula program staff's definition of success. The interview responses and perspectives of the community-based key informants are discussed in detail in comparison to those of key informants from HealthConnect One.

A. Description of Program Sites

1. The Midwestern city program

The first community-based doula program examined for this study is integrated within a county-wide home visiting program that began in 2004. Thus, doulas have two roles, that of a doula and a home visitor. To be clear, the agency employs other staff members who only function as home visitors. This integration generates funds through reimbursement for the doula's home visitation activities and sustains the doula program. The home visitation program employed at this site is a nationally replicated, evidenced-based program for families at risk for child abuse and neglect. Pregnant African-American women less than 24 years of age, who are enrolled in the home visiting program, are invited to participate in the doula program. The doulas at this program call the women they work with "moms." The Midwestern city doulas were full-time staff and reported carrying approximately up to three moms a month with home visits at least every other week and sometimes once a week.

2. The Southern city program

The Southern city program agency focuses on reducing the risks for low birthweight babies and sudden infant death syndrome in their county and does this through two different agency programs. The Southern city doula program, in collaboration with a university health center, initiated a pilot doula program in 2005. Funding to expand the pilot into a community-based doula program was secured in 2007 from grants and private donations. There is also a mentoring program in the agency that is separate from the doula program. This mentoring program provides friendship and social support for teens who are seeking a sisterly, friendship-based mentoring relationship with an adult woman during their pregnancy, birth, and up to one

year postpartum. While the mentoring program sounds similar to the doula program, it is focused on friendship and social support for teen moms and the doula program is focused on prenatal care, case management, labor support and parenting techniques for adult women. The doula program moms must be African-American or third generation Hispanic (English-speaking) women who are pregnant, 18 years of age or older, and between 7-28 weeks gestation. There are no educational or income level requirements for participation in the Southern city doula program. "Mommies" is the term used to refer to the women in the Southern city doula program. The Southern city doulas carried an average caseload of only one mom a month with up to two home visits a month when working part-time and up to four moms a month with up to eight home visits a month when working full-time.

Recruitment for participants in both the Midwestern and Southern community-based doula programs began with their pilot projects. Some recruitment occurred through referrals and was based on the relationships that the doulas had developed with the local midwifery practices and hospitals. Doulas would also approach pregnant women they saw in public, even when they were "off the clock," and encouraged them to join the doula program. As articulated by one doula,

"We could be in a shopping mall, out in our daily lives, if we see a pregnant woman and she's African American and we're introducing ourselves, hi, how are you, how far along are you? I'm part of this program and we're handing out materials..."

3. The Western city program

The Western city program is uniquely structured as a community-based doula program in conjunction with a residential program that specifically serves the comprehensive needs of women recovering from substance abuse. The program is also unique because the doulas, similar the moms in the program, are in recovery from substance abuse. The doula program was established at this site in 2005. The doulas carry a case load of five to ten moms for the length of time the moms remain enrolled in the recovery program which can be up to 18 months. The doulas could potentially see a mom every day that they are working at the treatment facility because it is a residential treatment center and the moms would be on the premises. The Western city program moms enroll in the residential treatment program as required by the local legal system, social services or by self-selecting into the program. The frequency of home visits differs between each program site and Table 2 provides a summary of each sites home visitation interaction with the moms.

TABLE IIDOULA INTERACTION WITH MOMS

Site	Caseload	Frequency of Home Visits	Duration of Relationship with Mom
Midwestern city	3 Moms a month	Every other week up to 1 a week	Up until the child is 5 years old
Southern city	1 Mom a month (part-time), up to 4 Moms a month (full-time)	2 home visits a month (part- time), up to 8 home visits a month (full-time)	Up to 4 months postpartum
Western city	5-10 Moms	Potentially every day at the residential facility	Up to 18 months (the length of the recovery program)

B. Characteristics of Key informants

1. Doulas

A total of eight doulas (6 African-American doulas and 2 Hispanic doulas) between 26 to 57 years of age were interviewed. Doulas at the Western city doula program were significantly older than those working in the Southern and Midwestern programs and two of the doulas not only had children of their own but grandchildren, as well. At the Western city program, the ethnic and racial identity of the doulas differed from that of their moms (1 African American doula and 2 Latina doulas) while the moms were all Caucasian. The Western city program doulas did not physically look like their moms but they were representative of the community because of their common recovery experience.

On average, the women interviewed had worked as doulas, including time as lay doulas, for 5 years with a range of 2 to 13 years. Two doulas stated that they started their doula services as lay doulas providing labor support for a close family member. Lay doulas have no formal doula training, nor are they usually formally hired as a doula, but they provide emotional and physical support during labor and delivery.

Doulas were employed by their respective agencies for an average of 4 years with a range of employment in the agencies from 2 and 9.5 years. Some women had been employed by the agency in other roles such as a community outreach worker or home visitor prior to becoming a community-based doula. This prior experience with the agency and in the community likely made a significant and positive contribution to their doula work as they were very familiar with the community and the resources for a myriad of services that could benefit their moms in the doula program.

Doulas at the Southern city site are DONA certified birth doulas and the Midwestern city site doulas are in the final stages of completing their DONA birth doula certification.

Anecdotally, certification as a birth doula or postpartum doula reflects a high standard of training, knowledge, and professional conduct, in the childbirth field. Additional details of the DONA certification process is discussed in the Literature Review. Becoming a certified doula was not as important to the Western city doulas. The Western city doulas work in a substance abuse recovery program so their focus was on training and certification as Certified Alcohol and Drug Counselors. Doulas of North America, International certification was not a part of their educational plans.

2. <u>Doula supervisors</u>

All three program sites have dedicated part-time supervisors. Supervisors do not have to be clinically trained nor do they have to be doulas to supervise the doula team. These supervisors completed program reports, supervised and provided emotional support to the doula staff, and also served as mediators between the doulas and hospital staff. For instance, supervisors stepped in to resolve issues with hospital staff when a doula was not well-received or not allowed to participate in a labor. When the doulas came to their supervisors with questions or concerns regarding their work, the supervisor helped them to strategize and develop solutions.

At the Southern city site, the supervisor is an experienced doula who serves as a back-up doula to the small and overworked doula team. A "back-up doula" refers to a doula team member that is assigned to another doula's mom in the event that the primary doula is unable to attend the birth due to conflicts such as a planned vacation or family obligation. At the Midwestern city site the supervisor is not a doula and therefore cannot serve as a backup doula.

However, she has a background in nursing and provides clinical information to the doulas, answers complex clinical questions, and serves as a direct medical resource for the doulas. At the Western city program, the supervisor serves a dual role of supervising the doulas and supervising the child care aspects of the residential treatment program. She is also trained in substance abuse recovery services, early childhood education and similar to the doulas at this site, she is a Certified Alcohol and Drug Counselor. The supervisor at the Western city program is not a doula and therefore does not serve as a back-up doula.

3. Program administrators

The doula program administrators interviewed for this study include two executive directors, a project coordinator, an associate executive director and a psychologist that serves as a program consultant. Executive directors are charged with the overall leadership of an agency and guide the agency towards its mission and goals, often providing and maintaining the "big picture." Project coordinator responsibilities include providing the day-to-day, hands-on program implementation tasks that help the home agency achieve its goals such as report writing and budget management. The Executive Director at the Midwestern city site, who has been with the agency for more than 7 years, is responsible for all of the programmatic, advocacy and administrative aspects of the lead agency where the doula program is housed. The Project Coordinator for the Midwestern city site is a contractor who is responsible for the program coordination and evaluation activities; she has been with the agency for more than six years. The Executive Director at the Southern city site co-founded the agency that houses the doula program nearly 15 years ago to help women at risk for negative birth outcomes, particularly low birth weight babies. The associate executive director and the consultant at the Western program

provide assistance with supervision and training of the doula team and have been with the agency for approximately 7 and 15 years, respectively.

4. Stakeholders

One stakeholder from the Midwestern and one stakeholder from the Southern program served as representatives of each program's stakeholder group and were interviewed for this study. HealthConnect One's community-based doula model requires that programs convene a group of individuals from the local community, who have a connection with community-based doula work and are committed to supporting the program. The stakeholders represent the agencies that provide services and resources that could benefit the families served by the program including local hospitals, clinics, and social service agencies. The stakeholders are responsible for identifying assets and deficits in the community as well making decisions about issues such as program funding and sustainability (Abramson, Breedlove and Isaacs, 2006). The stakeholders interviewed for this thesis both happen to have a background in nursing. These particular stakeholders have roles that differed from other stakeholders in that they also served as medical experts for clinical questions raised by the doulas. No stakeholders were interviewed from the Western city program.

5. <u>HealthConnect One leadership staff</u>

The HealthConnect One staff interviewed for this study included the agency's Executive Director, the National Doula Program Replication Manager, and the Senior Trainer. The Executive Director leads the organization in fulfilling its mission to build sustainable community-based programs for peer-to-peer support during pregnancy, birth, and early parenting. Additionally, the Executive Director manages all aspects of the organization,

including strategic planning, financial management, staff and volunteer management, fundraising, program development and oversight, public and media relations, publications, and building relationships with a variety of partners and community stakeholders. HealthConnect One's Executive Director started as a volunteer in1986 when the organization was called Chicago Health Connection and she has been the Executive Director for 21 years. The National Program Replication Manager is responsible for the training and technical assistance HC One's peer-to-peer programs. She began her affiliation 22 years ago starting as a steering committee member in 1988 and has been the National Replication Manager since 2002. The Senior Trainer, who is also a doula, works with the community to identify training opportunities, coordinate resources, develop training materials, and facilitate trainings for community-based doulas. She has been with the agency for 11 years and has worked as the Senior Trainer for the past four years.

C. Perspectives on Defining Success

The following section presents the perspectives and an analysis of the key informant interviews related to defining a successful community-based doula and a successful community-based doula program. The responses from each informant role (e.g., doulas, supervisors, etc.) are integrated within each section of response categories to represent the doula program staff responses compared to the HC One staff responses. Similarities and differences in responses are noted within each section.

1. A successful community-based doula

All of the key informants emphasized that being from the community and being familiar with the community was important to being a successful community-based doula.

"I think if you're a community-based doula you have to have a good knowledge of that community and be part of the community. I don't feel like someone who is not directly related to this community can come in this community and be a community-based doula. Having a relationship with this community, knowing the programs and the culture, and the feel, the vibe is probably the most essential thing you have to offer to the mother. Because she doesn't explain to you how she feels, her lingo, because you understand how she feels about stuff, you know that culture so that takes away some of that uneasy feeling when they have to go deal with the medical professional. So they have like an advocate there for them to communicate from their community about what's going on with their bodies and their child."

A successful community-based doula is a trusted member of the community in which she serves because she has overcome challenges in her own life in this community. She has likely navigated the system to meet her own needs and is aware of local resources that she can share with the moms.

"They really know their communities, they know what to listen for, they listen to their mothers and they have the context to judge what their response needs to be. They advocate for their clients, they support each other, they model mutual relationships, constantly learning, they're certainly role models for their clients; they're women who have achieved by overcoming obstacles themselves."

A successful community-based doula must have a commitment and compassion for helping people, especially women and children, and must have the ability to relate to her moms to foster open communication and relationship building.

"What makes a community-based doula a success is her ability to communicate with her mommies and through that communication, build trust. And once you have the trust of that mommy, your ability to do almost anything is attainable, the trust is important when you're going into labor and delivery, for mom to listen to you and really consider her options. It's the difference a lot of times between a vaginal birth and a c-section."

"I think, it's the ability of the individual not to be judgmental, to be accepting of her mom and where her mom is and where she came from and having an open heart and meeting that person where they are in the moment, you know, yeah, when it comes to the education part of it I believe the more the person doesn't make the mom wrong and gains trust and respect, it has to be a mutual respect..."

Being a supportive advocate is also part of being a successful doula. Many of the women served by community-based doulas are having their first birth. One doula mentioned that especially with the young girls that she serves, they simply need someone to talk to about their past life experiences, which are often negative. This requires the doula to be supportive and available. This availability is often facilitated by what one doula noted as essential to a doula's success, a cell phone. As discussed later on, cell phones are noted as physical resources that facilitate doula work. The success of a doula has much to do with her personality and her ability to be sensitive to the varying needs of her moms. The doulas responded that a successful doula must be patient,

passionate, sympathetic, flexible, willing to be an advocate, and willing to serve. One doula summarized that a successful doula has "...to be willing to serve and not just be a doula."

Doulas cannot be rigid or judgmental, they have to be good listeners, and they should have the unique ability to serve the moms and celebrate the mom's small successes.

While doula services are primarily focused on the mom, they are not isolated to the birthing mother. One of the most important things a doula can do to be successful is to ensure that everyone who wants to be involved in the labor feels included and useful during the labor and delivery process. This is particularly true if the father or partner is involved and desires to participate. For example, the doula will be deliberate about involving the father/partner, showing them comfort techniques that can be performed with the laboring mom, for example.

The doulas also expressed that a well-trained and educated doula is a successful doula. A successful doula demonstrates a commitment and willingness to learn new skills to serve her moms. The doula uses her education to inform and empower the mom to make her own decisions about her birth experience. For example, to maintain a peaceful birth space one doula mentioned encouraging a mom to request limited interruptions by the healthcare staff except for when she called them to her room. The doulas were eager to increase their skills and work towards doula certification. They expressed a desire for training opportunities and indicated that whenever training was offered within and outside their agency, they tried to participate. Keeping doula skills current is accomplished primarily through advanced workshops offered by Doulas of North America (DONA). The doulas also related keeping up their skills by reading books related to pregnancy and childbirth, visiting and interacting with pregnancy-related websites on the internet, as well as watching birth-related television shows. One doula mentioned watching

"A Baby Story" on TLC channel and other birth related documentaries as a part of her continuing education. The doulas in this thesis study reflected what other researchers have found to be true for other community health workers; initial and ongoing training lead to success (Swider, Martin, Lynas, & Rothschildm, 2010).

A doula's relationship with community agencies contributed to her success. For example, positive relationships with other community maternal and child health programs would lead to a mutual referral process between the doula program and the agencies.

The doula must be able to be intimately involved with the women that she serves. Doulas must be comfortable with touch between her and the mom as well as comfortable with observing the biological processes that occur in childbirth. A successful doula believes that birth is normal and not a medical condition, and that almost every woman is capable of having a natural birth. The supervisors, administrators, and HealthConnect One staff emphasized that not being afraid of touch was important to the success of a doula.

In order for the doula to meet the demands of her professional and personal responsibilities, it is important that she has the ability, resources and support to be flexible in her private life. Doulas are on-call 24 hours a day, stay up for many hours during labor and delivery and must be able to quickly adjust their schedules to meet the needs of their moms. Most of the doulas have families and children of their own to care for so having the ability to be away from their families on short notice and for several hours or days at a time is essential.

Successful doulas must be able to appropriately relate clinical information to their moms as well as provide direction and support for the moms to access needed social service resources.

A successful doula is able to take the clinical information she has been given during her training and put it in lay words and images that will make sense for the mom.

A sense of camaraderie and sharing of resources and responsibilities, such as being one another's back-up doula, contributed to doula success.

"Oh, assets. We have lots of assets! We get along, and that's number one and that's very important. We have educated ourselves, we work really well with our executive director, we've established great community relationships; we're Wonder-Women! We are...we're a great group of women and African-American women working together is a hard situation and I think we do it exceptionally well."

Doulas mentioned that the differences in their individual skills contributed to their success. An example given by one doula noted that some of the doulas could only do basic typing while another held a Master's degree. She said that appreciation for their team's variation in skills helped them remember to appreciate the varying knowledge and skills of their moms. Their diverse personalities, and therefore the different ways they were able to serve their moms, contributed to their success as a doula.

