Homeless Women with Children Navigating the Health Care System: An Intervention Model

Virginia M. McCarthy
St. Catherine University

Follow this and additional works at: https://sophia.stkate.edu/dnp_projects

Recommended Citation
Homeless Women with Children Navigating the Health Care System:

An Intervention Model

Systems Change Project
Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

St. Catherine University
St. Paul, Minnesota

Virginia Mary McCarthy

December, 2010

ST. CATHERINE UNIVERSITY
ST. PAUL, MINNESOTA
This is to certify that I have examined this
Doctor of Nursing Practice systems change project
written by

Virginia Mary McCarthy

and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by
the final examining committee have been made.

Roberta Hunt, PhD, RN

DEPARTMENT OF NURSING
Dedication page

To Kit
and
Sophie and Sanjana

Thank you.
Table of Contents

Title Page i
Advisors Signature Page ........................................................................................................ ii
Copyright Page ...................................................................................................................... iii
Dedication Page ..................................................................................................................... iv
Table of Contents ................................................................................................................... v
Abstract .............................................................................................................................. 1
Chapter One Introduction ........................................................................................................ 2
Chapter Two Theoretical Framework and Literature Review Synthesis ................................ 8
Chapter Three Project Design and Methodology ................................................................. 21
Chapter Four Results ............................................................................................................. 36
Chapter Five Conclusion ....................................................................................................... 57
References ............................................................................................................................ 63
Appendix A Research Information and Consent Form ........................................................ 73
Appendix B Pre- and Post-Intervention Survey Form .......................................................... 76
Appendix C ISS Objective Assessment Admission Form .................................................... 82

Table of Contents

Abstract .............................................................................................................................. 1
Chapter One Introduction .................................................................................................... 2
Chapter Two Theoretical Framework and Literature Review Synthesis ............................... 9
Chapter Three Project Design and Methodology ............................................................... 22
Chapter Four Results ......................................................................................................... 37

Table of Tables and Figures

(vi)
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>References</td>
<td>60</td>
</tr>
<tr>
<td>Appendix A Research Information and Consent Form</td>
<td>79</td>
</tr>
<tr>
<td>Appendix B Pre- and Post- Intervention Survey Form</td>
<td>73</td>
</tr>
<tr>
<td>Appendix C ISS Objective Assessment Admission Form</td>
<td>79</td>
</tr>
</tbody>
</table>

Comment [d1]: I checked Appendix A and your page numbers do not correspond. You need to check and change all of these.
Homeless Women with Children Navigating the Health Care System

Table of Tables and Figures

Tables

Table 3.1  Timeline of Research Project ................................................................. 27
Table 3.2  ROI Development Costs ................................................................. 29
Table 3.3  ROI Implementation Costs ................................................................. 30
Table 3.4  ROI Emergency Room Visits in Past Three Months ......................... 32
Table 3.5  ROI Description of Health ................................................................. 33
Table 4.1  Comparison of Demographics of Transitional Housing Program Residents and Minnesota Homeless Population 2009 ................................................................. 38
Table 4.2  Residents Health Care Service Utilization at Admission to Transitional Housing Program ................................................................. 40
Table 4.3  Comparison of Regular Source for Health Care Services at Admission and After Six Months Residency in Transitional Housing ................................................. 41
Table 4.4  Residents Mental Health Service Needs at Admission to Transitional Housing Program ................................................................. 43

Figures

Figure 2.1  Causal Pathways between Limited Health Literacy and Health Outcomes ...... 11
Figure 4.1  Comparison of Pre-Post Intervention Survey Results Description of Health.... 45
Figure 4.2  Comparison of Pre-Post Intervention Survey Results Regular Source of Health Care Provider ................................................................. 46
Figure 4.3  Comparison of Pre-Post Intervention Survey Results Emergency Room Visits in Past 3 months ................................................................. 47
Figure 4.4  Comparison of Pre-Post Intervention Survey Results Satisfaction with Health Care Provider ................................................................. 47
Figure 4.5  Comparison of Pre-Post Intervention Survey Results Regular Source of Mental Health Services ................................................................. 48
Figure 4.6  Comparison of Pre-Post Intervention Survey Results Satisfaction with Mental Health Services ................................................................. 49
Homeless Women with Children Navigating the Health Care System

Abstract

Homeless women with children living in transitional housing programs are at risk for inadequate and inappropriate navigation of the health care system, both medical and mental health services. Effective intervention programs to enhance navigational skills are needed to improve health outcomes and to decrease health care costs. This research study had two objectives: to identify whether the residents had a regular source of health care and to provide an intervention model to impact their navigational skills. Twenty-two women living in a Midwest urban transitional housing program participated. The quantitative study compared participants’ reported health care usage over two points in time: admission and after six months residency in Transitional Housing Program, as well as pre- and post-intervention. Paasche-Orlow and Wolf’s theoretical framework, Causal Pathway between Limited Health Literacy and Health Outcomes, describes the cognitive and psychosocial health literacy skills which are necessary for successful health care navigation. Harvard University’s Health Literacy Study Circles provided evidence-based curriculum for the intervention’s design which focused on three health literacy skills: problem-solving; patient-provider communication; and self-care capacity. Descriptive analysis revealed a change in the women’s navigation skills toward more positive health behaviors. There was an increase in participants’ use of regular health care provider after six months in agency program. There was no change in the reported access or utilization of mental health services The pre-post intervention survey responses also shifted toward improved self-perception of personal health and satisfaction with health care provider. Study limitations include small sample size. Replication of the research in similar programs is needed to establish the merit of this intervention model. This study also reveals the urgent need for effective programs to improve navigational skills related to utilization of mental health services.
Chapter One

Introduction

On a particular night in January, 2009, an army of volunteers in 2,988 counties and 1,056 cities in the United States set out to count the number of persons living on the street (US Department of Housing and Urban Development [HUD], 2009). The effort was an attempt to comprehend the magnitude of homelessness in the United States. For women and children without permanent housing, the news was not good- for the second consecutive year there was an increase in the number of families experiencing homelessness. On that night, 37 percent of those counted as homeless were persons living in families (households with at least one adult and one child).

Homeless families living in transitional housing programs (THP) are most likely to be headed by a woman under age 31 without a male partner. Most homeless families have one or two children, with the age of the majority of the children being five years or younger. Women with children who are experiencing homelessness have competing basic needs such as food, shelter, and safety which supersede health care needs, especially health prevention and promotion. Numerous studies indicate that homeless women, when compared to women with permanent housing of comparable age, are more likely to not have a consistent health care provider and are more likely to utilize the emergency room to meet non-emergency medical needs (Amen & Pacquiao, 2004; Kushel, Gupta, Gee, & Haas, 2006; Kushel, Perry, Bangsberg, Clark, & Moss, 2002; Martins, 2008; Wen, Hudak, & Hwang, 2007; Wong, Park, & Nemon, 2006). Factors that cause homelessness also impact families’ ability to access and use health care services (Gelberg, Andersen, & Leake, 2000). Navigating the health care system can be an overwhelming task for homeless families.
Navigation is the term used to convey all the skills that are required to go from one place to another in order to secure health services. Utilization of care is the measure of how well an individual, community or population negotiates the health care system (Paasche-Orlow & Wolf, 2007). Navigating the health care system includes the gamut of activities from securing healthcare insurance and a provider, completing endless complex medical forms, finding one’s way around the hospital, clinic, or government agency and making health care decisions (National Center for the Study of Adult Learning and Literacy [CSALL], 2005). Health care decisions can be as simple as which day to schedule an appointment, and as challenging as providing informed consent for cancer treatment. The application of basic literacy skills of reading, writing, speaking and understanding becomes a complex skill set in the health care setting.

In the past decade, health literacy has been recognized as a crucial factor in impacting health outcomes (Institute of Medicine [IOM], 2004). Health literacy is defined as the capacity to obtain, process, and understand vital health information in order to make informed decisions. This concept includes the foundational role of both cognitive and social skills (Shipman, Kurtz-Rossi, & Funk, 2009; Wolf et al., 2009). Persons with limited health literacy can delay seeking care due to lack of knowledge of the signs and symptoms of an illness. They may be reluctant to seek care due to discomfort in the health care setting. They can be fearful that their limited literacy will be exposed (Katz, Jacobson, Veledar, & Kripalani, 2007).

The most common predictors of health outcomes for the U.S. population (health insurance coverage and health knowledge) are not the most powerful predictors for homeless women. Most health outcome initiatives are based on increasing health knowledge to improve health outcomes. The design of health outcome intervention programs must be based on the
Homeless Women with Children Navigating the Health Care System

specific needs of each community (Baggett, O’Connell, Singer, & Rigotti, 2010). For homeless women and their children, health outcomes may be more effectively impacted through health literacy skill development and the availability of a consistent health care provider. This pilot intervention model focused on health-learning capacity which is a precursor to health knowledge and health behaviors (Wolf et al., 2009).

Background

The goal of this system change project (SCP) was to evaluate THP residents’ knowledge, skills, and behaviors in regard to navigation of the health care system (access and utilization) and to provide an intervention program focused on navigational skills for this population. During 2006, St. Catherine University (SCU) developed a clinical partnership with this agency. Students had the opportunity to provide home visiting services to women and their families. The research partnership between the two institutions was established in January, 2009 which was funded by SCU School of Health Research Grant.

In September, 2009, the agency proposed a research project which would evaluate resident’s health care access and utilization and provide an intervention program to impact health care utilization skills. The staff described their goal as: “to make sure that the families in the program have a home clinic” (September 14, 2009 meeting minutes). The partnership included Virginia McCarthy (SCU DNP student), Dr. Roberta Hunt, PhD, RN (SCU faculty advisor), Senior Director of Program Services and Manager of Housing and Supportive Services, both from the agency. This community based participatory research (CBPR) project germinated from this meeting.
Homeless Women with Children Navigating the Health Care System

Social Justice Considerations

The escalating reality of homeless women with children is compelling reason for this research study. American economist Sr. Amata Miller (2009) eloquently articulates the bewilderment that can be felt when the plight of homeless women and children is fully realized: “Why have the structures of society that have benefitted so many, left so many others behind?” (p. 3). Beauchamp (2003) argues that the dominant model of justice in The United States is a blending of merit-based beliefs and market-justice. This paradigm espouses that “under the norms of market-justice, people are entitled only to those valued ends such as status, income, happiness, etc., that they have acquired by fair rules of entitlement, e.g., by their own individual efforts, actions or abilities” (p. 269). The fundamental values of market-justice include the principles of individualism, personal responsibility, and voluntary behaviors. This approach frees an individual from the collective responsibility of the greater community. In contrast, Miller (2009) offers Catholic Social Teaching (CST) as a more comprehensive approach to justice. This model has three dimensions of justice: commutative (fairness), distributive (basic needs of all are met), and social (the welfare of the community). Social justice endorses principles of shared responsibility and concern for the common good (Budetti, 2008).

This SCP addresses two specific injustices, health outcome disparities and lack of access to health care services. CST provides a rich model for the consideration of issues of justice. According to this framework, six qualities indicate the presence of injustices (sinful social structures): destruction of life, facilitation of selfishness and greed, fragmentation of human communities, violation of human dignity, perpetuation of inequality, and hindrance of ecological sustainability (Miller, 2009). In considering this SCP, three relevant indicators of injustice are fragmentation of human communities, violation of human dignity and perpetual inequality. The
ethically response required of the nursing profession will be considered in Chapter 3. Without a social justice approach, women and children will remain the most vulnerable and the least valued. “Social justice reminds citizens that each of us has a personal obligation to do what is needed to create a society of concern for the concrete needs of all persons (Miller, 2009, p.10).”

