Mapping mental health and substance abuse services onto the primary health care framework in Saskatchewan

A Discussion Paper

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Executive Summary

- The purpose of this discussion paper is to provide an overview of research evidence and organizational models relating to the improvement of health outcomes through enhanced primary care team responses to mental health and substance use issues. This paper explores ways of mapping mental health and substance abuse services onto the broader primary health care framework emerging in Saskatchewan.

- The annual economic cost of substance misuse—including harmful alcohol use—in Canada has been estimated to be more than $35 billion during 2002. This estimate includes the burden on health care and law enforcement services as well as loss of productivity due to premature death and disability.

- The overall economic cost to society from binge drinking and chronic alcohol misuse was estimated to be almost as much as tobacco and over 1.5 times that of all illicit drugs combined.

- It is important to address the full spectrum of substance-related health risks and harms. In the case of alcohol, this includes the risks and harms from non-dependent, episodic, heavy ('binge') drinking and non-dependent long-term over-consumption as well as alcohol dependence. The overall health system burden from alcohol is largely driven by non-dependent harmful use.

- The efficacy, feasibility and cost-effectiveness of screening and brief interventions in primary care settings for adult risky drinking are now well established. As recommended prevention practices, alcohol misuse screening and counseling have the same ranking as breast cancer screening, cholesterol abnormalities screening, depression screening, diabetes screening, and obesity screening and counseling—yet have much lower levels of delivery.

- The annual overall economic burden of mental illness in Canada was estimated to be more than $50 billion during 2003, including all health service costs but excluding medication costs.

- In Canada, primary care has been shown to be the most commonly used source of help relative to other services, both formal and informal, across various mental disorder and substance dependence diagnostic statuses.

- Early identification of mental health or substance use issues relies heavily on opportunistic screening. Yet evidence suggests that only a minority of primary care providers use formal screening tools to detect potential issues of this kind and that the majority of physicians miss or misdiagnose alcohol abuse.

- Primary care early identification through screening of adults and adolescents for major depression is recommended by the research literature, but only if and when supports are in place for adequate diagnosis, treatment, and follow-up. A well-documented early intervention approach
for acute or chronic depression is cognitive-behavioral therapy, which can be as effective as psychosocial therapies and medication.

- There is a strong relationship between mental health and substance use issues, on the one hand, and chronic physical health problems, on the other hand. Those with mental illness or substance use disorders are at a higher risk for chronic physical conditions than those without these disorders. Those with co-occurring substance use and mental health disorders tend to be at highest risk for chronic physical conditions.

- Given the prevalence of co-occurring substance use and mental health disorders, there should be effective collaboration between mental health, substance use and other health care providers.

- Primary care teams require a capacity to help patients with mental health and substance use issues of low to moderate level severity, in addition to those relatively less common patients experiencing high levels of severity. In other words, the planning of primary care team roles needs to be driven by the diversity of clinical subpopulations in terms of the full spectrum of mental health or substance use severity.

- For patients without mental health or substance use issues, the primary care team’s role should be to facilitate patients maintaining their own health and healthy behaviors. For patients with low to moderate severity mental health or substance use issues, the primary care team’s role should extend to the provision of early interventions for moderate levels of depression or moderately risky patterns of alcohol consumption.

- With high levels of severity, the care required for patients will often be beyond the capacity or expertise of primary care teams. Therefore, the role of the primary care team should extend to coordinating patient use of external specialized treatment specialists or services.

- Collaborative care can be supplemented by specialist consultation provided through interactive videoconferencing in rural or remote primary care. It may also be supplemented by having mental health or substance use specialists provide training to primary care providers to increase their capacity to respond to these issues.

- Collaboration appears to result in increased physician and patient satisfaction, and better patient outcomes if combined with decision-support tools.

- The literature suggests building collaboration around clearly defined coordination of care including appropriate and regular clinical supervision. Mechanisms to facilitate information sharing and tracking of patient progress, ready access for patients as they transition between collaborating providers, sufficient resources and careful planning are key ingredients for a collaborative primary care model.

- Efforts to increase collaborative care will likely be enhanced by consulting with local stakeholders to find models best suited to particular communities and settings.
Background and Overview

The Province of Saskatchewan has been developing a framework for achieving a high performing primary care health care system. Particular emphasis in that process has been placed on healthcare services that are community-designed team-delivered and patient-centred. An important aspect of a patient-centred primary health care system is the focus on helping patients and families to manage and maintain their own health to the greatest extent possible” (Saskatchewan Ministry of Health, 2011).

The purpose of this discussion paper is to provide an overview of research evidence and organizational models relating to the improvement of health outcomes through enhanced primary care team responses to mental health and substance use issues. In other words, it addresses ways of mapping mental health and substance abuse services onto the broader primary health care framework. The paper has been prepared for the Saskatchewan Ministry of Health, Mental Health and Addictions Unit with the support from Health Canada's Drug Treatment Funding Program.

This paper is intended to inform policy and program directions in the Province of Saskatchewan. It pulls together information from multiple jurisdictions including available national and international data. It also builds heavily on published analyses from the health sciences research literature.

The paper is organized around the following sections, each addressing a major question:

- What is the epidemiology and burden of disease associated with mental health and substance use issues?
- What are the potential roles of primary care teams with respect to mental health and substance use issues?
- To what extent have people interacted with primary care providers about their mental health or substance use issues, and how have primary care providers responded?
- What is the evidence for the efficacy of early identification and early intervention in primary care settings for mental health and substance use issues?
- What is the evidence for the effectiveness and cost effectiveness of primary care-level collaboration in addressing mental health and substance use issues?
- What key ingredients have been identified for organizing primary care team collaboration directed at addressing mental health and substance use issues?
Some of these topics are extensively covered in the research literature and consequently a relatively high level of evidence exists, based on meta-analyses and systematic reviews of multiple studies. This is certainly the case with questions relating to epidemiology and burden of disease, as well as early identification and early intervention. However, the research literature dealing with other topics, such as models of collaboration, is less developed as of yet. For those topics, the evidence outlined here is drawn largely from analyses of case studies.

The reader should note several points concerning language, limitations of available research literature and the scope of the paper:

- When discussing evidence and health system practices concerning mental health, the discussion is limited to depression and anxiety. These generally are the most common mental health issues seen by practitioners in primary care settings. The literature provides considerable evidence concerning primary care early intervention and identification in these areas.