"I liked having a certain diversity in the women. There were certain women out there 'that one has to go to (name excluded)' or 'oh no, that one has to go to (name excluded)' and because we knew their personalities and because of their backgrounds and where they grew up in the community made a difference on who they got matched with and that's why I think it was so effective because we had a diverse staff and we could figure out 'this one can't handle the young ones but

this one can,' 'this one can't handle picking up the girl who's going to have her socks on with her flip flops and half dressed and this one can.'"

The doulas in the Southern city program were an asset to the agency's mentoring program because the doulas were able to fill-in as breastfeeding experts for the other programs moms. This sharing of staff knowledge and skills helped the agency maximize the training the doulas received.

According to one stakeholder, a successful community-based doula is one "with a happy, healthy mother and baby." Happy, healthy mothers have learned to care for themselves and their newborns and use the decision making skills taught to them by their doula.

An interesting point brought up by one HC One staff member is the success of a community-based doula being tied to having a supervisor and system that is supportive, available, and elicits the doula's talents.

2. A successful community-based doula program

Doulas work within a community-based agency and within that agency they work in a community-based doula program. As noted earlier, the community-based doula program is often integrated into another program in the agency and at times it is developed alongside a similarly structured program. The key informants identified a number of factors related to the success of an agency's community-based doula program.

The doulas noted that a successful community-based doula program must have administrators who understand community-based doula work. At the Midwestern city site, the doulas expressed concern over what seemed to be a lack of understanding by non-doula home visitors and other agency administrators of what doula work entails. For the doulas at this site,

this translated into difficulty finding harmony between their responsibilities as home-visitors as well as doulas. This imbalance led to a reduced quality of administrative work on both the doula and the home-visiting side evidenced by late home visiting reports and other related paperwork.

One doula explained that:

"...it's integrating both programs and not overworking the doulas. In some respect, there's balance of doula work and home visitation, so finding the happy medium between the two programs. And realizing that a lot of times, people that don't do the direct doula don't really know how much work goes into being a doula. You know, if you're at the hospital 20 hours or so, getting up the next morning and going to do 4, 5 visits, it's that you don't have the energy to do it. It's a very hard job, mentally, physically, emotionally, and just being able to respect how demanding the job is; that the people that are doing most of the grant writing or the people at top of it, they don't have the perspective, because they haven't endured it. You know, so they don't really have the perspective of why you can't do it, they're 'oh when can you do it, tomorrow?' You still might need time to recover from the event."

"First and foremost I think you have to have program managers, people that are in charge, they have to buy into it. They have to understand the value of it because there are challenges and how to make it work economically or within whatever system they are working within and if you don't have support from the manager supervisor, it's very hard to make it work."

Other important characteristics of a successful community-based doula program that were noted include having a community champion who is passionate about community-based doula work and is willing to be an advocate for the program when difficulties with funding and implementation arise. Additionally, this champion should be able to provide in-kind resources to the project such as giving their time to the program for advocacy. More specifically, one of the stakeholders noted that their program's executive director is the one who makes their community-based doula program successful because she is someone with the passion, vision and the energy to meet their program goals.

Trustworthiness and perceived legitimacy in the community was an important theme in the responses. Consistency in doula program offerings contributes to building trust within the community and thus to the success of the community-based doula program. For instance, the Southern city doula program previously offered scheduled childbirth education workshops on a regular basis. Over the past few years, funding cuts caused the classes to become irregularly scheduled and they were eventually discontinued indefinitely. One doula suggested that as the workshops offerings became unpredictable the community began to feel less comfortable relying upon the agency and the doulas for their maternity care and information. An established, reliable presence and connection to the service community is important to a successful community-based doula program. A community-based doula program should be well known and have a reputation for serving the community. In addition, the community-based doula program should have relationships with relevant collaborative agencies that can provide additional services to meet the needs of the moms.

The HC One staff emphasized that a successful site must adhere to the Five Essential components of the community-based doula model. HealthConnect One underscores the Five Essential components but it is important to note that it was rare for other key informants to directly reference the HealthConnect One community-based doula model or the Five Essential Components. The model and its Five Essential Components were presented in the Introduction and further discussion of key informant responses related to the Five Essential components are included in the Discussion section. The HC One leadership staff believes that the doulas, the stakeholders, and any other staff involved in the doula program must trust the model in order for the program to operate successfully. The administrators also stated that integrating the doula work into an existing program was important to the program's success. One community-based doula program administrator noted that a successful community-based doula program would be one that found a sense of equilibrium between the doula model and their community:

"I guess it would be striking a balance between following the model as it's been developed and replicated in other places but also looking for ways in which it might need to be tweaked a little bit in order to fit the needs of a local community or fit the needs of a host agency that may have been a host agency with the original pilot or another community so blending that...we want to be true to the model but we also want to be willing within parameters to make adjustments, to make sure it fits for us, fits for the infrastructure that we have to work around."

Importantly, the program must be able to adequately compensate the doulas and provide them with the tools needed to serve the moms, such as comprehensive training. As a final but

important point, the doulas were considered crucial to the success of a community-based doula program.

"...you definitely need a positive circle of doulas for your program. Because if you don't share the same goals and you don't share the same passion for it, it won't work."

"...it's like a recipe, there's so many things you can put together but unless you have the right mix it's not going to be right and everything is equally important because again, you talk about sustainability, you might get the funding, people might say yes, if you don't have the right doulas providing the service it's not going to work and eventually they're going to say no because you're not making an impact, you're not serving the people."

The key informant perspectives on defining success for a community-based doula and a successful program have been outlined. The following section will relate the responses to questions that were based on the conceptual framework for performance measurement in public health systems and specifically how components of the framework promote or impede community-based doula programs.

D. Conceptual Framework Applied to Community-Based Doula Work

1. Information resources

Information resources are the encounter-based or population-based data involved in making the public health system work (Turnock, 1997; Handler et al., 2001). Adequate and quality data are also required for successful community based doula programs. The extensive data collected at each study site and how such data are used is presented below.

Doulas collect comprehensive and quality information throughout the duration of the relationship with their moms including: birth plans, personal goals, notes on the home and social environment, birth details such as birthweight, method of delivery (vaginal versus C-section delivery), and complications related to labor and delivery. Data on postpartum experiences related to breastfeeding initiation, well-child visits, and immunizations are also collected. The Edinburgh Postnatal Depression Scale score is recorded if the hospital staff distributed it to the postpartum mother. The Midwestern city doulas expressed that they were overwhelmed by the amount of data they needed to collect and enter into a database for their combined doula and home visitor role. The Southern city site doulas did not express concerns about the amount of data collected.

a. informing and enhancing doula programs through data

The most frequently specified data items informative to doula work were related to maternal health. These data provide a comprehensive picture of the mom's current and prior health. Prior health conditions and experiences such as diabetes or sexual trauma assist the doulas in preparing educational materials for the moms that help them in dealing with issues that may arise during labor.

The doulas regard data on infant birthweight and duration of participation in the doula program as informative to their work. When moms enter the doula program late in pregnancy and have a low birthweight baby, the doulas are motivated to recruit moms into the program as early in their pregnancy as possible. Such data contribute to quality assurance and facilitate evaluation of doula program activities and services.

"Well, it shows areas that we're doing things well and if we need to beef up. Like one area for sure that we need to beef up is continued breastfeeding. A lot, a big percentage of the moms initiate but they don't continue."

Doulas also use information from their experiences with previous moms to inform the way they provide doula services to new moms. For instance, if a doula has a positive experience with a local social service agency, especially a positive interaction with a particular agency staff member, the doulas would use that agency or contact person for the next mom with a similar need. The doulas also share this type of information with their doula team via personal conversations or during team meetings. Doulas collect data to assess and evaluate a mom's situation and progress over time. For instance, a mom may set a personal goal to find an apartment for her and her children to live in after the baby is born. The doula can look at the goal from the beginning of their relationship and track the mom's activities towards that goal. At this point, data on the mom's extended family or father of her baby are not collected.

One administrator indicated that it would be informative for the program to collect information about the health of the father:

"I think it would be nice, but I think it would be difficult to get, but data on the father and his health. It would be great to get medical records which we don't get. We always assume our poor birth outcomes come from our mothers, the women, and it would be nice to look at the health of the dad...could or possibly could affect the health of the baby."

Data from the doulas on their encounters with moms can bolster the case for community-based doula programs and doulas as community health workers. An administrator noted that

their data on positive birth outcomes and reduced program attrition supported the blending of home visitor and doula roles to successfully serve and meet the needs of the women in their program. This is an interesting point since the doulas expressed difficulty in blending the home visitor and doula roles in the manner in which their agency had the roles structured. Similarly, the quantitative data from the individual programs allows HC One to compare community-based doula program outcomes to traditional home visitor outcomes. Positive outcomes on a number of levels promote and contribute support for the community-based doula model.

The community-based doula programs are service delivery projects and an emphasis on data collection has been limited. There are some data that if collected might be useful for further development of the community-based doula model. HealthConnect One staff suggested that it would be useful to examine how early in the prenatal period a woman needed to be connected to a doula for a positive impact such as continued breastfeeding in the postpartum period. Similarly, it would be useful to know how many doula home visits are associated with positive birth outcomes such as normal birth weight babies and full-term births. It is also of interest to HealthConnect One staff to collect information on parent-infant attachment in the short-term postpartum period and at 5 or 10 years of age, to see the relationship of infant attachment on the child's social-emotional development. Other potential data might include school-readiness, incidence of child abuse and neglect, and economic measures of the communities where community-based doula programs have provided services. Additionally, indicators of doula professional and personal growth could be collected to measure the relationship between the program and changes in the lives of the individual doulas. Lastly, more testimonials or "stories" from the women who are served by the community doula programs are needed on how the

programs have affected their lives. This information should be shared with public health leaders, including maternal and child health administrators, researchers, and funders.

"Storytelling; that is the best testimony that you can have. When you actually get a client who has several years in the program, where they are at and where they are going, that's the best thing. And I think that funders like to hear those things too."

At the time of this study, HC One was finalizing the initial phase of their formal quantitative data collection system. HealthConnect One's data system, called "Doula Data," will provide more uniform data from the community-based programs and is expected to strengthen the case for community-based doulas. Ultimately, the data system may demonstrate the long term benefits of community-based doula work for participants, their children and communities.

Supervisors highlighted the importance of collecting information on how doulas are received by hospital staff. As described earlier, there can be tension between physicians and nurses, and the doulas. Doulas are sometimes perceived as a distraction and burdensome for the hospital staff so they are not always welcomed into the laboring environment.

Doulas and supervisors identified a disappointing disconnect between a mom's stated intention to call the doula when she goes into labor and her actually making the call. The supervisors would find it useful for the doulas to gauge how well they are bonding with a family and their impression of whether or not the family will actually call them for doula services when they go into labor. More information on the dynamics related to a mom saying that she will call the doula when labor begins but not calling would be helpful to the doulas. Doulas could then figure out ways to further develop their relationships with the mom and hopefully reduce the

incidence of not being called. Related to this topic, HC One would like to track the percentage of births actually attended by the doulas. HC One expects that this would be a measure of the level of bonding between the doula and the mom.

2. Organizational resources

Organizational resources include the agency culture and mission, leadership within the organization, and those collaborations outside the agency that influence the community-based doula work (Turnock, 1997; Handler et al., 2001).

a. culture and mission

The mission of the agency in which the doula program is housed has to be congruent with the community-based doula model in order for the doulas to be successful in their work.

"...it has to be an organization that has strong ties with the community, that it is a community-based organization. The further that you get from a community-based program, the more challenging, the harder it is for a community-based doula to be effective in her role because they're in an environment we're they're not understood and what they're doing. And it's very important that the mission of the organization supports birth outcomes, it supports pregnant families in the community; your mission has something to do with wanting to have a healthy community and healthy babies."

b. leadership

A key factor for success identified by all key informants was the extent to which agency leadership demonstrates that they understand the complexity of the doula role in providing needed services to women in the community. There was usually an uncomfortable imbalance for

the Midwestern city site doulas between their home visiting role and their doula role. For instance, the agency would enforce inflexible policies, such as punching a clock or completing a timesheet by the end of the business day, which did not account for the late hours spent during the labor and delivery or the fact that the doulas are away from the agency office and could not reasonably complete those tasks. All of the HC One staff confirmed that in order for the doulas to be successful, the full support and understanding of the doula role by the agency leadership was needed.

"...she's much less likely to be successful if the project is not clear about the objectives, if they're not fully supportive of the model, if there isn't leadership at the top and on the front lines that are not clear about the role delineation and how the doula fits into other roles in the system, if the culture and the authority in the organization don't really respect the doulas expertise, her community expertise and her capacity for making change and her knowledge of her community and the fact that should be used to improve the program."

HealthConnect One staff emphasized that the agency must be committed to the Five Essential Components to have a successful community-based doula program; without one or more of the Components, the program will eventually falter.

"If you did most of the Essential Components, like just left out one, it's kind of like Jenga when you're playing with the bricks, it seems like everything's safe for a minute and then everything comes tumbling down, that could be another thing that hinders the program...they've got most of it together but they don't have all of the five pieces in place."

Other dimensions of leadership that promote the success of community-based doula programs relate to well-established agencies and administrative systems. A community-based doula program within an agency that has established fiscal management procedures, data collection processes and personnel management systems will likely have the support necessary to meet its administrative responsibilities. The doula program could also have access to resources such as a meeting space that may have otherwise been too expensive or unavailable to the program if it were not for the larger umbrella agency. The administrators noted that being housed within a large agency can add to the exposure and credibility of the program. However, a possible drawback of having a doula program within a large agency is that as one of many programs, it may end up competing for resources, support, and attention from the agency administration. If the doula program is connected to a very large agency such as a university, the doula program may also get lost in the university bureaucracy. Doula programs may also have difficulty establishing credibility in the community when they are connected to larger agencies with poor community relations.

c. collaborative relationships

Collaborative relationships can be both a help and a hindrance to successful doula work.

The doulas mentioned that one of the benefits of relationships with other community social service agencies was that they helped create a broad net of services for women in the community.

"The good thing about working with the community is the collaborative because we can't touch everyone, you know, we can't reach every single pregnant family in the county and so these partners in these other collaborative agencies that serve

this population of women know what the needs are of your client and not everyone they touch will need what we offer because we know we come across women who have support and so it does us no good to use what limited resources we have and to pour into a woman who is aware, educated, was empowered, informed individuals. They know what the needs of their clients are and make sure our information/services are provided to those that need it."

Collaborative relationships with other agencies also help the mom's partner; the Midwestern city program collaborates directly with a local fatherhood initiative which in turn supports the entire family.

However, not all collaborative relationships are mutually beneficial and at times there are drawbacks. It was noted that some agencies partnered with the community-based doula programs for the sake of appearing involved in an honorable community effort and not because they had a genuine commitment to serving pregnant and parenting women. Specifically, some outside agencies supported the doula program in name but not in funding, resources or services. With doula programs often struggling for funding and resources, partnerships that are not directly benefiting the program are a hindrance to its growth and sustainability.

Relationships with other doulas outside of one's home agency can be both a positive and negative experience. Some found that dialoguing with other doulas, community-based or not, helps the doulas to find support and solutions to problems they are having in their work.

However, a Southern city doula noted that there was also a sense of competition between private doulas and the community-based doulas for clients; the competition was described as coming from the private doulas because they are concerned in this tight economy that the moms will opt

for the free and comprehensive services of a community-based doula instead of the short term, contractual fee-for-service doula model of services.

Most of the HC One staff indicated that collaborative relationships with outside agencies that are unreliable or resource poor are a hindrance to doula success. For instance, a social service agency that wants to partner with a doula program would be a hindrance to a doulas success if that agency had long waiting lists for services and a generally poor track record for service in that community. One HC One staff member noted that she did not believe that any relationship was a hindrance to the community-based doula work. The philosophy behind this is that every relationship, even ones that are perceived to be of a competitive or negative nature, can be used to enhance the community-based doula work.