Project Objectives

The purpose of this research study was to evaluate the residents’ access to and navigation of primary care and mental health services, at three different points in time: (a) at admission to the program; (b) at the start of the research study; and (c) three months after the educational program. This intervention program was specifically created for the residents living in transitional housing which is a population at risk for inadequate access and navigation of the health care system. The intervention model incorporated limited health literacy research into the teaching plan. The project objectives were:

1. To compare health care access and navigation (primary care, mental health, and emergency department usage) at admission and after six months residency at the agency.

2. To create a navigational skills intervention program for this vulnerable population at risk for limited health literacy based on the findings of the data on the staff goals and The Health Literacy Study Circles (NCSALL, 2005). Pre- and post- intervention survey design evaluated the intervention effectiveness.

3. To recommend system level changes for the agency related to the process of documenting, monitoring and improving residents’ health care access and navigation of primary care and mental health services based on the research results.

In summary, the magnitude and demoralizing reality of life on the street for women and their children reveal the failure of our public health system to assure housing and health care for
Homeless Women with Children Navigating the Health Care System

this population. Women with children constitute one of the fastest growing subgroups of the
homeless population. The social justice issues of fragmentation of human communities, violation
of human dignity, and perpetual inequality were compelling reasons to pursue this research.
Chapter Two

Theoretical Framework and Literature Review Synthesis

The theoretical framework for this study was The Causal Pathways between Limited Health Literacy and Health Outcomes (Paasche-Orlow & Wolf, 2007). The design of this model addresses both patient and provider factors that contribute to positive health outcomes. This project focused on patient factors. The patient factors which were targeted in this study were participation in decision making, problem-solving skills, and self-care capacity. The intervention component of the study focused on health-learning capacity which is the precursor to health knowledge and health behaviors, which leads to health outcomes (Wolf et al., 2009). Health-learning capacity is the ability to promote or improve health through the use of complex skill set, which includes cognitive skills (processing speed, attention, working memory, and reasoning), psychosocial skills (self-efficacy, communication, and previous experience) and skills that overlap both realms (numeracy, verbal ability, and reading).

Theoretical Framework

The Causal Pathways between Limited Health Literacy and Health Outcomes (Paasche-Orlow & Wolf, 2007) identifies three distinct points in the health care encounter which are particularly sensitive to patient’s health literacy level: (a) access and utilization of health care, (b) the provider-patient interaction, and (c) self-care knowledge and behaviors (Paasche-Orlow & Wolf, 2007). The study design was also informed by The Gelberg-Andersen Behavioral Model for Vulnerable Populations (Gelberg, Andersen, & Leake, 2000), The IOM report Health Literacy: A Prescription to End Confusion (2004), Harvard University’s Health Literacy Study Circles (NCSALL, 2005) and The Health-Learning Capacity Model (Wolf et al., 2009). The facilitator’s guide informed the format of the evidenced-based practice intervention model in this
Homeless Women with Children Navigating the Health Care System

study. The principle work of Paasche-Orlow and Wolf (2007) and the most recent work of Wolf and his colleagues (2009) shed new light on the complexity of the concept “health literacy” and offered the road map for development of meaningful and effective interventions for these populations.

The Behavioral Model for Health Care Utilization was developed by Andersen as a theoretical framework which could be used to understand the factors that impact an individual’s access to health care (Goldsmith, 2002). The term Andersen gave to the concept of access to care was health service utilization (HSU). The model, including its many versions over the past four decades, remains the most well known and utilized model for understanding access to care issues. Andersen views health care usage as a function of three factors: predisposition to using health care, factors that enable or impede use, and a person’s need to seek out health care (Gelberg et al., 2000; Goldsmith, 2002). The Behavioral Model for Vulnerable Populations is a revised, expanded version of the original model which incorporates the awareness that the factors that cause homelessness for an individual or family also impact their ability to access and utilize health care services. The expanded model retained the original factors which are now referred to as the “traditional domains”, with the new indicators termed “vulnerable domains” (Gelberg et al., 2000).

Health care usage is a function of predisposing and enabling factors and the presence of some need for health care. The predisposing factors have been expanded to include not only age, race, and education, but also drug and alcohol use, severity of homelessness and psychological distress. The most extensive change to the model occurs in the enabling factors for seeking (or not seeking) health care. The model illustrates the multiple factors of the vulnerable domains. This particular aspect of the Behavioral Model for Vulnerable Populations is very useful for
health care professionals in assessing the factors which could be barriers for navigating the health care system. The need for health care remains the precipitating factor for initiating contact with a health care provider. The health behaviors, which are the way in which health outcomes are measured, reflect common personal practices of both the traditional and vulnerable domain (Gelberg et al., 2000).

The most common outcome measure for health intervention research has been health knowledge (Pignone et al., 2005). Modifiable factors other than health knowledge were found to be equally or perhaps more influential to health outcomes. Nutbeam (2008) proposes that health literacy, which is the capacity to obtain, process, and understand vital health information in order to make informed decisions, is a powerful yet overlooked factor. Health literacy includes skills and capacities that allow a person to access and use health information in an empowering manner.

Through systematic review of the literature (1996 to 2006), Paasche-Orlow and Wolf (2007) created their conceptual model, the Causal Pathways between Limited Health Literacy and Health Outcomes (see Figure 2.1). For each of the three critical steps (access and utilization, patient-provider relationship, and self-care), there are both system factors and patient factors that could be targeted for remediation or enrichment, depending upon the specific health literacy skill needs of the person, community or population at risk. Wolf and his colleagues (2009) have recently provided greater clarity to the concept of health literacy. The Health-Learning Capacity Model (2009) identifies three stages which lead directly to health outcomes: (a) health-learning capacity, (b) health knowledge, and (c) health behavior. This research study will focus on the first stage, health-learning capacity, which is defined as “the broad constellation of cognitive and psychosocial skills from which patients or family members must draw to effectively promote,
Homeless Women with Children Navigating the Health Care System

protect and manage their own or a child’s health” (Wolf et al., 2009, p.S275). The cognitive skill set includes processing speed, attention, working memory, and reasoning, while the psychosocial skill set includes self-efficacy, communication, and previous experience. The skills that overlap both realms are numeracy, verbal ability, and reading.

Figure 2.1. Causal Pathways between Limited Health Literacy and Health Outcomes

In summary, The Causal Pathways between Limited Health Literacy and Health Outcomes was the theoretical framework for this study. Gelberg-Andersen Behavioral Model for Vulnerable Populations (2000) significantly informed the intervention project design. This behavioral model recognizes that the factors that cause homelessness for an individual or family also impact their ability to access and utilize health care services.

**Literature Review and Synthesis**

**Health care access.**

Lack of access to appropriate health care for persons experiencing homelessness is well documented in the literature. Homeless women are considered the most vulnerable subpopulation within the homeless community (Ciaranello et al., 2006; Lim, Sadowski, & Kee, 2002; Redlener & Karich, 1994; Sadowski, Kee, VanderWeele & Buchanan, 2009). Homeless women’s hospitalization rates are five times higher than non-homeless women of similar age. When comparing homeless females to males, women are more likely to be younger, less likely to earn money through employment, and more likely to be dependent on the welfare system. They are also more likely than homeless men to be caring for their young children during the homeless experience. Their history is more likely to include sexual and/or physical abuse, increased incidence of diagnosed mental illness and reported greater degree of psychological distress while living on the street (Lim et al., 2002).

Though many studies indicate that health insurance is a critical marker for predicting health outcomes, the findings of Lewis, Andersen, and Gelberg (2003) revealed that a regular source of health care was a more powerful predictor of health outcomes for homeless women with children than having health insurance. Numerous research studies indicate that women who are experiencing homelessness are more likely than housed women of similar age to not have a
consistent health care provider and are more likely to utilize the ED to meet non-emergency medical needs (Amen & Pacquiao, 2004; Kushel, Gupta, Gee, & Haas, 2006; Kushel, Perry, Bangsberg, Clark, & Moss, 2002; Martins, 2008; Wen, Hudak, & Hwang, 2007; Wong, Park, & Nemon, 2006).

Availability of health care does not equate with access to health care, especially when considering the homeless community. Woman who are homeless identify distinct barriers to health care access. Some commonly identified barriers within the general homeless population are lack of knowledge of where to go for services, long wait time at clinics and fragmentation of care. Homeless mothers also report deferring health care services due to competing priorities such as the children’s essential needs, including accessing health care for their children. Sometimes they are too sick to seek out medical attention (Gelberg, Gallagher, Andersen, & Koegel, 1997; Kushel, Vittinghoff, & Haas, 2001; Lewis et al., 2003). More subtle yet equally powerful barriers identified in the literature include feelings of disrespect and experiences of being labeled or stigmatized by the health care community (Martins, 2008).

Hatton (2001) used the term “circuitous route” to describe the manner in which homeless women secured health care. She observed that the homeless are often navigating in emerging health care systems, which do not have the same longevity and stability of established health systems. The women were more likely to initially use a social network such as a women’s shelter which would then facilitate access to health care, though some of these resources did not provide continuity of care after transition to permanent housing. Women used words such as “provider change,” “runarounds,” and “knowing” (as in not knowing), to describe their health care experiences. These words portray the lack of continuity which contributed to the chaotic nature of homeless women’s health care encounters. Schanzer and her colleagues (2007) had similar
findings: homeless women’s health care access and health outcomes improved during the time they were in shelters.

In summary, the literature provides abundant evidence of the multiple barriers to health care access and utilization for women and their children who are homelessness. The experience which was once a rare occurrence is now an escalating reality. Arangua and her colleagues (2006) recognize that with the feminization of homelessness, services must be provided in a manner that is more responsive to the complex nature of homeless women’s needs. The defining risk factors for poor health outcomes for homeless women and their children parallel the characteristics of individuals and communities that are identified in populations as having limited health literacy rates (Gelberg et al., 2000).

**Health literacy.**

In 1992, significant gaps in U. S. adult literacy was first illuminated when the National Adult Literacy Survey (NALS) revealed that approximately half (47% to 51%) of US adults had difficult using printed material in their daily lives (Kirsch, Jungeblut, Jenkins & Kolstad, 1993). In the subsequent decades, literacy research revealed the correlation between health outcomes and educational level and/or income. These results also exposed the association between literacy and ability to access and navigate in highly literate environments, such as health care. The 1992 NALS galvanized both educators and the public health community to reexamine efforts to impact health literacy in order to improve health outcomes. Healthy People 2010 identified health literacy as one of the national health goal. Unfortunately, this goal was not fully realized during the decade and Healthy People 2020 includes health literacy again as a national health goal (U.S. Department of Health and Human Services [HHS], 2010).
The application of basic literacy skills of reading, writing, speaking and understanding becomes a complex skill set when attempting to navigate the health care system. Health literacy is a common term in health care, education and social sciences literature. Though the term originated in the 1970's in relation to persons whose primary language was other than English, in recent years the concept has become a descriptor for multiply realities. The concept of health literacy includes reading fluency, vocabulary, numeracy skills, and comprehension, as well as the capacity to listen, to speak up for self (self-efficacy), and to use information to make health care decisions. These skills are essential to successfully functioning as a health care consumer (Speros, 2005; Shieh & Halstead, 2009).