- While the paper includes illicit drugs and misused prescription medications as well as alcohol included under the term ‘substances,’ the lion’s share of evidence for early identification and early intervention has come from studies relating to alcohol issues. This predominance of evidence accords with the fact that alcohol’s overall burden on systems is at least equal to that of all the other substances combined.

- When the term ‘substance use issues’ is used in the paper, it is intended to encompass the full spectrum of substance-related risks and harms. In the case of alcohol, for example, this would include the risks and harms from non-dependent, episodic, heavy (‘binge’) drinking and non-dependent long-term over-consumption as well as alcohol dependence. This reflects the fact that the overall health system burden from alcohol is largely driven by non-dependent harmful use.

- While the focus of this paper is on multidisciplinary primary care teams, much of the published health research literature uses the term ‘primary care’ to refer to family medicine and general practice physicians exclusively. For example, the large majority of studies on topics such as ‘brief intervention’ have been based on family medicine and general practice physician-delivered services. This may limit the extent to which research findings on these topics can be generalized to a broader range of primary health care providers.

- Finally, when discussing health service functions that could occur in primary care team settings, the term ‘early identification’ should be understood to include formal and informal screening or preliminary assessment. Similarly, when the term ‘early intervention’ is used, it is intended to include a range of psychosocial practices—such as motivational interviewing, cognitive behavioral therapy and brief interventions—to support behavioral changes made by patients who are typically at moderate risk for harms from mental health or substance use issues.
What is the epidemiology and burden of disease associated with mental health and substance use issues?

**Epidemiology**

According to the 2004 Canadian Addiction Survey (CCSA, 2004), about 79% of Canadians aged 15 or older were current drinkers (defined as having consumed alcohol in the past year). Of these, approximately 44% typically consumed alcohol at least once per week. Approximately, 36% of current drinkers reported consuming at least three drinks on a typical drinking day.

Consistent with US National Institute of Health (NIH) guidelines, the Canadian Addiction Survey defined ‘heavy drinking’ as five drinks or more in a single sitting for males and four drinks or more for females. It was estimated that about 25% of Canadian current drinkers engaged in heavy drinking at least once a month and a further 6% engaged in heavy drinking once a week or more (CCSA, 2004). About 17% of current drinkers were estimated to engage in ‘high risk drinking,’ based on an Alcohol Use Disorders Identification Test (AUDIT) score greater than seven. Approximately 9% of current drinkers reported that they had experienced past year harms resulting from their own drinking. As well, 33% of current drinkers reported that they had suffered past year harms resulting from alcohol use by others.

For most of these rates, the Saskatchewan subsample from the survey was similar to the national sample. About 78% of Saskatchewan subsample aged 15 years or older were current drinkers. Of these, approximately 34% typically consumed alcohol at least once per week. Approximately, 40% of current drinkers reported consuming at least three drinks on a typical drinking day. It was estimated that about 24% of Saskatchewan current drinkers engaged in heavy drinking at least once a month and a further 6% engaged in heavy drinking once a week or more (CCSA, 2004). About 17% of Saskatchewan current drinkers were estimated to engage in high risk drinking. Approximately 9% of current drinkers reported that they had experienced past year harms resulting from their own drinking and 36% reported that they had suffered past year harms resulting from alcohol use by others.

The Canadian Addiction Survey estimated that about 14% of Canadians aged 15 or older had used cannabis in the past year. Only 3% of the total Canadian Addiction Survey sample had used any other illicit drug in the past year (CCSA, 2004). Among these illicit drug (including cannabis) users, 18% reported one or more harms such as related physical health problems, harms to friendships and social life, harms to home and marriage life, harms to work life, and financial harms (CCSA, 2004).
For the Saskatchewan subsample of the 2004 Canadian Addiction Survey, about 11% of those aged 15 or older had used cannabis in the past year, with only 3% of those reporting having used any other illicit drug in the past year (CCSA, 2004). Among past year illicit drug (including cannabis) users in Saskatchewan, 24% reported one or more related harms (CCSA, 2004)—the highest estimated level among the provinces.

Based on data from the 2004 Canadian Community Health Survey, one study (Urbanoski et al., 2007) estimated the prevalence of substance use and mental health disorders among Canadians 15 years or older. For the purpose of their analysis, mental health disorders included past year experience of five mood and anxiety disorders: major depression, manic episodes, panic disorder, social phobia, and agoraphobia. Substance use disorders were limited to past year illicit drug dependence and alcohol dependence (excluding alcohol or other drug abuse disorders). About 89.6% of the population (15+ years) was estimated to have neither mental health nor substance dependence disorders, about 2.1% had an alcohol or other drug dependence disorder but no mental health disorder, about 7.4% had a mental health disorder but no substance dependence disorder, and 0.9% had co-occurring mental health and alcohol or other drug dependence disorders. Note that these percentages are most likely underestimated due to stigma effects on self-reporting.

**Cost and Burden**

The economic cost of substance misuse in Canada for 2002 has been estimated to be in excess of $35 billion (Rehm et al., 2006). This estimate included the burden on health care and law enforcement services as well as loss of productivity due to premature death or disability. According to this analysis, health care costs resulting from substance use (including tobacco, alcohol and other drugs) were estimated to account for 22.1% of total economic costs. Tobacco accounted for 42.7% of total cost, alcohol for 36.6% and illegal drugs for 20.7%. Notably, the overall economic cost to society from alcohol misuse was estimated to be almost as much as tobacco and over 1.5 times that of illicit drugs combined.

With respect to physical health impacts, the technical report supporting the development of Canada’s low-risk drinking guidelines (Butt et al., 2011) found that: “Average long-term consumption levels as low as one or two drinks per day have been causally linked with significant increases in the risk of at least eight types of cancer (mouth, pharynx, larynx, esophagus, liver, breast, colon and rectum) and numerous other serious medical conditions (e.g., epilepsy, pancreatitis, low birth weight, hemorrhagic
stroke, dysrhythmias, liver cirrhosis and hypertension).” Short-term alcohol intoxication also increases risk for injury in a dose-response relationship with each drink consumed (Butt et al., 2011).

