Fall 12-18-2015

The Role of a Psychiatric Mental Health Nurse Practitioner as Part of a Mobile Health Unit for the Homeless Population

Joan Alviar Fraino
University of San Francisco, jfraino@mac.com

The Role of a Psychiatric Mental Health Nurse Practitioner as Part of a Mobile Health Unit for the Homeless Population

Joan Fraino

University of San Francisco

Abstract

An estimated 2.3 to 3.5 million people are homeless in the U.S., often living with chronic medical and mental illnesses. The underserved population, such as the homeless, continues to experience gaps in services, resulting in poor healthcare outcomes and readmission to the hospital setting. They often present in crisis through the emergency room, contributing to an already overburdened healthcare system. Increased spending and overutilization of healthcare services continues to rise in the United States (U.S.). Due in part to advancements in technology and expanded health insurance coverage, American healthcare continues be one of the most expensive commodities in the U.S. The financial state of hospitals are negatively impacted by the burden of patients returning to the hospital setting due to unresolved issues. The average per hospital stay associated with a patient readmission averages between $18,732 and $26,760 (Pfuntner, Wier, & Steiner, 2013). Cost containment measures are imperative to the survival of organizations and must be achieved without compromising quality patient care. Opportunity Village Mobile Health (OVMH) in conjunction with Marin County services is a pilot program that aims to provide comprehensive care to the homeless population transitioning from the inpatient setting to the outpatient setting in an effort to reduce rehospitalizations, improve quality of care, and decrease financial burden associated with readmission to the hospital setting. As a member of the OVMH team, a psychiatric mental health nurse practitioner (PMHNP) was assigned as part of the team to provide a comprehensive treatment approach to meet the mental health challenges of the homeless population. The role of the PMHNP was to identify mental and behavioral health service gaps associated with the transitional care process and collaborate with community partners to meet the individualized needs of patients in the program. Through this collaborative effort, continuity of health care services were made available to these patients,

and a reduction in readmission rates was expected. Participants in this program were expected to experience better health care outcomes and report feeling valued as members of their communities.

The Role of a Psychiatric Mental Health Nurse Practitioner as Part of a Mobile Health Unit for the Homeless Population

Background Knowledge

The prevalence of homelessness is estimated to range between 2.3 to 3.5 million in the United States (U.S.) where many of these individuals are living with chronic medical and mental illnesses (Buck, Brown, Mortensen, Riggs, & Franzini, 2012). These individuals utilize a significant amount of healthcare services. The U.S. spends the largest percentage of its gross domestic product on health care. American healthcare continues to be one of the most expensive commodities in the U.S., accounting for 17.9% of its gross domestic product in 2011 (Ferrier, Leleu, Moises, & Valdmanis, 2013). The financial states of hospitals are negatively impacted by the burden of patients returning to the hospital setting due to unresolved issues upon discharge. The average per hospital stay associated with a patient readmission averages between $18,732 and $26,760 (Pfuntner, Wier, & Steiner, 2013).

Factors associated with frequent readmissions include untreated or ongoing health conditions, poor compliance with discharge recommendations, misunderstanding of follow up care, and lack of services available to individuals upon discharge. These factors impact readmission rates and lead to longer length of stays (LOS). Hospital readmissions that occur after a previous discharge may be viewed as an adverse outcome of care (Linertova, Garcia-Perez, Vazquez-Diaz, Lorenzo-Riera, & Sarria-Santamera, 2011). Many organizations are being penalized or not receiving reimbursements from insurance companies considering patients as only partially treated from the initial point of hospital admission. Cost containment measures are imperative to the survival of organizations and must be achieved without compromising quality patient care. Outreach programs aimed as preventative strategies in the community can help

reduce frequency of hospital visits.

Identified Problem

The homeless population is identified as a vulnerable group of individuals utilizing extensive health care services contributing a significant burden in our healthcare system. A retrospective chart review by Doran et al. (2013) showed a 50.8% readmission rate in one urban hospital from May through August 2012 among the homeless. Patients that have unstable housing situations such as the homeless along with limited resources have an increased likelihood of rehospitalization. Doran et al. (2013) found that homeless individuals nearly tripled the 30-day hospital readmissions rates compared to those that were not homeless. The disparities of services available to these individuals contribute to feelings of helplessness, hopelessness, and dehumanization. They are often stigmatized and viewed as unproductive members of society relying on the system for care. The high-risk utilizers of the healthcare system, those who give rise to what is known as the revolving door phenomenon, frequently present in emergency rooms due to lack of support systems in their communities (Buck, Brown, Mortensen, Riggs, & Franzini, 2012).

Identified Resource Gaps

Along with limited housing resources, they are often living with chronic physical and mental health conditions and poor family support systems. They have a higher rate of dual diagnosis, living with coexisting mental illness and substance abuse, which further complicates their treatment needs (Buck et al., 2012). Poor discharge planning, and lack of coordinated inpatient and outpatient services, along with mental illness are all risk factors that increase the probability of readmission to the hospital. The lack of infrastructure and limited available programs increases their LOS, contributes to higher mortality rates, and imposes higher costs

to healthcare organizations compared to the general population (Buck et al., 2012).

Transitional care models that offer an integrative care process where a range of services can be incorporated as part of the patient's plan with an emphasis on timely and safe transitions from one setting to another can likely reduce the possibility of this vulnerable population from returning to the hospital setting thus alleviate the financial burdens associated with frequent readmissions (Noseworthy, Sevigny, Laizner, Houle, & La Riccia, 2014). The homeless find it difficult to navigate their way through the fragmented health care system, contributing to susceptibility to relapse and lack of trust in care providers. It is essential to explore the reasons why this vulnerable population is not being managed effectively on an outpatient basis.

The limited infrastructures and resources available to the homeless population is seen across the nation where even when resources are available, individuals are unaware of how to access them or they may be placed on a waiting list such as shelter placement. Case management services are limited to this population because funding is not available to meet the crucial needs of this population and this contributes to the stigmatization of these individuals as unproductive members of society.

Mental health issues that prevail among the homeless population exacerbate already existing conditions that may contribute to the lack of follow up care many of these individuals experience in the healthcare system. Addressing the psychiatric needs of these individuals can strengthen their ability to seek care from healthcare providers. It will also assist them in navigating available services they may not have otherwise sought because their mental health needs were not addressed. It is necessary to connect these individuals with available resources in their community in an effort to improve their quality of life and strengthen their ties as partners in their care.

Local Problem

The greater San Francisco Bay Area is viewed as the largest city where many homeless individuals reside, often without shelter. These individuals can be observed living under bridges, parks, sidewalks, and any other areas that are not true shelter placements. For those that are able to find shelter placement, they are often day-to-day placements where they must stand back in line each day competing with other individuals needing placement in hopes of finding an infrastructure that will house them for the night. Many that do not qualify for housing placements or are unable to find shelters for the night are left with limited resources to meet their most basic needs of housing. The lack of infrastructure not only exists for healthcare services but also for housing options as the homeless population continues to grow at an enormous rate.

With the continuation of this growing problem, local city agencies must explore alternative options and ways to address this problem and implement strategies for the homeless population to help improve the situation. The financial constraint that exists to meet the needs of these individuals remains constant and the stigma associated with meeting the challenges of this population often go unmet. Individuals willing to donate their time and effort to help this underserved population often do so on a voluntary basis.

Intended Improvement Project/Purpose of Change

A proposal of change to meet the needs of homeless individuals was identified by Marin County to implement a project in hopes of serving these individuals, particularly those recently discharged from the hospital setting in an effort to improve their outcomes and reduce cost to the city. In collaboration with several agencies, Marin County developed a plan to address the needs of the homeless population recently released from the hospital setting by providing continuity of healthcare services through a mobile healthcare team. Since these individuals were likely to

experience gaps in services, a collaborative effort from mobile health services was integrated as part of an effort to increase success of patients moving through the healthcare system effectively.

An integrative approach that addresses the medical and psychiatric challenges experienced by homeless individuals provides cost effective measures that improve quality of care and reduces overutilization of healthcare services. A specialist in psychiatric modalities can explore the needs of this challenging population and address their mental health needs. The care and management of psychiatric needs can be implemented by a nurse practitioner specialized in this area. A mobilized healthcare team that includes the delivery of psychiatric services is an innovative approach to healthcare delivery and is necessary to fully complement an integrative approach to patients.

Maslow's Hierarchy of Needs

Understanding Maslow's hierarchy of needs provided a foundation for meeting the particular needs of this population. Maslow's pyramid is a five-stage model that includes biological and physiological needs, safety needs, love and belongingness needs, esteem needs, and self-actualization needs (McLeod, 2007). The needs at each stage were meant to build upon one another to meet the highest level of needs, self-actualization. The most basic physiological needs, such as food and shelter must be met before an individual can move up the pyramid to have the higher needs of the pyramid met. When individuals such as the homeless are unable to have their most basic needs met, they are prevented from moving to the next level of need such as safety and belongingness (McLeod, 2007). Improvements in transitional care from inpatient to outpatient settings are vital components to successful outcomes for this population. A program that ensures the most basic needs for this population are met, helps to improve their growth needs, according to Maslow's theory, and moves them up the pyramid hierarchy (see

Appendix A). Along with meeting the basic needs of these individuals, the psychiatric needs of can be addressed to help them move up the pyramid.

The development of outreach services and community mental health services has demonstrated effectiveness in meeting the specialized needs of this population, thus reducing hospital readmission rates (Hwang, Weaver, Aubry, & Hoch, 2011). Programs that assist in meeting the most basic needs help individuals such as the homeless attain higher needs on the pyramid, paving the way to patients experiencing a sense of belonging in their communities.

Organizations and providers must take initiatives to improve patient outcomes by identifying and reinforcing their place within their communities and assisting patients in navigating the health care system. Authorization for this project was granted through the University of San Francisco (USF). Provisions of services through an outreach program were intended to be implemented by the designated USF healthcare mobile team, also known as Opportunity Village Mobile Health (OVMH) team as part of an outreach program for the homeless to support transitional care needs of the homeless from the inpatient to the outpatient setting, improving patient care outcomes. The intent of the OVMH team was to focus its efforts on identifying and implementing transitional care and services for the homeless population.

The implementation of such a program was designed to address the gaps that exist among patients who are hospitalized and then discharged to the community. This program has a focus partnering with individuals that are homeless and improving the transitional healthcare needs, improving healthcare delivery, and strengthening partnerships in their community. The creativity and necessity of developing a mobile health team that not only addresses the medical needs but also the mental health needs of homeless individuals provides a comprehensive approach to healthcare delivery. The specialized care and services of a team member

knowledgeable in psychiatric modalities strengthens the mobile health resources provided through this pilot program.

Partners of the Pilot Program

OVMH captured the essence of where health care needs to go when working with the homeless population. OVMH is a USF pilot program that was put in place to provide mobile health services to the homeless population of Marin County as homeless individuals transition from the hospital to the community. This nurse led team included nurse practitioner faculty, student family nurse practitioners, student psychiatric mental health nurse practitioners, and student clinical nurse leaders (see Appendix B). OVMH partnered with Marin County agencies such as Opportunity Village (OV), Project Independence, county clinics, county hospitals, and Sutter Health to address gaps in services among the homeless population (see Appendix C). In partnership with Marin County agencies, OVMH's intent was to assist patients in exploring and navigating through available resources and bridge the gap of services to these patients as they transitioned back to the community setting.

Referral Process for the OVMH Team

The OVMH team received referrals from OV and worked closely with this team to provide a comprehensive approach of care to the homeless population. High-risk patients with a potential for relapse were identified through a trigger system upon admission to the hospital setting. OV would then screen these patients and assess whether or not they met eligibility criteria to participate in the program. Once a patient was approved and accepted, OV then contacted the OVMH team for mobile health services for the patient upon discharge. Ideally the OVMH team would meet with patients while they were still hospitalized. If the team were unable to meet with a patient during hospitalization, the meeting would occur shortly after the

patient was discharged from the hospital. During the initial meeting, a needs assessment is conducted and discharge recommendations for outpatient care are reviewed with the patient for mutual treatment development.

It was then the OVMH team's responsibility to assist the patient in navigating through the health care system where gaps were identified. During this transitional phase, it was important that the OVMH team utilized a patient-centered approach when discussing the care and goals of the patient. Patient-centered care employs an approach where a partnership occurs between the patient and health care provider that encompasses the patient's values, preferences, and needs (Boykins, 2014). This was an important aspect of their transitional care, as the patient must agree with the recommendations discussed so his or her preferences could be incorporated into the plan of care.

As the structure of this program was being piloted through the USF team, several discussions took place as to how best deliver services to these individuals as they transitioned from the hospital setting. There was discussion about having the mobile health team provide services through a mobile health van as seen with other mobile health units in community settings. There was exploration about using private transportation for the USF team where the patient discharged from the hospital could be met by the team together as one unit at their provided placement from the hospital. This approach was considered the most feasible at this time for this pilot program as funding for a mobile health van was still in its infancy stages of development and implementation.

Goal of Pilot Program

The goal of implementing a pilot mobile health team was to provide continuity and extension of services upon discharge from the hospital setting to improve the patient's chances

of living independently and successfully in his or her community. Through this comprehensive program, individuals would be navigated successfully through the transitional process from the inpatient to the outpatient setting, improving their healthcare outcomes. This results in savings to the hospital and improves health outcomes for the patient as he or she receives supportive measures through community programs. Through a collaborative effort that supported the transitional needs of patients from the hospital setting to their community setting, a reduction in hospital readmission rates was expected, ultimately reducing financial burden on hospitals and the community as a whole.

The Patient Protection and Affordable Care Act

The enactment of the Patient Protection and Affordable Care Act (PPACA) in 2010 presented an opportunity to improve upon the current health care delivery that exists today (Jordow, 2014). As healthcare reform acknowledges the necessity of needed programs to meet the challenges of individuals with mental illness, it paves the way to improve psychiatric care implemented in current health care systems. The PPACA is a platform for evidence-based practice to be instituted as part of the patient care delivery model that moves away from a fragmented system to a patient-centered care system. Individuals such as the homeless can benefit from such a model where they become active partners in their care (Jordow, 2014).

