

**IMPROVING COMMUNITY SUPPORT PROGRAMS
FOR THE MENTALLY ILL**

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Abstract

This study investigates ways to increase community supports for individuals with severe and persistent mental illness. For a minority of individuals, the process of deinstitutionalisation has failed, leading to social isolation and a continuing cycle of admission and discharge from hospital. A broad examination of case studies is used to identify policy alternatives for British Columbia, and a detailed analysis of these alternatives confirms that they are best practices. Drawing on these findings, I propose four policy alternatives and conduct a policy analysis. Alternatives are assessed based on their ability to meet five criteria. Results indicate that telephone triage will immediately help alleviate some of the pressures on the mental health care system and address the needs of the most vulnerable portion of those with mental illness. I recommend that a telephone triage system be immediately implemented, followed by a community mental health centre in the next few years.

Keywords: mental illness; deinstitutionalization; community supports

Subject Terms: Mental illness.; Mentally ill -- Care -- British Columbia.; Mental health facilities -- British Columbia.; Deinstitutionalization.

Executive Summary

Since the beginning of deinstitutionalisation, BC has been moving from an institutional model of care for individuals with mental illness to a community based one. The goal of deinstitutionalisation has been to provide care and supports traditionally found in an institutional setting in the community, allowing individuals with mental health issues to receive care closer to home. This process has been successful for the most part, but for some individuals with severe and persistent mental illness, the process has failed to result in community integration and has exacerbated negative life outcomes. Specifically, individuals with mental illness face numerous health and labour market difficulties as well as increased risk of criminalisation. BC has the second highest one-year hospital readmission rate for mental health issues, and individuals with severe and persistent mental illness are more likely to overuse community services such as emergency departments and police resources.

Deinstitutionalisation has not been fully successful and as such, gaps remain in community supports. This capstone addresses what those gaps are and how they can be filled. Review of literature indicates that British Columbia lacks emergency services specifically for individuals with mental illness and does not have any programs that offer comprehensive community care. To determine policy options for British Columbia, three case studies are examined to determine availability of programs in those jurisdictions. The jurisdictions examined include the Inner West Metropolitan Service Area (Australia), South Verona (Italy), and the Calgary Health Region (Alberta). Findings indicate that all three jurisdictions provide community centred mental health care through biopsychosocial delivery centres, and the Inner West Metropolitan Service Area and the Calgary Health Region have telephone crisis lines and mobile crisis services for individuals with mental illness.

These findings, along with a survey of existing literature, helped create the following policy options for British Columbia:

1. *Telephone Triage*: A telephone number would be created to deal with mental health emergencies. Mental health clinicians would staff the line and triage mental health clients who are experiencing a mental health related emergency to determine what course of action needs to be taken.
2. *Mobile Emergency Response Team*: A mobile emergency team would be created to address mental health emergencies within the community. The team would be dispatched to clients to treat them on the spot rather than having clients locate emergency departments.
3. *Community Mental Health Centre*: A community mental health centre would be established to provide biological, psychological, and social support from one location. The centre would provide various levels of care from one location making access to community supports easier for clients.

A policy analysis of these three alternatives is conducted to determine the best course of action. The options are assessed based on their performance on the following criteria: effectiveness, equity, administrative feasibility, cost, and public acceptability. My policy analysis indicates that *Telephone Triage* scores the highest of all the options and should be implemented immediately. It is recommended that a *Community Mental Health Centre* be established in the long run to provide comprehensive community care. These two alternatives successfully fill current gaps in mental health care and improve upon the community supports available in BC.

Dedication

To my parents and sister whose support continues to motivate me.

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1: Introduction

Mental illness has become a prominent issue facing British Columbians, Canadians, and individuals worldwide. Many individuals with a mental illness are able to lead normal lives, with occasional help from the mental health care system, but for some, the severity of their illness becomes disruptive to the extent that they can no longer function independently. Individuals with severe and persistent mental health issues find themselves in hospital for treatment and medical management of their illness. After treatment, they are often released back into the community with hopes that the treatment they received in hospital and the supports provided to them by their community will allow them to lead normal lives again.

However, BC appears to have a gap in type and quantity of programmes provided at the community level; because of a small portion of the mentally ill population, community supports fail to provide what they need and these individuals find themselves being admitted to hospital repeatedly. A recent study by the Canadian Institute for Health Information (CIHI, 2008b) finds that, although general hospital readmission for a patient diagnosed with a mental illness decreased nationwide, BC has the second highest 30-day readmission rate of all provinces. With most of Riverview, the only remaining large scale psychiatric hospital in BC, slated for closure by 2011, it is important to identify how readmission rates can be lowered. Failure to do so will only worsen problems associated with ineffective treatment, such as homelessness, incarceration, street drug use, and overuse of general hospital emergency rooms.

This study aims to identify what factors cause mental health clients who have already received treatment in hospital, to be readmitted. The goal is to identify the gaps in community

supports and how they can be resolved. Research for this capstone is based on the analysis of case studies and detailed study of best practices in the mental health care system.

This capstone is organized in the following way: Section 2 provides a definition of mental illness and statistics surrounding it. The economic cost of the current mental health care system is also discussed, as well as the types of societal disadvantages faced by individuals with mental illness. Section 3 outlines the current institutional structure of the mental health system, identifying the roles played by the country, the province, and the city of Vancouver, and defines the policy problem, outlining why it must be addressed and the stakeholders. Section 4 identifies critical features of an effective mental health care system, as well as where the service gaps are in BC. Section 5 outlines the methodologies chosen, while Section 6 concentrates on analysing case studies. Section 7 states short-term and long-term policy objectives, as well as criteria and measures used to analyse policy alternatives, and the alternatives to be considered in the policy analysis. Section 8 presents the policy analysis of the alternatives, and Section 9 provides concluding thoughts.

2: Why is Mental Illness a Problem?

This Section provides a definition of mental illness, and the statistics and economic costs surrounding it. It also examines the issues that hinder individuals with an illness from becoming equal members in society.

There are many ways to define mental illness, but in this study I adopt the one provided by Health Canada. That is, mental illnesses “are characterized by alterations in thinking, mood, or behaviour (or some combination thereof) associated with significant distress and impaired functioning over an extended period of time” (Health Canada, 2002b, p. 16). Mental illnesses are commonly diagnosed using the criteria produced in a manual by the American Psychiatric Association, which is referred to as the DSM-IV (i.e. Diagnostic and Statistical Manual of Mental Disorders, 4th Edition; APA, 2000). Though this manual is published by an American organization, it is the reference most widely used by health professionals to diagnose mental illness in Canada as well (CMHA, 2008). Mental illnesses include, but are not limited to, mood disorders, schizophrenia, anxiety disorders, and personality disorders.

2.1 Facts about Mental Illness

Mental illness is a significant health issue facing many British Columbian’s. One in five individuals in this province will experience some form of mental illness. Translated into numbers, approximately 882,000 British Columbians have a mental illness (Ministry of Health Services, 2007b). Secondary effects of this illness will also affect countless family members, friends, and members of society. Of the 20 percent of individuals who encounter a mental illness, 3 percent will go on to develop severe and persistent symptoms (CAMIMH, 2008).

Generally, mental illness does not discriminate across economic, race, education, occupation, or gender lines. However, most mental illnesses manifest themselves in the later teen years or early twenties (Health Canada, 2002b, p. 19). This early onset can lead to difficulties later in life, especially in relation to the job market. Many important work-related skills are developed in the teen years, but individuals who are diagnosed with a mental illness early on may find themselves unable to develop the job skills necessary for successful entry into the work force (BCPMHAI, 2006b).

The younger population is also more prone to being hospitalized as compared to individuals with mental illness over the age of 45. Individuals aged 15-24 and 25-44 have a higher rate of hospitalization compared to other age groups with mental illness. These two groups have hospitalization rates over three times higher than the general mentally ill population. Individuals in the first group have a hospital admission rate of 12 percent, while the second group has an admission rate of 10 percent, compared with a 3.8 percent admission rate for all Canadians (Health Canada, 2002b, p.19). Such high rates of hospitalization have economic costs¹.

2.2 Economic Costs

Whiteford et al. (2001) estimate that mental illnesses will account for 22 percent of the total burden of disease worldwide by 2020. Costs of illness are borne by clients, family members, hospitals, employers, and society. In Canada, these costs place a heavy burden on society, with direct and indirect costs totalling billions of dollars.

As deinstitutionalisation continues, the number of mental health clients under the mandate of British Columbia's regional health authorities also grows. Unfortunately, the services provided by these health authorities have been unable to meet demand by clients. Consequently,

¹ The term 'hospitalization' or 'hospitalized' refers only to individuals who are admitted as inpatients with a primary diagnosis of mental illness. Inpatients are individuals who stay at least one night in hospital for treatment.

other community services find themselves overburdened with requests by individuals with mental illness. For example, Wilson-Bates (2008) finds that over one third of all calls placed to the Vancouver Police Department in 2007 concerned people with a mental illness, with this rate increasing in certain areas such as the Downtown Eastside. In terms of resources, these numbers translate to a cost of \$9 million and 13,000 police officer hours per year. When adequate mental health care services are unavailable, clients may find themselves overusing other community services, such as general hospital emergency rooms. The VCH (2007b) finds that people with mental illness are the third largest user of emergency departments, accounting for 30 percent of emergency department visits. Hackman et al. (2006) find that individuals with serious mental illness often access emergency departments even when they are not experiencing an acute episode. This is problematic because emergency department use for non-urgent matters by individuals with serious mental illness means that they displace other individuals who are in the emergency department to address an emergency health situation. Furthermore, in Vancouver, emergency room wait times range from one to four hours and if an individual with a severe and persistent mental illness is accompanied to the emergency department by a police officer, that officer must wait with the individual until they have seen by a doctor (VCH, 2007b). The police officer is dedicated to staying with the patient, and unavailable to deal with other emergencies, regardless of whether the patient is admitted to hospital or not.

Such overuse makes emergency departments and police resources make these services unavailable for others and negatively impact the economy. Stephens and Joubert (2001) find that the economic burden of mental illness in Canada in 1998 totalled almost \$7.8 billion dollars². Direct costs, such as hospital care, accounted for \$4.6 billion and indirect costs, such as short-term sick days and premature death, accounted for the remaining \$3.2 billion (p. 57). In the

² Note that this study is from 10 years ago, as no more recent comprehensive statistics are available. However, it is likely that costs for Canada have increased in line with a world-wide trend of growing burden of mental illness.

workplace alone, loss of productivity due to mental illnesses totals \$8 billion per year in a more recent estimate (BCPMHAI, 2006b). Furthermore, mental disorders accounted for 9.7 percent of all health care expenditures, ranking higher than cancer, digestive diseases, and respiratory diseases for direct costs in 1998 (Health Canada, 2002a, p. 15). The impact of mental illness on the Canadian economy is significant. In addition to addressing the economic burden, BC must acknowledge and remedy the societal disadvantages faced by individuals with mental illness.

2.3 Societal Disadvantages

Individuals with a mental illness face serious hardships during their lifetime compared to the average Canadian. They encounter increased health and labour market difficulties as well as more interaction with the criminal justice system and a lack of adequate community services. These barriers hinder the recovery process and make successful community integration difficult.

As of 2006, the leading cause of disability in Canada was mental illness and unlike in most other developed countries, it contributes at a disproportionate rate to disability (CAMIMH, 2006, p. 1). When individuals experience repeated episodes of an illness, the likelihood that they will develop a permanent disability also increases (Health Canada, 2002b, p. 20). Therefore, an important contributing factor to disability is mental illness.

In addition to having a higher rate of disability, individuals with disabilities are also more likely to be unemployed. Although unemployment levels can vary year to year, the rate remains consistently higher for individuals with a mental illness. Unemployment rates for individuals with a psychiatric disorder can be three to five times higher than for individuals with no disorder (BCPMHAI, 2006e). Lack of income contributes to the financial stresses faced by individuals with a mental illness and forces them to rely on government supports for sustained income. This can lead to feelings of loss of control over one's own life and helplessness, both of which exacerbate mental health issues (Moreau, 1999, p. 6). Furthermore, it is difficult to find a place in

the community when one is unable to contribute to the workforce, and employment is cited as a key factor in successfully transitioning into a community and recovering from a mental illness (CMHA, 2006). Although no specific statistics are available for mentally ill individuals, as of 2006, people with disabilities in BC had an unemployment rate of 56 percent, while the overall provincial unemployment rate stood at 4.8 percent (Leckie, 2006, p. 30).

