REDUCING BARRIERS TO ACCESSING PRIMARY CARE FOR INDIVIDUALS WITH SEVERE MENTAL ILLNESS: EXAMINING CHARACTERISTICS OF CANADIAN NURSE PRACTITIONER PRACTICE

by

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Abstract

Individuals with severe mental illness experience reduced access to appropriate and timely primary care. This reduced access has been linked to various barriers and may negatively affect health outcomes. The purpose of this project is to identify the characteristics of nurse practitioner (NP) practice that may reduce the most common barriers to accessing primary care encountered by individuals with severe mental illness. (SMI). The most common barriers to access can be broadly described by three themes and include suboptimal therapeutic relationships, complex service delivery, and stigma. A systematic review of the literature indicated that NPs possess a number of practice characteristics that help overcome barriers to accessing primary care. These characteristics can be described as collaborative practice, a holistic approach, and flexible practice formats. NP practice characteristics have the potential to reduce barriers to care for individuals with SMI and improve access to primary care.

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Dedication

To my family: Quoth the raven, `Nevermore' (Poe, E. A., 1845).

Chapter 1: Introduction

Individuals with severe mental illness (SMI) experience poorer health outcomes than the general population. They are also diagnosed with higher rates of chronic illness such as diabetes, respiratory and cardiac diseases (Parks, Svendsen, Singer, & Foti, 2006). Individuals with SMI also have life expectancies 25 years shorter than the general population (Bradford et al., 2008).

The discrepancy in the health status of individuals with SMI compared to the general population has been linked to barriers to accessing primary care, many of which have been identified by individuals living with SMI (Bradford et al., 2008; Parks et al., 2006; Torgerson, Wortsman, & McIntosh, 2006). Difficulty obtaining transportation to services, a perceived lack of respect by health care providers (DeCoux, 2005), a fragmented health care system (Wortans, Happell, & Johnstone, 2006), and stigma (Groh, 2007) are some of the many factors contributing to reduced access to primary care.

Canadian Nurse Practitioners (NPs) are primary care providers who may have a role to play in reducing the most common barriers to accessing primary care encountered by individuals with SMI. NPs are "health professionals who have achieved the advanced nursing practice competencies at the graduate level of nursing education that are required for registration as a nurse practitioner with College of Registered Nurses of British Columbia" (College of Registered Nurses of British Columbia, 2010, p. 5). The presence of NPs within the Canadian health care system has improved access to primary care and offers a model of care provision that is potentially well-suited to address the complex health care needs of individuals with SMI (Choy, Evanson, Martin, & Regehr, 2008)

The purpose of this project is to identify the characteristics of NP practice that may reduce the most common barriers to accessing primary care encountered by individuals with SMI. Specifically, this project addresses the question: What are the characteristics of NP practice that can reduce barriers to primary care commonly encountered by adult individuals with SMI?

The question for this project was generated by issues identified in my practice as a registered nurse (RN) case manager in a community mental health setting. In my role as a case manager supporting individuals with SMI, I was frequently unable to effectively connect individuals with SMI to primary care services. Individuals with SMI reported to me that they felt uncomfortable following up with primary care, and providers would state that offering services to individuals with SMI was challenging. It was not uncommon for individuals with SMI to be fired or be declined service by primary care providers for a variety of reasons. For instance, if a patient with SMI had difficulty complying with expectations of a primary care practice to provide advanced notice when they could not attend a booked appointment, the patient would receive a bill and eventually be released from the practitioner's care.

I also observed that the organization of primary care was another obstacle to connecting individuals with SMI to services. When individuals with SMI received primary care, they often expressed their frustration at having their complex health needs reduced to a single complaint per visit. Patients reported that when they would attempt to discuss more than one issue the patient would be reminded of the policy, or have the second concern dealt with in a superficial manner. Patients also reported that

explanations for follow-up procedures, such as medical imaging and laboratory testing were poor, and that they found the investigative appointments difficult to attend.

Patients in my practice often reported that stigma was a significant barrier to access to primary care services. Often individuals with SMI would resist attending primary care appointments for fear of being stigmatized by other patients, providers, and staff. Patients would tell me they felt uncomfortable being seen with a mental health worker because they felt they were immediately associated with having a mental illness. Patients would also express frustration at the rushed approach their primary care provider would pay to their multiple health concerns. They assumed the provider was not listening to them because they were "crazy." Collectively, these barriers appeared to reduce access to primary care for individuals with SMI.

My experience working alongside NPs led me to believe that their practice characteristics offered a potential solution to the primary care barriers commonly encountered by individuals with SMI. I observed NPs taking time to consult with a diverse range of community supports to help patients attend appointments inside and outside of the primary care setting. I witnessed NPs employing a number of treatment modalities that reflected a broad range of advanced practice nursing skills and approaches. I also noticed how NPs were able to adjust their practice to meet the needs of the individual patients. NPs did not appear to demand that patients conform to practice rules such as timely attendance and did not bill for missed appointments, thus improving rapport. I also observed NPs inviting the patient to participate in the design of their own care, such as asking about medication preferences, the affordability of medications, and frequency and timing of appointments. It was these characteristics of NP practice that led

me to believe NPs may have an important role to play in reducing primary care barriers commonly encountered by individuals with SMI.

This project presents findings of an integrative review of current and relevant literature focused on answering the research question. Critically analyzing the literature is an opportunity to identify those specific characteristics of NP practice that are particularly valuable in reducing barriers and improving access to care. Areas of NP practice that may contribute to the presence of barriers may also be identified as part of this review. This research is an opportunity to compile evidence and make recommendations to support NP practice to continue to improve access to primary care for Canadians living with SMI.

In Chapter 2, the background and context for the project are provided, including definitions of relevant concepts and key terms. The findings are presented in Chapter 3, through a critical examination and synthesis of the literature. In Chapter 4, the discussion related to the findings is presented that identifies the characteristics and approaches of NP practice that may prove effective in reducing barriers to the access of primary care. In the final chapter, recommendations for NP practice are proposed. Strategies that NPs can use in practice to reduce barriers to primary care encountered by individuals with SMI are offered as conclusions.

Methods

A thorough review of the literature was completed to search for information related to barriers encountered by adults with SMI that limit access to primary care, and NP practice characteristics that reduce those barriers. The academic databases CINAHL,

PsycINFO, and PubMed were selected and searched. These databases cover a broad spectrum of peer-reviewed literature including journal articles, books, and dissertations related to the fields of medicine, nursing, allied health, and behavioral sciences. Selected publications included primary research, literature reviews, and discussion and opinion articles published within professional journals. *Google Scholar* was also searched to supplement the academic databases and locate relevant grey literature. Searches were conducted between January 2010 and February 2012. Searches were reviewed annually over this time frame to determine if any new literature had become available.

Table 1: Initial inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Published in English	Target population of study limited to children or elderly
Published between 1999-2012	Target population of study of a specific cultural back ground other than North American, Australian/ New Zealand, or from the United Kingdom
Addressed at least two of the following:	Published in a language other than English
Nurse practitioners	
Primary care	
Mental disorders	
Treatment barriers	
Health service accessibility	
Published in a peer reviewed journal or a professional/ government website	

Inclusion and exclusion criteria were then developed to establish the range of publications that would be reviewed. It is important to note that publications specifically examining populations not primarily of a Western European or North American background were excluded. The rational for this is that the Diagnostic and Statistical

Manual of Mental Disorder (American Psychiatric Association, 2000) has been developed to diagnose mental illness specifically within individuals from Western cultures and reflects the cultural norms of this population.

Before conducting searches, key words were identified that were related to the core concepts of the project and generated the largest number of results. The selected key words included nurse practitioners, mental disorders, primary care, primary health care, health services accessibility, and treatment barriers. A search for Medical Subject Headings (MeSH) terms was also conducted looking for terms similar to the key words. The four identified MeSH terms included nurse practitioners, mental disorders, primary health care, and health services accessibility. Tables 2 and 3 identify the number of results for the two key word search combinations. Where search results exceeded 250 articles, additional search terms were utilized to reduce the listing.

