Nurse Practitioner Referrals for the Socioeconomically Disadvantaged in an Urgent Care Center

By

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Nurse Practitioner Referrals for the Socioeconomically Disadvantaged in an Urgent Care Center

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## **Table of Contents**

Title Page	1
DNP Project Team Approval Form	2
Acknowledgments	6
Abstract	7
Table of Contents	3
Chapter 1: Introduction	
a. Background and Significance	8
b. Needs Assessment	12
c. Problem Statement	13
d. Project Aim	14
e. Clinical Question	15
f. Congruence with Organizational Strategic Plan	15
g. Synthesis of Evidence: Search Strategy	16
h. Synthesis of Evidence	17
a. Health Disparities	17
b. Low-Income Seek Social Assistance	17
c. Coordination of Care	19
d. Provider-Community Partnership	20
e. The Need for Lifestyle Modifications	22
f. Community Health Workers	24
g. Nurse Practitioner Referral	25
h. Community Urgent Care Centers	24

	i. Food Insecurity	28
	j. Medication Assistance	29
i.	Conceptual Framework	30
Chapt	ter II: Methodology	
a.	Project Design	31
b.	Setting	32
c.	Population	32
d.	Tools and/or Instruments	33
e.	Project Plan	34
f.	Data Analysis	38
g.	Institutional Review Board / Ethical Issues	39
Chapt	ter III: Organizational Assessment and Cost-Effectiveness Analysis	
a.	Organizational Assessment	42
b.	Cost-Effectiveness	43
Chapt	ter IV: Results	
a.	Analysis of Implementation Process	45
b.	Analysis of Project Outcome Data	48
Chapt	ter V: Discussion	
a.	Results Linked to Project Objectives	53
b.	Limitations	55
c.	Implications for Practice	55
	a. Practice Implications	56
	b. Future Implications	57

	c. Impact on Nursing	57
	d. Health Policy Change	58
Chapt	ter VI: Conclusion	
a.	Value of Project	59
b.	DNP Essential	59
c.	Dissemination	64
d.	Personal & Professional Goals	65
Refere	ences	66
Apper	ndices	
a.	Appendix A: Pre-Survey	75
b.	Appendix B: Post-Survey	79
c.	Appendix C: Project Timeline	84
d.	Appendix D: Organizational Assessment Survey	85
e.	Appendix E: Project Budget Table	86
f.	Appendix F: Community Resource Type	87
g.	Appendix G: Qualitative Data	88
h.	Appendix H: Community Resource Tally	91

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#### Abstract

Vulnerable populations, which include individuals of low socioeconomic status, are at a higher risk for poor physical, mental, and social health. The main goal of my project was to develop a community resource binder for socioeconomically disadvantaged patients who presented to an urgent care clinic. The Convenient Urgent Care Clinic did not have a community resource binder, nor did they have a social worker or a case manager to assist in locating resources for their disadvantaged patients who were in need. Literature and studies were analyzed related to community resources and provider-community partnerships for the socioeconomically disadvantaged. Furthermore, community connections were facilitated. These combined attributes resulted in the developed and implemented community resource binder at the Convenient Urgent Care Clinic.

*Keywords:* community resources, socioeconomically disadvantaged, social needs, provider-community linkage, community assistance, vulnerable populations

Nurse Practitioner Referrals for the Socioeconomically Disadvantaged

## Chapter I

I selected this area of interest for my project because there is a significant need for coordinated, collaborative efforts with providers and the community to assist vulnerable populations such as the socioeconomically disadvantaged to reach their highest level of health. As a future healthcare provider, it is essential that I contribute to practice change to impact the outcomes of this population of people positively. By identifying the needs in the community in which this urgent care serves and addressing the needs utilizing resources gathered through research, community outreach, and collaboration with key stakeholders, I am confident that the impact on the outcomes of the beneficiaries would be significant. Combining resources for the socioeconomically disadvantaged related to needs such as housing, durable medical equipment, medication assistance, community health workers, social workers, dental services, and food resources in an easy to access bounded manual would not only provide patients with appropriate referrals but also assist nurse practitioners in their effort to provide high-quality integrative care in a time-efficient manner.

#### **Background & Significance**

Vulnerable populations are populations at substantially higher risk for poor physical, mental, and social health, and have higher rates of morbidity and mortality than the remainder of the population (Savage, Kub & Groves, 2016). Their vulnerability may be associated with their socioeconomic status, where they live, gender, age, disability status, or sexual orientation (Savage et al., 2016). The Urban Institute Health Policy Center defines vulnerable populations as those "that are not well integrated into the health-care system because of ethnic, cultural, economic, geographic, or health characteristics (Savage et al., 2016). These groups have specific

characteristics or experiences such as poverty, disabilities, inadequate housing, marginal education, less secure jobs, increased stress, multiple noncommunicable diseases, and less social capital that increase their risk of vulnerability, and in turn contribute to poorer health than found in the general population (Healthy People 2020, n.d. a; Savage et al., 2016). From a public health perspective, vulnerability can be thought of as the increased susceptibility to poor health of an individual or group stemming from exposure to multiple risk factors (Savage et al., 2016). To understand vulnerable populations is a step-in understanding and then decreasing health disparities related to health outcomes, access to nutritious foods, the ability to obtain health insurance, access to safe housing, transportation, and education (Healthy People 2020, n.d. a; Savage et al., 2016).

Socioeconomically disadvantaged patients experience more health disparities than their socioeconomically advantaged counterparts. These individuals experience homelessness, poverty, food insecurity, and inability to afford medications and basic needs (Doran et al., 2016). Health disparities are typically present in vulnerable social groups such as people living in poverty, minority populations, women, populations with substance abuse, or other groups who have persistently experience social disadvantage or discrimination (Healthy People 2020, n.d. b; Savage et al., 2016). As a result, members of vulnerable populations experience worse health status or higher health risk than more advantage social groups (Savage et al., 2016). Members of these vulnerable populations often lack resources such as having limited educational backgrounds, decreased physical capabilities, poor communicative skills, and/or inadequate financial assets, exposing them to increased risk and making it difficult to adequately safeguard their own health (Healthy People 2020, n.d. a; Savage et al., 2016). Healthcare providers and the country as a whole should focus their attention on vulnerable populations because their health

disparities exact an enormous toll on their health and well-being, the number of vulnerable groups is increasing, this social issue is best resolved at a community/population level, and because their needs place an increased demand on the limited capacity and resources of our healthcare system (Savage et al., 2016).

Socioeconomic status (SES) is a composite measure of the interrelated concepts of income, education, and occupation (Savage et al., 2016). With higher levels of education, a person is more likely to secure a better job, which in turn provides a higher rate of pay (Savage et al., 2016). In contrast, a person who doesn't earn a high school diploma has more difficulty finding a job that pays a living wage, a wage that provides access to the means of healthy living, e.g., housing, food, and health care (Savage et al., 2016). Therefore, individuals at a lower socioeconomic status level have increased vulnerability to poor health because of a lack of economic resources (Savage et al., 2016). There is a link of SES to health outcomes (Healthy People 2020, n.d. a; Savage et al., 2016). As a person's SES increased, the risk of morbidity and mortality decreased (Savage et al., 2016). When considering the influence of socioeconomic status on health, it becomes clear that healthcare providers must focus their efforts on improving not just health outcomes, but also social determinants of health such as educational and employment opportunities (Savage et al., 2016). Healthcare providers may facilitate the improvement of social determinants related to education and job opportunities with a referral to a community social worker.

The utilization of interprofessional approach, which would include referrals to healthcare specialist providers, social workers, federal and state resources, allied healthcare professionals, and primary care physicians has the potential to strengthen the use of evidence-based practices across disciplines in public health practice (Savage et al., 2016). According to Healthy People

11

2020 (n.d. c), successful prevention & population health initiatives will benefit from an interprofessional team approach; this is especially true for those who are vulnerable to poor health outcomes. Interprofessional collaboration is significant to the success of care coordination and improving the health of communities; nurse practitioners are well equipped to lead an interprofessional team coordinating patient care. The interprofessional approach requires the development of interprofessional teams across a healthcare issue who share knowledge and work to tie together the different aspects of the health issues (Savage et al., 2016). Healthcare specialist providers may assist patients with specialized needs outside of the scope of the nurse practitioners' practice, social workers can assist patients in connecting with vital resource needs such as food assistance programs and emergent housing needs, allied care needs such as physical therapy, and occupational therapy needs can address functional mobility issues and counseling, or psychotherapy can address behavioral and mental health needs. The nurse practitioner is equipped with the knowledge to recognize these needs and refer patients appropriately. All nurses are uniquely positioned to provide care that encompasses the societal mandate to deliver quality individual- and population-based care (Savage et al., 2016). Utilizing the guidelines outlined in the nursing process uses the personal, social, and health resources available to reduce the impact of vulnerability on health (Savage et al., 2016). Understanding vulnerability and vulnerable populations, from a public health perspective, is crucial to providing this holistic care (Savage et al., 2016). Also, this understanding allows nurses to advocate on behalf of vulnerable populations to reduce their vulnerability (Savage et al., 2016).

This background information relates to my clinical question as the population that I have identified in my project is a vulnerable population of the socioeconomically disadvantaged. This population within Lapeer County, Michigan presents to the urgent care facility with needs related

to lack of access to a primary care provider, lack of transportation to and from doctor appointments, food insecurity, inability to afford medications, homelessness, inability to afford medical equipment, joblessness, and no health insurance amongst other needs. To address these needs, nurse practitioners not only need to know who in the community they can to refer their patients to address these vital necessities, but they also need to access these resources in an adequate amount of time. A community resource binder that includes resources to address identified community needs will make the resources readily available to the nurse practitioners that would enable a seamless and more efficient referral process while reducing the time required to locate resources.

#### **Needs Assessment**

I completed a needs assessment utilizing a nurse practitioner's perspective in an urgent care center. Additionally, from the viewpoint of a local hospital and the department of health, the Lapeer County Community Health Collaborative implemented a community assessment to determine the needs of the residents in Lapeer County, Michigan (2016). These results highlight the SES and related health disparities of these clients. Vulnerable residents having inadequate and/or low-quality food options and obesity rates are high, residents are not able to afford/access stable housing, and they are not able to access services, or meet basic needs (Lapeer County Community Health Collaborative, 2016). In addition, lower SES residents do not have adequate income to meet basic housing, transportation, medical, nutrition, and childcare needs (Lapeer County Community Health Collaborative, 2016). Nurse practitioners identified the following needs in a local urgent care center: Access to dental care, home repair for the disabled, homelessness assistance, unemployment assistance, durable medical equipment needs, social work referral needs, Medicaid coverage assistance, uninsured assistance, finding primary care

providers, lack of education and vocational training, and medication coverage (S.M. Collins, personal communication, January 4, 2019).

Healthy People 2020 (n.d. a) identified a range of personal, social, economic, and environmental factors that contribute to individual and population health. For example, people with quality education, stable employment, safe homes and neighborhoods, and access to preventive services tend to be healthier throughout their lives (Healthy People 2020, n.d. a). Conversely, poor health outcomes are often made worse by the interaction between individuals and their social and physical environment (Healthy People 2020, n.d. a). Issues related to the unemployment rate in Lapeer County which is 4.2%, the percentage of persons in poverty is 8.7%, and persons without health insurance under the age of 65 is 6.8%, could be contributing factors to health disparities in this county (U.S. Bureau of Labor Statistics, 2018). The proposed project could assist with the health disparities of this vulnerable population. This project could provide assistance to patients who are unemployed, living in poverty, or have a lack of health insurance by empowering nurse practitioners in a local urgent care center with the necessary contacts and linkages for community resources, which can enable them to coordinate and address client's identified needs holistically. This approach could allow nurse practitioners to provide appropriate referrals efficiently as the resources would be readily available, decreasing research time and making them more knowledgeable about what resources are available in the community they serve.

#### **Problem Statement**

Socioeconomically disadvantaged patients experience more health disparities than their socioeconomically advantaged counterparts. These individuals experience homelessness, poverty, food insecurity, and inability to afford medications and basic needs (Doran et al., 2016).

These social determinants of health leave affected individuals vulnerable to health conditions such as anemia, asthma, diabetes, pneumonia, and hypertension (Savage et at., 2016). Socioeconomically disadvantaged patients also experience increased rates of mental illness resulting from chronic stress and disproportionate exposure to trauma and violence (Savage et at., 2016). These individuals need assistance obtaining the most appropriate referrals to assist them with their basic needs, and the nurse practitioners (NP) in the local urgent care center are perfectly placed to refer socioeconomically disadvantaged patients to those who can best assist them.

#### **Project Aim**

This project was aimed to determine the effectiveness of creating and implementing a community resource binder that includes resources identified as necessities in the needs assessment. These community needs were addressed to reduce the health disparities of the socioeconomically disadvantaged population. The community resource binder could improve the efficiency of locating community resources, educating the nurse practitioner regarding the availability of community resources as well as improve their time management. Furthermore, the aim of the project was to utilize interprofessional collaboration by assembling resourceful information from identified healthcare professionals, state and federal aid, and other organizations and facilities. I determined and employed the most effective communication channels for interprofessional collaboration, determine the levels of assistance the organizations, facilities, government, and other stakeholders can provide, and determined the best approach for patients to access discovered resources. The integration of knowledge from diverse sources and across disciplines, and the application of knowledge to solve practice problems and improve health outcomes are amongst the countless ways new approaches to care is determined

(American Association of Colleges of Nursing, 2006). This research and referral undertaking had the potential to help patients achieve health equity, decrease disparities, and improve the health of this vulnerable population while remedying NPs time restraints.