The Role of the Psychiatric Mental Health Nurse Practitioner in the Community

A psychiatric mental health nurse practitioner (PMHNP) is in a key position to help patients navigate effectively through the health care system from hospitalization to the community setting. Moczygemba, Osborn, and Lapane (2014) found that the critical component to positive and ongoing mental health care is longitudinal treatment in the outpatient setting. Additionally, patients are more likely to comply with treatment on an outpatient basis if services

are established during transition. The PMHNP is an advanced practice nurse skilled in delivering psychotherapeutic modalities that can be instituted during the period of transitional care. The PMHNP has advanced knowledge and clinical expertise to identify signs and symptoms of potential relapse and intervene with specialized crisis-management techniques in an effort to reduce rehospitalization (Jordow, 2014). Responsibilities of the PMHNP include mental health and educational support to increase adherence to treatment while simultaneously connecting patients to services in the community.

The PMHNP is an advanced nursing role that encompasses the importance of the therapeutic nurse-patient relationship. The PMHNP takes a holistic approach to health care, emphasizing the patient-centered model where emphasis is placed on mutual treatment goals and supportive measures that assist the patient to live as independently as possible in the community. As a member of the OVMH team, the PMHNP can strengthen patient rapport and establish trust by increasing the frequency of visits and spending the time necessary to instill health-promoting behaviors.

PMHNPs provide an alternative approach to meeting the needs of this population in the community settings that is cost efficient and just as effective as other providers in the clinical setting (Schaumberg et al., 2013). With the new era of health care emphasizing cost effective measures, integrating the PMHNP in community settings reduces cost. Patients discharged from the hospital setting with limited resources and minimal access to health care services can be strategically placed in the care of a PMHNP. Using the blended model for integrative health care, the PMHNP emphasizes collaboration of care with the patient, community partners, and point-of-care providers to improve outcomes of care within this unique population (Jordow, 2014).

Integrative care through collaborative partnerships brings a comprehensive treatment approach to patient care. This collaborative approach examines the individual needs of patients and incorporates specialized care and lateralizing services that improve their outcomes. Strong emphasis is placed on continuity of care through community services and support programs once the patient graduates from the transitional program provided by the OVMH team. Bridging the gap of services through community partnerships and therapeutic alliances can help reduce the patient's chances of relapsing into psychiatric crisis and utilizing emergency services.

Aim Statement

The aim of this project is to reduce readmission among the homeless population by improving their quality of care from inpatient to outpatient care by improving their access and quality of services provided by a PMHNP.

Objectives

The PMHNP was responsible for assessing the psychiatric needs of the patient while in the hospital or shortly after discharge, utilizing the identified discharge recommendations from the hospital treatment team. The PMHNP had responsibilities in assessing and implementing strategies that ensure the patient's success in the community using a patient-centered and holistic approach to healthcare delivery. Specific objectives identified as part of the PMHNP's responsibilities included

- assessment of mental health status that would be conducted shortly after patient was discharged from the hospital setting and again prior to discharge from the OVMH team;
- review of records that would preferably be obtained while patient was still in the hospital;
- medication management that would be ongoing throughout the OVMH team service;
- county clinic follow-up with healthcare providers that would be initiated during the

transitional period and in place prior to discharging patients from the mobile healthcare team;

- exploration of community support services that would support the ongoing needs of the patient;
- integrative care approaches through community partners that reinforced stabilization for the patient; and
- housing referrals for the patient's long-term success. The PMHNP's responsibility included a comprehensive approach to address the full gamut of mental health needs for these individuals upon discharge from the hospital setting (see Appendix D).

These objectives would be discussed with the patient and included as part of the transitional plan of care to increase adherence to the program and its success. An integrative care model with other partners such as OV, Project Independence, Marin County Clinics, and Sutter health was to be incorporated as part of the patient's transitional care to the community. OV would work collaboratively to provide housing referrals and explore trailer housing as an option for these patients as they transitioned back to their community settings. The transitional housing program provided by OV would be reinforced as a strategy limited to about 21 days of assistance and preparation for independent living with continuity of services in place upon discharge from the program.

The success of the OVMH team relied heavily on referrals provided by the OV team. The OVMH was frequently in contact with the OV team to ensure services would be implemented as part of the patient's transitional care process from inpatient to the outpatient setting. As the bulk of the OVMH team consisted of NP students, it was imperative that faculty be present during all visits to identified patients for safety purposes and continuity of the pilot program.

Review of the Literature

A review of the literature emphasizes the importance and necessity of developing and implementing programs that extend beyond the hospital setting to the community setting. This allows homeless individuals access to continuity of care while transitioning to a more stable living situation with stabilizing services in place. This again provides supportive evidence about the importance of meeting the psychiatric needs along with the medical needs of each patient. Transitional services that encompass the comprehensive needs of this vulnerable population can help bring needed services out in the community where it is warranted. The literature identifies several programs that help support individuals transitioning from institutional settings, such as hospitals, correctional settings, and outpatient settings.

The Critical Appraisal Skills Programme (CASP) tool was utilized to review the literature, strength, and relevance to this project (see Appendix E). A review of literature was conducted to examine whether or not this pilot program would be beneficial in meeting the transitional needs of the homeless population. This extensive review of the literature supported the development of a pilot program that focused on providing integrated mobile health service delivery to underserved individuals, such as those that are homeless.

The Boston Health Care for the Homeless Program

The framework of the Boston Health Care for the Homeless Program (BHCHP) can serve as an innovative model for today's healthcare delivery. They approach healthcare from a social justice perspective and ensure quality health care will be available to the underserved, especially the homeless population. The guiding principles of the BHCHP program focuses on the necessity of bridging the gap in services between hospitals and health care centers within the community of shelters and homeless service providers (O'Connell et al., 2010). The importance

of these partnerships is emphasized as part of a community effort where mobilized programs fill the gaps in services and exploring long-term solutions for this disenfranchised group. This retrospective look at their project over the span of 25 years proved favorable to meeting the needs of the homeless. This project grew to include medical, behavioral, oral health, and preventive services that continue to serve as the model for the Boston Public Health Care Framework.

Respite and Home Health Models

Respite programs and home health models have drawn attention away from focusing on infrastructures and have directed energy to the community settings where integrated primary and behavioral care can be provided to the homeless population (Buck et al., 2012). Home health models focus on bringing services to individuals in their community settings using a collaborative care model approach. Doran et al. (2013) found that patients discharged to a motel or rehabilitative placement had lower 30-day readmission rates compared to those discharged to the streets. Ensuring patients have a place to go upon discharge gives them an opportunity to connect with services that help stabilize them in the community. Research on these models demonstrated that those that were homeless were more likely to experience readmission to the hospital versus those that were domiciled. Having support services in place while out in the community along with stable housing reduced risk of patients returning to the hospital setting.

Health Care for the Homeless Model

Health Care for the Homeless Model (HCH) was created in response to meet the specialized needs of this population. This model emphasized a multidisciplinary approach in providing service care needs to the homeless population. Efforts focused on coordination of care with community health providers and social service agencies to provide the complex and unique

services required of this divers population (Zlotnick, Zerger, & Wolfe, 2013). The HCH model provides comprehensive services that utilize case management approaches and include housing, outreach needs, collaboration, and addressing of primary healthcare needs. This approach is similar to other identified models that have shown success in addressing an encompassing approach to the homeless population.

The Patient-Centered Medical Model

Formulating a plan that not only takes into account patients' medical conditions but also their socioeconomic, social, and psychological factors is imperative to their successful integration into the community (Rooney & Arbaje, 2012-2013). This comprehensive approach to healthcare delivery takes into account the entire spectrum of healthcare needs. Jordow (2014) explored the patient-centered medical model as a foundation to increase access to healthcare. This model explores innovative and cost-effective strategies that enable health care teams to provide care to the underserved, focusing on delivering care to individuals out in the community rather than focusing on limited infrastructures. Evidence provided points to the necessity of changing the current medical delivery system and deliver innovative solutions to improve quality of care. This will result in a reduction of cost and burden to the healthcare system.

Critical Time Intervention Model

Another novel approach that has been explored is the implementation of critical time intervention (CTI). In a randomized control trial among the homeless population after discharge from the inpatient psychiatric hospital, the benefits of CTI versus usual care were well recognized in reducing rehospitalization among the homeless. This trial focused on strengthening individuals' long-term ties to the community, promoting self-sufficiency, and establishing invaluable support networks in their community (Herman et al., 2011). This study

aimed at prevention of recurrent homelessness and relapse through supportive treatment programs delivered in a time sensitive manner.

While this program has shown benefits in paving the way to connect patients with community services, there is an emphasis placed on CTI workers helping patients navigate through community programs. Chen (2013) explained the importance of the role of CTI workers in connecting individuals to community programs utilizing existing services aimed at preventing re-hospitalizations. There is emphasis placed on the significance of these time-limited strategies being implemented shortly after discharge. During this window of opportunity, CTI workers can assist patients in staying motivated for treatment because opportunities for services are brought forward during the transitional period from inpatient hospitalization. The overall consensus is that CTI interventions resulted in less risk for readmission by homeless individuals that engaged in this comprehensive approach.

The Psychiatric Bridge Program Model

An evidence-based project implemented by a psychiatric advanced practice nurse showed promise using innovative approaches in managing patients with mental health conditions in the community setting while these patients waited for their clinic appointments to see health care provider. This psychiatric bridging program involved an advanced practice psychiatric nurse who providing short-term psycho-educational counseling and prescription medication support to depressed patients as a cost-effective measure while the patients waited to be seen for initial psychiatric evaluations (Schaumberg, Narayan, & Wright, 2013). This randomized control trial supported a psychiatric advanced practice nurse providing community interventions to support the needs of the homeless while awaiting their initial psychiatric evaluation. The interventions provided by the advance nurse also reduced the necessity of time needed from their initial

evaluation from 60 minutes to 30 minutes. This approach supports interventions by health care providers reaching out to community settings where the underserved are often overlooked. Implementing strategies that bring about creativity and new initiatives supporting homeless individuals in their transitions from hospitalization to community-based programs reduces the chances of these patients going into crisis that make hospitalization inevitable.

Summary of the Review of Literature

Through this extensive literature review, various strategies to address the medical and psychiatric challenges of homeless individuals were explored. A common theme was treating these individuals using a case management approach where frequent contact was initiated and maintained helped to improve their outcomes. Using a case management approach, homeless individuals were assisted in navigating the available resources in their community. Supporting evidence also presented an opportunity to bring mobile services to homeless individuals in community settings rather than relying on these individuals finding limited infrastructures available to meet their needs. This allowed them to obtain services and support out in their community rather than relying on the possibility that they may have either been unwilling to or unable to obtain services available in infrastructure set up for the underserved.

The overall literature supports the importance of provisions of services available to the homeless population shortly after discharge from the hospital. Implementing a patient-centered approach to develop mutual goals and ensuring connections are made with healthcare providers in a timely manner reduces the rate of rehospitalization. The review of literature supports the implementation of a mobile health unit, particularly one that emphasizes an integrative approach to healthcare delivery such as the OVMH pilot program. Providing mental health services as a integrative component to mobile health services whether it be the patient agreeing to see a

provider in the clinic or out in the community helps to ensure the psychiatric needs of homeless individuals are addressed in an effort to improve their care and outcomes. The reduction of frequent hospital overutilization associated with frequent readmissions results in savings to the hospital and reduces burden associated with overall healthcare costs.

Conceptual/Theoretical Framework

Hildegard Peplau's interpersonal relationship theory will be utilized as the framework to guide this project. The interpersonal relationship theory emphasizes four sequential phases: orientation, identification, exploitation, and resolution (Merritt & Procter, 2010). Throughout this process, the PMHNP takes the sequential roles of stranger, teacher, resource person, counselor, advocate, and leader. The interpersonal journey that exists between the patient and the PMHNP is meant to guide the patient toward goal attainment. The phases of this journey, just as the many roles played by the PMHNP, may overlap during this process. The nurse will invite the patient to take an active role, and a transparent approach to health care will be practiced throughout this process.

Orientation Phase

In the orientation phase, the nurse gathers information about the patient and helps to define the problem and necessity of services. A review of the discharge recommendations from the hospital will be discussed, available resources will be explored, and expected outcomes from this process will be shared with the patient. Again, it is important to include a patient-centered approach where gathering information to implement into the plan of care. The nurse must assess and take into account the patient's preferences, values, and biases when gathering information. During the initial part of this phase, the nurse takes the initial role of a stranger, which means trust must be established to move successfully to the next phase. Incorporating preferences and

values during the orientation phase is an opportunity for the nurse to enter into a therapeutic alliance with the patient in which a trusting relationship can be established and maintained. The PMHNP becomes part of an interpersonal process to help the patient through his or her hardships (see Appendix F).

Identification Phase

The identification phase involves the selection of the professional assistance needed, according to the patient's needs. The PMHNP takes the role of a teacher and resource nurse for the patient. The nurse incorporates the patient-centered plan and continues to strengthen the relationship with the patient during this phase. The nurse assists the patient in taking measures to actively take part in the plan of care. During this phase trust continues to grow where the patient feels a sense of partnership and understanding of the nurse's role in helping the patient navigate through needed services.

Exploitation Phase

During the exploitation phase, the patient utilizes the services that have been incorporated into the plan of care. It is the role of the PMHNP to act as a surrogate and advocate for the patient, ensuring the necessary resources are connected with the patient. The PMHNP also takes the role of a leader by helping the patient take initiative and personal responsibility for his or her care in this process. This approach helps the patient navigate identified gaps and established resources. These resources include establishing care with other health care providers, establishing a pharmacy where medications will be filled, participating in community services that will support the patient toward independent living, and any other community services incorporated into the patient's plan of care. The PMHNP takes the role of a resource nurse and helps the patient incorporate the resources identified as necessary components to his or her

success. It is therefore imperative that a mutual trusting and respectful relationship exists between the PMHNP and patient. This will ensure the patient accepts the resources and referrals provided by the PMHNP, thus optimizing the sense of acceptance and belonging in the community.