Health care literacy is now seen as a complex skill set that can be measured though use of various research and clinical tools. The most common research tools are Rapid Estimate of Adult Literacy (REALM), Test of Functional Health Literacy in Adults (TOFHLA, S-TOFHLA), Health Assessment Literacy Study (HALS) and Demographic Assessment for Health Literacy (Baker, 2006; Chew et al., 2008; Davis et al., 1993; Hanchate, Ash, Gazmararian, Wolf, & Paasche-Orlow, 2008; Parker, Baker, Williams, & Nurss, 1995; Rudd, 2007). These research tools do not transfer easily to the clinical setting due the required staff training and the administration time, both of which can be lengthy.

There is a pressing need for reliable health literacy screening tools that can be easily administered in the clinical setting. Several studies are offering hope for such a tool. One approach is to ask one to three questions from the TOFHLA as a rapid, reliable indicator of an individual’s health literacy. Chew and her colleagues (2004) used this approach in the Short Form of Functional Health Literacy. They created a five-point Likert scale tool that asks three questions: a) how often do you have someone help you read hospital or clinic information, b)
how confident (sure) are you filling out medical forms by yourself, c) how often do you have
problems learning about your medical condition because of difficulty understanding written
information. The strength of the tool is its simplicity and ease of scoring. The study was
conducted in a large VA primary care clinic, with a predominately male population. A limitation
of the study is whether the predictive ability of the tool differs between women and men (Chew,
2009; Chew et al., 2004). Wallace, Rogers, Roskos, Holiday, & Weiss (2006) utilized one
question, “how confident are you filling out medical forms by yourself” (p. 874), and found it to
be as reliable as multiple questions in detecting inadequate literacy skills.

Other reliable tools exist that are not based on the TOFHLA. Williams (1995) pioneered
a three question tool which focused directly on reading skills (newspaper, hospital forms, and
assistance needed for hospital forms). The Newest Vital Sign Tool (Weiss et al, 2005) is a
creative and efficient tool which provides a quick assessment of health literacy into three
categories: (a) limited, which is sixth grade reading level; (b) marginal, which is seventh to
eighth grade reading level; and (c) adequate, which is at least ninth grade reading level. The three
minute instrument asks patients to review a nutritional label and answer six questions about the
information on the label. The score reflects either likelihood of low health literacy or
unlikelihood of low literacy. In 2009, Chew conducted research which confirmed that self-report
format is a reliable method for identification of low literacy skills, but it is not equally reliable as
the research models in identifying persons who have marginal health literacy ability.

In summary, numerous tools are available to measure health literacy. Historically, these
instruments have required elaborate training for administrator and lengthy time frame for the
participant. Most designs were intended primarily for research use. Recently clinical tools are
available and offer opportunities for assessment in the health care delivery setting. Interventions which have application in the present productivity-driven health care model are needed.

**Health literacy interventions.**

In 2009, Wolf and his colleagues introduced The Health-Learning Capacity Model. It delineates four steps in the health learning process: (a) health-learning capacity, which involves encoding skills; (b) health knowledge, which includes awareness; (c) health behaviors which are the person’s actions; and (d) health outcomes which reflect the cumulative effect of the previous steps. The health-learning capacity phrase encompasses the cognitive and psychosocial skill sets required to navigate the health care system in order to attain optimal health outcomes. Wolf’s earlier work with Paasche-Orlow (2007) recognized that effective health literacy interventions must incorporate the various socio-cultural factors in order to truly improve health outcomes.

There are three points along the continuum of care that are most influenced by the patient’s health literacy capacity: (a) access and utilization of care, (b) patient-provider relationship, and (c) self-care (Paasche-Orlow & Wolf, 2007). Because health literacy is complex and multifocal, both system level factors and individual’s strengths and needs affect access to health care and self-care activities (Shieh & Halstead, 2009). The focus of this SCP was at the individual/subpopulation level of homeless women living in transitional housing.

Navigation is the term used to convey all the skills that are required to go from one place to another in order to secure health services. Utilization of care is considered the measure of how well an individual, community or population navigates the health care system (Paasche-Orlow & Wolf, 2007). In the past decade, research has provided health care professionals with evidence-based strategies which are specifically effective when working with limited literacy populations. Health literacy intervention research suggests revising written material to include “plain
language” (concise, conversational style with information presented in a logical order), numeracy skills (the capacity to understand and use numbers in everyday life) and communication skills (Rothman, Montori, Cherrington, & Pignone, 2008).

The Iowa Department of Public Health’s project called “Plain & Simple” reflects the essence of the national health literacy movement to impact health outcomes by attending to the degree to which individuals and populations obtain, process and understand health information. Other approaches with simple design which hold great promise are “AskMe3” and “Teach Back” (Frankel, 2008). Despite ongoing efforts to impact the reading ability level of health literacy material, much of the available literature is available in the English language only and is far more complex than the capacity of low-literacy level adults (Osborne, 2005; Osborne, 2006). The use of illustrations and information in a narrative form or story rather than bullet point approach demonstrated superior outcomes in a study population which consisted of women who were identified as poor readers (Michielutte, Bahnson, & Dignan, 1992).

Self-efficacy has shown to be a reliable predictor of self-management behaviors in low literacy persons with chronic illness, such as diabetes. Self-efficacy is the ability a person has to plan and carry out the steps necessary to manage one’s health care needs. According to social change theory, health literacy interventions that increase patients’ self-efficacy skills, including participation in health decisions, may improve health outcomes (Seligman et al., 2007). An interventional program which employs a developmental approach to self-efficacy skills could be effective in improving health care navigation for homeless women and their children. A developmental approach identifies the strengths of an individual or community and builds on these assets when teaching new skills to be mastered.
Homeless Women with Children Navigating the Health Care System

Though all of these individual interventions have merit, a more global systems approach to enhanced health literacy was created by The Health and Adult Literacy and Learning Initiative at Harvard University. The Health Literacy Study Circles + Guide (NCSALL, 2005) categorizes the common health-related tasks into five key groups: (a) health promotion, (b) health protection, (c) disease prevention, (d) health care and maintenance, and (d) navigation. The skills for health care access and navigation were created because “adults with less income and less education do not have the same access to health care as do adults with more income and education” (p. 12). The guide provides a template to build an educational plan for the specific needs of a targeted community or individuals. The goals are common tasks required in a health care encounter, such as locating appropriate services, making and keeping appointments, and providing information to the health care team. This guide was used to create and implement the intervention component of this study.

In summary, the research in the areas of health literacy and navigational skills reveal that factors other than health knowledge may hold greater promise in their capacity to impact health literacy. Self-efficacy, communication, and participation in health care decisions are three skills that are powerful precursors to health knowledge and subsequent improved health outcomes. Women living without permanent housing are at high risk for limited capacity of these skills. An intervention program with a concentration on these three skills could enrich the foundational psychosocial skill set of women’s health-learning capacity. Harvard’s Health Literacy Study Circles (NCSALL, 2005) provides an evidence-based model for an effective intervention program. Adequate health literacy facilitates improved navigation of the health care system which leads to improved health outcomes.
In conclusion, persons with limited health care literacy can delay seeking care due to lack of knowledge of the signs and symptoms of an illness. They may be reluctant to seek care due to discomfort in the health care setting. There may even be fear that their limited literacy will be exposed (Katz, Jacobson, Veledar, & Kripalani, 2007). An effective health literacy intervention program must incorporate fundamental skills which are core to access and utilization of the health care system in the United States. The historical work of Andersen and Gelberg, the innovative approach of Wolf and Paasche-Orlow, and the exemplary Health Literacy Study Circles provide a rich road map for impacting the health literacy skills of homeless women with children living in transitional housing.
Chapter Three

Project Design and Methodology

Homeless Women with Children Navigating the Health Care System Project was a joint effort of a transitional housing agency and SCU. The project design was based on the incorporation of the philosophies of community-based participatory research (CBPR) with evidence-based practice (EBP). CBPR is rooted in the collaboration of the community partner’s assets and identified need with the University’s skills in research and desire to collaborate with community organizations. The National Health Disparities Report (Agency for Healthcare Research and Quality [AHRQ], 2006) which guided the development of the survey tool, as well as the Health Literacy Study Circles (NCSALL, 2005) were utilized to evaluate the agency’s goal that every resident have a regular source of health care.

The first phase of the CBPR was the visioning stage. This initial process formed the foundation for ongoing and final evaluation of this endeavor. Key qualities of this project were:

1. Community members identified their most important needs and were passionate about creating a solution through community engagement and joint responsibility.
2. Process yielded a precise purpose which was based on the issues of greatest importance to the community agency. Specific goals were created through a reciprocal process.
3. Strategies were articulated to describe how the partnership would achieve these goals.

The partnership made a commitment to an action plan. Responsibilities, accountability, and communication mechanism were identified. These aspects of the project required ongoing evaluation to assure an effective partnership (National Association of County and City Health Officials, 2009).
The purpose of this research study was to evaluate the residents’ navigation of health care and mental health services and to create and implement an intervention program focused on navigation of the health care system. The project objectives were:

1. To compare health care access and navigation at admission and after six months residency within agency.
2. To create an intervention program based on agency staff’s goals for the educational sessions and Harvard University’s publication, The Health Literacy Study Circles (NCSALL, 2005).
3. To recommend system level changes for the agency related to the process of documenting, monitoring and improving residents’ navigation of health care and mental health services based on the survey results.

**Project Design**

The agency requested SCU’s participation in CBPR. The partnership has existed since 2006, which contributed to the ease in the establishment of this study and the subjects’ willingness to participate. The study was approved by the University’s Institutional Review Board (IRB). The agency did not have an internal research review committee and fully endorsed SCU IRB’s approval of the study.

The organization has three separate residential buildings with thirty-six female adult residents ranging in age from nineteen to fifty-five. Initially, the agency staff informed the residents about the study during the March residential building meetings. During the April meetings, the consent form was provided and read out loud to the residents (see Appendix A). Those who wanted to participate then signed the consent form and completed the pre-intervention questionnaire (see Appendix B). Participants were given a gift card (five dollar
value) after completing the pre-intervention survey, and were informed that they would be given a ten dollar gift card when they completed the post-intervention survey in September, 2010.

The intervention program included three sessions which were offered on consecutive weeks as part of the agency’s mandatory weekly class. The post-intervention survey (see Appendix B) was completed three months after the educational program at a weekly class. Home visits were arranged to accommodate the study participants who did not attend the class, in order to enhance participation in the post-intervention survey.

**Assessment Tools**

**Admission form.**

Record review included two sections of one document from the residents’ record, the Individual Service Strategies Objective Assessment (ISS) admission form (see Appendix C). This form, completed by the case manager at the time the resident entered the program, is a checklist that includes names, dates and comments related to health care needs and resources. The consent form communicated the limited scope of the data which would be reviewed in the admission form (Health Care and Mental Health sections only). The admission form is a reflection of the residents’ health status and health care access and navigation before they joined the program. These two sections specifically document the patterns of health care usage before admission and areas of need for health care and mental health services at the point of entry into the program. The information provides a brief summation of the initial contact. The form is completed by the case manager and is based on the information received from the resident, as well as the manager’s impression of the client’s needs. This initial assessment of the newcomer’s need is completed within the first forty eight to seventy two hours at the facility.
Health care assessment and navigation questionnaire.

A twenty-item questionnaire (see Appendix B) was developed which included three categories related to health care navigation: (a) demographic, (b) health care services, and (c) mental health services. Validity of the questions was not compromised by the separate use of individual items from the National Health Disparities Report (AHRQ, 2006), which was the source for the tool. Consistency was maintained with the original wording of each item. There were five markers for health care access and navigation included in the study’s survey: (a) usual source of health care; (b) pattern of usage (number of visits); (c) satisfaction with regular provider and mental health services; (d) emergency room visits; and (e) one word description of health.

