DEVELOPMENT OF A PATIENT NAVIGATOR TRAINING PROTOCOL PROMOTING TIMELY APPROVAL FOR PREGNANT AFRICAN AMERICAN WOMEN SEEKING PREGNANCY MEDICAID COVERAGE PRIOR TO 14 WEEKS GESTATION

by

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ABSTRACT

MARIAMA T. FOH. Development of a patient navigator training protocol to promote timely approval for pregnant African American women seeking pregnancy Medicaid coverage prior to 14 weeks' gestation. (Under the direction of DR. DEE Baldwin)

Pregnant women residing in North Carolina are at risk of delayed prenatal care associated with the application verification process for Medicaid maternity benefits. This project explored the use of a Patient Navigator Training protocol to assist pregnant African American women in Guilford County with the application completion process for Pregnancy Medicaid, thereby enabling timely access to prenatal care. The project design was an exploratory, descriptive study utilizing mixed methods of analysis. Participants included nineteen subjects, six Obstetric case managers, seven Medicaid eligibility caseworkers, and six pregnant African American women patients. Data were analyzed to inform the development of a Patient Navigator Training protocol to guide the Navigator and other clinicians to help patients complete the required processes for the Medicaid application and verification approval process. Collectively, qualitative data indicated common themes of communication, time management and system problems. Caseworkers' loads did not permit time to communicate with obstetric case managers or pregnant women due to heavy caseloads. Moreover, pregnant women experienced long wait times, lack of return calls, and unanswered phone calls. Data were used to develop a Medicaid verification training protocol to enable faster processing and enhanced communication, which was validated by an advisory committee. Findings revealed the researcher-developed Patient Navigator Training protocol has the potential to significantly augment Guilford County's ongoing efforts to improve pregnancy outcomes

by ensuring timely access to prenatal care. Findings also underscored the need for a patient navigator to bridge the communication gaps between the patients, eligibility caseworkers, and obstetric case managers.

DEDICATION

I would like to dedicate this work to my deceased parents, without whom this work would not have been possible.

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I would like to especially thank my family, my spouse of 29 years, Arthur, and my daughters Yetorma and Tiange' for helping me stay focused and not give up on my dream. Thanks to the Almighty Father and Maker, God Almighty, for through Him all things are possible.

I would like to offer my sincere gratitude to my Chair Dr. Dee Baldwin for her mentorship, support, and patience during the progression of this project. I would also like to thank all of my committee members: Dr. Judith Cornelius, Dr. Laura Armstrong, Dr. Charlene Whittaker-Brown, for their support throughout this process, and Ms. Lisa Alexander for her clinical expertise, and the GCDHHS staff for assisting in the project development.

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CHAPTER 1: INTRODUCTION/BACKGROUND

Infant mortality in the U.S. remains a serious public health issue. In 2013, the infant mortality rate (IMR) was six infant deaths per 1,000 live births (MacDorman & Mathews, 2015). More concerning is the fact that racial disparities with infant mortality exist. African American infants are twice as likely to die because of late or no prenatal care and late diagnosis for complications related to pregnancy when compared to white infants (IMRs of 11.1 and 5.1, respectively; MacDorman & Mathews, 2015).

Despite the determination made by Guilford County to improve pregnancy outcomes for mothers, access to prenatal care continues to pose challenges. These challenges continue to frustrate both the women who are seeking pregnancy Medicaid and the county workers who are charged with the responsibility of helping these women gain early access to prenatal care. Early prenatal care is essential for mothers in the delivery of healthy babies.

The percentage of women entering late into prenatal care or not receiving care increased across all race and ethnic groups in 2013 (Guilford County Department of Health and Human Services, 2016). In the article "Racial Disparities in Preterm Birth," neighborhoods played a significant part in the increased rate of preterm birth and disparities in the U.S. (Culhane & Goldenberg, 2011).

According to the most recent data, pregnant women who are late to care or not receiving care are all concentrated within a particular zip code in Guilford County

(Guilford County Department of Health & Human Services, 2016). Unfortunately, many low-income and underserved pregnant women do not have positive birth outcomes due to a lack of access to early prenatal care (Guilford County Department of Health & Human Services, 2016). Late or inadequate use of prenatal healthcare, i.e., entry after the first trimester and/or an inappropriate number of prenatal visits, may be due to individual characteristics, contextual characteristics, and health behaviors (Feijen-de Jong et al., 2011).

Although nine months of pregnancy seems like a lifetime endeavor, some mothers do not have the opportunity to enjoy the experience of their pregnancy due to worries about accessing prenatal care. This is due to a lack of insurance or other financial assistance. Obstetrical offices are refusing to see patients without insurance and other financial support, and the cost of prenatal care and delivery is unaffordable for many of these patients. This trend prevents most of the patients without Medicaid and other forms of pregnancy assistance from seeking prenatal care. Often, these patients have to seek care through the emergency rooms of area hospitals. Emergency room care results in higher cost for the Medicaid Program, Guilford County, and the State of North Carolina (Guilford County Department of Health & Human Services, 2016).

In 2013, the percentage of women entering into prenatal care late or not receiving care increased across all race and ethnic groups. This was twice as high as previous years 2009–2013 (Guilford County Department of Public Health Maternal and Child Data Briefs, 2016). The rate of preterm births for African American pregnant women increased to 10.7%. Percentages of low and very low birth weight were about twice as high for African American births as for Caucasian births, whereas the rate for Hispanic births

were slightly lower than Caucasian births (Guilford County Department of Health & Human Services, 2016). In an effort to decrease birth rate disparities, national organizations have identified access to prenatal care as a priority health issue (Wingate, Barfield, Petrini, & Smith, 2012). Information from the Guilford County Department of Health & Human Services (2016) showed an overall early and adequate use of care improved statistically for both racial groups and cultural disparities in prenatal care use, suggesting a reduction except for some young mothers. Within the same data brief, although these results were indicative of some improvement, the Healthy People 2000 goals and objectives were not achieved (Guilford County Department of Health and Human Services, 2016).

There are numerous reasons why African American women experience higher rates of prenatal/postnatal complications than their white counterparts (Guilford County Department of Health & Human Services, 2016). Poor prenatal care is cited as one of the many reasons why pregnant African American women have higher rates of complications (Creanga et al., 2015).

In Guilford County, this stems from failure to complete the Medicaid application verification process, consequently leading to late approval of Medicaid and late access to prenatal care or no prenatal care throughout the pregnancy. Another area leading to a lack of prenatal care relates to access to obstetric offices due to financial constraints and poor communication with caseworkers (Guilford County Department of Health & Human Services, 2016).

This inaccessibility impedes the patient's timeliness to complete the application verification process for pregnancy Medicaid. Within Guilford County, preterm delivery

and low birth weight tend to be concentrated in the Southeast, East Greensboro, and Central High Point areas where low socioeconomic and higher proportions of minority residents reside (Guilford County Department of Health & Human Services, 2016).

Healthy People 2020 and the American College of Obstetrics and Gynecologists recommend early prenatal care in the first trimester and attending at least 10 visits to prevent women at greatest risk for poor pregnancy outcomes (Department of Health & Human Services 2016; Riley, & Stark, 2012). African American women and women with less education have been identified as priority groups for which prenatal care has been underutilized (Guilford County Department of Health & Human Services, 2016).

A recent community needs health assessment compiled by the Cone Foundation and other community organizations within Guilford County, North Carolina revealed that access to care has worsened for the underserved and disadvantaged population (North Carolina Division of Public Health, 2013). Similarly, within that same assessment, access to care was identified as one of the top priorities for Guilford County (North Carolina Division of Public Health, 2013). This finding mirrors that from a national study on perinatal health care outcomes (Sunil, Spears, Hook, Castillo, & Torres, 2010).

In 2010, there was a slight decrease in delayed access to prenatal health care in Guilford County (from 16.6% and 16.4%; North Carolina Division of Public Health, 2013). While not significant, this was an acceptable trend for a longstanding health problem. However, significant barriers with disparities and access to care continue to exist.

Lack of insurance is the greatest barrier faced by pregnant mothers within Guilford County (North Carolina Division of Public Health, 2013). This issue continues

to be problematic, even with the passage of the Affordable Care Act. The new health care allowance has decreased the burden for some residents of Guilford County, but since North Carolina did not expand the Medicaid program, the lack of insurance remains a hurdle for poor pregnant women, therefore leaving North Carolina women to find ways of maximizing the ACAs in North Carolina and improve access to care to better serve the needs of low-income women (Ranji, Bair, & Salganicoff, 2015).

The lack of prenatal care has resulted in low birth weights. Prenatal care can reduce a baby's risk for health problems including low birth weight, mental retardation, and heart problems. Babies born without prenatal care are three times more likely to be of low birth weight and five times more likely to die than those who received prenatal care (Mazul, Ward, & Ngui, 2016).

One solution to the abovementioned problems could be the development of a patient navigator role to assist African American pregnant women in gaining access to timely approval of Medicaid. Research studies in cancer research and community health have shown favorable health outcomes with the use of a patient navigator to help patients gain access to care (Guilford County Department of Health & Human Services, 2016). Several case studies by Domingo, Davis, Allison, and Braun (2011) indicated that the use of patient navigators in cancer research promoted early access to care by removing barriers such as communication, financial, and educational problems. In that study, the patient navigator was effective in educating the patient on referral processes for palliative care and emotional support (Domingo et al., 2011).

Problem Statement

In 2013, North Carolina had 70 infant deaths per 1,000 live births for Caucasians and 163 infant deaths per 1,000 live births for African Americans (Guilford County Department of Health and Human Services, 2016). These differences underscore the disparity that exists with access to prenatal care in Guilford County (North Carolina Infant Mortality Report, 2013). Furthermore, studies have shown that African American pregnant women when compared to white women failed to initiate prenatal care early in their pregnancy, and have fewer prenatal care visits (Mazul et al., 2016; Riley & Stark, 2012).

From my experience as a caseworker in Guilford County, many of the African American pregnant women who apply for pregnancy Medicaid do not complete the application eligibility verification process, which includes proof of citizenship and/or residency, work, income verification, and photo identification. This verification process has been an obstacle for low-income pregnant women. Strategies to improve access to prenatal care, such as a patient navigator, may enable the applicant to complete the Medicaid application process, therefore gaining early access to care.

A patient navigator role developed specifically to aid these applicants and to reduce gaps in the communication with obstetric case managers and eligibility caseworkers may provide greater access to prenatal care. In this Doctor of Nursing Practice (DNP) project, my intent is to develop a patient navigator training protocol to assist pregnant African American patients with the application verification process for pregnancy Medicaid, therefore promoting timely access to prenatal care. The implementation of a patient navigator role is not only intended to assist the patient

complete the verification for pregnancy Medicaid, but to get early approval (compared to the 45-day waiting and processing time that is currently stipulated). This 45-day stipulation is a huge barrier to accessing prenatal care prior to the end of the first trimester (14th week of gestation).

Purpose of the Project/Significance

The purpose and importance of this DNP project is to develop a patient navigator protocol for assisting patients, eligibility caseworkers, and obstetric case managers with the pregnancy Medicaid application and verification process, thereby alleviating barriers to accessing prenatal care by African American pregnant women before the end of their first trimester or 14 weeks' gestation. The protocol will identify areas of difficulties for the patient, eligibility case worker, and obstetric case manager, and provide ways to remove those barriers, thus improving health outcomes for the mother and baby. Timely access to pregnancy Medicaid will allow pregnant women to schedule prenatal appointments and decrease the chances of preterm delivery, low infant birthweight, or infant mortality.

Clinical Question

The clinical question for this DNP project will relate to the development of the patient navigator role. Will the development of a patient navigator protocol allow timely approval for pregnant African American women seeking pregnancy Medicaid coverage prior to 14 weeks' gestation?