Individuals with a mental illness also face lower life expectancy rates in Canada. Hall (2000) finds that British Columbians released from hospital with a psychiatric diagnosis have an increased risk of premature death as compared to the rest of the population. Hall associates the lower life expectancy rate with barriers to access and the deficiencies of the mental health care system in the province. Another contributing factor to this statistic may be the high rate of suicide among individuals with mental illness. Suicide is viewed as a last resort for people who feel there are no viable alternatives left to treat their suffering. Many who choose to end their life have treatable mental illnesses, but have been unable to find or receive the help they need (Crisis Intervention and Suicide Prevention Centre of BC, 2008). Numerous studies have shown a link between mental illness and increased risk of suicide (see Mortensen et al., 2000, Harris and Barraclough, 1997, and Beautrais et al., 1996). In Canada, 10 to 15 percent of individuals with a mental illness commit suicide, with depression being cited as the most common mental illness to lead to suicide (BCPMHAI, 2006d).

Individuals with a mental illness also face increased risk of developing a substance addiction. It is estimated that up to half of individuals with a mental illness have a co-occurring substance addiction, compared with 15 percent of the general population (CMHA, 2005). Services for these individuals are limited in BC, as mental health professionals find it difficult to treat someone with an active addiction, while addictions services may feel progress will be hindered by an untreated mental illness. Thus, these individuals are particularly vulnerable and likely to fall through the cracks of the mental health care system (BCPMHAI, 2006a).

Recent reports have drawn attention to the link between mental illness and the criminal justice system. Wilson-Bates (2008) and the CIHI (2008c) observe that a disproportionate number of individuals in the criminal justice system report having a mental illness. Recidivism and over-involvement of the mentally ill in the criminal justice system can be attributed to a lack of adequate community support, specifically community care beds. It is difficult to treat individuals with complex mental health issues when the available facilities are inadequate.

Over recent years, many changes have been undertaken to the mental health care system and the types of support available to clients. Morrow et al. (2006) documents these changes by examining their impact on housing, employment, and income related supports. Changes to the income assistance application for persons with disabilities, and underfunding and limited growth of supported housing developments, have made it difficult for individuals with mental illness to live independently in the community. In addition, BC's failure to create a comprehensive framework for implementing a mental health strategy, and cutbacks to the system since 2001 have both contributed to an inadequate level of community supports. Of individuals in BC with a mental health issue, five percent have unmet mental health care needs, identifying accessibility, availability, and acceptability of services as major barriers (Morrow et al., p. 11).

Thus, the inadequacy of current services within the province is a hindrance to recovery, as the service gaps faced by those with mental illness can lead to difficulties in sustaining good health and steady income. Paired with negative life outcomes, the current mental health care system can leave individuals with mental illness at a distinct disadvantage in society. The next Section outlines how the mental health care system is administered and what programmes are available federally, provincially, and locally.

3: Institutional Set-Up

This Section outlines what responsibilities and roles the federal and provincial governments play in delivering mental health care. I provide a brief history of the process of deinstitutionalisation at both the national and provincial levels, with a focus on the impact of this process on psychiatric facilities in BC, as well as how mental health care is currently delivered in Vancouver. The last Sub-Section highlights current criteria for admission and discharge procedures for those with a mental illness.

3.1 Canada

The federal government has always been an overseer of the health care system, rather than a direct policy maker or service provider. Delivery of health care and decisions surrounding that process are the responsibility of the provincial government. The federal government “collaborates with the provinces and territories in a variety of ways as they seek to develop responsive, coordinated and efficient mental health service systems” (Public Health Agency of Canada, 2002). However, the federal government has passed key acts in the past that merit further attention.

The process of deinstitutionalisation in many provinces began in the same decade that the federal government passed the Medical Care Act, which allowed Canadians to have free access to physician services. This Act was passed in 1966, while finalized agreements were made at the provincial levels by 1972, and an updated version of the Act was released in 1984 (Government of Canada, 2007). No mental health act or plan exists at the national level.

With the federal government serving as an overseer, it has remained up to the provinces to ensure that their residents are receiving adequate and accessible mental health care. The health

care system is largely public, with funding provided by taxpayers. However, approximately 30 percent of health care spending comes from the private sector through health insurance providers or out-of-pocket payments by Canadians (CIHI, 2008a, p. 4). The next Section examines how BC has dealt with its role as primary mental health care provider over the years.

3.2 British Columbia

British Columbia has been treating and providing services for individuals with mental illnesses for well over a century. It has been home to numerous psychiatric facilities, many of which have now closed down. The most well known is Riverview. Like many Canadian provinces, BC began the process of deinstitutionalisation in the 1960's and has attempted to base treatment around a community care model ever since.

The first psychiatric institution in BC was located in Victoria in 1872; it was replaced by a larger facility in New Westminster by 1878 that would also later be closed. In 1904, a facility was opened in Coquitlam, and a hospital was built on the grounds by 1913 (Yearwood-Lee, 2008). This hospital became known as Riverview and remains the province's primary mental health care facility. One of the current roles of this facility is to provide adult psychiatric services including general psychiatry, a psychiatric intensive care unit, a secure care service, rehabilitation services, and a refractory research service (BCMHAS, 2008b).

A concerted effort to deinstitutionalise a large number of patients at Riverview began in the 1990's. Although some buildings had already been closed, a government mandated plan for deinstitutionalisation and the move to community-based treatment accelerated (Yearwood-Lee, 2008). Simultaneously, a Mental Health Initiative was created in 1990 to facilitate the movement of patients from Riverview to communities in the regional health authorities. The overall aim of this initiative was to downsize Riverview to a 300-bed in-patient facility by 2000 while creating 250 new beds in the province, and smoothly transitioning patients from Riverview to their new

settings. A transition fund was created by the Ministry of Health Services to aid in providing community services to patients, and this allowed nursing staff at Riverview to follow patients to their new homes in the hopes of easing the transition of moving. Furthermore, the process of re-admission to Riverview, if necessary, was made simpler for up to six months after the initial discharge (McCallum, 1994). Careful planning for discharge of these patients was undertaken by administrative staff at Riverview to make the transition as simple as possible for patients. The deinstitutionalisation process is ongoing, and although plans for closure continually change, most of Riverview is slated for closure by 2011. As of summer 2008, 396 replacement beds had been opened in various health authorities, with the Vancouver Coastal Health Authority accounting for nine of those beds (BCMHAS, 2008d). However, the mental health care system has not been able to keep up with the loss of resources due to deinstitutionalisation. More specifically, there has been a 63 percent decrease in days of care per 1,000 people in psychiatric hospitals, while there has been a 20 percent increase in the days of care per 1,000 people in psychiatric units at general hospitals.

Riverview is under the jurisdiction of the Provincial Health Services Authority (PHSA), which is one of six health authorities in the province. These authorities were created in 2001 by the provincial government as part of a new administrative structure (BCMHAS, 2008c). Five of the health authorities are regional, and although the PHSA is not regionally based, it is still equal to the other health authorities. The five regionally based health authorities are responsible for service delivery in their geographical regions, while the PHSA ensures that British Columbians receive similar services across the province. It also provides specialized, one-of-a-kind services and agencies such as Riverview Hospital and the Forensic Psychiatric Services. Furthermore, BC Mental Health and Addictions, an agency of the Provincial Health Services Authority, is in the process of developing a 10-year Mental Health and Addictions Plan (BCMHAS, 2007). The health authorities are meant to provide an overall health care system that is efficient, effective,

equitable, and accountable (Ministry of Health Services, 2007a). One of the five regional health authorities is the Vancouver Coastal Health Authority (VCH), and it is responsible for service delivery to Vancouver, North Vancouver, West Vancouver, and Richmond (VCH, 2008a)³.

3.3 Vancouver

Vancouver is under the jurisdiction of a health authority that serves a quarter of the province's population. The VCH delivers service to 1,044,750 people, operates 13 hospitals, and provides 8,936 beds for care. This health authority is guided by the vision of supporting healthy living in healthy communities (VCH, 2008a).

An important aspect covered by the VCH is mental health care; it provides diagnosis, treatment, individual and group therapy, rehabilitation, consultation, emergency and urgent care services, and residential services (VCH, 2008d). These services are further divided into older adult programmes, adult programmes, and child and youth programmes. Most of the mental health patients in the VCH are adults who have been diagnosed with a major mental illness and have significant impairments in functioning because of it (VCH 2008d), and many of the services offered by the VCH are geared towards them. Multidisciplinary teams provide services to children and adults with severe mental illness, ranging from psychiatric assessment to rehabilitation and education. The teams have been shown to be an effective way of providing services to the severely and persistently mentally ill (Malone et al., 2009) and currently the VCH has eight teams in operation. In addition to these teams, a range of services is provided, from clinical assessment to advocacy assistance.

3.4 Criteria for Admission to Hospital

This Section outlines admittance procedures to hospital for patients with a mental illness.

³ The other four regional health authorities are the Northern Health Authority, the Interior Health Authority, the Vancouver Island Health Authority, and the Fraser Health Authority.

Public hospitals and Riverview Hospital have different admission criteria, so each is outlined separately.

3.4.1 Public Hospital Admission Procedure

Individuals with a mental illness are admitted to public hospitals in BC according to criteria outlined in the BC Mental Health Act by the Ministry of Health Services (1996). It became law in 1967, with the goal of protecting the rights of individuals with a mental illness, as well as designating authority for involuntary admission, outlining criteria for voluntary and involuntary admission, and describing the procedures involved.

As per the Ministry of Mental Health Services (1996), if individuals choose to admit themselves to hospital for treatment of their mental illness, the following criteria must be met:

- Request admission by filling out Form 1, which states the patient will follow the rules of the facility and advise staff when they wish to be discharged
- Both a physician and the director must agree to admit the patient
- The person must consent to treatment by the facility by completing and signing Form 2, which allows the hospital to provide treatment to the patient

Patients admitted voluntarily may be discharged when they wish, and they do not have to fill out the forms outlined above if they are treated in the same manner as regular patients as opposed to having their own admittance procedure, as is the case in some hospitals.

Individuals can be admitted involuntarily through one of three methods: medical certificates, police intervention, or order by a judge⁴.

3.4.2 Riverview Admission Criteria

Unlike public hospital admission, individuals can be referred to Riverview only by physicians. The BC Mental Health and Addictions Agency, an agency of the Provincial Health

⁴ For a detailed description of these methods, see the BC Mental Health Act, published by the Ministry of Health Services (1996).

Services Authority, is responsible for the administration of the Adult Tertiary Psychiatry Program at Riverview. This programme provides treatment and rehabilitation services for adults diagnosed with a mental illness who are having an acute episode. An acute episode is the phase in mental illness requiring inpatient care. The agency outlines seven inclusion criteria that must be met before an individual's stay at Riverview for the Adult Tertiary Psychiatry Program (BCMHAS, 2008a):

4. An individual must have a diagnosis of a psychotic disorder, an affective disorder, or a substance dependence that is present in addition to the primary diagnosis of one of the illnesses mentioned.
5. The individual must have a high degree of disability, as determined by a Global Assessment of Functioning score.
6. The individual must be between the ages of 17 and 64.
7. They are unable to be managed in the community with current resources.
8. A satisfactory effort has been made by the referring hospital to treat the patient, and the patient is medically stable at the time of transfer to Riverview.
9. The patient must be referred by inpatient psychiatric units and psychiatric assessment units at general hospitals and a discharge plan must accompany the request for admission.
10. A discharge summary must accompany the patient

Various units within Riverview administer this programme, and patients referred to the service are usually admitted within seven days.

3.5 Discharge Procedures

As with admission procedures, discharge procedures differ for public hospitals and Riverview.

3.5.1 Public Hospital Discharge Procedure

Under the Mental Health Act (Ministry of Health Services, 1996), voluntary patients can be discharged without notification to family members, although family members can be notified

if the physician sees fit. Patients who are admitted to a general hospital involuntarily have different discharge procedures.

When the hospital decides an involuntary patient is ready for release, a near relative must be informed before discharge by having a completed Form 17 sent to them indicating that their relative is going to be discharged. Other near relatives may also be informed if the director of the hospital deems it necessary. A discharge plan is created by the hospital in cooperation with the patient, relatives, and other community care providers. This is meant to aid in the transition process from the hospital back to the patient's usual setting. Riverview has a separate set of discharge procedures, requiring detailed discharge plans.

3.5.2 Riverview Discharge Procedure

Discharge planning for patients at Riverview is undertaken by the hospital administration. The goal of the planning is to account for any aspect the patient might need assistance with after discharge including vocational planning, aid finding employment, or help finding financial support (McCallum, 1994, p. 114).

For patients at Riverview, before any formal planning can take place, the patient's status must be changed from involuntary to informal which allows the patient to leave Riverview at any time (McCallum, 1994, p. 114). Patients at Riverview also have a Charter of Patient Rights (1994), which states that patients must be informed of discharge two days before it occurs, be able to notify whomever they choose of the discharge, and be provided with assistance in finding adequate housing and community resources. They must also be informed of what follow-up medical care is necessary and have assistance in arranging it, and after a discharge plan is agreed upon, hospital staff must ensure that discharge does not take place until issues of housing, finances, and community clinical care are resolved.