Tables 4, 5, and 6 provide the number of three word combination results from key word and MeSH term searches. Articles were included if key words included any two key words or MeSH terms and met the remaining criteria. This process resulted in 104 identified publications.

A second review of the selected articles was performed looking for a match of any three search terms in the key words, title, or abstract. The three search terms were nurse practitioner, primary care, and health access or barriers. This left 71 publications that were reviewed in their entirety for relevance to the research project, of which only 24 contained enough relevant information to be included as a finding. One additional publication was located as part of a review of the references of the selected articles for

inclusion. The final number of articles located as part of the review of the literature was 25.

Chapter 2: Background and Context

This chapter provides the background and context that will assist readers in understanding this project. This chapter will include relevant concepts, epidemiology, and pathophysiology of SMI. The barriers to primary care are then organized and discussed under three broad themes and the chapter concludes with a brief description of NPs and their role in Canadian health care.

Relevant Concepts

Primary care. Primary care is defined as "continuing, comprehensive, and preventable health care services that are the first point of health care for a patient in an ambulatory setting" (Piper, 2008, p. 1265). Primary care is distinguished from primary health care in that the latter encompasses community factors, which contribute to health status (World Health Organization, 2001).

Shared medical appointments (SMAs). SMAs involve multiple patients seen at the same time for routine care (Noffsinger, Sawyer, & Scott, 2003). SMAs were designed for the primary care setting to improve the efficiency of primary care providers and therapeutic relationships with patients. In SMAs, a team of providers treat the chronic health care needs of up to 16 individuals in a group setting that may last up to 90 minutes.

Background and Context

SMI. SMI is the collective term which encompasses a wide range of diagnoses of mental disorders. Diagnostic criteria are defined by the Diagnostic and Statistical Manual of Mental Disorders (4th edition, American Psychiatric Association, 2000). There is no universally accepted lists of diagnoses that fall under the umbrella term SMI (Gold, Kilbourne, & Valenstein, 2008). For the purposes of this project, SMI includes psychotic

disorders such as schizophrenia, affective disorders such as major depression and bipolar and generalized anxiety disorders. This group of diagnoses was chosen for this paper as they represent the most common SMIs treated in Canada and reflect the most disabling and persistent illnesses with a shared pathophysiology (Offord et al., 1996; Stahl, 2008).

Pathophysiology of SMI. The anatomy and physiology of the neurological system is complex. The brain is made up of billions of cells called neurons (Stahl, 2008). A neuron is composed of a cell body, a single branch called an axon, and a multi-branched structure called a dendrite. The electrical signal is believed to primarily travel from the axon to the dendrite. Messages travel along the length of each of these cells in the form of an electrical impulse. The neurons are not physically connected and the electrical impulse does not directly travel from one cell the next.

Neurotransmitters are the messenger molecules responsible for the transmission of signals between neurons. The many different neurotransmitters are grouped into three categories: amino acids, amines, and acetylcholines. Each neuron primarily releases and accepts neurotransmitters at either end of the cell in response to the electrical signal and the neurotransmitters then move back and forth between neurons in the synaptic gap. Neurotransmitters released by a single neuron are believed to affect numerous nearby cells, causing the brain to be continually bathed in a complex molecular bath of messenger molecules (Stahl, 2008).

It is presently understood that, when the composition of the neurotransmitters released at the synaptic gap is altered for any reason, the interpretation of signals between neurons is distorted, leading to the symptoms associated with the various diagnoses of SMI. Potential causes for the onset of SMI include genetic, environmental, and

psychosocial factors (Stahl, 2008). Researchers have begun to identify genetic factors responsible for predisposing individuals to the onset of SMI. Environmental factors such as stress and trauma are also identified as influencing the onset. Lifestyle choices such as the use of illicit drugs and alcohol also affect the onset, severity, and outcome of SMI (Parks et al., 2006).

Definitions and Demographics of SMI. SMI is an umbrella term that encompasses a range of diagnoses. One characteristic shared by individuals diagnosed with SMI is impaired connections to reality and people of importance in their lives (Oud et al., 2009). The following is a more detailed description of the SMI diagnoses included in this project. In 1999-2000, 3.8% of all hospitalizations in Canada were related to a SMI (Public Health Agency of Canada, 2012). Deaths from suicide associated with SMI represent 2% of all deaths in Canada (Burman, McCabe, & Pepper, 2005). Peak annual prevalence occurs between 15–25 years of age (American Psychiatric Association, 2000).

Schizophrenia is a complex mental illness that affects interpretation of sensory input, cognitive processing, and emotional responses (American Psychiatric Association, 2000). Symptoms include hallucinations, delusions, thought disorder, reduced emotional responses, and irritability. Schizophrenia affects men and women equally. Onset is typically in the teens or young adulthood, but often later in women. The prevalence of schizophrenia in Canada is approximately 0.3% (Offord et al., 1996).

Major depressive disorder involves the loss of interest and pleasure in nearly all activities (American Psychiatric Association, 2000). Symptoms include changes in weight, sleep, psychomotor agitation, feelings of worthlessness, difficulty concentrating, and thoughts of death or suicide. Major depression is more common in women than men

(Patten et al., 2006). Lifetime prevalence of major depressive disorder (MDD) is 8% (Public Health Agency of Canada, 2012). The World Health Organization (2001) has identified major depressive disorder as the fourth highest cause of disability worldwide.

Bipolar disorder is a SMI that involves periods of elevated mood (mania) and depression (American Psychiatric Association, 2000). Symptoms of mania include reduced need for sleep, feeling of euphoria, impaired judgment, racing thoughts, rapid speech, and increased irritability. Periods of mania are mixed with periods of major depression. Bipolar disorder affects men and women equally, and onset is typically in the teen years or early adulthood (American Psychiatric Association).

Generalized anxiety disorder is a pattern of frequent or constant worry and fear related to a variety of situations and events (American Psychiatric Association, 2000). Symptoms include persistent worry, difficulty concentrating, fatigue, restlessness, and disrupted sleep patterns. Generalized anxiety disorder affects women more frequently than men and can appear as early as childhood (American Psychiatric Association). The 12-month prevalence of anxiety disorders are estimated at between 12.2% and 17.2% and are the most common of all SMIs (Burman et al., 2005).

Economic and health effects of SMI. The economic losses associated with SMI have an impact on the Canadian economy. The annual cost of treating SMI in Canada has been calculated at $7.3 billion (Public Health Agency of Canada, 2012). This cost reflects physician billing, hospitalization, and self-reported economic loss. A 1997-1998 study concluded annual economic loss associated with SMI was valued at $14.4 billion dollars (Public Health Agency of Canada, 2012).

Research has begun to identify that individuals with SMI experience increased mortality associated with increased morbidity (Vilena & Chelsa, 2006). Individuals with SMI experience increased rates (versus the general population) of diabetes mellitus (16.0% vs 4.7%), hypertension (36.2% vs 15.5%), asthma (19.4% vs 7.0%), and chronic bronchitis (25.0% vs 4.2%), (Sokal et al., 2004). These differences contribute to the reduced life spans of individuals with SMI (Parks et al., 2006).

Research indicates individuals with SMI experience increased risks to health associated with lifestyle choices and side effects of treatment. Individuals with SMI are more at risk for medical illness related to smoking, alcoholism, diet, and a sedentary lifestyle than the general population (Bartels, 2004). Treatment of SMI, which includes atypical antipsychotics, is also associated with increased rates of hypertension, dyslipidemia, and diabetes mellitus (Lawrence & Kisely, 2010).