Project Objectives

Project objectives can be used to identify the project's outcome and intended impact that it will have on the targeted population of African American pregnant women,

obstetric case managers, and eligibility caseworkers. For this DNP project the objectives are:

1. Identify barriers to the pregnancy Medicaid verification process experienced by African American pregnant women, obstetric case managers, and eligibility caseworkers.
2. Develop a patient navigator protocol that will be used to reduce barriers to accessing care experienced by African American pregnant women.
3. Establish content validity of the patient navigator protocol, train a patient navigator, and pilot the protocol with 4–8 African American pregnant women to examine the feasibility of obtaining timely approval with the pregnancy Medicaid application process.

In summary, African American pregnant women experience barriers with gaining access to timely approval with the Medicaid process. Development of a patient navigator protocol may reduce these barriers, thus providing these women with timely approval with the Medicaid process. It is essential that pregnant women be provided prenatal care early in their pregnancy during the critical window of opportunity through patient navigation. According to Dr. Harold Freeman's institute, the patient navigation model has been expanded to include the timely movement of an individual across the entire health care continuum from prevention to supportive care (Freeman & Rodriquez, 2011). A facility-specific project will improve the care and health outcomes of pregnant women and their unborn children. In Chapter Two, a review of the literature is presented. This section of the project examines the literature regarding the role of the patient navigator in improving patient outcomes with access to care.

CHAPTER 2: LITERATURE REVIEW

This scholarly project focused on identifying the problems related to the development of a patient navigator training protocol, and enabling access to care for the African American (AA) female Medicaid population within Guilford County. For the review of the scholarly evidence, numerous searches were conducted electronically, and the following databases were used: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, and PubMed. Keyword inclusion criteria were *Prenatal Care*, *African American*, *Pregnancy*, *Verification*, *Protocol,* and *Navigator*. There were over 600 articles found for the period of 2011 and 2016. The articles were further synthesized and separated into distinct areas of study concentrating on Pregnancy, Medicaid, African American population, disparities, and patient navigator processes. Articles earlier than the stipulated period of 2011 are not included in this project. Other items that were not related to the topics of pregnancy, Medicaid, African American, patient navigator, and disparities were excluded from this review.

There was a total of 27 articles analyzed for this project. Of these 27 articles, 14 articles were synthesized using a systematic approach to assess the studies based on relevance to this project. A Hierarchy of Evidence Rating System method was used to rate the 14 articles (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000).

The results of the review are as follows: five studies assessed were Level I systematic literature reviews (Braveman et al., 2015; Kim & Saada, 2013; Manderson,

Mcmurray, Piraino, & Stolee, 2012; Naylor, Ward, & Polite, 2012; Paskett, Harrop, & Wells, 2011) and five studies were Level II randomized control trial (RCT) studies (Jandorf et al., 2013; Jean-Pierre et al., 2011; Kozhimannil, Abraham, & Virnig, 2012; Phillips et al., 2011; Sly, Edwards, Shelton, & Jandorf, 2012). There was one Level III cohort study (Cox, Zhang, Zotti, & Graham, 2011), Melnyk and Fineout- Overholt 's (2011) hierarchy of evidence method, and three Level V descriptive studies (D'Antonio, Beeber, Sills, & Naegle, 2014; Ward, Mazul, Ngui, Bridgewater, & Harley, 2012; Wilson, Gance-Cleveland, & Locus, 2011).

Introduction

Reviewing the articles, the principal investigator was attentive to the systematic literature reviews, randomized control trial, descriptive studies related to maternal child wellbeing, patient navigators, Medicaid processes, and preterm birth/infant mortality. There were several articles related to Medicaid, but none were specifically related to the application verification process. The articles related to Medicaid were tied in with the financial implications in prenatal care. The major areas of focus for this review were the patient navigator processes and structure, and the financial impact as it relates to late prenatal care and access to care and preterm birth/infant mortality.

Preterm Birth/Infant Mortality

A systematic literature review of two articles (Braveman et al., 2015; Kim & Saada, 2013) were reviewed. Kim & Saada's (2013) article focused on a discussion of the social determinants of infant mortality and birth outcomes (IM/birth outcomes). The comprehensive systematic review conducted by Kim and Saada (2013) explored the empirical literature on each of the contextual and individual levels of social determinants

of Infant Mortality/birth outcomes (IM/birth outcomes) within and across western developed nations. The focus was based on non-medical social and economic determinants of birth outcomes. The researchers compared data for each social determinant of IM outcomes by noting observed directions compared to hypothesized directions for statistical significance of findings using a 5% significance level. This study revealed a significant gap in the literature with insufficient study on the social determinants of IM/birth outcomes compared to adult outcomes. Ultimately, addressing such gaps, including novel approaches to strengthen causal inference and implementing health and non-health policies, may reduce inequities in IM/birth outcomes across the western developed world (Kim & Saada, 2013). Through this comprehensive literature review, the author was able to conceptualize the social determinants of infant mortality and birth outcomes and assumed that these social determinants were related to financial burden, neighborhood, policies within neighborhood, and health issues.

An adapted framework was developed from the assumed findings of the social determinants of IM/birth outcomes, and the article suggests that these determinants are driven by the financial aspects, individual, race gender, ethnicity, segregations, and social cohesiveness that people live and work within and are in ingrained in them. For instance, was the IM/birth outcomes deficiencies related to financial burden, neighborhood, policies within neighborhood, health issues etc? The reviewer's opinion is that there is a gap in the literature suggesting insufficient attention given to the social determinants of IM/birth outcomes when compared to adult health.

This article's aim was to simultaneously review both IM/birth outcomes to social determinants and identify global patterns including the gaps in the literature therefore,

enhancing research in those areas and emphasizing the effects of social determinants can affect life from the onset of conception, and use this information to provide more effective interventions. In conclusion for this literature review it was determined that both health and non-health gaps exist, and are needed to address the social determinants, infant mortality, birth outcome and the disparities. Reducing the inequalities will involve the use of set policies as well as addressing the gaps in the literature as stated above.

Another literature review by Braveman et al. (2015), The role of socioeconomic factors in black-white disparities in preterm birth, compared the rates and likelihood of Preterm Births (PTB) among AA versus white women. The researchers used the population-based California Maternal and Infant Health Assessment survey and birth certificate data on 10,400 US-born Black and White California residents who gave birth during 2003 to 2010 to examine rates and relative likelihoods of preterm birth (PTB) among Black versus White women, with adjustment for multiple socioeconomic factors and co-variables. The researchers conducted the study on a total of 3,286 US-born AA women, and 7,114 US born white women. There was a statistical difference of .58% between AA women and immigrants, hence the researcher decided to use US born pregnant women.

The result was that black women had a greater disadvantage as supposed to White Women based on household income at or below the poverty line. PTB rates were also higher amongst black women than their white counterparts especially in the socioeconomic subgroups such as non-graduate of high school, women for whom paternal employment was recorded as unemployed or otherwise not working, and residents of high-poverty census tracts. The patterns observed in this study suggest a

complex role for socioeconomic and potentially other social factors in the Black-White disparity in PTB. Within the most socioeconomically disadvantaged subgroups, which included nearly one in four White and most AA women, the researchers found no significant Black-White disparity in PTB, reflecting similarly high rates of PTB among Black and White women in those subgroups. Also, significant was the black-white disparities within the socioeconomic group that are less disadvantaged.

This review suggests that the underlying reason for this racial disparity in preterm birth (PTB), is not well understood, it is discussed that there are a range of social economic factors such as income, wealth and education with the individual or the household. The study found that lower PTB was associated with socioeconomic advantaged women, but the disparity between the two groups was not significant.

Patient Navigator

A systematic literature reviews by Paskett et al. (2011) using descriptive and qualitative studies of a total of 33 articles provided particular insight into what patient navigators do or should do. The overwhelming majority of patient navigator programs studied were targeted toward patient populations at higher risk of not receiving adequate cancer care services due to cultural, economic, geographic, or social disparities.

Several research efforts focused on underserved urban patient populations, whereas some examined underserved rural populations, particularly Native Americans (Paskett et al. 2011). Furthermore, relationship interventions involve those efforts by the patient navigator that build and strengthen the interpersonal relationship between patient and provider. Paskett's study concluded that streamlined efforts were needed to improve access to breast cancer screening, diagnosis, and treatment services. Recommendations

pointed to the potential benefit provided by cancer patient navigators. Paskett et. al., study also provided insight into improving cancer care through the continuum, screening rate, diagnosis outcome, treatment outcome and clinical trial enrollment, with one study involved in the desire of a patients' expression for a patient navigator through the continuum. This study did not reveal efficacy of survivorship outcomes (Paskett et al., 2011).

Another study by Jean- Pierre et. al (2011), qualitatively analyzed 21 interviews with three patient navigators. One of the goals of this study by Jean Pierre et. al., was to provide feedback of the patient navigator research program by defining the characteristics of an effective patient navigator program, through which future programs can be developed. Interviews were conducted and randomized to the navigation arm of the study. The data was further categorized into two types of interventions: instrumental and relationship. Instrumental interventions were described as task-oriented or logistic in nature, such as helping a patient find transportation to appointments or information about their diagnosis whereas relationships were described as the development of relationships between the navigator and the patients (Jean Pierre et. al 2011).

The patients were contacted until saturation was reached for the program. The navigators informed the researchers once navigation tasks were completed with the patients. The researchers also contacted the patients within two weeks of the completion to get information related to their navigation process. The patient navigators were recruited from the community, and needed to have at least a high school education and

significant knowledge of the community. These navigators were trained to work with individuals with abnormal cancer screening test and cancer patients.

The chosen navigators were trained vigorously for three months using Community Health Workers (CHW) and a curriculum adapted from Cornell Empowering Families Project. The CHW's curriculum had ten modules consisting of self-care, communication, cultural competencies and other areas of needs. The opportunity to role play was also provided for the navigators through interviewing tasks teaching and coaching skills. Navigators were supervised by a case manager who was a licensed professional Social Worker.

A semi structured protocol (SSIP) was developed to assist in capturing the essence of the patient navigators from their perspectives. These included questions about navigator's overall experiences working with the patients. The interviews lasted 30 minutes and where audio taped and transcribed verbatim. Post data analysis, the results was compelling for the navigator process for cancer care system and the relationships developed between patients and navigators.

Similarly, a systematic literature review was conducted by Manderson et al., (2012). This literature review was compiled due to the fragmented care received by older adults. Mostly, this fragmentation was due to the incomplete transfer of information between health care providers and managing care deliveries for better outcomes (Manderson et al. 2007). The researcher developed and piloted a search strategy from five online bibliographies from 1999-2011. These were from CINAHL, Medline and Cochrane EBM (Evidence Base Medicine Review), Embase and PsycINFO. There were

four search strings referring to the subject matter found, such as patient navigator, discharge support and planning and post discharge. Exclusion criteria were based on articles with information regarding the role in cancer care and psychiatric care for children and those that are homeless, because these population access care through a different aspect and their process is complexed and well documented than adults with chronic health issues.

Post review of the selected articles, there were a number of considerations that impacted the format and potential success of a navigation program for adults who are transitioning. The conclusion was, patient navigation roles for the older adult was relatively new and hence needed more attention. Of the nine programs that were identified between provider and setting, five of the studies reported positive economic outcomes, with two reporting higher satisfaction with care for providers and patients, and five reported an increase patient quality of life and functionality Thus this article review has demonstrated that patient navigation added to care of older adults is beneficial to the population we serve (Manderson et. al 2012).