## **Clinical Question / PICO**

For nurse practitioners caring for socioeconomically disadvantaged patients visiting the urgent care facility, how does having a community resource binder compared to not having a community resource binder, impact time management and issuance of the appropriate referral with each patient encounter?

#### **Congruence with Organizational Strategic Plan**

The project aligned with the organizational and community strategic plan, mission, and vision because the identified needs assessment of the community, according to Lapeer County Community Health Collaborative (2016), and the urgent care center were addressed in the project. The county's needs assessment indicated that there was a need for more decentralized, coordinated services that were addressed in this project utilizing an interprofessional collaborative approach that was readily available to the referring nurse practitioner. Identified needs, as revealed in the community's needs assessment was addressed using an interprofessional team, and those resources were added to the community resource binder (Lapeer County Community Health Collaborative, 2016). This was in congruence with the organizational strategic plan because the urgent care facility's mission was to assist their patients in getting healthy, staying healthy with the availability to achieve this conveniently (Convenient Urgent Care, 2019). The disadvantaged patients who presented to the urgent care facility benefited from community resources, it helped them to meet their social needs, which significantly impacted their overall health. These community resources were conveniently available to the NPs enabling

them to coordinate care more effectively and efficiently. After the community resources were located, contacts were identified, which linked the urgent care center's NPs with an interprofessional team including social workers, state, federal, and other determined stakeholders to address the needs of socioeconomically disadvantaged individuals that present to a local urgent care facility within Lapeer County Michigan.

## **Synthesis of Evidence: Search Strategy**

A search for relevant articles published within the last six years was performed using Cumulative Index for Nursing and Allied Health (CINAHL), PubMed @ Bradley, Department of Health & Human Services website, Agency for Healthcare Research and Quality (AHRQ) Health Care Innovations, US Preventive Service Task Force, and Bradley University librarian. Search terms included community resources, socioeconomic disadvantage, nurse practitioner referrals, social worker disadvantaged, underserved, coordination of care, lifestyle modifications, community-based assistance, low-income, health disparities, community health worker, socially disadvantaged, and urgent care-led referral. The search was limited to articles in English that focused on socioeconomically disadvantaged and provider-community-based care. Articles were not reviewed if they did not involve the socioeconomically disadvantaged, were not within the last seven years, or did not include community needs. The rationale for excluding articles not related to the socioeconomically disadvantaged and community needs is because the project is based on this population of people and utilizing community resources to address their needs. The rationale for the inclusion of English is because this is my primary language, as well as the primary language of the NPs that will be referring patients. Of 29 articles retrieved, 20 were reviewed in detail. The other articles were not reviewed because they were outdated, or the subject was not closely relevant to my topic. Peer-reviewed studies included qualitative analysis,

cross-section case note analysis, retrospective analysis, systematic reviews, systematic screening and assessment, exploratory statistics, latent class analysis, ethnographic field research, integrative review, cross-sectional survey, semi-structured interviews, and secondary analysis.

## **Synthesis of Evidence**

Health disparities. Where a person is born, grow-up and work are social determinants of their health (World Health Organization, 2019). Factors such as housing and homelessness, food insecurity, employment, and neighborhood conditions can impact a person's health (Kwan et al., 2018; World Health Organization, 2019). Furthermore, according to the World Health Organization (2019), SES is a structural determinant of health, while behavioral and biological factors, psychosocial factors, and the health system are intermediary determinants of health. Social stability is significantly associated with chronic disease and substantially related to mental health diagnoses (German & Latkin, 2012). Lack of affordable, quality housing is a barrier to optimal community health and contributes to health inequities (Kwan et al., 2018; World Health Organization, 2019). In particular, homelessness has been associated with high levels of morbidity and mortality (Doran et al., 2016).

Low-Income seek social assistance. The socioeconomically disadvantaged tend to utilize the emergency department over ambulatory care because they perceive it as "less expensive, more accessible and of higher quality" (Kwan et al., 2018). Of the socioeconomically disadvantaged that presented to the emergency room (ER), 13.8% were living in a shelter or on the streets, and 15.5% had spent at least one night in a homeless shelter (Doran et al., 2016). Furthermore, nearly one-third (30.5%) had a history of homelessness in their lifetime (Doran et al., 2016). Of the socioeconomically disadvantaged that presented to the ER, their identified needs included homelessness, unstable housing, food insecurity, and inability to afford

medications and basic needs (Doran et al., 2016; Lendeen et al., 2017; Madden, 2015). Moreover, their health disparities included chronic and/or severe illness, lack of pain management, poverty, government insurance such as Medicaid, substance abuse, and mental illness (Doran et al., 2016; Kwan et al., 2018). These characteristics reflect health and social disparities among the social determinants of health (SDOH), defined by *Healthy People 2020* as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (German & Latkin, 2012; Healthy People 2020, n.d. a); Kwan et al., 2018).

In some cases, it was identified that patients who were socioeconomically disadvantaged social needs were more critical than their immediate medical needs (Doran et al., 2016). Interventions for patients with critical social needs may include a referral for community resources in addition to standard medical care (Doran et al., 2016). Clinicians such as NPs can advocate for improved access to social services and increased hospital, community, and national resources to address the needs of this vulnerable population (Doran et al., 2016). SDOH largely influence individuals' health status and drive health services use (Doran et al., 2016; German & Latkin, 2012). Consequently, the burden of multimorbidity is higher in poverty-stricken areas, which significantly impacts low SES individual's quality of life (Kwan et al., 2018; Mercer et al., 2016). NPs can be instrumental in advocating for people who are socioeconomically advantaged utilizing the CARE Approach. The practitioner/patient consultations can comprise of four key elements within the CARE Approach: Establishing therapeutic relationships with patients (Connect), focusing on the 'whole person' concentrating on the individual's personal and social contexts (Assess), responding empathically (Respond), and empowering patients (Empower; Mercer et al., 2016). This strategy to care could address the physiological and social needs of the

socioeconomically disadvantaged and can be done collaboratively utilizing an interprofessional team.

**Coordination of care.** The Affordable Care Act (ACA) has orchestrated a strong care coordination prominence for improved quality of care and to manage cost (Joo & Huber, 2013; Salmond & Echevarria, 2017). Care coordination is organizing patient care in collaboration with the patient and an interprofessional team to facilitate appropriate care across the continuum (Joo & Huber, 2013; Prokop, 2016). Changes in the reimbursement system encourage more emphasis on the transitions of care for continuity and coordination (Linnenkamp & Drenkard, 2016). The role of the provider of care is emphasized, including a focus on teamwork, collaboration, and knowledge sharing (Linnenkamp & Drenkard, 2016). The care team is critical to the coordination of care, identifying who the coordinator of care is to ensure patients have wellordered navigation of the health care system so that the patient needs are met across the continuum of care (Linnenkamp & Drenkard, 2016). While continuity of care across settings is the ultimate goal, the urgent care may not be utilizing all resources available to the NPs for care coordination (Linnenkamp & Drenkard, 2016; Salmond & Echevarria, 2017). Community health services and community-based care programs have thus been emerging as an increasingly important means of providing coordinated care across the continuum; this includes identified social needs, which greatly impacts health outcomes (Joo & Huber, 2013; Krieger & Lessler, 2014; Salmond & Echevarria, 2017). Furthermore, community-based programs can assist NPs with care coordination needs in a community setting (Joo & Huber, 2013; Krieger & Lessler, 2014; Prokop, 2016). The importance of an interprofessional team approach is evident; nurses are positioned to contribute to and lead the transformative changes that are occurring in healthcare by being a fully contributing member of the interprofessional team for patientcentered and quality care (Joo & Huber, 2013; Salmond & Echevarria, 2017). In community settings, there are many vulnerable populations who need health care, such as the uninsured, those with health disparities, and those with multiple comorbidities (Joo & Huber, 2013; Salmond & Echevarria, 2017; Tung & Peek, 2015). Social workers are an integral part of the interprofessional team in medical, school, mental health, and other settings addressing the physical, psychological, and emotional concerns of diverse client populations (DiLauro, 2018). Social workers in the community are vital in addressing the needs of the socioeconomically disadvantaged. Community social workers were consulted as a part of the interprofessional team to provide community resource information and/or to refer patients who are in need of a direct consultation.

Provider-Community partnership. A challenge to providing integrated health care is the unsystematic care management of numerous organizations, specifically a combination of hospitals, community-based programs, primary care providers, and many others (Bainbridge, 2015; Han et al., 2015). Integration of health care refers to the linking of providers to community programs to increase healthcare delivery, scope, and efficiency (Bainbridge, 2015). Linkage of community-based services and other identified providers and facilities is an essential component of integrated health care; NPs can lead in this partnership for improved patient outcomes. Community-based programs are integral to integrative healthcare; they are resourceful in coordinated care assistance (Han et al., 2015). Barriers to provider-community collaborative care are related to providers' unawareness of community resources, compensation issues, and lack of connections between the providers and community (Han et al., 2015). Consequently, health care providers infrequently refer patients to community-based programs, despite the resources that may be available to help patients manage chronic conditions and social needs (Han et al., 2015).

A provider-community partnership could leverage assets and resources to accommodate patients in achieving health goals (Krieger & Lessler, 2014; Lendeen et al., 2017). Providers could utilize ready-to-use tools and resources, including patient registries, educational materials and courses, guidelines, community websites, and patient support phone lines, which could improve patient outcomes (Krieger & Lessler, 2014). These resources can be adapted to improve the use of community-based program services (Krieger & Lessler, 2014). With the linking of health care and community-based resources, barriers can be quickly identified and addressed (Han et al., 2015; Krieger & Lessler, 2014; Lendeen et al., 2017; Ockene et al., 2013). This collaborative relationship could link medical and community organizations, which could inform clinicians such as NPs of available community resources, thereby benefiting patients who are in need of services (Krieger & Lessler, 2014; Ockene et al., 2013).

An effective collaborative provider-community partnership includes an official referral workflow and quality communication for strong coordination of care (Krieger & Lessler, 2014). Additionally, effective clinical and community-based processes across social-ecological frameworks increase available resources, which improves the utilization of services (Ockene et al., 2013). Although some problems of ill-health may be addressed in clinical or community settings, many are likely to benefit from the complementary and coordinated efforts of clinical and community-based interventions to fully address the opportunities for prevention (Ockene et al., 2013; Bainbridge, 2015). There is a need to address major health threats and concerns using an interprofessional perspective, by way of partnerships across multisectoral health systems, communities, educational institutions, businesses, and other sectors, to effectively improve the health of the population (Institute of Medicine, 2013). The integration of providers such as urgent care clinics and community health programs can enhance the capabilities of both sectors

to facilitate their respective missions and to improve population health (Institute of Medicine, 2019). The goal of this project was to provide local NPs with a community resource tool to link with community-based services facilitating interprofessional collaboration to ignite the journey of improving the health of the socioeconomically disadvantaged in Lapeer County, Michigan.

The Need for lifestyle modifications. Unhealthy lifestyle behaviors and risk factors, poor delivery of clinical and community preventive services, and environments not conducive to health, increase the risk of disease and injury and contribute to the leading causes of death (Ockene et al., 2013). Tobacco use, poor diet, and physical inactivity alone contribute to more than a third of the premature deaths in the United States (Lendeen et al., 2017; Ockene et al., 2013). Lifestyle modifications are effective at fostering clinically significant weight loss and can improve the health of at-risk adults in the community and primary care setting (Liyana et al., 2018). NPs provide a wellness model that can improve patient's health and wellbeing by recommending physical exercise, healthier nutritional regimes, encouraging smoking cessation and excessive alcohol consumption discontinuation as well as discussing the impact of lifestyle on chronic disease (Kelly, Garvey, Biro & Lee, 2017; Liyana et al., 2018). Furthermore, some burden can be averted through the delivery of clinical preventive services, through communitybased programs, and through appropriate treatment (Ockene et al., 2013; Stoutenberg, Stanzilis, & Falcon, 2015). Ways of addressing health and social disparities are to link patient needs to existing community resources (Tung & Peek, 2015). The community setting can be a prime location for lifestyle modification programs and the implementation of evidence-based practices in care settings (Stoutenberg et al., 2015). Community settings empower patients to practically initiate lifestyle modifications while enabling patients to stay in their local communities for support, thereby increasing the likelihood of sustainability of healthy behavior (Tung & Peek,

2015). Clinical, medical, and community-based programs contribute to reducing the burden of illness (Ockene et al., 2013).

The socioeconomically advantaged are more likely to meet recommended daily physical activity measures and less likely to experience adverse health effects associated with a sedentary lifestyle than socioeconomically disadvantaged counterparts (Craike, Wiesner, Hilland & Bengoechea, 2018). Certainly, improving participation in physical activity in socioeconomically disadvantaged population groups is a public health challenge (Craike et al., 2018; Stoutenberg et al., 2015). Physical activity interventions must target socioeconomically disadvantaged groups, and the risk of poor health outcomes is most notable in this population (Craike et al., 2018). For young families who are socioeconomically disadvantaged, parent-focused family-based community settings were effective in increasing physical activity (Craike et al., 2018).