Intervention Program Development

The staff articulated three goals for intervention program: to improve residents’ sense of empowerment; to increase the residents’ perception of self as consumer of health care; and to increase knowledge of the “logic of the hospital”. Three key points along the continuum of care, access and utilization, patient-provider relationship, and self-care skills served as the framework for each class (Paasche-Orlow & Wolf, 2007).

Health Literacy Study Circles curriculum categorizes the common health-related tasks into five key groups: (a) health promotion, (b) health protection, (c) disease prevention, (d) health care and maintenance, and (e) navigation. The health care maintenance and navigation categories were most consistent with the specific needs of this community. The tasks of these categories are common activities in a health care encounter, such as locating appropriate services, making and keeping appointments, and providing information to the health care team (NCSALL, 2005). The three tasks which were selected as the focus of this intervention project
were getting and keeping a medical appointment (access and utilization), communicating needs
to the health care team (patient-provider relationship), and advocating for self and family,
especially related to mental health services (self-care skills).

Each session’s curriculum was based on the unit template provided in The Health
Literacy Study Circles (NCSALL, 2005). Each class deconstructed a navigational task, in order
to teach the underlying required skills. The theme of the first session, going to the doctor,
related to access and utilization. The activities in this session included assessment of the
women’s self-esteem by the participants naming one activity or characteristic that she identified
as a personal strength. Sequential thinking skills were assessed and taught through the process of
naming the steps in common household tasks, such as going to the grocery store or getting the
children ready for school. The first class concluded with the introduction of the AskMe3 form,
which is a national patient education program designed to promote clear communication between
patients and providers, for the sake of improved safety and health outcomes (National Patient
Safety Foundation, 2004). AskMe3 poses three questions which guide the patient in
communicating her medical need to the provider. This task requires sequential thinking and
problem solving capacity. The first session demonstrated and familiarized the residents with
skills which could enhance self-care, communication with health professionals and improved
capacity to make and keep a medical appointment.

The theme of the second session was talking with a provider, which related to patient-
provider communication. AskMe3 was reviewed through use of pictures stories and role playing,
which are powerful educational tools for persons with limited health literacy (Osborne, 2005;
Osborne, 2006; Rudd et al., 2005). The cognitive behavioral therapy (CBT) model of assertive
skills training was taught, which describes the continuum of communication as passive,
assertive and aggressive (Osborn & Harris, 1975; Smith, 1975; Chenevert, 1994). The residents resonated with this model, when given three alternative descriptors, too polite, polite and rude (Rudd et al., 2005). These words captured their experience of communication in the health care setting. The theme of the third session was talking to a mental health provider which addressed advocacy and self-care skills. Various illustrated posters were utilized that provided simple terms and pictures to provide participants with language and terminology they could employ when communicating mental health needs to health care professionals. The last activity was using the AskMe3 form to communicate mental health needs. Pictures of various moods and affect were used to practice these emerging mental health literacy skills (Kelly, Jorm, & Wright, 2007). Residents worked in small groups and reported back to the class through role playing.

Timeline of Research Project

The timeline for this community based, participatory research project was established by all members of the partnership. The initial planning stage was accomplished between September 2009 and February 2010. Recruitment of study participants, admission data collection, and intervention curriculum development occurred during March, April, and May 2010. The three educational sessions were taught in May and June 2010. Post-intervention survey data were collected in September 2010. The final stage of data analysis was completed by January, 2011. Dissemination of the findings is discussed in Chapter 5 (see Table 3.1).
Table 3.1.

**Timeline of Research Project**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Dates</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>September, 2009 to February, 2010</td>
<td>Create partnership, clarify needs, formulate research focus and question.</td>
</tr>
<tr>
<td>Phase 2</td>
<td>March, 2010 to May, 2010</td>
<td>Recruit Subjects, data collection, create intervention plan.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>May, 2010 to June, 2010</td>
<td>Implement intervention.</td>
</tr>
<tr>
<td>Phase 4</td>
<td>September, 2010</td>
<td>Post-intervention data collection.</td>
</tr>
<tr>
<td>Phase 5</td>
<td>September, 2010 to October, 2010</td>
<td>Preliminary data analysis.</td>
</tr>
<tr>
<td>Phase 6</td>
<td>October 2010 to January 2011</td>
<td><strong>Dissemination of research findings.</strong></td>
</tr>
</tbody>
</table>

**Resources and Return on Investment**

The purpose of this study was to impact navigational skills of homeless women in order to improve health care access and utilization. There are both financial and non-financial benefits for this project. Return on Investment (ROI) is a business term used to predict and measure the financial benefit derived from a product, project or process. It is typically measured in a monetary manner. Non-monetary benefits include social factors that result from the financial investment (Phillip & Phillip, 2006). Study objective one was to identify whether residents had a regular source of health care, comparing admission to at least six months in THP. Identification of a regular health care provider measured non-monetary benefit of the agency’s program. Study objective two was to provide an intervention model to impact health care navigational skills for women in THP. Frequency of emergency room visits (ERV) measured monetary benefit of the
intervention model. Satisfaction with health care provider and description of one’s health
provided data on non-monetary benefits.

Homeless women are more likely than housed women of comparable age to have no
consistent health care provider and to use ERV for non-emergency needs (Amen & Pacquiao,
2004; Kushel et al., 2006; Kushel et al., 2002; Martins, 2008; Wen et al., 2007; Wong et al.,
2006). An ERV is a very costly option for securing health care for non-urgent needs. Equally
important, it is not an effective manner for addressing non-emergency health issues. This type of
health care encounter is not intended to provide preventive health services such as
immunizations, developmental screening or health education, which is often an unmet need of
this population. Homeless women and their children have complex medical and mental health
needs, which cannot be adequately addressed in the emergency department.

ERV is a common research measurement of the homeless community’s utilization of the
health care system (Kushel et al., 2002; Kushel, Vittenhoff, & Haas, 2001; Sachs-Ericsson, Wise,
Debrody, & Paniucki, 1999). Data from the Medical Expenditure Panel Survey (AHRQ, 2007)
revealed that the average cost of an emergency room visit is $707, with the median cost of $450.
The estimate of potential monetary savings for this project was based on ERV.

**Project cost.**

The cost of the project was divided into development and implementation expenses.
Personnel time, which included the faculty and the agency staff time, was calculated. The hours
devoted to the project were converted to monetary value based on a pro-rated hourly salary of the
professionals involved in the project. Supplies, printing cost and incentives to participants (gift
cards) were also included in the overall cost of the project (see Table 3.2 and Table 3.3). Overall
cost of the project was $7,701 (development cost = $6,579; implementation cost= $1,112).
Table 3.2.

**ROI Development Costs**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Quantity (Hours or Copies)</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Director</td>
<td>1 hour</td>
<td>$75/hour</td>
<td>$75</td>
</tr>
<tr>
<td>Agency Coordinator</td>
<td>5 hours</td>
<td>$40/hour</td>
<td>$200</td>
</tr>
<tr>
<td>Agency Case Managers</td>
<td>2 hours</td>
<td>$30/hour</td>
<td>$60</td>
</tr>
<tr>
<td>Faculty Advisor</td>
<td>4 hours</td>
<td>$40/hour</td>
<td>$160</td>
</tr>
<tr>
<td>DNP Student</td>
<td>200 hours</td>
<td>$30/hour</td>
<td>$6000</td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Literacy Study</td>
<td>1 copy</td>
<td>$39</td>
<td>$39</td>
</tr>
<tr>
<td>Illustrated Children’s</td>
<td>2 copies</td>
<td>$10</td>
<td>$20</td>
</tr>
<tr>
<td>Book Posters</td>
<td>2 copies</td>
<td>$5</td>
<td>$10</td>
</tr>
<tr>
<td>Printing</td>
<td>160 copies</td>
<td>$0.10</td>
<td>$16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>$6579</td>
</tr>
</tbody>
</table>
**Table 3.3.**

**ROI Implementation Costs**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Quantity (Hours or Copies)</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Coordinator</td>
<td>2 hours</td>
<td>$40</td>
<td>$80</td>
</tr>
<tr>
<td>Agency Case Managers</td>
<td>3 hours</td>
<td>$30</td>
<td>$90</td>
</tr>
<tr>
<td>DNP Student</td>
<td>12 hours</td>
<td>$30</td>
<td>$360</td>
</tr>
<tr>
<td>Statistician</td>
<td>5 hours</td>
<td>$30</td>
<td>$150</td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing</td>
<td>480 copies</td>
<td>$0.10</td>
<td>$48</td>
</tr>
<tr>
<td>Posters</td>
<td>10</td>
<td>$1</td>
<td>$10</td>
</tr>
<tr>
<td>Markers</td>
<td>10</td>
<td>$1</td>
<td>$10</td>
</tr>
<tr>
<td>Construction Paper</td>
<td>2</td>
<td>$4</td>
<td>$8</td>
</tr>
<tr>
<td>Gift Cards</td>
<td>22</td>
<td>$5</td>
<td>$110</td>
</tr>
<tr>
<td>Gift Cards</td>
<td>22</td>
<td>$10</td>
<td>$220</td>
</tr>
<tr>
<td>Snacks</td>
<td>3</td>
<td>$12</td>
<td>$36</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>$1122</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td></td>
<td>$7701</td>
</tr>
</tbody>
</table>
ROI of project.

The estimate of potential monetary savings for this project was based on ERV. The non-monetary benefits were based on the survey results: (a) regular source of health care; (b) satisfaction with health care provider; and (c) residents’ perception of their health, as indicated through one word description of health. The ROI calculation (monetary and non-monetary) was based on the degree of change in participants’ responses between two points in time: admission record and post-intervention survey data for study objective one; and pre- and post-intervention survey data for study objective two.

Study objective one was to identify whether residents had a regular source of health care. For homeless women, a regular health care provider is a significant non-monetary benefit. Comparison of the admission record (see Appendix B) and the post-intervention survey (see Appendix C) was used to measure change in regular source of health care. On the admission form, two columns on the health care category indicate if there is a regular source of health care. The columns identify either yes (“in place”) or no (“needs”). Survey question six asked participants to choose one answer that best described their regular source of care: (a) no regular source; (b) mostly emergency room; (c) regular source but no regular doctor; or (d) regular source with a regular doctor or nurse. Survey results were interpreted as either yes (both choices included regular source of care) or no (no regular source of care or mostly emergency room). At admission, fifteen women had a regular source of health care and five did not. At six months after residency, sixteen women had a regular source of health care and four did not. There was an overall change of one point from no regular provider to having a regular provider. This was a small difference but a positive change.
Homeless Women with Children Navigating the Health Care System

Study objective two was to provide an intervention model to impact health care navigational skills for women in THP. The monetary benefits were calculated based on emergency room costs. The difference in the number of ERV reported on the pre- and post-intervention survey question ten was used to calculate the monetary benefit of the study. Four response options were listed: (a) zero, (b) one, (c) two or three, and (d) four or more. The response options for this question were converted into actual numbers (0=0; 1=1; 2 or 3= 2.5; 4 or more= 4). The total number of ERV reported in the pre- and post intervention survey was compared. The overall number of ERV did not change. There was a shift away from the highest ERV frequency, four or more visits (see Table 3.4).

Table 3.4.