Naylor et al.'s (2012) study, (Interventions to Improve Care Related to Colorectal Cancer Among Racial and Ethnic Minorities: A Systematic Review), was conducted to review and address systematically the medical literature for interventions conducted within health care systems that have the potential to decrease racial and ethnic disparities in the care of colorectal cancer; through the evaluation of the strength of their evidence; and to recommend both public health and research strategies going forward based on this evidence. Based on this criteria of purpose the researcher used several search engines such as Medline and CINHAL to compile articles for review.

The combined search resulted in 489 articles identified with 53 full text articles reviewed. 14 studies representing community interventions were excluded due to lack of consistent healthcare. Overall, the search process resulted in a total of 33 articles that were included in the final systematic review, for improving Colorectal Cancer Screening in minority population. Of the 33 articles reviewed there were thirteen African-Americans, eight Hispanics, two Asians, seven were composed of a mix of racial/ethnic minorities, and three were listed as "non-white". The studies were further synthesized by interventions and outcomes with result of significant neglect in the cancer screening and treatment continuum by published articles on how to improve the colorectal cancer care for racial and ethnic minorities

Therefore, a significant portion of the cancer care continuum remains neglected in the published literature on how to improve colorectal cancer care for racial and ethnic minorities. The absence of studies aimed at increasing initiation and adherence to treatment or follow up after treatment is unfortunate given that prior work has shown that there are clear racial and ethnic differences in stage-specific colorectal cancer survival and in treatment and follow up after treatment.

In contrast, a Randomized Control Trial (RCT) conducted by Jandorf et al. (2013) with a group of cancer patients 50 years of age without comorbidity were randomized into one of three groups: pro patient navigation (n = 123) dealt with cultural sensitive navigation, and peer-navigation (n = 181). Thus the study; Culturally Targeted Patient Navigation for Increasing African Americans' Adherence to Screening Colonoscopy: A Randomized Clinical Trial, focuses on predicting outcomes of screening colonoscopy for colorectal cancer among African Americans using different patient navigation

formats. The result was that patient navigation has been an effective intervention to increase cancer screening rates, conducted by community workers, trained to be patient navigators (n = 46). The results highlighted that there was improvement in colonoscopy screening for all AA population of about 15% within all arms of the trial (Jandorf et al., 2013), again emphasizing the fact that patient navigators do improve other aspects of healthcare.

Among further studies done concurrently to verify patient navigation in increasing the mammography rate for a minority population was one conducted by Phillips et al. (2011) that focused on women 51–70 years of age randomized at their level by their primary care physician. 3,895 participants, half of the patients were randomized to intervention (n = 1817) and the control group (n = 2078). The findings showed that there was no difference in mammography adherence between the control and randomized group (78%; p=0.55). Post intervention at nine months the adherence increased in the intervention group versus the control group (87% vs. 76%, respectively; $p \leq 0.001$). This study showed that patient navigator improves mammography rates for the inner city, low income, minority population.

African American Women

One cohort study by Cox et al. (2011) examined the racial disparities relationship between prenatal care (PNC), preterm birth (PTB), low birthweight (LBW), and infant mortality in Mississippi. The objective is to identify racial disparities in PNC use and to look at the connection between PNC and LBW as it relates to infant mortality in Mississippi This was a retrospective cohort study from 1996 to 2003 through birth and infant death files. Cox et al. analyzed live infants born to non-Hispanic white and black

women (n = 292776). After controlling for health, age, and other social risks, a multiple logic regression was used to justify that one in five women in Mississippi had less than adequate PNC and received fewer visits. Also, racial disparities in PNC utilization were observed in black women through "inadequate PNC" ($p < 0.0001$) or "no care" ($p < 0.0001$) compared to white women. The evidences point towards the risk factors for PTB, LBW, and infant death which is higher in AA women (Cox et al., 2011).

An alternative study completed looked at the effects that hospital characteristics, physician influence, and patient socio-demographics plays in African American women's neonatal birth outcomes. Wilson et al. (2011), Ethnicity and Newborn Outcomes: The Case of African American Women, completed a retrospective descriptive study to determine if neonatal birth outcomes for Black women is attributed to one or all of the factors of socioeconomic status, ethnicity, education, and occupation on birth outcomes. Wilson et al. completed a fixed and random effects empirically, partitioning the variation of difference in birth outcomes to each component using a large dataset. The results indicated that ethnicity was a statistically significant predictor of adverse outcomes, as well as the number of prenatal visits and maternal education. The study also points to a significant relationship between adverse birth outcomes and ethnicity. The disparity that exists between African American women and other races are paramount and continues to grow, especially in the child bearing age, and this is viewed as a public health policy issue (Wilson et al., 2011).

Manzul et al., (2012) study, Anatomy of good prenatal care: Perspectives of low income African-American women on barriers and facilitators to prenatal care. examined the experiences of racial discrimination during prenatal care from the perspectives of

African American Women within low income Milwaukee residents. The researchers reviewed transcripts from six focus groups that included 29 women and also two individual interviews to develop and identify important themes. The themes identified based on perceived discrimination were: Insurance/Income status, race, and lifetime experiences of previous discrimination. The women described that they were treated differently based on the type of insurance they carried—public (Medicaid) versus private.

The Medicaid patients reported a lower quality of care. The result was that there was evidence of institutional racial disparities; the researcher stated that the system was designed in a way that worked against attempts to get quality prenatal care with public insurance such as Medicaid. The researchers' findings suggest that many AAW with limited income, perceive their providers, practice and, personal interaction during prenatal care as discriminatory (Manzul et al., 2012)

Health Insurance/Medicaid

A study by Kozhimannil et al.; (2012) attempted to address the risk of reproductive age women seeking preconception and prenatal care whether insured or non-insured. Their study: National Trends in Health Insurance Coverage of Pregnant and Reproductive-Age Women, 2000 to 2009, characterized changes in health insurance coverage among reproductive-age women in the United States during the periods noted. Health insurance facilitates financial access to health services, including prenatal and preconception care. The researchers collected data from women of reproductive age (18–49) between 2000 and 2009 in the U.S. through a national survey ($N = 207968$); this number was inclusive of pregnant women ($n = 3204$), and changes over time were viewed through a longitudinal regression model. The main findings were that 25% of the

women were uninsured and 10% of the pregnant women were uninsured. From 2000 to 2009, an increasing percentage of reproductive-age women were without insurance or Medicaid at some point in time.

After controlling for demographic and health variables, the study also found that the number of women who have been uninsured increased by 1.5% annually ($p < .001$); this did not differ between the pregnant women and those who were not pregnant. The number of pregnant Medicaid women increased 7% per year over the study period ($p < .001$). This study points to the fact that women of reproductive age are at risk of being uninsured and this increases concern for preconception, and prenatal care. Among the pregnant women population there was a decrease in private insurance and an increase in Medicaid programs.

Review Summary

In reviewing the literature, it was apparent that much work is needed in the Medicaid application verification process, although there were numerous studies related to navigator processes for areas such as breast cancer, colonoscopy, and other medical areas in the patient setting and in the community. There were no studies identified that speaks specifically to assisting with the Medicaid application and verification processes.

The bureaucracy involved in the Medicaid application verification processes and the North Carolina mandates to assist pregnant women (PW) into prenatal care prior to the end of their first trimester, becomes difficult to achieve in the current state. This is compounded with the rising statistics of late prenatal care, and the increase of infant mortality within North Carolina, it is crucial that PW are assisted to access this system earlier and thus get into care within the mandated time frame.

Theoretical Framework

The formation of interpersonal relations and relationships in nursing has long been established by many educators, researchers, and clinicians during the 20th century (D'Antonio et al., 2014). Currently, interpersonal dynamics are now used as the foremost key element in understanding human behavior within any realm in society. Hildegard Peplau's ideas related to the transformative power of relationships has the ability to move forces by providing directions. One of Peplau's earlier ideas of transformation is that nursing at its best is an interpersonal process that is not only used to shape our past but also guide us into the future (D'Antonio et al., 2014). Hence, Hildegard Peplau's interpersonal relationship concept guides this project. Hildegard Peplau's concept development was theoretical grounds to support our nursing actions. Essentially promising that our commitment to nursing is based on our interpersonal relationship of empathy.

Peplau's interpersonal relationship has four main phases; the therapeutic phase involves the identification as a professional and planned relationship between the client's needs, feelings, problems, and ideas.

1. The orientation phase is guided by the nurse/navigator, in this case the patient navigator in verifying the patient's problems, such as accessing care or assisting with the verification process for Medicaid and providing explanations and information and answering questions.
2. The identification phase involves the patient working interdependently and expressing their feelings and beginning to feel better. Again, the patient has voiced her concern regarding the Medicaid processes, from not receiving her

Medicaid card to not being able to access care and having to use the emergency room for prenatal care.

3. The exploitation phase includes the patient being fully involved with the services offered; such as, the patient navigator is now fully engaged with the assistance rendered to the patient, through the navigator's protocol. Accessing the care, they need through the medical provider.
4. The resolution phase is the resolution of the problem and the patient is no longer in need of assistance, hence ending the relationship.

As nurses, we are responsible for change, as are the patients. "It was the kind of person each nurse becomes that makes a difference in what each patient will learn" (Peplau, 1952, p. xii). The transformational guiding concepts for nursing included self-awareness, personal identity, and individuality. Peplau (1952) states that the need for safety and security creates tension, and tension creates energy which is then transformed into some form of behavior. In nursing, we must pay close attention to the needs of the patient and once that need is met, we can then move on to identify other needs and develop personalities with the patient. This is how nurses can use the skills of nursing as a social force to aid people in identifying their needs. This also will help the patient to and feel free knowing they are notable to struggling alone. with others that bring satisfaction (D'Antonio et al., 2014).

CHAPTER 3: METHODOLOGY

Project Design

This project is designed to determine if a patient navigator protocol will assist the African American pregnant patient in completing the Medicaid application verification process. Currently, applications for pregnancy Medicaid are delayed due to a 45-day verification process stipulation by the Department of Health and Human Services. Bridging the gap with the Medicaid application verification process is essential to promoting adequate care, decreasing preterm delivery, and decreasing infant and maternal mortality and morbidity.

According to Johnson and Onwuegbuzie (2004), a research paradigm is a perspective that relies on a set of shared assumptions, values, concepts, and practices. These principles are the driving force for this research project. The project used qualitative and quantitative data to address the question: "Will development of a patient navigator protocol promote timely approval for pregnant African American Women seeking pregnancy Medicaid prior to 14 weeks' gestation?" There were three phases to the development and piloting of the patient navigator protocol. Each phase was conducted with an eligibility case worker, Obstetric Case Managers, and patients.

Eligibility case workers are responsible for the daily reviewing of Medicaid applications, verifying eligibility, and inputing data for processing of Medicaid. Obstetric

Case Managers are nurses and/or social workers whose main function is to work with pregnant patients assisting the patients with necessary medical, social, or financial needs.

Phase I

This phase consisted of one-hour focus group interviews with the eligibility case workers, obstetric case managers, and patients. These focus groups were conducted and audiotaped until enrollment criteria was achieved for all three groups. Prior to the interviews, breakfast and/or lunch was provided for all participants. In addition, all patients (interviewed and pilot) received a $5.00 gift card to Walmart; this stipend was made available to the patients during the focus group interview and piloting process after protocol development.

The information collected was aimed at uncovering the experiences of these three groups associated with the Medicaid application and verification process. Qualitative data from the focus group interviews and literature review were used to develop the Patient Navigator Training Protocol.

Quantitative data were generated from the demographic data profile sheet (see Appendix F), a tool designed by the principal investigator for the purpose of this project. This sheet consists of data such as age, gender, address, number of years employed, educational status, and employment status. Demographic data were obtained from all participants with signed consent. The collected information was recorded and transcribed to provide demographic data for the written protocol.