Recruiting and retaining people for physical activity programs from socioeconomically disadvantaged groups is challenging (Craike et al., 2018; Stoutenberg et al., 2015). Evidence suggests that targeted recruitment, partnering community stakeholders, and organizations utilizing well-trained staff who are culturally matched to the population is associated with the successful recruitment of the socioeconomically disadvantaged (Craike et al., 2018).

Furthermore, people from socioeconomically disadvantaged groups face multiple barriers to engagement in physical activity; therefore, intensive interventions may be necessary to successfully change behavior (Craike et al., 2018; Stoutenberg et al., 2015). People from socioeconomically disadvantaged groups are far less likely to achieve recommended levels of physical activity and are more likely to experience poor health outcomes, than those from less disadvantaged groups (Craike et al., 2018; Liyana et al., 2018). Therefore, referrals for community-based programs for lifestyle modification interventions may decrease the incidence

of preventable disease in the socioeconomically disadvantaged as well as improve the health of those who are already affected by chronic health conditions. NPs are equipped to identify these patients and refer them appropriately to community-base programs.

## **Community Health Workers**

Community health workers (CHWs) have been utilized to educate patients, help patients navigate the complicated healthcare system, and work with patients to set goals that individually tailor their care (Tung & Peek, 2015). Likewise, CHWs have been shown to expand patient knowledge, elevate clinical outcomes, reduce disparities, and decrease health care costs (Tung & Peek, 2015). NPs wellness approach and their ability to coordinate care with an interprofessional team enable them to act in the role of the CHW. Evidence has showed increased Medicaid savings when CHWs link patient needs to community resources (Tung & Peek, 2015). NPs play an important role in the healthcare system; they can also link low-income patients to needed resources to improve the health of this vulnerable population as effectively as the CHWs (Mossabir, Morris, Kennedy, Blickem & Rogers, 2015; Silverman et al., 2018). Socially disadvantaged groups suffer disproportionately more from chronic conditions, such as diabetes and heart disease, but are often unable to make the most of available health provisions, NPs can facilitate that (Mossabir et al., 2015). Barriers vulnerable populations are faced with are associated with access, language, cultural appropriateness, transportation, finance, and health literacy (Madden, 2015; Mossabir et al., 2015). NPs can collaborate with an interprofessional team and with community-based programs and other identified stakeholders to close social and care gaps that affect health outcomes.

Health care systems must better address the complex social and chronic disease management needs of this vulnerable patient population (Kwan et al., 2018). Emergency

department (ED) can use reduction strategies such as case management, care coordination, patient navigators, and community-based programs to assist in reducing barriers to access and link patients to community resources which would address psychosocial needs (Doran et al., 2016; Kwan et al., 2018). Evidence supports the use of CHWs approach to care, which NPs are capable of implementing to improve health outcomes and reduce disparities (Silverman, Krieger, Sayre & Nelson, 2018). As members of the community and understanding of the community served, NPs acting in the role of CHWs are well-suited to address psychosocial issues for patients dealing with complex health needs in a fragmented health care system while working in collaboration with other health care disciplines and community programs (Kwan et al., 2018; Tung & Peek, 2015). Specifically, NPs acting as CHWs can: identify and address gaps in patient knowledge of chronic disease and self-management skills; identify socioeconomic obstacles to care and can link patients to appropriate resources; and assist patients in navigating the healthcare system (Silverman et al., 2018; Tung & Peek, 2015). Urgent care NPs acting as CHWs can refer and connect patients to primary care, community resources and can connect the patient with community individuals that can provide longer-term education and support (Kwan et al., 2018; Tung & Peek, 2015).

Nurse Practitioner referrals. With the implementation of an NP-led referral program, there was an 18% increase in the number of appropriate patients being identified for needed services (Mashlan, Hayes & Thomas, 2016). In fact, NP referrals increased the number of patients appropriately identified for needed health care services (Mashlan et al., 2016). On the other hand, it is unfeasible for NPs to keep up to date and to identify appropriate community-based resources for patients within the time constraints of a consultation (Mossabir et al., 2015). Social interventions such an NP-led referral for social work consultation facilitates access to

appropriate community-based resources that have the potential for longer-term health benefits (Mossabir et al., 2015). Healthcare professionals such as NPs play an important role in referring patients to needed resources and in introducing the notion of utilizing community programs with features of health management (Mossabir et al., 2015). Proximity to NPs in the local community is considered an essential facilitator of developing and maintaining an effective relationship with patients for successful referrals (Mossabir et al., 2015).

Community urgent care centers. The use of urgent care centers can save \$4.4 billion in healthcare costs annually; this is achieved because of the convenience of urgent care centers and their affordability (Villasenor & Krouse, 2016). The urgent care center where my project was implemented, is contributing to these cost savings in Lapeer County, Michigan. The urgent care center and those across the United States care for patients with or without a primary care provider (PCP), they often use urgent care centers practitioners as an alternate provider of care (Villasenor & Krouse, 2016). Unfortunately, in the United States, there continues to be an inadequate number of PCPs in family medicine, pediatrics, and gerontology; NPs are looking to fill that shortage (Villasenor & Krouse, 2016). Of the approximated 205,000 NPs that are licensed to practice, 86.5% are prepared in primary care (Villasenor & Krouse, 2016). Based on this trend, it is likely that NPs will further increase their role in delivering primary healthcare services to patients in urgent care facilities, primary practices, and other organizations (Villasenor & Krouse, 2016). Nineteen percent of adult patients and 53% of uninsured patients do not have a PCP and, therefore, no established rapport with a PCP, no care continuity, no preventative services, and no chronic care management (Villasenor & Krouse, 2016). Lack of primary care system capacity has been noted as a problem in health care reform efforts (Kwan et al., 2018). NPs in urgent care centers can assist with this problem by linking patients with PCPs

in the community as well as connecting patients with community-based resources and other health care professionals and a specialist to improve access and the quality of healthcare.

Care continuity between urgent care center NPs and PCPs is essential in ensuring transfer in ownership and responsibility for ongoing patient care, re-evaluation of acute episodic events, and management of chronic health conditions (Villasenor & Krouse, 2016). In particular, care continuity reduces the fragmentation of care and improves healthcare safety and quality (Villasenor & Krouse, 2016). Patients often stated that the access provided by urgent care centers relative to their general practices led to their visit, and some patients utilized an ED if urgent care centers or retail clinics did not exist (Cowling, 2016). Patients were noted to choose urgent care over PCP because: (a) perceived barriers to primary care, or benefits of using alternate care (convenience, cost-benefit, lack of insurance); (b) deflection with lack of collaboration between alternate sites and PCP; and (c) insufficient general knowledge of the healthcare system and actual urgency of the medical condition (Villasenor & Krouse, 2016, p. 337). NPs can address knowledge gaps by educating their patients about the appropriate use of the health care system and refer them as needs identified for primary care and care gaps outside the NPs scope of practice.

Lower SES is a key reason for the ED, retail clinic, and urgent care center use (Kwan et al., 2018; Villasenor & Krouse, 2016). Like retail clinic settings, urgent care centers provide treatments for acute episodic medical conditions as well as some aspects of primary care (Villasenor & Krouse, 2016). Furthermore, retail clinics and urgent care centers are identified as a strategy to improve access to care for insured and uninsured patients (Villasenor & Krouse, 2016). The need to increase collaborative and coordinated care across settings might be a prevailing norm for NPs (Joo & Huber, 2013; Villasenor & Krouse, 2016). Improving continuity

of care between primary care and alternative care sites requires a healthcare delivery model that emphasizes the coordination of care by NPs (Villasenor & Krouse, 2016). NPs are able to provide high-level medical care, and when working collaboratively with an interprofessional team, patients benefit by access to efficient care that addresses the expanding need for primary care (Kelly et al., 2017; Villasenor & Krouse, 2016). Ambulatory care provided by NPs within community-based facilities enables improved health outcomes, potentially reducing hospitalizations and in turn, reducing costs (Kelly et al., 2017).

Food Insecurity. The US Department of Agriculture (USDA) defines food insecurity as "a household-level economic and social condition of limited or uncertain access to adequate food." (United States Department of Agriculture, 2018). Nearly 13% of US households were food insecure in 2015 (Lendeen et al., 2017). Food insecurity is a social issue that affects an individual's health (Doran et al., 2016; Lendeen et al., 2017). Food insecurity is associated with an increased risk of chronic disease, obesity, diabetes, depression, hypertension, and chronic kidney disease (Lendeen et al., 2017). As a result of evidence that has linked food insecurity and health, health care organizations are increasingly attempting to address food insecurity in the communities they serve (Doran et al., 2016; Lendeen et al., 2017). Health care systems and organizations have been attempting to address food insecurity; however, the availability of a description of programs being implemented in the US is lacking (Lendeen et al., 2017). NPs working in partnership with the community is important, because partners may be abreast in the availability of food insecurity-related resources in the community that can meet patient and household needs (Lendeen et al., 2017). Public or private health insurance could be a source of funding for food-insecure beneficiaries, NPs are capable of collaborating with insurers to determine that (Lendeen et al., 2017). Furthermore, NPs can provide a referral to or provide a list of food resources, including local and federal food assistance programs such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (Lendeen et al., 2017). An allied health professional such as a social worker can assist patients who are food insecure in applying for state and federal programs, including Medicaid services; while leading an interprofessional team, NPs can refer these vulnerable patients to the identified professional (Lendeen et al., 2017).

**Medication assistance.** The United States government and pharmaceutical industry aid programs offer some help to low-income patients with medication costs, many un- and underinsured patients continue to struggle with medication access (Madden, 2015; Shaw 2014). In some cases, controlling health conditions depends not only on lifestyle modifications but on adherence to a medication regimen (Shaw, 2014). Barriers to access to prescribed medications can lead to poor health outcomes (Shaw, 2014). Clinicians have to be cognizant of the cost of medication when prescribing to uninsured patients; it may be more beneficial to prescribe generic as opposed to brand named medications. Unfortunately, even insured patients experience high out-of-pocket costs depending on their insurer's tier of medications. NPs acting as CHWs are able to assist patients who are struggling to afford their medications, they can assist or refer patients to a community-based service that can assist them with applying to various discount prescription drug programs (Shaw, 2014; Silverman et al., 2018). NPs in the urgent care center where I implemented my project has readily available resources related to access to low-cost, generic or free, brand-name drugs, pharmacy assistance programs, mail-order discount drug pharmacies, coupons, rebates, and patient education (Shaw, 2014).

## **Conceptual Framework**

The conceptual framework to support the change is based on Healthy People 2020 (n.d.; a) focus on improving the health of vulnerable populations through several initiatives, including a focus on social and community context, enhanced educational opportunities as a means to improving overall health, health care, and strategies targeting the environment. The strategy to reduce the health disparities of the socioeconomically disadvantaged is the use of the Healthy People 2020 (n.d. a) targeted topic: Social determinants of health and the vision goal which is to create social and physical environments that promote health, especially for those who are vulnerable to poor health outcomes.

This project utilized the quality improvement method, "Six Sigma". This method focuses on locating and discarding defects in a workflow to lessen variability and improve quality (Moran et al., 2017). The strategy used for the Six Sigma model is "DMAIC", which is Define (define the problem, goals, and stakeholders), Measure (measure and collect data), Analyze (analyze the data), Improve (Implement the intervention), and Control (monitor the plan). The Six Sigma model was applicable to my quality improvement project because the problem of lack of knowledge of resources for socioeconomically disadvantaged patients and NPs time constraints was identified, and we measured the number of community resources allocated to patients and the time took to locate them as a result of the community resource binder while collecting the data related to that. The data also helped analyze the effectiveness of the intervention of the community resource binder. Also, the data compared the impact of the binder versus the workflow without the binder. Interventions were established to enable the community resource binder to stay current and remain in practice.

#### **Chapter II: Methodology**

## **Project Design**

The project was implemented as an exempt research project. The measures of this project were simple, easy to use and administer, the measures consisted of a pre- and post-survey completed by the NPs in the urgent care center where the project took place (Cullen et al., 2018). The socioeconomically disadvantaged patients and the NPs benefited from the project as it improved the quality of the workflow for the issuance of community resource referrals. Furthermore, dissemination was possible within Lapeer County, Michigan where the project was completed. The socioeconomically disadvantaged population patient's needs will continue beyond the completion of this project, and they can as well as the NPs can continue to benefit from its use and dissemination.

The implementation of the project provided appropriate referrals for socioeconomically disadvantaged patients who presented to the urgent care center. In addition, those referrals were issued as efficiently as possible by providing the NPs with the binder of community resources, which identified contacts for local, state, and federal resources with the end goal of reducing research time for the NPs. The NPs completed a pre-survey of their experience finding community resources before the implementation of the binder and a post-survey of their experiences utilizing the binder. No protected health information or demographics were collected on the socioeconomically disadvantaged patients or the NPs in this project. The only data that was collected was related to the NPs experience prior to the binder compared with their experience after the implementation of the community resource binder.