Gauging the burden of disease associated with alcohol is complicated by evidence that alcohol has some health benefits (Butt et al., 2011). Nevertheless, it has been estimated that the preventable costs and burden to society from alcohol misuse could be reduced by 5%-12% by clinical interventions impacting unsafe levels of consumption, including primary care brief interventions (Rehm et al., 2008).

With respect to mental health issues, epidemiological research demonstrates:

“the considerable epidemiological burden that mental disorders impose on the world as a whole (more than 10% of lost years of healthy life and over 30% of all years lived with disability). ... The enormity of this disease burden is caused by the relatively high prevalence of mental disorders, the often chronic or recurring nature of these disorders and the severity of disability associated with many mental disorders” (WHO, 2006).

On the basis of 1998 data, Stephens and Joubert (2001) estimated that in Canada the annual overall economic cost attributable to depression and anxiety disorders alone was in the order of $14 billion (1998 dollars). Approximately, 43.5% of the total economic cost was accounted for by direct health care costs including hospital costs (26.9%), physician costs (5.9%), and medication costs (4.5%). A further 56.5% of the total economic cost was accounted for by indirect (lost productivity) costs including short-term disability (40.6%), long-term disability (11.9%), and premature death (2.7%). A later study (Lim et al., 2008), using a method of analysis that included all health service costs (excluding medications), estimated the overall economic burden of mental illness in Canada to be $50.8 billion (2003 dollars). The Institute of Health Economics (2010) has estimated that approximately 7% of total government health expenditures are allocated for the provision of mental health services.

Evidence points to a strong relationship between mental health and substance use issues, on the one hand, and physical health conditions, on the other hand.

- Across western nations there continues to be a substantial difference in the mortality rates between adults experiencing mental health issues and the rest of the population (Thornicroft, 2011).

- A recent review of the literature (Scott & Happell, 2011) found that for those experiencing serious mental illness, “the prevalence of obesity, metabolic syndrome, diabetes mellitus, symptoms of cardiovascular disease, and respiratory disease” were at least two times or more than double the general population.
A U.S. study involving over 650,000 older adults found that those with mental illness or substance use disorders were at higher risk for chronic physical conditions than those without these disorders (Lin et al., 2011). The same study found that those with co-occurring substance use and mental health disorders tended to be at the highest risk for chronic physical conditions.
To what extent have people interacted with primary care providers about their mental health or substance use issues, and how have primary care providers responded?

This section provides a brief overview of evidence concerning the extent and form of contact with primary care relating to mental health or substance use issues. The research literature (which focuses largely on contact with general practice and family physicians) was explored for information shedding light on two broad questions. First, what has been the prevalence with which individuals have presented to primary care for issues relating to mental health or substance use? Second, to what extent are mental health and substance use issues detected and adequately addressed in primary care setting?

Data from the 2002 Canadian Community Health Survey indicates that 39% of adults "who met the criteria for a mental disorder or substance dependence had sought help in the past year" from either formal or informal services (Urbanoski et al., 2007). Primary care was shown to be the most commonly used source of help relative to other services, both formal and informal, and across various mental disorder and substance dependence diagnostic statuses. More specifically:

- Of those meeting criteria for only substance dependence, 12% used formal services in the past year and 6% obtained help specifically from primary care physicians.
- Of those meeting criteria for only a mental disorder, 43% used formal services and 32% obtained services specifically from primary care physicians.
- Of those meeting the criteria for a mental health disorder and substance dependence, 48% used formal services and 35% obtained services specifically from primary care physicians.
- Of those meeting the criteria for either mental health disorders or substance dependence--and who used any service--27% obtained services only from primary care physicians.

Nevertheless, while many people may explicitly seek help from a primary care provider for mental health or substance use issues, early identification relies more on opportunistic screening. In the case of alcohol-related issues, a survey of American primary care physicians (Friedmann et al., 2000) found that while the large majority of physicians reported that they asked new patients about their drinking, less than 15% used a formal screening tool.

Another U.S. study found that “94% of primary care physicians missed or misdiagnosed (alcohol abuse) ... when presented with early symptoms of alcohol abuse in adult patients” (NCASA, 2000). In Approximately three-quarters of sampled patients, who went on to specialized treatment for problem
drinking reported that “their physician was not involved in their decision to seek treatment” and approximately 15% reported that their physician was only minimally involved (NCASA, 2000). A Canadian study using data from a telephone survey of adults in Ontario found that only about 30% of respondents—who were moderate to high risk drinkers—were asked by their primary care provider about their drinking (Rush et al., 2003). In contrast, at least 70% of the same respondents felt that general practice physicians should routinely ask patients about their drinking.

A review of the research concluded that few patients are asked about their drinking by their primary care physicians and when “problem use is identified, most patients do not receive appropriate follow-up and aftercare” (D’Amico et al., 2005). While both screening and brief interventions are highly ranked prevention practices, and despite the weight of research evidence, neither is carried out by primary care providers on a routine basis. The general consensus in the clinical research community is that the central challenge for this area is now one of implementation, rather than demonstrating efficacy or cost-effectiveness.

In the case of mental health issues, a review of the literature (Mitchell et al., 2011) found that primary care clinicians have limited success in identifying anxiety or depression. They note that “not all such individuals want professional help, and some people who are overlooked get help elsewhere, or improve spontaneously, therefore the implications of these detection problems are not yet clear” (Mitchell et al., 2011). With respect to the use of early interventions for depression and anxiety, there is still insufficient research on the extent to or how well approaches such as cognitive-behavioral therapy are being applied specifically in primary care settings.
What are the potential roles of primary care teams with respect to mental health and substance use issues?

This section sets out a conceptual framework to help identify the services and supports that primary care teams may be well positioned to provide to patients with respect to their mental health and substance use issues. Such a framework needs to reflect the full range of health services and supports that might be provided through primary care teams. The framework also needs to reflect the often complex care pathways that may be required by people experiencing (or at risk for) mental health or substance use issues.

Primary care is often characterized by a variety of attributes such as point of first contact, accessibility, longitudinality, and comprehensiveness. However, it is important to underscore that none of these features alone can adequately capture the foundational nature of primary care. According to the Institute of Medicine (1994): “Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.”

The Saskatchewan Ministry of Health (2011) observes that primary health care:

“has often been described as the everyday care that a person needs to protect, maintain, or restore health. It is often a person's first point of contact with the health system. This may come in the form of a visit with a family physician or nurse practitioner, advice from a pharmacist, information on managing a chronic disease, or numerous other interactions between patients, families and providers. At its best, primary health care provides a medical home for patients, is the link to other parts of the health system, and serves the patient by helping them to navigate the complexities and services of the health system.”

