

Improving Access to Mental Health Services: A Proposal for a Nurse Practitioner-Led Mental  
Health Team in Primary Care

Lisa C. Gaudet

University of Prince Edward Island

April, 2015

In partial fulfillment of the requirements for the degree of Master of Nursing

## Table of Contents

Abstract .....	iii
Acknowledgements .....	iv
Introduction .....	1
Part I: Needs Assessment .....	2
Nature of the Need .....	2
Contributing Factors .....	3
Impact of the Problem .....	8
Promising Approaches .....	12
Target Population .....	15
Part II: Project Goals and Objectives .....	16
Goal .....	16
Objectives .....	16
Part III: Project Design and Implementation .....	17
Project Overview .....	17
Project Activities and Timeline .....	22
Part IV: Project Evaluation .....	24
Objective One .....	24
Objective Two .....	25
Objectives Three and Four .....	26
Part V: Knowledge to Action Plan .....	26
Audience .....	27
Medium .....	27

Part VI: Budget .....	28
Part VII: Implications for Practice .....	29
Clinical Practice .....	30
Collaboration, Consultation, and Referral .....	31
Research .....	31
Leadership .....	32
Conclusion .....	32
References .....	34
Appendix A: Workflow Diagram .....	54
Appendix B: Project Activities and Timeline .....	55
Appendix C: Nurse Practitioner Satisfaction Survey .....	56
Appendix D: Warwick-Edinburg Mental Well-Being Scale .....	62
Appendix E: Budget .....	63

## Abstract

Mental illness is a global crisis affecting one in four individuals worldwide, and occurring in one of every five Canadians. The impact of mental illness affects almost every Canadian and does not discriminate against age, gender, culture, or socioeconomic status. Timely access to mental health services is a provincial priority in Prince Edward Island, however wait times for persons seeking mental health services are more than double the recommended provincial wait times due to an increased prevalence of mental illness and a lack of skilled professionals. Delays in treating mental illness have negative consequences such as: deterioration in mental condition; unemployment; disability; homelessness; inappropriate incarceration; stigma; discrimination; reduced life expectancy; and suicide. In order to address extended wait times, more emphasis in providing mental health services within the community is required. Nurse practitioners, who have demonstrated positive outcomes when caring for those with mental illness, have been identified nationally as cost-effective practitioners who can fill this gap. A health initiative implementing a nurse practitioner-led mental health team into a primary care network as a 1 year pilot project will attempt to reduce the gap in mental health services in Prince Edward Island.

## Acknowledgements

First and foremost I want to thank my creator for His never-ending love, guidance, and peace. Secondly, I want to extend heartfelt thanks to my family and friends for their generous support and prayers throughout this journey – not one kind word went unheard. A special thank you to my son Alex for the endless understanding and encouragement - you are an amazing young man.

I also want to acknowledge and thank my co-supervisors and program co-ordinators, Dr. Rosemary Herbert, Terri Kean, Dr. JoAnn MacDonald, and Dr. Janet Bryanton. Finally, I want to dedicate this synthesis project to all of the clients I have worked with who are living with a mental illness—each and every one of you have been the inspiration for this project.

## Improving Access to Mental Health Services: A Proposal for a Nurse Practitioner-Led Mental Health Team in Primary Care

Mental illness (MI) is a global crisis affecting one in four individuals worldwide and occurring in one of every five Canadians (Marcus, Taghi Yasamy, Ommeren, Chisholm, & Saxema, 2012; Mental Health Commission of Canada [MHCC], 2012a; World Federation for Mental Health, 2012; World Health Organization [WHO], 2011). The impact of MI affects every Canadian regardless of age, gender, culture, or socioeconomic status (Canadian Medical Association [CMA], 2014; MHCC, 2013a). The prevalence of mood disorders in Prince Edward Island (PEI) exceeds the national rates—8.9% versus 6.4% respectively (Statistics Canada, 2014a). Despite the prevalence of MI nationally and provincially, mental health (MH) services lag behind demand (Government of PEI, 2012a; MHCC, 2012a).

The Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) explains that no one definition can capture all aspects of every mental disorder, however, the Public Health Agency of Canada (PHAC, 2011a) describes MI as a happening within the brain that can cause alterations in mood, thinking, and behaviour. While there may be a lack of a single definition for MI, the impact of poor MH is felt worldwide.

Timely access to MH services has been identified as national and provincial priorities, however lack of dedicated funding and fragmented delivery models limit access to those in greatest need (Government of PEI, 2012a; MHCC, 2012a). Wait times for persons seeking MH services in PEI are longer than the recommended provincial wait times because of the increased prevalence of MI and a lack of skilled professionals (Government of PEI, 2012a; MHCC, 2012b; Statistics Canada, 2012a; Statistics Canada, 2014a). To help address extended wait times, more emphasis in providing MH services within the community is required (Canadian Nurses

Association [CNA], 2015; Government of PEI, 2013a). The CNA acknowledges that nurse practitioners (NPs) are able to fill this gap.

Nurse practitioners are registered nurses with additional experience and educational preparation who demonstrate and possess the competencies to perform specific procedures; to diagnose certain health conditions, order, and interpret diagnostic tests; and to prescribe pharmaceuticals, within a legislated scope of practice (CNA, 2009). Nurse practitioners provide quality and cost-effective care within the community and deliver positive client outcomes when caring for persons with MI (American Association of Nurse Practitioners, 2013; Fisher, 2005; Wand, White, Patching, Dixon, & Green, 2012; Wortans, Happell, & Johnstone, 2006).

The increased prevalence of MI, lack of access to MH services, increased complexities of the sequelae of untreated MI, and the evidence of NP success, provide support for the development and implementation of a pilot project of an NP-Led MH team into a primary care network (PCN) of Prince Edward Island.

### **Part I: Needs Assessment**

Mental illness is projected to be the leading cause of disability in the Western world by 2020 and remarkably, by the time Canadians reach the age of 40, more than half will have or have had an MI (Government of PEI, 2013a). Mental illness affects almost every Canadian when the impact on clients, family members, friends, and co-workers is considered. Within the next 30 years, the prevalence of MI in Canada is projected to increase by 30% (MHCC, 2013a).

#### **Nature of the Need**

Each year approximately 12,000 people in PEI receive care through Community Mental Health (CMH) and Addictions (Health PEI, 2013a). There are no statistics available that reveal how many people receive care from CMH and Addictions in each of the three counties of PEI.

Care is provided by a multitude of professionals (e.g., psychiatrists, primary care providers [PCPs], pediatricians, psychologists, social workers, and MH nurses) in a variety of settings, who deliver MH services within their respective scopes of practice and the confines of available resources (Health PEI, 2015). Despite these efforts, the wait time for adults seeking CMH services in PEI is 60 days; more than double the targeted wait time identified by the province of 28.8 days (Government of PEI, 2012a).

### **Contributing Factors**

The inability to secure timely access to MH services has been linked to multiple factors at the population and system level. Regional disparities, poverty, stigma, and cross cultural diversity contribute to an increased prevalence; whereas insufficient numbers of MH professionals and lack of integration of MH services and primary care services results in a system unable to respond in a timely manner (Canadian Mental Health Association [CMHA], 2012). An increased prevalence in MI and a decreased supply of prepared MH service providers lead to escalating wait times for CMH services in PEI which results in delays in early diagnosis and treatment (MHCC, 2012b; Statistics Canada, 2012a). The factors that contribute to PEI's increased prevalence of MI and lack of access to MH services are discussed below.

**Determinants of health.** Factors affecting what make Canadians healthy or unhealthy are known as the determinants of health (PHAC, 2011b). For the purpose of this proposal, the six most relevant determinants of health, to the topic of MH, are considered: health practices and coping skills; income and social status; education and literacy; employment and working conditions; physical environments; and health services (PHAC, 2011b).

***Personal health practices and coping skills.*** Good personal health practices and coping skills may improve mental well-being (PHAC, 2007). Amidst the higher-than-national rates of

MI, residents of PEI, aged 12 and over, report less stress than their national counterparts, indicating a greater capacity to cope or an enhanced resilience (PHAC, 2012). It is not well understood why there continues to be a MI epidemic despite this suggested resiliency; however, this incongruence suggests that individuals may be influenced differently by various contributing factors.

Prince Edward Island has higher rates of obesity and physical inactivity when compared nationally (Health Canada, 2012). Obesity and inadequate physical activity are respectively defined as having a body mass index greater than 30 and less than 150 minutes of moderate to vigorous physical activity per week (Canadian Society for Exercise Physiology, 2015; WHO, 2015). Decreased physical activity levels increase the risk of developing obesity (Statistics Canada, 2014b). Obesity increases the risk of low self-esteem and body image disturbances, which in turn may lead to the development of mental disorders such as depression, anxiety, and eating disorders (Collingwood, 2013; Galper, Trivedi, Barlow, Dunn, & Kampert, 2006; National Eating Disorders Collaboration, 2014; Sowislo & Orth, 2013).

***Income and social status.*** Low income is defined as having an after-tax household income less than 50% of the average household income in Canada (Statistics Canada, 2014c). In 2011, the Canadian average household income was 72,240 dollars (Statistics Canada, 2013). Canadians in the lowest income groups are three to four times more likely to report their MH as fair to poor, in comparison to the highest income group (Center for Addiction and Mental Health [CAMH], 2012). Prince Edward Island has more low-income households when compared nationally—26% versus 20% respectively (PEI Health and Wellness, 2010). There is a direct correlation between low-household income and the development of MI due to, in part, the social and material deprivation associated with low income (CMHA Ontario, 2007; Government of

PEI, 2012b; Mikkonen & Raphael, 2010; PEI Department of Health and Wellness, 2010; Sareen, Afifi, McMillan, & Asmundson, 2011). Low income may also impact treatment options for those seeking MH services. For instance, persons with low income or who are unemployed may not have the financial means or medical insurance to access private counselling or necessary medications.

***Education and literacy.*** Education and literacy equip the population with the skills and knowledge needed to problem solve and cope with life's circumstances (PHAC, 2011b). When compared with national statistics, residents of PEI have higher rates of adults with less than high school education, 14% and 19% respectively, and lower rates of high school and post-secondary education (Government of PEI, 2012b). Although when compared to the rest of Canada, PEI residents show a slightly higher rate of adults who have literacy levels that allow them to adequately work and cope, overall almost one third of PEI residents continue to have very low literacy levels (Canadian Council on Learning, n.d.; Employment and Social Development Canada, 2015; Government of PEI, 2012b; PEI Literacy Alliance, n.d.). The higher a person's education and literacy levels are, the less likely they are to suffer from poor MH, due to, in part, having healthier behaviours (ABC Life Literacy Canada, 2013; Araya, Lewis, Rojas, & Fritsch, 2003; Literacy BC, 2005; National Bureau of Economic Research, 2015). In addition, those with lower education levels have shown to have lower levels of health literacy which causes an inability to maneuver successfully through the health care system and results in higher rates of poorer health (Lambert & Keogh, 2014; Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman, & Rudd, 2005).

***Employment and working conditions.*** Unemployment and stressful or unsafe working conditions are associated with poor health (PHAC, 2011b). Prince Edward Island's

unemployment rate in January 2015 was 10.2%, which was significantly higher than the national unemployment rate of 6.6% (PEI Statistics Bureau, 2015). When compared with other Canadians, PEI residents report a higher incidence of working more than 60 hours per week (Government of PEI, 2012b). Unemployment and long work hours are risk factors for MI development (Amagasa & Nakayama, 2013; Frijters, Johnston, & Meng, 2009; Mikkonen & Raphael, 2010; PEI Health and Wellness, 2010). Prince Edward Island also has the highest rate of seasonal workers in Canada with 10.3%, versus less than 3% nationally (Statistics Canada, 2008). Seasonal employment is associated with job insecurity which in turn can result in psychological distress and depression (Meltzer et al., 2010; Quesnel-Vallee, DeHaney, & Ciampi, 2009).

***Physical environments.*** Factors influencing physical environments can have significant effects on psychological well-being (PHAC, 2011b). Persons living in rural areas are more likely to have higher rates of depression than their urban counterparts due to harmful personal health practices such as heavy alcohol consumption, decreased physical activity, lower income, and poor access to MH services (CMHA Ontario, 2009; McAleer, 2007; Probst et al., 2006). In 2011, 53% of PEI residents lived in a rural setting which is almost triple the national rate (Statistics Canada, 2011; Statistics Canada, 2012b). In addition, individuals experiencing low incomes may seek housing in low-income neighbourhoods, which are associated with heightened stressors and an increased risk of developing depression (Cutrona, Wallace, & Wesner, 2006).

***Health services.*** Use of, and access to, health services that treat or prevent illness is a key determinant of health (PHAC, 2011b). PEI has one of the highest client-to-family physician ratios in Canada (CMA, 2014). This creates a great demand on family physicians, who are typically the first, and sometimes only, contact of those with MI (CMHA Ontario, 2006; Talbot,

Clark, Yuzda, Charron, & McDonald, 2014).