Resolution Phase

The resolution phase is the final phase that terminates the professional relationship between the patient and the PMHNP. It is anticipated to occur as the patient gets close to graduation from the program. During this phase, all gaps in services should have been connected with the patient so that he or she has the tools for success and the ability to manage his or her care independently. The nurse acts as a counselor during this phase, ensuring the patient will remain successful in the community as a knowledgeable and confident navigator of the health care system.

Ethical Issues

The OVMH pilot program is an evidence-based project that was created from a quality improvement perspective to improve transitional services and connections for the homeless population. This author completed online training modules through USF as a requirement to ensure this project was not being conducted as research study. The Doctorate of Nursing Chair and its committee members approved this project and it was deemed a change of practice project. Therefore, the USF Institution Review Board for the Protection of Human Subjects (IRBPHS) approval was not required for this project.

Silva, Goering, Jacobson, and Streiner, (2011) conducted a study to investigate what services and interventions would achieve stable housing for homeless individuals as well as those with mental illness. Some ethical issues that surrounded this study included individuals

who initially participated in the program and then decided to drop out for various reasons. The ethical dilemma was whether or not services to these individuals should be withdrawn because they dropped out of the program. Some participants also chose to receive some of the services offered but not all services offered despite the fact that the project was based on the implementation of all services being rendered to the participants. The researchers found it necessary to continue services to these individuals despite their withdrawal from the project. This dilemma for the research provides one aspect of an ethical dilemma that can occur while providing services to the homeless population.

Some ethical issues that surrounded this project were ensuring this vulnerable population was treated with dignity and respect. Since the homeless population is often stigmatized, it was imperative that the OVMH team conveyed sensitivity to issues that surround these individuals. Individuals that agreed to participate in the OVMH program while in the hospital may have found the housing services where shelter placement was available as the only service they wanted. This would present an ethical dilemma to the entire Marin County project of whether or not services should be withdrawn from these individuals because they did not participate in the full gamut of services provided by this project.

This pilot program collaborated with Marin County partners to reduce the financial burden to the hospital and county by providing intervention strategies that would minimize the risk of rehospitalization through continuity of transitional services while providing the necessary care and services to this population. There is also the ethical dilemma of individuals that met admission criteria to participate in the project but chose to refuse housing services offered but wanted other specified services of the program. These warranted a thorough exploration to ensure that all providers in this project met the potential ethical dilemmas that could arise and

tailor the treatment for these individuals while maintaining their dignity and respect.

All services provided were implemented using the principles of social justice and beneficence as part of the comprehensive approach in transitioning the needs of the individuals from hospitalization to the community. The four principles of social justice are equity, access, participation, and harmony (Winter, 2015). This meant individuals were given fair treatment and equal access to available benefits, resources, and treatment. This principle is a necessary component that encompasses the particular needs of this stigmatized population. The principle of beneficence is applied for the promotion of good as enacted by employing strategies that prevent harm to individuals (Munyaradzi, 2012). Through the mobilized efforts of the USF healthcare team, the ethical principle of beneficence is met through the altruistic services provided to the homeless population.

Employing these ethical principles ensured individuals were given fair access to distribution of resources and all healthcare services available while members of the team provided compassionate care and advocated for the needs of these individuals. The selection of the members of the OVMH team was based on the foundation that care to this underserved population required compassion and understanding the unique and specialized needs of this population. This facilitated the trust and rapport necessary for many of these individuals to receive help from the mobile team allowing them to navigate through the healthcare system effectively and efficiently.

Setting

Through the integrative process and comprehensive care teams working together to navigate homeless individuals recently discharged from the hospital, it was imperative they first had a solid foundation of how and where to transition from the hospital. By their acceptance and

willingness to be part of the OV healthcare team, all invested members of the healthcare team assumed their specific role and responsibility through the navigational process. Accepted individuals would be given stable nighttime housing for a period of about 21 days where the OVMH team could intervene and ensure that an integrative approach was provided in meeting their needs. Mental health needs would be assessed and managed through the mobile team by the PMHNP. Members of the mobile team would have access to other community partners to ensure all aspects of the individual needs would be met. The housing options available immediately upon discharge from the hospital would allow these individuals an opportunity to feel safe and secure while the team helped them to navigate through all available services dependent on their specific needs.

Collaboration among all members involved in this project was a large part of the success of this program. Ensuring that individuals were assessed for their needs were met using an integrative process of healthcare provider involvement. Those agencies involved in this project had responsibilities to address all the specific needs of this population such as housing, transportation, medical, and psychiatric needs. The OVMH team served as the transitional liaison between these agencies to ensure the gaps in services was bridged from the inpatient to the outpatient setting. The OVMH interfaced frequently with Marin County partners, particularly the OV team and Project Independence to ensure a streamline plan of care was created and implemented by all members of the larger program in Marin County.

Planning the Intervention

The intervention was to provide mobile health services by designated healthcare members of the OVMH team largely composed of nurse practitioner students and faculty. The plan involved getting all members of Marin County services involved in this project to meet with

the OVMH team and work jointly in an effort to reduce rehospitalization of homeless individuals identified as high risk utilizers of the healthcare system. The OVMH health team also met personally with members of the county health team involved in this project as well as the lead member of the OV team where referrals were intended to come from. Frequent interfacing with the identified member of the OV team was done periodically to update members of the OVMH team of potential patients as well as any necessary project changes.

Refinements to the project were made as discussions continued between all parties such as how to incorporate and implement the services from the OVMH team to meet the needs of the homeless population. There was discussion about the necessity of having a licensed faculty nurse practitioner present during any interfacing with patients identified through the program as potential candidates. There was also discussion about possibly exploring receiving direct referrals from Marin County Clinic along with referrals from OV team to expand services from the OVMH team. Another potential option discussed was having new graduate NPs run the OVMH team rather than having this project directed by a USF faculty nurse practitioner.

As part of the OVMH team, the PMHNP was responsible in reporting to the USF nurse practitioner faculty assigned to the mobile health program. Responsibilities included meeting with the patient, providing mental health support, and making the connections with county services for continuity of care as the patient prepares for graduation from the OVMH program. The PMHNP was responsible in monitoring compliance with medications and potential side effects, and with cooperation from the patient, assume responsibilities such as participation in wellness strategies that maintained optimal mental health in the community.

Since this project was considered a pilot program by USF, several challenges needed to be addressed about how to best serve the needs of the homeless population of Marin County.

Since referrals were to come from the OV team, the OVMH team often interfaced with the lead member of the team through emails, Skype, and through the telephone. This was necessary to ensure all members on the project were involved with any changes in direction to the project or any new ideas presented to improve upon the pilot program. The OVMH team also met with one another to collaborate on the integrative services to be provided for eligible candidates that would be presented for services by the team. These options continue to be explored for the most feasible and realistic way to implement this pilot program with the goal of its continuation and future growth.

Part of the goals was approaching the needs of the homeless population discharged from the hospital setting similar to the perspective of a case manager. The economic benefits of utilizing nurse practitioners in the community have been well documented across populations. Nurse practitioners are well skilled at not only implementing the nursing role which is the fundamental aspect of nursing but also the specialized skills that they possess to provide advanced practice to patients.

Narrative of Responsibilities and Work Breakdown Structure

As a member of the OVMH team, the goal of the PMHNP was to provide comprehensive mental and behavioral health services to homeless patients to address gaps **t**hat occurred when a patient was discharge from the hospital setting to the community. To implement the role of the PMHNP in the community setting, a work breakdown structure (WBS) was necessary to identify the tasks associated in meeting the goal of the PMHNP (see Appendix G).

The tasks associated in meeting the goal of PMHNP began with receiving the referral from an OV member of the team. Once the referral was given, there were two identification pathways to fulfill the designated role of the PMHNP. They were, coordination with Marin

County services and the patient. Marin County services include county clinics, OV, Project Independence, and Sutter Health. The PMHNP identified these resources with the goal of implementing the connections according to the patient's needs. It was the intent of the OVMH team to work closely with OV as a point of contact in coordinating community services for the patient.

OV had responsibilities in providing the basic needs of the patient during transition from the hospital setting. These included transitional housing in a motel for an average of 21 days, including 3 meals per day. The patient would also be provided with a life alert system during this transitional phase to ensure he or she had access to emergency care if warranted. County clinic services consist of health care professionals such as the primary care provider, psychiatrist, and psychologist that would follow the patient upon discharge from the hospital. The PMHNP would ensure that access to providers is put in place through timely appointments. Project Independence had responsibilities in providing case management services and voluntary services such as transportation. Sutter Health was designated to provide needed home health services.

As a designated agent for the patient, the PMHNP had responsibilities for performing mental health screenings, reviews of records, psychotherapy, medication management, and community service referrals. A mental health toolkit of various screening tools was available for use by the PMHNP and dependent on the discharge needs of the individual in the program. Depending on the recommendations from the treatment team and all other providers involved in the transitional of the patient from the hospital setting to the community, the PMHNP would follow up with applicable assessment screening tools. These screening tools would provide baseline data post discharge and help the PMHNP and patient implement strategies to keep the patient from readmission to the hospital setting. This mental health toolkit would also be utilized

as needed by the PMHNP to assess for changes in baseline data that included improvements or triggers to alert the PMHNP for potential relapse while under the care of the mobile health team. These tools would also allow the PMHNP to assess specifically what community partnerships are needed to successfully help the patient transition back to the community (see Appendix H, I, J, K, L, M). Marin County services would be accessible to the PMHNP as resources for the patient during his or her transitional phase from the hospital setting.

Communication Matrix Plan

The success of this program involved consistent and effective communication between all members identified as part of the health care team and community resources partners. The PMHNP had responsibilities in communicating with all members identified by the team as necessary elements to patients' successful outcomes. Upon graduation from the program, it was expected that all identified resources had been established on behalf of the patient and they would have been educated on the importance of continuity of care. Again, a strong emphasis was placed on helping patients realize their goals and integrate safely back to the community setting with services in place. It was therefore necessary to identify the strengths of each individual enrolled in the program and utilize their strengths to keep him or her motivated toward improving their outcomes through the transitional process and make the necessary connections.

Narrative of Assumptions

It was assumed that patients selected for this program are motivated to seek wellness and a way to improve their outcomes of care. As an advocate for the patient, the PMHNP would take a supportive role as someone the patient would feel connected to and trust to help them navigate through the healthcare system. All identified partners in this program were assumed to be invested in the continuity of care for these individuals as well as ensuring that positive outcomes

are achieved through strategies aimed at reducing readmission to the hospital setting.

Implementation of the Project

Implementation of this project was again contingent on referrals received through the OV team of Marin County. The OVMH team pilot program was developed with the intention to be a part of the larger process of optimizing services to the underserved population while minimizing stigmatization to these individuals. The collaborative effort of the entire OVMH team actively pursued patients referred for transitional care and integration through constant communication with all members of the team. The PMHNP student and FNP student along with USF nurse practitioner faculty worked jointly to ensure an integrative model of care would be implemented in meeting all aspects of the referred patient to successfully integrate back into the community setting from rehospitalization.

Planning the Study of the Intervention

This project was piloted as a program that would reduce utilization of inpatient hospital services through the development of connections with community partners. The PMHNP would identify the milestones for this project using a GANTT chart to adhere to the projected timelines (see Appendix N). This GANTT chart helped to keep the specific timelines of this project moving successfully to ensure the success in piloting this program. As changes occurred with the implementation of this project, according to the patients that were referred or lack of continuity of patients referred, adjustments were made to ensure the project moved forward to its completion.

Description of Projected Resource Requirements

Projected resource requirements for this project included a dedicated number of hours spent in the community meeting with patients in their transitional housing settings. This time

would be spent discussing goals and integrating an agreeable plan of care for the patient's continuity of services. Specific resource requirements included access to nurse practitioner faculty, conferences with the discharge planner when the patient was hospitalized, access to health care records, identification of the pharmacy where medications would be filled, and time to interface with partners of this program. Along with these resources, it was important that the PMHNP had time to establish a rapport and maintain contact with the patient during the transitional period. This time would be spent working toward the patient's goals and helping the patient reach a level of independence from the supportive services that had been put in place for the patient. This required a strong commitment and partnership between the patient and the PMHNP. This program must maintain a strong connection among community partners with a common goal of serving the needs of each patient in the program. The PMHNP would continuously assess the appropriateness of this program in meeting the needs of the patient and look for signs and symptoms of possible decompensation that may disqualify the patient from continuing as a participant in the program. With timely interventions, the partnerships created with the patient and community programs would serve as a barrier to rehospitalization.

Time, Cost, and Performance Constraints

The PMHNP has a time-limited role in providing comprehensive services to meet the mental health needs of each individual accepted into the program. The PMHNP's role was to establish rapport with the patient and deliver timely strategies within the 21-day transitional period. Again, trust must be established as some individuals may lack faith in the healthcare system and health care providers due to feeling stigmatized or as a result of continued difficulty navigating the health care system. Education and support was a key component in helping the patients understand that services provided by the PMHNP were meant to improve their outcomes

and connect them with supportive services in the community. The cost of services from the OVMH team was not applicable to this project. As part of the OVMH team, the PMHNP would be a student nurse practitioner providing volunteer service hours to fulfill the PMHNP and doctoral of nursing program hours through USF. There are no performance constraints identified with this project as OVMH is intended to be a continuous service providing care to the homeless population through nurse practitioner students and clinical nurse leader students in pursuit of service hours toward their doctoral degrees.