Although discharge plans are meant to ensure that no problem arises for patients in their community settings, the plans themselves and the processes surrounding them can be flawed. McCallum (1994) finds that strained human resources at the hospital level and a lack of appropriate community supports can lead to discharge of patients to inappropriate settings. For example, one patient was discharged without an appointment being planned with the Social Services office, and was told he would have to wait over a week for a meeting (p. 115). Inadequate discharge plans are detrimental to the recovery process, and may be a result of various shortfalls in the current system.

3.6 Policy Problem and Stakeholders

This research addresses the policy problem of how to improve community supports for people with severe and persistent mental illnesses to reduce readmission rates.

Mental illness can strike any individual, and has significantly adverse effects on clients, family members, friends, and society as a whole. High re-admission rates and their toll on the BC economy signal that not enough is being done to help people with severe and persistent mental illnesses recover in a meaningful way. They face poorer life outcomes and harmful interactions that significantly reduce their quality of life. Individuals with mental illness face many negative health outcomes such as higher rates of disability, lower life expectancy rates, higher rates of suicide, and higher likelihood of substance abuse. Labour market and societal outcomes are also worse, with mentally ill individuals having disproportionately higher rates of unemployment and higher interactions with the criminal justice system.

Since deinstitutionalisation began in BC, community resources have been unable to cope with the demand placed on them, allowing some individuals, especially those with severe and persistent mental illnesses, to fall through the cracks. Given the shortfalls of the current system

their negative impact on mental health clients, this study aims to determine what programmes must be created or improved to better address the needs of people with mental illnesses.

Key stakeholders involved in the issue are:

- The Ministry of Health Services, which is mandated to guide and enhance health services for British Columbians
- The five regional health authorities, which provide mental health services to their respective populations, and the Provincial Health Services Authority, which is responsible for providing specialized services
- The BC Mental Health and Addictions Services agency, which provides specialized services for people with mental health problems, including adult psychiatry services at Riverview
- Community mental health care facilities, which provide mental health services to their respective populations
- Clients of the mental health care system

Secondary stakeholders include family members and workers in the mental health care field. These individuals deal with the consequences of mental illness on a daily basis, and improvements to the health of their dependents or patients would benefit them. Lastly, advocacy groups are also interested in this policy problem. Throughout the years, various groups have been created with the sole purpose of advocating on behalf of those with mental illnesses. They include the BC division of the Canadian Mental Health Association, the BC Schizophrenia Society, the Mood Disorders Association, and the Mental Health Action Research and Advocacy Association of Greater Vancouver. These groups spend time and resources trying to improve resources and programmes, and positive changes to the current system would help them achieve some of their advocacy goals.

Currently services to aid individuals with mental illness are inadequate, as seen in Sections 2 and 3. The next Section surveys the literature on effective mental health care systems.

4: Critical Features of an Effective Mental Health Care System

This Section outlines critical features that must be present in a mental health care system so that it successfully addresses all impacts of mental illness on clients' lives. Features are based on models presented in literature, and the impact of each feature on addressing client needs is discussed. It is important to ensure that patients who are being re-integrated into the community have the supports they need to make the process a success, and having an adequate discharge plan for patients is only one step in this process. A theme that arises repeatedly in the literature is the concept of a continuum of services as mental health clients require an array of services.

A medical model that addresses this continuum of services is the *biopsychosocial model* of mental health care. Having a multi-dimensional framework is essential, as “access to a delivery system is critical for individuals with severe and persistent mental illness not only for treatment of symptoms but also to achieve a measure of community participation” (USDHHS, 1999, p. 285). The model was created in the late 1970's in response to the heavy emphasis on biological causes of mental illness at the time. It acknowledges the impact of biology on the onset of illness, but it also emphasizes the psychological and social factors and their role in both onset and recovery from mental illness. Although the exact causes of mental illness are unknown, it is widely acknowledged that the interplay between biological, psychological, and social factors is important (USDHHS, 1999). In terms of mental health care delivery, the biopsychosocial model attempts to provide services in biological, psychological, and social areas.

The following Sections break the model down into its three areas of treatment and provide examples of programmes for each category based on the 1998 BC Mental Health Plan (Ministry of Health Services, 1998). This plan outlines components of a successful service

delivery structure in detail. The goals of the plan were to be realised over a seven year period, but did not occur due to two main reasons. First, although the Ministry had dedicated more funding to mental health care to help implement the plan, the full amount of funding promised did not materialize. Second, with the creation of the health authorities in 2000, each authority was asked by the Ministry to develop its own mental health plan rather than attempt to fill some of the gaps in service identified by the 1998 plan (BC Mental Health Monitoring Coalition, 2000). The two points combined with the defeat of the government in 2001 meant that a majority of the goals laid out by the 1998 plan went unmet. Nevertheless, the plan serves as a useful guide on what types of programmes should be present in a biopsychosocial based mental health care system. Some programmes address more than one component, but for the purpose of this analysis, they are placed only in one category.

4.1 Biological Aspects

With respect to the biological aspect, inpatient services should address medical management of illness and focus on stabilizing clients, while outpatient services should focus on helping individuals sustain the medical regime prescribed by the hospital. Emergency services must also be available to address acute episodes, and long-term stay facilities should be available for clients unable to cope on their own.

Treatment of biological aspects of mental health requires inpatient services, partial hospital stays, and crisis services (Barton, 1999). The Ministry of Health Services (1998) uses hospital psychiatric inpatient units to address inpatient services, and smaller regional facilities for clients who need more supervised care. Inpatient services are necessary in a continuum care model because some crises cannot be resolved in community settings and a more intensive care option is required (USDHHS, 1999). The regionally based facilities are meant to serve as specialized support in lieu of psychiatric hospitals. Crisis services include mobile response teams, as well as emergency and short-stay residential facilities. Having psychiatric wards in

general hospitals is not the only aspect of medical management, and the Ministry plan emphasises making emergency services easier for clients to access.

4.2 Psychological Aspects

Psychological supports should address the negative impacts of severe mental illness on clients' self-esteem by helping them regain skills and become contributing members of society, while taking into account the limitations imposed by the illness. Programmes that address psychological aspects include case management, individual counselling, peer-support groups, and family counselling services. Also needed is a focus on stress and time management, as well as a concentration on helping clients regain other important life skills.

Psychological services should be available for both clients and family members. They include case management, assertive community treatment, training to regain personal skills such as stress, time, and home management, and other programmes to help clients regain self-esteem and self-importance, including peer support programmes. Case management acknowledges that the course of mental illness is not the same for every individual, and case managers are meant to “coordinate service delivery and ensure continuity and integration of services” (USDHHS, 1999, p. 286). This approach brings treatment to the client rather than forcing the client to locate it. Clients with severe and persistent mental illnesses have complex care needs, and having individualised case management offers a strategy for addressing these needs. Research demonstrates that case management is an effective treatment option for clients who have a history of repeated hospitalizations (Ministry of Health Services, 1998). Peer support also provides an important component of psychological care, as individuals are able to share their struggles with other clients and overcome them together.

Another form of case management is assertive community treatment (ACT). Research demonstrates that individuals who are exposed to assertive community treatment are less likely to

be hospitalized, have a decreased time of stay if they are re-hospitalized, and are less likely to use emergency services (Tibbo et al., 1999). Best practices also indicate that clients and family members tend to be satisfied with ACT teams (Goering, 1997, p. 6). This increases the likelihood that clients will follow recommendations put forth by these teams. ACT teams can also provide higher levels of personal support and address the need for re-gaining of life skills.

4.3 Social Aspects

The social aspects of the system should address components necessary to successfully integrate people with mental illness back into the community. They include vocational, leisure, and educational services. Furthermore, social aspects must consider the services or educational tools needed to aid unpaid caregivers and the general public in understanding mental illness and how it affects people that have it.

Social programmes have been shown to reduce symptoms, ease community adjustment, prevent relapses, and reduce hospital use (Barton, 1999). Necessary components include vocational training, education for clients, family members, and the public, and leisure services such as clubhouses and social activity groups. Education for family members is important, because mental illness and the medication used to treat it can have negative impacts on the affected individual's personality or physical appearance, and it is important for family members to understand how to deal with these situations appropriately. Education for the public plays an important role in recovery and community integration for the severely and persistently mentally ill, as unchecked public stigma is a significant barrier to recovery. Stigma creates a sense of shame around mental illness, and can lead to self-shame or social isolation (BCPMHAI, 2006c). Public awareness campaigns for secondary schools, religious leaders, and doctors regarding the symptoms, treatment, and recovery process of mental illness are some of the tools to consider.

To summarise, a well-functioning mental health care system must include services that can adequately address all phases of mental illness and provide support for clients in all affected areas of their lives. Services and programmes must address biological, psychological, and social needs, while also providing transitional services for clients moving from one phase of illness to another. Such levels of support ensure that clients' needs are being met at all times and safeguards are in place to assist clients if they relapse.

4.4 BC and the Biopsychosocial Model

BC has been trying to implement a comprehensive biopsychosocial model since the process of deinstitutionalisation began. However, the societal advantages outlined in Section 2 indicate that the province has not been fully successful in achieving community-based mental health care. Current mental health services do address some aspects of the biopsychosocial model, but the system lacks consistency, and some programmes outlined in this section are not present.

Currently, emergency services specifically for individuals with mental illness are lacking. Absence of this service strains resources meant to be shared by the community and also strains staff at the general hospitals who may not feel equipped to deal with mentally ill individuals. The VCH (2007b) observes that individuals who go to the emergency room for treatment of mental illness do not always receive adequate help, noting that “the stigma associated with mental illness can result in wide variations in quality of care between medical patients and mental health patients” (p. 75). Furthermore, although various psychological and social supports exist throughout the VCH, there is a lack of central access to these services. Barton (1999) observes that often psychosocial rehabilitation is not adequate in mental health care systems, despite evidence indicating its important role in treatment for people with severe and persistent mental illness. Although a case management process is in place for mental health clients, caseloads are often high and many mental health services are scattered throughout Vancouver, so it can be

difficult for clients to locate appropriate services. Many residential facilities offer psychological and social supports, but they are only available to residents. BC lacks adequate services for those in crisis and does not have a central point of access for biological, psychological, and social supports.

The next Section outlines the methodology for analysis to address how BC can improve upon the community supports it currently has.

5: Methodology and Data Description

This Section outlines the primary and secondary methodology being used to derive policy alternatives and the selection process in locating appropriate data. The primary methodology is analysis of case studies from jurisdictions around the world to identify the best alternatives, while the secondary methodology assesses whether these alternatives are best practices through examination of academic studies.

Starting with the case study analysis, I present and assess the information based on its ability to address components of the biopsychosocial model. Case studies examined include: the Inner West Metropolitan Service Area in the State of Victoria, Australia; the South Verona catchment area in the region of Veneto, Italy; and the Calgary Health Region in Alberta. For the two foreign countries, I provide an overall background of mental health policy and history at the national level. I also provide an in-depth analysis of the cited smaller jurisdictions in those countries, which are comparable to the VCH in function. For Alberta, a provincial history of mental health care is provided as well as an in-depth analysis of the Calgary Health Region.

5.1 Case Study Selection

In selecting cases, I applied the following criteria: countries are economically developed; they must have begun the process of deinstitutionalisation a number of decades ago; they must currently have a mental health care system based around community care rather than institutional care; they must have some form of public health care as well as devolved mental health care that is the responsibility of small health authorities; and they must have a lower percentage of deaths due to mental illness than BC. Comparisons of the characteristics are provided in Table 1.

Table 1- Case Study Criteria

	Beginning of Deinstitutionalisation	Funding of Health Care	Area Responsible for Delivery of Health Care	Mortality Rate		
				2000	2003	% Change
Australia (Inner West)	1950's/60's	Public/Private	Metropolitan Service Areas	2.48	1.20	-1.28
Italy (South Verona)	1978	Public/ Private	Community Mental Health Services	1.16	0.92	-0.24
Alberta (Calgary)	n/a	Public/ Private	Regional Health Authorities	1.89	1.83	-0.06

Sources: WHO, 2009; and Government Services 2000, 2003

Table 1 demonstrates that the two countries being examined have been undergoing the process of deinstitutionalisation for over 30 years. All case studies have a public/private funding model of health care and divide health care delivery into smaller health authorities. Finally, mortality rates due to mental illness for individuals aged 25-64 have decreased in all cases⁵. At the national level, Australia has experienced the most significant lowering of mortality rate (i.e. 1.28 percentage points from 2000 to 2003), while Italy reduced the rate by 0.24 points, and Alberta reduced it by 0.06 points. BC reduced its mortality rate by 0.24 points in this period (British Columbia Vital Statistics Agency 2000, 2003). The differences in mortality rates compared to BC may not be a direct result of deinstitutionalisation policy. The rates are meant to highlight that the jurisdictions chosen for examination are doing a better job of reducing mortality rate due to mental illness, and one of the contributing factors to their lower rates may be the mental health programs they have in place. Although Alberta has not experienced as large a decrease in mortality as BC, it has a lower one-year readmission rate (22% vs. 27%; CIHI, 2008b).