The discrepancy in the health status of individuals with SMI is thought to be at least partially explained by inequities in the way health care is accessed by this sub-population (Druss, 2007). Individuals with SMI are less likely to receive routine medical screening than is the general population (Druss, Rohrbaugh, Levinson, & Rosenheck, 2001). Individuals with SMI are less likely to receive surgical interventions such as appendectomies, do not recover as quickly when surgery is performed, and experience more complications (Lawence & Kisley, 2010). Individuals with SMI experience inequalities in the access and uptake of medical care compared to the general population (Mitchell, Malonem, & Doebbeling, 2009).

Access to primary care. Access to primary care is a complex concept in regards to the provision of health services and can be described as consisting of three sub-

components; accessibility, availability, and acceptability (Sibley & Glazier, 2009). Authors such as Sibley and Glazier have developed this way of considering access from previous conceptualizations and applied them to the current Canadian health care landscape. Access is a personal issue that reflects the individual's ability to have their health needs met, and is highly dependent on psychosocial determinants such as education, financial status, and employment (Torgerson et al., 2006). Access to care is also an indicator of how well the health care system is performing and is often measured by the number of appointments made or surgeries conducted. Access to primary care is also typically described by rates of utilization, and does not commonly reflect who does not receive care and for what reasons (Sibley & Glazier, 2009).

The goal of improving access to primary care is an important objective for Canadian health care policy makers In 2004, the Prime Minister and premiers established the goal that 50% of Canadians would have 24/7 access to a multidisciplinary team of health care providers by 2011 (First Ministers' Meeting on the Future of Health Care, 2004). Exact figures about the success of reaching this goal is unknown (Standing Senate Committee on Social Affairs, Science and Technology, 2012), In 2007, Canadians were reporting the second lowest access to a primary care provider of seven commonwealth countries—Australia, Canada, Germany, the Netherlands, New Zealand, the United Kingdom, and the United States. Only 84% of Canadians reported they had regular access to a primary care provider, compared to 100% of the respondents from the Netherlands. Only citizens of the United States reported less access to primary care, at 80% (Schoen et al., 2007). To improve access to care and meet designated priorities, the

Canadian government began exploring new ways to achieve their goals, one of which was the wider introduction of nurse practitioners.

Example of barriers in practice. The following is an example from my own practice as an RN case manager in community mental health that illustrates how a patient with SMI experiences access to primary care.

A patient with SMI that I provided care for, whom I will call George, experienced difficulty retaining a regular primary care provider because of the challenges he experienced in attending appointments. George missed numerous appointments due to over-sedation related to his medications, and had difficulty obtaining transportation to the clinic from his rural home. Due to multiple missed appointments George's primary care clinic "fired" him and he was no longer able to book appointments with that office. To receive primary care services George then had to attend a walk-in clinic. George stated he was uncomfortable explaining the cause of his visit to the walk-in clinic receptionist in the middle of the waiting room. George was concerned that he might be labeled because of his diagnosis, and feared being stigmatized by staff and other patients.

Once in the treatment room, a primary care provider who was unfamiliar with his condition met with George for the first time. George experienced difficulty expressing the nature and severity of his symptoms within the time allotted for the appointment. As a result of the communication difficulties and limited time, George's medications were refilled, but not readjusted to treat worsening symptoms, and George was referred to community mental health resources for further assistance. George did not have a designated community mental health physician at the time and was placed on a waiting list for these services.

After his walk-in clinic appointment George arrived at the pharmacy with his prescription. He was told that he was unable to have the prescriptions refilled because his provincial special medical coverage for psychiatric medications, Plan G, had expired. Plan G is a provincial program that pays for psychiatric medication on behalf of individuals with limited income. The pharmacy was unable to refill the medication without charging George without current documentation of Plan G coverage. George could not afford to pay for the medications out of pocket. George was then unable to schedule another appointment with community mental health staff to have the forms filled out to reinstate the Plan G coverage until the following week because of staffing limitations at the community program, and only had enough medication to treat the symptoms of his SMI for one more day.

In this case George walked to my office in the community mental health building the following day and I was able to connect him with a mental health physician on an emergency basis. The physician, who provided only psychiatric care, offered samples of the required medication that would tide George over until the next week's appointment with a physician on the community mental health team. Had George been unable to obtain his medications in time, his mental health could have deteriorated and resulted in an increase in symptoms and hospitalization related to his schizophrenia.

Barriers to access. In order to understand to concept of access in primary care, it is important to understand what factors interfere with that access. Another way to look at this issue is what are the barriers to primary care for patients with SMI? It is important to note that in this project barriers are self-described reasons for the inability to access care (Sibley & Glazier, 2009).

Barriers to primary care have been described as arising from problems with availability, accessibility, and acceptability (Sibley & Glazier, 2009). Availability is the lack of services or unacceptable wait times. Accessibility is related to cost and transportation issues. Finally, acceptability has to do with personal preference based on the preferences or circumstances of the individual.

The inequities in access to health care are explained in part by barriers to care experienced by individuals with SMI (Mesidor, Gidugu, Rogers, Kash-MacDonald, & Boardman, 2011). There was no common language in the literature to describe the barriers to accessing primary care. To help organize this project, the barriers were organized into three broad themes identified in the initial literature review for this project and from my own clinical practice. The themes were suboptimal therapeutic relationships, complex service delivery, and stigma. Each theme captures and distills similar concepts into a single term that describes the most common barriers. The themes are both specific to individuals with SMI and similar to the three main barriers to primary care encountered by all Canadians (Sibley & Glazier, 2009).

Individuals with SMI experience reduced services related to sub-optimal therapeutic relationships with primary care providers. Sub-optimal therapeutic relationships arise when the patient and the care provider do not engage with one another to effect positive change for the patient because of insufficient communication, trust, and respect (DeCoux, 2005). Individuals commonly report that not therapeutic relationships with primary care providers are negatively affected when complaints related to the SMI diagnosis are dismissed as somatic (Davis, 2004). Patients with SMI report receiving insufficient education related to treatment options and potential side effects which

isolates them from treatment planning (Hardy, 2008). Isolation from the decision-making process results in patients not trusting care providers to consider patient preference and choice, which leads to a loss of respect (Hardy).

Insufficient appointment times are an important sub-theme of sub-optimal therapeutic relationships identified by individuals with SMI. Insufficient appointment times restrict a patient's ability to express their health care needs in the time available. This can result in health concerns of individuals with SMI being ignored or overlooked (Wortans, Happell, & Johnstone, 2006).

In the clinical example provided earlier, sub-optimal therapeutic relationships developed when the physician was unable to gather enough information to adequately assess George's needs. George's medication was not adjusted as a result, and George failed to develop trust that his concerns would be validated during the next appointment. This is an example of how George would experience a reduced access to primary care in the form of reduced acceptability of services. The insufficient time available in the walk-in clinic contributed to restricted access through limited availability.

Patients with SMI also experience reduced access to primary care as a result of complex service delivery. Complex service delivery is a barrier that exists because of the organizational, logistical, and bureaucratic challenges of delivering primary care resulting from a fragmented primary care system (DeCoux, 2005). Complex service delivery restricts access to care by requiring individuals with SMI to attend multiple primary care related appointments in different locations. Complex service delivery reduces access to primary care for individuals with SMI by requiring patients to navigate agency, professional, and organizational boundaries without adequate support (Glasby & Lester,

2004). Individuals with SMI also identify ineffective communication between care providers as a barrier to accessing services (Boardman, 2006). A lack of effective communication between primary care providers requires patients to undergo numerous, redundant assessments that discourages follow-up (DeCoux, 2005).

In the clinical example, George encountered two barriers related to complex service delivery. George encountered accessibility barriers when he was unable to retain a regular primary care provider because of his many health and psychosocial factors, and then was unable to obtain the required medications immediately because Plan G expiry. George experienced reduced availability when he had to attend a second appointment with a with a mental health physician to obtain medication samples while his request for Plan G funding was being processed.