Building on the above understanding, primary care teams can be defined as groups of health and allied professionals who have a formal arrangement to collaborate in the provision of multidisciplinary health supports and services organized around a medical home for patients. Such teams may include professionals such as family medicine or general practice physicians, nurses, nurse practitioners and pharmacists as well as non-medical practitioners with expertise in mental health, substance misuse and health behavior counseling. The organizational structures of primary care teams can vary considerably in practice (a topic that will be examined later in this paper), but they always are characterized by relatively continuous and intensive forms of shared care.
This sustained focus on multidisciplinary collaboration differentiates primary care teams from the more commonly found general practice clinicians whose collaboration tends to be limited to specialist referrals. However, along with general practice clinics, primary care teams are situated to provide early identification, early intervention and continuity of care in response to the full spectrum of health issues. In this respect, primary care teams provide a level of health care distinct from that provided by medical specialists and emergency medicine. Early identification, early intervention and continuity of care also differentiate primary care teams from specialized non-medical mental health and substance misuse treatment services. A crucial question underlying this paper concerns the extent to which primary care teams can provide health services needed by patients experiencing mental health or substance use issues.

At the population level, low to moderate severity issues tend to represent a far greater burden on health care systems and society. This is simply because there are relatively few individuals with high severity issues in comparison with the number of individuals with low to moderate severity issues. Even though the per case treatment costs associated with high severity issues can be quite high, the low to moderate severity cases with lower treatment costs are much more common. Consequently, the distribution of resources by the health system needs to balance considerations of costs per case, on the one hand, against costs and total number of cases at different levels of severity.

Similarly, it is necessary to acknowledge the full spectrum of severity among patients at the clinical level, especially when considering the potential roles of primary care in response to mental health and substance use issues. Most individuals experiencing mental health issues will fall into low to moderate severity categories, such as low to moderate levels of anxiety or depression. The same is the case among individuals experiencing substance use issues, where again most will be in low to moderate categories, such as moderate risk patterns of episodic heavy drinking or cannabis use. While a significant number of patients are indeed struggling with mental health or substance use issues of higher severity (e.g., highly severe depression, personality disorders or substance dependence), patients with low to moderate severity will tend to be more commonly present (although not necessarily identified) in primary care settings. This simply reflects the distribution of severity in the general population.

As a result, it is important that primary care teams have the capacity to help patients with mental health and substance use issues of low to moderate level severity, in addition to those relatively less common patients experiencing high levels of severity.
The matter is complicated by two additional factors. First, for a certain proportion of those individuals with low to moderate severity mental health or substance use issues some will have trajectories leading to higher levels of severity in the future. *Since addressing issues of low to moderate severity is more likely to be efficacious and cost-effective than those of high severity, it is prudent to invest in upstream interventions in order to reduce the number of more severe and costly cases downstream.* A second complicating factor is that a significant proportion of individuals will experience mental health and substance use issues concurrently. *The prevalence of co-occurring substance use and other mental health disorders points to the need for effective collaboration between mental health, substance use and other health care providers.*

In principle, primary care teams are well organized to provide services and supports relating to mental health and substance use issues at all levels of severity, although the specific kinds of care provided will be dependent on the particular presenting level of severity. Broadly speaking, primary care teams have the capacity to (a) educate all patients and to engage in early identification of individuals with mental health or substance use issues, (b) provide early interventions for those individuals with low to moderately severe mental health or substance use issues, (c) refer those patients with highly severe issues to specialized services beyond the primary care team for more intensive mental health or substance use treatment, and (d) provide continuing support and care coordination to patients—and their families—during and subsequent to their periods of intensive mental health or substance use treatment.

*Thus, the planning of primary care team roles needs to be driven by the diversity of clinical subpopulations in terms of mental health or substance use severity.* Patients experiencing different levels of severity will be best served by different care pathways and, in turn, will need their primary care teams to perform somewhat different sets of clinical functions. A practical way to group patients in this regard might be as follows: (1) patients who have no identified mental health or substance use issues, (2) patients with low to moderate severity mental health or substance use issues, and (3) patients with high severity mental health or substance use issues. The corresponding continuum of primary care team roles might be described as (1) supportive care, (2) directive care, and (3) coordinated care.

The Saskatchewan Primary Care Framework emphasizes that, in addition to treating illness and injury, the health system needs to help patients and families to manage and maintain their own health. *In the context of patients without identified mental health or substance use issues, this implies a supportive care role for the primary care team to facilitate patients maintaining their own health and healthy*
behavior in these areas. The support care role would include preventative health education as well as routine screening for emergent mental health and substance use issues. These prevention and early identification activities might be led by a nurse who is a member of the primary care team.

For those patients with identified low to moderate severity mental health or substance use issues, the supportive care role is extended to one involving more directive care. This would see the primary care team engaging in the active delivery of interventions when a more involved approach is warranted. The directive role would include the provision of early interventions for issues such as moderately risky levels of depression or moderately risky patterns of alcohol consumption. It could also include the prescription and management of medications to help address mental health or substance use issues in keeping with clinical guidelines. The directive role may also include reviewing the patient’s situation and behaviors with them on a periodic basis, as well as providing guidance to family members on how to be partners in the patient’s (or their own associated) care process. Early interventions might be delivered by substance use or mental health practitioners who are members of the primary care team. For example, in the situation represented by the example in Figure 1, the social worker/counselor would be the mental health and substance use practitioner on the team delivering early interventions.