Cost Benefit Analysis

The proposed budget for this was associated with the OV team and its ability to continue receiving funds to support the transitional housing services and overall goals of this pilot program. Grants were and continue to be received through the county of Marin to allow OV to continue supporting the needs of the homeless. Currently the OV program receives $200 per day for every participant enrolled in the program. The average transitional time that individuals are enrolled in this program is about 21 days, which averages to a total of $4200 in county funds. Without community services in place for the underserved such as the homeless, the cost to the healthcare system is magnified. The average cost associated with a patient's rehospitalization is between $18,732 and $26,760. A cost benefit analysis illustrates the savings to Marin County that are associated with the OV and the OVMH program (see Appendix O). Providing community support to the homeless that help them from readmitting to the hospital provides astronomical savings to healthcare systems. With these services in place, the OVMH team would be able to provide mobile services to the patient and establish the necessary connections needed for the success of this program. Mobile services provided by the OVMH team are voluntary services meant to give student nurse practitioners the opportunity and experience

to serve the Jesuit community in pursuit of their doctoral degrees associated with the role of a nurse practitioner.

Reporting Requirements

Acting as a patient advocate, the PMHNP would ensure that resources were identified and implemented during the transitional period of care. The PMHNP would be responsible for reporting to the faculty nurse practitioner during the implementation of this project. Reporting requirements also included interfacing with community partners about the progress of patients referred and ensuring that connections were in place prior to termination of the relationship between the PMHNP and patient. The PMNHP would also report progress with the patients, health care providers, and community partners of this program, while implementing strategies based on the patients' preferences and personal goals.

Methods of Evaluation

The overall goal of the OVMH program is to improve patient delivery to homeless individuals that require additional supportive services to improve their continuity of care once discharge from the hospital setting. Through this comprehensive approach, a reduction in the frequency of rehospitalizations among this group is expected. At this point in the development of this project, the 30-day readmission rate for the individual that received services from the OVMH team appears promising. However, it is not possible to fully measure this outcome at this time but will be measured in the future by student NPs that undertake this ongoing project.

A survey, using a Likert scale format was offered to patients as a way of measuring services provided by the OVMH prior to or toward completion of the program. This survey evaluated the patient's satisfaction with the mobile services provided, their continued commitment to follow recommended programs and services, and their increased knowledge and

willingness to maintain a healthy lifestyle as productive members of their community (see Appendix P). Information gathered from the survey tool was not solely used as a measure of success of this program but rather as a way to analyzing and improving OVMH services.

The survey tool is based on comprehensive services provided by the entire mobile health team, which may limit information specific to the role of the PMHNP as part of the mobile team. Because OVMH services are a collaborative effort in transitioning patients from the hospital to the community, it is appropriate to capture services provided by the entire team, rather than specific to the role of the PMHNP. For future purposes, evaluation of specific roles such as student faculty nurse practitioners, student psychiatric mental health nurse practitioners, student family nurse practitioners, and student clinical nurse leaders can be explored as the program matures.

Proposed Evaluation Criteria

Evaluation of this project was aimed at assessing where the patient was in relation to services and housing at the completion of the 21-day program. Successful outcomes of the program were to be based on patients graduating from this program with services in place and without readmission to the hospital setting upon graduation from the 21-day transition period. Having continuity of care and following patients beyond the 21-day period could also be expanded upon as patients' transition from the hospital and graduate from the program. The OVMH team could extend their responsibilities using a case management approach to ensure patients are following up with the connections provided by the OVMH team and its collaborative members. This would allow the OVMH team to monitor the long-term success of those that graduated from the program, intervene as necessary, and maintain the success of this project.

Information provided from the patients that participate in the program and evaluation of

results from the Likert scale would also provide invaluable information about this pilot program. This would allow the OVMH team the opportunity for exploration and modifications that may be necessary to the success of this program. It is therefore imperative the OVMH team ensures patients participate in the Likert scale so common themes and preferences can be identified for future improvement of this project.

Timelines for Evaluation Activity

Due to the complexity and needs of the homeless population, this program is intended to continue through other students pursuing their degrees as nurse practitioners and clinical nurse leaders that choose to participate in this program. As PMHNPs graduate from USF, their role as part of the mobile health team will be passed onto other students pursuing their PMHNP degree. Services again will be reflective of partnerships established as well as integrative care implemented for the patient to continue his or her success in the community. This includes but is not limited to established visits with the county clinic, established pharmacy support for medications, outpatient support programs such as Alcoholics Anonymous (AA), and housing referrals as indicated by the patient's preferences and needs. The foundation for this pilot program has been established and therefore the current baseline evaluation period that exists is successful graduation from the 21-day transitional program from inpatient hospitalization to connection with community partnerships. However, the intent is to grow this program and have USF take a larger role in serving the homeless population beyond the 21-day program.

Program Evaluation/Outcomes

This pilot program was intended to be part of a larger scale of providers in meeting the challenging needs of the homeless population. The evidence supporting this type of program is strong but relies heavily on connections and much support from community partners to be

successful. In order for the OVMH team to successfully implement this project, it was largely based on the referral received from the OV team of Marin County.

Prior to the collaborative approach of having a PMHNP student participate as part of this integrative program, the OVMH team received one referral that was navigated through the system. The family nurse practitioner student was able to meet this patient with the support of the faculty NP of USF and provide support and continuity of service referrals toward meeting the patient's success. This was the first interface with this pilot program and the patient was able to get assistance from the team, which was the intent of this program. Psychiatric services from the OVMH team was not involved at the time the first patient was introduced to the program.

A second patient was identified through the OV team and referred for services. However, this individual was pregnant and decided not to seek our services. An attempt was made to meet with this patient but she continued to refuse any service from the OVMH team. She safely delivered her baby and has been given support and referrals through the county agencies of Marin County.

The OV team then referred a third patient to the OVMH team for services. This individual was admitted to the program on October 7, 2015. The OVMH team met with this individual on October 16, 2015. As part of the program, he was set up at the Budget Inn for an average stay of 21 days. Within these 21 days, he will be referred and connected with outpatient services in the community with the intention of preventing rehospitalization. A strong case management component has been identified as the primary need of this patient. He is very familiar to the healthcare system and identified as a high utilizer of healthcare services.

This individual also has multiple comorbid medical issues that have gone largely gone unaddressed out in the community due to his inability to follow through with any aftercare

recommendations from the hospital setting. He is receiving support from community partners such as Project Independence and the Marin Clinic. He was seen for the first time and established with a primary care provider on October 13, 2015 in hopes of establishing a medical home base for him.

Due to his cognitive deficits, he is noncompliant with medications and self-care needs. Since his admission to the program, he has been intermittently noncompliant with abstaining from alcohol, which was part of his aftercare plan from the hospital setting. Members involved in his transitional care have been working with him extensively in an effort to increase his compliance with safer self-care decisions and providing him with education about the importance of staying connected with referrals provided.

During the initial visit, a PHQ 9 and AUDIT-C screening tool was used for assessment of his baseline status post hospitalization. Unfortunately, during the visit, he was intoxicated and had difficulty participating in the screening tools. The PMHNP established the rapport with the patient and used motivational interviewing to assess his readiness for change. This patient did not verbalize a readiness for change and education was provided by the PMHNP about the benefits of maintain sobriety along with the consequences of continued alcohol use. He appeared somewhat interested in the information provided to him. It is the intent of the OVMH team to continue following this patient through the course of his stay and assist him in navigating through the services available to him. The OVMH team has been and will continue working collaboratively with the OV team and Project Independence in an effort to transition this patient safely to the community with all services in place.

Implementation of the Pilot Program

As part of the OVMH team, the PMHNP was able to receive a patient through the referral

of the OV team. The PMHNP implemented the mobile health services to one individual thus far as part of the OVMH team and larger Marin organizational partners. The larger Marin County project identified to serve the homeless population discharged from the hospital setting to the outpatient setting continues to identify ways to improve upon the structural process of this program. This program has several entities involved in meeting the greater needs of this specialized population to ensure positive outcomes are achieved through supportive services provided through collaborative measures. The OVMH team's structure has been set up as the foundation for transitional services in helping those identified as appropriate participants in the program and has moved toward a more case management approach that assists Marin County partners in the care of individuals referred.

The foundation of the OVMH serves to provide support to participants enrolled in the program in an effort to reduce rehospitalization. This again reduces the burden of costs associated with readmission rates that may occur for these individuals that do not receive the support needed from hospitalization to community. The foundational aspects for the role of the PMHNP have been established and the structure for this role will allow it to be implemented through other members of the team in the future.

Case Studies Supporting the Pilot Program

As a member of the OVMH team, the PMHNP not only established services with the OV team, but also encountered homeless individuals through other clinical settings where the PMHNP student practiced under faculty supervision. All responsibilities identified as part of the role and responsibilities of the PMHNP were identified and implemented with two homeless individuals encountered through Mills Peninsula Hospital and through the outpatient setting where the PMHNP doctoral student practiced. Under the guidance and rapport established with

these individuals, the PMHNP was able to utilize strategies to help prevent rehospitalization.

Case Study One

The first male patient identified as homeless entered the healthcare system through psychiatric emergency services. This individual was 53 years old and well known to the San Mateo Community healthcare system and a high utilizer of healthcare services. He had several comorbid conditions and was a polysubstance abuser. He frequently sofa surfed between his parents and friends who were willing to accept him. He did not trust providers or social worker and found it difficult to navigate through the healthcare system. As the PMHNP assigned to the case for this patient, it was first necessary to establish a rapport with this patient and not approach him with any biases presented by staff familiar to him. Since he was a frequent flier that relied on the healthcare system to detox him from his alcohol and drug use, it was usual for him to go back to the community and use substances and then readmit back to the hospital shortly after using.

Using the identified roles of the PMHNP as part of a collaborative movement in transitional care, it was necessary to assist him in identifying realistic housing options and placements that would limit his access and cravings to use. A thorough medication evaluation was conducted and after being successfully detoxified from the unit, his care was approached from a case management perspective by the PMHNP student.

The PMHNP student implemented specific screening tools to help identify the needs of this patient while he was in the hospital setting. This was a new approach to this patient's care as he did not believe it was necessary to address any other psychiatric issues other than medication management after being detoxed from the hospital. This PMHP provided not only medication monitoring but also individual therapy to continue supporting and providing guidance toward his

goal of sobriety. The concepts of motivational interviewing were utilized as an approach to help identify his strengths toward moving to a clean and sober lifestyle. This process took about three months where he relapsed twice without the need for hospitalization due to the psychiatric interventions provided by the PMHNP student.

What appeared to be most helpful for this particular individual was assistance in housing him in a clean and sober living environment that he initially refused from other providers. The addition of integrating a case management approach provided this patient with the support he needed to maintain his sobriety. He was encouraged to meet with the PMHNP student weekly to discuss his success in AA/NA program as well as continued medication management to reduce cravings. During individual therapy sessions, he was able to identify depression as the contributing factor leading to his polysubstance use. It was the established rapport with this patient that maintained his commitment toward sobriety and continuity of care.

Case Study Two

Another identified patient that presented to the outpatient clinic where the PMHNP student practiced was a 32-year old male with a history of alcohol abuse and depression. This individual was deemed homeless after being kicked out of his girlfriend's house for continued alcohol use. He was fired from his job and now residing out of his car. At the time he presented to the clinic, he had discontinued his antidepressant and stopped attending AA.

Again, what was helpful with this patient was first assisting him in finding a place where he could live rather than living out of his car. After a few weeks of meeting regularly, we were able to work together with San Mateo County services to find him a clean and sober living environment that would allow him to live and pay monthly for a room. The ideal part of this housing option was it provided a nightly support system for this patient to participate in

maintaining his sobriety. As a motivating factor, if this patient participated nightly in the program offered, a reduction in his room rate was instituted. This was a huge motivating factor for this individual to continue attending the nightly support group.

This patient was encouraged to meet with the PMHNP student weekly to discuss his successes and frustrations experienced during the week. This approach appeared to be the motivational force he needed in order to maintain his sobriety. We reestablished a plan of action where he would begin attending AA one day a week and then progress to more days as moved forward in his sobriety. At times he discussed his frustration with the AA program and his unwillingness to return to the program due to lack of motivation. As the PMHNP assisting him in processing these feelings, we were able to collaboratively work together to find what things motivated him to stay sober and how this would help him once again be a viable member of the community in which he lived.

Through continued support from the PMHNP and commitment from the patient, he increased his participation in AA meeting to three times per week and began volunteering at a soup kitchen for the homeless. This case management approach was imperative to the success of this individual staying active in his sobriety and maintaining compliance with his antidepressants with the support her received from the PMHNP student, his self-esteem improved as he found value in helping others achieve success in their sobriety. He also began looking for a part-time job to eventually integrate back to the community where he lived.

Outcomes from Case Studies

These two case studies provide supportive evidence of how an advanced practice nurse can help meet the challenging needs of this specialized population. Establishing a rapport and therapeutic alliance helped these patients navigate through the healthcare system and trust the

resources and referrals provided to each one of them. Both individuals in these case studies verbalized feeling more hopeful about their sobriety, feeling supported by their healthcare provider, and feeling confident about the connections they made through the community programs. These individuals not being readmitted to the hospital and their continued commitment to maintain a clean and sober lifestyle demonstrated the successful outcomes achieved from having an advanced nurse practitioner such as a PMHNP navigate their needs. A modified version of the Likert scale was used as a way to gauge success of the strategies provided in each case study and their satisfaction with the interventions implemented by the PMHNP (see Appendix Q, R). There was a 100% success rate achieved with the implementation of services provided by the PMHNP. This along with ongoing support on their progress during visits and other methods of communication such as telephone check-ins served as a way to maintain the satisfaction with the services they received by the practitioner.

Although the PMHNP role is in the beginning stages of piloting through the OVMH team in conjunction with Marin County as of now, the two case studies served as a measure of success. The comprehensive approach provided by the PMHNP student demonstrated the importance of how a mobilized team effort could implement the care strategies, and assist in making the necessary connections for the care of this specialized population. Had these individuals participated in the OVMH team services, the benefits of this structured of program along with the support from the PMHNP would have been realized through their successful outcomes achieved and zero readmission rates to date.