<table>
<thead>
<tr>
<th>Number of Emergency Room Visits</th>
<th>Pre-intervention Survey</th>
<th>Post-intervention Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Participants</td>
<td>Number of visits</td>
</tr>
<tr>
<td>None (0)</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>One (1)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Two or three (2.5)</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Four or more (4)</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Two survey questions reflected the non-monetary benefit of the project: satisfaction with health care provider and description of one’s health. Participants’ satisfaction with health care provider demonstrated a positive change from fourteen to sixteen out of the twenty-one women satisfied on the post-survey results. These findings characterize the non-monetary benefits of enhanced empowerment and improved health care consumer capacity.
The women who participated in the study also demonstrated a change in their perspective of their own health. Survey question four asked participants to choose one word that best described their health. Four response options were provided: (a) very good, (b) good, (c) fair and (d) poor. The comparison of the pre- and post- intervention survey responses reveals a shift in the women’s view of their health. This shift was toward a more positive perception of health with the option “poor” decreasing from three points to one point (see Table 3.5).

Table 3.5.

ROI: Description of Health

<table>
<thead>
<tr>
<th>Description of Health</th>
<th>Pre-intervention Survey</th>
<th>Post-intervention Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Participants</td>
<td>Number of Participants</td>
</tr>
<tr>
<td>Very Good</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Good</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Fair</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Discussion of findings.

The ROI for this research project does not support the continuation of this program from a monetary perspective. The total development and implementation cost was $7,701. The calculated monetary benefit of the project was $0 (no benefit). There was no change in the actual number of ERV’s in the comparison of the pre-and post- intervention groups. There was a change in the post-intervention usage of option “four or more visits” which could have long-term financial benefit, if this pattern is sustained.
There are factors other than the financial component of this endeavor that support the monetary expenditure for this program. The overall cost of the program is not large. The most costly aspect of the program was the staff time to create the curriculum, which will not be required for subsequent implementation of the intervention program. The three month post-intervention time frame is probably too brief to demonstrate financial benefits. A time frame of at least twelve months or for the entire course of the family stay at the facility might have been a more appropriate time interval to determine positive financial ROI.

The non-monetary benefit of this study is apparent in three survey questions. Question six, “usual source of health care”, saw a three-point gain in the post-intervention results, which reflects a quality-of-life benefit for those families. A consistent health care provider is a powerful predictor of health outcomes for homeless women (Lewis, Andersen, & Gelberg, 2003).

Satisfaction with health care provider showed a gain of two points. This factor reflects improved communication with health care providers. Description of health showed a gain of five points in the most desirable category, very good, and showed a loss of two points in the least healthy category, “poor.” These findings demonstrated a positive outcome in the categories of non-monetary benefits.

**ROI conclusion.**

Through this research study, the agency leadership team received information requested on the residents’ patterns of access and utilization of a regular source of health care. The ROI for this research project does not support the continuation of this program, solely from a monetary perspective. The non-monetary benefit included increase in residents’ identification of a regular source of health care, improved communication with health care provider, and an enhanced sense of empowerment as health care consumers. The non-monetary benefits of this program provides
sufficient evidence to support the continued utilization of this intervention program in the agency. The results of this project can be used to improve and enrich the services offered to women with children who are living in the transitional housing program.

**Ethics**

The American Nurses Association (ANA) Code of Ethics (2010) identifies social reform as an ethical responsibility of the nursing profession. Two provisions in the code specifically apply to this SCP. One that applies is the provision that mandates that nurses are responsible for the rights of patients, particularly the right to health. The second provision identifies collaboration with other health care professionals to meet the health care needs of not only individuals, but also interventions at the community and population level. Fundamental to this research project is the right of every person to the highest standard of health.

The DNP clinician integrates scientific, ethical, and economic principles in decision making in the same seamless fashion that a differential diagnosis is reached (Peirce & Smith, 2008). Complex health care issues such as access for homeless women and their children are reached though integration of multiple ethical components. The doctorate nurse is charged with managing and negotiating the health care delivery system and ensuring the quality of health care practices for all (AACN, 2006). Dr. Cheryl Easley (2009), President of The American Public Health Association (APHA), described the present day ethical reality of health care as either a human right or an economic right. As advanced practice nurses with doctoral preparation, it is crucial that this tenet be challenged. The right to access to quality health care for all persons is a human right with economic implications.
Chapter Four

Results

A descriptive study design, using agency admission form and pre-post intervention survey data, was chosen for this quantitative study. The data analysis was performed by a St. Catherine University statistician using SPSS software program. Chi square analyses were not conducted because the cells of the contingency table did not meet minimum criteria for expected frequencies. The descriptive findings are presented in two parts. Part one reports the analysis of data related to the first study objective: to compare health care access and navigation at admission to THP and after at least six months residency. Part two reports the data analysis related to the second study objective: to create and pilot an intervention program which would impact residents’ health care navigational skills.

Demographics

The participants, twenty-one women, ranged in age from nineteen to fifty-five years. All met study criteria of at least six months residency. The THP demographic data compared to the statewide demographic information found in The Wilder Research Report, Long Term Homeless among Individuals and Families in Minnesota, 2009. This report provided the most precise demographics for the state of Minnesota, especially as it relates to ethnicity and educational levels of the homeless community. The limitation of the report is the use of one statistical measurement for homeless adults ages twenty-two to fifty-five, rather than reporting subgroups of this age. U.S. Department of Housing and Urban Development (HUD), Fifth Annual Homeless Assessment Report to Congress (2009) provided more specific national age demographic data which are included in Table 4.1. These statistics offer a broader view of the prevalence of homelessness in this age group, though it is less specific to Minnesota.
The race/ethnicity representation in the study is consistent with the distribution of ethnicity/race in the homeless population in the state with two exceptions: American Indian and white. There were no American Indian women in the study, which may be due to the availability of Native THP and social services in the area. Two participants (9.5%) identified as white, while Minnesota’s homeless white population is reported at 32.0%. The number of African American women in the program, twelve women (57.1%) is a substantial number yet is near the percent of African American homeless population in Minnesota (47.0%). It is important to note that only 4.6% of the state’s overall population (see Table 4.1).

The educational levels of the participants were different than the state’s homeless community overall. Less than a high school (HS) education or General Educational Development (GED) was identified by eight (38.1%) of the residents, while the state homeless population was 29.0%. Completion of HS or GED was reported by five (23.8%) of the THP women and the state level was 47.0%. Though eight (38.1%) of the residents had some college education, Only 25.0% of the state homeless reported some college education. More than a third of the THP participants did not have a HS degree, while a similar number had some college education. This information has implications for effective educational programs for this particular community (see Table 4.1).
Table 4.1.  
Comparison of Demographics of Transitional Housing Program Residents and Minnesota Homeless Population 2009

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Transitional Housing Program</th>
<th>Minnesota Homeless Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-21</td>
<td>6</td>
<td>28.6</td>
</tr>
<tr>
<td>22-24</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>25-29</td>
<td>6</td>
<td>28.6</td>
</tr>
<tr>
<td>30-39</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>40-55</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>12</td>
<td>57.1</td>
</tr>
<tr>
<td>African Native</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>American Indian</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>White</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Multi-racial or Other</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than HS/GED</td>
<td>8</td>
<td>38.1</td>
</tr>
<tr>
<td>HS / GED only</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Some College</td>
<td>8</td>
<td>38.1</td>
</tr>
</tbody>
</table>


b Wilder Research. Age demographic: 19-21=11%; 21-50=89%.
Findings

Part one: health care navigation after at least six months residency.

Data comparing access and navigation of health care and mental health services at admission to the program and after at least six months residency were analyzed. The admission form which was completed by the caseworker within seventy-two hours of admission to THP, provided the admission data for the analysis. The post-intervention survey, completed by study participants three months after the educational sessions, provided the comparison data which reflected the amount of change after at least six months in THP. Participant retention rate for the duration of the study was twenty-one out of twenty-two participants (96.0%).

Findings of the analysis of regular source of health care (clinic/doctor) will be considered first. The agency admission form included data on the resident’s utilization of health care services (see Appendix C). The health care section of the admission form had complete documentation for every category (100.0%). The health care section of the form included five categories: health insurance, clinic, medication, dental care and vision care. Each category had three choices: (a) in place, (b) needs, and (c) not applicable (n/a). Column marked “needs” was interpreted as lack of a regular source of health care. Column marked “in place” was interpreted as having a regular source of health care. Column marked “n/a” was interpreted as lack of a regular source of health care. Though the health care section of the admission form provided rich data related to several areas of health care services, this study focused on clinic/provider access, which was the agency’s identified purpose for the project. Fifteen (71.4%) of the study participants had a regular source of health care at admission, while five (23.8%) reported a need for a regular clinic/provider. One woman indicated she did not need a regular clinic/provider. This option was interpreted as no regular source of health care (see Table 4.2).
Table 4.2.

Residents Health Care Service Utilization at Admission to Transitional Housing Program

<table>
<thead>
<tr>
<th>Health Care Service</th>
<th>In Place</th>
<th>Needs</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>20</td>
<td>95.2</td>
<td>1</td>
</tr>
<tr>
<td>Clinic</td>
<td>15</td>
<td>71.4</td>
<td>5</td>
</tr>
<tr>
<td>Medications</td>
<td>6</td>
<td>28.6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td>Dental Care²</td>
<td>11</td>
<td>52.4</td>
<td>7</td>
</tr>
<tr>
<td>Vision Care²</td>
<td>7</td>
<td>33.3</td>
<td>8</td>
</tr>
</tbody>
</table>

*Row Total does not add to 100% due to missing data on one admission form.

The post-intervention survey was collected after six months (or more) residency in THP. Survey question six was “Choose one answer that best describes your health care” (see Appendix B). There were four response options: (a) no regular source of health care; (b) mostly emergency room; (c) regular source of health care but no regular doctor or nurse; or (d) regular source of health care and a regular doctor or nurse. The first two responses were interpreted as no regular source of health care. The last two choices were interpreted as regular source of health care.

The analysis of the data compared the admission form category “clinic/doctor” with the post-intervention survey question six, “describe your health care”. The response option “in place” on the admission form was matched with post-survey response option “regular source of health care” (See Table 4.3). The response option “needs clinic” on the admission form was matched with post-survey response option “mostly emergency use” (ER use). Findings of the analysis of regular source of health care reveal that 71.4% (n=15) of the residents at admission had a clinic or provider in place. Six months later, 90.5% (n=19) of the women
identified a regular source of health care on the post-intervention survey. At admission, 23.8% (n=5) of the women endorsed option “need” a clinic. Six months later, 9.5% (n=2) endorsed response option “mostly ER use” on the post-intervention survey. On admission, 4.8% (n=1) of the women indicated “n/a” option. After six months in THP, no one endorsed “n/a” option on the post-intervention survey.

Table 4.3.