3. Physical resources

Physical resources include the equipment and facilities for public health programs and how they impact program implementation and operations (Turnock, 1997; Handler et al., 2001). Perspectives on physical resources that promote or hinder the success of community-based doula programs are detailed below.

Most frequently, cell phones were noted as essential for the success of community-based doulas given that the doulas must be accessible to their moms for labor support at any time of day or night. The HC One staff emphasized that cell phones should be provided and paid for in full by the agency.

Other doula supplies such as birth balls (a round inflatable ball that moms sit on during labor for comfortable seating) and rebozos (a large cloth used to tie and carry babies on the mother's body to keep her hands free) were noted as needed by the doulas. In addition, "plus

size" maternity clothes, breast pumps, anatomical models and nursing bras for moms are frequently in great demand. The Midwestern city program doulas have expressed a need for scrubs as a part of their doula work supplies. They want to have a "uniform" that can be soiled instead of their own clothing during a birth and to look more like the hospital staff. This directly relates back to the doulas trying to alleviate the tension they experience with the clinical labor and delivery staff. These resources are the tools used to support and foster the intimate emotional and physical relationship between the doula and the mom.

Dedicated and equipped office space is important for the success of a community-based doula program. Small or even shared office space allows the doulas to meet with each other formally and informally, provides storage space, as well as access to a computer in order to complete their paperwork. Locating the office in the community was considered particularly important.

"It being a community-based doula program, the fact that the office is located in the community is essential because the mothers are able to, actually able to come into the office if they needed to contact you or speak to you in person... it meant more to the community because it was a great place to be because everybody's familiar with the area and the center and the services that are provided."

The office space should be comfortable for the moms to visit, insure privacy and be able to accommodate individual and group sessions. Ultimately, the space should demonstrate that the community-based doula program is a valued part of the agency.

"The building is very important. Sometimes a lot of social agencies feel like the community-based doula program is a small little piece so when they come to

work you literally see what the small piece is; meaning the space is very limited. I've gone to do site visits where their room, their office space is less than what I have here and it's like a closet and then I find out that it is a closet! And they're put in the basement, or they don't have any office phones available to them, just everything in order for them to be successful. Of course they're not just out there providing services but they have to come back and do their home visiting log in terms of what types of services were rendered that day and how they were able to assist with that or proper referrals that they might need, things like that. So they need to come to an area that they feel important, not in the basement, not in the closet room, because when the other projects see that particular program that's when a lot of the doulas become disvalued and that's when they have problems as the issues come up. Obviously, that doula program is not that important."

While the office space is important to the success of the doula's work, the absence of such should not prevent the doula from being visible, present, and engaged in the community.

Stakeholders noted that the doulas routinely transport the moms to clinic appointments and/or other social service appointments, in their own car. This can be incredibly difficult to manage when a mom has more than one child in a car seat. Availability of an agency van for doulas to transport the moms would address this need.

"It'd be great, in an ideal situation, a couple of vans would be fantastic because you do have that mommy that has four or five kids that need car seats, we've had that happen a couple of times. You try fitting five car seats in a car..."

4. <u>Human resources</u>

According to Handler, et al. (2001), the human resources in the conceptual framework for public health performance management refer to the public health workforce. In this study, the public health workforce includes doulas, doula supervisors, and the doula program administrators. Their perspectives on needs, assets, challenges, and issues around self-care for the doula team are described below.

a. team needs

The doula teams indicated that their primary need was to have more doula staff, so that they could begin to meet the growing and varied requests for doula services; more specifically, they expressed that they needed both African-American doulas and Spanish-speaking doulas. All of the current clients at the Southern and Midwestern doula programs were English-speaking because neither program had a doula who was able to adequately communicate with a mom who spoke only Spanish. The second team need related to having a larger team so that doulas could serve as back-ups for each other. With a small team of doulas, this backup coverage becomes increasingly more difficult, especially if more than one doula has a mom due around the same time.

"I think it's a very high burnout career for women especially if you have children of your own, a family. But I think it's one of the most wonderful things, wonderful gift you can give your community, having community-based doulas. Having said that, you have to always be prepared to train new community-based doulas in the community because of the high attrition. It's something we're trying to figure out now, are going to try to ramp up and train some more women...the

thing is we could train more but we can't get any more funding. We could bring them on as volunteers, if you're getting burnt out if you're getting paid how much can you do if you're doing it for free?"

All doulas expressed a need for more adequate and appropriate compensation for time spent on births as well as paid time off or overtime pay. The Midwestern program was within a very structured home visiting program that did not allow much flexibility in their schedules or compensation for their doula work. When doulas were not paid for the extra time they spent with their laboring moms beyond normal work day hours the doula team morale plummeted making it difficult to not only keep the current staff on board but also to recruit new doulas. The idea of adequate compensation for doulas relates directly back to one of the HC One model Five Essential Components.

The doulas specifically indicated a need for ongoing training to maintain and increase their doula skills in clinical childbirth knowledge and new comfort techniques for labor. Agency financial support for training was noted as important to program success. Despite the expressed need by HC One, the program doulas, and doula supervisors, funds for continued training was limited at the Midwestern and Southern program sites.

b. challenges of the doula team

Members of the doula teams have various backgrounds, training and experiences that influence the way they provide doula services as well as the way they interact with each other. This diversity was seen as an asset but also proved challenging for the doulas. Most of the time, sharing different approaches to providing doula care was useful and informative. The Southern program doulas mentioned that their meetings were often very long because everyone wanted to

share their ideas and opinions on a topic. An administrator reported that the doulas being from the community in which they served was both and asset and a challenge to their success:

"Sometimes the challenges are the same; both a challenge and an opportunity, and that is that the doulas, they do come with the background as the participants so they come with their own biases, their own set of patterns of thinking and at the same time this kind of work gives them an excellent opportunity for professional growth as well as personal growth because you're dealing with such basic human realities. That doesn't happen in every job, you know it just doesn't happen.

These are the types of jobs that have you know experience and learning your own personal truth and it's just an opportunity for growth, personal growth, for both the moms and the doulas."

Supervisors expressed that reconciling boundary issues between the doulas and their moms was often difficult. The supervisors were challenged in understanding that the relationship between the doula and the mom was more intense and intimate than the relationship between a traditional home visitor and the mom. The supervisor at the Midwestern city site indicated that she had to learn to supervise the doulas in a different way than the traditional home visitors since their roles are inherently different. Specifically, the supervisor adjusted her supervisory methods to accommodate the doulas who are available to the moms 24 hours a day and not simply within a structured 9a-5p work day. For instance, a supervisor could not rely on seeing the doulas in the office during a labor and have the opportunity to converse with them about their work or even check on their physical and emotional well-being. The supervisor

would have to visit the hospital where the doula is laboring with the mom or reach her on her cell phone to see if she needed relief during the labor.

Other doula team challenges were associated with the complex issues the mom had in her life that extended beyond her pregnancy such as housing problems or abusive relationships.

Managing all of the issues a mom had that were not directly related to the pregnancy was time consuming and sometimes overwhelming for doulas. While challenging, the doulas were trained and supported by their supervisors and other team members to provide comprehensive services to the moms that would include addressing these other issues.

A major challenge for doulas is managing the difficulties they have in their own personal lives that affect their doula work. For instance, lack of or limited childcare for the doula's own children make it difficult for a doula to meet all of her work responsibilities. This is especially relevant when a doula must be away in the middle of the night or for many hours participating in a labor and delivery. Additionally, if a doula personally suffered a sexual trauma or had a traumatic labor and delivery, she may need treatment or counseling for these events before being able to adequately serve her moms.

Negotiating the hospital system and dealing with medical staff who are unfamiliar with or unwelcoming to doulas was another challenge. The supervisors and administrators at both programs noted that they make efforts to visit and communicate with the local hospital staff to introduce them to their doula program services and what to expect when the doulas are on site for a labor and delivery. This outreach has helped but it has not completely eliminated the difficulties between the doulas and hospital clinical staff.

"Well, I mean I think even though the doulas, they're one-on-one with the family, they may need support, they need feedback, families have questions that they can't answer or they run into situations in the hospital setting that are frustrating. They, it's not just one, they're not there alone. They have the program behind them. And we went in, myself and (name excluded) went in to visit hospitals and explain the program, went back to explain what we're trying to do so it wasn't just the doulas going in there blind."

Establishing and maintaining credibility amongst community members is another challenge for the doula teams. The HC One model asks that the doulas be from the communities that they serve. However, the Midwestern program at one point had a doula that did not represent the ethnicity of the majority of their moms. It was difficult at times to explain how this doula was representative of the community they served. She had indeed worked in the community for several years and while she did not look like the rest of the doulas or moms necessarily, she was quite familiar with the community. The meaning of 'coming from' and 'being from' a community is complex. The issue of doulas as representatives of their communities is addressed in more detail in the Discussion section.

Sustainability of community-based doula programs is another major challenge. Finding a way to support doula work outside of sporadic grant funding is necessary to establish and institutionalize community-based doula programs. As noted above, coordinating or integrating doula programs with other relevant programs within agencies is part of the HC One community-based doula model.

c. doula self-care

When a doula is initially trained, the concept of "doula self-care" is introduced and emphasized. Doula self-care encourages the doula to engage in a number of activities to preserve her energy, patience, and health. For instance, making sure she takes some time to eat and hydrate during a long labor to maintain energy and strength. The Southern program site has a policy that the doula has a mandatory day off the day after a labor. This allows the doula to address the needs of her family, to rest, and to recuperate. The Southern program doula supervisor will also relieve a doula if she has been with a mom laboring for more than 24 hours. One doula mentioned that involvement in her church is a part of her doula self-care and it allows her to maintain a sense of balance and keep her expectations for the moms reasonable without depleting herself.

Doulas often navigate the same systems of care as the moms they work with. Receiving care in the community in which she often lives, works, and serves contributes to intimate knowledge and experience of the local systems of care. This in turn improves the doula's ability to understand and better serve the moms.

Doula self-care may also include safety policies and practices. The Midwestern city site encourages doula safety by not allowing home visits after 6:00 p.m. when it becomes darker earlier in the winter. The Southern program administrator mentioned that she put in a great deal of well-intended effort, though not always well-received by the doula team, to incorporate exercise and better eating into the doula team's work days.

5. Fiscal resources

Fiscal resources include inputs related to financing public health activities (Turnock, 1997; Handler et al., 2001). In this case, the public health activities are the community-based doula services to the pregnant and parenting moms. It is important to understand that most of the key informants stated that they had little knowledge or direct experience with the fiscal matters related to the community-based doula program.

The administrators noted that the largest part of the budget was allotted to personnel costs. The other key informants responded that more funding should be directed towards the salaries of the doulas. As discussed earlier, adequate compensation for doulas is a part of the HC One model's Five Essential Components and an important factor identified by the HealthConnect One staff.

"But if you ask me about the priority, the essence of the program is the relationships so a living wage and benefits for the doulas and money and support for the supervisors, that's really the core of the program."

One stakeholder commented that the community-based doula program was budgeted well. Supplies for the sites were a minimal cost, especially after the initial purchase of items in the early phases of project implementation.

When asked if any parts of the doula program should receive less funding, the doulas expressed that every part of the program should receive more money.

"All money is good money!"

"...everything should get more money."

E. Community-Based Doula Work and the Ten Essential Public Health Services

The processes component of the public health framework is based on the Ten Essential Public Health Services (Harrell & Baker, 1994). This study explored three of the Ten Essential Public Health Services as they relate to community-based doula program activities, including: informing, educating and empowering women about their birth experience, developing agency policies and plans that support community-based doula work, and connecting women with needed health services that they may not otherwise have accessed, such as prenatal care.

1. Informing, educating, and empowering moms

The doulas responded that they informed and educated their moms through childbirth education classes and connecting them to local services such as a health and dental care for the entire family. The moms are empowered through this education because they are better prepared to make health decisions for themselves and their families. The supervisors expressed that the best thing the doulas do for the moms is provide support and education in creative and resourceful ways.

"I will say that most of their education and empowerment, once women are enrolled in the program, is on the fly. So there's a textbook of the way a community-based doula should work and then there's the reality; ok I have to get her to a WIC appointment and we don't have time to talk about breastfeeding so we're going to talk about it in the car."

The doulas help their moms assert themselves and affirm their abilities and rights to make health decisions.

"Our goal is not to change them to what you are but to empower them to make decisions on their own; asking questions. In what I do, I ask educated women, who you think would have it all together, to know that your body is still yours. But they never thought of it that way; I understand you're in a hospital, but yet you get to ask questions, you get to say no, and they're just in shock. No you are still you!"

HC One staff noted that the education and empowerment is facilitated by the relationship between the doula and mom. Interestingly, the doula learns how to finesse this bond through modeling the relationship she has with her supervisor. The relationship between the doula and her supervisor is expected to be a long-term, reciprocal one.

"And similarly, the doula model models the parent-to-child relationship. The parent-child relationship is ongoing; even when the umbilical cord is cut you still maintain that relationship as a trusting relationship. Optimally, it is a nurturing relationship, is a relationship that is mutual...a lot of people think that mothers do all the giving and babies do nothing; but what we've learned through breastfeeding is that it's always a mutual give and take, the same way it is with the doula and the mother; there's this mutuality, this agreement, the trust, its ongoing. And the same way we hope that the relationship between the doula and the supervisor or the doula and their trainer, we've seen over time, there is this symbiotic relationship; 'I need you to do this, I need you to do that' and it goes on for years and years and years."

Neither the responses from the doulas nor the supervisors expressed this symbiotic relationship. The doulas expressed a need to be supported by their supervisors to be successful in their work.

Up to this point, analyzed results of the 15 key informant interviews at the Midwestern and Southern city sites have been presented. What follows is a summary of the Western city program key informant interviews.

F. Western City Site

1. Perspectives on defining success

This part of the Results section outlines the summaries of the key informant interviews at the Western city site in regards to their perspectives on defining a successful community-based doula and successful community-based doula program.

a. a successful community-based doula

The doulas expressed pride in giving back to the recovery community and the positive impact that they had on the mothers and infants under their care. Almost every informant at the Western city site mentioned the inspirational quote "you can't keep what you haven't given away." This motto is commonly used in recovery programs and it reflects that even those that have recovered must continue to serve and help others recover lest they lose their own sobriety. This motto is a motivator for doula success. The program's doula supervisor expressed a great deal of commitment to the doulas and the women being served by the program. The doula supervisor stated that the doulas are successful when they help build and support a healthy relationship between the mom and her baby.

b. <u>a successful community-based doula program</u>

A significant strength of the Western city program is that the doulas are graduates of the recovery program themselves. The doulas are living examples of women who have turned their lives around and are living and working "clean and sober." The doulas are good role models and able to relate opening and directly with the moms. A strength of the program is the duration of contact that doulas have with the moms and their infants. The program is 18 months long allowing for long term contact which can aid in the mom's recovery and maintenance of sobriety.

2. Conceptual framework applied to community-based doula work

Similar to the sections above, the following part of the Results provides a summary of the responses from the Western city site regarding the conceptual framework applied to the structural capacity components.

a. information resources

Doulas at the Western city program collect similar data to the other program sites in the study. Like their colleagues in the Midwestern city site, the Western city doulas expressed the need for required paperwork to be reduced. They would rather spend more time with the moms instead of completing the paperwork.

b. <u>organizational resources</u>

The collaborative relationships doulas have with other community agencies are considered helpful. Some key informants reported that none of the collaborative relationships were harmful to the program.

c. physical resources

The doulas reported that they have had to purchase their own doula supplies because their program did not have the funds to purchase the supplies. The doulas also reported that they could use an additional computer to complete their data entry and paperwork. While the doulas have access to vehicles for transporting moms to their different appointments, they are a shared resource with another program and they are often unavailable and unreliable. Therefore, the doulas have identified a need for more vehicles that are in better condition.

d. <u>human resources</u>

The supervisor noted that while the doulas had good intentions to serve their moms in comprehensive ways they sometimes lacked the knowledge to support those efforts. Training and education were needed to enhance the doulas' skills.