Primary care providers report that they do not have time to deal with MH issues in primary care because clients converse 85% longer about MH issues when compared to other medical issues (Ming, McGuire, & Weimin, 2007; Reiss-Brennan, Briot, Savitz, Cannon, & Staheli, 2010). Additionally, the complexity of MH topics requires a 37% longer time allotment (Ming, McGuire, & Weimin). Meeting the needs of individuals living with MI is a challenge for the PCPs in a system that values quantity of appointments (Government of PEI, 2011). Primary care physicians also report feeling unqualified to treat MH conditions and recognize that they do not have the time it takes to provide effective counselling (Blount, 2013; Clatney, Macdonald, & Shah, 2008; CMHA Ontario, 2006; Quilty & Bagby, 2007). Less than half of Saskatchewan family physicians who treat persons with MI in primary care are satisfied with the care they provide however, when they have on-site access to MH professionals, the satisfaction of the care they provide to individuals with a MI increases significantly (Clatney et al., 2008).

Access to MH services within the primary care setting is the most common area identified as requiring improvement to MH services (Clatney et al., 2008). Family physicians identify a lack of access to MH providers, specifically psychiatrists, as a key concern (Clatney et al., 2008). In 2009, the average wait time for psychiatric services in Canada and PEI, following a referral from a general practitioner, was 7 and 6 weeks respectively (Esmail, 2009). The survey was repeated in 2014, and although PEI psychiatrists did not participate in the study, the average wait time for psychiatric services on a national scale rose to 18.2 weeks. The longest wait times identified within the country for psychiatric services in 2014 were in the other three Atlantic Provinces: 21.9 weeks in Nova Scotia; 23.8 weeks in Newfoundland and Labrador; and 59.8 weeks in New Brunswick (Barua & Fathers, 2014).

In addition to provider access inequities, other access issues are present in PEI, such as geographic locations and hours of operation. Unlike other communities of Canada that have access to trains, subways, taxis, and buses, the rural communities of PEI offer no public transportation (McAleer, 2007). This poses crucial barriers to accessing MH care services for persons living in rural settings. The majority of CMH services in PEI are available during Monday to Friday daytime hours and therefore, persons who are unable to attend appointments during these hours have considerable challenges to access MH services (D. Hutchinson-Perry, personal communication, March 23, 2015).

In summary, examining the determinants of health reveals that the population of PEI is at a greater risk for developing MI. Increased risk contributes to a higher prevalence of MI, placing increased demands on already strained MH services, resulting in poor access and long wait times. Timely access to MH services is crucial for persons with mental disorders and the consequences of not meeting these needs have multiple negative impacts.

### **Impact of the Problem**

Improved access to MH services has positive outcomes for clients living with MI such as reduced symptoms in depression and anxiety, improved medication adherence, high client satisfaction of care, and overall improved quality of life (Young & Skorga, 2013). Delays in treating MIs can have numerous negative consequences such as: deterioration in the client's condition; delays in treatment seeking; unemployment; disability; homelessness; inappropriate incarceration; stigma; discrimination; increased medical needs; reduced life expectancy; and suicide (Canadian Institute of Health Information [CIHI], 2012; Ivbijaro & Funk, 2008; Kaufman, McDonnell, Cristofalo, & Ries, 2012; MHCC, 2015; National Alliance on Mental Illness [NAMI], 2014; PEI Department of Health and Wellness, 2013). The impact of poor

access to MH on the individual, health system, and society is discussed below.

**Individual. *Unemployment, disability, and homelessness.*** Persons with serious MIs are often severely disadvantaged. They are more likely to be unemployed than those without a MI due to: lack of employment experience and confidence; anxiety; fear; and stigma and discrimination (CMHA, 2014; NAMI, 2014). More than 30% of all Canadian pension plan disability benefits in 2013 were related to mental disorders (MHCC, 2015). Persons on disability receive between 25 and 30 dollars per day, which does not allow for decent housing (MHCC, 2013b). As many as 520,700 people with MIs in Canada are inadequately housed, and of these, up to 119,800 are homeless (MHCC, 2013b). An estimated 30% to 35% of Canada's homelessness is due to MI caused by difficulties finding employment and housing (CMHA, 2005). In Canada, 23% to 74% of homeless people report having a MI (MHCC, 2012c). Prince Edward Island's homeless population reports a MI prevalence of 47 % (Nishka Smith Consulting, 2015).

***Inappropriate incarceration.*** There is an over-representation of persons with MI in the Canadian justice system (CAMH, 2013). Fifteen to 40% of incarcerated persons in jails or prisons in Canada have a MI (CMHA, 2005). The rate of admissions to Canadian correctional facilities doubled between 1996/1997 and 2010 (Correctional Service of Canada, 2010). A number of factors contributing to the incarceration of persons with MI have been identified and include lack of sufficient income, housing, and MH services (CMHA, 2005). To illustrate this point, a recent media release revealed that an individual with a MI, who required a bed at an acute inpatient MH facility in PEI, was sentenced to jail for the night because there were no beds available at the MH facility. The man was homeless and the judge did not want to see his safety jeopardized by winter's outdoor elements (Canadian Broadcasting Corporation, 2015).

***Stigma.*** Stigma is the devaluation of an individual on the basis of real or perceived health (Gruskin & Ferguson, 2009). Dealing with the stigma from MI and preventing the discrimination of those with a MI is one of the most crucial priorities for improving Canadian's MH (Health Canada, 2012). Adverse effects of stigma include: early discontinuation of treatment; delays in seeking treatment; difficulties achieving employment and housing; injurious economic effects; and an increased morbidity and mortality in those living with MI (Abbey et al., 2011; Ivbijaro & Funk, 2008).

***Increased medical needs and reduced life expectancy.*** Mental health clients often have significant medical needs and those with serious MI are at an increased risk of metabolic syndrome, due both to their neuroleptic medications and poor lifestyle behaviours such as substance use, smoking, physical inactivity, and poor diet (Kaufman et al., 2012). Clients with serious MI, such as bipolar, schizophrenia, recurring depression, and schizoaffective disorder, have a reduced life expectancy of, on average, 25 years—approximately one third of their life span (Kaufman et al., 2012). A recent University of Oxford study suggests that many MIs decrease life expectancy equally as much as in those who smoke 20 cigarettes per day (Chesney, Goodwin, & Fazel, 2014).

***Suicide.*** Suicide was the 9<sup>th</sup> leading cause of death for all ages in Canada in 2009, but in ages 15 to 34 years it was the second leading cause of death (PEI Department of Health and Wellness, 2013). That same year, in PEI, suicide was the 10<sup>th</sup> leading cause of death. Mental health disorders, mainly depression, are the number one risk for suicide (PEI Department of Health and Wellness, 2013). In PEI, mood and anxiety disorders are the most common diagnosis of persons who commit suicide (PEI Department of Health and Wellness, 2013). Between 2002 and 2011, there were between 10 and 21 suicides in PEI per year—similar to Canadian rates (PEI

Department of Health and Wellness, 2013). Of these individuals, 47.2% were not receiving treatment (PEI Department of Health and Wellness, 2013). Seventy-five percent of PEI residents who died by suicide visited their family doctor within 1 year leading up to their death; 65% saw their doctor 6 months prior to their death; and 50% saw their doctor the same month as their death (PEI Department of Health and Wellness, 2013). Incredibly, only 38% were documented to have been there for MH purposes (PEI Department of Health and Wellness, 2013).

**Health care system impact.** A review of MH and addiction services and supports in PEI indicates primary care physicians admit their clients to a hospital in order to access specialized MH care (Government of PEI, 2013a). While the hospital readmission rate for MI is 12.5% in PEI and slightly higher than the national average, the readmission rate for medical clients is lower than the national rate (CIHI, 2015). This admission/readmission cycle is referred to as the revolving door syndrome because it demonstrates the proportion of clients who have had at least three separate admissions for a MI within a 1-year period (CIHI, 2015). Frequent hospital readmissions may reflect problems in accessing adequate support, appropriate medications, and overall care in the community (CIHI, 2015).

**Society.** Untreated MI can lead to ruined relationships, substance abuse, broken homes, and incarceration (NAMI, 2009). The economic burden of MI in Canadians 20 years of age and older is 51 billion dollars annually and is expected to rise to 2.5 trillion within the next 30 years (Government of PEI, 2013a; MHCC, 2013a). The majority of this spending is attributed to health care services, income support, and social services costs (MHCC, 2013a). Disability related to MI is linked to reduced work productivity and increased absenteeism, and costs Canadian businesses six billion dollars annually (Conference Board of Canada, 2015; MHCC,

2013a). The Canadian private sector spends 135 million dollars annually for long-term disability and between 180 and 300 million dollars on short-term disability benefits related to MH conditions (Institute of Health Economics, 2010).

### **Promising Approaches**

The affliction of MI is recognized globally, and improved access to MH services is identified as one solution to this escalating problem (Patel et al., 2013). There is no single best-practice model to integrate MH services into a health care system; however this section examines three promising approaches: integration of MH teams into primary care settings; a PEI PCN collaborative initiative; and the integration of NPs into PEI's health care system (WHO, 2008).

**Integration of MH teams into primary care settings.** Integrating MH services into primary care is a promising approach designed to close treatment gaps, decrease discrimination and stigma associated with MI, and improve access for a significant portion of individuals with MH needs (Haggarty, Jarva, Cernovsky, Karioja, & Martin, 2012; Petterson, Miller, Payne-Murphy, & Phillips, 2014; WHO, 2008). Holistic care is accomplished when MH is integrated into primary care (WHO, 2008).

Although teams can be more expensive than a single PCP, increased chronic disease management and health promotion provided by team members improve health outcomes and reduce the use of other services, such as hospital admissions and emergency department visits (Health Council of Canada [HCC], 2009). Team members experience increased satisfaction, have more positive experiences, and develop greater knowledge and skills (HCC, 2009). Team-based care is strongly supported for prevention and treatment of MH conditions (Gilbody, Bower, Fletcher, Richards & Sutton, 2006; HCC, 2009; Reiss-Brennan, 2014). A review of studies on team-based care for clients with depression revealed clients experienced greater

improvements than those who received usual primary care (HCC, 2009).

Since 1994, the Hamilton Family Health Team Mental Health Program in Ontario, Canada, has integrated MH teams consisting of MH nurses, social workers, and psychiatrists into physicians' offices (Kates, MacPherson-Doe, & George, 2011). The integration of these teams has improved access, decreased wait times to MH services, and demonstrated positive client outcomes, such as symptom reduction (Kates et al., 2011).

Over the past decade, Intermountain Healthcare based in Utah, United States, has implemented MH integration (MHI) teams into more than 130 primary care settings (Reiss-Brennan, 2014). The teams include one or more of the following providers: primary care physician; psychiatrist; NP with MH specialty; social worker; and psychologist (Reiss-Brennan, 2014). Positive client outcomes have been reported for those in the MHI clinics compared to clients not in MHI clinics (Reiss-Brennan, 2014). Outcomes include: a 54% reduction in ED visits by depressed clients; a reduction in health insurance claims by clients with depression in the year following diagnosis; improved glucose control in depressed clients with diabetes; and overall improved client functioning (Reiss-Brennan, 2014).

**Prince Edward Island Collaborative Mental Health Initiative.** In order to improve access to MH services in PEI, more emphasis in providing MH care within the community is required (Government of PEI, 2013a). The PEI government identified improving the MH of all PEI residents as a priority and in 2013 introduced a Chief Mental Health and Addictions Officer (CMHAO) to create a long-term strategic MH plan for PEI (Government of PEI, 2013b; PEI Department of Health and Wellness, 2014). While initial recommendations from the CMHAO target the enhancement of MH services for PEI's youth, there has yet to be a comprehensive MH strategy released (Health PEI, 2014).

In recognizing the demand for individuals seeking MH services within primary care settings in PEI, a collaborative MH initiative was implemented into the Kings County PCN by integrating two CMH social workers on a part-time basis (M. Barrett, personal communication, January 15, 2015). The social workers counsel referred clients, support the health care team, and train the nursing staff in MH screening (M. Barrett). Data from this initiative demonstrate an increase in clients who accessed MH services; less than 10 individuals were screened in October 2013 compared to more than 300 in October 2014 (M. Barrett). Client outcomes from the implementation of this initiative are not available at this time.

**Integration of NPs into PEI's health care system.** In 2006, NPs were legislated to work to their full scope of practice in PEI's health care system (CIHI, 2006). Nurse practitioners have been shown to: reduce average length of stays in hospitals; improve access to care; reduce costs to health care systems; receive an overall satisfaction rating from their clients; improve client self-efficacy; and have positive client outcomes in mental disorders, diabetes, hypertension, cardiac, and dyslipidemia (Clarke et al., 2014; College of Registered Nurses of Nova Scotia [CRNNS], 2014; Newhouse et al., 2011; Richardson, Derouin, Vorderstrasse, Hipkens, & Thompson, 2014; Stanik-Hutt et al., 2013; Wand et al., 2012; Wortans et al., 2006; Weston & Bennett, 2009; Wright, Romboli, DiTulio, Wogen, & Belletti, 2011). When outcomes for NPs and physicians are compared, the results are comparable with respect to client satisfaction, number of ED visits, number of hospitalizations, functional status, and mortality (Stanik-Hutt et al., 2013). Seventeen NPs currently practice in PEI, predominantly in primary care settings (M. McCarthy, personal communication, February 17, 2015). There are currently no NPs with an MH specialty employed in PEI.