Comparison of Regular Source for Health Care Services at Admission and After Six Months Residency in Transitional Housing Program

<table>
<thead>
<tr>
<th>Health Care Service Utilization</th>
<th>Regular Source at Admission</th>
<th>Regular Source after six months THP Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>In Place</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>Needs Clinic / ER Use</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Findings of the analysis of regular source of mental health services will be considered next. The agency admission form included data on the resident’s need for mental health services (see Appendix C). The mental health section of the admission form had complete documentation for every category in nineteen out of twenty-one participants’ forms (90.4%). Participants with missing data were excluded from analysis involving that variable. The mental health section of the admission form provided information about eight categories of mental health services: mental health diagnosis, individual therapy, treatment, support group, domestic violence, sexual assault, self-esteem issues, and anger management. Each category had three choices: (a) issue now, (b) resolved, and (c) not applicable (n/a). Column marked “issue now” was interpreted as needing mental health services now. Column marked “resolved” was interpreted as no need for mental
health services now. Column marked “n/a” was interpreted as no need for mental health services now. Data were missing on two charts, which could not be interpreted. The mental health section of the admission form was not formatted in a manner that could be used in the data analysis of health care utilization. This section of the admission form represented the resident’s need for mental health services at admission rather than utilization of mental health services at admission. Though the lack of utilization data on the mental health section of the form eliminated its use in assessing mental health access and navigation, it was useful to the agency in identifying residents’ mental health needs at admission. It also informed the agency about the limitations and gaps in the assessment, monitoring and documentation process of the present chart system as it applies to the residents’ navigation of mental health services. The information in Table 4.4 was useful to the agency. Implications of the data are included in the discussion section of this chapter.
Table 4.4.  

*Residents Mental Health Service Needs at Admission to Transitional Housing Program*

<table>
<thead>
<tr>
<th>Mental Health Service</th>
<th>Issue Now</th>
<th></th>
<th>Resolved</th>
<th></th>
<th>N/A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Mental Health Diagnosis</td>
<td>1</td>
<td>4.8</td>
<td>4</td>
<td>19.0</td>
<td>16</td>
<td>76.2</td>
</tr>
<tr>
<td>Individual Therapy</td>
<td>4</td>
<td>19.0</td>
<td>4</td>
<td>19.0</td>
<td>13</td>
<td>61.9</td>
</tr>
<tr>
<td>Treatment</td>
<td>1</td>
<td>4.8</td>
<td>3</td>
<td>14.3</td>
<td>17</td>
<td>81.0</td>
</tr>
<tr>
<td>Support Group*</td>
<td>1</td>
<td>4.8</td>
<td>19</td>
<td>90.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Violence*</td>
<td>7</td>
<td>33.3</td>
<td>2</td>
<td>9.5</td>
<td>11</td>
<td>52.4</td>
</tr>
<tr>
<td>Sexual Assault Services</td>
<td>2</td>
<td>9.5</td>
<td>1</td>
<td>4.8</td>
<td>18</td>
<td>85.7</td>
</tr>
<tr>
<td>Esteem Issues</td>
<td>2</td>
<td>9.5</td>
<td>3</td>
<td>14.3</td>
<td>16</td>
<td>76.2</td>
</tr>
<tr>
<td>Anger Management</td>
<td>2</td>
<td>9.5</td>
<td>2</td>
<td>9.5</td>
<td>16</td>
<td>76.2</td>
</tr>
</tbody>
</table>

*Row Total does not add to 100% due to missing data on one admission form.*
Part two: comparison of pre- and post-intervention health care navigation.

Data analysis also addressed the second study objective: to create and pilot an intervention program which would impact residents’ health care navigational skills. The twenty-item questionnaire served as both the pre- and post-intervention survey (see Appendix B). The survey was completed by the participants before the first educational session and three months after the last educational session. The comparison of pre- and post-intervention data were used to demonstrate any change in navigation of health care and mental health services by residents three months after the three-part educational intervention program.

Six survey questions were selected to be used for study objective two data analysis. These questions provided concise information on residents’ navigational skills and behaviors over a three month period of time. Due to the brief time frame of the pilot project and the small sample size of the study, many of the questions were not useful for data analysis of this study objective. The six selected questions were description of personal health (question four); usual source of health care (question six); number of emergency room visits (ERV) in past three months (question ten); satisfaction with health care provider (question twelve); usual source of mental health services (question thirteen); and satisfaction with mental health services (question seventeen). Each question had either three or four response options which reflect the range of least positive to most positive health behaviors. The change in response between the pre- and post-intervention survey was used to describe the impact of the educational program on residents’ navigation of the health care system.

Survey question four was “choose one word to describe your health.” The four response options were very good, good, fair and poor. Very good was viewed as the optimal description of health and poor being the least healthy choice. On the pre-intervention survey, two (9.5%)
women chose very good; fourteen (66.7%) chose good; two (9.5%) chose fair; and three (14.3%) chose poor. On the post-intervention survey, seven (33.3%) women chose very good; eleven (52.4%) chose good; two (9.5%) chose fair; and one (4.8%) woman chose poor (see Figure 4.1).

Survey question six was “choose one answer that best describes your health care.” The four response options were no regular source of health care/ mostly emergency room; regular source of health care, but no regular doctor or nurse; regular source of health care and a regular doctor or nurse; and do not know. “No regular source of health care/ mostly emergency room” choice was interpreted as no regular source of health care. The two options beginning with “regular source of health care” were interpreted as having a regular source of health care. Pre-intervention survey results revealed eighteen (85.7%) residents had a regular source of health care and two (9.5%) residents did not have a regular source of health care. One (4.8%) resident did not know if she had a regular source of health care. Post-intervention survey results revealed nineteen (90.5%) residents had a regular source of health care and two (9.5%) residents did not have a regular source of health care. No (0) resident on the post-intervention survey endorse response option, did not know (see Figure 4.2).
Question ten asked “how many emergency room visits (ERV) have you had during the past three months?” The four response options were none, one, two or three, and four or more. The more frequent ERV usage was interrupted as not optimal health care utilization. On the pre-intervention survey, fourteen (66.7%) participants reported no ERV in the past three months; three (14.3%) reported one ERV; three (14.3%) reported two or three visits; and one (4.8%) reported four or more visits in the past three months. On the post-intervention survey, eleven (52.4%) participants reported no ERV in the past three months; seven (33.3%) reported one ERV; three (14.3%) reported two or three visits; and no participant (0%) reported four or more visits in the past three months (see Figure 4.3).
Question twelve asked “are you satisfied with your regular provider? The three response options were yes, no, and do not know. The response option “do not know” was interpreted as the least optimal option as it relates to capacity to navigate the health care system. On pre-intervention survey, fourteen (66.7%) women said yes; four (19.0%) said no; and three (14.3%) said they did not know. On post-intervention survey, sixteen (76.2%) women said yes; four (19.0%) said no; and one (4.8%) said she did not know (see Figure 4.4).
Homeless Women with Children Navigating the Health Care System

Survey question thirteen was “choose one answer that best describes your mental health services, such as a social worker, therapist, psychiatrist, mental health clinic, and/or Pathway staff.” The three response options were mostly emergency room; no regular clinic or mental health provider; and regular clinic or mental health provider. “Mostly emergency room” and “no regular clinic or mental health provider” were interpreted as no regular source of mental health care. “Regular clinic or mental health provider” was interpreted as having a regular source of mental health care. Pre-intervention survey results revealed that nine (42.9%) residents had a regular source of mental health care twelve; (57.1%) residents did not have a regular source of mental health care; and no one (0) chose mostly used the emergency room. Post-intervention survey results showed no change in the findings: nine (42.9%) residents did have a regular source of mental health care; twelve (57.1%) residents did not have a regular source of mental health care; no one (0) chose mostly used the emergency room (see Figure 4.5).

Survey question seventeen was “are you satisfied with your mental health services, such as a social worker, therapist, psychiatrist, mental health clinic, and/or Pathway staff.” The four response options were yes, no, do not know, and does not apply. Response of “yes” was
interpreted as having mental health services and satisfied with the service; response of “no” was interpreted as having mental health services and not satisfied with the services; option “do not know” was interpreted as having mental health services and not certain if satisfied with the services; and response “does not apply” was interpreted as not having mental health services. On the pre-intervention survey, eight (38.1%) women said yes; three (14.3%) said no; five (23.8%) said they did not know; and five (23.8%) said the question did not apply to them. On the post-intervention survey, seven (33.3%) women said yes; three (14.3%) said no; one (4.8%) said she did not know; and ten (47.6%) said the question did not apply (see Figure 4.6).

<table>
<thead>
<tr>
<th>Satisfaction with Mental Health Services</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38.1% (8)</td>
<td>33.3% (7)</td>
</tr>
<tr>
<td>No</td>
<td>14.3% (3)</td>
<td>14.3% (3)</td>
</tr>
<tr>
<td>Do not know</td>
<td>23.8% (5)</td>
<td>4.8% (1)</td>
</tr>
<tr>
<td>Does not apply</td>
<td>23.8% (5)</td>
<td>47.6% (10)</td>
</tr>
</tbody>
</table>

Discussion of Findings

The discussion of findings is divided into three sections: (a) overview of the findings; (b) discussion related to study objective one; and (c) discussion relate to study objective two. Participants’ demographics (age, ethnicity/race, and educational level) were discussed at the beginning of Chapter Four. The disproportionate representation of minority communities (non-Caucasian) in the homeless population is one of the concerning findings of the state-wide report,
Homeless Women with Children Navigating the Health Care System especially the impact on the African American community. In October, 2010, The Wilder Foundation rapidly responded to the findings of the Minnesota Homeless Population 2009 report by forming the Engaging Impacted Communities Initiative, which invited leaders from all the affected populations to meet and develop culturally specific strategies to end homelessness within these communities. Evidence-based practice confirms that race/ethnicity, education, and age are powerful variables which impact health outcomes, especially for persons with limited health literacy (Paasche-Orlow & Wolf, 2007).

The small sample size limited the overall strength of the study. The origin of the survey questions, The National Health Disparities Report, assured the standardization and validity of the survey items used in the questionnaire (AHRQ, 2006). The Report is based on extremely large data set, which allows firm conclusions based on that sample (Utts & Heckard, 2006). Due to the small sample size of this study, a change in response of just one or two subjects caused a substantial change in the identified percentile.

There was a risk for selection bias in this study. Though there were thirty-six women living at the agency, only twenty-five women attended the monthly meetings when the study was introduced and consent to participate was secured. Selection bias was possible, as some of the women who were absent were attending evening classes and/or working. The women available to participate in the study may have been an overrepresentation of women who were not employed and/or not pursuing further education.

The findings of this study are consistent with the literature in many regards. The results reflect The Health-Learning Capacity Model (Wolf et al., 2009) which targets cognitive and psychosocial skills in order to improve health outcomes. The descriptive analysis demonstrated improvement in the number of women who identified a regular source of health care, which is
supported in the literature as an important predictive factor of health outcomes, especially for women without permanent housing (Lewis, Andersen, & Gelberg, 2003). Schanzer and her colleagues (2007) found that homeless women’s health care access and health status (health outcomes) improved during the time they were in sheltered housing.

Some findings in this study are inconsistent with the literature. This study did not reveal a decrease in the overall number of ERV after at least six months THP residency or in the comparison of pre- post-intervention survey results. ERV is one of the most common markers used in health service utilization research (Gelberg et al., 2000). As stated in Chapter One, numerous studies indicate that homeless women are more likely than housed women of similar age to utilize the emergency room to meet non-emergency medical needs (Amen & Pacquiao, 2004; Kushel et al., 2006; Kushel, Perry et al., 2002; Martins, 2008; Wen et al., 2007; Wong et al., 2006). No change in actual ERV in this study may be due to the small sample size. It may also be due to the three month period of time between intervention program and post-intervention survey, which is a brief period of time to measure behavioral changes.