⁵ This age group is chosen for comparison because statistics were not available for individuals aged 18-24 as the databases provide statistics only for individuals aged 16-24. This age bracket had to be excluded as it includes data for individuals under the age of 18, who are not under the jurisdiction of adult mental health services in BC.

Moreover, compared with BC, Alberta has been able to reduce its one year readmission rate by a larger margin. Between 2004/05 and 2005/06 Alberta reduced its rate by 16.3 points, while BC reduced its rate by 12.4 points. Thus Alberta reduced its rate by 3.91 more points than BC. Since Alberta has the same federal deinstitutionalisation history as BC, it is deemed a worthy case study.

All my case studies will focus on the history of deinstitutionalisation, and programmes currently being offered by the government and health care providers to individuals with a mental illness who have been discharged from hospital. Programmes run by non-profits and other charitable organizations are excluded.

5.2 Evaluation Framework

Cases are assessed based on their ability to provide a range of biological, psychological, and social programmes, as discussed in Section 4. Table 2 outlines the framework of analysis for mental health care programmes and defines measures to identify them.

Table 2 - Evaluation Framework

	Characteristic	Measure
Special Biopsychosocial Features	Biopsychosocial Delivery Centres	Is there a centre present that delivers all aspects of biopsychosocial care?
	Phone Service	Is there a phone number that anyone can contact to receive information about mental illness?
		Is there a crisis line?
Biological	Psychiatric Inpatient Units	Are there inpatient units for short-term stay in local general hospitals or other facilities for individual's experiencing the acute phase of their illness?
	Regional Facilities	Are there longer-term stay options available for clients requiring care for an extended period of time?
		Is there a short term stay residential facility?
	Crisis Services	Are there mobile crisis services for individuals?
		Are there stationary crisis services?
Psychological	Case Management	Are individualised care plans devised?
	Assertive Community Treatment Teams	Are there multidisciplinary teams available within the community to address the complex and varied needs of those with mental illness?
	Personal Skills Training	Are services available to help individual's regain independent living skills?
	Individual Counselling	Are one-on-one counselling services available?
	Family Counselling	Is counselling for family members available?
	Peer Support	Are group counselling or other forms of peer support available?
Social	Vocational Training or Services	Is vocational training available for those who would like to find an occupation? Is there any type of social enterprise programme in place?
	Education Services	Are educational services available for the public, clients, and family members wanting to know more about mental illness?
	Leisure Programmes	Are programmes available for clients wishing to partake in social activities?

Table 2 specifies the programmes that should be available in a biopsychosocial model of mental health care, as presented in Section 4. A special biopsychosocial features section has been included for programmes that do not easily fit into a single category. Biopsychosocial delivery centres provide all three types of care in one central location, with numerous locations throughout a health authority. Telephone services can be either for general enquiries regarding mental health care services or to provide triage in emergencies. The biological category covers psychiatric inpatient units, regional facilities, and crisis services; the psychological category covers case management, assertive community treatment, personal skills training, individual counselling,

family counselling, and peer support; and the social category covers vocational training or services, education services, and leisure programmes.

The next Section examines what programmes are available in the selected jurisdictions.

6: Analysis

This Section describes the mental health care systems in the three selected cases: Inner West Region (Australia), South Verona (Italy), and Calgary Health Region (Alberta). Each Sub-Section describes the components of the mental health care system for the jurisdiction being examined and outlines how they address the biological, psychological, and social needs of clients. From this analysis, I determine what programmes are present in the jurisdictions but absent in BC, and those programmes are examined in further detail. The summary of my comparative analysis appears in Table 3.

Table 3 - Case Study Programme Summary

		Australia	Italy	Alberta	
Special Features	Biopsychosocial Delivery Centres		✓	✓	✓
	Phone Service	Crisis	✓		✓
		General Information	✓		✓
Biological	Psychiatric Inpatient Units		✓	✓	✓
	Regional Facilities	Long Term	✓		
		Short Term	✓	✓	
	Crisis Services	Mobile	✓	✓	✓
		Stationary	✓	✓	✓
Psychological	Case Management		✓		✓
	Assertive Community Treatment Teams		✓		✓
	Personal Skills Training		✓		✓
	Individual Counselling			✓	✓
	Family Counselling			✓	✓
	Peer Support			✓	✓
Social	Vocational Training or Services			✓	✓
	Education Services				✓
	Leisure Programmes			✓	✓

6.1 Australia: Victoria, Inner West Metropolitan Service Area

The State of Victoria has a population size similar to BC's and a state-run mental health care system⁶. An important difference in Victoria is the greater role played by the national government than in Canada. Australia has had a national mental health plan since 1992, which continues to be internationally recognized for its innovative programmes. Victoria was the first Australian state to begin deinstitutionalising, with the process beginning in 1993 and ending in

⁶ Unless otherwise stated, the information for this section is from Department of Human Services, 2008.

1998 (Gerrand, 2005). Although some institutions had been closed well before that point, it was in 1993 that closing all psychiatric institutions in Victoria became a government priority.

In terms of state-wide services, Victoria has no psychiatric hospital, and services are distributed across general hospitals and outreach services. Different levels of services are available depending on the needs of individuals, and delivery is further divided into metropolitan areas. There are 21 metropolitan areas across the state, similar to the regional health care delivery structure in Vancouver. The Inner West Metropolitan Service Area has been chosen for comparison because it provides service to the largest city in the state, Melbourne.

6.1.1 Special Biopsychosocial Features

The Inner West region provides biopsychosocial delivery through “community care units.” The units provide services only to residents, and their residential aspect is discussed in the next Sub-Section. These units help residents re-learn everyday skills and locate other community support services, while providing the opportunity to enhance social skills through interactions with other residents. The State of Victoria also has a telephone hotline available 24 hours a day, seven days a week. This hotline provides all levels of psychiatric triage including information, assessment, and referral. It provides a central location of access into the mental health system for clients and others affected by or wanting to know more about mental illness. Residents of the Inner West metropolitan region have access to this hotline at all times.

6.1.2 Biological Services

Hospital psychiatric inpatient units are still available, although as of 2000, no hospital has been solely dedicated to psychiatric care. Inpatient services for individuals with severe and persistent mental illnesses are available in general hospitals that can also accept involuntary clients. Stays can be medium to long term depending on the severity of symptoms, and

rehabilitation services are provided. In the Inner West service region, acute inpatient services are provided by the Royal Melbourne Hospital, which also has long term and secure stay units.

Regional services are provided by the “community care units.” These units provide services for clients in a community setting and offer medium or long-term accommodation depending on client needs. The units are not meant to serve as permanent accommodation, and an emphasis is placed on providing clients with the skills needed to move to independent living or accommodation with a lower level of support. As such, the services provided are also psychological and social. There is one community care unit in the Inner West service area.

In terms of crisis services, acute inpatient services and community treatment options are provided. Victoria takes a unique approach, providing 24 hour intensive community treatment on an outreach basis when requested, which has been shown to be more successful than the traditional inpatient services and outpatient follow-up (Gerrand, 2005). This service is provided by Crises Assessment and Treatment Teams, which treat individuals experiencing an acute phase of their illness. They also assess treatment options and whether patients should be admitted to hospital. There is one team currently operating in the Inner West service area.

6.1.3 Psychological Services

Victoria provides mobile psychological support and treatment teams whose goal is to provide assertive community outreach. The teams operate seven days a week for extended hours. Two of these teams operate in the Inner West region, with one dedicated to homeless persons having psychiatric issues.

Continuing care, clinical and consultancy services make up the bulk of the mental health care system. These services are available only for individuals not requiring urgent care and provide non-urgent assessments, treatment, case management, support and continuing care. Length of time in contact with these services varies from client to client depending on need. The

services are available in four locations across the Inner West service region, two of which are in the Royal Melbourne Hospital. Although these services address various levels of care as per the biopsychosocial model, they are seen as psychological services for the purposes of this analysis because of the case management, consultancy, and personal care involved.

6.1.4 Social Services

The State of Victoria provides no specific social service programmes; however, many programmes mentioned above include social services. For example, community care units focus on helping clients learn independent living skills. Such programmes have two main benefits: they enhance clients' self esteem, and they help develop the tools clients need to integrate into the community in the future. Services in the region tend to cover social, psychological, and biological services, demonstrating that coordination and delivery of these services is possible in a community setting, but making it difficult to separate services for the purpose of the analysis.

6.2 Italy: Verona, South Verona

Italy changed many aspects of its mental health care system during the 1970's. Health care became free for all Italians with the establishment of a public national health care system. In 1978, all psychiatric hospitals were closed to new admissions and the deinstitutionalisation process began (De Girolamo et al., 2007). Mental health care reforms were brought about by Law 180, which mandated that:

- Large-scale psychiatric institutions must be closed down and replaced exclusively by psychiatric units in general hospitals no larger than 15 beds and only for acute care;
- Other care will be provided to mental health patients as close to their home environment as possible;
- Involuntary admittance will ensure that patients' rights are respected.

The new services were designed to provide an alternative system of mental health care, rather than complementing the existing model (Burti, 2001).

While the National Health Service (NHS) oversees the health care system for the entire country, budgeting, implementation of policy, and direct care are provided at the regional level by local health authorities. It should be noted that Italy has a slightly different organisational structure than Canada, as it is composed of regions, provinces, and municipalities. Each region is divided in provinces, and regions provide health care budgets directly to the local health units. The regions are responsible for administrative and legislative functions, while implementation and direct care is handled by local health units. The provinces themselves have little to do with the health care system. Due to decentralisation, there is regional variation in types of services available, and the region being examined for this case study, Veneto, is at the higher end of the service spectrum (CMHA Toronto, 2008).

Verona is a province in northern Italy and part of the larger geographical region of Veneto. Community Mental Health Services (CMHS) are the main focus of mental health services, as well as psychiatric units in general hospitals, universities, and private hospitals. Four of these CMHS are located around the province of Verona. One of the largest and most widely studied community mental health centres is located in South Verona and is the focus of examination for this case study⁷. This region is being examined because of the large amount of research surrounding it; however, it is much smaller than BC, which should be kept in mind when reviewing the case study.

6.2.1 Special Biopsychosocial Features

The South Verona Community Mental Health Service (CMHS) is responsible for providing inpatient and day care, rehabilitation and home visits, emergency room service, psychiatric consultation within departments in the general hospital, and a 15-unit inpatient unit in the general hospital, as well as social services for clients (Rothbard and Kuno, 2000). Many of

⁷ Unless otherwise stated, the information for this Section is from Tansella et al., 1998.

the components of the mental health care service were established in the late 1970's after the passage of Law 180 and have remained unchanged.

The clinical model behind this service centre is the 'single staff module,' meaning that "all staff, apart from the in-patient nurses, work both inside and outside of the hospital and remain responsible for the care of the same patients across the different components of the service and through the different phases of care" (Tansella et al., 2006, p. 91). This ensures continuity and stability of care providers for mental health clients. Within the CMHS, three multidisciplinary teams are responsible for serving a specific area of South Verona, and a fourth team consults and liaises with the general hospital. Each patient assigned to the team is also assigned a caseworker who is a member of the team. Individuals with higher levels of disability, have more than one case worker so that one is available at all times.

The CMHS has a community mental health centre that offers numerous services to clients and family members and encompasses various levels of biological, psychological, and social care. This centre is the predominant point of access for mental health clients.

6.2.2 Biological Services

Inpatient services are provided by both the CMHS and the general hospital. There is a psychiatric emergency room in the general hospital, and a separate psychiatric ward in the academic hospital. Health care providers in the academic hospital advise the CMHS when mental health clients may be in hospital for other medical purposes. Crisis intervention can also be undertaken in a home environment, although for chronic users, such home visits are planned in advance and conducted on a regular basis.

Regional care is provided by the CMHS in the form of two residential care facilities for patients requiring long-term stay. One facility is staffed 24 hours a day, while the second facility is staffed for six hours per day. Both facilities attempt to address all three aspects of the

biopsychosocial model of care, having medicine administered by a nurse, providing a counsellor during staff hours, and assisting clients in renewing or gaining daily living and social skills.

These two facilities aim to provide a graduating level of independence for clients. Once clients are ready to move from the 24 hour supervised facility, they can shift to the six hour supervised facility, and hopefully to independent living after that point.