Lastly, stigma reduces access to primary care for individuals with SMI. Stigma takes two forms that negatively affect access to primary care services. Internalized stigma is a result of the fears experienced by individuals with SMI of the misunderstanding of their health care needs by primary care providers, health professionals, and the general public (Drapalaski, Milford, Goldberg, Brown, & Dixon, 2008). As a result of these internalized beliefs, individuals with SMI are less likely to seek out primary care services. Externalized stigma is the discriminatory behavior that patients with SMI experience as a result of other individuals misunderstanding the nature of mental illness (Van Den, Tillaart, Kurtz, & Cash, 2009; Wortans et al., 2006). Externalized stigma can take the form of disrespectful treatment of the individual by staff and other patients, or access becoming limited by policies that are biased against certain individuals, such as charging for missed appointments.

In the clinical example, George experienced two kinds of stigma. George's inability to obtain a regular primary care provider was related to his challenges booking and attending regular appointments. This is externalized stigma as a result of his SMI. George could have experienced internalized stigma when he was uncomfortable providing his reason for the appointment to the receptionist for fear of being labeled by staff and other patients. Stigma, externalized or internalized, limits access to care by reducing acceptability of care.

The current model of primary care does not meet the needs of individuals with SMI. Individuals with SMI have described the ways in which the current model of delivery fails to recognize their unique health needs and restricts access to services (DeCoux, 2005). Having identified the most common barriers and the ways in which they restrict access to primary care, it is possible to search for alternative approaches to providing primary care to individuals with SMI.

Nurse practitioners. The goal of introducing of NPs in Canadian health care was to improve health outcomes and increase access to primary care to families by identifying and reducing service gaps (British Columbia Ministry of Health, 2006; Canadian Nurse Practitioner Initiative, 2006). The NP role has been present in North America since the 1960s, and initially described a nurse who worked in an advanced clinical role (Worster, Sardo, Thrasher, Fernandes, & Chemeris, 2005). There are currently over 3000 NPs in Canada working in a wide variety of clinical settings that include emergency health care, psychiatry, internal medicine, surgery, and family practice (Canadian Nurses Association, 2011). NPs employ a holistic and collaborative approach to the provision of preventative care as well as treatment of chronic and acute illness (Choy et al., 2008; Keith & Askin,

2008). Collaboration in NP practice reflects a core practice competency and reflects both interpersonal collaboration with patients as well as interprofessional collaboration. Holistic NP practice refers to the use of a wide range of therapeutic options and treatment modalities when providing primary care.

NPs in Canada possess a range of clinical skills and educational preparation. The family NP receives education that emphasizes the provision of care for the family across the life span (Health Force Ontario, 2006). Prior nursing experience and education affect how NPs enact their scope of practice while the jurisdiction in which an NP practices affects the range of skills and treatment options available to them. In British Columbia, entry level scope of practice includes diagnosing and health care management, prescribing medications, and consultation and referral to physicians (College of Registered Nurses of British Columbia, 2010).

While there are no nationally standardized guidelines for NP education and practice in Canada, all provinces and territories have introduced legislation that formally defines and describes the NPs (Canadian Nurses Association, 2011). In British Columbia, for example, the Health Professions Act recognizes the NP role and identifies the College of Registered Nurses of British Columbia as the regulatory body responsible for governing NP practice (British Columbia Ministry of Health, 2006). Similar legislation exists in other provincial and territorial jurisdictions (Worster et al., 2005).

Canadian NPs do not commonly rely on the fee-for-service model of remuneration employed by other primary care providers including physicians (Donald et al., 2010). This characteristic of practice affords NPs a certain degree of flexibility to extend or modify the structure of appointments to address the health care needs of their

patients. Funding models that do not rely on fee-for-service encourages Canadian NPs to pursue and establish collaborative relationships.

Chapter 3: Findings

Review of the relevant literature identified many barriers to primary care commonly encountered by individuals with SMI. For the purposes of this enquiry, those barriers have been organized into the three themes previously outlined in the background section: sub-optimal therapeutic relationships, complex service delivery, and stigma. The following is a critical review of the literature that describes how NPs improve sub-optimal therapeutic relationships, assist individuals with SMI to navigate complex service delivery, and work to reduce stigma. The concept of access to care will be expanded in regards to its three components: availability, accessibility, and acceptability (Sibley & Glazier, 2009).

Improving Sub-optimal Therapeutic Relationships

In several literature reviews, clinical trials, case studies, and articles, NPs were found to improve therapeutic relationships and access to primary care by adapting practice style and format to meet the needs of individuals with SMI. NPs used strong communication skills to support dialogue and share information. These skills assisted NPs in fostering trusting and respectful practice environments. NPs also integrated mental and physical health needs as well as psychosocial concerns within the primary care appointments. Lastly, NPs introduced flexible appointment formats to meet the unique primary care needs of individuals with SMI.

Several studies demonstrated that NPs reduced sub-optimal therapeutic relationships experienced by individuals with SMI by improving communication between themselves and their patients. Hardy (2008) conducted case study that examined models of care used in treating mental illness. He concluded that a willingness to support the

patient in determining what role the NP took in the patient's recovery strengthened therapeutic relationships. Wortans et al. (2006) conducted a qualitative, exploratory study examining satisfaction with care provided by NPs to seven individuals with SMI. The researchers found that the ease with which NPs communicated with their patient's strengthened the therapeutic relationship and improved access to care. NPs in these studies used communication techniques that helped patients feel comfortable sharing information, promoted the exploration of health concerns, while improving therapeutic relationships. These techniques included empowering the patient, creating an informal environment where patients felt comfortable, and using easily understood language to convey treatment options. These studies represent NPs improving access to primary care in the form of improving the acceptability of services.

The findings from a case study and a project proposal found that NPs improved therapeutic relationships between themselves and patients with SMI by developing a shared vision of treatment. Authors of an American case study which followed an individual treated simultaneously for Hepatitis C and schizoaffective disorder concluded that maintaining a flexible and dynamic approach, which recognized the changing health needs and integrated ongoing patient feedback, improved therapeutic relationships between the patient and NPs (Gardenier, Neushotz, & O'Connor-Moore, 2007). The NP earned the trust and respect of the patient by adapting treatment in response to the complex mental and physical side effects of treatment based on patient feedback. Storfjell et al. (2008), in a project proposal describing an integrated health clinic in Chicago, Illinois, concluded that NP-led shared medical appointments improved therapeutic relationships. Shared medical appointments provided a forum for individuals with a SMI

to share the responsibility for health care decisions with NPs and to consider additional treatment options. The results of these two publications suggest that NPs can reduce barriers to primary care related to suboptimal therapeutic relationships by collaborating with patients with SMI. These interventions are also examples of how NPs improved the acceptability of primary care services to patients with SMI.

NPs were able to improve therapeutic relationships by providing treatment for mental and physical health needs. Wand and White (2007) employed a qualitative research approach to assess outcome measures in the treatment of mental health by NPs in Australia. Two focus groups with a total of 11 participants were interviewed. Wand and White reported that NPs improved sub-optimal therapeutic relationships by saving time and reducing delays in treatment through addressing mental and physical health concerns simultaneously. The authors concluded that NPs improved therapeutic relationships by empowering patients and fostering resilience. Though the study examined NPs working in an emergency department setting, the authors contended that the strengths of NPs could be transferred to an outpatient, or community setting. This study demonstrates how NPs were able to improve availability and acceptability simultaneously.