Finally, for patients with identified mental health or substance use issues of high severity, the supportive and directive roles expand into the coordinated care role. With high levels of severity, the care required for the patients will typically be beyond the capacity or expertise of primary care providers. Thus, here the primary care team takes on a focus of coordinating patient use of specialized treatment specialists or services external to the team itself (e.g., psychiatrists, psychologists, or residential substance use treatment providers). In addition to the functions associated with the supportive and directive clinical roles, the coordinated role would include making referrals for assessments, making referrals for specialized mental health or substance use treatment in keeping with clinical guidelines, reciprocal consultations with the specialists (external to the team) who have temporarily become involved in the patient’s care, and helping patients navigate along these often complex care pathways. Mental health or substance use practitioners, who are members of the primary care team, might consult with involved external treatment specialists to determine how they and the team can together provide effective support to the patient and the patient’s family. Again, in the example presented in Figure 1, the social worker/counselor would be the mental health and substance use practitioner on the team.
To underscore, all levels of severity and corresponding primary team roles require effective use of mental health and substance use practitioners who are members of the primary care team as well as requiring effective use of external mental health and substance use specialists. Consider the following scenarios:

- In the context of the first role (providing supportive care to patients with no identified mental health or substance use issues), mental health or substance use practitioners (e.g., social workers or counselors) on the team may transfer knowledge of early identification tools with other kinds of practitioners on the team, and may also oversee the use of these tools with patients of the team.

- In the context of the second role (providing directive care to patients screened to have low to moderate severity mental health or substance use issues), mental health or substance use practitioners (e.g., social workers or counselors) on the primary care team may partner with other team practitioners to exchange knowledge about brief or early intervention protocols, and may take the lead in delivering these interventions with patients of the team.

- In the context of the third role (providing coordination for patients assessed to be in high severity categories), mental health or substance use practitioners on the primary care team (e.g., social workers or counselors) may partner with other team practitioners to exchange knowledge about external specialized practitioners and other resources, and may serve as the team’s primary liaison with external specialist practitioners and specialized treatment services concerning patients of the team.

Finally, regardless of patient level of severity, the whole primary care team has a critical function of providing continuity of care over the patient’s life course. This function is implicit in and transcends the roles described above. Continuity of care provides the central structure for primary care provision. This means that the primary care team members have established and trusting clinical relationships with the patients. The relationships may pre-date the appearance of mental health or substance use issues, they continue during the provision of any treatment, and endure as a source of post-treatment preventative support against the re-emergence or worsening of the issues.

The roles and functions described above are summarized in Table 1. As well, Figure 1 illustrates how some of the critical functions relating to mental health and substance use issues might be mapped on to a primary care team structure.
### Table 1: Primary care team roles and functions related to substance use and mental health severity levels

<table>
<thead>
<tr>
<th>Clinical Population</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient MH and SU Profile</td>
<td>No Identified MH or SU Issues</td>
<td>Low to Mod Severity MH or SU Issues</td>
<td>High Severity MH or SU issues</td>
</tr>
<tr>
<td>Primary Care Team Role</td>
<td>Supportive Care</td>
<td>Directive Care</td>
<td>Coordinated Care</td>
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<tr>
<td>Clinical Functions</td>
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<td>Early Identification</td>
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<td>Assessment</td>
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<td>Medication Management</td>
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<td>Family Engagement</td>
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<tr>
<td>Provider Coordination</td>
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</table>
Note 1: In this hypothetical model, the Primary Care Team is comprised of a family physician, a nurse practitioner, a nurse and a social worker or counselor working together in sustained collaborative relationships.

Note 2: The social worker or counselor would have the capacity (a) to facilitate navigation of patients and families along appropriate care pathways and (b) to provide health behavior education, early interventions and referrals to external specialized mental health and substance use services.

Note 3: Double-headed arrows indicate consulting and referral relationships between the primary care team members and external specialized health services.
What is the evidence for the efficacy of early identification and early intervention in primary care settings for mental health and substance use issues?

**Substance Use Issues**

For substance use issues, a well documented early identification and intervention protocol is SBIR (screening, brief intervention and referral). Primary care brief interventions are time-limited, opportunistic behavioral counseling sessions provided to patients, when indicated by formal screening or clinical judgment. In general, the presenting patients are seeking routine care, but do not self-identify as having a behavioral health issue (e.g., drinking beyond low risk guidelines) and are not seeking help for related problems.

Brief intervention is most strongly indicated when screening suggests that a patient is at moderate risk for harm. In the event that screening suggests that a patient is at high risk (i.e., high severity or a complex set of problems), then the primary care provider would also want to consider referral to an addiction or mental health specialist (medical or non-medical). If screening suggests a low level of risk, then neither referral nor brief intervention would be necessary. Instead, the primary care provider has an opportunity to engage in prevention by simply reinforcing the patient’s current good health behavior.

Based on available evidence (Whitlock et al., 2004), the United States Preventative Services Task Force (USPSTF) has recommended primary care screening of adults, including pregnant women, for alcohol misuse. The American Academy of Pediatrics (AAP, 2009) recommends that all adolescent patients be screened for alcohol misuse with a validated screening tool during health visits. In collaboration with the AAP, the American National Institutes of Health (NIAAA, 2011) has issued a guide with a new evidence-based two-question alcohol use screener for physicians working with adolescents.

For adults, the literature provides strong evidence support for the Alcohol Use Disorders Identification Test (AUDIT) as an alcohol screening tool (Raistrick et al., 2006). Multi-substance screening tools, including the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), have been developed to facilitate primary care early identification and brief intervention for related problems. Note that a study of an urban aboriginal medical service found that substance screening tools, such as
the AUDIT, can be felt to be overly intrusive and the authors recommended use of a culturally appropriate, two question screener (Brady et al., 2002).

Since primary care-delivered brief intervention has been most widely used to date in response to risky patterns of alcohol use, most of the studies discussed here have been concerned with problem drinking. Brief interventions for alcohol use may include “feedback on alcohol use and harms, identification of high risk situations for drinking and coping strategies, increased motivation and the development of a personal plan to reduce drinking” (Kaner et al., 2008). Brief interventions like this typically take place in one to three sessions, with each session usually being no longer than 20-30 minutes. More frequent brief intervention sessions do not appear to result in better outcomes (Kaner et al., 2008). In other words, if brief intervention will have an impact with a given patient, it will do so within two or three sessions. The efficacy of brief intervention may be enhanced through follow-up contact by telephone or other media.

A systematic review and meta-analysis of clinical trials has concluded that primary care brief intervention is effective in reducing levels of alcohol use at up to 12 months after the intervention (Bertholet et al., 2005). A later review of 29 controlled trials in general practice (24) and emergency (5) settings found that after at least a year patients who received a brief intervention for alcohol use drank significantly less than controls. Normal clinical settings yielded comparable outcomes to research settings, lending support to practical implementation.