6.2.3 Psychological Services

Psychological services include psychiatric consultations and therapy for individuals with illness as well as for family members. A peer support programme, established in 1990, provides “reciprocal support, self-determination, counselling, education, and advocacy” for mental health clients (Tansella et al., 1998, p. 249). The group also addresses the social needs of clients, as one of its main goals is to find work and support those with existing jobs.

6.2.4 Social Services

An established social programme is social cooperatives. Cooperatives are a form of social enterprise, aiding clients looking for work as well as providing employment opportunities. After the deinstitutionalisation process, people with mental illness had difficulty finding employment, which played an important role in the formation of social cooperatives, whose aim is to provide meaningful employment to vulnerable individuals. The social cooperatives must obtain 30 percent of their employees from special groups, one of which is people with mental illness (Social Enterprise London, 2002)

Research indicates that the community-care movement has been highly successful in this region, as hospitalization rates have been consistently declining while contact with community care providers, such as home visits, has been consistently increasing (Tansella et al., 2006).

6.3 Alberta: Calgary Health Region

Alberta's mental health care delivery system is similar to BC's with nine regional health authorities delivering services throughout the province. However, two differences in the Alberta administrative structure are noteworthy: First, the Alberta Mental Health Board is the overseer of the overall system, providing advising, leadership and management, coordination, and support roles, as well as working with the health regions and other levels of government. Second, a mental patient advocate ensures that needs and rights of patients in mental health facilities are met, providing information on patients' rights and resolving concerns of clients and families (Alberta Mental Health Patient Advocate Office, 2008).

The Calgary Health Region (CHR) has been chosen as a case study due to its lower 30-day and one year re-admission rate compared to BC (7% and 22% vs. 12% and 32%; CIHI, 2008b). This is significant as Calgary serves a larger population than the Vancouver Regional Health Authority⁸. CHR was established in 2003 along with the other health authorities as Alberta moved to a regional health care delivery model⁹. Mental health care and addictions services are delivered together, and the main mode of mental health care delivery in CHR is via mental health clinics and centres located throughout the community.

6.3.1 Special Biopsychosocial Features

The CHR has three mental health centres and two mental health clinics. The centres offer enhanced access to psychosocial interventions, and many of the services provided by the CHR are based in these centres. For example, the South Calgary Health Centre provides an array of psychosocial interventions including walk-in therapy, mental health urgent care, a mobile response team, and geriatric mental health services. The CHR also has a consultation service between primary care providers and mental health clinicians on how to appropriately treat mental

⁸ This health authority serves a population of over 1.2 million people and provides service via 12 hospitals, four health centres, 41 care centres, and other community services.

⁹ Unless otherwise stated, the information for this Section is from Alberta Health Services, 2009b.

health clients. One central point of access is provided for all clients, easing their navigation of the mental health care system. Mental health clinics do not offer as many services as the mental health centres, as they usually focus solely on assessment and treatment.

The CHR provides two telephone lines, one for emergencies, and the other for general information. The crisis line, called the Distress Centre Crisis Line, connects callers with appropriate services including mobile response teams, but it is not only for people with mental illness (Distress Centre Calgary, 2009). The general information line, called Access Mental Health, helps clients and other people from the region get mental health information, understand the options for mental health support, and connect with local community resources and mental health services in the CHR (Alberta Health Services, 2009a). The line screens and completes referral packages for programmes within Adult Mental Health Services and provides one-point access for clients regarding all levels of services to decrease confusion about available resources. It streamlines the process of accessing mental health services, matches clients to the right services, and advocates for clients by holding Mental Health Services accountable for promised follow-up and assistance. Individuals can also contact Access Mental Health via fax and email.

6.3.2 Biological Services

Crisis services are available at a short stay unit in one health centre, which has a capacity of 16 beds. Specialized psychiatric emergency services are offered to mental health patients in one hospital and two health centres, which are in addition to the general hospital emergency rooms. Individuals must be referred to psychiatric emergency services by an emergency room physician where they are provided with crisis intervention and psychiatric assessment. Psychiatric emergency services also have outreach teams that provide community support for discharge patients after contact with the services.

The region has three mobile response teams, composed of nurses, social workers, and psychologists. These teams can be contacted via the Distress Centre Crisis Line but do not operate 24 hours a day. They offer urgent assessment in a community setting, crisis prevention, critical incident stress management, and non-emergency services including educational seminars for the community, clients, and families, as well as two respite beds.

Acute (inpatient) care is provided by seven inpatient units with a total capacity of 178 beds. The goal of the units is to provide clients with access to health care professionals including nursing staff, medical staff, medical staff, psychologists, social workers, occupational therapists and recreational therapists. Patients are referred to these units through emergency departments or mobile response teams, although some units offer direct admission in certain cases. All acute care units are available 24 hours a day, seven days a week.

In terms of residential services, the Claresholm Centre for Mental Health and Addictions offers an extended treatment programme, with the goal of transitioning individuals into supportive housing or long-term care centres. The centre also offers an active rehabilitation programme for those with a higher level of functioning who are able to participate in their rehabilitation and aids clients in gaining enough independent functioning to move to autonomous living. The centre has 100 inpatient beds. The CHR also has contracts with family homes to provide room, board, assistance, and support in a home-like environment to adults with severe and persistent mental health issues. Furthermore, the CHR provides a short stay unit at one of the general hospitals, independent of the inpatient unit and emergency department. The unit's purpose is to stabilize clients in a short period of time, while attempting to mobilize community and family resources before the client is discharged.

6.3.3 Psychological Services

As mentioned, hospitals with psychiatric emergency rooms also have outreach teams, which are available at four locations. Teams address the psychological needs of the patients, focusing on providing emotional and mental health support through education and information, linkages to other services, and client follow-up. Outreach teams are offered for up to one month after the client departed the emergency room.

The region contains one assertive community outreach team, based in Calgary. Services provided include case management, assistance with medication, assistance with accessing other aspects of personal care such as housing resources, facilitation of family and community involvement, and client advocacy. The CHR also has an active treatment team to provide similar services. A community extension team provides the same services, but only to clients who are moving from one mode of mental health care to another, have a history of difficult community integration, and have not been able to keep in touch with follow-up services. The extension team provides direct and indirect assistance with psychiatric and medical care, financial resources, housing resources, transportation resources, vocational resources, social and recreational resources, and family and community supports.

Day programmes provide individual counselling and group therapy. Currently the CHR has two of these programmes, and both are four weeks long with a focus on stabilizing clients to increase their level of independent functioning. Individual, couple, family, and group therapy are also provided. Clients must be screened for this service through the Access Mental Health line. An outpatient mental health programme offers the same set of services, but only accepts patients referred by physicians.

6.3.4 Social Services

The CHR offers a community mental health rehabilitation service which focuses heavily on social skills, with some psychological intervention. The service is delivered through a team that offers functional assessment, leisure education, health promotion, life skills, vocational education, and physical activity groups. Furthermore, the CHR has paired with a multitude of non-profits to offer leisure and peer support services. For example, Calgary Alternative Support Services offer a programme called Creative Community Living Activities designed to address psychological and social needs of clients via therapy, the opportunity to learn basic living skills, crafts, socialization, leisure, healthy nutrition, and activity concepts.

Summary

To summarise the case studies, all three jurisdictions have a version of a biopsychosocial delivery centre. Although the centres vary in whether they include inpatient units, all provide some form of access to biological services. Both the Inner West region and the CHR also offer general information and crisis telephone lines. While the CHR has two separate lines, the Inner West region provides both types of telephone lines through one phone number. All three jurisdictions have fairly similar biological services, with most providing psychiatric inpatient units, short term residential facilities, and both types of crisis services. However, only the Inner West region has long term stay residential facilities. Availability of psychological services varies, with Alberta providing all six types of programmes. The CHR is also the only region that provides all types of social services.

Although specific programme availability varies across jurisdictions, all three provide biopsychosocial delivery centres and both mobile and stationary crisis services. Currently, BC does not have these programmes in place, as discussed in Section 4. Though emergency services are available through general hospitals, the high number of individuals using emergency

departments indicates that mobile services catering specifically to individuals with mental illness may be necessary.

6.4 Secondary Methodology

This Section aims to support key findings from the case studies regarding mental health programmes. Academic articles are used to assess whether the programmes present in the three jurisdictions examined, but not in BC, have been effective. The three programmes chosen for examination are telephone crisis services, mobile crisis services, and biopsychosocial delivery centres.

6.4.1 Telephone Crisis Services

The purpose of telephone crisis (triage) services is to assess the need of first time and regular clients when they feel they are in crisis and determine whether they require admission to hospital or whether other services can be used to aid them. Telephone triage is meant to provide an easy and accessible way for clients to get immediate help. This type of service is seen as especially positive in accessing rural populations, who may not be able to quickly and easily get to a hospital, yet require some form of contact with a mental health service (Kevin, 2002).

Although Victoria now offers a state-wide triage service accessible by phone, the programme was initially implemented in the Southern Health region. Wood and Hales (2008) assess the success of the Psychiatric Triage Service (PTS) in increasing access to mental health services. They also look at the impact of the programme on other mental health services in the region. Key features of the PTS include a telephone number for access 24 hours a day, answering of phone calls by experienced clinicians, unconditional acceptance of patients who have been referred by the PTS to other programmes and services, and telephone support for those in crisis or currently in between services.

The evaluation of the programme was conducted through quantitative and qualitative data analysis as well as through stakeholder consultation via focus groups. Some of the main findings include:

1. The PTS efficiently provides service to those in crisis
2. The PTS provides a single point of entry into the system
3. Initial assessment by the PTS has proven to be accurate
4. Unconditional acceptance of referrals is crucial to the success of the PTS
5. Clients support the PTS but are sometimes unclear on its role compared to other mental health services

The success of the PTS is also measured through its ability to reduce emergency department visits and programme utilization.

The analysis shows that from 2003 to 2007, the percentage of emergency department visits for individuals with mental illness decreased from 4.2 percent to 3.9 percent, a change of 0.3 points. This is in contrast to state-wide findings, which show that emergency department visits in general are actually on the rise (Wood and Hales, 2008, p. 39). In addition to these qualitative findings, stakeholder interviews corroborate that PTS has improved mental health services and has been utilised by clients, usually with positive outcomes. User satisfaction is also found to be high by O'Connell et al. (2001). They assess satisfaction of a random group of clients who have used the triage telephone line and find that 90 percent of callers were satisfied with the service they received. The triage line used in this study was not only for mental health clients, but it is assumed that similar satisfaction results would be obtained for a mental health triage line.

Additionally, statistics indicate Access Mental Health, the general information line in Calgary, provides quick and efficient service, answering most calls within 90 seconds, and completing referrals within five to nine business days (Alberta Health Services, 2009a).

6.4.2 Mobile Crisis Services

Mobile crisis services provide a client-centred way to address mental health emergencies. Instead of having clients locate emergency departments, mobile crisis teams go to clients' homes to provide immediate assessment and determine what further course of action needs to be taken. The purpose of these teams is to provide an alternative to the emergency department for individuals with mental illness in crisis. Mobile crisis services can treat individuals in any environment, as well as provide referral services. Numerous studies have been conducted into the impact and effectiveness of mobile crisis teams. For example, Hugo et al. (2002) compare the likelihood of psychiatric inpatient unit referral between clients whose first point of access was a hospital and those whose first point of access was a mobile crisis service. Results show that individuals admitted to a hospital emergency service are three times more likely to then be admitted to a psychiatric inpatient unit. People with severe mental disorders are even more likely to be admitted. Therefore mobile crisis services are more successful than hospital based services at preventing individuals from being admitted to inpatient units. The success of these services in reducing hospital readmissions is confirmed by Reding and Raphelson (1995).

6.4.3 Biopsychosocial Delivery Centres

Biopsychosocial delivery centres, or community mental health centres (CMHC), provide a central point of access to mental health care for clients, where they can receive various levels of biological, psychological, and social support. These centres have been shown to reduce client burden on the criminal justice system and to assist in creating positive long term outcomes for clients. For example, Harry and Steadman (1988) examine the impact of CMHCs in America on client interaction with the criminal justice system. They find that clients are still more likely than the general population to become involved with the criminal justice system, but that contact with the CMHCs reduces likelihood of criminalisation as compared to individuals who are released from state hospitals and have no contact with a CMHC. Mezzina and Vidoni (1995) conduct a

long term evaluation of a CMHC in Italy, documenting a four-year follow-up with 39 patients to assess their outcomes after interaction with the CMHC. Long-term outcomes are generally positive, with 29 users experiencing no crisis relapse, only one attempted suicide, and the majority being able to continue to live in their home environments. These results indicate that CMHCs may provide a way to lower readmission rates and reduce suicide rates, both of which are currently issues in the BC mental health care system.