Three publications exploring strategies to improve primary care access for individuals with SMI identified a link between integrating psychosocial concerns and improvements with therapeutic relationships. Groh (2007) concluded from a review of literature regarding poverty and mental illness amongst women, that NP support for child welfare and financial issues contributed to improved therapeutic relationships and attendance to appointments. Bauman (2004) drew similar conclusions from his richly

descriptive article examining clinical, conceptual, and operation challenges faced by NPs when providing care to inner city patients. Bauman reported that, when the NP provided support for psychosocial issues, the therapeutic relationship between patients and NPs improved as did access to primary care. Bauman noted that support included recognizing and integrating social issues as part of treatment planning as well as communicating and collaborating with various agencies. Bauman's case study clearly emphasized the practice challenges of supporting individuals with SMI. Johnson (2001) drew similar conclusions based on a qualitative study of four focus groups, with a total of 31 participants that examined primary care needs of women with SMI living in economically disadvantaged rural areas in the United States. The NPs in Johnson's study primarily offered emotional support for their patients. Unfortunately, Johnson's study included NPs and advanced practice nurses and did not distinguish between the two practice groups when drawing conclusions, which limits a direct association with NP practice. In each of the three studies, the efforts of NPs to recognize holistic health and social concerns improved therapeutic relationships with their patients and increased acceptability and use of primary care services.

Studies that examined NPs' adaptations of primary care appointments revealed improved therapeutic relationships when the format of the appointment was adjusted to meet the unique needs of patients with SMI. In a retrospective, descriptive, correlational study examining the role of shared medical appointments (SMAs) in the recovery of patients with SMI, Tierney and Kane (2011) reported that NP-led SMAs improved therapeutic relationships and provision of primary care for individuals with SMI. Participants in the study reported that they were very satisfied with the relationship

between themselves and the NPs. Participants cited access to the NP for assessment and treatment within the group as a reason for their satisfaction with NP care. Wortans et al. (2006) drew similar conclusions from a qualitative, exploratory study of consumer satisfaction with NPs. This study found that patients with SMI were more likely to attend appointments with NPs compared to other care providers because NPs were willing to extend appointments or meet patients in alternative settings such as the patient's home. Boardman (2006) conducted a quasi-experimental study that sought to assess primary care access among 76 participants with SMI attending American NP-led clinics. Boardman found that satisfaction with primary care services was increased when NPs spent between 45 minutes and an hour with each patient as part of the initial assessment. Boardman noted that improved satisfaction with NPs in the experimental group was associated with a 50% increase in attendance to primary care appointments. All three studies described improved accessibility and acceptability when NPs adapted appointments to better meet the primary care needs of individuals with SMI.

Not all NPs were able to adapt practice to accommodate the complex primary care requirements of individuals with SMI. In a study of mental health outcomes in 130 individuals with a major depressive disorder, NPs reported they were unable to provide the amount of time for appointments that patients requested (Torrisi & McDanel, 2003). The NPs in the study identified this as a barrier to primary care availability for individuals with SMI.

Navigating Complex Service Delivery

The findings indicate that NPs reduced complex service delivery barriers commonly encountered by individuals with SMI. NPs improved the communication and

collaboration between patients and other health care professionals, which in turn improved continuity of care. NPs also offered a wide range of therapeutic options that reduced the need to interact with multiple care providers. Finally, NPs led collaborative clinics that supported alternative practice models as a means to streamlining care and improving access to services.

An American case study examining the role of NPs in treating and co-managing psychiatric and medical health issues identified interpersonal collaboration as a means to reducing complex service delivery barriers (Gardenier et al., 2007). Gardenier et al. reported that the NP in the study worked in concert with the patient to advocate for the coordination of the many appointments required to treat the patient's complex physical and mental health needs associated with Hepatitis C. NPs collaborated with the patient to overcome side effects of hepatitis treatment, such as rashes, made medication adjustments to treat mood alterations, and provided education for family members to help them support the patient. As a result of this collaborative relationship, the NPs supported the patient through his treatment. The authors concluded that it was the intervention of the NP that maintained the patient's access to care throughout the treatment by ensuring the acceptability of services.

NPs established effective channels of communication and cooperation with a range of health care providers to improve access to primary care on behalf individuals with SMI. Doey, Hines, Myslik, Leavey, and Seabrook (2008) conducted a well-designed retrospective review of 805 charts from a collaborative clinic in Windsor, Ontario, to examine patient satisfaction with co-located mental health and primary care services. The researchers concluded that NPs communicated effectively with allied health care

providers and fostered an environment of trust and respect, which helped to improve continuity of care for individuals with SMI. The quasi-experimental study conducted by Boardman (2006) and randomized trial by Druss et al. (2010) also concluded that NPs effectively coordinated the sharing of client information amongst the members of the health care team to organize treatment and provision of services. In both studies, patients receiving care from NPs received increased preventative screening, attended more referrals, and increased adherence to treatment plans as a result of improved communication between care providers. Groh (2007), in a case study, examined her role as a NP in reducing barriers to primary care for women with SMI and concluded that collaboration was fundamental to reducing complex service delivery barriers that arise from psychosocial situations. Groh emphasized the need to collaborate with social and medical services to facilitate access to primary care. Groh concluded that collaboration between care providers resulted in the increased availability of services, though the conclusions were based on a single patient and provider.

NPs improved access to primary care by collaborating with psychiatric services to improve continuity of care on behalf of individuals with SMI. Sabado and Villanueva (2009) reported in a review of an initiative to integrate primary and mental health care that offering mental and physical health services in the same location improved continuity of care and attendance to primary care services by individuals with SMI. The researchers reported a 12% increase in attendance, which they attributed to the integrated services. The methodology was not described which reduced the reliability of the findings. Improving the integration of psychiatric services reflects an increase in the availability of primary care services.

Another way NPs collaborated to improve availability of services was by ensuring the overall coordination of primary health care. Roberts, Robinson, Stewart, and Wright (2008) reviewed a NP-led American health center that integrated mental and physical health care and concluded that NPs reduced access barriers by coordinating psychiatric, addiction, and infectious disease care. NPs in the study by Roberts et al. relied on strong working relationships with members of the health care team and administrative support staff to delegate responsibilities while maintaining a unified treatment plan. A best-practice case scenario was described in the study by the authors to reinforce the efficacy of the NP role in arranging care and maintaining the availability of services. The use of NPs to maintain accessibility was cost effective enough that program coordinators wanted to integrate more NPs into the program.

Boardman (2006) conducted a quasi-experimental field study of 76 participants, with 39 in the experimental group examining health access for individuals with SMI. Boardman concluded that patients experienced improved availability of primary care services such as preventative screens and medical treatments as a result of receiving primary health care from a NP. These improvements were associated with NPs coordinating care and sharing the responsibility to arrange and deliver services with case managers and psychiatrists to improve continuity. The results of Boardman's study indicated an increase in attendance at primary care appointments and a decrease in the use of emergency health services when care was provided by the NP.

Canadian and American NPs were able to reduce complex service delivery barriers and improve the availability of primary care by offering diverse treatment options within the primary care setting. A randomized, controlled trial examining barriers

and facilitators to health care for individuals with SMI concluded that NPs improved access to primary care and decreased rates of hospitalization (Mesidor et al., 2011). The authors reported that the provision of rapid access appointments and increased education regarding a range of topics such as nutrition and lifestyle choices to individuals with SMI all played important roles in increasing the acceptability of primary care services. Reynolds, Chesney, and Capobianco (2006) used a bivariate conceptualization that compared behavioral health risks with physical health risks. Reynolds et al. concluded that NPs who provided a range of screening, preventative, and educational options as part of primary care reduced complex service delivery barriers and increased availability of care. The study methodology was not well described but did demonstrate attendance to primary care appointments improved as a result of NPs working to quickly respond to emerging health care needs, and integrating a range of treatment options, such as wound and diabetic foot care.

Puskar and Bernardo (2002) also concluded from their literature review that holistic care, which included increased screening for depression and chronic illness, would lead to improved health delivery and address the unmet primary care needs of individuals with SMI. Finally, a publication that reviewed the effects of an integrated health center reported that the use of primary care and laboratory services for individuals with SMI increased 62% between the first and second year of the program (Marion et al., 2004). The publication did not include clear methodology and referred only to nurses working at an advanced level with additional education as advanced practice nurse as opposed to NPs. This weakened the strength of the scholarly findings, but the specific

mention of improved access and the similar scope shared by Canadian NPs and the advanced practice nurses in this publication was enough to warrant inclusion.