Phase II

This phase included the development of the Patient Navigator Training Protocol and Operational Matrix (see Appendixes A and B, respectively) from the themes and

information gathered from Phase I. The Training Protocol was developed by the PI with input from the PI's project committee. After development of the protocol, the PI secured three experts to represent an advisory board (expert panel). The advisory committee members who are experts in the Medicaid application and verification process were provided the protocol and a brief six-item Likert-type scale survey (see Appendix D) to provide validity of the protocol content. The three advisory members included a supervisor, team leader, and program manager. They were graduates of an accredidated institution with a degree in Social Work or related field, working for the Department of Health and Human Services (DHHS) in the economic and processing division. They have been employed by the DHHS at least three to five years with experience in Medicaid verification and processing to be classified as an expert resource.

The advisory committee members were approached through e-mail and were provided the survey (see Appendix D) as well as the protocol and matrix, and engaged to review the protocol and provide feedback using the 6-item survey provided with the protocol. The Advisory Committee members were allowed seven days to review the protocol and provide feedback. If no response was received within seven days a reminder e-mail was sent to the advisory committee member and an additional week was granted to review the protocol and provide feedback.

Phase III

This phase focused on piloting the patient navigator training protocol with four African American (AA) pregnant women who were at less than 14 weeks' gestation, had applied for pregnancy Medicaid, and were in the application verification process. The patient navigator selected and trained to perform this function was a high school graduate

enrolled in the Health Administration program at Guilford Technical Community College (GTCC). She was in her second year of her program. Recruitment of the navigator was achieved through GTCC's administrative department. A recruitment flyer was sent to the department through an e-mail requesting applicants to be a part of the navigator training protocol. Resumes of prospective applicants were received via e-mail and a thorough assessment of the resumes was conducted by the PI; the selected applicant was notified via e-mail. The PI used these steps listed below to train the navigator (see Appendix C):

1. How to approach and speak with pregnant women about the Medicaid application verification;
2. What the criteria of the Medicaid eligibilities process entail;
3. How to complete the application eligibility process;
4. How to review the Medicaid application for completeness;
5. How to approach and interact with Guilford County Medicaid eligibility caseworkers and case managers;
6. Involving the obstetric case managers, and possibly physician's offices;
7. Seeking information from Obstetric Case Managers in order to expedite application process; and
8. Documenting all the above processes for data collection and recordkeeping which will be evaluated by the PI.

No evaluative information was collected from the prospective navigator during the training session. It is the intention that the third stage of this process was to conduct a limited piloting of the protocol on four AA pregnant women to determine if the protocol would assist and expedite the Medicaid completion and verification process.

The navigator was trained at the DHHS in High Point, North Carolina. The PI used a tool with a set of directives for this purpose. These directives addressed a set of eight questions related to training the navigator (see Appendix C). The questions focused on the role of the navigator, how to approach and speak to patients regarding the application verification process, tasks needed to accomplish the patient's, obstetric, and eligibility process, and approaching the eligibility case workers and obstetric case managers. The patient navigator was also expected to review the application for completeness, obtaining information needed from the eligibility case workers to expedite the process. The PI and navigator discussed these processes on several occassions, and role-played the training prior to the implementation phase with patients.

The navigator used the developed protocol to assist four AA pregnant women who were at less than 14 weeks' gestation on the Medicaid verification application process. A tool developed by PI and navigator after reviewing the protocol was used for this process (see Appendix G). This tool had a set of questions for the patients: "How many weeks pregnant are you?"; "Have you applied for Medicaid?"; "Have you received any communication from your Medicaid Case worker?"; "Do you know who your Medicaid case worker is?"; "Do you have an Obstetric case manager?"; "If so do you know how to contact her?"; "Have you started your Medicaid application verification process?"; "If no, would you know how to provide information from letter received?"; and "Did you find this service helpful?"

The patient navigator was trained to reached out to the eligibility case workers and obstetric case managers who are serving the patient Medicaid application. This task by the navigator would be accomplished via phone calls, e-mails, or face-to-face,

providing them assistance in completing the Medicaid verification process. It is not routine to have a patient navigator work with eligibility case workers and obstetric case managers regarding the Medicaid application and/or verification processes; therefore, the need to develop a patient navigator protocol to assist with this difficult task is needed within the DHHS. The patient navigator was provided a stipend of $75.00 at the conclusion of the verification training and piloting implementation process.

Participants

Phase I inclusion criteria included six eligibility case workers, seven obstetric case managers, and six pregnant women. These participants were of African American, Caucasian, and Asian descent, with ages that ranged from 21 to 60. Phase II focused on development of the Patient Navigator Training Protocol based on an analysis of focus group data in Phase I. Phase III included pilot testing of the Patient Navigator Training Protocol with four African American pregnant women. These participants were between the ages of 21 and 45 and were at less than 14 week's gestation. Exclusion criteria for Phase I included all insurance holders, non-residents of Guilford County, all non-pregnant women applying for other forms of Medicaid, and patients less than 21 and greater than 45 years of age and are non- English speaking. Phase 1 also excluded all participants without a Bachelors or Master's degree from an accredited university. Phase 3 exclusion were non pregnant women, non - African American Women who were ages less than 21 years of age and greater than 45 years of age, all non -American male or female with expected enrollment into another form of Medicaid, and all non-English speaking women.

Setting

This project was conducted at the Department of Health and Human Services–Public Health, and Social Services Division (DHHS-PH/SS) in Greensboro and High Point, North Carolina. Both locations of the DHHS-PH/SS are located in an urban area of Guilford County. Data collection was obtained within both departments and locations.

Methods

Data Collection, Tools, and Measures

The PI designed and used a data collection tool (see Appendix F) to collect demographic data. This PI-developed tool contained information related to demographic information such as name, age, occupation, and how long the participants had been employed with the DHHS. This tool was used to collect demographic data from all the participants in the study. The participants included the eligibility case worker, obstetric case manager, and AA pregnant patients who were at less than 14 week's gestation.

The intervention and data collection process were completed in three phases. Phase I involved the focus group setting and collection of data from the eligibility caseworker, obstetric case management, and four pregnant women as subjects. The collected data were transcribed verbatim by means of the software program NVivo. Themes were further analyzed to develop the patient navigator protocol in Phase II. An excel spreadsheet was used once data were transcribed from the recording device used for data collection focus group settings with obstetric case managers, eligibility case workers, and patients. Phase III involved training the patient navigator and piloting the protocol with four AA Pregnant women. In Phase III, the PI trained the navigator with

the developed protocol and piloted the protocol on four AA pregnant patients who were at less than 14 week's gestation.

Data Analysis

For Phase I, data were analyzed from focus groups with eligibility case workers, obstetric case managers, and six patients. The interview transcripts were transcribed using the software program NVivo. Data were reviewed by a professional transcriptionist with the PI and project committee verifying the themes that emerged from the data. Findings from the focus groups were used to develop the patient navigator protocol in Phase II.

Phase II included development of the protocol. The Training Protocol was developed by the PI and the project committee. Data from the literature and themes from the focus groups were used to develop the protocol. Once the protocol was developed, it was sent to three Medicaid experts at the DHHS for verification of content validity. Upon receipt of the response from the Medicaid experts, a content validity score was calculated using the C. H. Lawshe ratio

$$(CVR) = (ne - N2)/(N/2), \text{ (Eq. 1)}$$

where CVR = content validity ratio, ne = number of SMEs (Subject Matter Experts) rating essential, ranging in value from +1 to –1 based on rating of experts. The score for this protocol was 1.0. Based on this score the protocol content was considered valid (Lawshe, 1975).

Phase III included training of the patient navigator at the DHHS in High Point North Carolina using a set of PI-developed questions addressed in the Navigator Training protocol (see Appendix A). The questions focused on the role of the navigator, how to

approach and speak to patients regarding application verification process, tasks needed to accomplish the patient's, obstetric, and eligibility process, approaching the eligibility case workers and obstetric case managers, and reviewing the application for completeness and information needed from eligibility case workers to expedite the process. The PI and navigator discussed the processes on several occasions and role-playing was completed prior to the navigator's access to the patients. The patient navigator was also trained to reached out to the eligibility case workers and obstetric case managers who have a role in the patient Medicaid application. Phase III also included pilot testing of the protocol by the navigator on four AA pregnant women who were at less than 14 weeks' gestation and in the Medicaid verification process.

Translation and Impact on Practice

Implementation of a patient navigator protocol is essential in the Medicaid application verification process at the DHHS. With an expedient application process, patients will have access to prenatal care and hence have the potential to reduce the infant and maternal mortality rate within Guilford County, increase the use of recommended prenatal care, and decrease the number of emergency room visits for non-emergency illnesses.

Fiscal Impact

The fiscal impact on the Department of Health and Human Services and State of North Carolina will be phenomenal after the protocol is fully implemented. The literature points to millions of dollars that would be saved by the decreased number of preterm deliveries (Chambers, Adamson, & Eijkemans, 2013). Infants born early have to spend anywhere from two to ten weeks in neonatal intensive care. Pregnant women not seeking

proper prenatal care for financial reasons also have higher hospital stay and frequent emergency room visits. The financial implication of implementing a patient navigator protocol does have the potential for an increase in the budget of DHHS; however, the benefit of a patient navigator outweighs the cost derived from the late or no prenatal care received, and extensive, intensive neonatal or maternal care, preterm deliveries, and emergency room visits.

Ethical Consideration

There are many factors that could influence one's research (Klassen et al., 2012). For example, when one chooses to write about a phenomenon that is an obvious problem one usually has had an experience with the problem and needs a resolution to the problem. Clarifying those biases that can influence one's project is paramount; therefore, I decided to state my bias for clarity. Having worked as an obstetric case manager within the Guilford County Health Department for several years, many times I was faced with problems in attempting to assist my pregnant patients to get prenatal care prior to the end of their first trimester. Time and time again I was challenged with the discussion that the reason the patient was late to care was centered on not receiving their Medicaid approval on time. Needless to say, the obstetric physician's offices would not see the patients. I started to think of ways I could assist these pregnant women to gain access to care in a timely manner through the assistance of their Medicaid application and verification process. Having access to the Department of Social Services assisted my plight in getting patients' information to the case workers and getting the Medicaid approved in less than the 45 days stipulated period.

To avoid interjecting my judgment in this project, I chose to use bracketing (Klassen et al., 2013). This form of self-reflection assisted me in becoming aware of my own bias through personal experiences with the eligibility caseworkers. Tufford and Newman (2012) also suggested that bracketing contributes to a more rigorous study and better validity.

Advisory Committee

The data provided to the Advisory Committee Experts had no identifiable patient information. The data were stored, maintained, and transported on a flash drive to and from the Department of Health and Human Services. The flash drive was locked in a desk drawer within the Guilford County Health Department. This information provided was from the transcribed focus group interview from the eligibility case worker, the obstetric case manager, and patients. All key data linking participants' names and aliases will be destroyed as soon as the information has been collected, analyzed, and finalized.

All electronic data files were transferred to a removable drive and password-protected prior to providing the information to the DHHS. Data from the flash drive were uploaded to a personal computer, which was also password protected. Once uploaded it was copied to a secure, password-protected file. A locked file cabinet containing all hard copy data (demographic survey, etc.) was maintained and secured in a locked office at DHHS Public Health Division. The interview transcripts were transcribed using the software program NVivo. All subjects, obstetric case manager, eligibility case worker, and PN were HIPAA compliant. Being compliant with HIPAA laws is a requirement for work at the health department and it means that all patients' information will be kept secure and confidential.

No risk factors to the subjects were foreseen. No psychological harm was expected. Participants were advised that their participation was completely voluntary and they may refuse to participate by not answering the questions. All information was confidential and not exposed to other areas within the DHHS. The significance of this project is to collect and validate the necessary steps for development of a patient navigator verification protocol that can be used to assist pregnant women in completing the Medicaid application verification process prior to 14 weeks' gestation. It is hoped that this navigator protocol would assist pregnant women to obtain their Medicaid coverage prior to their 14th week so that they could obtain appropriate care.