**Part one: health care navigation after at least six months residency.**

The data analysis addressed the first study objective, to compare health care access and navigation at admission and after six months residency at the agency. Findings of the analysis of regular source of health care reveal that at admission to THP, 71.4% (n=15) of the residents had a clinic or provider in place. Six months later, 90.5% (n=19) of the women identified a regular source of health care on the post-intervention survey. At admission, 23.8% (n=5) of the women endorsed option “need” a clinic. Six months later, 9.5% (n=2) endorsed response option “mostly ER use” on the post-intervention survey. On admission, 4.8% (n=1) of the women indicated “n/a” option. After six months in THP, no one endorsed “n/a” option on the post-intervention
survey. The research demonstrated that access to regular source of health care services increased after six months of participation in THP. The research also showed that at time of admission, 23.8% of the participants need a regular clinic. After six months residency, only 9.5% of the participants indicated that they “mostly used the emergency room for regular health care needs.

The agency also wanted to know residents’ navigational skills as it related to mental health services. The mental health section of the admission form represented the resident’s need for mental health services at admission but did not include data on participants’ utilization of mental health services at admission. Due to the content of the mental health information on the admission form, it could not be used in the data analysis of health care utilization. Despite the lack of utilization data in the mental health section of the admission form, the collation of the residents’ mental health needs was useful to the agency (see Table 4.4). This information informed the agency about the limitations and gaps in the assessment, monitoring and documentation process of the present chart system as it applies to the residents’ navigation of mental health services. Though agency benefitted from the information, the lack of mental health utilization data at admission limited the degree to which study objective two was accomplished. This is a significant weakness of the research study.

In the early phase of this community-based participatory research project, the agency identified that one benefit of the study might be to reveal needed changes in the admission and ongoing documentation process. The study provided the agency with information on the need for revision of both mental health assessment and documentation process. The study results suggest that an important next step for the agency might be to provide continuing education programs focused on mental health assessment skills and documentation. Within the next year, the agency will transition to standardized electronic medical and mental health documentation. This
Homeless Women with Children Navigating the Health Care System

transition can provide an opportunity to incorporate a standardized approach to mental health documentation for all staff.

In summary, the data analysis provided pertinent findings related to the first study objective: to compare health care access and navigation at admission to the agency and after six months residency. The analysis indicates that the residents demonstrated improved health care access and navigational behaviors after living at and participating in the transitional housing program for at least six months. The analysis of mental health access and navigation could not be accomplished due to lack of pertinent admission data.

Part two: comparison of pre- and post-intervention health care navigation.

The data analysis addressed the second study objective, to create and pilot an intervention program which would impact residents’ health care navigational skills. The pre- post intervention survey provided data for the analysis of the effectiveness of the intervention program. The data analysis revealed three patterns that informed the second research question: a) shift in responses toward more positive health behaviors; b) shift in more appropriate use of emergency room services; and c) decrease endorsement of response option, “do not know”.

The first pattern identified from the data analysis was a shift in responses toward more positive health behaviors. The change in behavior is illustrated in four survey questions: a) description of health (question four); b) usual source of health care (question six); and c) satisfaction with regular provider (question twelve). Discussion of findings related to objective one identifies the increase in residents’ use of a regular source of health care after six months THP residency. The pre-post survey results also demonstrated a slight increase in residents’ use of a regular health care. These indicators address the staff’s identified goals for the intervention
Homeless Women with Children Navigating the Health Care System

sessions: to enhance a sense of empowerment and to increase residents’ perception of self as consumer of health care.

The second pattern is a shift in participants’ responses related to the number of emergency room visits (ERV) in the past three months (survey question ten). Though the overall number of visits did not decrease, the post-intervention survey results showed no endorsement of the last option, four or more visits. Frequent ERV is not an appropriate utilization of emergency services. The use of emergency level care for non-emergency issues is also an ineffective way to get ongoing care. Families using emergency level care at this frequency are not getting their healthcare needs adequately met. When comparing pre- and post-intervention data, the total number of ERV did not show any change. The noteworthy shift in usage was the decrease in ERV use of four or more, which was endorsed by one resident on the pre-intervention survey. On the post-intervention survey, no resident chose this option. This may suggest indicates a shift toward more appropriate use of emergency services, which reflects both an economic benefit to the health care system and a benefit to families.

The third pattern is a decrease in the post-intervention survey endorsement of response option “do not know”. This was apparent in three survey questions: (a) usual source of health care (question six), (b) satisfaction with regular provider (question twelve), and (c) satisfaction with mental health services, if mental health services were needed (question seventeen). The change from uncertainty to clarity about satisfaction with services may indicate an enhanced sense of empowerment and increased confidence as consumers of health care services. The ability to identify either satisfaction or dissatisfaction with services conveys the belief that one has a right to judge the quality of the care received (consumer of health care) and an ability to
make that decision (empowerment). These values are consistent with two of the three staff goals for the educational program.

As discussed in chapter three, the goals articulated by the staff were: (a) to increase skills that would enhance a sense of empowerment; (b) to increase the residents’ perception of self as consumer of health care; and (3) to increase knowledge of the “logic of the hospital”. The third staff goal was not met in this study. This is a limitation of the study. The initial planning process did not design behavioral objectives for this goal. Future qualitative research would be useful in crafting a concept analysis of homeless women’s perception of the hospital culture, specifically the “logic of the hospital.”

A significant weakness of this study was the outcomes related to residents’ navigational skills when they attempted to secure mental health service. Mental health skills did not show improvement in the course of this study. One aspect of the analysis revealed progress in the mental health category. Question seventeen asked if the participant was satisfied with present mental health services and offered three response options: yes, no, do not know. The number of persons who answered this question varied between the pre- and post-intervention survey due to women discontinuing or adding mental health services in the time-frame of the study (sixteen on the pre-survey and eleven on the post survey). On the pre-intervention survey, 31.5 percent (five out of sixteen) of the participants indicated that they did not know if they were satisfied with mental health services. In the post-intervention results, the percent dropped to 9.0 percent (one out of eleven). There was a decrease in the number of women who did not know if they were satisfied with their mental health provider. This finding suggests that the participants had either gained knowledge about how to evaluate satisfaction with mental health services or gained confidence as a consumer of health care services, or both.
In summary, data analysis revealed some shifts in the participants’ response that suggest improved navigation of the health care system. The shifts included improved self-perception of personal health and increased satisfaction with health care providers. There was a downward shift in highest frequency of ERV which is consistent with more appropriate emergency department usage. These findings provide direction for the agency, as they evaluate and revise their program design and content.

In conclusion, this community-based participatory research had two objectives. Research question one asked if residents had a regular source of health care and a regular source for mental health services, if these services were needed. The study revealed increased participants’ report of a regular source for health care services, but not related to mental health services. Research objective two compared pre- and post-intervention survey results to measure the navigational skills of homeless women in a transitional housing program. There were findings that informed the research objective and provided some direction to the agency in revising and enhancing both staff continuing education and residents’ educational program.
Chapter Five

Conclusion

Homeless women with children experience many barriers in navigating the health care system. Limited health literacy can be an invisible yet very powerful obstacle to improved health outcomes. Interventions targeted at improving fundamental health-learning capacity skills can offer life-long benefits. This research study had three objectives: (a) to compare health care access and navigation at admission and after six months residency within agency; (b) to create an educational program based on agency staff’s identified goals for the educational sessions and Harvard University publication, Health Literacy Study Circles (NCSALL, 2005); and (c) to recommend system level changes for the agency related to the process of documenting, monitoring and improving residents’ navigation of health care and mental health services based on the survey results.

Review of Research Findings

The genesis of this research project was the agency’s concern for whether their residents had established a regular source for health care needs, as well as mental health services. Data analysis comparing admission and after six months residency, showed an increase in residents’ identification of a regular source for health care needs. Due to limitations in the mental health admission information, it was not possible to compare admission data with post-intervention survey data in a meaningful way in order to assess access and utilization of mental health services. The pre- and post- intervention data analysis did not reveal several patterns related to change in access and navigation of health care services. These results provided useful information for the agency in revising and enhancing educational programs for both staff and
The study results have provided recommendations for the agency and lessons learned by the researcher.

**Recommendations and Lessons Learned**

**Recommendations for the agency.**

This research project provided information for the agency regarding their process of documenting, monitoring and improving residents’ health care access and navigation of primary care and mental health services (study objective three). Completion of the admission form requires the caseworker to demonstrate both assessment capacity and consistent documentation practice. The data collection phase of the research study involved reviewing residents’ admission data. This process, as detailed in Chapter Four, revealed deficits in both the assessment and documentation process, as related to mental health services. Documentation of the health care category on the admission form was both complete and consistent on all study participants’ records. The mental health category revealed incomplete admission information. The difference in documentation between the two categorizes suggests a need for staff development in mental health assessment and documentation. Caseworkers may benefit from continuing education in specific approaches to mental health assessment and common language to use for mental health documentation. The staff education need could be integrated into the staff development required for the agency’s transition to the computer-based electronic assessment forms. Developing a new documentation system might provide for greater uniformity in assessing and monitoring the residents’ mental health status.

This research project also provided the agency with recommendations related to the residents’ ongoing educational needs. Residents receive ongoing education through the mandatory weekly life skills program at the agency. Topics, which are established by the staff,
Homeless Women with Children Navigating the Health Care System

are taught by a number of professionals from the community over a fifty week period. Though themes have been identified for the overall program, the agency recognizes that volunteer presenters are not always knowledgeable about the overall content of the program. This can lead to fragmentation and inconsistency in both content and approach in program sessions. It is recommended that the agency consider a consistent design for the educational component of the program. Revisiting key lessons or problematic areas and revising content accordingly might be beneficial in promoting behavioral changes related to the women’s health. The agency could expand their academic partnership to include the University’s Department of Education to support an assessment and redesign of this educational program.

In the initial partnership meetings, the agency staff identified concern for the residents’ access to mental health services. This research study confirmed the gaps in the participants’ capacity to access mental health services. Though the third session of the intervention model introduced the concept of mental health literacy, development of additional mental health educational session could enhance the women’s emerging skills and improve the intervention model design. Further, the agency indicated that they valued the findings of the study and has initiated a process to secure an ongoing preferred-provider relationship with a mental health resource in their community.

Lessons learned.

As stated in Chapter Three, this project was rooted in community-based participatory research (CBPR), with a strong evidence-based practice approach. This approach to research both requires and cultivates collaboration and mutuality. Collaboration is required to establish the partnership, yet it deepens with the process. Mutuality is built on both parties identifying needs and renegotiating over time. As a novice researcher, it was challenging to maintain parity.
The immediate needs of the agency and the priority of the women’s lives had to be balanced with the worth and needs of the research and its design. Advocating and maintaining the integrity of the study was a valuable lesson for this researcher. Finally, inspiration and passion is required to conduct research. The researcher was inspired by the research process which was embedded in the participatory action research.

**Dissemination and Next Steps**

Dissemination of research findings is a critical aspect of the research process. Dialogue about dissemination of the findings of the project began when the research results were first reviewed by all members of the partnership in October, 2009. In a subsequent meeting in November, 2010, the implications and recommendations of the study were discussed with the agency which led to members of the partnership seeking out opportunities for dissemination. As a result, an abstract was submitted and the intervention model was featured in a poster session at Minnesota Nurse Practitioner Annual Conference (November, 2010). The preliminary research results were disseminated at the Minnesota Homeless Coalition Annual Conference, November, 2010, St. Cloud and the final research findings will be presented at the national level at the National Health Care for the Homeless Council, Annual Meeting, June, 2011, Washington, DC. In the future a manuscript developed from this project will be submitted to the peer-reviewed nurse practitioner journal, *The American Journal for Nurse Practitioners*.