The Southern and Midwestern doula program staff talked about their team camaraderie as an asset to being a successful doula and having a successful doula program. Interestingly, the Western city doula staff spoke about their ability to be painfully honest with each other, while at the same time having difficulty getting along with one another. This difficulty was also noted by the doula supervisor and administrators. The description of the difficulties seemed to revolve around differences in communication styles (e.g., "I didn't like how she spoke to me yesterday in the meeting"). One respondent described the disharmony of the doulas as "fighting like sisters." The doulas explained that they actively practice conflict resolution techniques such as apologizing to the person with whom they had the argument and they noted that they usually move past the disagreements quickly.

All of the key informants stated that more staff doulas were needed. The doulas expressed that they often struggled at maintaining professional boundaries with their clients. The supervisor and administrators echoed this concern. An example of this is when the doulas gave the moms their personal cell phone number instead of the number to the agency to be paged. The doulas stated that they provide their personal cell phone numbers because it is the quickest way for a mom to get a hold of the doula. The doula supervisor and/or other administrators continue to discourage the doulas from sharing their personal cell phone numbers but were unable to provide the doulas with alternatives such as business cell phones.

The administrators seem to act as rule enforcers. They work with the doula supervisor to ensure that policies and procedures are followed by the doulas. The administrators participate in supervisory meetings with the doula team and provide seminars and trainings on issues that the team suggests.

The doulas expressed that the most difficult part of their work is working with moms who are not interested in being mothers and who decide to leave the program before completing all of the requirements. The doulas try to help the mothers maintain custody of their children but they were also aware and understood the limits of their influence on the mother, her behavior and her decisions. The doulas seemed genuinely distressed when speaking about moms who left the recovery program early. The supervisor noted that one of the biggest challenges the doulas encounter is that all moms will not finish the recovery program. The doulas graduated from the recovery program and they expect and believe that everyone else should be able to do so.

Part of the doula work at this Western city site is helping the moms learn to parent clean and sober. Since they are often surrounded by friends and family who may not be clean and

sober, this includes helping the mom find alternative sources of social support. An interesting point raised was that doulas were also potentially involved in helping the moms deal with their substance abuse triggers. For example, immunization shots given to the baby with a needle might be a trigger for some moms. The doulas work hard to find creative ways of helping the moms successfully cope in such situations.

e. <u>fiscal resources</u>

Similar to the doula program staff at the other sites, the Western city program staff stated that they had virtually no knowledge or involvement with the fiscal matters of the program.

However, program areas they identified in need of more funding included: doula compensation, client transportation, equipment and supplies, and training opportunities.

3. Community-based doula work and the ten essential public health services

The most rewarding part of doula work identified at the Western city related to being present and supportive of the mothers during labor and delivery. Sharing their knowledge while supporting a mom's decisions about labor, delivery and even parenting are ways the doulas see themselves empowering their moms.

A chart summarizing the main points from the Results that are congruent or the comments that can inform for the model is in Table 3.

TABLE III

SUMMARY OF THEMES

Congruent: A theme from the key informant interviews that is congruent with the current Health Connect One community-based doula model.

New: A theme from the key informant interviews that can inform HealthConnect One's community-based doula model.

Themes	Congruent/New
Doulas should represent the community they serve.	Congruent
Moms should enroll in the program as early in the pregnancy as	Congruent
possible.	
Relationships in the community help the doulas serve their moms.	Congruent
Community-based doula work requires supportive supervision and	Congruent
agency policies that reflect the fluid nature of doula work.	
Doulas should be adequately compensated for time spent serving	Congruent
moms for extended hours or time outside the regular work day.	
Data can directly influence the way the doulas perform their doula	Congruent/New**
activities and inform the field about community-based doula model.	
Program staff input should be incorporated into budget development to	New
accommodate the needs that directly affect doula work.	
Business cell phones should be provided and considered part of	New
mandatory doula supplies.	
Consider team dynamics when recruiting and building the doula team.	New
Troubleshoot with moms throughout the relationship to address issues	New
that may lead to their not calling the doulas when they go into labor.	
Ensure that replication programs have funds available for, or the	New
means to access, continuing education and training for the doulas.	

^{**} At the same time that the key informants were expressing this theme about using data to inform their work and the model, HealthConnect One was developing a data system for quality assurance and collecting evidence about community-based doula work.

V. DISCUSSION

This study investigated how staff and stakeholders of community-based doula programs implementing the HC One community-based doula model defined success compared to HealthConnect One's definition of success for doulas and the doula programs. Insights and perspectives from the program staff are anticipated to inform and facilitate further development of the HC One model and ensure ongoing relevance and quality in replicating the model in communities across the country. There is growing awareness and support for the CHW model and a better understanding of HC One's community-based doula work will contribute to this trend. Community health workers are an integral part of underserved communities receiving assistance with primary health care activities such as screening and preventative health care services. As such, community-based doula work should continue to be supported, evaluated and funded in underserved communities. HealthConnect One's community-based doula model is nationally replicated and should be included as an exemplary model of community health worker efforts for the maternal and child health population.

As previously described in the Introduction, HealthConnect One's community-based doula model emphasizes the Five Essential Components. They are:

- 1. Employ women who are trusted members of the target community.
- 2. Extend and intensify the role of doula with families from early pregnancy through the first months postpartum.
- 3. Collaborate with community stakeholders/institutions and use a diverse team approach.
- 4. Facilitate experiential learning using popular education techniques and the HC One training curriculum.
- 5. Value the doulas' work with salary, supervision and support.

The interview responses from the HealthConnect One staff reflect this emphasis but the frontline implementation staff did not usually refer directly to the model or the Five Essential

Components. However, many of their responses partially reflect these components and the sentiment of the Five Essential Components is generally on track with what the program staff believes to be important to their success. The differences and similarities between the key informant responses and the model, specifically around the Five Essential Components and the conceptual framework for performance measurement in public health systems, are highlighted. Finally, the manner in which the community staff perspectives may impact the HC One community-based doula model are presented.

The interview responses from the HealthConnect One staff reflected that success was highly dependent upon the program following the Five Essential Components. Through key informant interviews, the HealthConnect One staff suggested that the Western City program was one of the replication sites that most closely followed the HC One community-based doula model. Interestingly, the Administrators at the Midwestern City program and the Western City program were the only key informants to refer to the model in the interviews. However, other key informants, while not specifically referencing the model, provided responses that reflected an awareness and understanding of the Five Essential Components. These understandings in relation to each component are presented below.

A. Reflections on the Five Essential Components

1. Employ women who are trusted members of the target community

All of the key informants agreed that the doulas should represent the community in which they serve. Similar to other community health workers, the doulas were recruited from the community they serve. Generally, this was assumed to mean that the doulas "looked like" and "talked like" the moms in race, ethnicity and language. One of the most interesting findings of

this study is the manner in which the doulas "looked like" their community. The Western city program doulas did not physically look like the moms because they were of different races and ages. However, they "looked" like the moms because they were part of their recovery community and its common experience. The doulas, similar to the moms, had recovered from substance abuse and had in fact graduated from the very same recovery program. The doulas at all of the program sites affirmed this component but it was really highlighted in the Western city program and directly related to having integrity with the moms. Looking like the community in which one serves can mean being similar not only in race or ethnicity but in culture and in experience.

2. Extend and intensify the role of doula with families from early pregnancy through the first months postpartum

The doulas expressed that they wanted to enroll the women into the programs as soon as possible. Without direct empirical evidence from their own work, the doulas believed that their early intervention could improve birth outcomes such as reducing low birthweight babies or preterm births. Intuitively, the doulas knew they could have a positive effect on birth outcomes. The doula programs worked to recruit and enroll the women early in their pregnancies in order to provide case management, group education, and connect them to the many resources needed by underserved populations. As described in the literature review, the use of community health workers such as doulas to improve health access and health screenings for moms and babies is effective and efficient.

3. <u>Collaborate with community stakeholders/institutions and use a diverse team approach</u>

The key informants stated that collaborative relationships with outside agencies in the community were generally helpful to the doulas. Most often, this collaboration was described as connecting moms to alternative or complementary social and health services. Some key informants stated that no relationship, even a difficult one, was a hindrance to the doula's work because there were lessons to be learned even from that negative relationship. The doula is a community health worker and she is able to be a mom's advocate for goods and services in their community such as child care and healthy eating options.

Positive relationships with local hospitals and clinics were certainly a part of what the doulas needed to be successful. For instance, without a positive relationship with the staff at the hospitals, the doulas are limited in their ability to gain access to and serve a laboring mom. The doula supervisors worked to cultivate relationships with the hospital labor and delivery staff so that the presence of the doulas was not only expected but also welcomed. This creates a better work environment for the doulas and subsequently a better birth environment for the mom.

4. <u>Facilitate experiential learning using popular education techniques and the HC One</u> training curriculum

As HC One community-based doula replication sites, the doula programs were trained using the HC One training curriculum. The curriculum teaches doulas how they can reflect and draw upon their own knowledge and experience with problems around pregnancy, labor and the postpartum period to serve the health needs of pregnant and parenting women in their communities. Despite this, the key informants generally did not refer to the HC One training,

popular education techniques or the community-based doula model in the interviews. While they may not have referred directly to these ideas, their responses mirrored pieces of the training model. For example, the doulas expressed a nearly constant desire to learn new doula skills and using their personal experiences as sources of education and expertise.

5. Value the doulas' work with salary, supervision and support

The key informants clearly reflected that doulas needed to be better compensated for time spent on labor and deliveries. Agency administration was perceived as more understanding and supportive of the doulas when the doulas were able to have time for rest and recuperation after labors. Without proper recuperation, burnout and therefore attrition was all but certain.

Supportive supervision, including access to a clinical expert, is important for a doula's success. Clinical expertise helped the doulas answer questions posed by their moms and their families. Supervisor's helped doulas be successful by being available for procedural questions, providing support when dealing with a complicated labor, and equipping them with the educational opportunities and supplies needed to provide doula services. Strong, supportive supervision, as also noted by Behnke and Hans (2002) was considered essential to the success of the doulas.

Outside of the Five Essential Components, there are other important factors in implementing the doula program model. HealthConnect One staff stressed that the community based doula model is not intended to be a stand-alone program and should be integrated into another program such as an early childhood home visitation program. Based on the feedback from the HC One staff and the staff responses in this study, this is an important part of the replication model. The Midwestern City program was integrated into an early childhood home

visiting program and this allowed them to have a larger administrative structure and steadier funding stream to manage and sustain the doula program. However, the Southern city program was dependent on individual grants and was struggling financially at the time of the study interviews. In fact, the doula program had recently lost a staff person because of funding issues that had reduced the doulas to part-time status; a difficult circumstance for women who are already modestly paid. Not only is funding from an existing program important to the doula program's survival but the structure of that program is important to the success of the doula program. For instance, an early childhood home visiting program can provide a formal curriculum for the doulas to follow which ensures that several topics relevant to pregnant and parenting women are covered. It can also help set into place a system of care that follows the mom and baby beyond the immediate postpartum period and well into early childhood. On the other hand, a doula program that is integrated into another program that is too structured or too restrictive may hinder the doula work. For instance, doulas at the Midwestern city program had numerous forms and reports to complete at the same frequency and pace as the agency home visitors who were not doulas. The doulas would quickly fall behind in this paperwork because they often had a variable schedule that greatly limited how easily they could complete the paperwork. Integrating the doula program into another existing program is helpful, appropriate and critical to the long term success of the doula program. The challenge is for the agency to find a way to balance the demands and requirements of both the existing program and the doula program without comprising quality and service to the moms.

Beyond key informant perspectives related to the Five Essential Components of the HC One community based doula model, this thesis captured key informant perspectives on the

structural capacity and process aspects of the conceptual framework for performance measurement in public health systems (Handler, Issel, Turnock, 2001). The framework measures public health performance through examining the public health programs structural capacity and its processes and how they influence public health outcomes. This framework allows for an assessment of the resources, relationships, and activities integral to community-based doula work and its processes.

B. Reflections on Structural Capacity and Processes

1. Human resources

The composition of the doula team was crucial to the success of the doulas. The principle that the doulas must be from the community that they are serving has been detailed previously in this thesis. But more importantly, a doula must have a personality that is conducive to building trusting and supportive relationships quickly, as well as being physically able to do the work. Doula work is inherently intimate and physical and doulas must be able to embrace and demonstrate these capacities. Simply put, a doula cannot be afraid to touch or be touched. Doulas must have a personality that lends itself to bonding with women, connecting with moms and maintaining long-term relationships. To be successful, doulas not only have to be able to have positive relationships with the moms, but amongst themselves, as well. The size of a doula team was important to the overall ability of the doulas to adequately serve the moms. For instance, a team must be large enough that there is a back-up doula available when the primary doula is unavailable. An optimal doula team may be one that has at least two doulas plus a supervisor that can also serve as a back-up doula for long or difficult labors. This would put the doula team in a position where they likely have enough staff to cover moms due to give

birth around the same time as well as work together to share their doula skills and knowledge and maximize access to local resources.

The individual differences and unique personalities of the doulas were consistently noted as both a strength and a weakness. The differences allowed the doulas to learn from each other and incorporate their varied life and work experiences into their doula work. The differences were also a challenge when team dynamics were directly impacted by tension around ideas or personalities. While a harmonious and passionate team contributes to the success of community-based doula programs, a commitment to serving women during pregnancy and childbirth seemed to be the thread that kept the team focused despite personal tensions. The success of a doula was tied to the doula respecting the birth process which is similar to what was reported in the Low, Moffat and Brennan (2006) study on doula work. The findings in this study mirror the limited evidence that exists on community-based doula work.

2. Information resources

Data that was collected by the doulas should be used to inform their work. The data has the potential to inform the program about how to improve outcomes such as improving breastfeeding rates and poor birth outcomes. The data was used by some doulas to modify their doulas services. For instance, a doula may see that the most recent moms had preterm births so she will work to recruit new moms into the program even earlier in pregnancy. The data collected from the Midwestern city program served a dual purpose of being information for the doula program staff but it also met the requirements of the home visiting program it was integrated within. The data collected from the doula programs can be used for quality assurance and improving health outcomes in the future. As HealthConnect One finalizes their data

collection system, considerations should be made to maximize the data collected for both internal program monitoring and improving health outcomes for the moms.

3. Organizational resources

Organizational culture and leadership directly impacted the doulas ability to be successful. An organizational culture that honored the doula work, was flexible and allowed them to serve their moms and complete their other agency responsibilities was optimal. The community-based doula model requires supportive supervision and agency policies and procedures that reflect the fluid nature of doula work.

4. Physical resources

Having full access to the doula, through cell phones especially, helped build trust and assurance with the mom. While the community-based doula role is designed for her to be engaged and active in the community, having a dedicated office space was deemed useful for their administrative work responsibilities. Physical resources, such as cell phones and workspaces are considered necessary means for a successful doula.

5. <u>Fiscal resources</u>

Generally, the doulas, doula supervisors, and the stakeholders had very little information about the fiscal resources related to their doula programs. They were not privy to the budgetary and financial aspects of their programs. The administrators provided the most insight into the fiscal resources because they were directly involved in the development or management of their budgets. The HC One staff was able to provide clear feedback about optimal budget size and spending based on their experiences with the replication process and how programs have appropriated their funds over the years. It may not be necessary for the frontline staff to be

aware of the budget details. However, they did have a sense of shortfalls in the budget that would restrict them from participating in continuing education or from receiving doula supplies. Their input should be incorporated into budget development to accommodate their needs in the budget that directly affect their work such as the aforementioned need for training and supplies.