When caring for persons with MI, NPs have shown high client satisfaction with NP care,

reduced symptoms, improved access to care, improved medication adherence, improved overall mental well-being, and improved mental quality of life satisfaction (McKenzie & Chang, 2015; Wand et al. 2012; Wortans et al., 2006).

The government of PEI recognizes the importance of improving access to MH services in PEI and is working diligently toward a solution (Government of PEI, 2013b; PEI Department of Health and Wellness, 2014). The national and international integration of MH teams into the primary care setting demonstrates positive client outcomes (Kates et al., 2011; Reiss-Brennan, 2014). Nurse practitioners are recognized worldwide as providing exceptional care, resulting in favorable outcomes to individuals with MH needs (McKenzie & Chang, 2015; Wand et al. 2012; Wortans et al., 2006). The combination of these promising approaches is the basis for this proposal.

### **Target Population**

The target population for this health initiative is adults between the ages of 19 and 64 years living with a mood disorder, or schizophrenia, and who require MH services in PEI. If a client in the program turns 65 years of age, an exception will be made to allow the individual to continue in the program. Clients must be followed by a PCP of Harbourside Health Center (HHC), must not currently be seeking MH services from PEI's CMH division, and must require care within the scope of practice of the NP. Exclusion criteria include clients who are acutely psychotic and those who are current substance (tobacco exempt) users. The rationale for the latter exclusion criteria is that it is very difficult to achieve mental well-being when using substances illicitly (Allen & Holder, 2014; DualDiagnosis.org, 2015; Pompili et al., 2012).

## **Part II: Project Goals and Objectives**

### **Goal**

The primary goal of this health initiative is to improve access to MH services for adult clients through the integration of a NP-Led MH team into the HHC PCN of East Prince County as a 1 year pilot program.

### **Objectives**

The goal will be measured through the achievement of the following objectives:

1. At the end of the pilot project, at least 80% of clinic clients will be satisfied or very satisfied with the care received from the nurse practitioner.
2. At the end of the pilot project, at least 50% of clients who are receiving care exclusively from the NP will report improved mental well-being.
3. Throughout the pilot project, at least 70% of the clients accepted into the NP-Led MH team will require care, such as assessments, psychotherapy, pharmacotherapy, or some combination of all, by the NP.
4. Wait times for NP care, as described in objective three, will not exceed the provincial benchmark wait time of 28.8 days.

**Rationale for objectives.** The rationale for the first objective's target is based on studies that demonstrate clients, with and without a MI, who are treated by a NP, report a high level of satisfaction in care (Agosta, 2009; Carter & Chochinov, 2007; CRNNS, 2014; Gagan & Maybee, 2011; Jones, Hepburn-Brown, Anderson-Johnson, & Lindo, 2014; Wand et al., 2012; Wortans et al., 2006). Measuring client satisfaction in MH services is an important step in assuring client-focused and quality services are being offered and required changes are being recognized (Alberta Health, 2014).

The rationale for the second objective is that measuring mental well-being is necessary to evaluate the effectiveness of a MH program (Tennant et al., 2007). More than 60% of clients demonstrate improved mental well-being when receiving care from a NP (Sidani & Doran, 2010). Overall health and mental well-being are improved with care from a nurse practitioner (Clarke et al., 2014; CRNNS, 2014; McKenzie & Chang, 2015; Richardson et al., 2014; Stanik-Hutt et al., 2013; Wand et al., 2012).

The rationale for objectives three and four is that measuring the utilization, productivity, and accessibility of the NP demonstrates his/her value within the program (Liu & D'Aunno, 2012; Rhoads, Ferguson, & Langford, 2006). The integration of NPs into the health care system has demonstrated improved client access to health care and decreased wait times (Carter & Chochinov, 2007; CRNNS, 2014; Roots & MacDonald, 2014).

### **Part III: Project Design and Implementation**

#### **Project Overview**

**Health initiative.** An NP-Led MH team, where the NP has a speciality in MH, will be integrated into the HHC PCN located in Summerside, Prince Edward Island, for a 1 year pilot project. Individual and group therapy sessions will be provided, as well as home visits for individuals who are unable to go to the PCN.

**Program components.** Care will be coordinated by the NP and provided by a range of skilled professionals including the NP with a specialty in MH, social worker, occupational therapist, licensed practical nurse (LPN), and medical secretary. Individual therapy sessions will take place at HHC and in clients' homes as needed. Group therapy sessions will also be offered and take place in the HHC boardroom. All therapy sessions provided by the NP, including office, home, and group, will be based on cognitive behavioural therapy (CBT).

***Cognitive behavioural therapy.*** Cognitive behavioural therapy was developed on the assumption that each person thinks and feels about, and behaves in specific situations based on how the individual interprets the situations. Cognitive behavioural therapy uses techniques to help individuals recognize the way behaviours, feelings, and thoughts interact, so that positive changes can be made (Freeman, 2006). Nurse practitioners have been shown to achieve positive outcomes in performing CBT with MH clients (Philp, Lucock, & Wilson, 2006). Not only has CBT been shown to reduce depressive symptoms, decrease anxiety, improve functional impairment and dysfunctional cognition, reduce psychological distress, and reduce recurrence and relapses, but it has also improved client quality of life and satisfaction with life (Driessen & Hollon, 2010; Hunsley, Elliott, & Therrien, 2014; Oei & McAlinden, 2014). Another important outcome of CBT is improved medication adherence (Cavezza, Aurora, & Ogloff, 2013; Patel & David, 2007). This is critical because between 50% and 75% of MH clients are non-adherent to their medications (Cavezza et al., 2013). Cognitive behavioural therapy has also been shown to have positive client outcomes when delivered in a group setting (McCarthy, Hevey, Brogan, & Kelly, 2013; Oei & McAlinden, 2014).

***Group therapy.*** Group therapy provides peer support for members by facilitating learning from each other's experiences (Williams, 2014). Group therapy has been found to reduce symptoms in depression, anxiety, and eating disorders and improve overall mood. In addition, group therapy has also been shown to reduce auditory hallucinations in those with schizo-affective personality disorder and schizophrenia (Gallagher, Tasca, Ritchie, Balfour, & Bissada, 2014; McCarthy et al., 2013; Thimm & Antonsen, 2014; Zanello, Mohr, Merlo, Huguelet, & Rey-Bellet, 2014). Group therapy will primarily be facilitated by the NP, based on CBT, and will be provided in the HHC boardroom. Individual sessions will be available at HHC

and also in-home for clients who are unable to come to the clinic.

**Home visits.** Home visits will be provided within the East Prince county region for clients who are unable to come to the clinic for various reasons, such as no access to transportation or inability to leave their home due to agoraphobia. The care provided by the NP during a home visit will mirror the client care provided by the NP in the office. Home visits have been shown to have positive client outcomes, such as reducing symptoms of anxiety and depression and improving life satisfaction in persons with mental disorders (Ammerman et al., 2013; Bransford & Sunha, 2012; Reif et al., 2012; Segre, Stasik, O'hara, & Arndt, 2010). For personal safety reasons, two team members will be present for all home visits.

**Pharmacotherapy.** Pharmacotherapy is an important aspect in treating MI. In fact, in depression, a combination of CBT and antidepressants has the best symptom reduction outcomes (Hunsley et al., 2014). The NP will apply and maintain competency with treatment guidelines, such as the Canadian Network for Mood and Anxiety Treatment (CANMAT) guidelines and the Canadian Psychiatric Association's (CPA's) clinical practice guidelines, and incorporate established and new medications being used to treat various MIs (CANMAT, n.d.; CPA, 2015). The NP is mindful that medication non-adherence in persons with schizophrenia is common, results in relapse and increased hospitalizations, and can be prevented with the aid of using long-acting neuroleptic injectable medications (Morton & Zubek, 2013). The NP will provide education to all clients on current best practices, discuss recommendations, work with the client to create a treatment plan, and support the client in their decision-making process.

**Team members and roles.** The team will consist of a full-time NP, part-time (50%) social worker, part-time (50%) occupational therapist, shared (33%) LPN, and shared (33%) medical secretary. The shared LPN and medical secretary will work full-time at HHC but their

time will be divided equally between 2 PCPs and the MH team. The LPN will administer long acting neuroleptics as ordered by the NP. The shared LPN will also be responsible for bringing the clients to the appropriate rooms, performing vital signs, venipuncture, and injections, and administering screening tools and surveys as needed. The shared medical secretary will answer the phone, schedule appointments, and receive clients into the clinic. The occupational therapist will assist clients with employment skills, activities of daily living, and instrumental activities of daily living, complete home visits, and facilitate group sessions. The social worker's responsibilities will include management of all child and family service issues, income support, and housing and facilitating grief therapy, home visits, and group sessions. The NP will be responsible for leading and supervising the MH team, carrying out administrative duties such as care plans, organizing group sessions and collaborative meetings. The NP will also be responsible for providing direct client care such as MH assessments, diagnosis, health promotion education and ordering and interpreting tests, providing psychiatric referrals, prescribing medication, assessing for side effects, facilitating individual and group therapy at HHC, and providing in-home visits. Although the NP will be the supervisor of this program, the manager of HHC services will be the manager of the MH team.

**Hours of operation and appointment duration.** The hours of operation will be flexible, including evenings and weekends, in order to accommodate clients who require appointment times other than weekdays. Appointment times for injection and home, office, and group therapy sessions will range between 30 and 90 minutes depending on the session's topic. Injection clinic appointments will be scheduled during the week based on the availability of the client and LPN.

**Referral process.** Referrals to the NP-Led MH team require a formal consult request via

hand-written or electronic referrals, with the exception of emergent referrals which are discussed below. If hand-written, existing HHC referral forms will be used. Only internal referrals, that is, those generated by the PCP of HHC will be considered. All referred clients must meet the inclusion criteria. If the referred client does not meet the inclusion criteria, the NP will notify the PCH in writing to ensure an alternate plan of care can be developed by the PCP. It will be the responsibility of the PCP to inform the client.

Referrals will be triaged by the NP based upon CPA's benchmark wait times for clients with serious MIs who are seeking psychiatric services (CIHI, 2012; CPA, 2006). The CPA identifies three acuity levels: emergent, urgent, and scheduled. Emergent refers to danger to life and requires immediate hospital-based evaluation (CPA, 2006). The PCP will make arrangements for direct transfer to hospital. In this situation, if available, the NP will operate in a supportive role to the client and the PCP until emergency personnel are dispatched and arrive at HHC. Urgent acuity refers to unstable conditions that may deteriorate quickly and require emergency admission; the suggested wait time for this acuity is 2 weeks or less (CPA, 2006). If the NP is unable to assess or deliver treatment accordingly, the referee will be contacted, and the client returned to the PCP for an alternate plan of care. The final acuity is scheduled, which is defined as stable symptoms in a client who has adequate community support and whose condition is unlikely to deteriorate quickly (CPA, 2006). Clients with this level of acuity will be the basis of the program. The suggested wait time for this acuity is 4 weeks (CPA, 2006).

Clients referred to the MH team will not be added to the client list until initial assessments are complete and the NP and client mutually agree to a plan of care. If the client does not wish to continue, or the client or NP believes the client's inclusion in the program is no longer required, the client will be discharged from the program. The PCP will be contacted and

made aware of all discharges. If the client requires services from the MH team after being discharged from the program, the referral process, as outlined above, is repeated. If the NP refers the client to a psychiatrist and the client plans to follow with that psychiatrist, the client will continue to be part of the program, but medication management will be directed by the psychiatrist. If the client does not wish to follow with the psychiatrist, or the psychiatrist believes it is no longer necessary to follow the client, the NP will assume responsibility of medication management.

If the client has more than two no-shows to his/her initial appointment without reason, and has no response to phone contact from the clinic, a letter will be sent to his/her address asking him/her to contact the office. If there is no client response within 1 month, the referral is considered void, the PCP is notified in writing, and re-referral is required if MH services are again elicited. It is the responsibility of the PCP to construct an alternate plan. Clients follow with their PCP for all non-MH related medical services.

A client, who presents to the MH team with a medical concern, will be redirected to his/her PCP. An MH team client who presents to his/her PCP for MH services will be redirected to the MH team. Two case management meetings will take place weekly; in attendance will be the NP, social worker, LPN and occupational therapist. Every month, each PCP will participate in MH rounds for 1.5 hours to discuss his/her clients of the MH team, on-going care plans, and progress to date (see Appendix A for a workflow diagram).

### **Project Activities and Timeline**

The first activity of the planning process is the needs assessment, followed by engagement of the stakeholders (McKenzie, Neiger, & Thackeray, 2013). Key stakeholders to be engaged are: Department of Health and Wellness; Health PEI; CMH and Addictions; the PEI

division of the CMHA; and individuals with the lived experience of MI. Engagement activities will include private and public and individual and group discussions and presentations. Other activities necessary for the implementation of this health initiative are: development of policies, guidelines, and evaluation tools; working with regulatory body to address NP scope restrictions; approval for funding; allocation of space and equipment; involvement of human resources with the NP, social worker, and OT job postings, interviews, and hiring; education of personnel; and marketing and education of the HHC employees.