A qualitative synthesis of evidence published during the 1999-2009 period examined outcomes in terms of co-morbid physical and mental health problems. “Brief intervention tended to produce positive effects in patients with substance use and co-morbid physical health problems. However, there was a limited amount of research work in this area. The evidence of positive brief intervention effects in patients with substance use and mental health problems or dual substance use was less convincing” (Kaner et al., 2011).

A review of published research found that primary care brief interventions for risky drinking reduce injuries resulting from such events as falls, motor vehicle crashes, and suicide attempts (Dinh-Zarr et al., 2004). This is significant since injuries account for the largest burden of morbidity and mortality from risky drinking. A meta-analysis has provided evidence that brief interventions for alcohol misuse reduce rates of mortality (Cuijpers et al., 2004).
An extensive implementation study involving patients in six U.S. states found that screening and brief intervention “was feasible to implement and the self-reported patient status at six months indicated significant improvements over baseline, for illicit drug use and heavy alcohol use, with functional domains improved, across a range of health care settings and a range of patients” (Madras et al., 2009). Similar indications of practical feasibility were found in a study focused on emergency departments (Bernstein et al., 2009). While the research is limited, there is some suggestion that brief intervention can be feasible and culturally appropriate with Aboriginal patients (Brady et al., 2002).

In a systematic review of controlled trials and cost-effectiveness studies (1992-2004), screening and brief counseling was found to be very cost effective and potentially cost-saving from both the societal and health-system perspectives (Solberg et al., 2008). The authors conclude that: “These results make alcohol screening and counseling one of the highest-ranking preventive services among the 25 effective services evaluated using standardized methods. Since current levels of delivery are the lowest of comparably ranked services, this service deserves special attention by clinicians and care delivery systems.” To place this observation into context, alcohol misuse screening and counseling had the same U.S. Preventive Services Task Force (2010) ‘B’ ranking as breast cancer screening, cholesterol abnormalities screening, depression screening, diabetes screening, and obesity screening and counseling.

Thus, the efficacy, feasibility and cost-effectiveness of brief interventions in primary care settings for adult risky drinking are now well established (Bernstein et al., 2009; BMA Board of Science, 2008; Nilsen et al., 2008; National Quality Forum, 2007; Baker et al., 2006; Heather et al., 2006). Accordingly, and supported by their own review of the evidence (Whitlock et al., 2004), the USPSTF has recommended primary care brief interventions (behavioral counseling) to reduce alcohol misuse by adults, when indicated by screening.

Thus, the efficacy, feasibility and cost-effectiveness of brief interventions in primary care settings for adult risky drinking are now well established (Bernstein et al., 2009; BMA Board of Science, 2008; Nilsen et al., 2008; National Quality Forum, 2007; Baker et al., 2006; Heather et al., 2006). Accordingly, and supported by their own review of the evidence (Whitlock et al., 2004), the USPSTF has recommended primary care brief interventions (behavioral counseling) to reduce alcohol misuse by adults, when indicated by screening.

The American Academy of Pediatrics (AAP, 2011) now recommends that brief interventions be attempted with adolescent patients for alcohol or other drug misuse, again, when indicated by screening. Adding to this support, a large multi-site, randomized controlled study (Fleming et al., 2010) found that brief alcohol interventions with postsecondary students seeking routine care in campus clinics resulted in significantly reduced levels of drinking at 12 months after the intervention. Significant reductions in Rutgers Alcohol Problem Index (RAPI) scores were also observed.
A more recent line of research has focused on assessing the application of screening and brief intervention in emergency departments. These settings are well placed to contact and motivate individuals with injuries for which alcohol (or other drugs) has been a major contributing factor. But clinical trials in this area have yielded rather mixed—though promising—results with respect to efficacy and cost-effectiveness (e.g., Field et al., 2010; Ahmed, 2007; Gentilello et al., 2005).

The potential benefit of emergency department SBIR justifies continued efforts at finding models of implementation that can work effectively. This will almost certainly require models of efficient onsite collaboration between medical practitioners and specialized substance use counselors (Bernstein et al., 2009). The challenge will be to incorporate the elements of SBIR within “the current systems of care so they are routine, efficacious, and typical components of the process” (Saitz et al., 2006). This applies equally to primary care settings as it does to emergency care settings.

**Mental Health Issues**

In the context of primary care settings, the main focus of early identification and early intervention will be on depression and anxiety issues. Other, more severe, mental health issues would often be referred to pediatric or adult mental health specialists, while continuing to provide ongoing coordination and support through the primary care medical home.

Based on the most recent review of evidence (O’Connor et al., 2009), the U.S. Preventive Services Task Force (USPSTF) recommends primary care early identification through screening of adults for major depression, but only if and when supports are in place for adequate diagnosis, treatment, and follow-up. Similarly, based on current evidence (Williams et al., 2009), the USPSTF recommends primary care screening of adolescents (12-18 years) for major depression, but again only if necessary supports are in place.

There is still uncertainty regarding the effectiveness of specific screening tools for adolescents (Barton, 2009; Williams et al., 2009). For the purpose of screening adolescents for possible concurrent substance use and mental health disorders, the Global Appraisal of Individual Needs Short Screener or GAIN-SS (McDonell et al., 2009) has been validated and is seeing substantial use in the U.S. and Canada.

A well-documented early intervention approach for depression and anxiety is CBT (cognitive-behavioral therapy). According to a recent meta-analysis:
“CBT has been found superior to control conditions and as efficacious as other psychotherapies and ADM (anti-depression medication) in the acute treatment of depression. When adequately implemented, CBT can be as efficacious as ADM for patients with more severe depressions. CBT may also be of use as an adjunct to medications in the treatment of bipolar disorder, although the evidence there is not so clear or extensive. CBT reduces relapse/recurrence rates, with a magnitude of effect that might be comparable to keeping patients on medications, which is particularly noteworthy in a chronic recurrent disorder” (Driessen & Hollon, 2010).
What is the evidence for the effectiveness and cost effectiveness of primary care-level collaboration in addressing mental health and substance use issues?

Collaboration between practitioners (or between service organizations) can take many forms and with variant levels of intensity. Consequently, the available evidence needs to be examined bearing in mind that ‘collaboration’ is a broad concept. An overview of models for collaboration is presented in the next section of the paper, along with a discussion of key ingredients that may apply across different models.