6. Processes

The conceptual model in this thesis incorporated three of the Ten Essential Public Health Services as processes considered important for the success of community based doula programs (Harrell & Baker, 1994). Through key informant interviews, the processes assessed related to: a) informing, educating and empowering women about their birth experience, b) developing agency policies and plans that support doula work, and c) connecting women with health services that may have otherwise been difficult to access. The interviews revealed that the doulas do inform, educate and empower their moms through the classes and educational sessions both formally (e.g., group prenatal classes) and informally (e.g., impromptu lessons en route to a clinic appointment). The doulas provide critical information about the pregnant woman's body, the birth process, and postpartum realities that give the moms the tools to make informed decisions about their health care. Additionally, the doulas believed that sharing testimonials and personal stories was instrumental in empowering the moms. When moms heard stories of triumph in the lives of their doula or women similar to themselves, they were encouraged and felt more able to overcome the obstacles in their lives.

VI. LIMITATIONS

As with any study, there are concerns regarding whether the study was conducted properly, if the study could be replicated by another researcher and if the data received are interpreted correctly. Each of these concerns is addressed below.

My initial concern with conducting this study with community-based doulas was my own status as a private doula. As explained in the Introduction, private doulas are different from community-based doulas in the length of time that they have a relationship with a mom and therefore the intimacy gained in that relationship. I was concerned that the community-based doulas may feel that as a private doula I was not a part of their community as well as because I was a researcher. I was concerned that they would have difficulty trusting or opening up to me. From what I could tell, this proved not to be true at all. Evidence of this, is the physical change I would see in the doulas such as a change in their posture or even an audible sigh of relief when I explained that I too was a doula. Perhaps knowing this relieved concerns that they were not interacting with solely a researcher but someone keenly aware of doula life.

Separately, there was a concern of a conflict of interest since I had previously served as a Board Member for HealthConnect One. My Board membership involved discussions about larger scale agency matters such as building lease issues or fundraising and development efforts. I disclosed to the key informants that I was formerly a part of the Board, what my role was on the Board and that my relationship with the Board would not influence the study. I explained this to the key informants so that they understood why I was interested in HealthConnect One's model and how I planned to use the information collected. I was also careful to explain the possible perception of a conflict of interest and how it was being addressed so that there was no

unintentional or undue influence on study key informants. This potential conflict of interest was also disclosed to the University. The University found that the disclosure to the key informants as well as my term on the Board having ended prior to conducting the interviews satisfied any concerns around a conflict of interest. The key informants mentioned that sharing this helped them to understand my relationship with HealthConnect One and why I was interested in this topic. I am confident that my status as a private doula and a former Board member did not impact the interviews and the data collected.

Reliability was addressed by following a scripted recruitment process and following the interview guide consistently for each interview.

I have addressed the study's replicability and credibility by adhering to a transparent process of keeping a detailed record of the steps, order, methods and procedures of this study. The processes of this study are available for other researchers to examine.

As the principal investigator, I am the only person that read, coded and interpreted the data; this may impact whether the data interpretation is objective or justifiable.

The results of this study are most directly transferrable to other HC One community-based doula sites. The information in this study may also be applicable to doula programs with similar structure and training.

This study could be replicated by other researchers with similar community-based doula sites. Future directions for research around community-based doula work may include other community-based doula sites that follow HC One's model to see if the themes uncovered still hold true.

Full analysis of the Western City program may also impact whether the information from this site is truly similar or different from the information obtained at the other study sites. It is possible that this program might provide insights that are more specific to doula programs with women in recovery and not for women in general community settings. Overall, what stands to be gained from the study findings is further insight and understanding of what contributes to successful community based doula programs, to inform and support HealthConnect One and their replication efforts.

Finally, member checking did not occur for this study. Member checking involves taking the data back to the key informants and allowing them to confirm that the narrative is a realistic reflection of what was shared (Creswell & Miller, 2000). While it allows the key informants to provide feedback on whether the researcher's interpretations make sense and that the narrative is accurate, there is some debate as to whether or not member checking adds to the validity of a study since it also provides the opportunity for key informants to change their original responses because they were uncomfortable with what was shared or have since had circumstances change their opinion on a subject (Angen, 2000). Due to the compressed timeline for completion of this project, member checking was not feasible.

VII. RECOMMENDATIONS AND CONCLUSIONS

The HealthConnect One model for community-based doula work has been honed over the years through intuition, education, trial and error, and evidence around serving women and infants. This study did not seek to find inadequacies or deficiencies in the model but to unearth points of information that might contribute to further establishing the components of successful doulas and doula programs. The recommendations described below were generated through the key informant interviews that can inform the community-based doula model.

A. Informing the Community-Based Doula Model

1. Data

Data collected by the doulas is and should be used to inform their work. The data has the potential to inform the program about how to improve outcomes such as breastfeeding rates and poor birth outcomes. Data collection is not a formal HealthConnect One essential component. However, the HC One community-based model would benefit from incorporating an emphasis on collecting and using data to both inform the model as well as contribute to ongoing quality assurance of the community-based programs' activities and outcome evaluations. The data collection system being developed by HC One will help in this effort. Data such as the number of home visits conducted, the number of face-to-face meetings, and other process data may be useful for HC One and the doula program administrators to assess and ensure that they are meeting their program goals. Other data about the labor and delivery experience such as the comfort techniques utilized along with the doulas impression of using such techniques. This kind of data would be helpful to the doula supervisor and the other doulas on the team because it

could provide insight into techniques that are really helpful to laboring moms, which techniques are used the most (or the least) or that a certain technique needs to be modified for better use.

Overall, the data can directly influence the way the doulas perform their doula activities and in turn have a positive effect on the moms when service provision is improved from data collection and analysis.

2. Compensation

It was clear that the key informants felt that the doulas were generally underpaid and should be adequately compensated for time spent serving the moms, especially for time outside of the regular 9a to 5p schedule. The nature of community-based doula work does not lend itself to a limited structured schedule. Team morale and productivity suffers when the doulas are not able to rest following a birth and are held to the same standards as the rest of the home visitors. The agency leadership must understand that the work of the doula is not exactly the same as the other agency staff; in fact it is inherently different because of the variable schedule. A clear understanding and appreciation for what doula work entails is congruent with HealthConnect One's Five Essential Components. As replication sites are developed, some serious discussions must be had with the agency leadership about appropriate compensation for the doulas in terms of salary and their variable work schedule. Any agency that is considering integrating a doula program into an existing program must develop a plan to accommodate the doulas. The agency has to have plans in place to address how the doula will account for her time (how can she clock in and out if she is at a hospital during a labor?), how will the hours past the regular work day be handled (is flex time or overtime pay available?), and how does the agency plan to help the doulas achieve a good work-life balance (does the doula have time off after a birth to address her own home and family needs?). These are the type of organizational issues that potential doula programs must seriously consider and plan for in order to maintain an energized and productive doula teams.

3. Cell phones as necessary supplies

Cell phones are already a regular part of most of our work and personal lives. The doulas in this study emphasized that cell phones were an essential part of their success as doulas. As a part of the replication process, HC One should emphasize that access to a cell phone for business purposes be a part of needed supplies. Our modern age of electronic communication calls for it and so do the needs of today's moms.

4. Team dynamics

It is clear that the HC One model emphasizes that the doulas represent the community they are serving. To that I would add that the recruitment should also consider the individual personalities that feed team dynamics that are productive for the program and therefore for the moms. During the hiring phase of a doula program, it may be difficult to discern these team dynamics and how they may or may not affect the program but it is something worth considering during the program training.

5. Calling the doula for the birth

There were moms that would call the doula for labor support at any time, and the doulas could reasonably predict which moms would likely not call when they went into labor, particularly when they had inconsistent contact with the mom during the pregnancy. However, it was not clear why a mom would not call the doula when the relationship was seemingly well-established. Some preliminary explanations from the doulas include the moms stating that they

did not want to disturb the doulas when they went into labor in the middle of the night or the mom's family expressing that they did not want the doula at the birth. This phenomenon is a concern to the frontline program staff and is certainly an area to be studied further. When the moms do not call, the doula feels confused, even hurt, and believing that her work up until that point was in vain. The doulas call to action is continuous labor support and not fulfilling that core function is disappointing. In terms of the model, there should be a specific focus on troubleshooting issues with the mom throughout the prenatal period that may lead to her not calling the doula when she goes into labor. This may include helping the mom to become comfortable calling the doula at non-traditional work times and ensuring that the doula's contact information is a prominent part of the mom's labor and delivery overnight bag preparation. The doula could also sit down with the mom and the family members who plan to attend the birth to discuss their questions, concerns and reservations about the doula. The family is sometimes concerned that they will be pushed out of the way and not made to feel a part of the birth if the doula is present or they sometimes feel that the doula is an unnecessary person at the birth if they are going to be there already. Interestingly, doulas are trained to include friends and family in attendance into their doula activities by demonstrating comfort techniques and encouraging them to support the mom with these techniques. The doula also works with the family to help them understand that she is there to support the mom, the family and friends by ensuring that they are all well-nourished and rested throughout the labor, too.

6. Continuing education

Continuing education was a strong desire amongst the doulas. When completing the doula program budget plans, HealthConnect One should ensure that potential replication sites

have funds available for continuing education. If limited funds are not available for continuing education, the site should have plans in place for creative means for continuing education such as collaborating with a local agency to share training expenses or even exchanging the services of in-house topic experts as payment.

Given the growing importance of community health workers in the Patient Protection and Affordable Care Act of 2010, the community-based doula model has important and direct implications for healthcare cost savings. The HC One community-based doula model uses women from the community to be in relationship with women early in their pregnancies, to provide continuous labor support, and to remain in relationship with the women into the early postpartum period. The benefits of community health workers and continuous labor support are well-documented. Community-based doula work goes beyond continuous labor support and this long-term relationship is what makes a community-based doula unique. However, research on community-based doula work is limited and increased validation and confirmation of its contribution to the health of women and children, particularly those most vulnerable, are needed. This thesis adds to this body of knowledge by examining and sharing how community-based doulas define success for themselves and for their programs. These insights can contribute to HealthConnect One's community-based doula model by detailing the parts of the model that were affirmed by the doula program staff and introducing some additional important factors that contribute to doula success that were less known to HC One. As HealthConnect One continues to replicate their model across the United States, incorporating some of the findings from this study would enhance their community-based doula model and further the efforts of communitybased doula programs to meet the needs of women and children in communities across the country.

REFERENCES

- Abma, T. A. & Stake, R. E. (2001). Stake's responsive evaluation: Core ideas and evolution.

 New Directions for Evaluation, 2001, 7-22. doi: 10.1002/ev.31
- Abramson, R. (2004). The critical moment and the passage of time: reflections on community-based doula support. *International Journal of Childbirth Education*, 19, 34-35.
- Abramson, R., Breedlove, G. K. & Isaacs, B. (2006). The community-based doula: Supporting families before, during, and after childbirth. Washington, DC: Zero to Three Press.
- Altfeld, S. (2002). The Chicago doula project evaluation, final report. The Ounce of Prevention Fund.
- American Academy of Pediatrics: Section on Breastfeeding. (2005). Breastfeeding and the use of human milk, *Pediatrics*, *115*, 496-506. doi: 10.1542/peds.2004-2491
- American College of Obstetricians and Gynecologists (2007). ACOG Committee Opinion No. 394: Cesarean Delivery on Maternal Request. *Obstetrics & Gynecology*. 110, 1501. doi: 10.1097/01.AOG.0000291577.01569.4c
- Angen, M. A. (2000). Evaluating interpretive inquiry: reviewing the validity debate and opening the dialogue. *Qualitative Health Research*, *10*, 378. doi: 10.1177/104973230001000308
- Auerbach, C. F. & Silverstein, L.B. (2003). Qualitative data: An introduction to coding and analysis. NYU Press.
- Behnke, E. F. & Hans S. L. (2002). Becoming a doula. Zero to Three, 23, 9-13.
- Berg, C. J., Mackay, A.P., Qin, C., Callaghan, W.M. (2009). Overview of maternal morbidity during hospitalization for labor and delivery in the United States: 1993-1997 and 2001-2005. *Obstetrics & Gynecology*, 113, 1075-81. doi: 10.1097/AOG.0b013e3181a09fc0

- Bergeron, V. (2007). The ethics of cesarean section on maternal request: a feminist critique of the American college of obstetricians and gynecologists' position on patient-choice surgery. Bioethics, 21, 478-487. doi:10.1111/j.1467-8519.2007.00593.x
- Boulding, K. (1956). The image: knowledge of life in society. Ann Arbor: University of Michigan Press.
- Breedlove, G. (2005). Perceptions of social support from pregnant and parenting teens using community-based doulas. *Journal of Perinatal Education*, *14*, 15-22. doi: 10.1624/105812405X44691
- Campbell, D. A., Lake, M. F., Falk, M., Backstrand, J. R. (2006). Randomized control trial of continuous support in labor by a lay doula. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *35*, 456-464. doi: 10.1111/j.1552-6909.2006.00067.x
- Centers for Disease Control and Prevention. (2003). *Revised Standard Certificates and Reports*.

 Atlanta, GA: National Center for Health Statistics. Retrieved September 24, 2010 from http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm.
- Collaborative Group on Hormonal Factors in Breast Cancer, Breast cancer and Breastfeeding (2002). Collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50,302 women with breast cancer and 96,973 women without the disease. *The Lancet*, 360, 187-195. doi: 10.1016/S0140-6736(02)09454-0
- Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*, 124-130. doi:10.1207/s15430421tip3903_2

- Danel, I., Berg, C., Johnson, C. H., Atrash, H. (2003). Magnitude of maternal morbidity during labor and delivery: United States, 1993-1997. *American Journal of Public Health*, 93, 631-634. doi:10.1097/01.OGX.0000083706.47431.B1
- Declercq, E.R., Sakala, C., Corry, M.P. & Applebaum, S. (2006). Childbirth Connection.

 Listening to mothers II: Results of the second national U.S. survey of women's childbearing experiences. Retrieved from www.childbirthconnection.org/listeningtomothers/.
- Declercq, E. R., Sakala, C., Corry, M. P., Risher, P. & Applebaum, S. (2002). Maternity Center Association. *Listening to mothers: report of the first national U.S. survey of women's childbearing experiences*. Retrieved from www.childbirthconnection.org/listeningtomothers/.
- DONA International. (2005). The birth doula's contribution to modern maternity care.

 Retrieved June 2, 2010 from

 http://www.dona.org/publications/position_paper_birth.php#.
- DONA International. (2009). eDoula Special Issue: U.S. doulas and third party

 reimbursement insurance coverage for doula services in the U.S. is a possibility.

 Retrieved September 29, 2009 from

 http://www.dona.org/publications/edoula%20revised.php.
- Epstein, R. H. (2010). Get me out: A history of childbirth from the garden of Eden to the sperm bank. New York: W. W. Norton & Company.
- Freire, P. (2000). Pedagogy of the oppressed. New York: Continuum.

- Goodwin, K. & Tobler, L. (2008). Community health workers: Expanding the scope of the health care delivery system. National Conference of State Legislatures. Retrieved from http://www.ncsl.org/print/health/CHWBrief.pdf.
- Hans, S. L. (2005). Doula support for young mothers: A randomized trial. Final report to the maternal and child health bureau research program (R40 MC 00203-04). Washington, DC: Department of Health and Human Services.
- Handler, A., Issel, M., & Turnock, B. (2001). Conceptual framework to measure performance of public health system. *American Journal of Public Health*, 91, 1235-1239.
 doi:10.2105/AJPH.91.8.1235
- Hans, S. & Korfmacher, J. (2002). The professional development of paraprofessionals. *Zero to three*, 23, 4-8.
- Harrell, J. A. & Baker, E. L. (1994). The essential services of public health. *Leadership in Public Health*, *3*, 27-30. Chicago, IL: University of Illinois at Chicago, School of Public Health.
- Hodnett, E. D., Gates, S., Hofmeyr, G. J., Sakala, C., Weston, J. (2011). Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews*. doi: 10.1002/14651858.CD003766.pub3
- Hodnett, E. D., & Osborn, R. W. (1989). A randomised trial of the effects of monitrice support during labor: Mothers' views two to four weeks postpartum. *Birth*, *16*, 177-183.
- H.R. 3590, 111th Congress. (2009). *Patient Protection and Affordable Care Act*.
 Washington, DC: U.S. Government Printing Office. Retrieved from http://www.gpo.gov/.