Health policies are mandated strategies that incorporate laws, ordinances, executive orders, judicial decisions, regulations, position statements, rules, and policies (McKenzie et al., 2013). Implementation of the proposed health initiative will require development of regulated policies. The strategic direction policy of vision and goals for the 2013 to 2016 Health PEI strategic plan includes access to appropriate care in the right setting and by the right provider in order to reduce wait times in MH services (Health PEI, 2013b). The MHCC identifies in its strategy the importance of providing access to MH services, supports, and treatments for persons with MI (MHCC, 2012a). The proposed health initiative is congruent with each of these strategic directions

Currently in PEI, there are no NPs with a specialty in MH; therefore development of policies and guidelines with regards to NP responsibilities and qualifications will be required for this new role. The WHO states that it is imperative that primary care workers be adequately trained and prepared in their competencies and skills in order to be able to effectively support, assess, diagnose, treat, and refer persons with MH conditions (WHO, 2008). Unlike some countries, Canada does not have advanced practice nurse specialization in MH and therefore the CNA certification of psychiatric MH nursing for registered nurses (RNs) will be required of the

successful candidate. Extensive experience (5 years minimum) in MH nursing, either as a NP or registered nurse will also be required of the NP (see Appendix B for a chart of program activities and timeline).

#### **Part IV: Project Evaluation**

Evaluation of a program is necessary to demonstrate the program's quality and effectiveness (McKenzie et al., 2013). Program evaluations are used for guiding program changes, measuring project outcomes, and determining if program goals and objectives have been met (McKenzie et al., 2013). Full program evaluation of the NP-Led MH team will focus on all components of the program and the outcomes of the total team; however for this proposal, the evaluation focuses on the role of the NP within the team. Evaluation of the NP role will determine if program objectives have been met and provide stakeholders with information which will demonstrate the value and need of the NP within the program. Evaluation of the four program objectives are discussed below.

##### **Objective One**

The Nurse Practitioner Satisfaction Survey (NPSS) will be used to measure the first objective (see Appendix C for NPSS). At the time of its creation, the NPSS was the only measurement tool that was explicitly developed to measure satisfaction of NP-provided care (Agosta, 2009). Because the NPSS was created to measure NP satisfaction in a women's health clinic, modification will be required for the purpose of the MH initiative's evaluation. The NPSS is made up of twenty-eight 5-point Likert-type questions (Agosta, 2009). Each question asks participants to indicate their degree of agreement, from strongly agree to strongly disagree (Agosta, 2009). Lower scores (strongly disagree = 1) indicate greater levels of dissatisfaction than higher scores (strongly agree = 5) scores (Agosta, 2009). Three subscales are identified

within the 28 Likert-type questions and are: general satisfaction (18), communication and accessibility (6) and convenience (4) (Agosta, 2009). Measurement of reliability, using Cronbach's alpha, was 0.98, 0.83, and 0.76 of each subscale respectively (Agosta, 2009). Another 19 questions are included in the NPSS which examine: age, race, gender, income, employment, marital and health status, health insurance, past experience with health providers, and education level (Agosta, 2009).

Permission will be obtained from the NPSS author to modify the survey. These modifications include changing the clinic to MH clinic in questions eight and nine, and removing questions 29 to 47 as the majority of them do not fit a Canadian health care setting. The LPN will explain the survey to each client who agrees to participate and will provide a private location to complete the survey. Clients who received care from the NP on at least five separate occasions will be asked to complete the NPSS at the end of the pilot project.

## **Objective Two**

The Warwick-Edinburg Mental Well-Being Scale (WEMWBS) will be used to measure the second objective (see Appendix D for WEMWBS). The WEMWBS was developed in the United Kingdom by a panel of MH experts and measures well-being in individuals aged 13 to 74 years (Putz, O'Hara, Taggart, & Stewart-Brown, 2012; Tennant et al., 2007). The WEMWBS is a 14-item scale that measures two perspectives of a person's well-being: hedonic, a person's life satisfaction and state of happiness, and eudaimonic, a person's relationship with self and others and psychological functioning (Putz et al., 2012). The WEMWBS is made up of 14 items scored positively by a 5-point Likert scale; the higher the score the higher the individual's mental well-being (Tennant et al., 2007). The WEMWBS is recognized as a quality tool for measuring the impact of work that is being done to improve mental well-being (Putz et al., 2012). Validation of

the WEMWBS was conducted with students and a representative sample resulting in a Cronbach's alpha of 0.89 and 0.91 respectively (Putz et al., 2012). Test-retest reliability was 0.83 at 1 week (Putz et al., 2012).

Permission to use the WEMWBS will be obtained from the author. The survey will be offered to all clients at their initial visit and then again after receiving 6 months of NP care. The LPN will explain the scale to each client who agrees to participate and will provide a private location to complete the survey.

### **Objectives Three and Four**

The third and fourth objectives will be measured at the end of each month for the duration of the pilot project. Administrative support staff will track all incoming referrals for the NP-Led MH team, all incoming referrals that meet the inclusion criteria, and all referrals that require care exclusively from the NP. The amount of time it takes for the client to be seen by the NP will also be recorded. The wait time will measure the time lapse between the date of referral receipt and the first day care was provided by the NP. Administrative support staff will provide data entry and run monthly reports. The NP will share reports with stakeholders quarterly.

The ability of a new health initiative to meet program objectives demonstrates its value to stakeholders (McKenzie et al., 2013). The evaluation of this health initiative will provide evidence of whether or not the program is contributing to improved access to MH services, which may determine the continuance of the program. The results from the evaluation of the pilot project will be disclosed to invested parties during the knowledge-to-action phase of the health initiative.

### **Part V: Knowledge-to-Action Plan**

Knowledge translation is an important process in which researchers and knowledge users

undergo a complex system of interactions to achieve better health for Canadians (CIHR, 2014). The CIHR identifies two types of knowledge translation: end of grant knowledge translation and integrated knowledge translation. The knowledge-to-action plan for the NP-Led MH team health initiative will consist of end-of-grant knowledge translation, in which the researcher will develop a plan and implement activities to disseminate newly gained knowledge to relevant audiences through appropriate mediums.

### **Audience**

Dissemination will target various audiences including: key stakeholders (i.e., CMHA PEI division, Association of Registered Nurses of PEI [ARNPEI], Chief Executive Officer of Health PEI, CMHAO of Health PEI, PEI directors of primary care and MH services, and PEI PCN and CMH managers and clinical leads); health care professionals (i.e., psychiatrists, PCPs, RNs, and PEI PCN and CMH staff); and the general public. Not all audience members will have the same vested interests in the health initiative, and therefore the presentations will be customized based on the audience (McKenzie et al., 2013).

### **Medium**

**Stakeholders.** Stakeholders will be sent a written document that highlights the NP-Led MH team program. The full report, including program evaluation results and implications for practice, will be available on the Health PEI website. This link will be provided within the written document sent to stakeholders. Oral presentations will also be done by the NP in various locations of the community and Health PEI.

**Healthcare professionals.** The written report created for the stakeholders will be sent to the PEI Nurses' Union, ARNPEI, and the Medical Society of PEI to be circulated among their members. A poster presentation of the pilot program results will be presented at UPEI Research

Day, as well as at the LINK annual psychiatric conference held in PEI. A formal article discussing the pilot project will be sent to the Canadian Association of Advanced Practice Nurses, the American Association of NPs, and to peer-reviewed journals, such as the Canadian Nurse and the Journal for NPs, for publication.

**General public.** Radio and television interviews will be arranged once evaluation data are available. Participating in the interviews will be the NP, the director of primary care services in PEI, and the director of MH services in PEI. The NP will discuss program information such as contact information and inclusion criteria. The directors of primary care and MH will discuss implications of the NP-Led MH team with regards to program outcomes and improvement in MH accessibility.

One goal of translating this knowledge is to increase awareness of the NP-Led MH team. Another important reason to disseminate the program's outcomes to stakeholders, healthcare professionals, and the general public is to inform decisions made about health practices, programs, and policies (CIHR, 2014).

## **Part VI: Budget**

Attaining necessary financial resources is crucial to this health initiative's implementation. Staffing requirements of one full-time NP, one part-time social worker, one part-time occupational therapist, one shared licensed practical nurse, and one shared medical secretary will be the majority of the required expenses. The LPN and medical secretary will be employed full time at HHC but shared between two family PCPs and the MH team. Office supplies, technology, and furniture such as stationary, binders, folders, chart supplies, computers, software, projector, desks, and chairs are required. Computers and a projector will be a one-time cost, should the program move forward. Mental health education materials including text books,

software, and printed materials will also be required. Educational training in CBT for the NP will be at the expense of Health PEI. The University of Toronto's course in CBT will be mandatory for the NP prior to program launch. All costs associated with this course, including tuition, travel, and accommodations will also be at the expense of Health PEI. The remaining team members will not require additional training to qualify them for their role on the team. Any travel that is required, during day-to-day activities of the NP-Led MH team members, will be done primarily with the HHC vehicle, to which Health PEI incurs the cost. If the vehicle is not available, staff will use their personal vehicles and be reimbursed as per the mileage rate set by Health PEI at that time. Office space, furniture, exam rooms, and group therapy rooms will be provided within HHC. Because Health PEI will be providing a vehicle, space, and furniture in-kind, these costs are not reflected within the expenditures of the budget (see Appendix E for program budget).

### **Part VII: Implications for Practice**

Nurse practitioners meet advanced practice nursing competencies by building and expanding upon the competencies required of a registered nurse (CNA, 2010). The competencies serve as the basis for approving NP nursing education programs, developing regulatory examinations, assessing NPs when they are applying for registration, and assessing continuing competence (CNA, 2010). The four core competencies are: professional role, responsibility, and accountability; health assessment and diagnosis; therapeutic management; and health promotion and prevention of illness and injury (CNA, 2010). The professional role competency is unique in that it divides into four practice nursing subsets. These are: clinical practice; collaboration, consultation, and referral; research; and leadership (CNA, 2010). These subsets are fundamental to advanced nursing practice and, therefore, pertain to each of the core competencies (CNA,

2010).

### **Clinical Practice**

Credibility and legitimacy are vital in the successful implementation of the NP role, and clinical practice guidelines are paramount in this development (DesBorough, 2012). The development of policies and guidelines that will guide the new role of the NP will be important to adequately capture this expanded field for the NP.

One of the barriers to optimizing the NP role is the inability to provide care to clients who are hospitalized. Indicator 1.1 of the professional role competency and identifies that all NPs must practice in accordance with federal and provincial/territorial legislation (CNA, 2010). In Canada, there are differences between what federal and provincial legislation has approved and what each province/territory has adopted. At the federal and PEI provincial level, it is part of NP authority to admit clients to, and discharge from, an acute care setting (College of Registered Nurse of British Columbia [CRNBC], 2015; Health PEI, 2011). The NP regulatory body of PEI, however, does not have policies and guidelines in place to safely support the admitting and discharging practice by the NP to and from an acute care setting. The NP will attempt to minimize this disjointed care by providing up-to-date client information, including client care plans, to the in-hospital provider. This communication will be provided by the NP as soon after hospital admission as possible.

A second identified barrier to NP practice in MH is found within indicator 3.9 of the therapeutic management competency and deals with pharmacotherapy prescribing (CNA, 2010). Federally, NPs are legislated to prescribe controlled substances (CNA, 2012; CRNBC, 2015). All PEI NPs will be required to complete an education module before receiving approval for prescriptive authority of controlled substances (Legislative Council Office, 2014). Currently PEI

NPs are waiting for their regulatory body to decide which educational component is to be completed. Best practice will be difficult to achieve for some conditions (e.g. anxiety) until the NP secures the ability to prescribe first-line treatment of a benzodiazepine. The NP and her regulatory body will need to work together for this change. In the interim, the NP will require her collaborating physician to co-sign her prescriptions for controlled substances.

### **Collaboration, Consultation, and Referral**

The NP must collaborate and consult with, as well as refer and accept referrals from, other health care providers (CNA, 2010). The NP must develop strong professional relationships with her team members, collaborating physicians, psychiatrists, and community resources: CMHA Summerside, CMH Summerside, child and family services, adult protection, local group home staff, private counsellors and psychologists, and PCH crisis response.

### **Research**

The NP is required to engage in practice that is informed by evidence, current, and based on research and best-practice guidelines (CNA, 2010). An important component of the NP role is conducting and supporting research (CNA, 2010). As the field of NP specialities continues to grow, the NP-Led team and its outcomes will provide evidence for other communities, provinces, and countries who are trying to improve access to their MH services. The NP will set aside 2 days per month to review up-to-date MH evidence-based research and guidelines in areas such as pharmacotherapy, psychotherapy, and the role of the NP in MH provincially, nationally, and internationally. When available, the NP will attend MH-related education sessions, including CPA conferences and Health PEI's annual Atlantic Psychiatric Conference. The NP will foster a culture of research within her practice and will share her knowledge through formal and informal education sessions to health care professionals and the general public as needed. If

the NP recognizes trends in her practice and believes these would be important areas to research, she will contact nursing schools in the Maritimes and discuss these with potential researcher partners.