Public policy involvement is also the responsibility of the Doctorate of Nursing Practice clinician. The author has been a committee member of Heading Home Hennepin, Group Residential Housing Committee since it was convened in July, 2010. The group’s purpose is to identify barriers to ending homelessness within the transitional/group housing programs, with particular concern for the county regulations which places limitations on monetary value of
residents' savings while living in temporary housing. As mentioned in Chapter Four, Wilder Foundation created the Engaging Impacted Communities Initiative in 2010. The author participates in this initiative as a committee member of the African-American Initiative which works to end homelessness within the population that has the largest percent of homelessness in Minnesota.

**Conclusion**

In conclusion, lack of skills to navigate the health care system common to women with children experiencing homelessness has urgent theoretical, clinical, and practical significance. From the theoretical perspective, effective interventions to improve navigational skills for this highly vulnerable population are scarce. Review of the literature over the past decade revealed promising theoretical models for intervention programs, such as Causal Pathways between Limited Health Literacy and Health Outcomes (P.O. & W, 2007) and Conceptual Model of Health Learning (Wolf et al., 2009). There has been limited success in actualizing these conceptual models successfully in the real world for high-risk groups.

There is also clinical significance to this research. Adequate navigational skills can promote improved health outcomes, such as improving rates of early initiation of prenatal care for women and increasing rates of immunizations for children. Practical significance of this study is apparent when considering the economical and ethical implications. The ethical support for this project rests in The ANA Code of Ethics (2010), as well as the precepts of Catholic Social Teaching (CST). The nursing profession’s ethical code identifies social reform as a professional responsibility. CST reminds us of “the personal obligation to do what is needed to create a society of concern for the concrete needs of all persons” (Miller, 2009, p.10).

Fundamental to this research project is the right of every person to the highest standard of health.
This project was designed to improve health care navigational skill of homeless women with children who were living in transitional housing. The study showed an increase in the establishment of a regular source of health care after six months THP residency. The lack of change in use of regular mental health services illuminates the urgent need for the development of effective intervention programs to impact mental health literacy skills in order to increase access and utilization of MH services. This study did not establish the effectiveness of the pilot intervention program, due to small sample size. Replication of the study in similar settings will provide further opportunity to establish the value of this interventional model.

Homeless women with children who are living in transitional housing are at high-risk for persistent unmet health care needs. Usually parenting without a partner, they experience competing basic needs such as food, shelter, and safety which supersede health care needs, especially health prevention and promotion. Navigating the health care system can be an overwhelming task for homeless families. An effective intervention program must incorporate fundamental health-learning capacity skills which are essential to accessing and navigating the complex health care system in the United States. Women and children represent the future of our nation. They must not be left behind.
References


Homeless Women with Children Navigating the Health Care System


Homeless Women with Children Navigating the Health Care System


Appendix A

RESEARCH INFORMATION AND CONSENT FORM

Health Care Access and Utilization Homeless Women Living in Transitional Housing

Introduction:

You are invited to participate in a research study investigating how women in transitional housing find (access) and use (utilization) a regular doctor, nurse practitioner or clinic. This study is being conducted by Virginia (Ginny) McCarthy at St. Catherine University. You were selected as a possible participant in this research because you are residents of The YWCA Transitional Housing Program. Please read this form and ask questions before you decide whether to participate in the study.

Background Information:

The purpose of this study is to identify if women in transitional housing find and use a regular healthcare provider and if these women are satisfied with the healthcare they are receiving. Approximately 36 people are expected to participate in this research.

Procedures:

If you decide to participate, you are giving consent to fill out a survey in April, 2010 and again in September, 2010. The survey will take approximately 10 minutes to complete. You are also giving consent to allow Virginia McCarthy to review two sections of one form in your YWCA record that was filled out by your caseworker when you moved into Transitional Housing. The two sections include information about your health care services. Virginia McCarthy will give you a copy of the blank form so you know exactly what type of information is being reviewed. The information will be summarized so the experience of all the participants in the study can be evaluated. You will attend the Weekly Skills Classes on Thursday evening in May, which will discuss finding and keeping a regular healthcare provider (doctor, nurse practitioner or clinic) that you find helpful. The Skills Classes in May will be the regularly scheduled class you have every Thursday. Virginia McCarthy will teach these three classes. You will attend the Weekly Skills Classes whether you sign up to participate in this study or you decide not to participate in this study.

Risks and Benefits:

The study has minimal risks. One direct benefit to you is that you will receive a $5.00 Target gift card when you complete the survey in April, and a $10.00 Target gift card when you complete the survey in September. There could be benefit to you participating in the Skills Classes in May which will talk about how to find and keep a good healthcare provider. The data collected in this study will help the YWCA Transitional Housing Program improve their
services, especially in helping women know how to choose a good doctor or nurse practitioner and how to stay with that clinic after you leave YWCA Transitional Housing.

**Confidentiality:**

Any information obtained in connection with this research study that can be identified with you will be disclosed only with your permission. In any written reports or publications, no one will be identified or identifiable and only the group data will be presented. For research purposes and data collection, all records will have names removed and will be assigned a code number.

The research results will be kept in a locked file cabinet at St. Catherine University. Only the research team and my advisor, Dr. Roberta Hunt, will have access to the records while working on this project. Research materials will be kept in the locked file cabinet for three years. We will then destroy all original reports and identifying information that can be linked back to you.

**Voluntary nature of the study:**

Participation in this research study is voluntary. Your decision whether or not to participate will not affect your future relations with the YWCA or St. Catherine University. If you decide to participate, you are free to stop at any time without affecting these relationships. You do not need to consent to participate in this study in order to attend the Weekly Skills Classes in May, 2010, which will be taught by Ginny McCarthy.

**Contacts and questions:**

If you have any questions, please feel free to contact me, Virginia (Ginny) McCarthy at 952-412-3933. You may also contact my faculty advisor, Dr. Roberta Hunt, PhD, RN at 651-690-6851. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher(s), you may also contact John Schmitt, PhD, Chair St. Catherine University Institutional Review Board, at (651) 690-7739.

You may keep a copy of this form for your records. You will also be given a blank copy of the ISS form, so you will know what type of information is on the form that Virginia McCarthy will review.

**Statement of Consent:**

You are making a decision whether or not to participate. Your signature indicates that you have read this information and your questions have been answered. Even after signing this form, please know that you may withdraw from the study at any time and no further data will be collected.
I consent to participate in the study.

Signature of Participant

Date

Signature of Researcher

Date

Virginia (Ginny) McCarthy, RN, CNP
Appendix B
Pre- and Post-Intervention Survey Form
Health Care Access and Utilization for Homeless Women Living in Transitional Housing

ONLY Write your name HERE above the line. Your name will be cut off this form and destroyed after your code number is put on the form below the line.

Code number:

1. Choose one answer that best describes your age.
   19-21
   22-24
   25-29
   30-39
   40-55

2. Please choose one word that best describes your race/ethnicity.
   American Indian
   African
   Asian/Pacific Islander
   Biracial
   Black/ African American
   Hispanic/Latino/Chicano
   Multiracial
   White/Caucasian
   Race Unknown
3. Choose the education level that best describes you.

- Not done with high school
- Going to high school/ GED now
- Finished high school
- Going to college now
- Finished college

4. Choose one word to describe your health.

- very good
- good
- fair
- poor

5. Do you have a usual source of health care, a place you usually go when you are sick or want advice about your health?

- Yes
- No
- Do not know
6. Choose one answer that best describes your health care.

No regular source of care
Mostly emergency room
Regular source of care, but no regular doctor or nurse
Regular source of care and a regular doctor or nurse

7. Choose the level of work that best describes you.

Not working
Looking for work
Working some
Working full time

8. Did you pick your regular doctor, nurse practitioner, clinic or were you assigned to one?

Picked my clinic
Assigned to my clinic
Do not know

9. How many clinic visits or doctor visits have you had in the past 3 months?

None
1
2-3
4 or more
10. **How many emergency room visits have you had during the past 3 months?**

- None
- 1
- 2-3
- 4 or more

11. **How many times have you stayed overnight in the hospital during the past 3 months?**

- None
- 1
- 2-3
- 4 or more

12. **Are you satisfied with your regular provider (such as your clinic, doctor's office, or nurse practitioner)?**

- Yes
- No
- Do not know

13. **Choose one answer that describes your mental health services, such as a social worker, therapist, psychiatrist, mental health clinic, and/or Pathway program staff.**

- No regular clinic or mental health provider
- Mostly emergency room
- Regular clinic or mental health provider
14. How many mental health visits have you had during the past 3 months?
   None
   1
   2-3
   4 or more

15. How many emergency room visits for mental health problems have you had during the past 3 months?
   None
   1
   2-3
   4 or more

16. Have you ever stayed overnight in the hospital because of mental health problems (such as depression, anxiety, stress and/or anger)?
   Yes
   No
   Do not know
17. Are you satisfied with your mental health services, such as a social worker, therapist, psychiatrist, mental health clinic, and/or Pathway program staff?

Yes
No
Do not know
Does not apply

18. We want to understand your experience with your health care provider (clinic, doctor's office, or nurse practitioner). Please describe any problems you had in the past 3 months.

19. We want to understand your experience with your mental health providers (mental health services, such as a social worker, therapist, psychiatrist, mental health clinic, and/or Pathway program staff). Please describe any problems you had in the past 3 months.

20. Is there anything else you would like to tell us about your health or your experience of health care?
Appendix C
ISS Objective Assessment Admission Form

**ONLY DATA IN THE TWO HIGHLIGHTED SECTIONS BELOW WILL BE USED IN THIS STUDY**

<table>
<thead>
<tr>
<th>Name: _______________________________</th>
<th>Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: _______________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address: ______________________________</th>
<th>ISS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: _______________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Housing: current housing and future housing plans</th>
<th>In Place</th>
<th>Needs</th>
<th>N/A</th>
<th>Date Accessed</th>
<th>Comments (type, where, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent market rate housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent subsidized housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renter/homeowner counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damage deposit/1st month’s rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Down payment assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moving assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rental application fee assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### YAP & IMPACT

**Client**

- Live with parent(s)
- Live by yourself
- Live in shelter
- Live with foster family
- Live in more than one household
- Move in with family or friends
- Relocate out of town
- Other

**Family/Friends, Support System**

<table>
<thead>
<tr>
<th>In Place</th>
<th>Needs</th>
<th>N/A</th>
<th>Date Accessed</th>
<th>Comments (who, when, how, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Family/friends nearby
- Other supportive people/groups
- Moral/ emotional support
- Financial support
- In-kind support (childcare, food, clothes, transportation, etc.)
<table>
<thead>
<tr>
<th>Children’s Issues</th>
<th>In Place</th>
<th>Needs</th>
<th>N/A</th>
<th>Date Accessed</th>
<th>Comments (who, where, type, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>parent needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenting skills **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenting support **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childcare provider **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back-up childcare provider **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childcare subsidy **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Crisis nursery **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preschool program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled K-12 school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At grade level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass BST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truancy concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before/after school programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor/clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care – Parent(s)</td>
<td>In Place</td>
<td>Needs</td>
<td>N/A</td>
<td>Date Accessed</td>
<td>Comments (where, type, etc.)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-----</td>
<td>---------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Dental care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinic/doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains correct med schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Limitations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(anyone in household)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury/temporary disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical rehabilitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Mental Health

<table>
<thead>
<tr>
<th>Mental Health</th>
<th>Issue Resolved</th>
<th>N/A Date Access</th>
<th>Comments (details, when, how was it resolved, where, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health diagnosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment/ therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support/therapy groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual assault/abuse services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>