Not all studies indicated NPs were successful in reducing complex service delivery barriers for individuals with SMI when accessing primary care. Burman, McCabe, and Pepper (2005), in a survey of NPs asking about their comfort and competencies in dealing with patients experiencing depression and anxiety, observed that NPs in Wyoming experienced challenges providing care for individuals with SMI related to a number of practice issues. NPs reported that they were generally positive about patient outcomes, and were consistent in medication prescription with national guidelines, but reported a lack of knowledge regarding pathophysiology and neurobiology. This conclusion was supported in an assessment of American NPs' preparedness to treat SMI in the primary care setting (Groh & Hoes, 2003). Burman et al. (2005) also concluded that the NPs in their study struggled to reduce barriers to care, such as limited appointment time, competing demands, and systemic health care issues that interfered with health care delivery.

NPs improved availability of primary care by adapting the organization of practice delivery to provide increased time to reduce complex service delivery barriers. In a series of well-designed randomized control trials set within the US Veterans Affairs (VA) system, NPs reduced the complex service delivery barrier to primary care by modifying appointment formats to adapt to the specific needs of individuals with SMI. Druss et al. (2001) conducted a randomized control trial of 120 participants that compared the treatment of patients with SMI in an integrated primary care clinic staffed by NPs and an RN case manager to the standard care in a veteran's medical clinic.

Patients treated by the NPs reported fewer difficulties with access, continuity, and coordination of care than the control group. NPs in the experimental group accomplished these improvements to care by allowing extra time for appointments and flexible scheduling. The experimental group also supported half the case load of the usual care group and required additional administrative support to aid in the organization of services. This study indicated that additional staffing resources that may be required to improve to the availability and outcomes of care for individuals with SMI.

Sousa and Zunkel (2003) drew similar conclusions in their descriptive survey investigating ways to optimize mental health care for 151 patients with SMI. NPs practicing in NP-led clinics extended appointment times to provide additional education and address multiple health concerns that reduced the need to contact multiple care providers. Longer appointments were recommended as a means to inform clients how to use educational tools provided by NPs that could be taken home to work on independently and reduced the need for one-to-one visits. The discussion and conclusions were not well described by Sousa and Zunkle, though they briefly discuss the relationship between lengthened appointments as a means to reduce frequency of visits.

Reducing Stigma

NPs reduced stigma as a barrier to primary care by adopting a variety of strategies. Normalization of treatment for SMI as part of primary care practice was one approach. Establishing partnerships with community agencies involved in supporting individuals with SMI and other health care providers with the goal of providing increased education also reduced stigma as a barrier to care. Finally, developing alternative models

of primary care was another strategy employed by NPs to reduce stigma as a barrier and to improve access to primary care for individuals with SMI.

Two articles reported that NPs successfully reduced the barrier of stigma by normalizing the treatment of the disease within the primary care setting. Roberts et al. (2008) described an integrated mental health practice that was designed to offer treatment for mental and physical health concerns within an integrated care model. Roberts et al. observed that initial publicity designed to attract patients to an integrated mental health clinic actually deterred potential patients from attending because members of the community living with SMI did not want to be stigmatized as a result of attending the clinic. Clinic staff overcame reluctance to integrated care by visiting community settings and carefully placing educational material to provide information about the treatment of physical and mental health concerns in efforts to normalize the treatment for both. The authors' experiences provide good examples for NPs of methods that may help reduce stigma as a barrier and improve the acceptability of primary care. Torrisi and McDanel (2003) also reported a reduction of internalized stigma when NPs provided education to patients regarding the treatment of depression to dispel myths and misconceptions about the treatment of mental illness as part of primary care. The authors described how the program used a series of educational pamphlets to provide patients and their family's strategies to help reduce internalized stigma. NPs also participated in a series of speaking events addressing the general public and health care providers to help reduce externalized stigma. The authors concluded that these interventions successfully increased the acceptability of primary care services for patients with SMI.

Two publications examining NP-led clinics identified strategies used by NPs to reduce the stigma of treatment for SMI. In both publications NPs reduced stigma as a barrier by integrating mental and physical health care within collaborative clinics that incorporated coordinated and supportive services. Mesidor et al. (2011) conducted a qualitative study using ten key informant interviews to determine what effects NPs had on improving access to health care services. This article addressed barriers to care such as stigma, service delivery barriers, and sub-optimal therapeutic relationships. The authors recognized that empowering the patient and fostering a trusting relationship, using compassion and patience in a setting where patients felt comfortable to share information, was one method of overcoming internalized stigma. The authors also described successful interventions implemented by NPs that helped improve therapeutic relationships such as increasing the availability with walk-in services and increased frequency of appointments.

Doey et al. (2008) described an Ontario NP-led collaborative clinic that had been developed to offer co-located mental and physical primary care services in a new and purpose-built location. One of the benefits of the clinic was the reduction of stigma by developing a primary care center that facilitated access to resources and programs. The authors conducted a survey to determine client perception of the services; 51.6 % of respondents reported decreased use of emergency health care as a result of accessing the clinic. This study is valuable in that barriers and NP interventions are described from a Canadian context, and provides valuable examples of to how NPs can increase access by improving the availability and acceptability of primary care services.

An American publication suggested that NPs use flexible appointment formats as a means to reduce the stigma of SMI. Storfjell et al. (2008) proposed in an article describing a new project designed to improve access to NP primary care services for individuals with SMI, that NP-led shared medical appointments were one way to accomplish that goal. Patients who accepted the offer of a group appointment found the longer appointments encouraged casual conversation and sharing of personal coping strategies not easily provided in traditional one-on-one primary care visits. Adapting appointments to the meet the needs of a client population is another means by which NPs reduced stigma and increased availability and acceptability of primary care for individuals with SMI.

Limitations and Bias

The discussion of the findings to this point has not recognized the limitations and bias of the data, which affect the ability to draw accurate conclusions and replicate research scenarios. A lack of standardized language across the literature makes it difficult to determine whether or not a barrier has been reduced (Groh, 2007; Storfjell et al., 2008). For example, the use and definition of a term such as *patient satisfaction* (Doey et al., 2008) make it difficult to compare the efficacy of interventions meant to improve therapeutic relationships.

The quality of the research is another limitation of the literature. Small sample sizes potentially introduce bias and may not be applicable to larger populations as conclusions are more likely to be affected by the individual characteristics of the participants. Failure to distinguish between nurses, advanced practice nurses, NPs, and other primary care providers and their respective roles meant that many studies were

excluded because of a lack of clarity in regards to which profession was thought to contribute to a given outcome. Incomplete descriptions of methodology, such as in the publication by Sabado and Villanueva (2009), also can decrease the quality of evidence.

A dearth of original research is also a limitation of this project. Reviews of literature commonly drew upon a small pool of original research, such as the work by Druss et al. (2001). In this project, the literature reviews cited within the findings have frequently drawn conclusions based on a limited numbers of original research publications. These limitations contribute to a lack of a strong evidence base to support NP practice when attempting to reduce barriers and increase access to primary care for individuals with SMI.

Chapter 4: Discussion

Having completed a review of the findings, it is now possible to identify characteristics present in NP practice that successfully reduced common barriers and improved access in regards to the availability, acceptability, and accessibility of primary care for individuals with SMI. The characteristics may be thematically organized to include collaborative practice, a holistic approach, and flexible practice formats. NP-led collaborative clinics and shared medical appointments are then discussed in further detail as examples of opportunities where NPs may employ all three characteristics of practice to reduce barriers to primary care.