- Kar, S. B., Pascual, C. A., & Chickering, K. L. (1999). Empowerment of women for health promotion: A meta-analysis, *Social Science & Medicine*, 49, 1431-1460. doi: 10.1016/S0277-9536(99)00200-2.
- Kennell, J. H., Klaus, M. H., McGrath, S. K., Robertson, S. S., & Hinkley, C. W. (1991).Continuous emotional support during labor in a U.S. hospital. *Journal of the American Medical Association*, 265, 2197-2201.
- Kent, G. (2006). WIC's promotion of infant formula in the United States. *International Breastfeeding Journal*, 1:8. doi:10.1186/1746-4358-1-8
- Klaus, M. H., Kennel, J. H., Klaus, P. H. (1993). Mothering the mother: How a doula can help you have a shorter, easier, and healthier birth. Reading, MA: Addison-Wesley Publishing Company.
- Langer A., Campero, L., Garcia, C., Reynoso, S. (1998). Effects of psychosocial support during labour and childbirth on breastfeeding, medical interventions, and mothers' wellbeing in a Mexican public hospital: a randomised clinical trial. *British Journal of Obstetrics and Gynaecology*, 105, 1056-63. doi:10.1111/j.1471-0528.1998.tb09936.x
- Lantz, P. M., Low, L. K., Varkey, S., & Watson, R. L. (2005). Doulas as childbirth paraprofessionals: Results from a national survey. *Women's Health Issues*, *15*, 109-116. doi:10.1016/j.whi.2005.01.002
- Lantz, P. M., Low, L. K., & Watson, R. L. (2004). Doulas' views on the rewards and challenges of their work. *International Journal of Childbirth Education*, 19, 31-34.

- Lewin, S., Dick, J., Pond, P., Zwarenstein, M., Aja, G. N., vanWyk, B. E., Bosch-Capblanch, X., & Patrick, M. (2005). Lay health workers in primary and community health care.

 Cochrane Database of Systematic Reviews. doi: 10.1002/14651858.CD004015.pub2
- Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X., van Wyk, B.
 E., Odgaard-Jensen, J., Johansen, M., Aja, G.N., Zwarenstein, M., Scheel, I. B. (2010).
 Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database of Systematic Reviews*2010. doi: 10.1002/14651858.CD004015.pub3
- Low, L.K., Moffat, A. & Brennan, P. (2006). Doulas as community health workers: Lessons learned from a volunteer program. *Journal of Perinatal Education*, *15*, 25-33. doi: 10.1624/105812406X118995
- MacQueen, K., McLellan, E., Kay, K., & Milstein, B. (1998). Codebook development for teambased qualitative analysis. *Cultural Anthropology Methods*, *10*, 31-36. doi:10.1177/1525822X980100020301
- Mason, J. (1996). Qualitative researching. London: Sage Publications Ltd.
- Mason, J. (2002). Qualitative researching. London: Sage Publications Ltd.
- McCool, W. F. & Simeone, S. A. (2002). Birth in the United States: An overview of trends past and present. *Nursing Clinics of North America*, *37*, 735-746. doi: 10.1016/S0029-6465%2802%2900020-8

- McGrath, S. K. & Kennell, J. H. (2008). A randomized controlled trial of continuous labor support for middle-class couples: Effect on cesarean delivery rates. *Birth*, *35*, 92-97. doi: 10.1111/j.1523-536X.2008.00221.x
- McGrath, S., Kennell, J., Suresh, M., Moise, K., Hinkley, C. (1999). Doula support vs. epidural analgesia: Impact on cesarean rates [Abstract]. *Pediatric Research*, 45, 16A. doi:10.1203/00006450-199904020-00101
- Menacker, F. & Hamilton, B. E. (2010). Recent trends in cesarean delivery in the United States.

 NCHS data brief, no. 35. Hyattsville, MD: National Center for Health Statistics.
- Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education*, *1*, 58-63. doi: 10.1177/1541344603252172
- Miesnik, S. R. & Reale, B. J. (2007). A review of issues surrounding medically elective cesarean delivery. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 36*, 605-615. doi: 10.1111/J.1552-6909.2007.00196.x
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis*. Thousand Oaks, CA: Sage Publications.
- Mottl-Santiago, J., Walker, C., Ewan, J., Vragovic, O., Winder, S., & Stubblefield, P. (2008). A hospital-based doula program and childbirth outcomes in an urban, multicultural setting.
 Maternal & Child Health Journal, 12, 372-377. doi:10.1007/s10995-007-0245-9.
- Muhr, T. & Friese, S. (2004). User's manual for ATLAS.ti 5.0: Visual qualitative data analysis & knowledge management in education, business, administration & research. Berlin.

- National Institute of Health. (2006). State of-the-science conference statement: Cesarean delivery on maternal request.

 http://consensus.nih.gov/2006/CesareanStatement Final053106.pdf.
- Nommsen-Rivers, L. A., Mastergeorge, A. M., Hansen, R. L., Cullum, A. S. & Dewey, K. G. (2009). Doula care, early breastfeeding outcomes, and breastfeeding status at 6 weeks postpartum among low-income primiparae. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 38*, 157-173. doi: 10.1111/j.1552-6909.2009.01005.x
- Rahman, A., Malik, A., Sikander, S., Roberts, C. & Creed, F. (2008). Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. *Lancet*, *13*, 902–909. doi: 10.1016/S0140-6736(08)61400-2
- Ransjö-Arvidson, A., Matthiesen, A., Lilja, G., Nissen, E., Widström, A., & Uvnäs-Moberg, K. (2001). Maternal analgesia during labor disturbs newborn behavior: Effects on breastfeeding, temperature, and crying. *Birth*, *28*, 5-12. doi: 10.1046/j.1523-536x.2001.00005.x
- Raphael, D. (1973) A tender gift: breastfeeding. Englewood Cliffs, NJ: Prentice-Hall.
- Rosenthal, E. L., Brownstein, J. N., Rush, C. H., Hirsch, G. R., Willaert, A. M., Scott, J. R., Holderby, L. R., & Fox, D. (2010). Community health workers: Part of the solution. *Health Affairs*, 29, 1338-1342. doi:10.1377/hlthaff.2010.0081

- Sakala, C. (2006). Childbirth Connection. *Vaginal or cesarean birth? A systematic review to determine what is at stake for mothers and babies*. Retrieved from www.childbirthconnection.org/listeningtomothers/.
- Scott, K. D., Berkowitz, G., & Klaus, M. H. (1999). A comparison of intermittent and continuous support during labor: a meta-analysis. *American Journal of Obstetrics and Gynecology*, 180, 1054-1059. doi:10.1016/S0002-9378(99)70594-6
- Scott, K. D., Klaus, P. H., & Klaus, M. H. (1999). The obstetrical and postpartum benefits of continuous support during childbirth. *Journal of Women's Health & Gender-Based Medicine*, 8, 1257-1264. doi:10.1089/jwh.1.1999.8.1257
- Shyken, J. M. & Petrie, R. H. (1995). Oxytocin to induce labor. *Clinical Obstetrics* & *Gynecology*. 38, 232-245. doi:10.1097/00003081-199506000-00006
- Simkin, P. P. & O'Hara, M. (2002). *American Journal of Obstetrics and Gynecology*. 186, S131-159. doi:10.1016/S0002-9378(02)70188-9
- Sosa, R., Kennell, J. H., Klaus, M. H., Robertson, S., & Urrutia, J. (1980). The effect of a supportive companion on perinatal problems, length of labor, and mother-infant interaction. *The New England Journal of Medicine*, 303, 597-600. doi:10.1056/NEJM198009113031101
- Stuebe, A. M., Rich-Edwards, J. W., Willett, W. C., Manson, J. E., & Michels, K. B. (2005).

 Duration of lactation and incidence of type 2 diabetes. *Journal of the American Medical Association*, 294, 2601-2610. doi: 10.1001/jama.294.20.2601

- Swider, S. M. (2002). Outcome effectiveness of community health workers: An integrative literature review. *Public Health Nursing*, *19*, 11-20. doi: 10.1046/j.1525-1446.2002.19003.x
- Swider, S. M., Martin, M., Lynas, C. & Rothschild, S. (2010). Project MATCH: Training for a promotora intervention. The Diabetes Educator, 36, 98-108. doi: 10.1177/0145721709352381
- Trueba, G., Contreras, C., Velazco, M., Lara, E. & Martinez, H. (2000). Alternative strategy to decrease cesarean section: Support by doulas during labor. *Journal of Perinatal Education*. 9, 8–13. doi: 10.1624/105812400X87608
- Turnock, B. J. (1997). Public health: What it is and how it works. Gaithersburg, MD: Aspen Publications.
- Ulin, P. R., Robinson, E. T., Tolley, E. E. (2005). Qualitative Methods in Public Health: A Field Guide for Applied Research. San Francisco, CA: Jossey-Bass.
- U.S. Department of Health and Human Services. (2008). HRSA awards \$6.3 million to lay health workers in primary and community health care for maternal and child health and the management of infectious diseases launch new parents initiative, 'doulas' training.
 Washington, DC. Maternal and Child Health Bureau, Health Resources and Services Administration. Retrieved from

http://archive.hrsa.gov/newsroom/releases/2008/doulastraining.htm.

- U.S. Department of Health and Human Services. (2007). Community health workers national workforce study. Rockville, MD: Health Resources and Services Administration.
 Retrieved from ftp://ftp.hrsa.gov/bhpr/workforce/chw307.pdf.
- U.S. Department of Health and Human Services. (2001). *Healthy people 2010: Understanding and improving health*. Washington, DC. Retrieved on April 12, 2007 from http://web.health.gov/healthypeople/document.
- U.S. Agency for Healthcare Research and Quality. (2007). HCUPnet: Healthcare cost and utilization project. Rockville, MD: AHRQ. Retrieved June 26, 2010 from http://hcupnet.ahrq.gov/.
- Viswanathan, M., Kraschnewski, J., Nishikawa, B., Morgan, L. C., Thieda, P., Honeycutt, A., Lohr, K. N., Jonas, D. (2009). Outcomes of community health worker interventions. evidence report/technology assessment No. 181 (Prepared by the RTI International—University of North Carolina Evidence-based Practice Center under Contract No. 290 2007 10056 I.) AHRQ Publication No. 09-E014. Rockville, MD: Agency for Healthcare Research and Quality.
- Weimer, J. P. (2001). *The economic benefits of breastfeeding: A review and analysis*.

 Washington, DC: U.S. Dept. of Agriculture, Economic Research Service.
- Witmer, A., Seifer, S. D., Finocchio, L., Leslie, J., O'Neil, E. H. (1995). Community health workers: integral members of the health care work force. *American Journal of Public Health*, 85, 1055-1058. doi:10.2105/AJPH.85.8_Pt_1.1055

- World Health Organization. (1985). Appropriate technology for birth. *Lancet*. 326(8452), 436-437.
- Zhang, J, Bernasko, JW, Leybovich, E, Fahs, M, & Hatch, MC (1996). Continuous labor support from labor attendant for primiparous women: A metaanalysis. *Obstetrics and Gynecology*, 88(4), 739-744.

APPENDICES

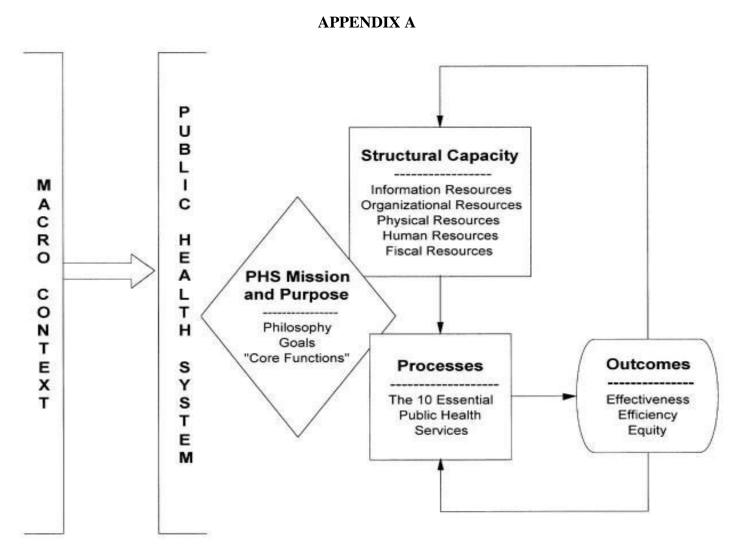
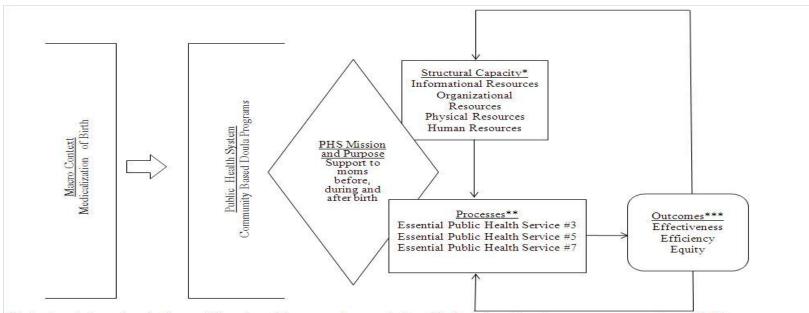


FIGURE 1. Conceptual framework to measure performance of public health system (Handler, Issel, Turnock, 2001)

APPENDIX B



This thesis study focused on the Structural Capacity and Processes of community-based doula work and how those components contribute to defining success. This figure is based on the work of Handler, Issel, Turnock, 2001.

*Structural Capacity

Informational Resources: The data collection infrastructure and data collected by the doulas about their encounters with the moms

Organizational Resources: The mission, leadership and collaborative relationships inside/outside the doula's agency

Physical Resources: The equipment and resources used by the doulas in their doula work

Human Resources: The traits of the doula as individuals and as members of a doula team

Fiscal Resources: The financial inputs that help/hinder doula work

Processes

Essential Public Health Service #3: Informing, educating and empowering people about their birth experience.

Essential Public Health Service #5: Developing agency policies and plans that support doula work.

Essential Public Health Service #7: Connecting women with health services that they may not otherwise access such as prenatal care.

***This study was not designed to examine the mom's satisfaction with doula services nor the health-related outcomes of doula work at these sites.

Figure 2. Conceptual Framework to Measure Performance of Public Health System Applied to Community-Based Doula Work

APPENDIX C

Key Informant Interview: Community-Based Doula/Supervisor

Introduction

Thank you so much for taking the time to sit down with me for this study. As I mentioned to you on the phone/via email, the purpose of this research is to find out how community-based doula staff define a successful community-based doula program. Your perceptions on what makes a successful community-based doula program will be compared to the perceptions from HealthConnect One. Together, these results will be used to make recommendations about a combined definition of a successful community-based doula replication site. My intent is to use your feedback to positively influence the standard practice of replicating community-based doula programs.

We'll begin with the consent. This is the consent to participate in this study. Here's a copy for you; we'll go over the consent together and you can also read it on your own. Please let me know if you have any questions or concerns about it. (Go through the consent, highlighting the salient points from each section, allow participant to read the consent on their own. Participant must sign the consent and indicate permission to be audio-recorded for the study. If they agree to participate, they keep one consent for themselves and the interviewer keeps the signed copy.)