Summary

Findings from the secondary methodology indicate that CMHCs and specialized emergency services should be considered as alternatives for BC. Telephone and mobile crisis services can reduce emergency department use while increasing accessibility of the mental health care system. CMHCs can reduce both the criminalisation of the mentally ill and negative health outcomes such as relapses and suicide attempts. These three services are used to formulate policy options for BC, due to their ability to address current service gaps in the delivery of biopsychosocial care.

7: Policy Objectives, Criteria, and Measures

This Section outlines the policy objectives, describes the criteria and measures, and proposes three policy alternatives. For community mental health programmes to improve, short term and long term objectives must be met. This Section defines the objectives in further detail, and establishes criteria and measures to analyse the policy alternatives noted at the end of Section 6. Interviews are also conducted with primary stakeholders to determine whether the policy options chosen for BC will help improve the mental health care system, and whether the criteria and measures outlined in Section 7.2 are accurate¹⁰.

Two main long-term policy objectives must be met for BC to provide a better mental health care system. The first long term goal is to provide a mental health care system that addresses all phases of mental illness and provides the appropriate transitional services to clients moving from one phase of illness to the other. The second long term goal is for BC to reduce its one-year re-admission rate from 27 percent at least to the Canadian average of 23 percent.

In order to achieve these long term goals, short term goals must be met. First, follow-up services after initial release from hospital must be improved. It is easier for individuals to relapse if follow-up is not as thorough as it should be. Second, priority must be given to vulnerable individuals. As mentioned in Section 2.3, individuals involved in the criminal justice system and with alcohol and drug dependency have a higher rate of mental illness, so programmes geared towards helping them and monitoring their progress will aid in lowering readmission rates. These short term objectives should be accomplished within the next two to three years because the issues need to be immediately addressed, while the time period for addressing long term objectives will begin after the short term objectives have been realised.

¹⁰ Details regarding these interviews can be found in the Appendix.

7.1 Policy Criteria and Measures

The policy alternatives are compared based on five criteria: effectiveness, equity, administrative feasibility, cost, and public acceptability. Each criterion is given a specific measure. Each measure has an index, and alternatives are given a score based on how they rank on the index. Most indices have the same ranking system composed of the scale high, medium, and low, and the numeric values of 3, 2, and 1 respectively, with the exception of effectiveness and administrative feasibility which have two measures so numeric values assigned to each range between 0.5 and 1.5. Scores for how each alternative does on each measure are tallied, and the alternative with the highest total score is viewed more favourably than those with lower scores. Table 4 summarises the criteria and measures.

Table 4 - Criteria and Measures

Criteria		Definition	Measure	Value
Effectiveness	Re-admission Rate Reduction	The ability of an alternative to reduce the one year readmission rate (RR)	RR target 20%<RR≤23% 23%<RR≤26% RR>26%	High= 1.5 Medium= 1 Low= 0.5
	Client Friendliness	Increase in utilisation rate by clients (UR)	UR increase URI>1.4% URI=1.4% URI<1.4%	High= 1.5 Medium= 1 Low= 0.5
Equity		Ability of programme to reduce overuse of community services by those with severe and persistent mental illness (EDUR)	Does the alternative decrease over use of emergency departments? EDUR≤15% 15%<EDUR<30% EDUR≥30%	High= 3 Medium= 2 Low= 1
Administrative Feasibility	Labour Cost	Monetary amount required for human resources	How much will the alternative increase labour costs (ILC) by? ILC≤5% 5%<ILC≤10% 10%<ILC≤15%	High= 1.5 Medium= 1 Low= 0.5
	Ease of Implementation	Amount of co-ordination required	How many agencies will be involved? 1-2 2-3 <3	High= 1.5 Medium= 1 Low= 0.5
Cost		Cost of implementing programme	Cost of implementing programme minus benefit to clients Less than Status Quo Equal to Status Quo Higher than Status Quo	High= 3 Medium= 2 Low= 1
Public Acceptability		Will the public view this alternative favourably?	How visible will the alternative be to the community? Not Visible Somewhat Visible Very Visible	High= 3 Medium= 2 Low= 1

Effectiveness: Two measures are used for effectiveness: one related to re-admission rate reduction and the other to client friendliness. Because this criterion has two measures rather than one, each one is evaluated on a scale of 0.5-1.5, rather than 1-3. A ranking of low will receive a score of 0.5, a ranking of medium will receive a score of 1, and a ranking of high will receive a score of 1.5. This modified scale is to ensure that the criterion is not weighted differently than other criteria in the policy analysis.

Re-admission rate reduction is defined as the ability of an alternative to reduce the one-year readmission rate from its current provincial rate of 27 percent (CIHI, 2008b), and it is measured by how much an alternative can decrease the readmission rate by. An alternative that is able to reduce the readmission rate to between 20-23 percent scores high on the index because it will be equal to or lower than the current Canadian average of 23 percent; an alternative that reduces the readmission rate to just above 23 to 26 percent scores medium; and an alternative that does not reduce the readmission rate scores low.

Client friendliness evaluates whether the alternative increases client utilisation of the mental health care system and is measured by whether clients who have never accessed the mental health care system will do so because of the alternative. Currently, only 44 percent of individuals with self-reported mental disorders seek treatment, which is the highest rate in Canada (Lesage et al., 2006, p. 14). Statistics demonstrate that in the State of Victoria, 51 percent of individuals with a very high level of psychological distress receive mental health care (Victorian Government Department of Human Services, p. 81). For BC to achieve this percentage of usage in the short run (five years), an alternative must increase use of mental health services by 1.4 percentage points per year. An alternative able to reach this target is ranked as medium; if it is not able to do so, it is ranked as low; and if it is able to exceed this goal, it is ranked as high.

Equity: This criterion assesses whether an alternative is able to reduce overuse of certain community services by people with a severe and persistent mental illness. Section 2 outlined the overuse of emergency departments by mentally ill clients. This service is meant to be distributed equally among society, but has to dedicate more resources to treating mentally ill people. Equity is measured by the ability of an alternative to reduce emergency department visits. It is estimated that while only four percent of the general population uses the emergency department, 30 percent of emergency department visits are by those with mental health issues (VCH, 2007b, p. 79; CIHI, 2007). Due to the complex care needs of people with mental illness, it is unlikely that emergency department use can be reduced to the same rate as the general population. Therefore, if an alternative can reduce emergency department use by half (15%), it is ranked as high; if it is able to reduce emergency department use from the current level, but not by half (to just above 15% to under 30%), it is ranked as medium; and if it is not able to reduce emergency department use, it is ranked as low.

Administrative Feasibility: This criterion examines how simple or difficult an alternative is to implement in terms of labour costs and ease of implementation. It is assessed based on the amount of additional human resources required and the amount of coordination required. First, human resources are an important factor to consider, as working in the mental health care field requires a certain level of expertise and education. Data indicates that much of the current workforce is set to retire within the next five to seven years, meaning that there is opportunity to institute alternatives that may require more staff, but would previously have been viewed as impossible to implement due to the amount of human resources required. Currently, the VCH dedicates \$1,477 million towards health care labour costs (VCH, 2007a, p. 42). For the 2006/07 fiscal year, the VCH dedicated \$1,404 to labour costs. Between the 2006/07 budget and 2007/08 budget, there was a five percent increase in labour expenditure. Therefore, an alternative that increases labour costs by five percent or less is ranked as high, an alternative that increases labour

costs by six to ten percent is ranked as medium, and an alternative that increase labour costs by greater than ten percent is ranked as low.

Second, ease of implementation examines how simple or difficult an option will be to implement in terms of co-ordination among various agencies. An option that requires co-ordination among numerous agencies will be harder to implement than an option that requires the involvement of fewer agencies. If an option requires co-ordination among numerous agencies, it will take longer to implement and will have to balance the mandates and roles of the various agencies. As such, an alternative that requires co-ordination among over three agencies is ranked as low; an alternative that requires coordination among two to three agencies is ranked as medium; and an alternative that requires coordination among one to two agencies is ranked as high.

Cost: It assesses the cost effectiveness of each alternative compared with the status quo. The current administrative cost is taken as given because no alternative will be replacing the status quo immediately, and all policies are in addition to it. Cost calculations for each alternative will be on a per-patient basis. To determine cost, the additional cost of administration of the programme per client is found and subtracted from the benefit to society of a patient not being readmitted due to the programme. Definitions of cost and benefit are as follows:

- Cost to society = Additional administrative cost / number of patients using service
- Benefit to society = Income of one individual with a mental illness¹¹

The number of patients using the service is based on results from the effectiveness criterion. One of the measures used to assess effectiveness is increase in the use of mental health services due to the implementation of an alternative, and the findings from the criterion are used to determine how many patients will use the service. Administrative feasibility is another criterion used to

¹¹ The annual income of a person with an emotional or psychological disability is \$20,490 (Statistics Canada, 2008). This number indicates the average labour income of a person with an emotional or psychological disability and does not include transfer income, so does not capture the total social cost.

assess the policy alternatives, and it is found by calculating the additional labour costs of an option. For the purposes of this calculation, it is assumed that individuals who are not readmitted can enter the work force; however, it is unlikely that all of them will be able to. An alternative that produces a positive number (i.e. is more expensive than the status quo) is ranked as low; if it is equal to the status quo, it is ranked as medium; and if it is negative, it is ranked as high.

Public Acceptability: This criterion examines how the public will view the alternative. It is important that the public supports a policy because it will increase the likelihood that the alternative can be adopted. However, the public does not always view people with mental illness in a positive way, as the creation of anti-stigma campaigns attests. Literature has also shown that people are less accepting of a mental health facility in their neighbourhood than other types of community buildings, and they are likely to lobby against community based homes for people with mental illness (see Borinstein, 1992; Piat, 2000). The public is more likely to be accepting of programmes that are not physically visible. Hence, the index for this measure is based on the visibility of the programme in terms of the type of physical space required to implement the alternative. An alternative that is not visible and can be run in an existent facility is ranked as high, an alternative that is somewhat visible but does not require its own physical space is ranked as medium, and an alternative that has its own physical location and is very visible is ranked as low. Stakeholders 1 and 2 confirmed that opposition has traditionally been high to visible community mental health programmes, and ranking the alternatives in terms of visibility is accurate.

7.2 Policy Alternatives

Alternatives have been derived from information gathered in analysis of case studies and are based on information regarding gaps in the current mental health care system in BC and the VCH, as outlined in Section 4. The options can be implemented separately or together, since they are complementary rather than mutually exclusive. For the purpose of this analysis, the new

options are analysed independently of each other to determine which alternative is the best addition to the current mental health care system.

7.2.1 Policy Alternative 1: Status Quo

This alternative assumes that the current BC model of mental health care would be unchanged. Some biological, psychological, and social programmes would exist; however, the gaps discussed in Section 4 would still remain. There would be no central point of access to mental health care, nor would there be any specialised emergency services. As a result, people with severe and persistent mental illness, a small portion of the overall population, would continue to overuse community services while vulnerable individuals would still have unmet service needs.

7.2.2 Policy Alternative 2: Telephone Triage

Currently, mental health crises are usually dealt with in general hospital emergency departments. However, not all individuals require this extent of service. The VCH has attempted to address this problem through the creation of ‘Urgent Response Teams’ whose purpose is to triage mentally ill patients in emergency departments (VCH, 2007b). However, the teams only deal with individuals who are already at the emergency department and do not provide triage before that point. Another way to determine what services are needed by a client with a mental illness is to have them or another individual call a telephone triage line where a mental health care worker determines what course of action best suits the client’s needs. If immediate action is required, arrangements can be made for hospital admission, or if immediate action is not required, arrangements can be made to put the individual in contact with the right services. This line can also be used by interested parties to access information regarding mental health services in the area. The line would have to have similar features to regular emergency lines in that it would have to be staffed 24 hours a day, 7 days a week. The line would have to be run by mental health

professionals who are able to accurately and quickly assess the mental health of an individual and determine the appropriate response.

7.2.3 Policy Alternative 3: Mobile Emergency Response Team

This alternative proposes to establish mobile emergency response teams, but only the impact of one team is evaluated. The mobile emergency service would allow assessment of clients wherever they are instead of having clients locate hospitals and get treatment. The team would be multidisciplinary to provide the best assessment and intervention possible based on the nature of the emergency. It would have to be cohesive, with members being able to communicate effectively with each other regarding client needs. The team would be dispatched by 911 operators or advocacy groups that provide housing for those with mental illness, and it would treat clients on the spot to determine whether hospital admission is necessary. Follow-up services would have to be provided by the team to ensure that clients who are not hospitalized are able to recover from their crisis. Mobile emergency response teams have been proposed as an alternative to emergency rooms by federal, provincial, and regional reports (VCH, 2007b; Ministry of Health Services, 1998; Health Canada, 2002b), suggesting their acceptance by government stakeholders.