#### **Setting**

The project took place in an urban area urgent care center located in Lapeer County, Michigan. The facility had four exam rooms, an x-ray room, a waiting room, a reception area, an NP office, locker, two bathrooms, and a lounge/kitchen area. The urgent care center was owned by a group of physicians, but the NPs manage the patient's care based on a collaborative agreement with the physician owners. The urgent care center is in an area that serves socioeconomically disadvantaged patients. Many of these patients were uninsured, underinsured, or were on Medicaid or Medicare. Also, some of the patients presented without a PCP and were having issues locating a PCP, some were homeless and suffered from food insecurity (S.M. Collins, personal communication, January 4, 2019). The organizational culture was receptive, and they anticipated the implementation of the project. The staff included on-call physicians (and specialists such as radiologists), NPs, medical receptionists, and medical assistants (MA). There were no identified staffing or leadership issues (S.M. Collins, personal communication, January 4, 2019).

## **Population**

The population served were low SES patients in Lapeer County, Michigan, who presented to the urgent care center. The clinic served about 20 to 25 patients per day during the week and 15 to 20 patients per day during the weekend (S.M. Collins, personal communication, January 4, 2019). The community resource binder also served the NPs in the urgent care clinic as the community resource binder saved them time and connected them with community-based programs allowing them more networking opportunities and the ability to serve their patients more holistically.

#### **Data Collection Tools or Instruments**

**Surveys.** A pre-survey was created which asked the NPs questions related to their ability to locate community resources and how much time it generally took for them to locate those resources and what type of community resources the NPs were attempting to locate most often. After the implementation of the resource binder, a post-survey was be completed by the NPs to compare their experience with locating needed community resources in the binder and the time it took for them to issue the referral.

Prior to providing the NPs with the community resource binder, the pre-survey helped me determine their ability to locate community resources for the socioeconomically disadvantaged, how long it generally took for them to locate those resources and what type of resources they were attempting to locate most often. The post-survey was completed by the NPs to compare their experience with locating community resources in the binder, the time it took for them to locate the resources in the binder and if the NPs was able to successfully provide the patient with the appropriate referral as a result of utilizing the binder (see Appendix A for pre-survey & Appendix B for post-survey).

Community resource binder. Evidence that supported the development of the community resource binder was to address the health and social disparities of low SES patients. The community resource binder matched patients' needs to existing community resources to improve their health outcomes (Ockene et al., 2013; Tung & Peek, 2015). Furthermore, NPs referral services increased the number of patients appropriately identified for needed health care services (Mashlan et al., 2016). However, it is challenging for health professionals to keep up to date and to identify appropriate community-based resources for patients within the time constraints of a consultation (Mossabir et al., 2015). A binder with needed community resources

linking the NPs to resources that they can refer their patients to was noted to likely improve their health outcomes as well as address the time constraints of NPs researching community resources. To gather the needed community resources, I searched for government agencies and potential contacts in the community. I collaborated with the Lapeer County Department of Health, Lapeer County Mental Health Center, various clinics, the Salvation Army, and a host of many other entities. I also completed research online utilizing the State of Michigan Department of Health & Human Services and medical equipment providers. All resources were verified with contacts within these government programs and identified community organizations.

## **Project Plan**

The project plan was to address the needs identified in the community from the perspective of the local department of health, a local hospital, and the NPs in the urgent care center. The initial step in my project was to administer an anonymous electronic survey to all three of the NPs working in the urgent care center. However, the NPs did not want to complete the pre-and post-surveys online; they preferred a hardcopy. Each NP created a 5-digit code number for each survey and wrote it on the survey. The surveys were collected by the MA and provided to me. The survey assessed the level of satisfaction (scale of 1 to 10) that the NPs had regarding their current workflow for locating and issuing community resources, how long it took for the NPs to locate and issue community resource referrals to their patients, were they able to locate needed community resources to address their patient's needs, did they identify a interprofessional team that they can collaborate with for coordination of patient care needs, and the level of ease (scale of 1 to 10; 1 being difficult and 10 being user friendly) of use of their current workflow to locate and issue referral to the patients in need of community resources and

how confident (scale of 1 to 10; 1 being less confident and 10 being most confident) are they in their ability to locate and issue the community resources required to address their patient needs.

Next, the NPs tracked how long it took for them to locate and issue a referral and what types of community resource referrals they were issuing. I introduced one community resource binder to the NPs. A digital copy of the binder was uploaded to a flash-drive to allow for updating of the community resource information. The hardcopy community resource binder had a table of contents, and tabs relating to the subject of each section of the binder enabling the user to locate the resource needed more efficiently as well as appendices for applications and brochures. Furthermore, the digital copy enabled the users to complete a search within the PDF document locating the community resource expeditiously.

Outcome objectives that I measured in my project were 1) educating the NPs regarding the availability of community resources, 2) improve the NPs time management related to locating and issuing community resource referrals, 3) connecting the NPs to other identified healthcare professionals, government programs, organizations and facilities for interprofessional collaboration and resources, and 4) employed interprofessional collaboration while determining the levels of assistance the organizations, facilities, government, and other stakeholders can provide, and determining the best approach for patients to access discovered resources.

After the introduction of the community resource binder, each day the NPs tracked how long it took them to locate and issue a referral and what types of community resource referrals they issued. The NPs were to track the data in a spreadsheet, and at the conclusion of the implementation phase, they provided the data to me. The tally sheet was located in the NP office and adhered to the wall. Lastly, eight weeks after the binder was introduced, another survey was administered to all three NPs (see Appendix C for project timeline).

The post-survey was used to determine if the objectives of the project were met, as well as the effectiveness of the community resource binder for the NPs. The survey a) determined the level of satisfaction (scale of 1 to 10) that the NPs had regarding the community resource binder for locating and issuing community resources compared to previous workflow, b) how long did it take for the NPs to locate and issue community resource referrals to their patients utilizing the community resource binder, was the digital copy of the binder more helpful than the previous workflow (scale of 1 to 10; 1 being not as helpful and 10 being more helpful), c) was the hardcopy of the binder more helpful than the previous workflow (scale of 1 to 10; 1 being not as helpful and 10 being more helpful), d) which binder format was most efficient when used (a. the hardcopy or b. the digital copy), e) were they able to locate the needed community resources to address their patient's needs, f) did the interprofessional team identified in the binder help for collaborative coordination of patient care needs (scale of 1 to 10; 1 being less helpful and 10 being very helpful), and g) how confident were the NPs in their ability locate and issue community resource referrals to address their patient's needs now compared to their confidence with the prior workflow (scale of 1 to 10; 1 being less confident and 10 being most confident).

Sustainability. The MAs & NPs in the clinic are to maintain the community resource. The NPs will ensure with the help of the MAs that the resources remain active and usable for the patients. When it is identified that a community resource is no longer available, the NPs with the assistance of the MAs, will determine what the replacement is or if there are alternatives by contacting identified community contacts listed in the binder. Listed within the binder are community programs and resources and for each program or resource I have identified contacts within Lapeer County. The contacts for each community program, government agency, clinic, or other facilities have professionals that include social workers, public health nurses, physicians,

community health workers and many others that are ready to assist the urgent care clinic staff in determining resource and alternatives for patients that live in Lapeer County. The MAs and the NPs were trained to know which contact the call related to the resource listed in the binder.

The patients are asked to inform the clinic should they have any difficulty in utilizing the resources provided to them. If the patient is faced with any challenges and is not able to access the resources the MAs with the assistance of the NPs as needed will contact the professionals and community programs that I had identified in the community to determine alternatives. The MAs and NPs were trained to utilize those contacts to identify alternative resources as needed. When an alternative is identified the MA will contact the patient to provide the new resource and then update the digital copy via flash drive and print the document to replace the resource in the binder. For example, a patient is in need of a resource for medication assistance and the patient presents to the identified site or completes an application and is informed the resource is no longer available. The patient will call the clinic and inform the MA. The MA will call the last known contact or organization for the resource and determine if there are alternatives. If an alternative is available that MA will contact the patient and provide the new information to them and update the binder. If the identified community program does not have alternatives, there are several other medications resources listed in the binder, that the MA will verify remain active and then provide it to the patient.

For emergent-type resource referrals, such as homelessness, food resources, urgent need DME, or emergent utilities needs, the MA will call the identified contact immediately to ensure the resource is still available before providing it to the patient. If the resource is no longer available the MA will contact the last known emergent resource contact such as the Salvation Army, the Red Cross, or community social worker to determine alternatives and then provide the

information to the patient. The MA will add the new resource in the flash drive, and the outdated information is deleted, then the page for the binder is reprinted and replaced with the MA initials and the date it was changed.

# **Data Analysis**

The data analysis used was descriptive statistics and qualitative analysis. The measures of central tendency and variation; provided a measure of independent, confounding, and outcome variables (Moran, Burson & Conrad, 2017). These data are useful when comparing how much time it took for the NPs to locate community resources without the community resource binder compared to how long it took with the utilization of the community resource binder. A spreadsheet was used to compare the data pre-implementation versus post-implementation. The spreadsheet was helpful because it allowed me to determine how useful the community resource binder was for the urgent care clinic. The spreadsheet helped me understand the NPs level of satisfaction with the community resource binder compared to their previous workflow. The qualitative analysis involved the thoughtful review of written narratives to identify themes and patterns in the data (Moran et al., 2017). These data were useful in the project because the NPs overall experience and ease of use of the community resource binder were also determined via a pre-and post-survey. The qualitative analysis helped me understand the phenomenon of how things were related to the issuance of community resource referrals prior to the binder implementation compared to after the binder implementation from the NPs perspective. The data was collected from the NPs utilizing hardcopy surveys without identifying information, and the data results hardcopies were provided to me from the MA upon my next practicum visit. Prior to the implementation of the surveys, I trained the NPs how to complete the surveys, and I determined if they need any clarification. The NPs tracked data included to how long it took for

them to issue a referral two weeks pre- and throughout the post-implementation of the community resource binder every day. They determined how long it took for them to locate and issue a referral and what type of community resource referrals they were issuing. The NPs shared this data with me at the conclusion of the implementation phase of the project.

#### **Institutional Review Board and Ethical Issues**

The community resource binder, pre- and post-surveys followed the de-identification standard as it did not include patient demographic data. The urgent care center classified this project as a quality improvement project. Because of this classification, submission to the institutional review board (IRB) is not required by the urgent care center where the project was implemented. The project was approved by the Bradley Committee on the Use of Human Subjects in Research (CUHSR), which determined that this proposal was exempt from IRB full review according to federal regulations.

There are five categories that can qualify research as being exempt from IRB review, one of which includes research involving surveys and tests in which the participants cannot be identified (Terry, 2015). This project did not include any protected health information or other identifiable information for patients or NPs.

The Privacy Rule was designed to protect individually identifiable health information by permitting only certain uses and disclosures of protected health information (PHI) provided by the Rule, or as authorized by the individual subject of the information (U.S. Department of Health & Human Services, 2015). I did not have contact with the patients, only the NPs. Since information such as patient names, health plan identification numbers, addresses, telephone numbers, social security numbers, medical record numbers, and other data related to demographics were not used, this project protected the privacy of the patients.

No protected health information or demographics was collected on the socioeconomically disadvantaged patients in this project. The only data that was collected was related to the NPs experience prior to the binder compared with their experience after the implementation of the community resource binder. The NPs demographics were not collected on the surveys; only their responses to the survey questions and the data that they collect related to their experience with the community resource binder.

# Chapter III: Organizational Assessment and Cost-Effectiveness Analysis Organizational Assessment

A Reflect and Learn Organizational Assessment survey was completed at the urgent care center the project was completed at and they received a score of 5 out of 55. This shows that the organization is "exceptional," which (Under 16 - You work in an exceptional organization) indicates that the organization is ready and open for change (Reflect and Learn, n.d.) (see Appendix D for organizational survey results). An identified strength was the organization's ability to identify the real causes of problems and their willingness to develop tangible solutions to the problems. For example, the organization identified a gap in care related to the need for socioeconomically disadvantaged patients to have community resource referrals; it was noted that a significant amount of the NPs time was consumed locating resources, and, in some cases, they were not able to find resources for some patients. When the opportunity arose for me to assist with this problem as a DNP student, they welcomed me to assist them in determining a solution to this problem. There were no anticipated barriers to the implementation of this project. Facilitators to the implementation of this project were the NPs, the MAs, and me. There were no identified risk or unintended consequences outside of the risk associated with the usual care of patients. There were no costs to the urgent care center where this project was implemented; however, the clinic did incur their usual cost of paying their NPs and MAs. The role of interprofessional collaboration with the NPs was to collect data, utilize the community resource binder, and complete a pre- and post-survey. I collaborated with the NPs to ensure they were trained and understood the project plan. We worked together to determine their needs and expectations of the community resources binder. When they identified a need or had an idea to add more details to the binder, we discussed it and I added what they needed. The MAs were

trained to assist with the sustainability of the binder as well as provide patients with referrals from the binder as delegated by the NPs. Furthermore, I utilized an interprofessional team approach to reach out to various professional disciplines, community-based programs, local hospitals, government agencies, and other identified stakeholders to assemble community resource information for the binder. I worked with them to address the identified needs of socioeconomically disadvantaged patients who together as team members and team leaders. To achieve effective interprofessional collaboration, I first had to understand the individual's areas of expertise. With that understanding I worked with those professionals to gather resources needed for the patients. I can also collaborate with them to help resolve individual patient issues to improve the patient's outcomes.