Analysis

The case management approach implemented by the OV team and its agencies demonstrated a cost reduction in their healthcare system as evidenced by patients that

participated in their comprehensive program thus far. To date, twelve patients referred by either Marin General Hospital and Kaiser Hospital participated in the OV program and its partners. Transitional services were implemented through this collaborative effort from the inpatient to the outpatient setting. The strategies were implemented over the course of two days to three weeks. Of these twelve patients, eleven successfully sustained housing and navigated successfully through the program. All participants acquired a medical home base through the efforts of the OV program and none of the participants were readmitted to the hospital to date. This resulted in a cost to the county of $4,200.00 per patient for the 21-day program and a total calculated average savings of $204,006 to the healthcare system of Marin County thus far.

This reinforced the importance of the timely and necessary implementation of the county program in transitioning these patients from the hospital setting to the community with available services and support measures in place. This also supports the efforts of why this program is so important to provide to high utilizers of the healthcare system such as the homeless population. The success of these eleven patients supports the cost benefit analysis identified with the implementation of such a program. The savings to Marin County are evident by these patients not being readmitted back to the hospital because a collaborative approach of interventions was implemented to ensure their success in the community.

This pilot program is based on the participation of partners of Marin County and patients active participation in the program. It is imperative that collaborative partners identified as part of the project participate in the referral process as well as the implementation of services needed from each partner to meet the needs of this specialized population. Buy-in from this vulnerable and challenging population serves as the basis for the direction of this program and its necessity. Participants that do not find any value to this program will likely drop out or not participate

altogether from the point of hospitalization. Facilitating the trust between patient and provider is imperative in navigating these individuals through the healthcare system as many do not trust the healthcare system and meet with public stigma that surrounds those that are homeless. These individuals remain vulnerable and at continued risk for rehospitalization.

Satisfaction of services is another way to gauge the success of this program. Although the Likert scale is intended for use to evaluate effectiveness of this project through satisfaction of services received by individuals, it will also serve as an improvement tool for this program. Because this program is in its beginning stages, it will require ongoing analysis of its success in serving the homeless population.

The identified objectives of the PMHNP were addressed and implemented with the OVMH patient as follows

- an assessment of his mental health status and baseline functioning was conducted shortly after hospitalization in the motel setting where he was placed;
- a review of records was not possible while the patient was in the hospital because he was referred to the OVMH program after discharge. There was also difficulty in obtaining records as patient was conserved and OVMH was still in the process of obtaining authorization through the county for release of records. Rather, information was exchanged through continued collaboration and interfacing with the OV team and Project Independence team;
- medication management was discussed with the patient but he continued to decline taking any medications, largely due to his cognitive impairments;
- county clinic follow-up with his medical PCP shortly after discharge but patient refused to follow up in the medical clinic for psychiatric services and evaluation. Therefore the

the PMHNP of OVMH visited the patient at his motel for evaluation to develop recommendations to Marin County partners;

- OVMH team worked collaboratively with partners involved in patient's care, made recommendations for treatment, and participated in ongoing referral suggestions for the patient;
- an integrative care approach was implemented through community partners that emphasized the importance of patient stability that included long-term housing in a sober living environment as patient admittedly engaged in daily alcohol use while enrolled in this program; and
- housing referrals were explored for this patient to ensure safety, continuity of care, and long-term success for this patient. The PMHNP was able to address the psychiatric needs of this patient, collaborate with members of county involved in his care, and make written recommendations for his follow up care in the community.

Summary

The implementation of the PMHNP role as part of the OVMH remains invaluable in addressing the needs of the homeless population. Those who are homeless often suffer mental health issues and need supportive services that can be provided by a PMHNP. The role of the PMHNP has proven importance in assisting those with mental health issues navigate through services in the community. The services provided by the PMHNP to the identified patient from the program serves to work collaboratively with the community partners of Marin County and discuss the best recommended plan of care for this patient. As the PMHNP on the team, suggestions have been made regarding the importance of having a strong case management role for this patient as well as exploring residential housing as a realistic and necessary option for

him.

The PMHP services were also valuable in meeting the needs of the two cases that were outside of Marin County and demonstrated much benefit to these individuals who were homeless. The patients encountered by the PMHNP did not trust the healthcare system and did not feel confident or stable with any healthcare providers to help them navigate through the healthcare system. The provisions of services offered by the student PMHNP provided the foundation of the relationship in understanding their needs and helping them to navigate the necessary services. The ability of the PMHNP to establish rapport and function as a liaison for individuals encountered and supported how patients were able to follow through with recommendations provided using a patient-centered approach.

Relation to other Evidence

The foundation of the model created by the OVMH team is similar to other mobile health models that have proven efficacy in serving the needs of the underserved such as the homeless. As this program continues to mature and grow, the expectation is a fully viable program that will be valued by not only patients accepted into the program but by the agencies providing the services. There is strong evidence supporting how a mobilized team can bring services to the homeless population where an infrastructure for providing services may not be available in some communities.

The evidence supports that strong foundations built with this specialized population that may have otherwise experienced stigma with the public along with previous encounters in the healthcare system may help them accept services available. This in turn improves their care and outcomes and reduces the chances of readmission to the hospital. The long-term benefit is savings to the healthcare system. A comprehensive approach by the OVMH team models the

same approach implemented by Marin County that reduces the chances of these individuals representing to the hospital for readmission. The OVMH team provides additional support to the larger comprehensive program set forth by Marin County to address the gaps in services from inpatient to outpatient care. The evidence presented by the literature that utilizes a comprehensive approach and meets the healthcare needs of frequent utilizers of the healthcare system has demonstrated a reduction in savings to healthcare systems and communities.

Barriers to Implementation/Limitations

The services provided by OVMH are evidence-based strategies meant to reduce the likelihood of patients returning to the hospital setting. It was the role and intent of the PMHNP to work in collaboration with healthcare providers and community programs on a larger scale. Transitioning patients back into their community settings from hospitalization helps to maintain some stability while enriching their lives in the least restrictive setting. Therapeutic communication strategies and rapport building are the key areas that need to be emphasized and reinforced through the mobilized team. Because this is a pilot program, it is projected that this innovative approach to service delivery would be well accepted and valuable to the community where it is implemented.

SWOT Analysis

A SWOT analysis (see Appendix S) was conducted to identify the strengths, weaknesses, opportunities, and threats that exist with the implementation of the OVMH pilot program. There is strong evidence-based research to support the implementation of a nurse practitioner mobile health program. A review of the literature demonstrated the benefits afforded through various programs that serve the homeless population through mobilized programs, such as the OVMH pilot program. Student nurse practitioners have a strong commitment to this program and are

dedicated to help the underserved population such as the homeless. Collaborative partnerships with Marin County members to address the needs of the homeless in their community form the basis for the development of the entire program.

The foundational basis of OVMH program is relatively new. The success of the OVMH program relies on referrals from its affiliates in order to implement the mobile health services. The addition of a PMHNP to the mobile health unit is an innovative approach to healthcare delivery that is not traditionally seen with many mobile health programs. It is important for the PMHNP to demonstrate the value of this additional service in an effort to provide continuity of care and reduce rehospitalizations among the homeless.

USF has an opportunity to lead with a vision that is not traditionally seen with other mobile health programs. This cutting edge approach can serve as a model that will quickly catch on to other mobile health programs, as the value of the PMHNP is observed with reductions in overutilization in healthcare services among the homeless population. Nurse practitioner students will have opportunities to gain experience as part of this program while earning their doctoral degrees through USF. Full partnerships with Marin County will strengthen relationships that USF can maintain and expand upon for future growth of this project.

OVMH receives referrals from the OV team and therefore there is a threat of losing the viability of this program should referrals decline or cease. Funding to the OV program is granted through its county programs and therefore it is important that grants and other funding opportunities continue to be sought for continued growth of the entire program. USF faculty presence is required at this time in order for the OVMH team to see patients in the community. It is therefore imperative that other avenues should be explored that will allow students to see these patients if faculty is unable to be present during visits. Specific avenues that can be

explored is having an NP lead this program with light faculty involvement or utilizing a telemedicine approach to meet patients out in the community setting.

Specific barriers that prevent the implementation of services can hinder success of this program and its sustainability. Potential barriers may include discontinuation of funding for transitional housing referrals, patient dropout, lack of referrals from OV, and lack of student participation in the mobile health program piloted by USF.

Possible Financial Constraints

A potential barrier to this program is the possibility that funding may be discontinued to OV. The operation of OVMH is based on referrals from OV where patients must qualify and participate in the program. OV services include transitional housing in a motel for an average of 21 days; meals and additional services are provided through this program. OV relies heavily on funding from Marin County to provide these services. However, there is a strong commitment and an ongoing effort to explore opportunities for funding that will provide the mainstay of this program. With the basic physiological needs met, the OVMH team can focus efforts on the individualized needs of each patient.

Potential for Drop Outs

Another potential barrier may include patients dropping out of the program due to lack of interest, increase in symptoms requiring hospitalization, or other higher-level care needs that cannot be managed on an outpatient basis. . It is imperative that the PMHNP provide an integrative and holistic approach to health care delivery that supports the psychiatric needs of this population based on patients' understanding and acceptance of help offered through the OVMH team. A patient-centered approach will reduce resistance to care as preferences and values are integrated into the individual's transitional plan of care. Without the patient's

understanding of his or her psychiatric needs and the necessity of ongoing mental health services, the role of the PMHNP with OVMH is lost. The PMHNP must therefore be a strong advocate and educator to these patients and continue to educate collaborative partners of the specialized care required o f this population.

Barriers to Student Participation

Lack of participation from students as part of the OVMH team is another possible barrier to this program. The OVMH program is comprised of USF faculty and student nurses and without commitment from these individuals, the mobile health program will cease to exist. The OVMH team is doctoral students devoted to macrosystem projects that will pave the way for creative solutions that can be developed to improve health care delivery systems. Students must be willing to hazard the risks involved in interacting with this population. Such risks may include treating those that may develop a psychotic episode or altered mental status from substance use resulting in possible violent aggression. However, OV has instituted screening measures such as those incapable of participating in the transitional program or posing a danger to others. As the structure of the program is currently set up, a faculty nurse practitioner must be present during visits due to needing a licensed practitioner to support students in this program as well as the safety of its members. Students will be selected to participate in this program based on their goals and commitment to Jesuit values in serving serve members of the community.

Actual Barriers to Implementation of Project

The biggest hurdle in implementing this project was the difficulty in receiving referrals from the OV team. This project was again based on being a part of a larger scale program that was created by Marin County agencies in an effort to reduce high utilizers of the healthcare system, thus resulting in a reduction in readmission rates. The OVMH team relied solely on the

OV team, as this is how the pilot program was initially set up. The OVMH team made every effort to collaborate with individuals from the OV team but found it very challenging in eliciting and receiving referrals to implement the project. This is likely due to the newly developed role of the OVMH team being identified partners in the Marin County program. Since the foundation has been strengthened with the OVHM team and partnerships continue to be built, referrals are being made to the OVMH team such as the one established on October 16, 2015. Modifications to this program were also made in order to attempt to integrate the role of the PMHNP in the community setting along with the individual referred from the OV team.

The PMHNP identified high utilizers of the healthcare system in other areas of practice, focusing on those that were homeless. In the San Mateo County, two individuals were identified as homeless with one identified as a frequent utilizer of the hospital setting for detox purposes. Through this modification of services, the PMHNP was able to utilize the strategies of the OVMH team and apply them to another county of practice. Successful outcomes were identified by a reduction in the utilization of healthcare services identified as readmission to the hospital within a 30-day period.

Interpretation

The strategies implemented with individual referred by the OV team and the two outside cases were based on these patients accepting the services offered from available community resources and establishing rapport with the student PMHNP for continuity of care. The PMHNP met with these individuals and helped identify potential triggers for relapse during each patient encountered. In the two outside case studies, individuals responded well to motivational interviewing techniques implemented by the student PMHNP and demonstrated a commitment to improving their overall mental health. The individual referred by OV team appears to be

somewhat resistive at this time but the PMHNP continues to implement a strong case management approach with this patient and his collaborative partners in the community.

This project was not only ideally suited for implementation on a larger scale as part of a collaborative movement through Marin County services, it was also successfully implemented in other areas where the student PMHNP practiced. The challenging needs of the homeless population were assessed on a case-by-case basis and the PMHNP helped each patient navigate through the healthcare system and connect with services available to each patient.

In case study number one, he was under the constant supervision of the student PMHNP weekly along with telephonic support. Despite the fact that he relapsed twice during the three - month period he met with the PMHNP, he did not require hospitalization. This was largely due to the skills of the PMHNP identifying issues that needed immediate attention otherwise hospitalization was likely to follow. This individual came to the clinic drunk on one occasion and it was necessary for the student to help manage his detox symptoms on an outpatient basis while helping him connect with the AA/NA programs he was attending.

The patient in the second case study struggled with feelings of loss and low self-esteem because he was kicked out of his home and also lost his job. He was frustrated and feeling defeated. It was the skill of the PMHNP student and the ability to apply the therapeutic strategies needed for this patient to utilize a strength-based approach to achieve sobriety. During the times he felt like quitting the AA program, the PMHNP student helped him review his long term goals and provided him with the reassurance he needed to envision a future of sobriety and reestablishing himself as a viable member of the community.

In both cases, it was the skill of the PMHNP student in identifying triggers for relapse and ensuring these individuals stayed connected with their community support programs.

Helping them establish safe housing that would support their sobriety efforts was a key element to improving their motivation in participating in a clean and sober lifestyle. Utilizing tools such as the PHQ 9 in assessing and identified their level of depressive symptoms was also skillfully executed by the PMHNP. This comprehensive approach served as the model concept identified by the OVMH team to implement in Marin County. These individuals still required the same services and support identified with the pilot program of the OVMH team.

Although this project was ideally suited for implementation on a larger scale as part of a collaborative movement through Marin County services to meet the challenging needs of the homeless population, homeless individuals were identified in other settings. They still required the same services and support identified with this pilot program.