7.2.4 Policy Alternative 4: Community Mental Health Centre

This alternative proposes to create a mental health centre that addresses all three aspects of the biopsychosocial care model in one central location. They would include monitoring of medication, psychiatric, and psychological services for clients and their families, various vocational and education services, and social programmes for clients. The centre would not initially provide inpatient care but could do so in the future if deemed necessary. Staffing would consist of multidisciplinary teams including psychiatrists, occupational therapists, psychologists, social workers, occupational therapists, and recreational staff. Several centres would have to be established throughout the VCH and BC to provide accessibility for clients, but for the purpose of

this analysis, effects of the implementation of one centre is analysed because it is unknown exactly how many would be needed in the area.

The next Section analyses the four options based on the performance on the five criteria defined in Sub-Section 7.2.

8: Policy Analysis

In this Section each policy alternative is ranked and at the end of the analysis, a policy recommendation is provided based on the results. The results of the analysis are given in Table 5.

8.1 Policy Alternative 1: Status Quo

Effectiveness: Currently, the readmission rate stands at 27 percent. Although the readmission rate has been decreasing over a number of years, it still remains higher than the Canadian average. This alternative is ranked as LOW in its ability to significantly reduce readmission rates. It is unknown how much the readmission rate has decreased over the past few years, but the assumption is made that the rate has not decreased by the same margin as the Canadian average because the readmission rate for BC remains higher than the rate for Canada. The Canadian readmission rate has decreased from 37 percent to 23 percent from 2003 to 2006 (CIHI 2006, 2008b). In that four year time period, the rate has decreased by 14 points, or 3.5 percent per year. Alternatives are ranked based on their ability to reduce readmission rate by a higher margin than the annual decline rate for Canada.

In terms of client friendliness, less than half of clients with mental health issues use mental health services. As discussed in Section 7, only 44 percent of those with self-identified mental disorders access some form of mental health care in BC. Due to the lack of utilization of services in the current system, this alternative is ranked as LOW in regards to client friendliness.

Equity: As mentioned in both Section 2 and Section 7, the current mental health care system is not adequately dealing with emergency mental health situations. As a result, clients must have their needs met by general hospital emergency rooms instead. Currently, 30 percent of individuals who utilise general hospital emergency rooms are individuals with mental health

issues. This alternative receives a LOW ranking for its inability to reduce general hospital emergency department use.

Administrative Feasibility: The VCH allocates \$1,477 million to health care labour costs (VCH, 2007a, p. 42). This option is ranked as HIGH for administrative costs, meaning that the cost of the alternative is low, because the current funds allocated to human resources would remain unchanged. It also receives a ranking of HIGH in terms of ease of implementation because it does not require co-ordination among any agencies that are not already involved in the current system.

Cost: For this option, the cost calculation assumes that there is no additional administrative cost and that there are no individuals that would not be re-admitted because of the current policy. Therefore, there is no cost to the status quo, as per the calculation used for this criterion, and it is given a ranking of MEDIUM.

Public Acceptability: Currently, mental health care in BC has many gaps. This has led to the increased criminalization and homelessness of the mentally ill. The public views the current mental health care system negatively because of the visibility of mental health care issues, partially due to these two factors. This has manifested itself through public opposition to any community mental health services in local neighbourhoods, which has most recently led to the abandonment of two community mental health services in Vancouver (Ludvigsen, 2005). Therefore, this alternative is given a ranking of LOW in terms of public acceptability.

8.2 Policy Alternative 2: Telephone Triage

Effectiveness: Hunter (2000) examines the impact of telephone support for individuals with mental illness. Results show that telephone support was able to prevent hospital readmission for individuals in the experimental group, while 56 percent of individuals in the control group were readmitted within a five month period. Although these results are extremely positive, the

sample size for this study was very limited, with full data available for only five people in the experimental group, so it is assumed that the 100 percent success rate would not be replicated. Also, the line will be difficult to access for homeless individuals, who are more likely to have mental health issues (Greater Vancouver Regional Steering Committee on Homelessness, 2008). Nonetheless, the results of the study indicate that the readmission rate will decrease, and access to individuals knowledgeable about mental health care during an emergency will increase the effectiveness of the system. Wood and Hales' (2008) assessment of a triage line finds that hospital usage decreased from approximately 2,500 patients to 2,000 patients. This is a change of 20 percent over five years, and applied to the current readmission rate of 27 percent, would decrease it to 21.6 percent¹². Therefore, this alternative is given a ranking of HIGH.

Wood and Hales (2008) assess whether demand for assessment is met by telephone triage in Victoria. Their stakeholder interviews indicate that the telephone triage number is visible in the community and known to be available by those who need it. It is acknowledged that this line mainly addresses the needs of individuals in crisis, who are a minority of people with mental illness. Grigg et al. (2007) find that 47 percent of clients using the triage line have not had previous contact with the mental health care system in the State of Victoria, although many of the individuals who call the line seek information rather than treatment. Individuals who use the phone service for crisis situations are likely to have already received some form of mental health care in past, but new clients can be reached if they are aware that they can also receive general information from the line. The telephone line has to be visible in the community for use, so although both studies on this criterion find positive results, new client use is based on these individuals knowing the services exists. Although mental health care use will likely decrease, it

¹² The study was based on findings from 2003 to 2007, so the total percentage change in hospital usage was a decrease in 20% within that five year period. Short term policy objective should be accomplished within five years, so this percentage is subtracted from the current readmission rate of 27 percent to determine how successful the policy will be in the short term.

may only be a small margin until the line has been in the community for some period of time. Therefore the alternative is given a ranking of MEDIUM.

Equity: The analysis of the telephone triage system in the State of Victoria indicates that emergency department use would decrease by a small margin. Telephone triage is meant to serve clients in a crisis situation, but not all clients in such a situation may be able to access the line. Specifically, homeless individuals, who are more likely to have a mental illness than the general population, will be unlikely to use this service, and may find it easier to receive care through a hospital emergency department. As such, compared with the status quo, this alternative would be more successful in reducing emergency department use, but not by a large amount. Therefore, the alternative is given a ranking of MEDIUM.

Administrative Feasibility: Telephone triage can be conducted only by experienced mental health clinicians who are familiar with local mental health services. The triage line would require staff 24 hours a day, 7 days a week. The PTS model discussed in Section 6 employs approximately 12 full-time workers, who can be either mental health nurses or social workers. It is assumed for this analysis that six mental health nurses and six social workers will be hired, and they are paid \$32.50 per hour, and \$33.00 per hour respectively¹³. Based on this assumption, administrative costs will total \$754,560¹⁴. This will increase labour costs by less than 0.05 percent, so this option is ranked as HIGH.

In terms of ease of implementation, telephone triage will require co-ordination among the VCH and health professionals, as well as co-ordination with an agency for set-up of the telephone line itself. In total, this option will require co-ordination among three groups so is given a ranking of MEDIUM.

¹³ Hourly wage for a nurse is \$28-\$37 per hour for new employees. The figure presented for the analysis is based on an average of that range (British Columbia Public Service Agency, 2006). The hourly wage for a social worker is based on a job posting with the VCH (VCH, 2009).

¹⁴ This total was calculated based on the assumption that employees work 40 hours a week for 48 weeks per year. The calculation is as follows: $(\$32.50 * 40 * 48) * 6$ mental health nurses + $(\$33 * 40 * 48) * 6$ social workers = \$754,560.

Cost: The cost calculation for this alternative is as follows:

$$(\$754,560 / 29,210^{15}) - (\$20,490) = -\$20,464$$

This alternative would save society \$20,464 per patient which is less costly compared to the status quo, so is given a ranking of HIGH.

Public Acceptability: Public acceptability for this project is highest of all options because it does not require new infrastructure or integration of mentally ill individuals into communities. The establishment of a telephone triage line would not visibly impact the community, as services provided by this alternative would take place in one central location that would not require direct physical contact with clients. For example, The Victoria Triage Line has a dedicated call centre, but is integrated into the general hospital. Therefore, this alternative is ranked as HIGH in terms of public acceptability.

8.3 Policy Alternative 3: Mobile Emergency Response Team

Effectiveness: Reding and Raphelson (1995) find that when a mobile emergency response team is available, psychiatric hospital admissions decrease by 40 percent on average. Tacchi et al. (2003) also find that mobile emergency response teams are able to reduce hospital admissions. Results indicate that during the time a mobile response team was in place, only 21 individuals were referred to hospital, as compared with 53 individuals admitted during an equivalent 6 month period when the team was not in place. Scott (2000) assesses the effectiveness of a mobile crisis service that is present in a jurisdiction with a mental health crisis line. In comparison with clients whose emergency was addressed by police officers, clients who met with the mobile emergency response team were less likely to be hospitalized. Forty-five percent of clients seen by the team were admitted to hospital, compared with 72 percent of clients whose first contact was with the police, a difference of 27 points. These findings indicate that hospital readmission can be

¹⁵ Wood and Hales (2008) find that 29,210 individuals accessed the crisis line in the Southern Health region of the State of Victoria in 2006/07.

reduced, as 30 percent of clients seen by the team had been hospitalized in the past six months (p. 1155). Due to the significant reductions in readmission rates in these studies, I predict that this option can reduce the rates by one and a half times greater than the status quo, so by 5.25 percent per year rather than 3.5 percent. Therefore, this alternative would decrease the readmission rate to 20 percent¹⁶; and is ranked as HIGH.

Analysis of service utilization from other jurisdictions indicates that mobile crisis response teams can increase client interaction with mental health care services. Tacchi et al. (2003) find that 60 percent of the clients in their sample population were known to have psychiatric issues; but were not currently in contact with local mental health services. However, this option focuses on addressing the needs of individuals who may be experiencing a crisis, so it would not reach a high number of clients. Furthermore, although Tacchi et al.'s results suggest an increase in service utilisation, they do not specify whether their sample was previously in contact with mental health services, only that they were not currently in contact. Due to the limited population this alternative would serve, it is unlikely that more clients would access the services and that service utilisation would increase, so the alternative is given a ranking of LOW.

Equity: Tacchi et al. (2003) find that use of mobile emergency response teams is initially low, but increases as the team continues to operate. Scott (2000) assesses a team that has been in place for a number of years and finds that it is able to reduce hospital use as compared to police intervention. This study does not specifically investigate emergency department use, only examining admission to hospital, but it does indicate that having the teams in place will decrease contact with hospitals. Neither study specifically looks at reduction in emergency department use, but both find positive results regarding use of mobile mental emergency services.

Emergency department use will decrease from the current rate of 30 percent with the

¹⁶ To determine how much this option would reduce the readmission rate over the short term objective (five year period), the following calculation is made: $5.25\% * 5 \text{ years} = 26.25\% \text{ reduction}$. A 26.25% reduction of 27% (the current readmission rate) is 7 points, and results in a readmission rate of 20 % ($27\% - 7 \text{ points} = 20\%$).

implementation of these teams, but because initial service utilisation has been shown to be low, the alternative is given a ranking of MEDIUM.

Administrative Feasibility: Mobile response teams are composed of members from various health fields. For example, the Calgary Health Region teams are composed of a nurse, social worker, and/or psychologist. Many mobile teams also have liaison police officers for situations where the teams may be concerned about their physical safety. For the purpose of this analysis, I will assume that all four of these workers will be involved in the team at all times. The team will have to be staffed 24 hours a day, 7 days a week. To have a fully staffed team available, there will need to be three members from each profession at minimum. Registered nurses are paid \$32.50 per hour, social workers are paid \$33.00 per hour, psychologists are paid \$30.00 per hour¹⁷, and police officers are paid \$55,964 per year (VPD, 1995). Based on these numbers, this option will cost \$717,972¹⁸. This will increase administrative costs by 0.0004 percent, so the alternative is ranked as HIGH.

In terms of ease of implementation, this alternative will require co-ordination among the VCH and health professionals. The Vancouver Police Department will also have to be involved because the team requires a liaison police officer and dispatch via 911, which is the number called in case of emergencies in Vancouver. In total, there will be three agencies involved in the implementation of this alternative, so it is given a MEDIUM ranking.

Cost: The cost calculation for this alternative is as follows:

$$(\$717,972 / 1,193^{19}) - (\$20,490) = - \$19,888$$

¹⁷ Based on the average of \$28-\$32, which is the pay range for new psychologists.

¹⁸ Calculation is as follows: $(\$32.50 * 48 * 40) * 3$ registered nurses + $(\$33 * 48 * 40) * 3$ social workers + $(\$30 * 48 * 40) * 3$ psychologists + $(\$55,964 * 3)$ police officers = \$717,972

¹⁹ Wood and Hales (2008) find that the mobile crisis team in the Southern health region of Australia receives 1,193 requests for service from the crisis line.

This option would save the public \$19,888 per individual making it less costly compared to the status quo. Accordingly, this alternative is given a ranking of HIGH.