## **Cost-Effectiveness**

The urgent care center where the project was implemented, did not incur any additional cost as a result of this project. They continued to pay their NPs and staff as usual. The salaries of the staff was not disclosed to me, but I estimated three NPs at \$50/hour each and 3 MAs estimated at \$15/hour. There was a cost in time for the NP to take 2 minutes after a referral to document the data related to how long it took and what type of referral. Also, the NPs were trained for 30 minutes twice after their work-shift on how to complete the surveys and how to utilize the community resource binder hardcopy and digital copy. I purchased the binder, paper, sheet covers, folders and tabs to create the community resource binder costing \$39.97 to create. I also purchased a flash-drive for \$10. Pre- and post-surveys were completed utilizing a professional-grade online survey service, which was free. The hardcopies of the surveys that were printed for the NPs to manually complete, did not incur additional cost. Databases for research were provided by Bradley University, and I already had Microsoft Excel. The urgent

care clinic also had several computers for their staff. The cost savings with the implementation of this project was attempting to avoid the use of additional computer programs that were not free (see Appendix E for project budgetary needs).

## **Chapter IV: Results**

# **Analysis of Implementation**

Community Resource Binder. The initial steps in creating the binder began in March 2019. At that time, I began to search for government agencies and potential contacts to gather resources that they may offer. I presented to the Lapeer County Department of Health and was able to speak with several public health nurses at the agency who were able to provide me with resources including dental care assistance, immunization resources, women and children resources, senior care assistance, and housing assistance resources. The Lapeer County Department of Health required three visits to obtain the community resources that were needed, each time I spoke with a different nurse, or I was able to get resources that were posted within the agency. I also presented to the Lapeer County Mental Health Center and spoke with the medical receptionist, and I was able to gather a significant amount of mental health community resources. Also, I visited the local hospital and was informed that a third-party company handled its community resources and case management functions; therefore, I was not able to get information from them. However, I was able to meet with the manager of social work at the hospital, and she provided me with some social work contacts in the community. I had a lot of success collaborating at one of the local Clinics when I met with their social worker. I was able to speak with her for an hour, and she provided valuable resources, including how patients can access free diapers, housing, transportation, homeless shelters, food banks, free clothing, grandparent resources, Medicaid information, and food program assistance. The social workers also discussed the needs that she identified in the community and the challenges she had assisting patients with their needs. It was a very beneficial conversation; I was able to add her to a list of other professionals for collaboration.

To gather additional resources, I called the top five insurance companies that were utilized at the urgent care clinic. I wanted to inquire if these insurance payors provided resources for their beneficiaries. Unfortunately, I encountered difficulty obtaining information from the insurers, and they did not have a significant amount of information on their websites related to resources for their beneficiaries. I have worked as a case manager for a top-five insurance provider, and I am well aware of the additional benefits that some of them provide. Therefore, I informed the NPs that most insurers have resources for their beneficiaries, including social workers, case managers, disease management, and transportation assistance. The NPs were advised to have their patients who were insured to contact their insurance providers to inquire about additional benefits that may be available to them. I also looked into state resources for the socioeconomically disadvantaged, through the state I was able to find resources including medication assistance, uninsured assistance, food insecurity assistance, resources for special needs children, and maternal/infant resources. These resources were found on the State of Michigan website, and they were verified by calling the phone numbers provided to confirm they were still active.

I was in contact with a Salvation Army representative to ask her about community resources for Lapeer County and was informed that residents of that county could utilize the resources for Genesee County. The resources that I confirmed were available included eviction/foreclosure assistance, utility shut-off assistance, and emergency financial assistance. Also, I searched on the internet for local durable medical equipment (DME) providers and cold-called them to determine if they provided resources for socioeconomically disadvantaged patients. I was successful at finding several that offered free and low-cost DME, which included walkers, commodes, nebulizers, wheelchairs, and lifts. I also located resources for vulnerable

populations, including HIV /AIDS and disabled Veterans. For patients with access issues, I was able to identify primary care physicians and physician specialists utilizing a variety of resources, including insurance providers in-network physicians. Providers who had the highest quality rating scores were included in the binder; their clinic sites were called to ensure that they continued to practice there.

There were a host of other resources that were found utilizing the internet, contacting community resource programs, local clinics, and government agencies. All resources were verified via telephone conversations or visits to the various agencies and clinics. The binder consisted of over 130 pages of community resources, not including the appendices and table of contents. The community resource binder was organized by resource type (see Appendix F for resource types). The appendices in the binder consisted of housing assistance applications, state aid applications, dental assistance applications, and brochures for other community programs that may be helpful to patients in need.

**Pre- and post- implementation.** At the request of the NPs at the clinical site, the preand post-surveys were not completed electronically. The NPs requested a hardcopy of the
surveys which were provided. No identifying information was included in the surveys. Once the
surveys were completed, the medical assistant (MA) provided me with the surveys. Furthermore,
it was the NPs preference to tally the community resource type and the number of referrals on a
hardcopy Word document. The MAs collected that data and provided the hard copies to me as
well. The pre-implementation phase consisted of teaching the NPs how to use the community
resource binder, the NPs completing the pre-survey, and the collection of the initial data of their
current workflow for providing community resource referrals to their patients, this phase lasted
two weeks.

The implementation phase consisted of the NPs using the community resource binder. During that time, the NPs noted several additional resources that were needed, including clinical sites for patients who were in need for sexually transmitted infection testing and birth control. There was also a need for more details related to medication resources as well as durable medical equipment (DME) resources. These details included medication types that were discounted at the various pharmacies and DME providers who offered free DME versus low-cost DME. During the implementation phase of the project, I identified the appropriate community contacts and was able to address these needs and added the details to the binder and updated the flash drive. Furthermore, the NPs request a more user-friendly organization system for the binder; this included larger tabs, improved visibility of the headers, and appendices for applications and brochures. All of the community resource binder change requests were completed, and the flash drive was updated. The MAs were taught how to update the flash drive and how to identify the contacts in the community as needed in order to sustain the community resource binder. The implementation phase lasted eight weeks. Some things that were not well understood prior to the development of this project were the much-need tractability and purposeful deliberation needed to create a successful project.

# **Analysis of Outcome Data**

The pre-and post-survey was completed by 100% of the NPs (n=3). Compliance of the use of the community resource binder was 100% when needs were identified for a patient who was socioeconomically disadvantaged. There were three NPs identified as potential participants; all three NPs were recruited in the pre-and post-implementation phase. The average time it took for NPs to locate community resources pre-implementation was 21 minutes or longer (100%), and post-implementation it took on average 1 to 5 minutes (100%) (see Figure 2). Furthermore,

pre-implementation the rate of satisfaction with the NPs current workflow of locating community resources was somewhat unsatisfied (67%); very unsatisfied (33%), and post-implementation, the average was very satisfied (100%). The top resources the NPs found themselves attempting to find most often were medication assistance (100%), uninsured assistance (67%), locating a primary care provider (100%) dental care (67%), and social work assistance (33%). Pre-implementation the NPs disagree (67%) and strongly disagree (33%) that the current workflow was easy to use and post-implementation, they strongly agree that the community resource binder is easy to use (100%). The NPs agree (100%) pre-implementation that the current workflow improved the quality of patient care, and they strongly agree (100%) post-implementation that the community resource binder improved the quality of patient care.

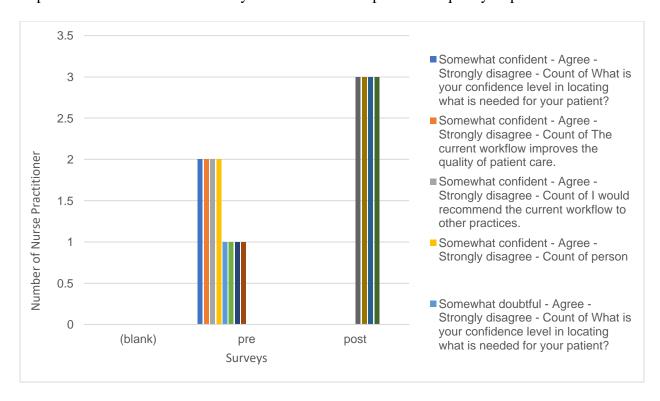


Figure 1. Pre- post- survey regarding NP use of community resource binder.

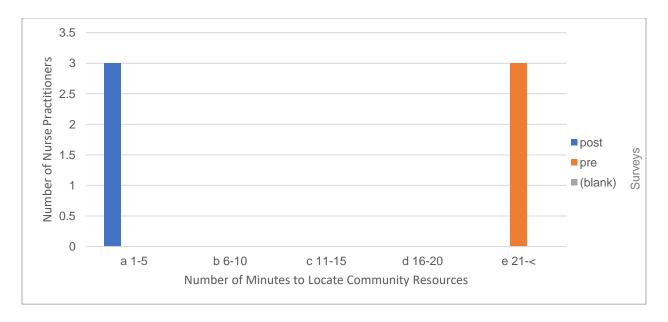


Figure 2. Pre- post- survey regarding NPs time to locate community resources.

Sixty-seven percent of the NPs agreed, and 33% disagreed pre-implementation of the community resource binder that when they needed community resources, they were able to find them, post-implementation 100% of the NPs strongly agreed that they were able to find the community resources they needed in the community resource binder. All of the NPs (100%) strongly disagreed that they would recommend their current workflow for locating community resources to other similar practices pre-implementation, on the other hand; 100% of the NPs strongly agree that they would recommend the community resource binder for locating community resources to other similar practices post-implementation (see Figure 1). Pre-implementation 100% of the NPs strongly agree that the use of the current workflow for locating community resources interfered with their work and post-implementation 100% of the NPs strongly disagree that the use of the community resource binder for locating community resources interfered with their work.

Regarding time management pre-implementation, 100% of the NPs strongly disagree that overall, the current workflow for locating community resources saved them time. In contrast,

them time. Pre-implementation when the NPs current workflow for locating community resources for their patients did not contain the resources, they needed they found resources by (100%) discussed with other NPs in the urgent care and (100%) Google searched community resources. Post-implementation, when the NPs used the community resource binder for locating community resources for their patients, 100% found what they needed. When the NPs were asked pre-implementation if they had identified an interprofessional team in the community that they can collaborate with for coordination of patient care, 100% answered no, and during post-implementation with the community resource binder 100% answered yes. Lastly, pre-implementation the NPs were asked based on their experience with the current workflow for locating community resources for their patients how confident were they in finding what was needed for their patient 100% responded somewhat confident. Post-implementation of the binder, the NPs answered that they were 100% very confident that they would locate what they needed using the community resource binder.

Overall qualitative data revealed satisfaction and success with the community resource binder. One NP indicated that "it would be nice if we could identify each medication the pharmacy provides a discount for" in the community resource binder. NP 51892 reported that

"I like that the highest-rated PCP and specialist were added to the provider list. It enabled me as an NP and the patients to know that they were getting a quality referral. I also appreciated the vast amount of community resources in the binder in just about any area of need that we could think of."

And another NP indicated that

"I have been able to quickly provide resources to patients in need of dental care assistance, medication assistance and who are in need of a PCP. It has been very helpful. It has significantly decreased the amount of time we usually take locating resources, and it is good to know that all of the resources have been verified. This has been a great addition to our practice. I was able to provide a PCP referral for a patient who had multiple chronic health conditions and had not been under the care of a PCP in months. He owed the previous PCP money and could not afford to pay him, so the PCP would not see him anymore."

The patient was also provided with a referral for a community social worker to determine if there was assistance available for the past due bills for the previous PCP (See Appendix G for NPs qualitative data).

# **Chapter V: Discussion**

# **Results Linked to Objectives**

I was able to educate the three NPs about the use of the community resource binder, and 100% of them were receptive to the teaching and compliant with the use of the binder. The NPs were informed about the available community resources in Lapeer County, Michigan; the NPs were not aware of many of the resources. All of the NPs expressed appreciation for the development of the binder and being informed of resources that may be available to their socioeconomically disadvantaged patients. Following the NPs determination of their patient needs, the community resource binder could be used, which enabled them to look into the table of contents and quickly find resources with contact information. The binder decreased the NPs time searching for community resources from 21 minutes or longer to 1 to 10 minutes per the post-survey results. As a result, this allowed the NP to spend less time searching Google or making several calls to determine if a resource was available, which enabled them to have more time with their patients and to complete other vital tasks. The NPs delegated to the MA to make a copy of the resources to provide to the patient as they checked out the clinic after healthcare services were rendered.

Developing the community resource binder allowed me to network and make connections with other healthcare professionals and community workers in Lapeer County. The NPs were connected with the contacts in the community; these individuals and groups work for various organizations, facilities, and government agencies. Pre-implementation of the binder 100% of the NPs indicated that they had not identified an interprofessional team for collaboration. Post-implementation of the binder several community contacts had been established for the NPs when there is a need to collaborate for various patient needs.