Collaborative Practice

Collaborative practice describes the characteristic of an NP's practice that fosters partnerships between patients and other health care providers to develop and implement patient centered primary care. Collaboration represents both interpersonal and interprofessional relationships. Interpersonal relationships facilitates the development of trust and respect between the patient and the NP by developing a mutually agreed upon plan of care and encouraging the individual with SMI to take ownership of their health outcomes (Wortans et al., 2006). Interprofessional relationships assist the NP in the navigating health care services on behalf of the patient by gathering the input of all members of the health care team and coordinating care based on the capacity of health systems (Druss et al, 2001). Collaboration also provides new opportunities to offer primary care in alternative ways that present a range of therapeutic options to individuals with SMI (Doey et al., 2008; Hardy, 2008).

Interpersonal collaboration between NPs and patients with SMI can reduce the barrier associated with suboptimal therapeutic relationships and improve access to and acceptability of primary care services. Collaborating with the patient improves coordination of physical and mental health care and helps formulate a response to address changing health care needs in an organized and comprehensive manner (Gardenier et al., 2007). NPs can collaborate to improve therapeutic relationships by moving away from a prescriptive approach and invites patients with SMI to take ownership and control of their health care (Storfjell et al., 2008). Developing strategies to overcome psychosocial obstacles that negatively affect health and access to primary care is another way NPs collaborate with individuals with SMI to improve therapeutic relationships (Johnson, 2001). Combining the personal experience of the patient with the knowledge and expertise of NPs has the potential to successfully reestablish therapeutic relationships that in the past may have been sub-optimal.

NPs have the potential to reduce service delivery barriers and improve the availability of primary care by fostering interprofessional collaboration amongst health care providers. Traditionally, case managers have assumed the role of care coordinators for individuals with SMI. However, a lack of medical knowledge and an emphasis on acting as a gatekeeper of services rather than as a provider limits the efficacy of their interventions in anticipating and navigating barriers to primary care (Collins, Levis Hewson, Munger, & Wade, 2010). NPs incorporate knowledge from many professional disciplines, including medicine. NPs bring to their advanced practice knowledge of health care systems developed as part of their undergraduate nursing experience, and combine this with graduate level education and advanced nursing knowledge. NPs also foster

primary care environments that emphasize collaborative care and integrate a range of health care professionals (Boardman, 2006). The holistic view and collaborative skills of NPs can support team decisions and interventions to meet the complex health care need of individuals with SMI. Whether this is supporting the establishment of new communication protocols or new models of multidisciplinary care, interprofessional collaboration by NPs improves the organization and delivery of primary care services to individuals with SMI (Doey at al., 2008; Druss et al., 2001). NPs demonstrate the leadership, communication, and organization skills needed to form collaborative, interprofessional relationships that improve access to primary care for individuals with SMI.

The research demonstrates that NPs collaborate with other health professionals to reduce stigma by introducing new venues or formats for primary care delivery. NP-led collaborative clinics, such as the ones studied by Doey et al. (2008) and Roberts et al. (2008), illustrate how NPs can assemble the resources to offer comprehensive mental and physical primary care in venues not stigmatized by an association with SMI. Receiving educational and emotional support in these centers helps reduce the internalized stigma that is a barrier to care and improves the acceptability of services. Interprofessional collaboration with other health providers assists NPs in establishing SMAs that provide an opportunity for individuals to share coping strategies to help deal with internal and externalized stigma (Storfjell et al., 2008). The SMA is a valuable tool that assists NPs in reducing stigma and improving access through improvements in the acceptability of services for patients requiring care.

Holistic Practice

The holistic characteristic of NP practice recognizes and addresses a broad spectrum of physical, mental, and psychosocial factors that may improve availability of primary care for individuals with SMI (Bauman, 2004). Providing more treatment options within the primary care setting reduces the need to attend multiple appointments with a range of care providers and may improve accessibility by reducing complex service delivery barriers. Holistic NP care has the potential to increase acceptability of primary care by normalizing the treatment of mental and physical health needs that reduces the stigma of SMI as a barrier to care.

Holistic practice may reduce the barrier of sub-optimal therapeutic relationships and improve the acceptability of primary care by establishing trust and respect between individuals with SMI and NPs. This can be accomplished by addressing the emotional and psychological distress of individuals with SMI (Wand & White, 2007). Recognizing and treating symptoms of distress beyond physical complaints addresses a gap that has historically interfered with therapeutic relationships between primary care providers and individuals with SMI (Wortans et al., 2006). Providing holistic care reduces the need to introduce multiple care providers that has been traditionally associated with complaints of what can be characterized assessment fatigue by patients, a situation arising from multiple assessments (DeCoux, 2005). While not all NPs may initially possess advanced counseling skills, knowledge of neurobiological processes or practice in a setting that accommodates regular extended appointments, patients respect and trust the efforts of NPs to address their physical, mental, and emotional primary care needs (Burman et al., 2005).

Holistic practice offered by NPs can help to reduce the common primary care barrier of complex service delivery encountered by individuals with SMI. Holistic care reduces the logistical and financial challenges that result from care delivered in multiple locations by multiple providers. (Doey et al., 2008; Wortans et al., 2006). The willingness to address complex chronic physical health conditions, such as diabetes and heart disease often experienced by those with SMI, in addition to mental health needs, may also reduce service gaps and improve access to primary care (Reynolds et al., 2006). Offering comprehensive assessment, screening, and treatment for physical and mental health can reduce service gaps and redundancies that can frustrate patients and can lead to reluctance in seeking primary care (Drapalaski et al., 2008).

NP holistic practice has the potential to reduce stigma as a barrier to primary care by normalizing treatment for mental health. Externalized stigma from primary care providers, administrative staff, and fellow patients may be reduced when individuals receive care from NPs that adapt their practice to accommodate the communication and behavioral challenges that may be experienced by individuals with SMI (Mesidor et al., 2011). When practicing in an environment that anticipates and accommodates the holistic primary care needs of patients with SMI, NPs can help reduce the fear and anxiety associated with appointments that can lead to a withdrawal from care. When NPs treat SMI as part of the continuum of primary care services, the stigma associated with SMI can be reduced (Hardy, 2008). Placing equal emphasis on the treatment of physical and mental health concerns can help patients appreciate the chronic nature of SMI and similarities with other health conditions, such as diabetes or asthma, that are not as

stigmatized by the general public (Roberts et a., 2008). These strategies may help improve the acceptability of primary care services on behalf of individuals with SMI.

It was noted in the literature that not all NPs felt they possessed enough knowledge, education, or training to practice as holistically as they would have liked (Burman et al., 2005). It is understandable that, given the range of clinical experience and educational preparation each NP brings to practice, not all NPs will initially possess the practice skills required to address the complex mental and physical health needs of individuals with SMI. Fortunately, Canadian NPs are required to continue to expand their practice knowledge as part of continuing education required to maintain registration. Pursuing education regarding diagnosis and SMI treatment options is one way to meet practice requirements and to enhance holistic practice as a means of reducing barriers and improving access to primary care for individuals with SMI.

One other barrier to holistic practice noted in the literature was the legislated boundaries on the scope of practice experienced by NPs in some jurisdictions (College of Registered Nurses of British Columbia, 2011). Not all NPs have been able to provide all of the required care to patients with SMI, as in British Columbia where NPs are unable to prescribe controlled substances. NPs in this province are required to consult with additional primary care providers when controlled substances are required, which restricts the NPs ability to independently meet all of the patient's medication needs.

Flexible Practice

When practicing in settings designed to accommodate patients with SMI, the flexible characteristics of NP practice may help establish trust and respect between the NP and the patient (Boardman, 2006). Flexible practice can also provide time for

advocacy and coordination of care while adapting practice to meet the unique primary care needs of this population. Introducing alternative models of practice, such as NP-led clinics and shared medical appointments, is another example of how flexible practice allows NPs to improve access to primary care by reducing stigma as a barrier (Storfjell et al., 2008).