Approval for the research was obtained from the University of North Carolina at Charlotte Institutional Review Board (IRB) prior to the data collection. Approval was granted on November 4, 2015.

CHAPTER 4: RESULTS

Overview of the Project

Introduction

The purpose and importance of this DNP project was to develop a patient navigator training protocol for assisting patients, eligibility case workers, and obstetric case managers with the pregnancy Medicaid application and verification process, thereby removing barriers to accessing prenatal care by African American pregnant women before the end of their first trimester, or 14 weeks' gestation. The intent of the protocol also was to identify and assist in solving areas of difficulties for the patients, eligibility case workers, and obstetric case managers, and to provide ways to remove those barriers, thus improving health outcomes for the mother and baby. Timely access to pregnancy Medicaid insurance coverage allows pregnant women to schedule prenatal appointments and decrease the chances of preterm delivery, low birth weight, or infant mortality.

Clinical Question

The clinical question for this DNP project was: "Will the development of a patient navigator training protocol allow timely approval for pregnant African American women seeking pregnancy Medicaid coverage prior to 14 weeks' gestation. To answer this question, the study was conducted in three phases. Phase I consisted of one-hour focus group interviews with the eligibility case workers, obstetric case managers, and African American female patients. These focus groups were conducted and audiotaped until

enrollment criteria were achieved for all three groups. Phase II included the development of the Patient Navigator Training Protocol (see Appendix A) and matrix (see Appendix B) from the themes and information gathered from Phase I and from literature findings. Phase III focused on piloting the patient navigator training protocol with four African American (AA) pregnant women who were at less than 14 weeks' gestation, had applied for pregnancy Medicaid, and were in the application verification process.

This chapter describes the individuals who participated in the study, including demographic information that characterizes the groups by each phase. The chapter also describes the findings of the study based on each phase of the study.

Description of the Participants

Phase I consisted of examining findings from focus group data. Three groups participated in the focus groups: eligibility case workers, obstetric case managers, and pregnant AAW. The total number of participants in the project was nineteen subjects. Below find a description of the participants by group.

Group 1: Eligibility Case Workers

Phase I had a sample population of six eligibility case workers (n = 6; 31.57%). This focus group was completed at the Department of Health and Human Services in Greensboro, North Carolina. Of the six participants, five were African American and one was American Indian (83.3% and 16.7%, respectively). The ages of the participants ranged from 25 years of age to 60 years of age (see Table 1) Table 2 defines the work experience of the eligibility case workers, and Table 3 defines the educational levels of the eligibility case workers.

Table 1

Ages of Eligibility Case Worker Participants (n = 6)

Age	*n* (%)
25–40	5 (83.3)
41–60	1 (16.7)

Table 2

DHHS Work Experience of Eligibility Case Workers

Number of Participants	Years of Work Experience
2	1–10
2	11–20
2	21–30

Table 3

Education Attainment of Eligibility Caseworkers

Degree	Number of Participants
Bachelor of Arts (4 years)	2
Bachelor of Science (4 years)	2
Masters of Science (6 years)	2

Group 2: Obstetric Case Managers

The sample population for Phase I also included seven Obstetric Case Managers (*n* = 7; 36.84%). This focus group also was conducted at the Department of Health and Human Services in Greensboro, North Carolina. The participants consisted of six AA female obstetric case managers, ages 26–45, and one Caucasian who was 45 years of age.

Table 4 presents the obstetric case managers' demographic information. Table 5 represents their years of employment, and Table 6 represents their educational level.

Table 4

Ages of Obstetric Case Managers

Age	Number of Participants	Percentage
26–30	3	42.8%
31–35	2	28.6%
> 45	2	28.6%

Table 5

DHHS Work Experience of Obstetric Case Managers

Number of Participants	Years of Work Experience
5	1–10
1	11–20
1	21–30

Table 6

Education Completed by Obstetric Case Managers

Degree	Number of Participants
Bachelor of Science in Nursing	3
Bachelor of Social Work	1
Masters of Social Work	2
Associate Degree	1

Group 3: Pregnant AAW

The focus group for the pregnant AAW patients was also held at the Department of Health and Human Services in Greensboro. Six (31.57%) AA female pregnant women patients consented prior to the focus group discussion and recording. Table 7 denotes the demographic information related to these participants. Table 8 is a reflection of the educational levels of the patients.

Table 7

Demographic Information of AAW Patients

Age	*n* (%)
21–25	5 (83.3)
26–30	1 (16.6)

Table 8

Educational Levels of the Patient Participants

Education	Number of Participants
Associate degree	1
High School Diploma	2
GED	3

Description of the Findings

The information gathered from the focus group interview process was used to develop a patient navigator training protocol for the Department of Health and Human Services. The information was transcribed using the software program NVivo and codes and themes were developed. These themes were used to design, develop, and train the

patient navigator. Further, the developed protocol was sent to experts within the DHHS to provide content validity (Chapter 3). The following findings are direct quotes from the focus group sessions held with the three groups in phase one.

These themes were further analyzed and the barriers encountered during the focus group sessions were used to develop a patient navigator training protocol. During processing of the data and development of themes, irrelevant themes were deleted from the study. The relevant themes were validated by comparing all the themes with actual transcript information from the conversation during the focus groups with the patients, eligibility case worker, and the obstetric case manager.

Phase I

The main themes resulting from the focus groups settings were communication, time management, and system problems, and the subthemes were case load and job function specificity, which were grouped into systems problems to facilitate discussion. These themes as defined are inclusive of all transcribed material verbatim, addressing all information with the patients, obstetric case managers, and eligibility case workers. The views and experiences of each participant highlighted the difference of perception among the three groups in the study. The major three themes are described below.

Communication

A major theme that emerged from the three focus groups was communication. All three focus groups expressed concerns about communication with patients. For example, CR, an eligibility case worker, stated, “I’m sorry I do not call anybody,” “I have not heard of any problems from the patients,” “If we do not hear that the patients have problems then we cannot help them,” “We have to hold them accountable too,” and “We

are not here to hold their hands." It was observed that these comments were made and continued in a derogatory manner even after another eligibility case worker, identified as MS, attempted to explain to CR and the other focus group members that she does make phone calls and assists applicants who call and have problems with accessing their records from other states. CR stated, "I do not have time to call anybody." Other communication barriers were expressed by obstetric case manager KB, who stated [in her efforts to contact patients], "We call and leave messages, send e-mails, and no one responds or answers the phone or we are left on hold for hours." Several of the patients reiterated the same problems with communication. For example, DS, stated, "I called and was placed on hold for over 45 minutes," and IS stated, "I have a minute phone and cannot afford to stay on hold for that long," "I had to hang up and go to the department [in person] to take care of my paper work," "I did not get my Medicaid card even after calling the office," and "no one answered the phone."

Time Management

Time Management was another theme established from the focus group data, and was discussed extensively. This theme was conveyed by eligibility case workers, obstetric case managers, and the patients. One of the eligibility case workers stated, "I have to produce 1,700 records monthly." This statement was in contrast to the earlier statement made by CR, DG, an eligibility case worker who stated, "denial cannot be done without reaching out to the applicant." She further explained that in rare cases, "for out of town applicants, she would reach out to previous Medicaid case workers in the other county, in an attempt to assist with the approval process." This information/suggestion

provided by a veteran caseworker with over 20 years of experience was also frowned upon by CR.

The obstetric case managers voiced concerns related to their caseloads and having time to interact with the patients and eligibility case workers when e-mails and calls are not responded to in a timely manner. KB stated, "most of the time the patients are assigned to us after the end of the first trimester . . . so that poses a problem for us initially attempting to help them get Medicaid and prenatal care prior to the end of the first trimester is already defeated." KB and AI also stated that "right now caseloads are in the high hundreds, this makes it difficult to assist everybody with their needs. Having someone to navigate the system to help women to complete the Medicaid application verification would help tremendously." MR joined in the discussion and stated, "I feel system-wide we are not allowed sufficient time for adequate and quality work with high caseloads. . . . Your proposal for a patient navigator sounds like a great idea to assist."

System Problems.

The third major theme that emerged from the focus group data was "system problems." Many of the problems faced at the DHHS-SS office associated with the Medicaid application and verification process are related to misplaced records, shift in processing structure, and dependence on old processes that have been in place and are misconstrued to be factual, such as the statement made by one eligibility worker, "I have 45 days to approve this Medicaid application." One of the patients stated, "I turned in my applications several weeks ago, I have not heard or received anything yet; it has already been more than 45 days . . . when I called to check on my application, no one answered the phone." The patient continued to explain that she finally was transferred to speak to

someone at DHHS, and she stated, “They do not have an application for Medicaid for me in the system. . . . I had to find transportation and go to DHHS that day to reapply for my Medicaid.” “My case worker stated she mailed my Medicaid card, but I still did not receive the card.” She blamed it on the new system NC tracks.

The eligibility case workers, during their group session, discussed the newly-devised system that the state of North Carolina (NC) uses to track applications. “DG stated, this new North Carolina tracking system has a lot of glitches with processing of Medicaid applications.” “MS stated, the system is not located here at the DHHS, it is in Raleigh NC”; “MS also stated, this system was supposed to make our work easier and efficient when it works”; and “CG stated, although we have a new system in place for the Medicaid application and verification process, the 45 days processing is still warranted for each application.”

Another case worker chimed in about the work load and the number of Medicaid applications they are expected to complete monthly. For example, Obstetric case manager KB stated that “The patients most of the time, do not know who their Medicaid case worker or eligibility case workers are,” and “Even though we are in the same building, it is difficult to speak to the eligibility case worker.” Another obstetric case manager, AI, stated, “The eligibility case workers are separated from us, the obstetric case managers”; “although we are in the same building, we do not collaborate”; “Our systems DHHS and Public Health do not talk to each other”; “Most of the time, the eligibility case worker will not answer the phone”; and “We leave messages and no one responds to the e-mail or acknowledges receipt.”

All of these quotes and findings from eligibility case workers, obstetric case managers, and patients assisted in defining the difficulties of communication, time management, and systems problem as major themes throughout the process, allowing for the development of the navigator verification training protocol to assist in combating the current phenomenon.

Phase II

The development of the protocol involved three steps. First, the PI reviewed several articles from the literature (Jean-Pierre et al., 2011; Donelan et al. 2011; Parker et al 2010) focusing on concepts and structure for Protocol development. These articles came mostly from the cancer literature and focused primarily on the role of navigators in community settings (Parker et al., 2010). An article titled, Patient Navigation: Development of a Protocol for Describing What Navigators Do, cited by Parker et al. (2010), was the primary study used to guide the development of the Protocol for this project. The Protocol was also developed using findings from the focus group data, which included communication, time management and systems problems. The Protocol also was developed using concepts derived from Peplau's Theory of Interpersonal Relations. Peplau suggests that interpersonal relations provide the background on which the nurse-patient relationship is secured and hence is important to the outcome for both the patient and health care provider which drives the interpersonal relations and communication processes. Based on these factors, the Patient Navigator Training Protocol for this project included the following components: conceptual definition of a Patient Navigator, duties and functions of the Medicaid patient Navigator and the role of the navigator with the patient, Obstetric Case Managers and eligibility case workers.

The next step in the development of the navigator training protocol entailed designing a visual operational matrix to be used by the Patient Navigator in assisting the patient to complete the pregnancy Medicaid application process and for the eligibility case worker and obstetric case managers to facilitate the pregnant women to apply and complete the application process. The components of the matrix included the following: navigating, coordinating, facilitating, communication and documentation and expected outcomes. The navigator protocol also was designed for the trained navigator to ensure the communication lines are open for obstetric case managers, and eligibility case workers to complete their documentation of work performed, thereby ensuring that the expected outcomes related to completing the application verification processes are met. The matrix also can be used by other health care providers and patient educators to facilitate their understanding of the communication and work flow processes in completing the DHHS, Medicaid application verification process.