Ok, thanks for agreeing to participate in the study. I'll start the recorder now and have you speak directly into this microphone to help me record what you're saying. I'll also be taking notes by hand but I don't want to miss anything. So, you'll see me looking down at my paper sometimes and sometimes at the laptop screen to make sure that it is recording you well; please don't think I'm not paying attention!

(Transition)

We'll start with some basic information about who you are and what you do for the agency.

Background

Tell me what your role is with this agency?

How long have you been with this agency?

How long have you been a doula?

How many clients/moms do you have now?

How long have you been a doula?

APPENDIX C (continued)

What kinds of continuing education do you do to keep maintain your doula skills? Have you pursued any kind of certification around your doula work?

Describe your community based doula program to me:

What are the strengths of your program?

What are the challenges of your program?

(Transition)

We'll now talk about big picture ideas of community-based doula work:

- 1) In your own words, describe what makes a community-based doula (the person) successful?
- 2) What makes a community-based doula replication site (program) successful?

(Transition)

The Structural components that make a successful doula replication site:

Now we're going to talk about the Structural components that make a successful doula replication site. The structural components are the resources and relationships that make the public health system work:

Organizational Resources:

The first one we'll talk about is organizational resources. That would be the resources such as the agency culture, mission, and/or leadership within the organization. It is also the collaborations outside the agency.

Organizational Resources:

- A. What are the leadership aspects that exist inside your agency that influence your work as a doula?
- B. What about those leadership aspects add to/help your work as a doula?
- C. What about those leadership aspects take away from/hinder your work as a doula?
- A. What are the collaborative relationships that exist outside your agency that have an influence on your work as a doula?

APPENDIX C (continued)

- B. What about those collaborative relationships add to/help your work as a doula?
- C. What about those collaborative relationships take away from/hinder your work as a doula?

(Transition)

Now we're going to talk about the information resources. That would be the encountered based data or data you collect on the women you serve.

Information Resources

- A. What data do you collect now about your encounters with women?
- B. How is this data helpful to you?
- C. What data would be more helpful to collect?
- D. What outcomes do you collect data on that don't really reflect your success?
- E. What are the outcomes you would like to track to represent your success(es)?

(Transition)

Now we'll talk about the public health workforce of this program; the Human Resources, the doulas!

Human Resources

- A. Tell me how you work with/in what way you work with the other doulas on your team?
- B. What are some of the assets of your doula team?
- C. What are some of the challenges of your doula team?

(Transition)

Now we'll talk about the financial inputs that go into your program; the fiscal resources. Examples of things to consider are: personnel, training materials, continuing education, program supplies, service provision, administrative/overhead costs, and consultation by HC One.

APPENDIX C (continued)

Fiscal Resources

- A. What parts of the doula program get the most money/funding? What parts should get more money?
- B. What parts should get less money?

(Transition)

Now we'll talk about the physical resources that contribute to your program; that would be equipment, building, offices, etc.

Physical Resources

- A. What are some of the physical resources (e.g., equipment, building, offices, etc.) that help you to be a successful doula?
- B. What could be improved?

We'll move on to talk about some of the processes in your agency for the community-based doula program.

- 1) The processes that contribute to a successful site:
 - A. How do you inform, educate and empower women about their birth experience?
 - B. Tell me about the best parts of what you do for women.
 - C. What are some of the most challenging aspects of serving the women?
 - D. How would you do things differently for the women?
 - A. What policies and plans do you use to help women with their individual health?
 - B. What policies and plans in your agency help you with **your own** health?
 - C. What are some of the best aspects of these policies/plans?
 - D. What would you like to see improved about these policies/plans?

(Transition)We are finally finished with all of my questions. I just need a couple of pieces of demographic information about you and we'll be done.

Final Demographics

What year were you born?

What is your race?

APPENDIX D

Key Informant Interview: Administrators

Introduction

Thank you so much for taking the time to sit down with me for this study. As I mentioned to you on the phone/via email, the purpose of this research is to find out how community-based doula staff define a successful community-based doula program. Your perceptions on what makes a successful community-based doula program will be compared to the perceptions from HealthConnect One. Together, these results will be used to make recommendations about a combined definition of a successful community-based doula replication site. My intent is to use your feedback to positively influence the standard practice of replicating community-based doula programs.

We'll begin with the consent. This is the consent to participate in this study. Here's a copy for you; we'll go over the consent together and you can also read it on your own. Please let me know if you have any questions or concerns about it. (Go through the consent, highlighting the salient points from each section, allow participant to read the consent on their own. Participant must sign the consent and indicate permission to be audio-recorded for the study. If they agree to participate, they keep one consent for themselves and the interviewer keeps the signed copy.)

Ok, thanks for agreeing to participate in the study. I'll start the recorder now and have you speak directly into this microphone to help me record what you're saying. I'll also be taking notes by hand but I don't want to miss anything. So, you'll see me looking down at my paper sometimes and sometimes at the laptop screen to make sure that it is recording you well; please don't think I'm not paying attention! One last thing, for the ease of conversation, you'll hear me say just "doula" instead of "community-based doula" but know that I am referring to community-based doulas.

(Transition)

We'll start with some basic information about who you are and what you do for the agency.

Background

Tell me what your role is with this agency?

How long have you been with this agency?

Describe your community based doula program to me:

APPENDIX D (continued)

What are the strengths of your program?

What are the challenges of your program?

(Transition)

We'll now talk about big picture ideas of community-based doula work:

- 1) In your own words, describe what makes a community-based doula (the person) successful?
- 2) What makes a community-based doula replication site (program) successful?

(Transition)

Now we're going to talk about the Structural components that make a successful doula replication site. The structural components are the resources and relationships that make the public health system work:

Organizational Resources:

The first one we'll talk about is organizational resources. That would be the resources such as the agency culture, mission, and/or leadership within the organization. It is also the collaborations outside the agency.

- A. What are the leadership aspects (culture, mission, structure) that exist inside your organization that influence your program?
- B. What about those leadership aspects (those things) add to/help your program?
- C. What about those leadership aspects (those things) take away from/hinder your program?
- A. What are the collaborative relationships that exist outside your organization influence your program?
- B. What about those collaborative relationships add to/help your program?
- C. What about those collaborate relationships take away from/hinder your program?

(Transition)

Now we're going to talk about the information resources. That would be the encountered based data or data you collect on the women your program serves.

APPENDIX D (continued)

Information Resources

- A. What data do you collect now about your doula team's encounters with women?
- B. How is this data helpful to your program?
- C. What data would be more helpful to collect about your program?
- D. What outcomes do you collect data on that don't really reflect your success?
- E. What are the outcomes you would like to track to represent your success(es)?

(Transition)

Now we'll talk about the public health workforce of your program; the Human Resources.

Human Resources

- A. Who makes up your doula program staff?
- B. What does their background/training look like?
- C. Is there anything you'd like to see different about the doula workforce in your program?
- D. What are some of the assets of your doula staff?
- E. What are some of the challenges of your doula staff?

(Transition)

Now we'll talk about the financial inputs that go into your program; the fiscal resources.

Fiscal Resources

- A. If you were to divide your doula program budget into a pie, how much (or what percent) would be divided up between personnel, training materials, continuing education, program supplies, service provision, administrative/overhead costs, and consultation by HC One?
- B. Ideally, what would that pie look like if you could change those pie slices (percents)? (Transition)

APPENDIX D (continued)

Now we'll talk about the physical resources that contribute to your program; that would be equipment, building, offices, etc.

Physical Resources

- A. What are the physical resources that help your program?
- B. What about the physical resources hinder your program?

(Transition)

We'll move on to talk about some of the processes in your agency for the community-based doula program.

The processes that contribute to a successful site:

- A. How does your doula team inform, educate and empower women about their birth experience?
- B. What would you like to do to improve/see different about the way this is done?
- A. What policies and plans exist that help your clients with their individual health?
- B. What policies and plans exist that help the doulas with their own health?
- C. What would you like to do to improve/see different about the way this is done?

(Transition)

We are finally finished with all of my questions. I just need a couple of pieces of demographic information about you and we'll be done.

Final Demographics

What year were you born?

What is your race?

APPENDIX E

Key Informant Interview: Stakeholders

Introduction

Thank you so much for taking the time to sit down with me for this study. As I mentioned to you on the phone/via email, the purpose of this research is to find out how community-based doula staff define a successful community-based doula program. Your perceptions on what makes a successful community-based doula program will be compared to the perceptions from HealthConnect One. Together, these results will be used to make recommendations about a combined definition of a successful community-based doula replication site. My intent is to use your feedback to positively influence the standard practice of replicating community-based doula programs.

We'll begin with the consent. This is the consent to participate in this study. Here's a copy for you; we'll go over the consent together and you can also read it on your own. Please let me know if you have any questions or concerns about it. (Go through the consent, highlighting the salient points from each section, allow participant to read the consent on their own. Participant must sign the consent and indicate permission to be audio-recorded for the study. If they agree to participate, they keep one consent for themselves and the interviewer keeps the signed copy.)

Ok, thanks for agreeing to participate in the study. I'll start the recorder now and have you speak directly into this microphone to help me record what you're saying. I'll also be taking notes by hand but I don't want to miss anything. So, you'll see me looking down at my paper sometimes and sometimes at the laptop screen to make sure that it is recording you well; please don't think I'm not paying attention! One last thing, for the ease of conversation, you'll hear me say just "doula" instead of "community-based doula" but know that I am referring to community-based doulas.

(Transition)

We'll start with some basic information about who you are and what you do for the agency.

Tell me what your role is with this agency?

How long have you been with this agency?

Describe your community based doula program to me:

What are the strengths of your program?

What are the challenges of your program?

APPENDIX E (continued)

(Transition)

We'll now talk about big picture ideas of community-based doula work:

- A. In your own words, describe what makes a community-based doula (the person) successful?
- B. What makes a community-based doula replication site (program) successful?

(Transition)

Now we're going to talk about the Structural components that make a successful doula replication site. The structural components are the resources and relationships that make the public health system work:

The Structural components that make a successful doula replication site:

<u>Organizational Resources:</u>

The first one we'll talk about is organizational resources. That would be the resources such as the agency culture, mission, and/or leadership within the organization. It is also the collaborations outside the agency.

- A. What are the leadership aspects (culture, mission, structure) that exist inside this organization that contribute to the success of your program?
- B. What about those leadership aspects help the program be successful?
- C. What about those leadership aspects hinder this agency from being a successful program?
- A. What are the collaborative relationships that exist outside this agency that help this program to be a successful program?
- B. What about those collaborative relationships help this be a successful program?
- C. What about those collaborative relationships hinder this agency from being a successful program?

(Transition)

Now we're going to talk about the information resources. That would be the encountered based data or data collected about the women the program serves.

APPENDIX E (continued)

Information Resources

- A. Do you know what data the agency collects on their doula work? What is this data?
- B. How is this data helpful to the program?
- C. What data would be more helpful to the program?

(Transition)

Now we'll talk about the public health workforce of your program; the Human Resources.

Human Resources

- A. What are some of the assets of the doula team?
- B. What are some of the challenges of the doula team?

(Transition)

Now we'll talk about the financial inputs that go into your program; the fiscal resources.

Fiscal Resources

- A. If you were to divide your doula program budget into a pie, how much (what percent) would be divided up between personnel, training materials, continuing education, program supplies, service provision, administrative/overhead costs, and consultation by HC One?
- B. Ideally, what would that pie look like if you could change those pie slices (percents)?

(Transition)

Now we'll talk about the physical resources that contribute to your program; that would be equipment, building, offices, etc.

Physical Resources

- A. What are the physical resources that help this doula program?
- B. What about the physical resources hinder this doula program?

(Transition)

APPENDIX E (continued)

We'll move on to talk about some of the processes in your agency for the community-based doula program.

The processes that contribute to a successful site:

How does your doula team inform, educate and empower women about their birth experience?

- A. What would you like to do to improve/see different about the way this is done?
- A. What policies and plans exist that help your clients with their individual health?
- B. What policies and plans exist that help the doulas with their own health?
- C. What would you like to do to improve/see different about the way this is done?

(Transition)

We are finally finished with all of my questions. I just need a couple of pieces of demographic information about you and we'll be done.

Final Demographics

What year were you born?

What is your race?

APPENDIX F

Key Informant Interview: HealthConnect One Staff

- 1. Your literature notes that a successful doula is one who has a genuine commitment to serving their community, helping women have a birth that is satisfying to them, can listen and respond to a mother's needs and have the ability to form strong interpersonal relationships. What is missing from this definition? What hinders a doula from being successful?
- 2. A successful site will have the foundation of an agency culture that fosters communication, guidance and support to doula staff. What is missing from this definition for a successful replication site? What hinders a site from being successful?
- 3. The Structural components that make a successful doula replication site:

Organizational Resources:

- A. What are the leadership aspects (culture, mission, structure) inside an organization that contribute to the success of a replication program?
- B. What about those leadership aspects hinder them from being a successful program?
- C. What are the collaborative relationships that exist outside an organization that help them to be a successful program?
- D. What about those collaborate relationships hinder them from being a successful program?

Information Resources

- A. What data do sites collect now about doulas encounters with women?
- B. How is this data helpful to the success of a program?
- C. What data would be more helpful to the success of a program?

Human Resources

- A. What does the background/training of a successful doula look like?
- B. What would you like to see different about the doula workforce in your replication sites?
- C. What are some of the assets of the doula staff that contribute to the success of their replication site?

APPENDIX F (continued)

Fiscal Resources

- A. If you were to divide your doula program budget into a pie for a successful replication site, how much (what percent) is divided up between personnel, training materials, continuing education, program supplies, service provision, administrative/overhead costs, and consultation by HC One?
- B. If you could change the way that pie is divided, what would that pie look like for a successful replication site?

Physical Resources

- A. What are the physical resources (e.g., equipment, building, offices, etc.) that help replication sites be successful?
- B. What about the physical resources for a replication site hinder success?
- 4) The processes that contribute to a successful site:
 - A. How do successful replication site doulas inform, educate and empower women about their birth experience?
 - B. What are the best aspects of this education and empowerment?
 - C. What would you like to do to improve this education and empowerment?
 - A. What policies and plans at successful doula replication sites help women with their individual health?
 - B. What are some of the best aspects of these plans?
 - C. What would you like to see improved about these plans?
 - A. How have women been connected with health services that they may not otherwise access at successful replication sites?
- 5) The desired outcomes for a successful site:
 - A. What outcomes do you keep track of that helps a site demonstrate success?
 - B. What outcomes do sites keep track of that help them demonstrate success?
 - C. What other outcomes do you think replication sties should keep track of?
 - D. What other outcomes do you think you should keep track of?