The identified patient through the OV team continues to need strong support through case management services for all aspects of his care. It is the belief that this individual can be successfully navigated through the healthcare system with the continued efforts of all community partners involved in his care by developing a structured program for him to participate in along with residential placement. This again will be patient-centered and involve the patient in all his healthcare decisions.

Conclusions

The implementation of the PMHNP role as part of a mobile health unit is clearly identified as a needed service in the community for the underserved population such as the homeless. A case management approach in mental health and behavioral services from an advanced practice nurse such as the PMHNP has been identified in several literature studies. A common factor was the ability of the PMHNP to establish a therapeutic and trusting relationship with this population, as they are often untrusting of the mental health system. Identifying mental

health conditions, potential for relapse, and implementation of psychotherapeutic strategies are well within the scope and expertise of the PMHNP. As a member of the OVMH team, mobilized services that integrate medical and psychiatric services to the underserved population such as the homeless can be the key to reducing rehospitalizations and cost saving measures to its community.

Future Directions

Placing nurse practitioners such as FNPs or PMHNPs out in the community setting is an innovative and creative approach to meeting the physical and mental health challenges of the homeless population. The social and political challenges these individuals face, perpetuates the stigma they encounter on a regular basis from their own communities. Limited infrastructures exist to provide services to this population and healthcare systems and agencies need to move toward a direction of preventative strategies such as mobile health clinics in meeting the challenging demands of this population. As more research continues to support an integrative and collaborative model of care for all patients in the healthcare system, it makes sense that those who are vulnerable, such as the homeless population would likely benefit from these services rendered.

The OVMH pilot program created by USF team members was created to meet the challenging needs of the homeless population and meant to provide an integrative approach to improve healthcare outcomes along with an effort to reduce readmission rates in the hospital. This is a joint effort with collaborative partners in better serving and meeting the needs of the underserved population. The OVMH program sponsored by USF is anticipated to grow and refine as more research is collected as to how best to implement this program. Evidence-based practices and strategies will continue to be explored, ongoing and new connections will be

established with community partners, and integrating newly graduated nurse practitioners will be explored to extend the services of the OVMH program.

Sustainability Plan

The foundation of this program has been developed by the initial members of the OVMH team as part of the Marin County larger program. Sustainability of the OVMH program will rely heavily on the continued dedication and commitment of nurse practitioner students and faculty to ensure its success. It is imperative to continue partnerships with members of Marin County, which will include frequent interfacing with its members and obtaining ongoing referrals for the success of the OVMH program. Sharing in the responsibilities that include establishing rapport with homeless individuals in the program and exploring ways to grow the services provided by the mobile health program will ensure its continued success and sustainability in the community.

Funding

Funding for future projects should include an actual mobile health van that can provide these integrative services to reach all those underserved in their communities. Nurse practitioners are key individuals that exist in promoting health prevention strategies as well as educational approaches for wellness in their communities at an economical cost. Exploration of providing residency programs for new graduate nurse practitioners should also be emphasized as a cost effective measure as it helps meet the challenging needs of this population while allowing new grads to gain experience in providing care to this underserved population.

The structure and foundation of the OVMH team has been established through this DNP project and the continuity of its services should be embraced by those looking for clinical opportunities in practicing as nurse practitioners out in the community. Opportunities for growth should again include the possibility of extending this program to new graduate nurse

practitioners as leaders in this mobile health project that can support nurse practitioner doctoral students needing doctoral projects. Exploration should also include connecting with other agencies within the Marin County such as their county clinics, public health nurses, and hospital social workers for referrals to the OVMH program as funding for services continue to be explored and utilized to meet the needs of this specialized population.

References

Boykins, A. D. (2014). Core communication competencies in patient centered care. *The ABNF Journal*, *25*(2), 40-45.

Buck, D. S., Brown, C. A., Mortensen, K., Riggs, J. W., & Franzini, L. (2012). Comparing homeless and domiciled patients' utilization of the Harris County, Texas Public Health System. *Journal of Health Care for the Poor and Underserved*, *23*, 1660-1670.

Chen, F. (2014). Developing community support for homeless people with mental illness in transition. *Community Mental Health Journal*, *50*(5), 520-530 11p. doi:10.1007/s10597-013-9641-3

Doran, K. M., Ragins, K. T., Iacomacci, A. L., Cunningham, A., Jubanyik, K. J., & Jenq, G. Y. (2013). The revolving hospital door Hospital readmissions among patients who are homeless. *Medical Care*, *51*, 767-773.

Ferrier, G. D., Leleu, H., Moises, J., & Valdmanis, V. G. (2013). The focus efficiency of u.s. hospitals. *Atlantic Economic Journal*, *41*(3), 241-263. http://dx.doi.org/doi:10.1007/s11293-013-9385-z

Herman, D. B., Conover, S., Gorroochurn, P., Hinterland, K., Hoepner, L., & Susser, E. S. (2011). Randomized trial of critical time intervention to prevent homelessness after hospital discharge. *Psychiatric Services*, *62*(7), 713-719. Retrieved from http://ps.psychiatryonline.org/doi/full/10.1176/ps.62.7.pss6207_0713

Hwang, S. W., Weaver, J., Aubry, T., & Hoch, J. (2011). Hospital costs and length of stay among homeless patients admitted to medical, surgical, and psychiatric services. *Medical Care*, *49*, 350-354.

Jordow, R. L. (2014). Patient-centered medical homes: Presenting a role for the advanced practice mental health nurse. *Journal of Psychosocial Nursing & Mental Health Services*, *52*(3), 26-32.

Linertova, R., Garcia-Perez, L., Vazquez-Diaz, J. R., Lorenzo-Riera, A., & Sarria-Santamera, A. (2011). Interventions to reduce hospital readmissions in the elderly: in-hospital or home care. A systematic review. *Journal of Evaluation in Clinical Practice*, *17*(6), 1167-1175.

McLeod, S. (2007). Maslow's Hierarchy of Needs. Retrieved from http://www.simplypsychology.org/maslow.html

Merritt, M. K., & Procter, N. (2010). Conceptualising the functional role of mental health consultation-liaison nurse in multi-morbidity using peplau's nursing theory. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, *34*(2), 158-166. http://dx.doi.org/doi:10.5172/conu.2010.34.2.158

Moczygemba, L. R., Osborn, R. D., & Lapane, K. L. (2014). Utilization of behavioral health outpatient therapy and psychiatry services among homeless people recently hospitalized for a psychiatric condition. *Journal of Ambulatory Care Management*, *37*(4), 303-313.

Munyaradzi, M. (2012). Critical reflections on the principle of beneficence in biomedicine. *The Pan African Medical Journal*, *11*.

Noseworthy, A. M., Sevigny, E., Laizner, A. M., Houle, C., & La Riccia, P. (2014). Mental health care professionals' experiences with the discharge planning process and transitioning patients attending outpatient clinics into community care. *Archives of Psychiatric Nursing*, *28*, 263-271.

O'Connell, J. J., Oppenheimer, S. C., Judge, C. M., Taube, R. L., Blanchfield, B. B., Swain, S. E., & Koh, H. K. (2010). The boston health care for the homeless program: A public health framework. *American Journal of Public Health, 100*(8), 1400-1408.

Pfuntner, A., Wier, L. M., & Steiner, C. (2013). Costs for hospital stays in the united states, 2011. Retrieved from http://www.hcup-us.ahrq.gov/reports/statbriefs/sb168-Hospital-Costs-United-States-2011.jsp

Rooney, M., & Arbaje, A. L. (2012-2013). Changing the culture of practice to support care transitions-why not? *Journal of the American Society on Aging, 36,* 63-70.

Schaumberg, L., Narayan, S. M., & Wright, T. (2013). Advanced practice nurse psychiatric bridging intervention. *Journal of Psychosocial Nursing, 51,* 36-43.

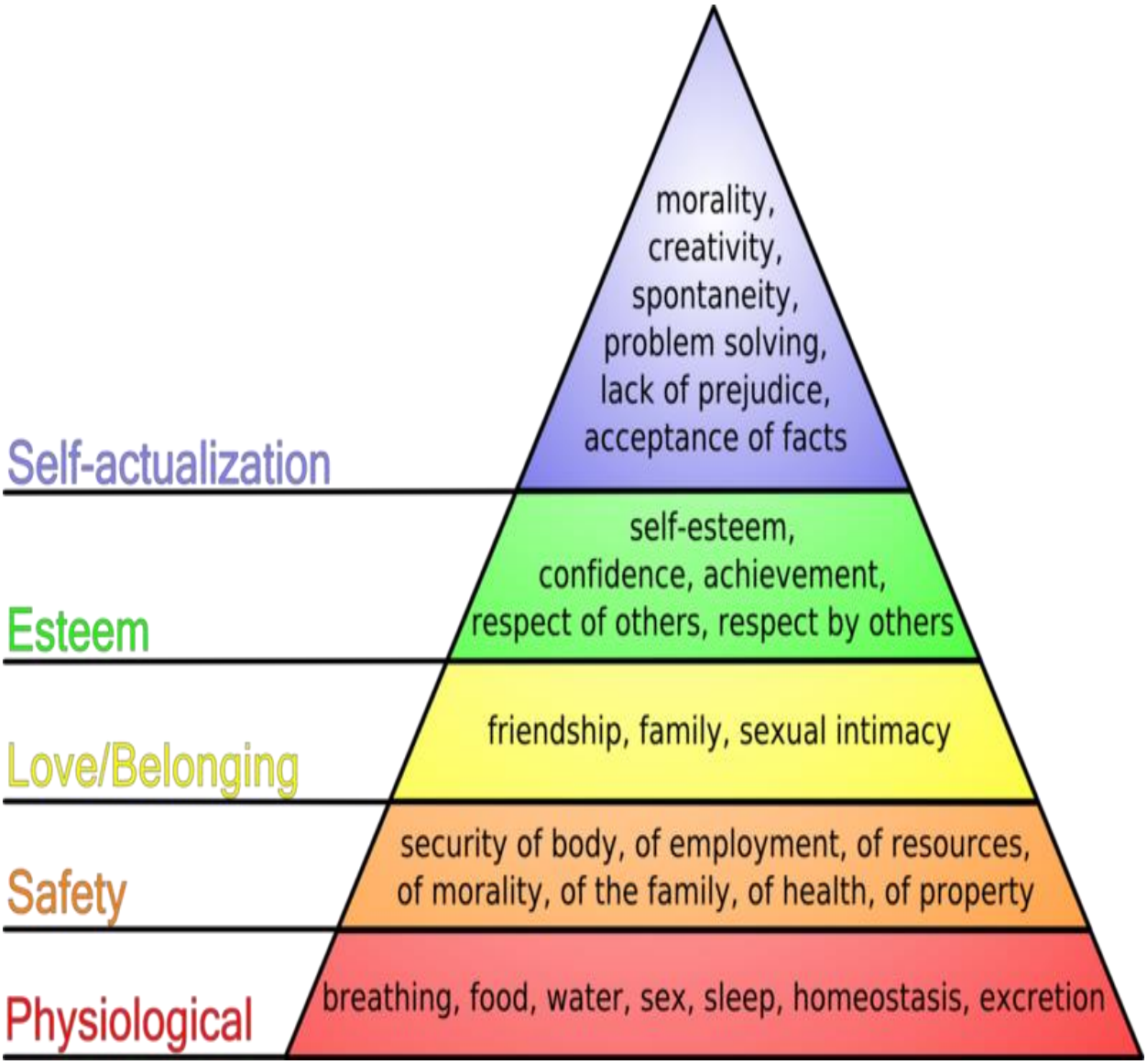
Silva, D. S., Goering, P. N., Jacobson, N., & Streiner, D. L. (2011). Off the Beaten Path: Conducting Ethical Pragmatic Trials with Marginalized Populations. *IRB: Ethics And Human Research, 33*(3), 6-11.

Winter, L. A. (2015). The Presence of Social Justice Principles Within Professional and Ethical Guidelines in International Psychology. *Psychotherapy And Politics International, 13*(1), 55-66. doi:10.1002/ppi.1346

Zlotnick, C., Zerger, S., & Wolfe, P. B. (2013). Health Care for the Homeless: What We Have Learned in the Past 30 Years and What's Next. *American Journal Of Public Health, 103*(S2), S199-205. doi:10. 2105/AJPH.2013.301586