Phase III

Phase three focused on piloting the Patient Navigator Training Protocol with four African American (AA) pregnant women who were less than 14 weeks' gestation, had applied for pregnancy Medicaid, and were in the application verification process. To initiate the piloting process, the PI selected and trained a high school graduate. This student was enrolled in the Health Administration Program at Guilford Technical Community College (GTCC) and was in her second year of the program. The student was recruited through the GTCC administrative department using a recruitment flyer sent to the department via e-mail requesting an applicant to be involved in the navigator training protocol process. Resumes of the prospective applicants were received via e-mail and a

thorough assessment of the resumes was conducted by the PI eliminating unqualified applicants.

After the navigator was selected, the PI trained the navigator using a tool developed by PI. This tool included a set of eight questions (Appendix C). The questions focused on the role of the navigator, how to approach and speak to the patients regarding the application verification process, tasks needed to be accomplished by the patients', obstetric case managers and the eligibility process, and the use of strategies for communicating and approaching the eligibility case workers and obstetric case managers. The navigator was also tasked in reviewing the Medicaid application verification for completeness and obtaining information needed from the eligibility case workers to expedite the process. The PI and navigator discussed these processes on several occasions and role played the training prior to the implementation phase with the patients.

Upon completion of the training, the navigator used a set of questions designed to help the patient complete the Medicaid application verification process. This set of seven questions, (see Appendix G) were designed to be assist the patient with the services needed and for the eligibility case workers and obstetric case managers. The first five questions related to the communication processes with the patient, eligibility case workers and obstetric case managers, question six related to the completion of the application verification process, and question seven was associated with determining the overall effectiveness of the protocol.

Results of the training with the four (AA) pregnant women revealed that the women had many questions about the process. For example, one of the women IS stated, it is really nice to have someone here to help with the Medicaid". Another woman

indicated MG asked “will this process make the application faster”? Three of the women had applied for Medicaid and were waiting on their Medicaid verification process, all four women had not sought prenatal care at the time of the navigator piloting phase, one patient had applied and completed the Medicaid application verification process because she felt that she had knowledge of the application process, but did not know who has eligibility case worker or obstetric case manager was. All patients stated they found the process of having a navigator to assist them in the application verification process was helpful and necessary.

In summary, the findings of this qualitative project post piloting on four AA pregnant women who were at less than 14 weeks’ gestation was relevant and deem successful by the patient, obstetric case managers, and eligibility case workers. The navigator assisted these women with their Medicaid application/verification process and directed them towards the proper channel to expedite their application by providing contact liaisons between all parties concerned. The case workers and managers were appreciative and welcomed the idea of a navigator to assist with the Medicaid application verification process.

One limitation encountered by the navigator was noted in her initial attempt to pilot the navigator protocol on the four pregnant women who were at less than 14 weeks’ gestation. She encountered problems such as some patients were more than 14 weeks’ gestation (a few of the women were at 20 weeks’ gestation), and there were three women who were Hispanic and spoke no English and had to be excluded. There were seven women who were excluded from the navigator process due to the problems addressed.

The navigator used the matrix successfully with the four women who participated in the pilot and were less than 14 weeks' gestation. These women were at the beginning of their Medicaid application verification process and needed assistance navigating the system, completing the Medicaid application verification process, and getting into early prenatal care.

CHAPTER 5: DISCUSSION, SIGNIFICANCE, AND IMPLICATIONS

Discussion and Major Findings

The purpose and importance of this DNP project was to develop a patient navigator training protocol for assisting patients, eligibility case workers, and obstetric case managers with the timely completion of the pregnancy Medicaid applications and verifying the certification process. Additionally, the development of the patient navigator training protocol was geared towards removing barriers to accessing prenatal care by African American pregnant women before the end of their first trimester, or 14 weeks' gestation. This chapter will describe the major findings and implications for future practice and research. The major findings and discussion are organized around the three phases of the study.

Phase I

Phase one of the project focused on conducting three focus groups with patients, eligibility case workers, and obstetric case managers. Major findings from the focus group data resulted in three primary themes: (a) communication, (b) time management, and (c) systems problems. These findings are similar to several studies found in the literature related to the use of Navigators in promoting access to care. For example, Domingo, Davis, Allison, and Braun (2011) indicated that the use of patient navigators in cancer research promoted early access to care by removing barriers involving communication, financial, and educational problems. Domingo et al. also established that

the patient navigator was an effective tool in educating the patient on referral processes for palliative care and emotional support (Domingo et al., 2011). Another area within the Domingo (2011) study that is consistent with findings from this study focuses on the use of Navigators to guide cancer patients through the fragmented health care system that typically involves a myriad of cancer care providers and issues often referred to as "systems" barriers (Domingo et al., 2011). Likewise, findings from this project also revealed systems problems related to missing and lost records and an ineffective newly-created Medicaid system designed to track applications.

Similarly, a study by Donelan (2011) compared two groups of patients, one set of patients in a navigator lead program and another set of patients without navigator access. The core purpose of this group comparison study was to determine if a patient navigator group would promote better mammography access for patients. The findings of this study were overwhelmingly positive for quality of care, although the study did not confirm any differences between the navigated group and non-navigated group in terms of the quality of care. The main finding indicated improved access to routine care for mammography patients, thus verifying that patient navigators could assist in enhancing patient care by providing necessary information, direction, and support. This outcome relates to my study because it provides the evidence that patient navigator/navigation can assist patients with communication and understanding workflow processes, thus preventing undesirable consequences.

A third study by Jean-Pierre et al. (2011) attempted to understand the methods of the navigation process in reducing disparities within the different groups in cancer care. For this study, Jean-Pierre and his colleagues (2011) studied 21 interview transcripts

involving patient navigators. These transcripts highlighted the experiences of patient navigators who had completed a randomized trial of a patient navigator process used in their dealings with patients.The study used a three-stage analysis model from which four categories emerged, indicating certain effects on cancer care outcomes, patients' navigators, and navigator processes. These categories were used to form the structure and align the processes of a program through which patient navigators could best assist patients, particularly through relationship building and other needed services (Jean-Pierre et al., 2011), which were similar to findings in this study.

Phase II

The development of the patient navigator training protocol was based on findings from the literature and the themes from this project, using Peplau's Theory of Interpersonal Relations as a guiding framework. Several studies in the literature addressed the topic of developing a Patient Navigator Training Protocol. For example, Koh's article titled, "Evaluation of a Patient Navigation Program," examined the value and effectiveness of a patient navigation program in terms of timeliness of access to cancer care, resolution of barriers, and satisfaction in 55 patients over a six-month period. Although not statistically significant, the time interval between diagnostic biopsy to the first consultation with a cancer specialist after program implementation was reduced from an average of 14.6 days to 12.8 days (Koh et al., 2011). These findings from Koh et al.'s (2011) study is relevant to my study because it decreased the time that patients waited to access care, eliminated the barriers, and decreased time management concerns when receiving certain procedures, all using a patient navigator system. Within this current study, communication, time management, and systems problems were the main concerns

encountered as evidenced by the focus groups data. Hence the study by Koh is consistent with findings from this study, and was used in developing the patient navigator training protocol.

Hendren et al. (2010) conducted a clinical trial of intervention strategies involving patient navigation and activation to improve care. Patients were enrolled in a randomized control trial of patient navigation activation. The goal of this study was to decrease health disparities of cancer care and promoting patient self-efficacy. Through patient navigation services, it was noted that the physician-patient communication was improved for the underserved population. The intervention strategies used for this process included training of paraprofessional staff and detailed training of patient navigators as community health workers to act as patient navigators and patient activation to promote and improve care. After three months of the study, it was evident that patient navigators had improved the timeliness of patient care, patients' adherence to care and treatment protocols, patients' satisfaction with the services provided, and patients' overall increased knowledge of cancer care (Hendren et al., 2010). This study is consistent with the development of the patient navigator protocol in this project. The components of the Patient Navigator Training protocol includes a conceptual definition of a patient navigator, duties and functions and role of the navigator.

A third randomized study conducted by Phillips et al. (2011) suggests that a patient navigator can assist a mammography patient and promote better care. The study was conducted over nine months with both an intervention group, that was randomized to intervention methods, and control groups. After nine months, the study showed increased improvement in mammography adherence as a result of patient navigator intervention

methods, including repeated telephone calls, letters, and reminders (Phillips et al., 2011). These findings of duties and functions of the navigators and navigator intervention methods were also used in the development of the patient navigator training protocol.

Phase III

Phase three was related to the implementation and piloting of the developed protocol with four (AA) pregnant women who were at less than 14 week's gestation and who were already in the Medicaid, application verification process. The pilot study was implemented on four AA pregnant women who were at 8-12 weeks' gestation and in need of pregnancy Medicaid. Major findings from the Navigator being able to use the training Protocol to educate patients on how to complete the Medicaid application process included increased knowledge of the application process and satisfaction with services provided by the navigator. This process revealed that the use of patient navigators can successfully be implemented to assist patients to improve prenatal care outcomes. Providing early access to prenatal care through the use of the patient navigator protocol process can also assist the patient to complete the Medicaid application verification process.

To conclude this discussion of the piloting phase of the patient navigation process, it is evident through findings from this project and other studies in the literature that the use of patient navigators can assist patients in achieving better access to care and improve communication between the provider and patients.

Significance

The purpose and importance of this DNP project was to develop a patient navigator protocol for assisting patients, eligibility caseworkers, and obstetric case

managers with the pregnancy Medicaid application and verification process, thereby alleviating barriers to accessing prenatal care by African American, pregnant women before the end of their first trimester or 14 weeks' gestation period. The protocol was designed to help patients complete the Medicaid application verification process and to serve to identify areas of difficulties for the patient, the eligibility case worker, and the obstetric case manager. The protocol also was developed to identify strategies for removing or overcoming those barriers, thus improving health outcomes for the mother and baby. Timely access to pregnancy Medicaid allows pregnant women to schedule prenatal appointments and decrease the chances of preterm delivery, low infant birthweight, or infant mortality. Consequently, the clinical question, "will the development of a patient navigator protocol allow timely approval for pregnant African American women seeking pregnancy Medicaid coverage prior to 14 weeks' gestation?" is answered as follows. The protocol pilot project indicates positive outcome for both county employees and those seeking Medicaid. Thus this project and the developed navigator protocol will greatly help the Medicaid Program in Guilford County, and the State of North Carolina.

Implications for Practice

The use of the patient navigator protocol, and operational matrix will assist the patients, eligibility case workers and the obstetric case managers to decrease the frustrations they voiced during the focus group sessions. Firstly, the patient navigator and protocol will provide the necessary relief needed within the DHHS. This can be achieved through the improvement of communications between the patients, eligibility case workers, and the obstetric case managers. Improved communication will encourage and

provide faster access to the patient information, therefore assisting with the processing of the patient's pregnancy Medicaid. Secondly, the patient navigator protocol will assist the eligibility case workers and obstetric case manager's workloads, this will be achieved as a result of having a navigator protocol to help the patients with the application verification process, by the use of, the navigator operational matrix as a guide. Thirdly, the patient navigator protocol will assist the DHHS to restructure their processing of the Medicaid application verification processes hence improving the stagnation caused by application back log. This process will lead to improved systems problems. Implications for practice include improvement of the Medicaid application verification process in terms of efficiency and ease in using the application verification processes, could increase, the likelihood of funding the patient navigator position as an asset to the patient, to eligibility case workers, and to obstetric case managers. As a result of numerous studies, patient navigation in health care settings has proven to be an essential pathway to enhancing access to care and has been determined to improve health outcomes for many service deliveries (Freeman, 2006; Jandorf et al., 2013).