### **Leadership**

The indicators in this subset explore each of the settings NPs may find themselves in once fully integrated into their role and lists leader and mentor as important characteristics of the nurse practitioner (CNA, 2010). The NP will work autonomously as team leader and will not only mentor each of the MH team members but also other nursing colleagues through education, guidance, and role modelling. The NP will also demonstrate leadership through political advocacy for legislation and policy changes as needed.

The new role of the NP with a specialty in MH will provide an opportunity to advance the role of the NP, as well as add improved access to MH services in PEI. This new, expanded role for NPs may also open doors for other NP-Led programs in PEI, which would further broaden the NP role and continue to improve access to health care services for PEI residents.

### **Conclusion**

Not only does PEI exceed national averages of MIs within the population, but it also exceeds national averages of several risk factors for developing MI. Despite significant consequences of not treating MI, PEI continues to be unable to meet the demands of individuals seeking MH services which has resulted in escalating wait times more than double the provincial benchmark. Initiating a NP-Led MH team into HHC will ensure a holistic and person-centred approach that will address the psychosocial and educational needs of the mentally ill population of Prince Edward Island. An NP is capable of providing cost-effective, quality care to clients with MI through demonstrated counselling techniques, pharmacological therapies, and

appropriate collaboration with involved health care providers. Through the partnership with key stakeholders and funding from the province, implementation of the NP-Led MH team has the potential to increase access to MH services, decrease MH services wait times, reduce MH-related ER visits and hospitalizations, and prevent negative impacts on the individual and society.

## References

- Abbey, S., Charbonneau, M., Tranulis, C., Moss, P., Baici, W., Dabby, L., . . . Paré, M. (2011). Stigma and discrimination. *Canadian Journal of Psychiatry, 56*(10), 1-9.
- ABC Life Literacy Canada. (2013). *Adult literacy facts*. Retrieved from <http://abclifeliteracy.ca/adult-literacy-facts>
- Agosta, L. (2009). Patient satisfaction with nurse practitioner-delivered primary healthcare services. *Journal of the American Academy of Nurse Practitioners, 21*(11), 610-617. doi:10.1111/j.1745-7599.2009.00449.x
- Alberta Health. (2014). *An annual patient/client rating of overall satisfaction with addiction/mental health services*. Retrieved from <http://www.health.alberta.ca/documents/PMD-Patient-Satisfaction-Addiction-Mental-Health.pdf>
- Allen, J., & Holder, M. (2014). Marijuana use and well-being in university students. *Journal of Happiness Studies, 15*(2), 301-321. doi:10.1007/s10902-013-9423-1
- Amagasa, T., & Nakayama, T. (2013). Relationship between long working hours and depression: A 3-year longitudinal study of clerical workers. *Journal of Occupational and Environmental Medicine, 55*(8), 863. doi:10.1097/JOM.0b013e31829b27fa
- American Association of Nurse Practitioners. (2013). *Nurse practitioner cost-effectiveness*. Retrieved from <http://www.aanp.org/images/documents/publications/costeffectiveness.pdf>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed). Arlington, VA: Author.
- Ammerman, R. T., Putnam, F. W., Altaye, M., Stevens, J., Teeters, A. R., & Van Ginkel, J. B. (2013). A clinical trial of in-home CBT for depressed mothers in home visitation.

*Behavior Therapy*, 44359-372. doi:10.1016/j.beth.2013.01.002

Araya, R., Lewis, G., Rojas, G., & Fritsch, R. (2003). Education and income: Which is more important for mental health? *Journal of Epidemiology and Community Health*, 57(7), 501-505.

Barua, B. & Fathers, F. (2014). *Wait times for health care in Canada*. Retrieved from <http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/waiting-your-turn-2014.pdf>

Blount, A. (2013). Getting mental health care where it is needed. *Families, Systems, & Health*, 31(2), 117-118. doi:10.1037/a0032496

Bransford, C. L., & Sunha, C. (2012). Using interpersonal psychotherapy to reduce depression among home-bound elders: A service-learning research collaboration. *Best Practice in Mental Health*, 8(1), 1-15.

Canadian Broadcasting Corporation. (2015). *P.E.I. homeless man jailed because no room in hospital*. Retrieved from <http://www.cbc.ca/m/touch/canada/story/1.2484023>

Canadian Council on Learning. (n.d.). *Levels of Literacy*. Retrieved from <http://www.ccl-cca.ca/CCL/Reports/ReadingFuture/LiteracyLevels.html>

Canadian Institute of Health Information (CIHI). (2006). *The regulation and supply of nurse practitioners in Canada: 2006 update*. Retrieved from [https://secure.cihi.ca/free\\_products/The\\_Nurse\\_Practitioner\\_Workforce\\_in\\_Canada\\_2006\\_Update\\_final.pdf](https://secure.cihi.ca/free_products/The_Nurse_Practitioner_Workforce_in_Canada_2006_Update_final.pdf)

Canadian Institute of Health Information (CIHI). (2012). *Health care in Canada, 2012: A focus on wait times*. Retrieved from [https://secure.cihi.ca/free\\_products/HCIC2012-FullReport-ENweb.pdf](https://secure.cihi.ca/free_products/HCIC2012-FullReport-ENweb.pdf)

Canadian Institute of Health Information (CIHI). (2015). *Overall results from Prince Edward*

- Island*. Retrieved from <http://yourhealthsystem.cihi.ca/indepth?lang=en#/overall/C100/2/>
- Canadian Institute of Health Research (CIHR). (2014). *More about knowledge translation*. Retrieved from <http://www.cihr-irsc.gc.ca/e/39033.html#Knowledge-Translation>
- Canadian Medical Association (CMA). (2014). *Canadian physician statistics*. Retrieved from [https://www.cma.ca/Assets/assets-library/document/en/advocacy/17-Pop\\_per\\_FP.pdf](https://www.cma.ca/Assets/assets-library/document/en/advocacy/17-Pop_per_FP.pdf)
- Canadian Mental Health Association (CMHA). (2005). *Criminalization of mental illness*. Retrieved from <http://www.cmha.bc.ca/files/2-criminalization.pdf>
- Canadian Mental Health Association (CMHA). (2012). *Access to services*. Retrieved from [http://www.cmha.ca/public\\_policy/access-to-services-2/#.VMIG5\\_54pBA](http://www.cmha.ca/public_policy/access-to-services-2/#.VMIG5_54pBA)
- Canadian Mental Health Association (CMHA). (2014). *Employment*. Retrieved from <http://www.cmha.ca/mental-health/find-help/employment/>
- Canadian Mental Health Association (CMHA). Ontario (2006). *Dialing for doctors*. Retrieved from <http://ontario.cmha.ca/network/dialing-for-doctors/>
- Canadian Mental Health Association (CMHA). Ontario (2007). *Poverty and mental illness*. Retrieved from [http://ontario.cmha.ca/public\\_policy/poverty-and-mental-illness/#.VRCg1vnF-3g](http://ontario.cmha.ca/public_policy/poverty-and-mental-illness/#.VRCg1vnF-3g)
- Canadian Mental Health Association (CMHA). Ontario (2009). *Rural and northern community issues in mental health*. Retrieved from [http://ontario.cmha.ca/public\\_policy/rural-and-northern-community-issues-in-mental-health/#.VMO0Bv54pBA](http://ontario.cmha.ca/public_policy/rural-and-northern-community-issues-in-mental-health/#.VMO0Bv54pBA)
- Canadian Network for Mood and Anxiety Treatment (CANMAT). (n.d.). *Guideline, slides and articles*. Retrieved from <http://canmat.org/guides.php>
- Canadian Nurses Association (CNA). (2009). *Position statement: The nurse practitioner*.

- Retrieved from [http://www2.cna-aiic.ca/cna/documents/pdf/publications/ps\\_nurse\\_practitioner\\_e.pdf](http://www2.cna-aiic.ca/cna/documents/pdf/publications/ps_nurse_practitioner_e.pdf)
- Canadian Nurses Association (CNA). (2010). *Canadian Nurse Practitioner Core Competency Framework*. Retrieved from: [http://www.cno.org/Global/for/rnec/pdf/CompetencyFramework\\_en.pdf](http://www.cno.org/Global/for/rnec/pdf/CompetencyFramework_en.pdf)
- Canadian Nurses Association (CNA). (2012). *2012 annual report*. Retrieved from [http://www.cnaaiic.ca/~media/cna/page%20content/pdf%20en/2013/07/26/09/24/cna\\_annual\\_report\\_2012\\_e.pdf](http://www.cnaaiic.ca/~media/cna/page%20content/pdf%20en/2013/07/26/09/24/cna_annual_report_2012_e.pdf)
- Canadian Nurses Association (CNA). (2015). *Mental health and addictions: Nurse practitioners needed*. Retrieved from <http://cna-aiic.ca/en/events/2014-cna-biennial-convention/selected-abstracts/innovation-stations/mental-health-and-addictions>
- Canadian Psychiatric Association (CPA). (2006). *Wait time benchmarks for patients with serious psychiatric illnesses*. Retrieved from <http://www.cpa-apc.org/media.php?mid=585>
- Canadian Psychiatric Association (CPA). (2015). *Professional guidelines*. Retrieved from <http://publications.cpa-apc.org/browse/documents/69>
- Canadian Society for Exercise Physiology. (2015). *Canadian Physical Activity Guidelines and Canadian Sedentary Behaviour Guidelines*. Retrieved from <http://www.csep.ca/english/view.asp?x=949>
- Carter, A. E., & Chochinov, A. H. (2007). A systematic review of the impact of nurse practitioners on cost, quality of care, satisfaction and wait times in the emergency department. *CJEM: Canadian Journal of Emergency Medicine*, 9(4), 286-295.
- Cavezza, C., Aurora, M., & Ogloff, J. R. (2013). The effects of an adherence therapy approach in

- a secure forensic hospital: A randomised controlled trial. *Journal of Forensic Psychiatry & Psychology*, 24(4), 458-478. doi:10.1080/14789949.2013.806568
- Center for Addiction and Mental Health (CAMH). (2012). *Mental illness and addiction statistics*. Retrieved from [http://www.camh.ca/en/hospital/about\\_camh/newsroom/for\\_reporters/pages/addictionmentalhealthstatistics.aspx](http://www.camh.ca/en/hospital/about_camh/newsroom/for_reporters/pages/addictionmentalhealthstatistics.aspx)
- Center for Addiction and Mental Health (CAMH). (2013). *Mental Health and Criminal Justice Policy Framework*. Retrieved from [http://www.camh.ca/en/hospital/about\\_camh/influencing\\_public\\_policy/Documents/MH\\_Criminal\\_Justice\\_Policy\\_Framework.pdf](http://www.camh.ca/en/hospital/about_camh/influencing_public_policy/Documents/MH_Criminal_Justice_Policy_Framework.pdf)
- Chesney, E., Goodwin, G. M., & Fazel, S. (2014). Risks of all-cause and suicide mortality in mental disorders: A meta-review. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 13(2), 153-160. doi:10.1002/wps.20128
- Clarke, J., Proudfoot, J., Birch, M., Whitton, A., Parker, G., Manicavasagar, V., . . . Hadzi-Pavlovic, D. (2014). Effects of mental health self-efficacy on outcomes of a mobile phone and web intervention for mild-to-moderate depression, anxiety and stress: Secondary analysis of a randomised controlled trial. *BMC Psychiatry*, 14(1), 1-19. doi:10.1186/s12888-014-0272-1
- Clatney, L., Macdonald, H., & Shah, S. M. (2008). Mental health care in the primary care setting: Family physicians' perspectives. *Canadian Family Physician/Médecin de Famille Canadien*, 54(6), 884-889.
- College of Registered Nurse of British Columbia (CRNBC). (2015). Legislation relevant to nurses' practice. Retrieved from <https://www.crnbc.ca/Standards/Lists/StandardResources/328LegRelevanttoNursesPractice.pdf>
- College of Registered Nurses of Nova Scotia (CRNNS). (2014). *2014 NP sensitive outcomes*

- summary report*. Retrieved from [http://crnns.ca/documents/NP\\_Sensitive\\_Outcomes\\_2014.pdf](http://crnns.ca/documents/NP_Sensitive_Outcomes_2014.pdf)
- Collingwood, J. (2013). *Obesity and mental health*. Retrieved from <http://psychcentral.com/lib/obesity-and-mental-health/000895>
- Conference Board of Canada. (2015). *Mortality due to mental disorders*. Retrieved from <http://www.conferenceboard.ca/hcp/details/health/mortality-mental-disorders.aspx>
- Correctional Service of Canada. (2010). *Mental health strategy: Quick facts*. Retrieved from <http://www.csc-scc.gc.ca/publications/092/005007-3020-eng.pdf><http://www.csc-scc.gc.ca/publications/092/005007-3020-eng.pdf>
- Cutrona, C. E., Wallace, G., & Wesner, K. A. (2006). Neighborhood characteristics and depression: An examination of stress processes. *Current Directions In Psychological Science (Wiley-Blackwell)*, 15(4), 188-192. doi:10.1111/j.1467-8721.2006.00433.x
- Desborough, J. L. (2012). How nurse practitioners implement their roles. *Australian Health Review*, 36(1), 22-26. doi:10.1071/AH11030
- Driessen, E., & Hollon, S. D. (2010). Cognitive behavioral therapy for mood disorders: Efficacy, moderators and mediators. *Psychiatric Clinics of North America*, 33(*Cognitive Behavioral Therapy*), 537-555. doi:10.1016/j.psc.2010.04.005
- DualDiagnosis.org. (2015). *Mental health disorders*. Retrieved from <http://www.dualdiagnosis.org/mental-health-and-addiction/>
- Employment and Social Development Canada. (2015). *Learning – Adult literacy*. Retrieved from <http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=31>
- Esmail, N. (2009). National psychiatry waiting list survey. An excerpt from: *Waiting your turn: Hospital waiting lists in Canada*. Retrieved from <https://www.fraserinstitute.org/research>