Appendix A

Maslow's Hierarchy of Needs Pyramid

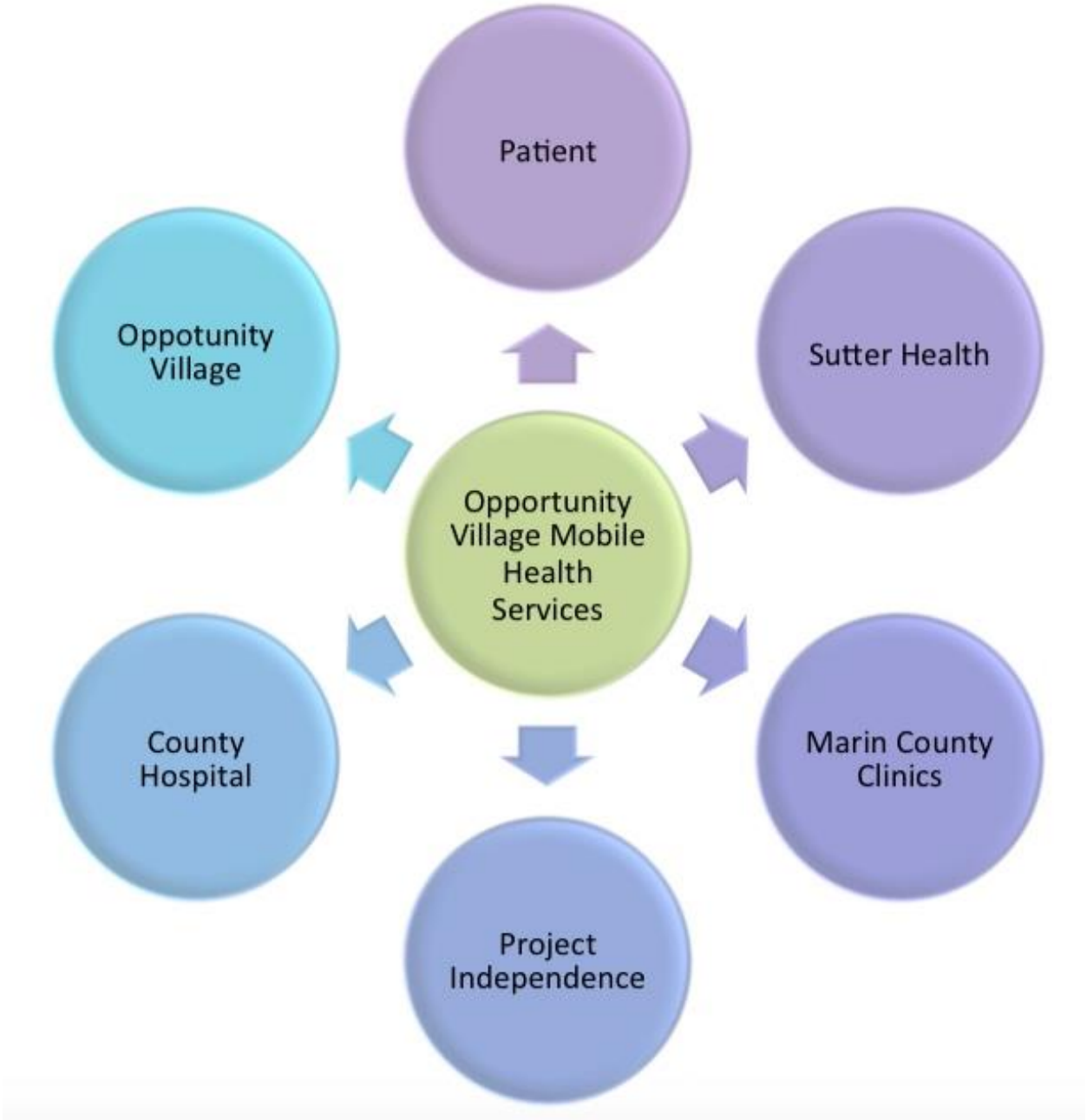


Appendix B

Opportunity Village Mobile Health Organizational Chart

Appendix C

Organizational Chart of Partnerships



Appendix D

The Role of the Psychiatric Mental Health Nurse Practitioner (PMHNP) in the Community

Goal:
As part of the mobile health team and in collaboration with Marin County Services, the PMHNP will provide lateralized mobile health services. The PMHNP will assess and implement strategies that ensure the patient's success in the community using a patient-centered and holistic approach to healthcare delivery.

Objectives:
1. Assess mental health status: Conduct depression screening and other applicable screenings tools prior to or shortly after discharge from hospital setting.

2. Review of records: Obtain discharge summary from hospital, preferably while patient is in the hospital setting. Review discharge recommendations with patient. Develop goals with patient using a patient-centered approach.

3. Medication management: Ensure patient has picked up medications from pharmacy. Review medications and provide comprehensive education to maintain compliance.

4. County Clinic follow-up: Ensure follow-up (e.g., PCP, psychiatrist, and psychologist) appointments in the clinic are scheduled and adhered to by patient.

5. Community support services: Explore community services available and applicable to patient, such as outreach programs (AA, residential treatment housing).

6. Integrative care: Collaborate with other partners (OV, Project Independence, Marin County Clinics, and Sutter Health) as warranted by the individual needs of the patient, providing transitional care to the patient during 21-day program and ensure continuity of services upon graduation from program.

7. Housing: Establish housing referral source prior to discharge from OVMH services.

8. Future: Explore trailer housing as an option for future growth and support to individuals.

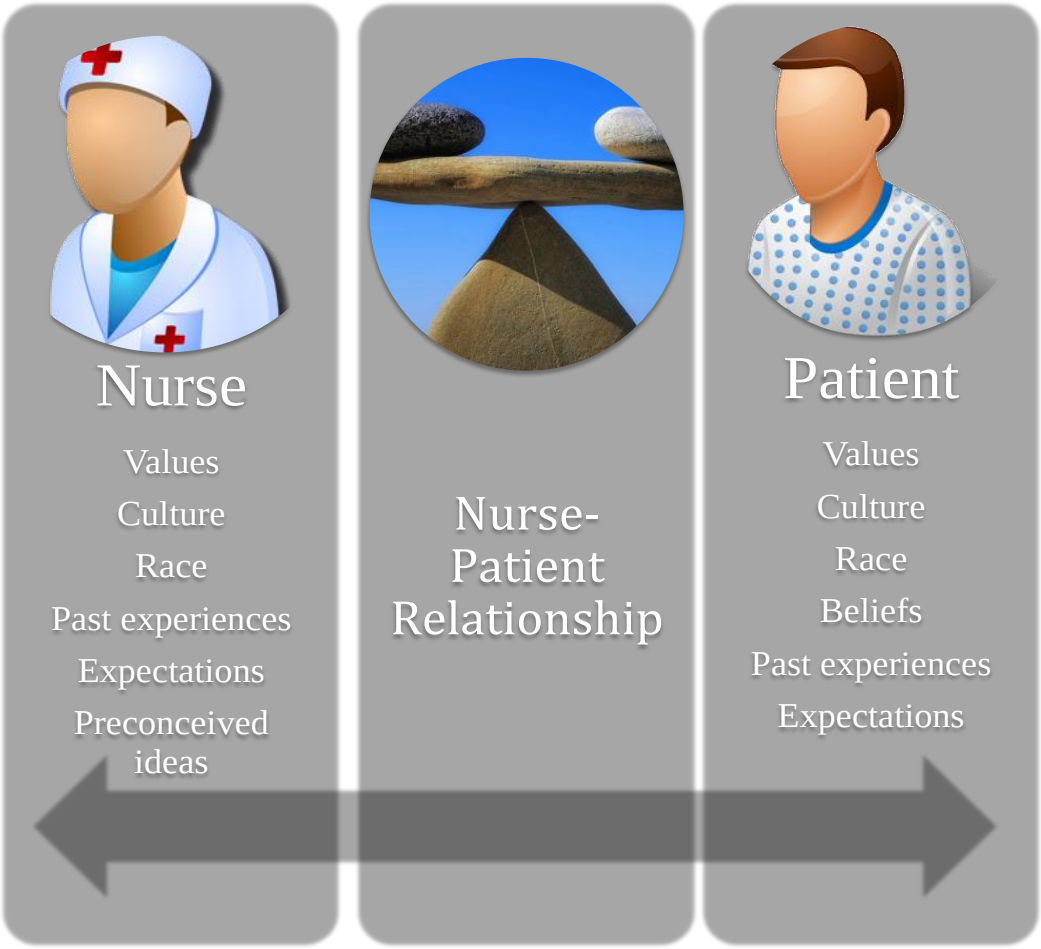
Appendix E

Review of Literature

Author/Year	Study Design	Sample Size/Setting	Intervention	Findings	Evidence Strength: Level & Quality
O'Connell et al., (2010) The Boston Health Care for the Homeless Program: A Public Health Framework	Retrospective program evaluation	11000 homeless individuals/Boston	Public health care framework to address challenges of the homeless population and provide integrative needs. Guided by six principles and using a social justice perspective to provide services	25-year program that continues to serve the homeless population. Services expanded to include medical, behavioral, oral health care, and preventative services.	Level V/Quality A
Buck et al., (2012 Comparing Homeless and Domiciled Patients' Utilization of the Harris County, Texas Public Health System)	Retrospective study	331 homeless individuals/Texas	Comparison of homeless patients versus domiciled patients with focus on readmission/utilization of healthcare services without services in place. Lack of support services were looked at as reasons for rehospitalizations.	Homeless patients had higher rates of readmissions due to their complex needs and lack of integrative services that included medical and behavioral services compared to domiciled patients. Community programs that were made available reduced rates of readmissions.	Level II/Quality B
Zlotnick, Zerger, & Wolfe, (2013) Health Care for the Homeless: What We Have Learned in the Past 30 Years and What's Next	Retrospective program evaluation	805,064 homeless individuals/208 various cities throughout the United States	Follow up on the health care for the homeless (HCH) services and model framework implemented in various cities. HCH incorporates a case management approach: housing, outreach, community collaboration, and primary healthcare.	HCH model has grown to various cities to serve the homeless and has focused on providing specialized comprehensive services to both adults and children. It has been successful in reaching the homeless population.	Level IV/Quality A
Rooney & Arbaje, (2012-2013) Changing the Culture of Practice to Support Care Transitions-Why Not?	Review of evidence-based practices	1 case study/review of hospital settings for care transitions	Author reviewed different care transitions as a way to control costs, improve healthcare delivery, and improve patient experiences. Looking at past medical model solutions that have been largely unsuccessful	Evidence shows a need for changing the current medical system to include innovative solutions that improve quality care and reduce costs. Authors emphasize the importance of a patient-centered care to change current practice guidelines	Level V/Quality B
Jordow, (2014) Patient-Centered Medical Homes: Presenting a Role for the Advanced Practice Mental Health Nurse	Research on Evidence-based practices	N/A/community settings	Exploration and review of evidence for cost effective strategies in behavioral health care in collaboration with primary care providers. Focus on bringing services to the community rather than focusing on infrastructures.	Evidence supports innovative approaches to healthcare delivery by a psychiatric mental health clinical nurse specialist/nurse practitioner. Collaborative approaches provides optimal care and when given in community settings rather than infrastructure. Supporting evidence that collaboration improves healthcare.	Level V/Quality B
Herman et al., (2011) Randomized Trial of Critical Time Intervention to Prevent Homelessness after Hospital Discharge	RCT	150 homeless men and women/hospital setting	Patients were randomized to critical time intervention (CTI) or usual care. The CTI group received a case management approach and early intervention shortly after discharge compared to those receiving usual discharge care and follow up care.	Those that received CTI had less risk of homelessness. Short interventions that were applied in a critical window period provided better outcomes for patients. Community support interventions as part of CTI benefited individuals and decreased risk of rehospitalization.	Level I/Quality B
Schaumberg, Narayan, & Wright, (2013) Advanced Practice Nurse Psychiatric Bridging Intervention	RCT	57 patients/community setting	Advanced psychiatric nurse (APN) provided bridging interventions to a group of patients while waiting for their initial psychiatric evaluation appointment.	Those that participated in the bridging program provided the APN needed less time during their initial psychiatric evaluation and reported better outcomes with support from APN.	Level I/Quality B

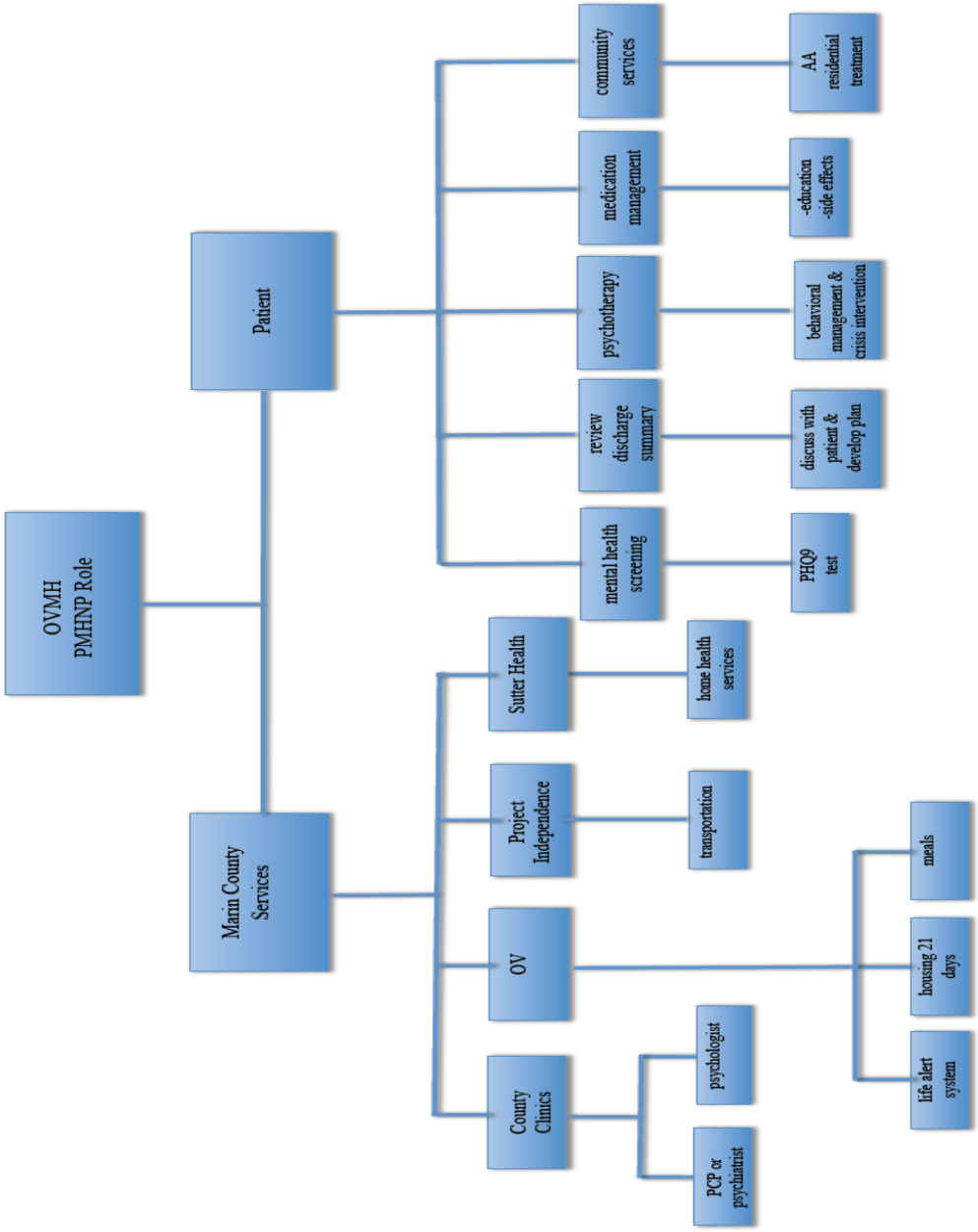
Appendix F

Hildegard Pepleu's Interpersonal Relationship Model



Appendix G

Work Breakdown Structure



Appendix H

Screening Tools

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME:_____ DATE:_____

Over the last *2 weeks,* how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
add columns		+	+	
(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:				