Implications for Future Research

The development of the navigator training protocol and piloting was conducted on a small scale, using a reduced sample size based on a particular demographic and population, as designed. Although the pilot program proved useful to the population served, it needs to be implemented on a wider scale and in other settings in order to investigate its true potential. Therefore, this study could contribute to future studies that might lead to the development of an improved service provision mechanism aimed at better productivity relative to the Medicaid application verification process within the

DHHS statewide. Specific to this study, the exclusion of other races was by no means an act of negligence. The project design was based on the research that has highlighted disparities among the AA pregnant women seeking Medicaid in the Guilford County area. Therefore, with regard to future studies, inclusion of other races and geographic areas within the state of NC and beyond could provide an enhanced statistical reference for future care of the Medicaid population and pregnant women.

Summary

To summarize this study, the protocol was centered on Peplau's (1992) Theory of Interpersonal Relations. The results were consistent with the concepts of the theory. For example, one of Peplau's (1992) concepts states that nursing is an interpersonal process because it involves interaction between two or more individuals with a common goal. The successes of patient navigator programs are strengthened by the patient's innate need to have a better health outcome for her baby and herself, as well as the nurse's desire to see her/his patient achieve this kind of healthy outcome. Nursing, as a therapeutic art, strives to relieve the felt need of the patient and reduce the tension created by such needs. In fulfilment of these wants, the network of interpersonal relationships among the patients, caseworkers, and navigators becomes the vehicle to propel their drive to cooperate and attain success in their efforts (Peplau 1992). Thus, the negative attitudes first communicated during the focus group discussions gave way to appreciation and cooperation with the efforts exerted by the navigator/monitor during the piloting phase. Furthermore, another concept from Peplau (1992) states, "the attainment of goals is achieved with the use of a series of steps following a series of patterns". On this point,

the protocol's matrix provides the series of steps and patterns recommended to guide the implementation of a patient navigation program for the Medicaid program.

Finally, while the protocol did not address all of the barriers derived from the focus group discussions, it provided a structured framework for seeking solutions to some of the problems that create barriers to healthcare access for AA pregnant women. Many of the problems highlighted in the studies presented in the literature review were also evident in the focus groups, and such problems could be put to the test using the protocol matrix and other patient navigator intervention programs.

Recommendations

The recommendations to the DHHS: SS/PH are in progress, including the restructuring of the Medicaid verification process and further development and information for the community. Outreach to the community, through community forums, will also support and combat the negative images of Medicaid-related systems and barriers as voiced by patients. Furthermore, the issues of caseloads and variances for eligibility caseworkers and obstetric case managers, as discussed in focus group settings, should be reviewed. Finally, although the focus of this research was on the verification process for pregnant women, the research has revealed other areas in need of further research and improvement. Identified problems could be targets for future studies in the coming months and years. As researcher, it is my hope that this project can be a launching point for the implementation of similar projects on a wider scale; that by advancing this kind of research, the need for patient navigators will be better valued, in order to continue providing needed assistance in the Medicaid application processes,

hence, reducing the disparities of all pregnant women, and increase access to care for all residents of North Carolina.

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APPENDIX A: PATIENT NAVIGATOR PROTOCOL

Patient Navigator Protocol

I. Introduction

The patient navigator protocol is anticipated to help the Guilford County Department of Health and Human Services plan and implement a Patient Navigation program with the intention of enabling the pregnancy Medicaid applicant complete the application and verification process before the end of their first trimester of pregnancy. This will enhance access to pregnancy Medicaid by qualified applicants and provide a good chance of reducing health disparities and improving health outcomes for African American Women.

Some provisions of the Affordable Care Act address 4 key issues important to reducing health disparities in the United States, all of which are amenable to improved implementation through patient navigation: prevention and early detection; health care access and coordination; insurance coverage and continuity; and diversity and cultural competency (Dohan & Schrag, 2005).

Focus groups conducted with pregnant African American women, Obstetric case managers and eligibility case workers revealed systemic issues relating to the Medicaid application and verification processes. The problems are rooted in employee case overload (among others), leading to a breakdown in the workflow and communication processes resulting in a lack of consistency in dealing with patients and systems problems. The Patient Navigator Protocol will attempt to reengineer some of the work of the Eligibility Caseworkers and Obstetric Case Managers in order to improve the efficiency of verifying Medicaid application.

II. Conceptual Definition

a. Patient Navigator—A person or process that enhances service delivery and improve patient satisfaction and outcomes by providing assistant to those seeking pregnancy Medicaid achieve their goal in a timely manner. Ensuring that applicants understand and provide correct information while going through the application and verification processes of the pregnancy Medicaid application. Furthermore, it could also be viewed as a model to provide care targeted to reducing or eliminating a particular problem or disparities that exist within a system.

b. Protocol—These are generally a set of rules and procedures or practices to be adhered to in the performance of a duty or function as a Medicaid patient navigator.

III. Protocol Design

This protocol will be based on Peplau's Theory of Interpersonal Relations (Peplau, 1952), which is driven by communication. According to Peplau, "man strives in its own way to reduce tension generated by needs." The pregnant woman as clients/patient has felt needs for the survival, security, and protection for themselves and their unborn babies. Nursing as a therapeutic art, strives to relieve the felt need and reduce the tension created by such needs. Peplau's theory of interpersonal relations provides the background on which the nurse-patient or eligibility worker/obstetric case manage-client relationship is secured and hence, in the effort to design a protocol that will provide a better outcome for both the patient/client and health care service employees.

With the above theory in mind, the design of the protocol is tailored towards addressing the breakdown in workflow and communication, increase in efficiency, and reinforcement of a better system workflow process. The protocol contains practical tools such as Operational Matrix (Appendix B), review of literature related to recent studies of patient navigator in other capacities such as community, hospital and within disciplines as cancer care. These case studies (Appendix II) such as Domingo et al. (2011) will be attached as references and guide to the navigator process to help accomplish the following protocol design goals:

1. Incorporate best practices tailored towards the enhancement and simplification of the pregnancy Medicaid application and verification process
2. Utilize experience and case studies from other navigation programs to improve access to caseworkers and eligibility case managers for pregnancy Medicaid applicants
3. Establish a patient navigator operational matrix that will highlight the inter-relationships between the various personnel and the work functions and responsibilities
4. Provide patient navigators to pregnancy Medicaid applicants who lack an understanding of the application and verification processes, and the requirements needed to obtain pregnancy Medicaid
5. Provide periodical assessment and evaluation of the program continuous quality assurance and process improvement
6. Educate the public about the availability of the program through local newspapers and flyers.

IV. Barriers Faced by Patients Applying for Pregnancy Medicaid

Even with the expansion of Medicaid in several states, North Carolina's Medicaid programs remain increasing inaccessible and often, an inadequate source of support for poor women seeking prenatal health services. Though most of these women qualify for pregnancy Medicaid, they encounter enormous barriers to eligibility application and verification process coupled with widespread misinformation about typical application requirements and delays that they are discouraged from completing the process. Many

forgo normal prenatal care but receive emergency Medicaid when they show up in the emergency rooms of area hospitals to deliver their babies. Such moves are not only riskier for both the mothers and their babies but also not cost effective.

V. Duties and Functions of the Medicaid Patient Navigator Role:

The main role of the patient navigator is to guide patients to overcome barriers that exist within the DHHS- SS and PH.

1. Role of Navigator with Patient
    a. Explain about Medicaid application process.
    b. Provide assistance with application
    c. Educate patient about pregnancy Medicaid
    d. Initiate Medicaid verification review
    e. Coach patient on Medicaid verification process
    f. Assist in locating case manager or eligibility case worker
2. Role of Navigator with Obstetric Case Managers
    a. Educate Obstetric Case Manager regarding role of Navigator
    b. Assist in contacting eligibility case worker
    c. Coordinate and collaborate between eligibility case worker and Obstetric case manager
    d. Establish team communication
    e. Ensure patient attached to medical home
    f. Facilitate support to and from other sources

3. Patient navigator and eligibility case worker
    a. Establish Team communication between obstetric case manager and eligibility case worker
    b. Provide completed application from patients
    c. Provide assistance in contacting patients or Obstetric Case managers
    d. Coordinate appointments for intake
    e. Scan verification documents to eligibility case worker
    f. Collaborate with the team regarding processing of application

APPENDIX B: PATIENT NAVIGATOR OPERATIONAL MATRIX

Patient	Navigating	Coordinating	Facilitating	Communication & Documentation	Expected Outcome
Inquiry about Pregnancy Medicaid	Explaining about application process	Caseworker or Case manager could be requested	Provide name to Caseworker/ Case manager	Active listening and providing information on application	Patient is informed about the application process
Request Application	Provide help with application if needed	Involve Caseworker if needed	Introduce patient to Caseworker	Establish team communication	Application is correctly filled, received and filed
Provided date and time for follow-up	Educate patient about the Pregnancy Medicaid	Eligibility Case Manager starts reviewing the Application	Ensure all information is completed as required	Inform applicant about any remaining issues to be resolved	Application is reviewed and submitted for verification
Start Verification process on agreed date and time	Initiating verification review and coach patient on the verification process	Collaborate with the team on the verification process	Ensure full corporation from patient and build good working relationships within the teams	Track navigation activities in patient record or through navigation tools or software	Verification to be completed within 4 weeks of receiving completed application
Receive letter of award or decline for pregnancy Medicaid	Review the final decision with patient and further educate them on their obligations to the Medicaid program	Ensure that appropriate prenatal services are available at the agency that the patient goes to	Facilitate any available support from other sources and help with paperwork to augment the support that the patient needs	Integrate information through documentation and sharing with team members	Patient receives pregnancy Medicaid and or other available support for prenatal services.
Final meeting with the team to review options	Alert all team members to this final meeting and provide health promotion and educational materials to further enhance the	Coordinates appointments with providers to ensure timely delivery of prenatal services and perform other duties as assigned	Expand the case management role to collaborate within one's practice setting to support regulatory adherence	Maintain communication with patients and the health care providers to monitor patient satisfaction with the prenatal care experience.	Improve outcomes by utilizing adherence guidelines, Standard Operating Procedures (SOP) and proven processes to measure a patient's

Patient	Navigating	Coordinating	Facilitating	Communication & Documentation	Expected Outcome
	patients' preparation for the birth of the new baby				understanding and appreciation of the program and their willingness to become health literate for themselves and their children

APPENDIX C: NAVIGATOR TRAINING DIRECTIVES

Navigator Training Directives

Below are a list of items for the impending training protocol:

1. How to approach and speak with pregnant women about the Medicaid application verification.
2. What the criteria of Medicaid eligibilities process contains
3. How to complete the application eligibility process
4. How to review Medicaid Application verification for completeness
5. How to approach and interact with Guilford County Medicaid eligibility caseworkers
6. Involvement of Obstetric Case Managers and Physician's offices
7. What information to seek from the caseworkers in order to expedite the Medicaid application verification process
8. Document all the above processes for data collection and record keeping which will be turned over to the Principle investigator for evaluation.

APPENDIX D: ADVISORY COMMITTEE SURVEY

Advisory Committee Survey

Please take a few minutes to review the attached protocol and provide some feedback to me the Principle Investigator related to the use of a patient navigator to assist in the Medicaid verification process discussed in this protocol at the DHHS in Greensboro. NC.

1. On a scale of 1-10 with 1 least possible and 10 most likely. How would you rate the information provided for Medicaid verification process at DHHS in this protocol?

2. Please rate the proposed use of a Navigator to assist with the verification process on a scale of 1-10.

3. On a scale of 1-10, please provide information on the content of the proposal?

4. On a Scale of 1-10, Provide information as it relates to the guidelines given on completing the Medicaid verification process in the proposal/protocol?