53

Also, I employed interprofessional collaboration to determine the levels of assistance the organizations, facilities, government agencies, and other stakeholders could provide for disadvantaged patients. Interprofessional collaboration was achieved by working with the identified contacts in the community to obtain the clinical resources that I was looking for based on the need's assessment. I worked with the contacts in the community with visits to their facilities or agencies and by calling them. I also used their websites, if applicable, to determine the services that they offered to residents in Lapeer County. The community resources I collected were related to dental care, housing, community clinics, food insecurity, women and children resources, mental health, seniors and the disabled assistance, durable medical equipment, emergency relief, and medication assistance — furthermore, a local provider specialist list was provided which included primary care providers and social workers. Based on the collaboration that took place with the various contacts in the community, a community resource binder was created to assist the patients in reaching a higher level of health and helping the NPs gain knowledge of resources and improve time management. The community resource binder has over 150 pages of community resources with appendices for various assistance applications and brochures. At this time, the binder has been utilized 39 times over eight weeks (see Appendix J for resource type tally). Post-implementation of the binder, the NPs answered that they were 100% very confident that they would locate what they need using the community resource binder and when the NPs used the binder for locating resources, 100% found what they needed. I collaborated with organizations and government agencies such as the Lapeer County Department of Health, Salvation Army, The Hamilton Clinic, and Lapeer County Mental Health Department, and many others to develop the binder. I collaborated by making multiple visits to their facilities, calls, and emails.

#### **Limitations or Deviations**

Several limitations were noted in this project, including the small sample size of three NPs, the urgent care clinic only had three NPs employed at the facility. Therefore, the sample size did not achieve statistically robust results. Another limitation was the top five insurance payors of the clinic were not open to collaboration. Therefore, I was not able to obtain resources from all of the top five insurers, and those that I was able to get resources from were limited. The NPs were educated that most insurers offer their beneficiaries resources such as case management, disease management, and social work. The NPs were encouraged to make their patients aware of this potential benefit. One deviation from the original plan was to not utilize the online survey, instead the NPs opted to use hardcopy surveys and tallied the number of times they used the resources. Additionally, the NPs preferred to use a handwritten tally sheet for each category of resources from the binder to keep track of its use; they did not want to use an Excel spreadsheet.

## **Implications & Impact on Practice**

The aim of this project was to provide community resources to socioeconomically disadvantaged patients who lived in Lapeer County and to provide those resources to NPs so that they may provide referrals to the patients without significantly impinging on their time all while improving patient outcomes. The goals of the project were realized; however, the sample size of the NPs was small. Future projects could be strengthened with a larger sample of NPs; this could allow higher statistically significant results. Future projects can take place in larger practices or several practices at a time in different counties. Future projects could target NPs and as well as physicians.

55

**Practice Change.** The workflow for gathering community resource information was effective; however, future projects could benefit from more than one person contacting government agencies, clinics, insurers, and other identified stakeholders for community resources. The more hands-on with gathering quality resources, the more can be located and added to the community resource binder. It may be beneficial for the end-users of the digital copy of the binder to have it uploaded on their computers and when the binder is updated with new information all of the digital versions are changed automatically, and the end-user who made the change is automatically time-stamped which would reduce the risk of human error. The end-user who updated the binder must print a copy for the hardcopy of the binder if a reminder pop-up appeared that would be helpful as well. These types of technical changes would require a computer professional or someone who is skilled at these tasks, but it would be beneficial to future projects. A monitoring plan that could be beneficial for future projects is for the office staff to follow-up with the patient via a telephone call to ensure that the patient was able to utilize the resource and determine if the patient had any difficulty with accessing their resources. This follow-up would allow the staff to be proactive about deciding alternatives with the community contacts and referring the patient to a different resource or connecting the patient to a social worker as needed. The turn-around-time of the follow-up call should be within a few days to a week from the day the referral was provided to decrease delays in the required services. Another benefit to monitoring could be if resources were not used in over a month; it could be beneficial for staff to call the identified community contact to ensure the resource is still active. Monitoring resources would decrease the chances of patients receiving a referral for a service that is no longer available or has changed.

**Future Implications.** Future projects could focus on attempting to recruit more assistance from insurance payors who may have additional resources to help patients such as transportation, case management, and social workers. Electronic surveys and spreadsheet data collection tools could be employed to ensure that the data collection processes are accurate and more accessible. Furthermore, future projects could also assess the patient's perspective related to whether the patient found the resource beneficial or not.

Impact on Nursing. The urgent care clinic has been positively impacted by the addition of the community resource binder to their practice, 100% of the NPs felt more confident in their ability to provide community resources to their patients, and 100% of the NPs indicated that now it takes less time for them to locate community resources they need. The organization is now connected with the community, which provides them with the ability to collaborate with other healthcare professionals and community workers. This connection ensures that the patient's social needs are met. Socioeconomic deficits have been shown to significantly impact health outcomes (Healthy People 2020, n.d. a; Savage et al., 2016). The NPs strongly agree (100%) post-implementation that the community resource binder improved the quality of patient care.

The MAs will sustain the community resource binder in the clinic. The MAs are providing the referral to the patient as ordered by the NP and delegated to the MA. Upon check-out, the MA asks the patient to contact the clinic should they have any difficulty with the resource. If the patient reports an issue with the resources, the MA will reach-out to community contacts to update resources; then, the MA will call the patient with the new information. Next, the MA will update the electronic binder that is uploaded on a flash drive. The MA will indicate when the resource was updated with their initial and the date, then print a copy of the resource and replace the new information and discard the old.

**Health Policy Change.** As a result of this project, NPs were given back some of their time, provided with knowledge of the resources available to their patients, as well as provided with identified contacts to establish an interprofessional approach to care. As a result of collaborating and networking with various healthcare providers, government agencies, and community workers, evidenced-based practice commenced. The utilization of interprofessional approach, which would include referrals to healthcare specialist providers, social workers, federal and state resources, allied healthcare professionals, and primary care physicians, has the potential to strengthen the use of evidence-based practices across disciplines (Savage et al., 2016). As a result of this project, NPs are empowered to affect patient outcomes because they have enabled the patients to gain access to provider specialist and community resources that they otherwise may not have had. Health policy changes that could take place after this project, are mandates for the linkage of provider and community programs. A mandate could be as simple as providing a list of known community resources from the local department of health via email or mail. I believe this little step is a step forward to keeping the provider connected with community programs and what is available to their socioeconomically disadvantaged patients.

## **Chapter VI: Conclusion**

# Value of Project

There is significant evidence in the literature that supported the implementation of this community resource binder project. The binder decreased NPs time spent locating community resources by more than 50%; it made the NPs more knowledgeable about the resources available in the community and connected the NPs with other interprofessional teams in Lapeer county. All of which evidence has shown according to the literature positively impacts patient's health outcomes. However, the sample size of three NPs did not achieve statistically robust results. Future projects could be strengthened with a larger sample of NPs for higher statistically significant results.

## **DNP Essentials**

Doctoral education in nursing prepares nurses for the highest level of leadership in practice and scientific inquiry (American Association of Colleges of Nursing, 2006). The Essentials of Doctoral Education for Advanced Nursing Practice articulates the competencies for all nurses practicing at this level (American Association of Colleges of Nursing, 2006). Activities that I participated in or observed during my practicum included the preparation for implementation and the implementation of my DNP project. To accomplish that, I researched dozens of literature and visited multiple clinical sites and government agencies in the community, including hospitals, the department of health, mental health facilities, and the Salvation Army. Within the practicum site, I had meetings with the staff to update them on my progress with the project. I made revisions to my project in collaboration with the clinical staff, and I educated them on the use of my project tool, which was a community resource binder.

Within the practicum site and out in the community where the project took place, I was also able to hone skills within the DNP Essentials (Moran, Burson & Conrad, 2017).

DNP Essential I: Scientific underpinnings for practice (American Association of Colleges of Nursing, 2006). This project has allowed me to participate in the DNP Essential I, it has allowed me to gain an improved understanding of how the health of human beings is affected by the interaction with their environments (American Association of Colleges of Nursing, 2006). Socioeconomically disadvantaged patients, which was the population that benefited from this project, were indeed affected by their environment. These patients were impacted by a lack of access to primary care, some had housing issues, including homelessness, and some could not afford other basic needs. The lack of these resources could impede patients from reaching their highest level of health. The community resource binder assisted in addressing the absence of these basic needs.

DNP Essential II: Organizational and systems leadership for quality improvement and systems thinking (American Association of Colleges of Nursing, 2006). With this Essential, I analyzed the cost-effectiveness of practice initiatives accounting for risk and improvement of health care outcomes (American Association of Colleges of Nursing, 2006). During this project, I had to be mindful of the cost associated with its implementation as well as attentive to risk and health outcomes; the clinical site did not establish a budget to incur cost on their end. However, the clinical site did lend its staff time and allowed me to be present in their clinic to support the implementation of my project.

**DNP Essential III: Clinical scholarship and analytical methods for evidence-based practice** (American Association of Colleges of Nursing, 2006). This project has allowed me to utilize Essential II. I was able to design, direct, and evaluate quality improvement methodologies

Association of Colleges of Nursing, 2006). I designed, directed, and evaluated my community resource binder and how it impacted the care that NPs provided to socioeconomically disadvantaged as it related to their ability to provide needed community resources. I also promoted timely, effective, and efficient patient-centered care as the community resource binder decreased the time that NPs used to locate community resource referrals and I also educated the NPs about community resources that they did not know existed. The community resource binder was readily available and provided a wide range of resources that could be specialized to the patient's identified needs.

DNP Essential IV: Information systems/technology and patient care technology for the improvement and transformation of health care (American Association of Colleges of Nursing, 2006). This project allowed me to demonstrate the conceptual ability and technical skills to develop and execute an evaluation plan involving data extraction from practice information systems and databases (American Association of Colleges of Nursing, 2006). Data was gathered from the NPs related to their pre-implementation workflow around locating and providing community resources and post-implementation. The data was gathered from anonymous surveys and a Word document. The data was then entered in Excel to provide a comparison to determine the impact the community resource binder had on the NPs ability to provide community resources.

DNP Essential V: Health care policy for advocacy in health care (American Association of Colleges of Nursing, 2006). Completing this project has allowed me to advocate for the nursing profession within the policy and healthcare communities (American Association of Colleges of Nursing, 2006). The inclusion of the community resource binder has not only

been beneficial for patients, but it has also been helpful for nurses. NPs time management is essential; they need to be able to care for the patients, document the care, and complete other tasks within the clinic. It can be challenging to locate verified community resources as well as manage the patient's other health care needs. Therefore, the inclusion of the community resource binder helped the NPs take back some of their time while maintaining or improving the holistic quality of care.

DNP Essential VI: Interprofessional collaboration for improving patient and population health outcomes (American Association of Colleges of Nursing, 2006). This essential is one of the Essentials that I have improved on as a result of this project. My project and practicum site has provided me with the opportunity to lead interprofessional teams in the analysis of complex practice and organizational issues as well as employ effective communication and collaborative skills in the development and implementation of practice models, standards of care, and/or other scholarly products (American Association of Colleges of Nursing, 2006). Developing and communicating objectives with my mentor and practicum site allowed me to meet the goals of the project and improve my competency ratings (Moran, Burson & Conrad, 2017).

DNP Essential VII: Clinical prevention and population health for improving nations health (American Association of Colleges of Nursing, 2006). Completing this project allowed me to evaluate care delivery models and/or strategies using concepts related to community, environmental, and socioeconomic dimensions of health (American Association of Colleges of Nursing, 2006). During this project, I was afforded the opportunity to dive deep into care delivery models and concepts for the socioeconomically disadvantaged to determine how we could potentially improve their quality of care. I evaluated care models by critically appraising

dozens of literature research and also researching the needs of the community in which my practicum site served. The strategy that was selected for this project to improve population health was to create a binder brimmed with verified community resources that included primary care physicians in the community and other specialists, social workers, housing assistance, uninsured assistance, medication assistance, and medical equipment assistance amongst many others.

**DNP Essential VIII: Advanced nursing practice.** This last essential was used during my project (American Association of Colleges of Nursing, 2006). This project allowed me to design, implement, and evaluate therapeutic interventions based on nursing science and other sciences (American Association of Colleges of Nursing, 2006). Nursing science is embedded in theory, persistent research, and evidence-based interventions to improve the quality of patient care and to improve the practice of nursing at all levels of nursing education. Other health care practice models have similar interests, with the patient being the center of all that we do. The goal of improving the quality of patient care is best implemented in collaboration with other health professionals and community workers integrating nursing science with other sciences, including physical therapy, social science, medical science, pharmaceutical science, and many others based on the need of the individual patient. During this project, I designed and implemented my community resource binder, which was an intervention to solve the problem of a lack of knowledge of community resources for patients and NPs and time management while locating needed resources. Specifically, nursing science and social science were evaluated for therapeutic interventions to design and implement the community resource binder.

#### **Plan for Dissemination**

The outcome of this project will be disseminated with the Convenient Urgent Care Clinic taking ownership of the community resource binder, and they will be presented with the final

results of the data collected. Other local urgent care facilities of providers that may want to utilize the binder may do so with an email of an electronic copy. This project could be beneficial beyond local boundaries; the processes and workflow used in this project can be used across community clinics and hospitals nationally. Students, health professionals, and healthcare project managers can employ my methods to gather community resources. I would present this project at a national conference by detailing the steps that I took to create this project. The NPs should start with identifying their PICOT question and complete a literature review; they should also determine the clinical site(s) that they would like to implement the project at and ensure that they are on-board with the change. Once that is confirmed, the NPs should identify the needs of the community of patients in which they serve by discussing this with other NPs, clinics, hospitals, and locating the community needs assessment. Once the needs are identified, then the NP should network with groups and individuals that work in government agencies, clinics, social workers, public health nurses, insurers, and other identified stakeholders in the community that may be able to provide community resources. Once those resources are gathered and verified active, the NP can add those to the community resource binder, create it in a Word doc, and save it digitally as well. The binder should consist of a table of contents, tabs to separate the subjects and, appendices for brochures and applications. The NP must teach the end-users how to use the binder and educate them on who the community contacts are and how to sustain the binder by ensuring that the contents are up to date. Following these steps could not only save NPs, physicians, and other end-users time, but most importantly, it could improve patient outcomes, which may otherwise not have access to necessities including food, housing, medical equipment, primary care, and medications. My created workflow for developing a community resource binder can be utilized at all levels of care across the nation. Lastly, this project will be

disseminated through a presentation to Bradley University's faculty, students, and community.