APPENDIX G

Contact Summary Form

Contact Date:		
Site Name:		
Site Address:		
Phone Number/Email Address:		
Start Time:		
End Time:		
Met with:		
Contact Setting: Site Visit	Skype	Telephone
Salient Features or Experiences of the Contact:		
Concerns:		

APPENDIX H

Document Summary Form

Received Date:		
Site Name:		
Method Received: Electronic Hard Copy		
Context in Which the Document was Shared:		
Description of Document:		
Importance of Document to the Site's Doula Work		

APPENDIX I

Codebook

Code	<u>Definition</u>	Code Families
Role	Explanation of the informants role in the agency	Background
Length Doula	Length of time woman has been working as a doula	Background
Length Agency	Length of time doula has been working at the agency	Background
Continuing Ed	Things being done by doulas to maintain doula skills (i.e. massage technique class for comfort measure skill set)	Background
Certification	Types of certification doula possesses, her progress towards any doula- related certification (i.e., DONA certification, lactation consultant, etc.)	Background
Background	The background of participant including education, professional experience, social indicators (i.e., nursing degree, monitrice, mother of two)	Background
Visits	Details about the home visiting aspect of doula work	Client Interaction
Recruitment	How clients are recruited into the doula program	Client Interaction
Client Who	Who the birthing mothers are: ages, race, the geographical area served by the program/doulas, communities clients represent, may be target audience traits	Client Interaction
Client No.	Number of clients currently served by the doulas	Client Interaction
Closing	Any comment made after the interview questions that the participant wanted to share about their work/program that didn't necessarily fit under any of the interview questions	Closing
Trust	Importance of trust in doula-mom relationship, focuses on the mom-doula relationship	Commitment
Passion	Passion, desire, dedication to the job and helping moms, serving women, motivation	Commitment
Year Born	Year informant was born	Demographics
Race	Race of the informant	Demographics

APPENDIX I (continued)

Funding Most	Parts of the budget that receive the most funding and general information on funding	Fiscal Resources
Funding More	Parts of the budget that should receive more funding	Fiscal Resources
Funding Less	Parts of the budget that should receive less funding	Fiscal Resources
Team Needs	What the doula team needs to do their doula work (i.e., nursing bras to distribute to new moms)	Human Resources
Team How	How the doula works with her doula team, doula team interaction	Human Resources
Team Challenges	Challenges related to the doula team (staff) and the challenges the doula encounters serving the women in the program	Human Resources
Team Assets	Description of the assets of the doula team (staff)	Human Resources
Doula Supervision	The ways and methods of how the doula team is supervised and comments about supervision techniques/experiences	Human Resources
Doula Self Care	Policies/plans within the agency that help doulas with their own health and personal actions for doula to care for self (i.e., backup support for births longer than 48 hrs, leave time after a long birth)	Human Resources
Data What	The data that is collected about the doula encounters with women (positive or negative effect undetermined)	Informational Resources
Data More Help	Data collection that would be more helpful/more informative to doula work	Informational Resources
Data How Help	An explanation of how the data that is collected about doula encounters with women is helpful to doula work; how the data positively influences the doula's work	Informational Resources
Data Doesn't	Data that is collected that doesn't reflect the success of the doula, things doulas are asked to track that they don't believe accurately reflects the work they do with their clients	Informational Resources
Stories	Stories or examples from the staff about the moms that they serve	Mommies
Mom	The name birthing mothers are called by the doulas (usually instead of client or participant)	Mommies
Lessons for	How the doula inspires the new mother, ways to change her life, ways to	Mommies

APPENDIX I (continued)

Moms	improve her situation	
Leadership What	The leadership aspects exist in CBD agency that influence doula work (positive or negative effect undetermined)	Organizational Resources
Leadership Hinder	Leadership aspects inside agency that hinder doula work (i.e., agency culture, tone set by director, etc.)	Organizational Resources
Leadership Help	Leadership aspects inside agency that help doula work (i.e., agency culture, tone set by director, etc.)	Organizational Resources
Collaborative What	The collaborative relationships that exist outside the agency that influence doula work (positive or negative effect undetermined)	Organizational Resources
Collaborative Hinder	Those things about the collaborative relationships that exist outside the agency that hinder doula work	Organizational Resources
Collaborative Help	Those things about the collaborative relationships that exist outside the agency that help doula work	Organizational Resources
Successful Site	Description of that which makes a community-based doula replication site (program) successful	Overarching Questions
Successful Doula	Description of that which makes a community-based doula (person) successful	Overarching Questions
Physical What	The physical resources that exist for the doula work (positive or negative effect undetermined)	Physical Resources
Physical Improve	The manner in which physical resources could be improved for better doula work	Physical Resources
Physical Help	The physical resources that help doula work (the building, supplies, etc.)	Physical Resources
Program Strengths	Strengths of the doula program	Processes
Program Challenges	Challenges of the doula program overall	Processes
Processes Policy Women	Policies/plans within the agency/program that help women (clients) with their individual health	Processes

APPENDIX I (continued)

Processes Policy	What should be improved about these policies and plans regarding serving	Processes
Improve	the women in the program	Trocesses
Processes Policy Doula	Policies/plans within the agency/program that help doulas with their own health	Processes
Processes Policy Best	Best aspects of these policies and plans/best parts of what the doulas do for the women that they serve (i.e., what they enjoy the most about it)	Processes
Processes How	How the doula educates, informs and empowers the women she works with	Processes
Processes Different	How the doula would do things differently for the women that she serves	Processes
Mission	Things related to the mission of the organization/agency	Processes
Describe Program	General description of the community-based doula program	Processes

APPENDIX J

13 Code Families:

Code Family Name: Background

Code Members: Background, Certification, Continuing Ed, Length Doula, Length Agency, Role

Code Family Name: Client Interaction

Code Members: Client No., Client Who, Recruitment, Visits

Code Family Name: Closing

Code Members: Closing

Code Family Name: Commitment

Code Members: Passion, Trust

Code Family Name: Demographics

Code Members: Race, Year Born

Code Family Name: Fiscal Resources

Code Members: Funding Less, Funding More, Funding Most

Code Family Name: Human Resources

Code Members: Doula Self-Care, Doula Supervision, Team Assets, Team Challenges, Team

How

Code Family Name: Informational Resources

Code Members: Data Doesn't, Data How Help, Data More Help, Data What

Code Family Name: Mommies

Code Members: Lessons for Moms, Moms, Stories

Code Family Name: Organizational Resources

APPENDIX J (continued)

Code Members: Collaborative Help, Collaborative Hinder, Collaborative What, Leadership

Help, Leadership Hinder, Leadership What

Code Family Name: Overarching Questions

Code Members: Successful Doula, Successful Site

Code Family Name: Physical Resources

Code Members: Physical Help, Physical Improve, Physical What

Code Family Name: Processes

Code Members: Describe Program, Mission, Processes Different, Processes How, Processes

Policy Best, Process Policy Doula, Processes Policy Improve, Processes Policy Women,

Program Challenges, Program Strengths

5 Primary Document Families:

Doulas (includes all five doula Primary Document's)

Supervisors (includes both supervisor Primary Document's)

Administrators (includes the three administrator Primary Document's)

Stakeholders (includes both stakeholder Primary Document's)

HC One Staff (includes the three HC One's Primary Document's)

VITA

Michele L. Shade

Public Health Leadership and Mentorship • Maternal and Child Health Management

- Held leadership roles in diverse public health settings including a county health department, a
 local school district and a university setting and maintains positive collaborative relationships
 at each agency.
- Successful track record of evidence-based planning, implementation and applied public health research.
- Published author and experienced presenter for various public health topics in local and national venues.
- Expertise in public health fiscal management including managing annual budgets ranging from \$200,000 to \$1.9 million.
- Practical experience in chairing review panels for federal public health grant applications.
- Active leadership roles in local and national public health associations.

ACADEMIC CREDENTIALS

DOCTORATE OF PUBLIC HEALTH IN LEADERSHIP, University of Illinois at Chicago, School of Public Health, degree to be conferred in May 2011

Concentration: Maternal and Child Health Administration

Dissertation Topic: "Defining a Successful Community-Based Doula Replication Program"

MASTER OF PUBLIC HEALTH, University of Illinois at Chicago, School of Public Health, May 2000

Concentration: Maternal and Child Health

Thesis Topic: "The Importance of Male Involvement in Women and Children's Health-

Recommendations for the Greater Englewood Healthy Start Initiative"

BACHELOR OF SCIENCE IN COMMUNITY HEALTH SCIENCES, University of Illinois

at Urbana-Champaign, Department of Applied Life Sciences, May 1998

Major: Health Administration and Planning

PUBLICATIONS

Shade, M.L., Miller, L.J., Borst, J., English, B., Valliere, J., Downs, K., Herceg-Baron, R., & Hare, I. (in press). Statewide innovations to improve services for women with perinatal depression. *Nursing for Women's Health*.

Miller, L.J., Shade, M.L., Vasireddy, V. (2009). Beyond screening: Assessment of perinatal depression in a prenatal care setting. *Archives of Women's Mental Health*, 12, 329-334.

Miller, L.J., Shade, M.L., Vasireddy, V. What next after screening? A statewide system for diagnosing and treating perinatal depression. Manuscript submitted for publication.

CAREER OVERVIEW

UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL, 2008-Present Department of Psychiatry, Institute for Juvenile Research, Illinois DocAssist Program

PROJECT COORDINATOR: Coordinate a Medicaid-funded consultation and training program to serve the mental health and behavioral health needs of children and adolescents in Illinois. Write and report on the monthly, quarterly and annual progress as well as financial functions of the project. Create and implement promotional plan activities to increase use of the consultation service and educational training programs. Project bolsters the skills of primary care clinicians to provide mental health treatment and referrals to pediatric patients in the primary care setting. Organize and lead project team meetings. Successfully negotiated contract deliverables between state funders and internal project team. Provide presentations locally and nationally on project activities. Collaborate with Illinois and other state pediatric mental health consultation programs.

UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, IL, 2007-2008 Department of Psychiatry, Women's Mental Health Program, Illinois Perinatal Mental Health Project

PROJECT COORDINATOR: Managed and led statewide implementation of innovative model in perinatal mental health awareness, provider education and infrastructure building. Project activities led to increasing the capacity of health care providers to screen, assess, and treat perinatal mental health disorders. Managed overall budget as well as the first-of-its-kind perinatal mental health consultation telephone line. Wrote and submitted all required reports to state and federal funding agencies. Co-authored three journal articles related to perinatal mental health. Presented on perinatal mental health project activities at local and national public health meetings.

SAFE SCHOOLS/HEALTHY STUDENTS INITIATIVE, Maywood, IL, 2003-2006 Proviso Township High Schools

ASSISTANT DIRECTOR: Worked directly with project director and program evaluators to design, implement and apply research methodology to multifaceted program activities. Researched and recommended evidence-based violence prevention programs to the project director and school administration. Conducted public health program planning and project management with project director. Worked with initiative partners to pursue and prepare grant applications to sustain project activities after initial funding period. Conducted site visits of initiative partners to guide public health program implementation. Maintained \$1.9 million annual program budget and facilitated related invoicing and record keeping according to federal regulations.

EARLY CAREER

PROJECT COORDINATOR: Safe Schools/Healthy Students Initiative, Cook County Department of Public Health, Oak Park, IL (2003)

REGIONAL COORDINATOR: Tobacco Prevention and Control, Cook County Department of Public Health, Oak Park, IL (2002-2003)

PROJECT COORDINATOR: Access to Benefits and Care Project, Cook County Department of Public Health, Oak Park, IL (2001-2002)

PROJECT COORDINATOR: Chicago Childhood Diabetes Registry, University of Illinois at Chicago, Chicago, IL (2000-2001)

RESEARCH AND FELLOWSHIP EXPERIENCE

Current in University of Illinois at Chicago IRB T raining, Ethics Training and HIPPA Training

INTERVIEWER: Family Management of Childhood Diabetes Study, National Institute of Child Health and Human Development, Chicago, IL, 2006-2007

Research interviewer for one of four national clinical research sites studying how families handle living with childhood diabetes.

FELLOW: Illinois Institute for Maternal and Child Health Leadership Program, University of Illinois at Chicago, Chicago, IL, 2003-2004

Created an original children's educational tool; violence prevention topical discussion cards for families with children aged 0-5 years old entitled "While You Wait" Conversation Cards. Developed "A Crisis Intervention Team Training" curriculum outline for high school staff based on evidence-based crisis intervention techniques.

MATERNAL AND CHILD HEALTH INTERN (MPH CAPSTONE): Chicago Department of Public Health, Chicago, IL, 2000

Assisted Project Manager in health planning and development activities of Healthy Start program in the Greater Englewood neighborhood. Conducted extensive literature review and developed formal program recommendations specifically for the Greater Englewood Healthy Start Initiative's Male Responsibility Program

SUMMER INTERN: Health Careers Opportunity Program, University of Illinois at Chicago, Chicago, IL, 1998

Recruited and trained south suburban teens for tobacco sale stings through Cook County Department of Public Health's "Reducing Access to Tobacco by Teens-South Suburban Area" Presented quantitative and qualitative data regarding tobacco sale stings

RESEARCH FELLOW: Summer Research Opportunity Program, University of Illinois at Champaign-Urbana, Champaign, IL, 1996

Designed and utilized codebook to research prostate cancer messages directed towards African-American males in popular print media. Conducted and presented literature review on prostate cancer messages directed towards African-American males in popular print media.

PRESENTATIONS

"Illinois DocAssist Program: Integrating Child and Adolescent Mental Health Care into Primary Care" for the National Healthy Start Association, 11th Annual Spring Conference, March 15, 2010

"Illinois DocAssist Program: Integrating Child and Adolescent Mental Health Care into Primary Care" for the American Public Health Association, 137th Annual Meeting, November 9, 2009 (poster)

"Designing a statewide perinatal mental health system in Illinois," American Public Health Association, 137th Annual Meeting, November 10, 2009 (listed as co-author for poster)

"A statewide system to address perinatal mental health disorders: The Illinois experience," American Public Health Association, 137th Annual Meeting, November 10, 2009 (listed as coauthor for presentation)

"Perinatal Depression: An Audio Conference for Federally Qualified Health Centers and Rural Health Clinics" for the Pennsylvania Chapter-American College of Obstetricians and Gynecologists, June 10, 2008

"The Illinois Experience: Improving Services for Women with Perinatal Depression" for the Massachusetts Maternal and Infant Mental Health Conference, June 3, 2008

Moderator for the American Public Health Association's 135th Annual Meeting & Exposition for session entitled "Katrina: The Lessons Continue Part II," November 5, 2007

"Reducing Perinatal Risks by Treating Maternal Depression," Michael Reese Health Trust and the Illinois Department of Healthcare and Family Services' Closing the Gap Meeting, April 27, 2007

"The UIC Perinatal Mental Health Consultation Service" for the Pennsylvania Chapter-American College of Obstetricians and Gynecologists Audio-Conference, April 17, 2007

"Utilization of Evidence Based Public Health Methods in Maternal and Child Health," Illinois Public Health Association, Student Poster Session, April 25, 2006

FEDERAL GRANT REVIEWS AND PREPARATION

GRANT REVIEWER: Office of Justice's Bureau of Justice Assistance (2009), Office for Violence Against Women (2009), Consultant for Office of Juvenile Justice and Delinquency Prevention (Fall 2007-present), American Public Health Association Student Assembly Nominations Committee (2006), Association of Schools of Public Health/Center for Disease Control Public Health Internship (2005), Safe Schools/Healthy Students Initiative (2004)

GRANT REVIEW CHAIRPERSON: Compassion Capital Fund Communities Empowering Youth (2007), Compassion Capital Fund Demonstration Program (2006-2007), Compassion Capital Fund Targeted Capacity Building (2006-2007)

GRANT WRITER: Assisted grant writing team by writing portion of successfully awarded Magnet School Assistance Program Grant (2005)

PROFESSIONAL DEVELOPMENT

University of Illinois at Chicago, School of Public Health, Maternal and Child Health Program Participant in the Leadership Pathways: A Seven-Month Experiential Leadership Development Program, 2005-2006

SELECT NON-PROFIT AND VOLUNTEER EXPERIENCE

HealthConnect One-Board of Directors, 2007-2009

University of Illinois Extension Unit-School Enrichment Committee, Advisory Council Member, 2004-2007

Nia Group—Professional Public Health Networking Group, Member since 2004 Illinois Maternal and Child Health Coalition, Member since 2002 Alpha Kappa Alpha Sorority, Inc., Member since 1997

PROFESSIONAL AFFILIATIONS

American Public Health Association: Member (1996, 2005-present), Section Councilor for the Health Administration Section (2010-2013 term), Secretary for the Health Administration Section (2006-2008)

Illinois Public Health Association, Student Member (2006-present) Association of Teachers of Maternal and Child Health, Member (2005-present)

CERTIFICATIONS

Certificate of Completion-Title VI Cultural Competency (2007)

Certificate of Completion-16 hours of required Birth Doula Training (2007)

Certified facilitator for the Strengthening Families Program (2003)

Certified facilitator for Not-on-Tobacco Program (2002)

Certified facilitator for Freedom From Smoking program (2002)