Flexible practice affords NPs the opportunity to invite individuals with SMI to join in the development of their own treatment plan and encourages the patients to take ownership of the health outcomes. Flexible practice allows NPs to take the extra time required to mutually develop the care plan and consider treatment options based on the NPs knowledge of health systems (Wortans et al., 2006). The complexity of providing primary care to individuals with SMI often requires additional time to consider their perspective regarding treatment options and psychosocial factors that may affect their adherence to the treatment plan (Groh, 2007).

Flexible practice allows NPs to adapt the care and treatment provided to meet the unique needs of individuals with SMI and contributes to improved therapeutic relationships and acceptability of care. NPs recognize that flexible practice may result in reduced access for their case load as a whole to accommodate fewer individuals who would otherwise access no primary care. It may not be necessary to extend every appointment for every patient with SMI as not all health needs benefit from longer appointments, but keeping the option open to do so can help improve the acceptability of primary care. Extending appointments early in the primary care relationship can lead to greater increased availability of appointments over time as health care issues are resolved and individuals are empowered (Mesidor et al., 2011). Extending appointments when

needed may reverse the loss of respect for primary care providers that has been reported by patients with SMI (Wortans et al., 2006). A flexible practice affords increased opportunities to exchange information and the time to develop a plan of care that reflects the unique needs and wishes of the patient (Storfjell et al., 2008). NPs recognize that, when they are unable to incorporate flexible practice into primary care, barriers for individuals with SMI remain (Torrisi & McDanel, 2003). Moving away from inflexible appointment times and structures removes an important barrier to primary care for individuals with SMI.

Flexible practice reduces complex service delivery barriers by affording NPs the opportunity to advocate, plan, and organize the primary care of individuals with SMI. NPs may adopt the role of coordinator of primary care as needed to improve the availability and accessibility of care that reduces service delivery barriers (Boardman, 2006; Roberts et al., 2008). Delegating and assigning tasks to the other members of the care team, when appropriate, reduces redundancies and may free up NP appointment time for other patients. Flexible practice also affords NPs the opportunity to implement alternative models of primary care, such as NP-led collaborative clinics and SMAs to provide a range of services that improve the availability and accessibility of primary care to individuals with SMI (Doey et al., 2008; Druss, 2001).

NP-led collaborative clinics. NP-led collaborative care clinics combine the most successful characteristics of NP practice that reduce common barriers and increase access to primary care for patients with SMI (Druss et al., 2001). Within these clinics, NPs employ collaborative, holistic, and flexible practice to reduce barriers and increase the availability of primary care (Doey et al., 2008). In collaborative clinics, NPs can

assemble the resources to accommodate the complex physical and mental primary care needs and provide a one-stop-shop for care (Sabado & Villanueva, 2009). These clinics may include supporting psychiatrists, occupational therapists, nurses, and dieticians. NPs foster therapeutic relationships between themselves and patients by offering an informal, comfortable, and welcoming environment, free from external stigma that improves the acceptability of care. Practicing in collaborative clinics also supports NPs in adopting multiple roles, such as provider and coordinator of care, which may not be available in other primary care settings (Roberts et al., 2008).

Shared medical appointments. Shared medical appointments (SMAs) provide another opportunity for NPs to integrate collaborative, holistic and flexible practice characteristics as a means to reduce the most common barriers and improve access to primary care for individuals with SMI. SMAs do not require NPs to adopt a leadership role, but NPs' communication, leadership, and collaborative skills make them excellent candidates. Though SMI is not the focus of their article and therefore not included in the findings, Watts et al. (2009) identified NPs as possessing unique practice characteristics that make them well suited to lead SMAs. Watts et al. cited the holistic practice of NPs as important in providing education and motivation for patients living with chronic illness. NP-led SMAs potentially reduce complex service delivery barriers to primary care by providing increased access to treatment and timely support for mental and physical health issues (Tierney & Kane, 2011). SMAs also increase the acceptability of care by providing opportunities for patients to share strategies to overcome external and internal stigma associated with SMI (Storfjell et al., 2008).

Chapter 5: Summary, Conclusions, and Recommendations

The purpose of this project was to identify the characteristics of NPs practice that may reduce the most common barriers to accessing primary care encountered by individuals with SMI. The most common barriers associated with reduced access to primary care identified by individuals with SMI are sub-optimal therapeutic relationships, complex service delivery, and stigma. The three characteristics of NPs that were most effective at reducing these barriers were collaboration, holistic care, and flexible practice. NPs collaborated with patients and other care providers to coordinate and organize services that resulted in improved availability and accessibility to primary care. NPs also practiced a holistic style of primary care that addressed physical, mental, and psychosocial health needs and provided a range of therapeutic options that improved the acceptability of services. Finally, NPs implemented flexible practice when required that allowed for the introduction of alternative appointment formats that recognized the unique primary care needs of individuals with SMI. These three characteristics of NP practice reduced barriers to primary care and improve the availability, accessibility, and acceptability of primary care to individuals with SMI.

Recommendations

NPs possess a unique combination of knowledge and skills from the domains of nursing, medicine, and other disciplines that allow them to reduce barriers and improve access to primary care for individuals with SMI. Knowledge and skills developed as part of registered nursing practice are enhanced through the education process which is part of NP preparation. The result is a primary care provider who understands the challenges and rewards of delivering care to patients with SMI and has the capacity to assess, diagnose, and prescribe the necessary interventions at the primary care level.

Based on the integrative review of the literature completed for this project, the following seven recommendations for NP practice are offered:

1. Collaborate with patients and other health care providers to integrate personal preferences when developing plans of care to improve therapeutic relationships and the acceptability of primary care services.
2. Emphasize a holistic approach in the provision of primary care to individuals with SMI to improve the accessibility and acceptability of services.
3. Consider incorporating alternative practice models such as SMAs and NP-led clinics.
4. Support patients in addressing psychosocial concerns such as financial, legal, transportation, or cultural needs to improve the accessibility and acceptability of services.
5. Utilize the requirements for professional development to identify and undertake training and education regarding the treatment and management of SMI.
6. NPs that work regularly with patients with SMIs should identify research partners from nursing and other disciplines to advance knowledge regarding access barriers.
7. Normalize the treatment of SMI a part of primary care practice.

NPs possess the practice characteristics to take a leadership role in reducing barriers to primary care commonly encountered by individuals with SMI. The uniqueness of the NP role within the Canadian health care system offers an alternative to existing primary care systems that sustain barriers to access. Emphasizing the benefits associated

with these practice characteristics is an opportunity for NPs to take a leadership role in improving access to primary care and the health outcomes of individuals with SMI.

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Table 2. First two key word search results

Nurse practitioner, mental disorders	206
Nurse practitioner, primary care	2397
Nurse practitioner, treatment barriers	14
Mental disorders, primary care	3790
Mental disorders, treatment barriers	145
Primary care, treatment barriers	189

Table 3. Second two key word search results

Nurse practitioners, mental disorders	206
Nurse practitioners, primary health care	2721
Nurse practitioners, health services accessibility	728
Mental disorders, primary health care	2722
Mental disorders, health services accessibility	2300
Health services accessibility, primary health care	4555

Table 4. First three key word search results

Treatment barriers, nurse practitioners, and mental disorders	4
Treatment barriers, nurse practitioners, and primary care	4
Primary care, treatment barriers, and mental disorders	12
Primary care, nurse practitioners, and mental disorders	53

Table 5. Second three key word search

Primary health care, nurse practitioners, and mental disorders	40
Primary health care, nurses practitioners, and health service accessibility	195
Mental disorders, nurse practitioners, and health service accessibility	16
Mental disorders, health service accessibility, and primary health care	207

Table 6. MeSH term searches of PubMed.

Primary health care, nurse practitioners, and mental disorders	281
Primary health care, nurse practitioner, and health services accessibility	201
Primary health care, health services accessibility , and mental disorders	708
Health services accessibility, mental disorders, and nurse practitioners	27
Health services accessibility, mental disorders, nurse practitioners, and primary health care	12