5. Are the instructions accurate and do you think patients would cooperate with the verification instructions?

6. Please rate the content of the outline proposal based on this scale

1-5	Fair
5-10	Good
11-20	Excellent
>20	Perfect

Comments: Please provide comments for improvement of this proposal.

APPENDIX E: CONSENT TO COLLECT DATA

Request for Permission for Data Collection from the Guilford County Department of Health and Human Services, Divisions of Public Health and Social Services

October 23, 2015

Guilford County Departments of Public Health (GCDPH) and Social Services (DSS)
1203 Maple Street
Greensboro, NC 27405

Dear DHHS- PH and DSS,

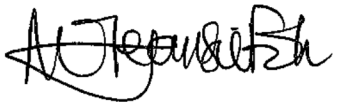
I am hereby requesting permission to collect research data from the Guilford County Department of Health and Human Services: Division of Public Health and Social Services as a requirement for the degree of Doctor of Nursing at the University of North Carolina – Charlotte. The project is titled: Development of Patient Navigator Verification Protocol Promoting Timely Approval for Pregnant African American Women Seeking Pregnancy Medicaid Coverage Prior to 14 Weeks Gestation. I am also requesting permission to interview Obstetric Case Managers, Eligibility Case Workers and Patients, through focus group interviews and surveys. These focus groups interviews and surveys will be conducted within the Health Department and DSS and limited to the difficulties in applying processing and verification of the Pregnancy Medicaid applications.

The purpose of this research study is to examine and analyze general statistical and demographic data related to Medicaid application and processing. It is the goal of the project to provide a better understanding of the difficulties both Case Managers, Eligibility Case Workers and patients encounter during Pregnancy Medicaid application processing and verification. Provide strategic measures to eliminate these barriers.

There are no risks involving personal information or identity for those participating in the survey and focus groups. The survey questions are open-ended and general (not personal) in nature. Consents will be signed prior to conducting both survey and focus groups interviews.

If you have any questions, please contact me at the above contact information.

Sincerely,



Mariama Foh

Approved by:

Department of Public Health/DSS Representative

10/29/15

Merle Green MPH MBA
Public Health Director
Guilford County Department of Public Health
1203 Maple Street
Greensboro, NC 27405
336-641- 3288
Email: mgreen@co.guilford.nc.us

Date

11-10-15

Heather Skeen
Social Services Director
Guilford County Department of Public Health
1203 Maple Street
Greensboro, NC 27405
336-641-
Email: hskeen@co.guilford.nc.us

Date

APPENDIX F: DEMOGRAPHIC DATA

DEMOGRAPHIC DATA
PATIENT

We know some of the following questions are sensitive. Your response to these questions will be used only for statistical purposes during this study. The information will only be viewed by the Principal Investigator and committee members who are involved in the study. Your responses will assist in completing this study and designing a protocol that will assist patients as well as case workers and case managers.

Full Name: _____ Date of Birth: _____

Today's Date: _____

Street Address: _____

City, State, Zip: _____

Home Phone Number: _____

Cell Phone Number: _____

Preferred Language: _____

1. Race	African American	Asian	Caucasian	Other	
2. Age:	20–29	30–39	40–45		
3. Gender:	Male	Female	Other		
4. How many weeks' gestation (Patient only answer this question)				6–10 weeks	10–13
5. Medicaid Application Status:		Applied	Not Applied	Pending	

DEMOGRAPHIC DATA
OBSTETRIC CASE MANAGERS AND ELIGIBILITY CASE WORKERS

We know some of the following questions are sensitive. Your response to these questions will be used only for statistical purposes during this study. The information will only be viewed by the Principal Investigator and committee members who are involved in the study. Your responses will assist in completing this study and designing a protocol that will assist patients as well as case workers and case managers.

Full Name: _____ Date of Birth: _____

Today's Date: _____

Street Address: _____

City, State, Zip: _____

Home Phone Number: _____

Cell Phone Number: _____

1. Age: 20–29 30–39 40–45

2. Race: Caucasian Asian African American Other

3. Gender: Male Female Other

4. Work experience as an Eligibility CW and/or Obstetric CM at GC:

0–5 6–10 11–16 17–21 > 21 years

5. Type of job: Case Manager Eligibility Case Worker

APPENDIX G: PILOT PHASE TRAINING QUESTIONNAIRE

Pilot Phase Patient Questions

The goal of this research is to successfully provide a Navigator through to support the communication process between the Department of Health Social Services, Public Health, and the patients, to assist in the Medicaid application verification process.

Please answer the following questions below and place your initials at the top of the page:

1. How many weeks are you today?
2. When did you start your Prenatal Care visit?
3. Have you applied for Pregnancy Medicaid?
4. As of today, what is the status of Pregnancy Medicaid application?
5. Do you know your Medicaid caseworker? Yes No
6. Do you know how to contact your caseworker? Yes No
7. Do you have an Obstetric Case Manager? Yes No
8. Do you know how to contact your Obstetric Case Manager? Yes No
9. Did you receive a letter in the mail regarding your pregnancy Medicaid application?
10. Did you understand what was asked of you regarding your application?
11. Do you have any concerns regarding your Pregnancy Medicaid application?

APPENDIX H: FOCUS GROUP QUESTIONS FOR MEDICAID ELIGIBILITY CASE WORKERS

#1		Patients	✓
How many patients have you personally seen in the last week?		Less than 10	
		10 to 20	
		21 to 30	
		31 to 40	
		41 to 50	

#2		Minutes	✓
How many minutes do you spend with each patient application verification process?		Less than 45	
		45 to 60	
		61 to 70	
		71 to 80	
		81 to 90	

#3		Patients	✓
How many (total) patients do you have on your case load?		Less than 20	
		20 to 34	
		35 to 50	
		51 to 66	
		67 to 82	
		83 to 98	
		99 to 114	
		Over 115	

#4		Weeks	✓
On average, how often do you see your patients?		Less than 2	
		2 to 4	
		4 to 6	
		6 to 8	
		8 to 10	
		10 to 12	

#5		Circle one	
Do you have patients with Medicaid Applications pending?		Yes	No

#6		Weeks	✓
How many patients whose Medicaid Application is still pending?		Less than 5	
		6 to 10	
		11 to 15	
		16 to 20	
		21 to 25	
		26 to 30	

#7		Weeks	✓
On average, how often do you see your patients?		Less 2	
		2 to 4	
		4 to 6	
		6 to 8	
		8 to 10	
		10 to 12	

#8		Circle one	
Did your patients report any problems with the application verification process?		Yes	No

#9		Circle One	
Do you have patients who report problems with Medicaid Applications process?		Yes	No
If YES, answer the next question (#10). If NO , proceed to #11			

#10	***Please select all that apply*.**	✓
A	Patient did not understand the application	
B	No one was available to help patient with the application	
C	Application was too long	
D	Patient did not complete the application	
E	Patient did not have the required documents to continue the application process	

#11		Circle One	
Do you face any barrier in performing your work?		Yes	No
If YES, answer the next question #12. If NO, proceed to #13			

#12	***Please select all that apply*.**	✓
A	I could not get in touch with the patient. Patient does not return my phone calls.	
B	Patient moved out of the county	
C	Patient does not follow directives.	
D	Patient did not complete the application	
E	Patient did not have the required documents to continue the application process	
F	I did not have enough time to see all my patients	
G	Patient stop responding to DHHS	

#13		✓
	What would help you be more effective in doing your job?	
A	Patient are committed to improving the birthing outcome	
B	Reduced case load of Medicaid patients	
D	Patient attend classes to be healthcare literate and learn about Medicaid requirements	
E	Patient put more effort to provide the required documents for the Medicaid enrollment	

#14		Circle One	
Since the ACA became law, have you had any training that explains the new rules and their effect on Medicaid?		Yes	No
If YES, answer the next question (#10). If No, proceed to #11			

#15		✓
	What do you think of having a patient navigator to help with the Medicaid application verification process?	
A	Strongly support a Patient Navigator program	
B	Support a Patient Navigator program	
C	It does not matter	
D	Do not support	
E	Strongly oppose to such a program	

APPENDIX I: FOCUS GROUP QUESTIONS FOR OBSTETRIC CASE MANAGERS

#1		Patients	✓
How many patients have you personally seen in the last week?		Less 10	
		10 to 20	
		21 to 30	
		31 to 40	
		41 to 50	

#2		Minutes	✓
How many minutes do you spend with each patient?		Less 45	
		45 to 60	
		61 to 70	
		71 to 80	
		81 to 90	

#3		Patients	✓
How many (total) patients do you have?		Less 20	
		20 to 34	
		35 to 50	
		51 to 66	
		67 to 82	
		83 to 98	
		99 to 114	
		Over 115	

#4		Weeks	✓
On average, how often do you see your patients?		Less 2	
		2 to 4	
		4 to 6	
		6 to 8	
		8 to 10	
		10 to 12	

#5		Circle one	
Do you have patients with Medicaid Applications pending?		Yes	No

#6		Weeks	✓

How many patients whose Medicaid Application is still pending?	Less 5	
	6 to 10	
	11 to 15	
	16 to 20	
	21 to 25	
	26 to 30	

#7		Weeks	✓
On average, how often do you see your patients?		Less 2	
		2 to 4	
		4 to 6	
		6 to 8	
		8 to 10	
		10 to 12	

#8		Circle one	
Did your patients report any problems with the application process?		Yes	No

#9		Circle One	
Do you have patients who report problems with Medicaid Applications process?		Yes	No
If YES, answer the next question (#10). If NO , proceed to #11			

#10	***Please select all that apply*.**	✓
A	Patient did not understand the application	
B	No one was available to help patient with the application	
C	Application was too long	
D	Patient did not complete the application	
E	Patient did not have the required documents to continue the application process	

#11		Circle One	
Do you face any barrier in performing your work?		Yes	No
If YES, answer the next question #12. If NO, proceed to #13			
#12	***Please select all that apply*.**		✓

A	I could not get in touch with the patient. Patient does not return my phone calls.	
B	Patient moved out of the county	
C	Patient does not follow directives.	
D	Patient did not complete the application	
E	Patient did not have the required documents to continue the application process	
F	I did not have enough time to see all my patients	
G	Patient stop responding to DHHS	

#13		✓
	What would help you be more effective in doing your job?	
A	Patient are committed to improving the birthing outcome	
B	Reduced case load of Medicaid patients	
D	Patient attend classes to be healthcare literate and learn about Medicaid requirements	
E	Patient put more effort to provide the required documents for the Medicaid enrollment	

#14		Circle One	
Since the ACA became law, have you had any training that explains the new rules and their effect on Medicaid?		Yes	No
If YES, answer the next question (#10). If No, proceed to #11			

#15		✓
	What do you think of having a patient navigator to help with the Medicaid application process?	
A	Strongly support a Patient Navigator program	
B	Support a Patient Navigator program	
C	It does not matter	
D	Do not support	
E	Strongly oppose to such a program	

APPENDIX J: FOCUS GROUP QUESTIONS FOR PATIENTS

#1		Patients	✓
How many times have you called DHHS?		Less 10	
		10 to 20	
		21 to 30	
		31 to 40	
		41 to 50	

#2		Minutes	✓
How many minutes do you spend on the phone on hold for each call?		Less 30	
		30 to 45	
		45 to 60	
		60 to 75	
		>75	

#3		Hours	✓
How much time did you spent on the application process?		<1	
		1-2	
		2-3	
		3-4	
		>4	

#4		Scale 1-5	✓
Rate your experience at the DHHS office.		Less 1	
		1 to 2	
		2 to 3	
		3 to 4	
		5	

#5		Circle one	
Do you know your Medicaid case worker?		Yes	No