The final DNP Scholarly project paper will be submitted to the DNP Project Repository.

## **Attainment of Personal and Professional Goals**

As a result of this project, I have gained knowledge about myself and my capabilities, I have improved my clinical judgment and collaborative and communication skills. These skills have benefited me professionally and personally. This project has enabled me to be more confident and comfortable in my leadership skills. Furthermore, this project has improved my research skills and the ability to implement evidence-based practice. As a result of these series of DNP Seminar courses and the work to complete all of the phases of my project, I have significantly strengthened my knowledge and skills in all areas of the DNP Essentials which has prepared me to professionally apply that knowledge as a future DNP trained family nurse practitioner. From the initial DNP Seminar course, I was met with barriers that I had to overcome, including challenges finding a practicum site and changes in the direction of my project due to a lack of organizational support. Those barriers help me learn to overcome objectives and persevere despite obstacles. As a future doctoral prepared advanced practice nurse, I know that I will be met with barriers when attempting to achieve goals, whether that is with direct patient care or administrative functions. This project has prepared me to think about solutions critically, collaborate with others, and stay on course to realize the goals despite the challenges.

#### References

- Agency for Healthcare Research and Quality. (n.d. c). *Baseline clinician survey: Keystone health information exchange*. Retrieved April 30, 2019, from https://healthit.ahrq.gov/sites/default/files/docs/survey/baseline-clinician-survey-keystone-health-information-exchange-keyhie.pdf
- Agency for Healthcare Research and Quality. (n.d. a). Clinician survey on quality improvement, best practice guidelines, and information technology. Retrieved April 31, 2019, from https://healthit.ahrq.gov/sites/default/files/docs/survey/clinician-survey-quality-improvement.pdf
- Agency for Healthcare Research and Quality. (n.d. d). *Community chronic care network online*publication and education: User needs survey. Retrieved April 30, 2019, from

  https://healthit.ahrq.gov/sites/default/files/docs/survey/cccn-online-publication-education.pdf
- Agency for Healthcare Research and Quality. (n.d. b). *Electronic health record end user survey*.

  Retrieved April 30, 2019, from https://healthit.ahrq.gov/sites/default/files/docs/survey/electronic-health-record-end-user-survey.pdf
- American Association of Colleges of Nursing. (2006, October). *The essentials of doctoral education for advanced nursing practice*. Retrieved January 23, 2019, from http://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf
- Bainbridge, D., Brazil, K., Krueger, P., Ploeg, J., Taniguchi, A., & Darnay, J. (2015). Measuring horizontal integration among health care providers in the community: An examination of a collaborative process within a palliative care network. *Journal of Interprofessional Care*, 29(3), 245-252. https://doi.org/10.3109/13561820.2014.984019

- Community Health Access. (2014, January 15). Program uses "pathways" to confirm those atrisk connect to community-based health and social services, leading to improved outcomes. Retrieved January 23, 2019, from https://innovations.ahrq.gov/node/4433
- Convenient Urgent Care. (2012). Why choose convenient urgent care. Retrieved March 7, 2019, from http://www.convenientuc.com/why-choose-us.php
- Convenient Urgent Care. (2019, January). [Personal interview by the author].
- Cowling, T. E., Ramzan, F., Ladbrooke, T., Millington, H., Majeed, A., & Gnani, S. (2016).

  Referral outcomes of attendances at general practitioner led urgent care centers in

  London, England: Retrospective analysis of hospital administrative data. *Emergency*Medicine Journal, 33(3), 200-207. http://dx.doi.org/10.1136/emermed-2014-204603
- Craike, M., Wiesner, G., Hilland, T. A., & Bengoechea, E. G. (2018). Interventions to improve physical activity among socioeconomically disadvantaged groups: An umbrella review. 

  International Journal of Behavioral Nutrition & Physical Activity, 15(43), 1-11. 

  https://doi.org/10.1186/s12966-018-0676-2
- Cullen, L., Hanrahan, K., Farrington, M., DeBerg, J., Tucker, S., & Kleiber, C. (2018). Evidence-based practice in action: Comprehensive strategies, tools, and tips, from the University of Iowa hospitals and clinics. Retrieved from https://vufind.carli.illinois.edu/vf-bra/Record/bra\_448979
- Dahrouge, S., James, K., Gauthier, A., & Chiocchio, F. (2018). Engaging patients to improve equitable access to community resources. *CMAJ: Canadian Medical Association Journal*, 190(1), S46-S47. http://dx.doi.org/10.1503/cmaj.180408
- DiLauro, M. D. (2018). Examination of an integrative health care model for social work practice.

  \*Health & Social Work, 43(4), 261-268. http://dx.doi.org/10.1093/hsw/hly028

- Doran, K. L., Kunzler, N. M., Mijanovich, T., Lang, S. W., Rubin, A., Testa, P. A., & Shelley,
   D. (2016). Homelessness and other social determinants of health among emergency
   department patients. *Journal of Social Distress and the Homeless*, 25(2), 71-77.
   https://doi.org/10.1080/10530789.2016.1237699
- German, D., & Latkin, C. A. (2012). Social stability and health: Exploring multidimensional social disadvantage. *Journal of Urban Health*, 89(1), 19-35. http://dx.doi.org/10.1007/s11524-011-9625-y
- Han, M. A., Kwon, I., Reyes, C. E., Trejo, L., Simmons, J., & Sarkisian, C. (2015). Creating
  "wellness pathway" between health care providers and community-based organizations to
  improve the health of older adults. *Journal of Clinical Gerontology & Geriatrics*, (6).
  http://dx.doi.org/10.1016/j.jcgg.2015.06.004
- Harris, J. L., Roussel, L., Dearman, C., & Thomas, P. L. (2016). *Project planning and management: A guide for nurses and interprofessional teams* (2nd ed.). Burlington, MA: Jones & Bartlett Learning.
- Healthy People 2020. (n.d. a). Disparities. Retrieved February 17, 2019, from https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities
- Healthy People 2020. (n.d. b). *Prevention and population health education across the health professions*. Retrieved February 17, 2019, from https://www.healthypeople.gov/sites/default/files/HP2020HealthEdAcrossHealthProf\_9.0 9%20slides\_0.pdf
- Healthy People 2020. (n.d. c). Social determinants of health. Retrieved February 17, 2018, from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

- Institute of Medicine. (2013, July 9). Toward quality measures for population health and the leading health indicators. Retrieved March 2, 2019, from http://nationalacademies.org/hmd/~/media/Files/Report%20Files/2013/Quality-Measures/QualityMeasuresSlides.pdf
- Joo, J. Y., & Huber, D. L. (2014). Integrative review of nurse-led community-based case management effectiveness. *International Nursing Review*, 61(1), 14-24. http://dx.doi.org /10.1111/inr.12068
- Kelly, J., Garvey, D., Mary Anne, B., & Susan, L. (2017). Managing medical service delivery gaps in a socially disadvantaged rural community: A nurse practitioner led clinic.

  \*Australian Journal of Advanced Nursing, 34(4), 42-49. Retrieved from CINAHL Plus with Full Text database. (Accession No. 123551129)
- Krieger, J., & Lessler, D. (2014, July 16). Community coalition connects medical practices to community resources, leading to improved asthma and diabetes outcomes in at-risk populations. Retrieved January 23, 2019, from https://innovations.ahrq.gov/node/4486
- Kwan, B. M., Rockwood, A., Bandle, B., Fernald, D., Hamer, M. K., & Capp, R. (2018).
  Community health workers: Addressing client objectives among frequent emergency department users. *Journal of Public Health Management & Practice*, 24(2), 146-154.
  http://dx.doi.org/10.1097/PHH.0000000000000540
- Lapeer County Department of Health, & McLaren Hospital. (2016). 2016 community health needs assessment. Retrieved January, 2019, from https://www.mclaren.org/Uploads/Public/Documents/LapeerRegion/documents/CommunityNeedsAssessment2016.pdf

- Linnenkamp, R., & Drenkard, K. (2016). Coordinating care: Shifts in perspective. *Nursing Administration Quarterly*, 40(2), 122-129. https://doi.org/10.1097

  NAQ.0000000000000152
- Liyana, A. Z., Appannah, G., Sham, S. Y. Z., Nor, N. S. M., Ambak, R., Samad, A. A., . . . Aris, T. (2018). Effectiveness of a community-based intervention for weight loss on cardiometabolic risk factors among overweight and obese women in a low socioeconomic urban community. *BMC Women's Health*, *18*(1), 35-42. https://doi.org/10.1186/s12905-018-0593-1
- Lundeen, E. A., Siegel, K. R., Calhoun, H., Kim, S. A., Garcia, S. P., Hoeting, N. M., . . .
   Haddix, A. C. (2017). Clinical-community partnerships to identify patients with food insecurity and address food needs. *Preventing Chronic Disease*, 14(E113), 1-10.
   http://dx.doi.org/10.5888/pcd14.170343
- Madden, E. F. (2015). Cultural health capital on the margins: Cultural resources for navigating healthcare in communities with limited access. *Social Science & Medicine*, *133*, 145-152. https://doi.org/10.1016/j.socscimed.2015.04.006
- Mashlan, W. (2016). Advanced nurse practitioner-led referral for specialist care and rehabilitation. *Nursing Older People*, 28(1), 24-29. Retrieved from CINAHL Plus with Full Text database. (Accession No. 112739893)
- Mercer, S. W., O'Brien, R., Fitzpatrick, B., Higgins, M., Guthrie, B., Watt, G., & Wake, S. (2016). The development and optimization of a primary care-based whole system complex intervention (care plus) for patients with multi morbidity living in areas of high socioeconomic deprivation. *Chronic Illness*, *12*(3), 166-181. https://doi.org/10.1177/1742395316644304

- Moran, K., Burson, R., & Conrad, D. (2017). The doctor of nursing practice scholarly project: A framework for success (2nd ed.). Burlington, MA: Jones & Bartlett.
- Mossabir, R., Morris, R., Kennedy, A., Blickem, C., & Rogers, A. (2015). A scoping review to understand the effectiveness of linking schemes from healthcare providers to community resources to improve the health and well-being of people with long-term conditions.

  \*Health & Social Care in the Community, 23(5), 467-484. http://dx.doi.org/10.1111/hsc.12176
- Ockene, J. K., Edgerton, E. A., Teutsch, S. M., Marion, L. N., Miller, T., Genevro, J. L., . . . Briss, P. A. (2016, September). Integrating evidence-based clinical and community strategies to improve health. Retrieved January 23, 2019, from https://www.uspreventiveservicestaskforce.org/Page/Name/integrating-evidence-based-clinical-and-community-strategies-to-improve-health
- Prokop, J. (2016). Care coordination strategies in reforming health care: A concept analysis.

  \*Nursing Forum, 51(4), 268-274. https://doi.org/10.1111/nuf.12157
- Reflect and Learn. (n.d.). Learning together about organizational assessments. Retrieved February 27, 2019, from http://www.reflectlearn.org/discover/self-assessment-tools?keys=&field\_orgtype\_value\_many\_to\_one=Profit&field\_ioaclassification\_value\_many\_to\_one=Performance
- Robert, F., Carolina, G. S., Raquel;, L. R., Ramin, P., & Oralia, B. (2013). Advanced primary care in San Antonio: Linking practice and community strategies to improve health.

  \*Journal of the American Board of Family Medicine\*, 26(3). http://dx.doi.org/10.3122/jabfm.2013.03.120238

- Salmond, S. A., & Echevarria, M. (2017). Healthcare transformation and changing roles for nursing. *Orthopaedic Nursing*, *36*(1), 12-25. https://doi.org/10.1097/
- Savage, C. L., Kub, J. E., & Groves, S. L. (2016). *Public health science and nursing practice:*Caring for populations. Philadelphia: F.A. Davis Company.
- Sendecki, C. (2016). When older adults are super utilizers of emergency departments. *Canadian Journal of Emergency Nursing*, *39*(2), 28-33. Retrieved from CINAHL Plus with Full Text database. (Accession No. 120093171)
- Shaw, C. (2014). Reducing the burden of medication costs to improve medication adherence.

  Nurse Practitioner, 39(7), 43-47. http://doi.org/10.1097/01.NPR.0000450739.27061.e2
- Silverman, J., Krieger, J., Sayre, G., & Nelson, K. (2018). The value of community health workers in diabetes management in low-income populations: A qualitative study. *Journal of Community Health*, 43, 842-847. http://dx.doi.org/10.1007/s10900-018-0491-3
- Steve, I. (2016). Community-based interventions for older people with complex needs: Time to think again. *Age & Ageing*, 45, 2-3. http://dx.doi.org/10.1093/ageing/afv185
- Stoutenberg, M., Stanzilis, K., & Falcon, A. (2015). Translation of lifestyle modification programs focused on physical activity and dietary habits delivered in community settings.