-news/display.aspx?id=13238

- Fisher, J. (2005). Mental health nurse practitioners in Australia: Improving access to quality mental health care. *International Journal of Mental Health Nursing, 14*(4), 222-229. doi:10.1111/j.1440-0979.2005.00375.x
- Freeman, S. (2006). Cognitive behavioral therapy in advanced practice nursing: An overview. *Topics in Advanced Practice Nursing, 6*(3), 1-8. Retrieved from: <http://www.medscape.com/viewarticle/545336>
- Frijters, P., Johnston, D. W., & Meng, X. (2009). The mental health cost of long working hours: The case of rural Chinese migrants. *School of Economics and Finance, Queensland University of Technology, Australia*. Retrieved from: [http://www.iza.org/conference\\_files/LabEco2009/frijters\\_p931.pdf](http://www.iza.org/conference_files/LabEco2009/frijters_p931.pdf)
- Gagan, M., & Maybee, P. (2011). Patient satisfaction with nurse practitioner care in primary care settings. *Australian Journal of Advanced Nursing, 28*(4), 12-19. Retrieved from [http://www.ajan.com.au/Vol28/28-4\\_Gagan.pdf](http://www.ajan.com.au/Vol28/28-4_Gagan.pdf)
- Gallagher, M. E., Tasca, G. A., Ritchie, K., Balfour, L., & Bissada, H. (2014). Attachment anxiety moderates the relationship between growth in group cohesion and treatment outcomes in group psychodynamic interpersonal psychotherapy for women with binge eating disorder. *Group Dynamics: Theory, Research, and Practice, 18*(1), 38-52. doi:10.1037/a0034760
- Galper, D. I., Trivedi M. H., Barlow, C. E., Dunn, A. L., & Kampert, J. B (2006). Inverse association between physical inactivity and mental health in men and women. *Journal of Medical Science Sports Exercise, 38*(1), 173–178. doi:10.1249/01.mss.0000180883.32116.28

- Gilbody, S., Bower, P., Fletcher, J., Richards, D., & Sutton, A. J. (2006). Collaborative care for depression: A cumulative meta-analysis and review of longer-term outcomes. *Archives of Internal Medicine*, 166(21), 2314-2321.
- Government of Prince Edward Island (PEI). (2011). *Master agreement between the Medical Society of Prince Edward Island and the government of Prince Edward Island and Health PEI*. Retrieved from [http://www.gov.pe.ca/photos/original/doh\\_masteragree.pdf](http://www.gov.pe.ca/photos/original/doh_masteragree.pdf)
- Government of Prince Edward Island. (2012a). *Report of the Auditor General for PEI 2012*. Retrieved from [http://www.gov.pe.ca/photos/original/ag\\_report2012.pdf](http://www.gov.pe.ca/photos/original/ag_report2012.pdf)
- Government of Prince Edward Island. (2012b). *Promote, prevent, protect – PEI Chief Health Officer's report and health trends 2012*. Retrieved from [http://www.gov.pe.ca/photos/original/hw\\_cphoar2012.pdf](http://www.gov.pe.ca/photos/original/hw_cphoar2012.pdf)
- Government of Prince Edward Island. (2013a). *Review of mental health and addictions services and supports in Prince Edward Island*. Retrieved from <http://www.gov.pe.ca/photos/original/mhareport.pdf>
- Government of Prince Edward Island. (2013b). *Newsroom*. Retrieved from <http://www.gov.pe.ca/newsroom/index.php?number=news&newsnumber=8885&dept=&lang=E>
- Gruskin, S. & Ferguson, L. (2009). Using indicators to determine the contribution of human rights to public health efforts. *Bulletin of the World Health Organization*, 87(9), 714-719. doi:10.2471/BLT.08.058321
- Haggarty, J. M., Jarva, J. A., Cernovsky, Z., Karioja, K., & Martin, L. (2012). Wait time impact of co-located primary care mental health services: The effect of adding collaborative care in northern Ontario. *Canadian Journal of Psychiatry*, 57(1), 29-33.
- Health Canada. (2012). *A report on mental illnesses in Canada*. Retrieved from

- [http://www.phac-aspc.gc.ca/publicat/miic-mmacc/chap\\_1-eng.php](http://www.phac-aspc.gc.ca/publicat/miic-mmacc/chap_1-eng.php)
- Health Council of Canada (HCC). (2009). *Teams in action: Primary health care teams for Canadians*. Retrieved from [http://healthcouncilcanada.ca/rpt\\_det.php?id=335](http://healthcouncilcanada.ca/rpt_det.php?id=335)
- Health PEI. (2011). *Medical staff bylaws*. Retrieved from: [http://www.healthpei.ca/photos/original/hpei\\_medstaffby.pdf](http://www.healthpei.ca/photos/original/hpei_medstaffby.pdf)
- Health PEI. (2013a). *Mental health services are changing to make care more accessible*. Retrieved from <http://www.healthpei.ca/index.php3?number=1040534&lang=E>
- Health PEI. (2013b). *Care that is changing to meet the needs of islanders: Better access better care*. Retrieved from <http://www.healthpei.ca/betteraccessbettercare>
- Health PEI. (2014). *Minister releases details of new and expanded mental health and addictions services for Island youth*. Retrieved from <http://www.healthpei.ca/index.php3?number=news&newsnumber=9856&dept=&lang=E>
- Health PEI. (2015). *Mental health services*. Retrieved from <http://www.healthpei.ca/Mentalhealth>
- Hunsley, J., Elliott, K., & Therrien, Z. (2014). The efficacy and effectiveness of psychological treatments for mood, anxiety, and related disorders. *Canadian Psychology/Psychologie Canadienne*, 55(3), 161-176. doi:10.1037/a0036933
- Institute of Health Economics. (2010). *The cost of mental health and substance abuse services in Canada*. Retrieved from <http://www.ihe.ca/documents/Cost%20of%20Mental%20Health%20Services%20in%20Canada%20Report%20June%202010.pdf>
- Ivbijaro, G., & Funk, M. (2008). No mental health without primary care. *Mental Health in Family Medicine*, 5(3), 127-128.
- Jones, K., Hepburn-Brown, C., Anderson-Johnson, P., & Lindo, J. M. (2014). High

- patient satisfaction with nurse practitioner delivered services at two health centres in urban Jamaica. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 48(2), 181-189. doi:10.5172/conu.2014.48.2.181
- Kates, N., McPherson-Doe, C., & George, L. (2011). Integrating mental health services within primary care settings: The Hamilton Family Health Team. *The Journal of Ambulatory Care Management*, 34(2), 174-182. doi:10.1097/JAC.0b013e31820f6435
- Kaufman, E. A., McDonell, M. G., Cristofalo, M. A., & Ries, R. K. (2012). Exploring barriers to primary care for patients with severe mental illness: Frontline patient and provider accounts. *Issues in Mental Health Nursing*, 33(3), 172-180. doi:10.3109/01612840.2011
- Lambert, V., & Keogh, D. (2014). Health literacy and its importance for effective communication. Part 1. *Nursing Children & Young People*, 26(3), 31-37. doi:10.7748/ncyp2014.04.26.3.31.e387
- Legislative Council Office. (2014). *Nurse practitioner regulations*. Retrieved from <http://www.gov.pe.ca/law/regulations/pdf/R&08-1-1.pdf>
- Literacy BC. (2005). *Literacy is a key determinant of health*. Retrieved from <http://decoda.ca/wp-content/uploads/health.pdf>
- Liu, N., & D'Aunno, T. (2012). The productivity and cost-efficiency of models for involving nurse practitioners in primary care: A perspective from queueing analysis. *Health Services Research*, 47(2), 594-613. doi:10.1111/j.1475-6773.2011.01343.x
- Marcus, M., Taghi Yasamy, M., Ommeren, M.V., Chisholm, D., & Saxema, S. (2012). *Depression: A global public health concern*. Retrieved from [http://www.who.int/mental\\_health/management/depression/who\\_paper\\_depression\\_wfmh\\_2012.pdf?ua=1](http://www.who.int/mental_health/management/depression/who_paper_depression_wfmh_2012.pdf?ua=1)
- McAlear, C. (2007). *Rural poverty in Prince Edward Island: Some considerations for Island*

- women. Retrieved from [http://www.gov.pe.ca/photos/original/acsw\\_ruralpov.pdf](http://www.gov.pe.ca/photos/original/acsw_ruralpov.pdf)
- McCarthy, O., Hevey, D., Brogan, A., & Kelly, B. D. (2013). Effectiveness of a cognitive behavioural group therapy (CBGT) for social anxiety disorder: Immediate and long-term benefits. *The Cognitive Behaviour Therapist*, 6(5), 1-13. doi:10.1017/S1754470X13000111
- McGill University. (2009). *Temp work strains employee mental health*. Retrieved from <http://www.mcgill.ca/channels/news/temp-work-strains-employee-mental-health-107960>
- McKenzie, J. F., Neiger, B. L., & Thackeray, R. (2013). *Planning, implementing & evaluating health promotion programs* (6<sup>th</sup> ed.). Glenview, IL: Pearson.
- McKenzie, K., & Chang, Y. (2015). The effect of nurse-led motivational interviewing on medication adherence in patients with bipolar disorder. *Perspectives in Psychiatric Care*, 51(1), 36-44. doi:10.1111/ppc.12060
- Meltzer, H., Bebbington, P., Brugha, T., Jenkins, R., McManus, S., & Stansfeld, S. (2010). Job insecurity, socio-economic circumstances and depression. *Psychological Medicine*, 40(8), 1401-1407. doi:10.1017/S0033291709991802
- Mental Health Commission of Canada (MHCC). (2012a). *Changing directions, changing lives: The mental health strategy for Canada*. Retrieved from <http://strategy.mentalhealthcommission.ca/pdf/strategy-text-en.pdf>
- Mental Health Commission of Canada (MHCC). (2012b). *Territorial and provincial initiatives for improving mental health in primary health care in Canada: An environmental scan*. Retrieved from [http://www.mentalhealthcommission.ca/English/system/files/private/document/PrimaryCare\\_Environmental\\_Scan\\_ENG.pdf](http://www.mentalhealthcommission.ca/English/system/files/private/document/PrimaryCare_Environmental_Scan_ENG.pdf)
- Mental Health Commission of Canada (MHCC). (2012c). *The facts*. Retrieved from

<http://strategy.mentalhealthcommission.ca/the-facts/>

Mental Health Commission of Canada (MHCC). (2013a). *Making the case for investing in mental health in Canada*. Retrieved from [http://www.mentalhealthcommission.ca/English/system/files/private/document/Investing\\_in\\_Mental\\_Health\\_FINAL\\_Version\\_ENG.pdf](http://www.mentalhealthcommission.ca/English/system/files/private/document/Investing_in_Mental_Health_FINAL_Version_ENG.pdf)

Mental Health Commission of Canada. (2013b). *Turning the key*. Retrieved from [http://www.mentalhealthcommission.ca/English/system/files/private/PrimaryCare\\_Turning\\_the\\_Key\\_Full\\_ENG\\_0.pdf](http://www.mentalhealthcommission.ca/English/system/files/private/PrimaryCare_Turning_the_Key_Full_ENG_0.pdf)

Mental Health Commission Canada (MHCC). (2015). *Informing the future: Mental health indicators for Canada*. Retrieved from <http://www.mentalhealthcommission.ca/English/informing-future-mental-health-indicators-canada>

Mikkonen, J., & Raphael, D. (2010). *Social determinants of health: The Canadian facts*. Retrieved from [http://www.thecanadianfacts.org/the\\_canadian\\_facts.pdf](http://www.thecanadianfacts.org/the_canadian_facts.pdf)

Ming, T., McGuire, T. G., & Weimin, Z. (2007). Time allocation in primary care office visits. *Health Services Research, 42*(5), 1871-1894. doi:10.1111/j.1475-6773.2006.00689.x

Morton, N. K., & Zubek, D. (2013). Adherence challenges and long-acting injectable antipsychotic treatment in patients with schizophrenia. *Journal of Psychosocial Nursing and Mental Health Services, 51*(3), 13-18. doi:10.3928/02793695-20130215-01

National Alliance on Mental Illness (NAMI). (2009). *A family guide to mental health: What you need to know*. Retrieved from [https://www2.nami.org/Template.cfm?Section=Multicultural\\_Support1&Template=/ContentManagement/ContentDisplay.cfm&ContentID=93227](https://www2.nami.org/Template.cfm?Section=Multicultural_Support1&Template=/ContentManagement/ContentDisplay.cfm&ContentID=93227)