10. If you checked off *any problems,* how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____ Somewhat difficult _____ Very difficult _____ Extremely difficult _____

A2663B 10-04-2005

Appendix I

Screening Tools

Patient Stress Questionnaire*

Name: _____

Date:_____ **Birthdate**_____

Over the ***last two weeks*** , how often have you been bothered by any of the following problems? (please circle your answer & **check the boxes that apply to you**)	Not at all	Several days	More than half the days	Nearly Every day	
1. Little interest or pleasure in doing things	0	1	2	3	
2. Feeling down, depressed, or hopeless	0	1	2	3	
3. ☐ Trouble falling or staying asleep, or ☐ sleeping too much	0	1	2	3	
4. Feeling tired or having little energy	0	1	2	3	
5. ☐ Poor appetite or ☐ overeating	0	1	2	3	
6. Feeling bad about yourself or that you are a failure or have let yourself or your family down	0	1	2	3	
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3	
8. ☐ Moving or speaking so slowly that other people could have noticed, or ☐ the opposite - being so fidgety or restless that you've been moving around a lot more than usual	0	1	2	3	
9. ☐ Thoughts that you would be better off dead, or ☐ hurting yourself in some way	0	**1**	2	3	**Total**
(10)		add columns:			

1. Feeling nervous, anxious or on edge	0	1	2	3	
2. Not being able to stop or control worrying	0	1	2	3	
3. Worrying too much about different things	0	1	2	3	
4. Trouble relaxing	0	1	2	3	
5. Being so restless that it is hard to sit still	0	1	2	3	
6. Becoming easily annoyed or irritable	0	1	2	3	
7. Feeling afraid as if something awful might happen	0	1	2	3	**Total**
(8)		add columns:			

*adapted from PhQ 9, GAD7, PC-PTSD and AUDIT 1/24/11

Please also complete back side →

Provider:_____

Appendix J

Screening Tools

Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all sure	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Add the score for each column	+	+	+	
Total Score *(add your column scores)* =				

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____
Somewhat difficult _____
Very difficult _____
Extremely difficult _____

Source: Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. *Arch Inern Med.* 2006;166:1092-1097.

Appendix K

Screening Tools

AUDIT

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential, so please be honest.

For each question in the chart below, place an X in one box that best describes your answer.

NOTE: In the U.S., a single drink serving contains about 14 grams of ethanol or "pure" alcohol. Although the drinks below are different sizes, each one contains the same amount of pure alcohol and counts as a single drink:

12 oz. of beer (about 5% alcohol) =

8-9 oz. of malt liquor (about 7% alcohol) =

5 oz. of wine (about 12% alcohol) =

1.5 oz. of hard liquor (about 40% alcohol)

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times a month	2 to 3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have 5 or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Note: This questionnaire (the AUDIT) is reprinted with permission from the World Health Organization. To reflect drink serving sizes in the United States (14g of pure alcohol), the number of drinks in question 3 was changed from 6 to 5. A free AUDIT manual with guidelines for use in primary care settings is available online at ***www.who.org***.

Excerpted from NIH Publication No. 07-3769 **National Institute on Alcohol and Alcoholism** ***www.niaaa.nih.gov/guide***

Appendix L

Screening Tools

Substance Abuse Screening Instrument (O4/05)

The Drug Abuse Screening Test (DAST) was developed in 1982 and is still an excellent screening tool. It is a 28-item self-report scale that consists of items that parallel those of the Michigan Alcoholism Screening Test (MAST). The DAST has "exhibited valid psychometric properties" and has been found to be "a sensitive screening instrument for the abuse of drugs other than alcohol.

The Drug Abuse Screening Test (DAST)

Directions: The following questions concern information about your involvement with drugs. Drug abuse refers to (1) the use of prescribed or "over-the-counter" drugs in excess of the directions, and (2) any non-medical use of drugs. Consider the past year (12 months) and carefully read each statement. Then decide whether your answer is YES or NO and check the appropriate space. Please be sure to answer every question.

		YES	NO
1.	Have you used drugs other than those required for medical reasons?	___	___
2.	Have you abused prescription drugs?	___	___
3.	Do you abuse more than one drug at a time?	___	___
4.	Can you get through the week without using drugs (other than those required for medical reasons)?	___	___
5.	Are you always able to stop using drugs when you want to?	___	___
6.	Do you abuse drugs on a continuous basis?	___	___
7.	Do you try to limit your drug use to certain situations?	___	___
8.	Have you had "blackouts" or "flashbacks" as a result of drug use?	___	___
9.	Do you ever feel bad about your drug abuse?	___	___
10.	Does your spouse (or parents) ever complain about your involvement with drugs?	___	___
11.	Do your friends or relatives know or suspect you abuse drugs?	___	___
12.	Has drug abuse ever created problems between you and your spouse?	___	___
13.	Has any family member ever sought help for problems related to your drug use?	___	___
14.	Have you ever lost friends because of your use of drugs?	___	___
15.	Have you ever neglected your family or missed work because of your use of drugs?	___	___
16.	Have you ever been in trouble at work because of drug abuse?	___	___
17.	Have you ever lost a job because of drug abuse?	___	___
18.	Have you gotten into fights when under the influence of drugs?	___	___
19.	Have you ever been arrested because of unusual behavior while under the influence of drugs?	___	___
20.	Have you ever been arrested for driving while under the influence of drugs?	___	___
21.	Have you engaged in illegal activities in order to obtain drug?	___	___
22.	Have you ever been arrested for possession of illegal drugs?	___	___
23.	Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	___	___
24.	Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	___	___
25.	Have you ever gone to anyone for help for a drug problem?	___	___
26.	Have you ever been in a hospital for medical problems related to your drug use?	___	___
27.	Have you ever been involved in a treatment program specifically related to drug use?	___	___
28.	Have you been treated as an outpatient for problems related to drug abuse?	___	___

Scoring and interpretation: A score of "1" is given for each YES response, except for items 4,5, and 7, for which a NO response is given a score of "1." Based on data from a heterogeneous psychiatric patient population, cutoff scores of 6 through 11 are considered to be optimal for screening for substance use disorders. Using a cutoff score of 6 has been found to provide excellent sensitivity for identifying patients with substance use disorders as well as satisfactory specificity (i.e., identification of patients who do not have substance use disorders). Using a cutoff score of <11 somewhat reduces the sensitivity for identifying patients with substance use disorders, but more accurately identifies the patients who do not have a substance use disorders. Over 12 is definitely a substance abuse problem. In a heterogeneous psychiatric patient population, most items have been shown to correlate at least moderately well with the total scale scores. The items that correlate poorly with the total scale scores appear to be items 4,7,16,20, and 22.

Appendix M

Screening Tools

COLUMBIA-SUICIDE SEVERITY RATING SCALE
Screen Version

SUICIDE IDEATION DEFINITIONS AND PROMPTS	Past month	
Ask questions that are bolded and underlined.	**YES**	**NO**
Ask Questions 1 and 2		
1) Wish to be Dead: Person endorses thoughts about a wish to be dead or not alive anymore, or wish to fall asleep and not wake up. ***Have you wished you were dead or wished you could go to sleep and not wake up?***		
2) Suicidal Thoughts: General non-specific thoughts of wanting to end one's life/commit suicide, "*I've thought about killing myself*" without general thoughts of ways to kill oneself/associated methods, intent, or plan. ***Have you actually had any thoughts of killing yourself?***		
If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6.		
3) Suicidal Thoughts with Method (without Specific Plan or Intent to Act): Person endorses thoughts of suicide and has thought of a least one method during the assessment period. This is different than a specific plan with time, place or method details worked out. "*I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it....and I would never go through with it.*" ***Have you been thinking about how you might kill yourself?***		
4) Suicidal Intent (without Specific Plan): Active suicidal thoughts of killing oneself and patient reports having some intent to act on such thoughts, as opposed to "*I have the thoughts but I definitely will not do anything about them.*" ***Have you had these thoughts and had some intention of acting on them?***		
5) Suicide Intent with Specific Plan: Thoughts of killing oneself with details of plan fully or partially worked out and person has some intent to carry it out. ***Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?***		
6) Suicide Behavior Question: ***Have you ever done anything, started to do anything, or prepared to do anything to end your life?*** Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc. **If YES, ask: *How long ago did you do any of these?*** · Over a year ago? · Between three months and a year ago? · Within the last three months?		

For inquiries and training information contact: Kelly Posner, Ph.D.
New York State Psychiatric Institute, 1051 Riverside Drive, New York, New York, 10032; posnerk@nyspi.columbia.edu

Appendix N

GANTT Chart

Timeline Schedule	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	April 2015	May 2015	June 2015	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015
Review of literature for project need and role of PMHNP																
Present project and role of PMHNP																
Meet with collaborative partners and formalize role																
Develop goals & objectives																
Present goals and objectives to team																
Implement project																
Interface with team & collaborative partners																
Collect data																
Evaluation and present findings.																

Appendix O

Cost Benefit Analysis

Services Provided	Individual cost for average 6-10 day stay	Average cost for individual for 1 day stay	Cost to Marin County for OV program participants	Potential savings to county for 21-day maximum OV Program vs. average hospital stay
Hospital Stay (medical-psychiatric services)	$18,732 to $26,760	$2,843	N/A	N/A
OV Program Services	$1,200 to $2,000	$200	$4,200 maximum 21-day stay	N/A
USF OVMH Mobile Health Services (PMHNP services 3 visits during 21-day transition period)	N/A	N/A	$0	$825
Potential savings to hospital from OV Program	$17,532 to $24,760	$2,643	N/A	$14,532 to $22,560
Actual savings to hospital from OV program participants (11 successful cases)	$192,852 to $297,360	N/A	$46,200	$159,852 to $248,160

Appendix P

Survey Questionnaire

Survey questions after discharge	Very Poor	Poor	Fair	Good	Very Good	Total	%
Rating scale	**1**	**2**	**3**	**4**	**5**		
How helpful was it to meet with a nurse before or shortly after being discharged from the hospital to discuss your goals for continued care in the community?							
How helpful were the mobile services provided by the nurse practitioner team help you to connect with services you would have normally not been able to access on your own?							
How helpful was it to have a mobile team of nurses' help you connect with community services compared to your previous experiences of being discharge from the hospital setting?							
How likely would you recommend the nursing mobile health team to help other patients in need of community services?							
Total							
Do you have any suggestions or recommendations to help us improve our services?	Yes		No				
Comments:							

Appendix Q

Survey Questionnaire Results from Case Study One

Survey questions after discharge	Very Poor	Poor	Fair	Good	Very Good	Total	%
Rating scale	1	2	3	4	5		
How helpful was it to meet with a nurse before or shortly after being discharged from the hospital or in the clinic to discuss your goals for continued care in the community?					YES		
How helpful were the services provided by the nurse practitioner team in helping you to connect with services you would have normally not been able to access on your own?					yes		
How helpful was it to have a nursespractitioner help you connect with community services compared to your previous experiences of being discharge from the hospital setting or during clinic visits?					yes		
How likely would you recommend the nurse practitioner to help other patients in need of community services?					yes		
Total							
Do you have any suggestions or recommendations to help us improve our services?	Yes		(No)				
Comments:	Ishouldve used in 26 days						

Appendix R

Survey Questionnaire Results from Case Study Two

Survey questions after discharge	Very Poor	Poor	Fair	Good	Very Good	Total	%
Rating scale	1	2	3	4	5		
How helpful was it to meet with a nurse before or shortly after being discharged from the hospital or in the clinic to discuss your goals for continued care in the community?					✓		
How helpful were the services provided by the nurse practitioner team in helping you to connect with services you would have normally not been able to access on your own?					✓		
How helpful was it to have a nursespractitioner help you connect with community services compared to your previous experiences of being discharge from the hospital setting or during clinic visits?					✓		
How likely would you recommend the nurse practitioner to help other patients in need of community services?					✓		
Total							
Do you have any suggestions or recommendations to help us improve our services?	(Yes)		No				
Comments:	It was helpful meeting with my nurse every week.						

Appendix S

SWOT Analysis

Strengths	**Weaknesses**
Strong evidence-based research to support a mobile health program addressing the needs of homeless individuals. Collaborative partnerships in Marin County support the OVMH team in an effort to meet the transitional needs of the homeless population in Marin County. USF faculty and nurse practitioner students have a strong commitment to build a strong foundational base for this program to succeed and continue. Psychiatric Mental Health Nurse Practitioners understand and have the training to address the coexisting mental health conditions that exist with this population.	The foundation of this program is new and it is necessary to recruit psychiatric nurse practitioner students to participate in this pilot program for success. Time constraints and limited faculty availability can hinder fully implementing this program to its potential. There is a lack of streamline communication between all partnerships with OVMH, which has caused some fragmentation in providing transitional services. The lack of transitional support from inpatient to outpatient care for the homeless, results in frequent rehospitalizations and increased burden to the healthcare system.
Opportunities	**Threats**
OVMH has a vision to provide an innovative and cost effective approach to meet the needs of the homeless population and reduce the burden of healthcare overutilization that exists with rehospitalizations. Marin County partners have a strong commitment to partner with OVMH to provide a strong transitional program for the homeless population. The OVMH program will provide opportunities for students to gain experience while working toward their doctoral degree as nurse practitioners. Full partnerships with members in the Marin County community will strengthen the ties with USF/OVMH team.	The OV program requires continued funding in order to be successful and sustainable. OVMH team relies heavily on referrals from the OV team, which could limit the OVMH team's ability to expand upon their program. Faculty presence is required during all visits, which could also limit availability of services that the OVMH team can provide.