  \*International Journal of Behavioral Medicine\*, 22. https://doi.org/10.1007/s12529-014-9438-y
- Stoutenberg, M., Stanzilis, K., & Falcon, A. (2015). Translation of lifestyle modification programs focused on physical activity and dietary habits delivered in community settings.

  \*International Journal of Behavioral Medicine\*, 22(3), 312-327. https://doi.org/10.1007/s12529-014-9438-y

- Terry, A. J. (2015). Ethics in clinical research. In *Clinical research for the doctor of nursing* practice (2nd ed., pp. 61-77). Burlington, MA: Jones & Bartlett Learning.
- Tung, E. L., & Peek, M. E. (2015). Linking community resource in diabetes care: A role for technology. *Curr Diab Rep*, *15*(7). https://doi.org/10.1007/s11892-015-0614-5.
- United States Census Bureau. (2018). Quick facts Lapeer County, Michigan. Retrieved February 20, 2019, from https://www.census.gov/quickfacts/fact/table/lapeercountymichigan/PST045218
- United States Department of Agriculture. (2018, September 5). Definitions of food security.

  Retrieved February 28, 2019, from https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/
- U.S. Department of Health & Human Services. (2015, November 6). Guidance regarding methods for de-identification of protected health information in accordance with the health insurance portability and accountability act (hipaa) privacy rule. Retrieved March 10, 2019, from https://www.hhs.gov/hipaa/for-professionals/privacy/special-topics/de-identification/index.html
- Villasenor, S., & Krouse, H. J. (2016). Can the use of urgent care clinics improve access to care without undermining continuity in primary care? *Journal of the American Association of Nurse Practitioners*, 28, 335-341. http://dx.doi.org/10.1002/2327-6924.12314
- World Health Organization. (2019). About social determinants of health. Retrieved February 20, 2019, from <a href="https://www.who.int/social\_determinants/sdh\_definition/en/">https://www.who.int/social\_determinants/sdh\_definition/en/</a>

# $Appendix\,A$

# **Pre-Survey**

1.	On average how long does it take for you to locate community resources for your patients using your current workflow (AHRQ, n.d. a)?
	1 to 5 minutes
	6 to 10 minutes
	11 to 15 minutes
	16 to 20 minutes
	21 minutes or longer
2.	What are the top 3 community resources you find yourself attempting to locate most often?
	Medication Assistance
	Durable Medical Equipment Assistance
	Uninsured Assistance
	Food Insecurity Assistance
	Stable Housing Assistance
	Locating a Primary Care Provider
	Dental Care Assistance
	Transportation Assistance
	Mental Health Assistance
	Social Work Assistance
	Home Repair Assistance
3.	Please rate your satisfaction with your current workflow usability for locating community resources for your patients (AHRQ, n.d. b).
	Very satisfied – Has everything I need
П	Somewhat satisfied - Provides most things I need Neither satisfied nor unsatisfied

	Somewhat unsatisfied – Don't use it much
	Very unsatisfied – Doesn't help me at all
4.	Based on your experience with the current workflow for locating community resources for your patients, please indicate whether you strongly disagree, disagree, agree, or strongly agree to the following statements (AHRQ, n.d. c; AHRQ, n.d. d).
a)	The current workflow is easy to use.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
b)	Improves the quality of patient care.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
c)	When I need community resources I am able to find them.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
d)	I would recommend the current workflow for locating community resources to other similar practices.
	Strongly disagree
	Disagree
	Agree
	Strongly agree

e)	The use of the current workflow for locating community resources interferes with my work.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
f)	Overall the current workflow for locating community resources saves me time.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
5.	When your current workflow for locating community resources for your patients do not contain the resources you need, how do you find what you need (AHRQ, n.d. d)? (Please check all that apply)
	Telephone other health care providers
	Telephone other professionals in the community
	Discuss with other nurse practitioners in your urgent care center
	Google search community resources
	I do not find what I need
	I find what I need with the current workflow
	Other, please specify:
	21 minutes or longer
6.	Have you identified an interprofessional team in the community that you can collaborate with for coordination of patient care?
6.	

7.	If yes to the previous question, what is the ease of use for collaborating with the identified interprofessional team in the community?
	Very difficult
	Somewhat difficult
	Somewhat easy
	Very easy
8.	Based on your experience with the current workflow for locating community resources for your patients, please indicate your confidence level in locating what i needed for your patient (AHRQ, n.d. c).
	Very doubtful
	Somewhat doubtful
	Somewhat confident
П	Very confident

# Appendix B

### **Post-Survey**

9.	On average how long does it take you to locate community resources for your patients using the community resource binder (AHRQ, n.d. a)?
	1 to 5 minutes
	6 to 10 minutes
	11 to 15 minutes
	16 to 20 minutes
	21 minutes or longer
10.	What are the top 3 community resources you find yourself attempting to locate most often?
	Medication Assistance
	Durable Medical Equipment Assistance
	Uninsured Assistance
	Food Insecurity Assistance
	Stable Housing Assistance
	Locating a Primary Care Provider
	Dental Care Assistance
	Transportation Assistance
	Mental Health Assistance
	Social Work Assistance
	Home Repair Assistance
11.	Please rate your satisfaction with the community resource binder usability for locating community resources for your patients (AHRQ, n.d. b).
	Very satisfied – Has everything I need
	Somewhat satisfied - Provides most things I need Neither satisfied nor unsatisfied

	Somewhat unsatisfied – Don't use it much
	Very unsatisfied – Doesn't help me at all
12.	Based on your experience with the community resource binder, please indicate whether you strongly disagree, disagree, agree, or strongly agree to the following statements (AHRQ, n.d. c; AHRQ, n.d. d).
g)	The community resource binder is easy to use.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
h)	The community resource binder improves the quality of patient care.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
i)	When I need community resources I am able to find them in the community resource binder.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
j)	I would recommend the community resource binder to other similar practices.
	Strongly disagree
	Disagree
	Agree
	Strongly agree

k)	The use of the community resource binder interferes with my work.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
1)	Overall the community resource binder saves me time.
	Strongly disagree
	Disagree
	Agree
	Strongly agree
13.	When the community resource binder did not contain the resources you needed how do you find what you need (AHRQ, n.d. d)? (Please check all that apply)
	Telephone other health care providers
	Telephone other professionals in the community
	Discuss with other nurse practitioners in your urgent care center
	Google search community resources
	I do not find what I need
	I found what I needed in the binder
	Other, please specify:
14.	When the community resource binder did not contain the resources you needed how long did it take for you find the resources (AHRQ, n.d. a)?
	1 to 5 minutes
	6 to 10 minutes
	11 to 15 minutes
	16 to 20 minutes
	21 minutes or longer
	I found what I needed in the binder

15.	Was an interprofessional team in the community identified in the community resource binder for you to call as needed to coordinate patient care?
	Yes
	No
16.	If yes to the previous question, what is the ease of use for collaborating with the identified interprofessional team in the community?
	Very difficult
	Somewhat difficult
	Somewhat easy
	Very easy
17.	Based on your experience with the community resource binder, please indicate your confidence level in locating what is needed for your patient (AHRQ, n.d. c).
	Very doubtful
	Somewhat doubtful
	Somewhat confident
	Very confident
18.	Based on your experience with the community resource binder, please indicate your ease of use in managing community resource referrals (AHRQ, n.d. b).
	Very difficult
	Somewhat difficult
	Somewhat easy
	Very easy <b>Do you have other suggestions for information to be added to the community resource binder?</b>

20. What are the three things you like most about the community resource binder?

21. What are the three things you would like to change about the community resource binder?
22. If you have any other comments about the community resource binder and it's use
in the practice, please provide below:

### Appendix C

### **Project Timeline**



# Appendix D

### Organizational Assessment Survey

Services	Results	Insights	About Us	Clients	Contact
Exam Finished					
Scoring:					
51-55 - Your organization	would benefit from a broa	d customized solution tha	t teaches effective problem	solving.	
<b>35-50 -</b> Your organization	would benefit from training	g in problem solving and o	decision making.		
<b>16-34 -</b> Your organization	would benefit from inform	al training in components	of problem solving.		

# Appendix E

Table 1

Project Budget Table

DNP Proje	ect Budget	
	Estimated	Actual
Surveys for 3 months		
Pre-Survey	\$35.00	\$0.00
Post-Survey	\$35.00	\$0.00
Survey Subscription	\$35.00	\$0.00
Subtotal	\$105.00	\$0.00
C		
<b>Community Resource Binder</b>	r Estimated	Actual
Paper (Quantity unknown)	\$15.00	\$8.99
Inserts	\$20.00	\$20.00
Binder	\$20.00	\$10.99
Digital Copy	\$0.00	\$9.99
Subtotal	\$55.00	\$49.97
	,	
<b>Hourly Salary for Project</b>		
	<b>Estimated</b>	Actual
<b>Nurse Practitioners</b>	\$150.00	\$150.00
Other Staff	\$45.00	\$45.00
Interdisciplinary team	\$0.00	\$0.00
Subtotal	\$195.00	\$195.00
<b>Computer Programs /Inform</b>	nation Technol	ogy
	<b>Estimated</b>	Actual
Microsoft Office	\$0.00	\$0.00
Databases	\$0.00	\$0.00
Statistical Program	\$0.00	\$0.00
Subtotal	\$0.00	\$0.00
Total	\$355.00	\$244.97

#### Appendix F

#### **Community Resources Binder Topics**

- 1) Dental
- 2) Housing
- 3) Low Income Community Clinics
- 4) Food Resources
- 5) Women & Children Resources
- 6) Seniors & Disabled Services
- 7) Mental Health Resources
- 8) Medicare / Medicaid & Other Health Care Coverage
- 9) Medication Assistance
- 10) PCP & Provider Specialist
- 11) Miscellaneous Clothes resources, Salvation Army resources etc.
- 12) Transportation
- 13) Insurance Specific Resources
- 14) Durable medical equipment
- 15) Emergency Relief

#### Appendix G

#### **Qualitative Post-Survey Data**

1) Do you have other suggestions for information to be added to the community resource binder?

It would be nice if we could identify each medication the pharmacy provides a discount for.

2) What are the three things you like most about the community resource binder?

I like the content, the organization of the binder, and the ease of use.

3) What are the three things you would like to change about the community resource binder?

I would not change anything about it.

4) If you have any other comments about the community resource binder and it's use in the practice, please provide below:

I was able to provide a family with a housing resources after their existing house had been in a fire. I am thankful that I was able to provide several emergency housing resources to them.

6)

1) Do you have other suggestions for information to be added to the community resource binder?

Adding the locations for the nearest Medicaid offices would be helpful and adding a contact person in those locations.

#### Appendix G

#### 2) What are the three things you like most about the community resource binder?

I like that the highest rated PCP and specialist were added to the provider list. It enables me as a NP and the patients to know that they are getting a quality referral. I also appreciated the vast amount of community resources in the binder in just about any area of need that we could think of.

# 3) What are the three things you would like to change about the community resource binder?

No, beside adding the Medicaid office locations.

# 4) If you have any other comments about the community resource binder and it's use in the practice, please provide below:

Some of the resources listed in the binder may be helpful for personal use for my elderly mother. As a caregiver I found the senior services to be very helpful to those in need.

# 1) Do you have other suggestions for information to be added to the community resource binder?

No, I have not identified any information that should be added to the binder. It is filled with just about anything we can think of including a resource for free diapers.

#### 2) What are the three things you like most about the community resource binder?

I like the unexpected resources including the car repair assistance, emergency relief for housing utilities and special benefits for grandparents who are raising their grandchildren. I also found the mental health section to be helpful. It is also nice to know that we have professionals that we can contact and collaborate with in the community as needed for our patients.

# 3) What are the three things you would like to change about the community resource binder?

I wanted clinical sites for STD testing and birth control added and Keyana was able to locate those resources for us. There are no other changes needed at this time. The format and content are great.

# 4) If you have any other comments about the community resource binder and it's use in the practice, please provide below:

I have been able to quickly provide resources to patients in need of dental care assistance, medication assistance and who are in need of a PCP. It has been very helpful. It has significantly decreased the amount of time we usually take locating resource and it is good to know that all resources have been verified. This has been a great addition to our practice. I was able to provide a PCP referral for a patient who had multiple chronic health conditions and had not been under the care of a PCP in months. He owed the previous PCP money and could not afford to pay him so the PCP would not see him anymore. The patient was also provided with a referral for a community social worker to determine if there was assistance available for the past due bills for the previous PCP.

# $Appendix\ J$

### **Community Resources Used Tall**

Dental
IIII
Housing
II
Low Income Community Clinics
I
Food Resources
II
Women & Children Resources
Seniors & Disabled Services
I
Mental Health Resources
II
Medicare / Medicaid & Other Health Care Coverage
IIIII
Medication Assistance
ШП
PCP & Provider Specialist
IIIIIII (PCP), IIII (SW)
Miscellaneous – Clothes resources, Salvation Army resources etc.
I
Transportation

II

Insurance Specific Resources

Durable medical equipment

I

**Emergency Relief**