National Alliance on Mental Illness (NAMI). (2014). *What is mental illness: Mental illness*

- facts*. Retrieved from [http://www.nami.org/template.cfm?section=about\\_mental\\_illness](http://www.nami.org/template.cfm?section=about_mental_illness)
- National Bureau of Economic Research. (2015). *The effects of education on health*. Retrieved from <http://www.nber.org/digest/mar07/w12352.html>
- National Eating Disorders Collaboration. (2014). *What is body image?* Retrieved from <http://www.nedc.com.au/body-image>
- Newhouse, R. P., Stanik-Hutt, J., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., . . . Weiner, J. P. (2011). Advanced practice nurse outcomes 1990-2008: A systematic review. *Nursing Economic\$, 29*(5), 230-251. Retrieved from <https://www.nursingeconomics.net/ce/2013/article3001021.pdf>
- Nishka Smith Consulting. (2015). *Charlottetown and Summerside homelessness point-in-time caseload review*. Retrieved from <http://webcache.googleusercontent.com/search?q=cache:O04CDhTCWCgJ:pei.johnhoward.ca/services/homeless/Point%2520In%2520Time%2520Client%2520Identification.docx+&cd=1&hl=en&ct=clnk&gl=ca>
- Oei, T. P., & McAlinden, N. M. (2014). Changes in quality of life following group CBT for anxiety and depression in a psychiatric outpatient clinic. *Psychiatry Research, 220*(3), 1012-1018. doi:10.1016/j.psychres.2014.08.036
- Paasche-Orlow, M. K., Parker, R. M., Gazmararian, J. A., Nielsen-Bohlman, L. T., & Rudd, R. R. (2005). The prevalence of limited health literacy. *JGIM: Journal of General Internal Medicine, 20*(2), 175-184. doi:10.1111/j.1525-1497.2005.40245.x
- Patel, V., Belkin, G. S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: Integrating mental health services into priority health care platforms. *Plos Medicine, 10*(5), 1-6. doi:10.1371/journal.pmed.1001448
- Patel, M. X., & David, A. S. (2007). Specific community treatments: Medication adherence:

- Predictive factors and enhancement strategies. *Psychiatry*, 6(*Community Psychiatry Part 2 of 2*), 357-361. doi:10.1016/j.mppsy.2007.06.003
- Petterson, S., Miller, B. F., Payne-Murphy, J. C., & Phillips, R. J. (2014). Mental health treatment in the primary care setting: Patterns and pathways. *Families, Systems, & Health*, 32(2), 157-166. doi:10.1037/fsh0000036
- Philp, F., Lucock, M. P., & Wilson, A. R. (2006). Primary care-based guided self-help for depression provided by a nurse practitioner: A pilot evaluation. *Primary Care Mental Health*, 4(3), 159-164.
- Pompili, M., Serafini, G., Innamorati, M., Biondi, M., Siracusano, A., Di Giannantonio, M., . . . Möller-Leimkühler, A. (2012). Substance abuse and suicide risk among adolescents. *European Archives of Psychiatry & Clinical Neuroscience*, 262(6), 469-485. doi:10.1007/s00406-012-0292-0
- Prince Edward Island (PEI) Department of Health and Wellness. (2010). *Prince Edward Island health trends 2010*. Retrieved from [http://www.gov.pe.ca/photos/original/dohw\\_epi\\_trnd10.pdf](http://www.gov.pe.ca/photos/original/dohw_epi_trnd10.pdf)
- Prince Edward Island (PEI) Department of Health and Wellness. (2013). *Suicide and mental health in Prince Edward Island*. Retrieved from <http://www.gov.pe.ca/photos/original/suicidetrends.pdf>
- Prince Edward Island (PEI) Department of Health and Wellness. (2014). *Chief Mental Health and Addiction Officer*. Retrieved from <http://www.gov.pe.ca/health/cmhao>
- Prince Edward Island (PEI) Literacy Alliance. (n.d.). *Literacy in PEI*. Retrieved from [http://www.pei.literacy.ca/resources\\_general?page=resources\\_literacy\\_in\\_pei](http://www.pei.literacy.ca/resources_general?page=resources_literacy_in_pei)
- Prince Edward Island (PEI) Statistics Bureau. (2015). *Statistics*. Retrieved from

[http://www.gov.pe.ca/photos/original/pt\\_lfs.pdf](http://www.gov.pe.ca/photos/original/pt_lfs.pdf)

Probst, J. C., Laditka, S. B., Moore, C. G., Harun, N., Powell, M. P., & Baxley, E. G. (2006).

Rural-urban differences in depression prevalence: Implications for family medicine.

*Family Medicine*, 38(9), 653-660.

Public Health Agency of Canada (PHAC). (2007). *An environmental scan of mental health and*

*mental illness in Atlantic Canada*. Retrieved from <http://www.multicultural>

[mentalhealth.ca/wp-content/uploads/2013/10/Mental\\_Health\\_Scan\\_2007\\_](http://www.mentalhealth.ca/wp-content/uploads/2013/10/Mental_Health_Scan_2007_)

[Atlantic\\_Canada.pdf](http://www.mentalhealth.ca/wp-content/uploads/2013/10/Mental_Health_Scan_2007_)

Public Health Agency of Canada (PHAC). (2011a). *Mental illness*. Retrieved from

<http://www.phac-aspc.gc.ca/cd-mc/mi-mm/index-eng.php>

Public Health Agency of Canada (PHAC). (2011b). *What makes Canadians healthy or*

*unhealthy?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/>

[determinants-eng.php#employment](http://www.phac-aspc.gc.ca/ph-sp/determinants/)

Public Health Agency of Canada (PHAC). (2012). *Mental health in Atlantic Canada: A*

*snapshot*. Retrieved from [http://publications.gc.ca/collections/collection\\_2012/aspc-](http://publications.gc.ca/collections/collection_2012/aspc-)

[phac/HP35-33-2012-eng.pdf](http://publications.gc.ca/collections/collection_2012/aspc-)

Putz, R., O'Hara, K., Taggart, F., & Stewart-Brown, S. (2012). *Using WEMWBS to measure*

*the impact of your work on mental wellbeing: A practice-based user guide*. Retrieved

from <http://www.healthscotland.com/uploads/documents/19559-WEMWBS%20>

[practitioner-based%20user%20guide%20for%20evaluation%20Sept%202012.pdf](http://www.healthscotland.com/uploads/documents/19559-WEMWBS%20)

Quesnel-Vallee, A., DeHaney, S., & Ciampi, A. (2009). Contingent work and depressive

symptoms: Contribution of health selection and moderating effects of employment status.

*Conference Papers -- American Sociological Association*, 1(1), 1-24.

- Quilty, L. C., & Bagby, R. M. (2007). *Mental health screening: Picking up psychiatric problems in primary care*. Retrieved from [http://www.parkhurstexchange.com/clinical-reviews/ud\\_08\\_vol15](http://www.parkhurstexchange.com/clinical-reviews/ud_08_vol15)
- Reif, S. S., Pence, B. W., Legrand, S., Wilson, E. S., Swartz, M., Ellington, T., & Whetten, K. (2012). In-home mental health treatment for individuals with HIV. *AIDS Patient Care & Stds*, 26(11), 655-661. doi:10.1089/apc.2012.0242
- Reiss-Brennan, B., Briot, P. C., Savitz, L. A., Cannon, W., & Staheli, R. (2010). Cost and quality impact of Intermountain's mental health integration program. *Journal of Healthcare Management*, 55(2), 97-114.
- Reiss-Brennan, B. (2014). *How Intermountain Healthcare's mental health integration is improving care*. Retrieved from <http://www.beckershospitalreview.com/hospital-management-administration/how-intermountain-healthcare-s-mental-health-integration-is-improving-care.html>
- Rhoads, J., Ferguson, L., & Langford, C. (2006). Measuring nurse practitioner productivity. *Dermatology Nursing*, 18(1), 32-38.
- Richardson, G. C., Derouin, A. L., Vorderstrasse, A. A., Hipkens, J., & Thompson, J. A. (2014). Nurse practitioner management of type 2 diabetes. *The Permanente Journal*, 18(2), e134-e140. doi:10.7812/TPP/13-108
- Sareen, J., Afifi, T. O., McMillan, K. A., & Asmundson, G. G. (2011). Relationship between household income and mental disorders: Findings from a population-based longitudinal study. *Archives of General Psychiatry*, 68(4), 419-426. doi:10.1001/archgenpsychiatry.2011.15
- Segre, L. S., Stasik, S. M., O'hara, M. W., & Arndt, S. (2010). Listening visits: An evaluation of

- the effectiveness and acceptability of a home-based depression treatment. *Psychotherapy Research*, 20(6), 712-721. doi:10.1080/10503307.2010.518636
- Sidani, S., & Doran, D. (2010). Relationships between processes and outcomes of nurse practitioners in acute care: An exploration. *Journal of Nursing Care Quality*, 25(1), 31-38. doi:10.1097/NCQ.0b013e3181b1f41e
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213-240. doi:10.1037/a0028931
- Stanik-Hutt, J., Newhouse, R. P., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., . . . Weiner, J. P. (2013). Original research: The quality and effectiveness of care provided by nurse practitioners. *The Journal for Nurse Practitioners*, 9(8), 492-500. doi:10.1016/j.nurpra.2013.07.004
- Statistics Canada. (2008). *Seasonal workers by province*. Retrieved from <http://www.statcan.gc.ca/pub/71-222-x/2008001/sectioni/i-seasonal-saisonniers-eng.htm>
- Statistics Canada. (2011). *Population, urban and rural, by province and territory*. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62c-eng.htm>
- Statistics Canada. (2012a). *Ratio for specific groups of health care professionals per 100,000 inhabitants, provinces, territories, Canada and Canada less Quebec, 2001 and 2006*. Retrieved from <http://www.statcan.gc.ca/pub/91-550-x/2008001/t022-eng.htm>
- Statistics Canada. (2012b). *Proportion of the population living in rural areas, provinces and territories, 2006 and 2011*. Retrieved from [http://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-310-x/2011003/fig/fig3\\_2-3-eng.cfm](http://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-310-x/2011003/fig/fig3_2-3-eng.cfm)
- Statistics Canada. (2013). *Median total income, by family type, by province and territory (all*

- census families*). Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil108a-eng.htm>
- Statistics Canada. (2014a). *Mood disorders by sex, province and territory*. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/health114a-eng.htm>
- Statistics Canada. (2014b). *Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian health measures survey*. Retrieved from <http://www.statcan.gc.ca/pub/82-003-x/2011001/article/11396-eng.htm>
- Statistics Canada. (2014c). *Persons living in low-income neighbourhoods*. Retrieved from [http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-014-x/99-014-x2011003\\_3-eng.cfm#bx3](http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-014-x/99-014-x2011003_3-eng.cfm#bx3)
- Talbot, F., Clark, D. A., Yuzda, W. S., Charron, A., & McDonald, T. (2014). "Gatekeepers" perspective on treatment access for anxiety and depression: A survey of New Brunswick family physicians. *Canadian Psychology, 55*(2), 75-79. doi:10.1037/a0036449
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., . . . Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health & Quality Of Life Outcomes, 5*, 563-75. doi:10.1186/1477-7525-5-63
- Thimm, J. C., & Antonsen, L. (2014). Effectiveness of cognitive behavioral group therapy for depression in routine practice. *BMC Psychiatry, 14*(1), 1-20. doi:10.1186/s12888-014-0292-x
- Wand, T., White, K., Patching, J., Dixon, J., & Green, T. (2012). Outcomes from the evaluation of an emergency department-based mental health nurse practitioner outpatient service in

- Australia. *Journal of the American Academy of Nurse Practitioners*, 24(3), 149-159.  
doi:10.1111/j.1745-7599.2011.00709.x
- Weston, C., & Bennett, C. (2009). Improving cardiac outcomes and patient satisfaction. NP practice in a community hospital. *Advance for Nurse Practitioners*, 17(5), 31-32.
- Williams, B. (2014). Group therapy: A natural opportunity for support. *Practice Nursing*, 25(4), 190-194.
- World Federation for Mental Health. (2012). *Depression: A global crisis*. Retrieved from [http://www.who.int/mental\\_health/management/depression/wfmh\\_paper\\_depression\\_wmhd\\_2012.pdf](http://www.who.int/mental_health/management/depression/wfmh_paper_depression_wmhd_2012.pdf)
- World Health Organization (WHO). (2008). Integrating mental health into primary care: A global perspective. Retrieved from [http://www.who.int/mental\\_health/resources/mentalhealth\\_PHC\\_2008.pdf](http://www.who.int/mental_health/resources/mentalhealth_PHC_2008.pdf)
- World Health Organization (WHO). (2011). *Mental health atlas 2011*. Retrieved from [http://www.who.int/mediacentre/multimedia/podcasts/2011/mental\\_health\\_17102011/en](http://www.who.int/mediacentre/multimedia/podcasts/2011/mental_health_17102011/en)
- World Health Organization (WHO). (2015). *Obesity*. Retrieved from <http://www.who.int/topics/obesity/en/>
- Wortans, J., Happell, B., & Johnstone, H. (2006). The role of the nurse practitioner in psychiatric/mental health nursing: Exploring consumer satisfaction. *Journal of Psychiatric & Mental Health Nursing*, 13(1), 78-84. doi:10.1111/j.1365-2850.2006.00916.x
- Wright, W. L., Romboli, J. E., DiTulio, M. A., Wogen, J., & Belletti, D. A. (2011). Hypertension treatment and control within an independent nurse practitioner setting. *American Journal of Managed Care*, 17(1), 58-65.