In this section, a brief overview is provided on evidence regarding the efficacy and cost-effectiveness of collaboration. There is a growing body of systematic reviews and meta-analyses examining the potential value of primary care collaboration with mental health providers, with most reviews being concerned with depression. However, evidence on the value of primary care collaboration with practitioners who work exclusively in the area of substance use issues (e.g., addiction counselors) is still relatively scarce.

With respect to collaboration around mental health issues, published systematic reviews have concluded that collaboration combined with clinical treatment structured around decision-support instruments (guidelines, protocols or algorithms), can result in positive patient outcomes beyond collaboration or treatment alone (Craven & Bland, 2006; Adli & Rush, 2006; Agius et al., 2010).

When examining five trials of various collaborative care models for mental health and substance use issues, another systematic review found that there was “a substantial positive impact on linkage to and quality of medical care; there was evidence of health improvement and improved abstinence rates in patients with greater medical comorbidity” (Druss BG & von Esenwein, 2006).

In addition to improved depression outcomes, the literature suggests that primary care collaboration with mental health practitioners can increase both physician and patient satisfaction (Agius et al., 2010). Increased patient satisfaction resulting from collaboration may also be linked to the patient’s decision to opt for psychotherapy instead of (or along with) prescribed medication.

A review of largely American literature found that collaborative care could provide cost-benefits, although with some short-term immediate increase in costs (Agius et al., 2010). However, another review of three trials with economic analyses concluded collaborative care to be “cost-neutral from a health-plan perspective” (Druss BG & von Esenwein, 2006).
Higher levels of collaboration do not appear to be more likely to yield positive outcomes than less intensive levels (Craven & Bland, 2006; Butler et al., 2011). Differences in collaboration effects may be more tied to qualitative factors, such as the form and context of collaboration (Butler et al., 2011). Studies indicate that clinical follow-up consistent with treatment guidelines is a predictor of better outcomes, possibly in part through increased medication adherence (Craven & Bland, 2006).

How knowledge exchange between primary care and other practitioners plays into collaborative care remains uncertain. A study which reviewed randomized controlled trials of collaborative care for depression found positive outcomes were not associated with communication between physicians and mental health providers (Chang-Quan et al., 2009). Another review found collaboration alone to be insufficient to produce changes in physician skill levels or practice patterns (Craven & Bland, 2006).
What are the potential models for organizing primary care team collaboration directed at addressing mental health and substance use issues?

In this final section, an overview is provided of various models of collaboration between providers within primary care teams, particularly around mental health and substance use issues. The section concludes with a discussion of potential key ingredients for effective collaboration identified in the literature.

Models of collaboration

For the purpose of this overview, it is useful to consider four general models of collaboration: the simple referral model, the co-location model, the consultation-liaison model and the integrated model (adapted from Kates et al., 2006).

What we might call the simple referral model (or specialist liaison model) is no doubt the most widely followed by Canadian primary care physicians. It involves the primary care physician referring patients to specialists or other resources for issues that cannot be fully addressed within the context of the primary care setting due to a lack of expertise in some specific area of health assessment or treatment. The model involves minimal contact by the primary care provider with specialists to whom the patient is referred. In the case of medical specialists, the primary care provider will typically send the specialist a formal referral letter. After meeting with the patient, the specialist will provide the primary care provider with a formal response including recommendations. The medical specialist may also often continue to work with the patient while maintaining formal communications with the primary care provider.

Primary care providers will have a firm expectation that medical specialists treat the primary care setting as the patient’s health care home, including keeping the primary care provider informed of the patient’s progress. The situation with non-medical specialists, however, can be quite different. Referrals to non-medical specialists may simply occur in the form of suggestions to the patient that they explore getting further help. In many cases, this will be the end of the primary care provider’s involvement, other than asking the patient about his or her progress with the other provider. Consequently, collaboration by primary care with mental health or substance use providers will often be even more limited than with medical specialists. The simple referral model is more or less the status quo for primary care work with
patients who have mental health or substance use issues, particularly with the latter. Enhancing collaboration would mean moving beyond the simple referral model.

One enhanced approach to collaboration is the co-location model in which primary care and other providers are located in the same setting, such as a clinic or building, while not being part of the same organization or administrative structure (Kates et al., 2006). For example, a health clinic might have a substance use or mental health counselor working in the same clinic as a family physician, but with each operating as independent professionals with their own largely separate client/patient caseloads. These providers would refer patients to one another as needed and could in principle readily communicate about shared clients/patients as well as about mental health or substance use treatment issues in general.

Another enhanced approach to collaboration is the consultation-liaison model (Kates et al., 2006; Meadows et al., 2007; Gask, 2005) in which specialists visit the primary care clinical setting periodically to work with the primary care patients. For example, a substance use or mental health counselor might have a standing arrangement to see patients or consult with the family physician once a week. The counselor would have other clients as part of his or her own practice, and may have visiting arrangements with multiple primary care providers. This model places greater emphasis on the capacity for communication between providers.

A further enhanced approach to collaboration is the integrated model (Kates et al., 2006; Gask, 2005) in which a specialist is more or less permanently and exclusively part of the primary care practice team. For example, a primary practice team might include a mental health counselor and substance use counselor who both share the same clients/patients with a family physician. This model maximizes the capacity for communication among the providers on individuals in their mutual care and also for knowledge exchange across professional knowledge bases. The integrated model is sometimes found in large health care organizations and community health centres. It may be more challenging to implement in the smaller, independent family practice settings that are common in some parts of Canada.

To some extent these models can be combined, with different aspects emphasized depending on the physical and behavioral health risks involved (Mauer et al., 2010). As well, each model can be supplemented by telepsychiatry in which therapeutic consultation or services are provided through interactive videoconferencing in rural or remote primary care settings (Meyer et al., 2009; Haggarty et
al., 2009). Each model may also be supplemented by having mental health or substance use specialists provide training to primary care providers to increase their capacity to respond to these issues (Gask, 2005).

**Essential Ingredients**

Needless to say, caution is warranted in applying any general model to specific real world settings. Contextual factors, as well as the need for engagement of practitioners and other local stakeholders, require sufficient flexibility in implementation. What follows is an outline of key ingredients for effective primary care collaboration suggested in the recent literature (Brawer et al., 2010; Katon et al., 2010; Mauer et al., 2010; Pomerantz et al., 2010; Tew et al., 2010; de Jong 2009; Haggarty et al., 2009; Meyer et al., 2009; WHO, 2007; Felker et al., 2006; Kates et al., 2006; Katon et al., 2006; Gask 2005).