Public Acceptability: This option will require more visibility than Alternative 1 because the mobile response team will have to present itself at the location of individuals. It should be ensured that the vehicle used for travel by the team is non-descript so as not to draw attention to the location of individuals receiving treatment and encourage stigmatization. However, this alternative may be viewed somewhat favourably by the public because, due to the mobile nature of the teams, their presence at a location will not be permanent. Therefore, this alternative is given a ranking of MEDIUM on this measure.

8.4 Policy Alternative 4: Community Mental Health Centre

Effectiveness: Mezzina and Vidoni (1995) assess readmission rates of individuals in contact with a CMHC and those who receive mental health services from other sources. Findings show that in a four year period 33 percent of individuals in the first group relapse, compared with 70 percent of those in the second group. Both groups in the study did not have the same number of clients, but the CMHC group was larger in number and had a lower readmission rate after contact with the CMHC. Within another group of 39 patients in contact with the CMHC, eight relapsed, a rate of 21 percent. Madianos and Economou (1999) assess the impact of a community mental health centre on psychiatric hospitalizations in Greece. Utilization of psychiatric inpatient units was examined for various years from the period 1979-1995. Results indicate that utilization of inpatient units and compulsory admissions decreased from 1979 to 1995. Specifically, total admissions to psychiatric units decreased by 71 points, and mean length of stay also decreased by 79 points. Although this decrease may not be solely due to the CMHC, comparison of results with other jurisdictions in Greece that do not have CMHCs indicates that inpatient reduction was not as significant in these areas. Using the results from Mezzina and Vidoni (1995), this option

will decrease readmission rates to 20 percent²⁰. Therefore, this alternative is given a ranking of HIGH.

In terms of client friendliness, Hall (1988) analyses the use of four CMHCs in New Zealand and finds that if the centre is centrally located and easy to access, clients are more likely to use it. Because CMHCs offer a variety of services from one central location, it is more likely that all types of clients will attempt to access the service. For example, a CMHC can offer both drug monitoring and vocational services, addressing the needs of individuals who require a lot of day-to-day assistance and those who are able to function more independently. Clients can also drop in to the centre to socialise with other clients, so are not confined to using the CMHC only when they have an appointment. Due to the broad spectrum of services offered and the ability of this alternative to address the needs of various types of clients, it is given a ranking of HIGH on this measure.

Equity: The CMHC does not have inpatient units or emergency intake. However, it is able to assist with medical management, thus providing some level of biological support. Staff can also triage patients who may have previously used the emergency room as an initial point of contact into mental health services, thereby diverting patients to appropriate services. However, this alternative is given a ranking of LOW, because even though it is able to help clients find and access the services they need, it will not immediately decrease emergency department use.

Administrative Feasibility: CMHCs should have multidisciplinary staff to address all levels of need for those with mental health issues. The team should include psychiatrists, psychologists, occupational therapists, social workers, and recreational therapists. Support staff

²⁰ The study took place over a four year period. During this time there was a 21 percent readmission rate. If BC were to achieve that rate in four years, there would have to be a 5 percent reduction from the current 27 percent readmission rate each year ($27 - 21 = 20\% / 4 = 5\%$ per year). The five percent reduction is multiplied by five to determine the readmission rate reduction over the short term objective (five year period) for BC ($5\% * 5 = 25\%$). Therefore, a 25 percent reduction will occur over 5 years, and reduce the current readmission rate of 27 percent by 6.7 points ($27 - 25\% = 6.7$), to approximately 20 percent ($27\% - 6.7 \approx 20\%$).

and managerial staff would also have to be employed to ensure organization and accountability of services and employees. Information on current staffing levels in CMHCs is available only from one case study. Tansella et al. (1998) indicate that the South Verona Community Centre employs 5 psychiatrists, 4 psychologists, and 2 social workers. Information regarding occupational therapists and recreational therapists is not available from this case study, so it is assumed there are 2 of each, similar to the number of social workers. Data regarding support and managerial staff is also unavailable and therefore has been excluded, but it should be kept in mind that actual administrative costs will be higher than calculated for this analysis. According to this calculation, administrative costs will total \$1,284,855²¹. This alternative will increase labour costs by 0.09 percent so is ranked as HIGH.

In terms of ease of implementation, this option requires co-ordination among the most agencies as compared the other options. There will need to be co-ordination among the VCH and health professionals, as well as managerial staff and operations staff. The last two groups require various levels of staff within them. For example, managerial staff will need to include managers, secretarial staff, and be responsible for hiring of individuals that are not considered health professionals such as recreational staff. Operations staff will be responsible for construction of the centre (if the centre is not located within an existing building) and maintenance of the centre. In total, this alternative will require co-ordination among four agencies, so given a ranking of LOW.

²¹ Administrative cost was calculated the following way: $(\$145,891 * 5 \text{ psychiatrists}) + (\$57,600 * 4 \text{ psychologists}) + (\$63,360 * 2 \text{ social workers}) + (\$29.50 * 40 * 48 * 2 \text{ recreational therapists}) + (\$42,500 * 2 \text{ occupational therapists}) = \$1,284,855$. Information for psychiatrists, recreation therapists, and occupational therapists was found from: Health Systems Planning Division, 2007; Fraser Health, 2006; and Canadian Association of Occupational Therapists, 2009.

Cost: Cost data is as follows:

$$(\$1,284,855 / 5648^{22}) - (\$20,490) = - \$20,262$$

According to these calculations, this alternative would decrease costs to society by \$20,262 per patient. This cost is lower compared to the status quo, so this alternative is given a ranking of HIGH for this criterion.

Public Acceptability: This option ranks lower than the other two alternatives because a CMHC requires a permanent location within the community, making it more visible than a telephone triage line or a mobile crisis service. It is likely that public acceptance of this alternative will be very low in the beginning. Individuals or organizations who do not want these centres in their community will mobilize and lobby the government to move the centre to a different location, as has been the case with various housing projects for individuals with a mental illness. Therefore, this alternative is ranked as LOW in terms of public acceptability.

Summary

Table 5 summarises the outcomes of the analysis.

²² It is unknown exactly how many people would access the CMHC. However, Amaddeo et al (1997) estimate that there were 706 clients who utilised services in South Verona in 1992. I assume that the majority of clients used the CMHC, as it is a very large component of the community mental health care service in South Verona. South Verona has a population of 75,000 people (Rossi et al, 2005), whereas Vancouver has a population of 600,000 (City of Vancouver, 2009), so Vancouver has eight times as many residents. Therefore it is assumed that 5,648 individuals will use the CMHC in Vancouver ($706 * 8 = 5,648$).

Table 5 - Policy Analysis Summary

		Alternative 1	Alternative 2	Alternative 3	Alternative 4
		Status Quo	Telephone Triage	Mobile Emergency Response Team	CMHC
Effectiveness	Re-admission Rate Reduction	Low (0.5)	High (1.5)	High (1.5)	High (1.5)
	Client Friendliness	Low (0.5)	Medium (1)	Low (0.5)	High (1.5)
Equity		Low (1)	Medium (2)	Medium (2)	Low (1)
Administrative Feasibility	Labour Cost	High (1.5)	High (1.5)	High (1.5)	High (1.5)
	Ease of Implementation	High (1.5)	Medium (1)	Medium (1)	Low (0.5)
Cost		Medium (2)	High (3)	High (3)	High (3)
Public Acceptability		Low (1)	High (3)	Medium (2)	Low (1)
Total		8	13	11.5	10

8.5 Policy Recommendation

My analysis of the four potential alternatives indicates that all new alternatives rank higher than the status quo. Alternatives 2 and 3 are fairly close in their scores, with alternative 4 scoring the lowest among the three. All three options rank higher than the status quo on their ability to reduce re-admission rates and cost. Although labour costs vary between alternatives, all three receive a high score. For example, a community mental health centre requires \$1,284,855 for labour costs, whereas the mobile crisis service and telephone triage need less than \$800,000 each; however, all three still receive a high ranking despite the difference because each option

increases labour costs by less than five percent. The alternatives receive varying rankings for client friendliness and public acceptability. The community mental health centre ranks the highest in regards to having new clients utilise mental health services, whereas the mobile crisis service ranks lowest. In terms of public acceptability, telephone triage is be the most likely to be accepted by the public, but a community mental health centre will face difficulties integrating into the community. The community mental health centre will also be the most difficult to implement because it will require coordination among many agencies. With these tradeoffs in mind, my policy recommendations are as follows: To implement Policy Alternative 2 (telephone triage) in the short run, and to implement Policy Alternative 4 (CMHC) in the long run. Ideally, all three options would be implemented in the long run, but because they are complementary and it is unlikely that all three will be adopted, I prioritise the sequencing of implementation based on the results of the analysis.

Given the results of the analysis, Policy Alternative 2 should be implemented immediately. It ranks high on re-admission rate reduction and public acceptability, suggesting that it will be easily adapted and utilised within the existing mental health care structure. It is also less costly than the status quo, ranks high in terms of labour costs, and successfully meets the short term policy objective of addressing the needs of vulnerable clients, but it does not necessarily improve upon follow up services because it focuses only on the immediate needs of clients. However, it does address one of the gaps in the current system outlined in Section 4, which is the lack of emergency services specifically for those with mental illness in BC. Furthermore, Stakeholder 3 observes that this line will be a valuable tool for families who are struggling to find the resources they need for their ill family member.

To address long term objectives of readmission rate reduction and an efficient continuum of services, a CMHC should be implemented in the near future. Although it scores lower than implementing a mobile crisis service, such a service can only meet short term objectives, which

will already be addressed by telephone triage. The CMHC has a low cost, and the coordination and cohesiveness it will provide to the system will help the Ministry of Health Service deliver community-based, client-centred care. This alternative ranks high on both measures of effectiveness indicating that it will increase appropriate access to mental health care and reduce readmission rates to the level needed to meet the Canadian average. All three stakeholders agreed that despite the CMHC not receiving the highest ranking, the centre is an important piece of the community treatment puzzle that is missing.

It is important that both alternatives be implemented, with an emphasis on creating a telephone triage system as soon as possible, and establishing a CMHC in the next few years. Telephone triage will aid in alleviating current pressures on both the mental health care system and community services, but is a reactive rather than proactive response. The CMHC will provide the missing piece in current community services and create both a central point of access and a continuum of services to clients in a location that is convenient for them.

9: Conclusion

Since the beginning of deinstitutionalisation in the late 1960's, BC has been trying to create community based supports to replace services traditionally provided in psychiatric institutions. When this process became a priority in the early 1990's, there was an increased emphasis on moving patients from Riverview back into the community and having biological, psychological, and social supports available in that setting. However, this process has not been fully successful, and poor planning combined with a lack of system coordination and inadequate resources have lead to numerous individuals failing to get the care they need in a community setting. For a minority of clients, the system has failed in a significant way, leaving these individuals in a circle of hospital readmission and release back to community where adequate supports are not present and integration is extremely difficult.

This study attempts to address the gap in community supports by identifying what comprises an effective mental health care system and uses case studies to outline how this system should look in practice. A broad examination of case studies and detailed examination of the best practices was conducted to help identify alternatives for BC. My findings indicate that the jurisdictions examined have emergency services solely dedicated to people with mental illness, and they have made a concerted effort to provide centralized care through community mental health centres. The secondary methodology confirmed that these types of programmes improve short term and long-term outcomes for individuals with mental illness.

Based on these findings, I formulated three alternatives to the status quo for BC: instituting a telephone triage service, creating a mobile emergency response team, or establishing a community mental health centre. Using five criteria, I conducted a policy analysis to determine which one of these options would be best for BC. Findings indicated that a telephone triage

service ranked the highest, followed by a mobile emergency response team, and a community mental health centre. I determined that a telephone triage service should be created immediately, followed by the construction of a community mental health centre. The creation of a mobile response team was not recommended, as many of the services provided by this type of programme overlap with a telephone triage system, and the mobile response teams did not score higher than that alternative.

The recommendation to establish a telephone triage line right away is based on its ability to give priority to vulnerable individuals and help them access the services they need, easing navigation of the mental health care system. Although the community mental health centre did not score higher than a mobile emergency service, I recommend the former as an option in the long run because of its ability to meet long-term objectives.

BC has been struggling to manage the needs of a minority of individuals who consistently access mental health care and community services. The two recommendations provided from this study attempt to fill some of the gaps in the current system and ease the struggle by addressing both immediate and long-term needs and goals for these clients.

Appendix

This appendix outlines when stakeholder interviews were conducted. Three key informant interviews were conducted to verify options, and criteria and measures. Due to the sensitive nature of this topic, stakeholder names remain anonymous, although their association with mental health care services is indicated.

Stakeholder #	Position	Date of Consultation
1	Advocate and non-profit organization member	February 7, 2009
2	Employee at local general hospital	February 18, 2009
3	Employee of the Provincial Health Services Authority	February 19, 2009

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