Young, C. F., & Skorga, P. (2013). Collaborative care for depression and anxiety problems.

*International Journal of Evidence-Based Healthcare (Wiley-Blackwell)*, 11(4), 341-343.

doi:10.1111/1744-1609.12043

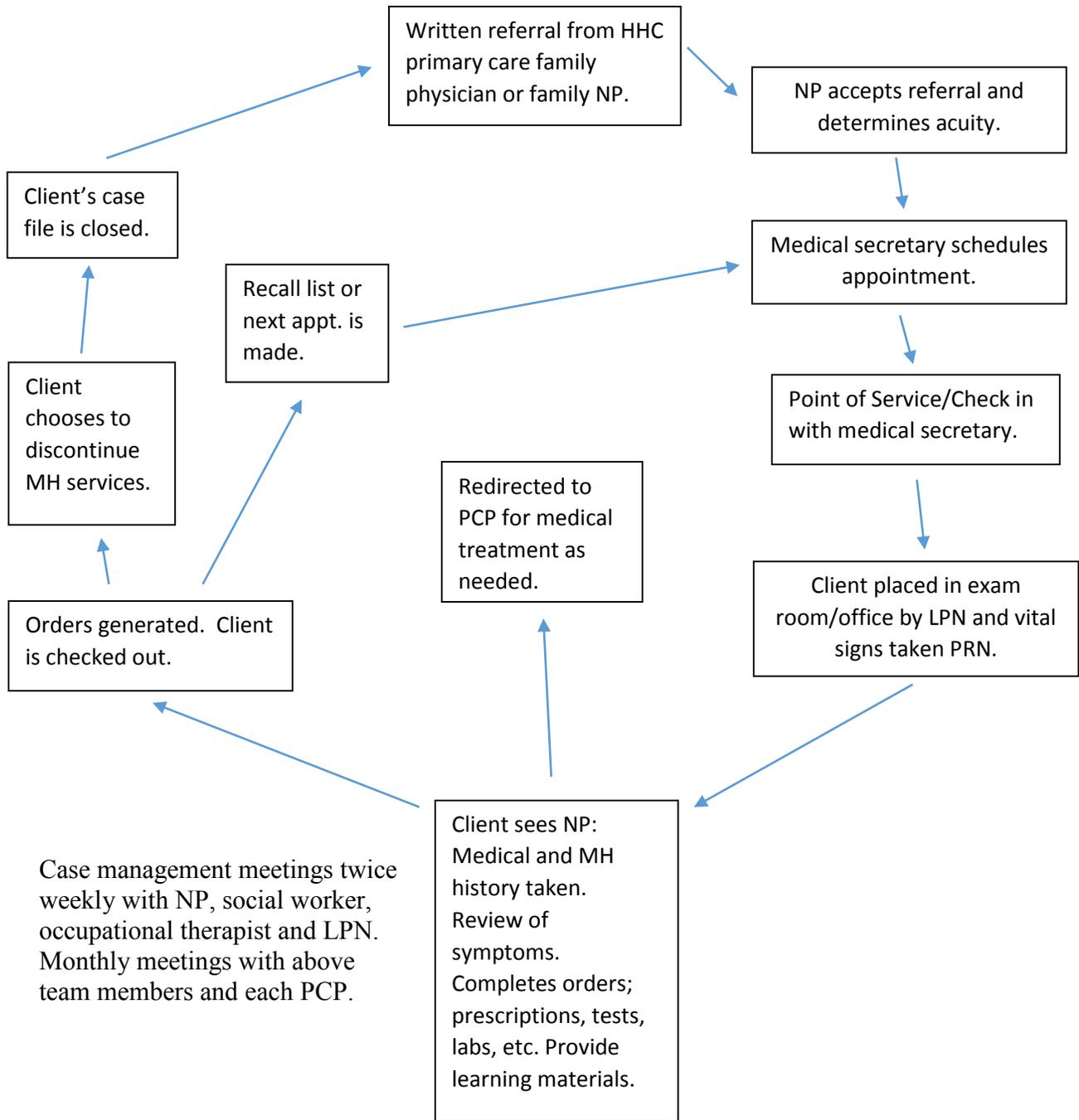
Zanello, A., Mohr, S., Merlo, M. G., Huguelet, P., & Rey-Bellet, P. (2014). Effectiveness of a

brief group cognitive behavioral therapy for auditory verbal hallucinations: A 6-month follow-up study. *The Journal of Nervous and Mental Disease*, 202(2), 144-153.

doi:10.1097/NMD.0000000000000084

# Appendix A

## Workflow Diagram



## Appendix B

### Project Activities and Timeline

Month Year	Feb 2014	June 2015	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016
Needs assessment.									
Engaging stakeholders.									
Approval for funding from Health PEI.									
Securing necessary equipment and office space at HHC.									
Development of policies, guidelines and evaluation tools.									
Working with regulatory body to address NP scope restrictions.									
NP, social worker, and occupational therapist jobs posted.									
NP, social worker, and occupational therapist interviews and hiring of personnel.									
Education of personnel.									
Marketing and education to HHC employees.									
Launch pilot program at HHC									

# Appendix C

## Nurse Practitioner Satisfaction Survey

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58cffffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1 - Google Chrome  
https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58cffffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1

*Psychometric Evaluation of the NPSS* 131

**APPENDIX: NURSE PRACTITIONER SATISFACTION SURVEY**

**We are conducting a study of patient satisfaction regarding the use of nurse practitioners. The survey is completely confidential and only summary information will be reported in the study results. Thank you in advance for your help with this survey.**

Please indicate your degree of satisfaction with the following statements:  
SD = Strongly Disagree D = Disagree A = Agree SA = Strongly Agree  
U = Uncertain

*Fill in the bubbles like this: O*

	SD	D	A	SA	U
1. Overall I was satisfied with my visit with the nurse practitioner(NP).-----	O	O	O	O	O
2. I am likely to recommend the NP to others.---	O	O	O	O	O
3. I am likely to schedule appointments with the NP in the future.-----	O	O	O	O	O
4. The NP was not rushed.-----	O	O	O	O	O
5. I would rather see the NP than my regular physician.-----	O	O	O	O	O
6. I was able to schedule a convenient appointment with the NP.-----	O	O	O	O	O
7. When I feel the need to see a healthcare provider, I can get an appointment with the NP without a problem.-----	O	O	O	O	O
8. The Woman's Hospital Employee Health clinic is easy to access.-----	O	O	O	O	O

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1 - Google Chrome

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1

9. Scheduling an appointment with the Woman's Hospital Employee Health Clinic NP is easier than scheduling with my usual physician.-----	0	0	0	0	0
10. My NP is a skilled healthcare provider.-----	0	0	0	0	0
11. My NP discusses methods other than medication to treat my problem.-----	0	0	0	0	0
12. I am satisfied with how the NP treated me.-----	0	0	0	0	0
13. I was satisfied with the amount of time the NP spent with me.-----	0	0	0	0	0
14. My NP is caring.-----	0	0	0	0	0
15. My NP is knowledgeable about health problems.-----	0	0	0	0	0
16. I trust my NP.-----	0	0	0	0	0
17. My NP knows when to refer to or consult with a physician.-----	0	0	0	0	0
18. The NP listened to what I had to say.-----	0	0	0	0	0
19. The NP was interested in my health concerns.-----	0	0	0	0	0
20. The NP respected me.-----	0	0	0	0	0
21. I can easily talk to the NP about my health concerns.-----	0	0	0	0	0

132 Agosta

	SD	D	A	SA	U
22. I understood what the NP explained to me.——	0	0	0	0	0
23. I understood what the NP taught me.——	0	0	0	0	0
24. The NP explained things in an understandable manner.——	0	0	0	0	0
25. I feel comfortable asking the NP questions.——	0	0	0	0	0
26. I feel comfortable asking my personal physician questions.——	0	0	0	0	0
27. I left the NP visit with all questions answered.——	0	0	0	0	0
28. I usually leave my personal physician's visits with all questions answered.——	0	0	0	0	0

*Please choose only one response for questions 29 and 30*

**29. From past experience, who do you feel has provided healthcare that you've been most satisfied with?**

Nurse Practitioner
  Physician
 Physician's Assistant

**30. From past experience, who do you feel has provided you with the best health education?**

Nurse Practitioner
  Physician
 Physician's Assistant

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1 - Google Chrome

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1

Assistant

**31. Number of times in the past year that you have seen the NP in the Employee Health Clinic at WH:**  
 1-5     6-10     11-15     16 or more

**Number of times in the past year that you have seen a:**

<b>32. Physician (MD)</b>	<b>33. Nurse Practitioner (NP)</b>	<b>34. Physician's Assistant (PA)</b>
<input type="radio"/> None	<input type="radio"/> None	<input type="radio"/> None
<input type="radio"/> 1-5	<input type="radio"/> 1-5	<input type="radio"/> 1-5
<input type="radio"/> 6-10	<input type="radio"/> 6-10	<input type="radio"/> 6-10
<input type="radio"/> 11-15	<input type="radio"/> 11-15	<input type="radio"/> 11-15
<input type="radio"/> 16 or more	<input type="radio"/> 16 or more	<input type="radio"/> 16 or more

**35. Gender**  
 Male     Female

**36. Patient Type**  
 Woman's Hospital Employee     Family Member of Employee     Contract Employee

**37. Highest Education Level Completed**  
 Less than High School Degree     High School Degree/GED     Some Vocational/ Technical School

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default%2FINBOX&id=20944&attachment=2&save=0&filter=1 - Google Chrome

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default%2FINBOX&id=20944&attachment=2&save=0&filter=1

*Psychometric Evaluation of the NPSS* 133

Vocational/Technical School Degree     
 Some College     
 Associate Degree (AD)

Bachelors Degree (BA/BS)     
 Masters Degree (MA/MS)     
 Doctoral Degree

**38. Age**

18-25     26-35     36-45     46-55     56-65  
 66-75     76-85     86 and older

**39. Race**

African American     Hispanic     Asian     Other (please specify):  
 Caucasian (white) \_\_\_\_\_

**40. Employment Status**

Unemployed       PRN/ As Needed  
 Full Time       Contract  
 Part Time       Retired

**41. Health Insurance**

Aetna       State Employees Group  
 Blue Cross Blue Shield     United Healthcare  
 Cigna       Woman's Hospital Health Plan  
 Medicare/Medicaid     Other (please specify):  
 Ochsner      \_\_\_\_\_

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1 - Google Chrome

https://webmail.bellaliant.net/ajax/mail?action=attachment&session=73fb8801a2b64cec8c96ee58ccfffc&folder=default0%2FINBOX&id=20944&attachment=2&save=0&filter=1

**42. Marital Status**

Single Never Married     Married/Cohabiting     Separated  
 Divorced     Widowed

**43. How ill are you today?**

Very Ill     Moderately Ill     A Little Ill     Not Ill

**44. How injured are you today?**

Very Injured     Moderately Injured     A Little Injured     Not Injured

**45. What current health problems do you currently take medication for? Please check ALL that apply.**

High Blood Pressure     Depression/Anxiety     Asthma/Lung/  
Breathing Problems

HIV/AIDS     Heart Disease     Cancer

Diabetes/High Blood Sugar     High Cholesterol     Thyroid Problems

Other

**46. Number of prescription medications that you currently take:**

**47. Your yearly net (take home) income**

< \$25,000     \$25,001 – \$50,001     \$50,000 – \$75,000  
 \$75,001 – \$100,000     > \$100,001

Source: Agosta (2009)

Appendix D

Warwick-Edinburg Mental Well-Being Scale

<b>STATEMENTS</b>	<b>None of the time</b>	<b>Rarely</b>	<b>Some of the time</b>	<b>Often</b>	<b>All of the time</b>
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Source: Putz et al. (2012)

Appendix E  
Program Budget

Expenditures	Cost
Full Time Permanent Nurse Practitioner Salary	\$114,612 (Base salary at highest pay scale plus 18% benefits)
Part Time Permanent Social Worker Salary	\$44,156 (Base salary at highest pay scale plus 18% benefits)
Part Time Permanent Mental Health Occupational Therapist (50%)	\$40,854 (Base salary at highest pay scale plus 18% benefits)
Permanent Shared Licensed Practical Nurse Salary (33%)	\$18,436 (Base salary at highest pay scale plus 18% benefits)
Permanent Shared Medical Secretary Salary (33%)	\$16,090 (Base salary at highest pay scale plus 18% benefits)
Office space, vehicle, and furniture	In-kind from Health PEI
Cognitive behavioural therapy training	\$2,500
Technology (Computers, projector)	\$5000 (One time cost.)
Office Supplies & Educational Materials	\$2000
Travel	\$3000
<b>Total Expenditures</b>	<b>\$246,648</b>