**Collaborative Team** – The literature suggests the need for clearly defined coordination of care, including appropriate and regular clinical supervision. This implies a critical role for the primary care setting as a health care home for patients. However, the extent to, and how, leadership is shared in that role needs to be addressed explicitly. While oversight and coordination are important, all participants in the collaboration need to be part of a well-functioning team. A lack of shared understanding about the nature of their collaboration on the part of the primary care, mental health or substance use providers can serve as a barrier. Successful team collaboration can be enhanced if team members, and especially those with coordination responsibilities, have a broad base of knowledge and cross-sector experience. Training and knowledge exchange efforts need to focus on strengthening this knowledge base. The colocation of primary care, mental health and substance use practitioners also lends itself to team success as it allows for routine consultations between primary care, mental health and substance use providers.

**Access to Care** – For collaborative care to function effectively, there should be open and prompt access as clients/patients transition between collaborating providers as well as when they first come into contact with the team. Clients/patients should be able to access collaborative care from the team regardless of which team provider to whom they first present—in other words, a ‘no wrong door’ model of access. Clearly, for there to be open access, each of the services provided in the collaboration need to be sufficiently resourced and organized so that transitions between the different providers can be relatively seamless. As well, attention needs to be paid to providing clients/patients with the necessary knowledge and support to counter their potential resistance to accessing mental health and substance use services within the collaborative. (Indeed, clients may need to be encouraged by their mental
health or substance use providers to also visit a primary care provider to address concurrent medical issues.) Coordinated strategies for ensuring continuing care (e.g., follow-up support and relapse prevention) are also important.

Clinical Interventions – A stepped care system of evidenced-based clinical interventions relating to mental health and substance issues should be available through the team of collaborating providers. These will include motivational interventions to facilitate and sustain patients accessing specialized mental health and substance use care. These should be time limited interventions that best fit within a primary health care milieu, such as cognitive behavioral counseling for mental health issues or brief intervention counseling for substance use issues. Such psychosocial interventions can often be strengthened with adjunct pharmacological interventions. The stepped care system needs to be built around effective screening, assessments and referral among the collaborating primary care, mental health and substance use providers. It also requires capacity for referrals to external specialist providers for more acute issues. Feedback to the primary care providers is needed regarding their preliminary diagnosis for each patient that is referred to collaborating mental health or substance use providers, as well as their ongoing treatment progress. Moreover, there needs to be a delineation of the kinds of mental health and substance use issues that can be effectively addressed more or less exclusively within primary care settings as opposed to those which might be better referred to specialized care.

Supportive Mechanisms – A number of tools and other mechanisms have been identified as supportive of collaborative care. Such mechanisms can include the use of electronic medical record systems to facilitate information sharing, flow, communication and tracking of patient/client progress. Useful mechanisms also include the use of computer-assisted assessments to facilitate efficiency of communication and clinical response by the collaborating primary care, mental health and substance use care providers. Collaborative care is facilitated by knowledge exchange protocols for sharing (and applying) field-specific best practices information (e.g., algorithms or clinical guidelines) among the participating providers. Of importance are the coordinated use of standardized evidence-based assessment tools, periodic assessment of client/patient needs, and monitoring of treatment progress. Similarly helpful is a coordinated approach to monitoring primary care patients who are sub-threshold for mental health or substance use diagnoses. Finally, collaborative care can be strengthened through the use of client tools for self-management and self-monitoring (e.g., workbooks or diaries for recording and reflecting upon mental health or substance use issues, along with health educational resources).
Planning and Resources – It is important to underscore that enhanced collaborative care cannot be implemented or sustained without adequate funding or planning. Careful planning is required for allocating and managing scarce resources (financial, time, human, office space). Built-in mechanisms for evaluation and research are needed to support quality improvement based on lessons learned over the long-term as well as during the implementation process. It is important to carry out situational analyses in order to identify internal and external forces that may serve as barriers. In this regard, reviewing relevant institutional policies is a critical prerequisite (e.g., funding mechanisms). Similarly, context must be taken into account in each unique effort to implement collaborative care, with particular appreciation of the need for flexibility and adaptability (e.g., to address differences in language, culture or geography). Collaborative care needs to be based upon, and responsive to, the needs and resources of individual communities. Ultimately, this approach needs to build upon existing networks and strengths.

Change Management - In addition to resource and contextual challenges, the shift to enhanced collaborative care can require significant changes in organizational structures, professional cultures and individual practices. The process of change may be made more viable by finding ways to address fears of administrators and clinicians (e.g., fear that if patients are given open access to care, programs will be overrun). Such fears might be lessened by ensuring that the work load of individual practitioners is not unduly increased. The cost-benefits of implementation of collaborative care have to be realized at the front-line, rather than merely across the health system in general. Moreover, practitioners should not be placed in the position of having to use health care skills for addressing mental health or substance use issues beyond their own comfort levels. Also important to address is stigma about people experiencing mental health and substance use issues. This may include stigma held by clinicians, administrators and staff as well as by patients themselves. Finally, engagement of stakeholders, defined in the broadest terms, appears to be essential. This includes attaining support and ongoing engagement from clients/patients, all staff in the primary care setting (e.g., clinical, administrative, clerical) and from decision-makers who drive policy and resource planning.

In summary, efforts to increase collaboration in real-world situations will likely be enhanced by consulting with local stakeholders to find configurations of the key ingredients outlined above that are best suited to particular communities and settings.
References


Institute of Health Economics. The Cost of Mental Health and Substance Abuse Services In Canada: A report to the Mental Health Commission of Canada. 2010.


Kaner EFS, Brown N, Jackson K. Mental health and substance use A systematic review of the impact of brief interventions on substance use and co-morbid physical and mental health conditions and co-morbid physical and mental health conditions. Mental Health and Substance Use. 1;4(1):38-61.


Madras BK, Compton WM, Avula D, Stegbauer T, Stein JB, Clark HW. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later Drug Alcohol Depend. 2009 Jan 1;99(1-3):280-95.


Scott D, Happell B. The high prevalence of poor physical health and unhealthy lifestyle behaviours in individuals with severe mental illness. Issues in Mental Health Nursing. 2011,32(9):589-597.


