Review of the Island Health Substance Use Services System

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“Leaders need to remember what heroes our clients are. The journey is such a struggle—the amount of will power that is required. It’s an honour for us just to walk beside them.”

-Focus group participant

1.0 ACKNOWLEDGEMENTS

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This review represents the work, dedication and perspectives of many. The members of the project's Advisory Committee gave critical input into the scope and planning for the review and were instrumental in ensuring equitable and comprehensive access to a range of stakeholders. A special thanks goes to Michelle Dartnall for her overall leadership of the review process and to Jolene MacKinnon for her assistance in coordinating critical aspects of the review. And finally, to all Island Health staff, physicians, managers, leaders, community partners, clients and concerned community members who gave generously of their time in the context of focus groups, telephone interviews and surveys. We hope that your dedication and commitment to strengthening substance use services is adequately reflected in this report.

2.0 INTRODUCTION

Vancouver Island Health Authority (referred to as Island Health)[1] is one of six health authorities in British Columbia. Through a network of hospitals, clinics, centres, health units, and residential facilities, Island Health provides health care to more than 752,000 people on Vancouver Island, on the islands of the Georgia Strait, and in mainland communities north of Powell River, and South of Rivers Inlet. Island Health's health care services include hospital, community, home care, and environmental and public health services. Island Health Mental Health and Substance Use Services (MHSU) provide appropriate accessible services for persons with mental illness and/or substances use problems.

The Mental Health and Substance Use Operating Plan for fiscal 2012-13 identified improved quality and safety of services as a priority objective for MHSU. A key strategy for accomplishing this objective is to review the quality, structure, effectiveness, and safety of Island Health's substance use services in relation to evidence and best practice.

The substance use review is inclusive of three program areas as follows:

1. Adult Mental Health and Substance Use Services (Adult MHSU) - offers a range of services for people with mental illness and/or substance use problems, including crisis and emergency services, acute care and short-term services, and on-going management, support and recovery services.

2. Youth and Family Substance Use Services (YFSUS) - offers prevention/early intervention, community-based counselling, withdrawal management, supported residential services and outpatient programs for youth, as well as supports for families and caregivers.

3. Older Adult Mental Health and Substance Use Services (Seniors Health) - offers outreach, inpatient, and outpatient services.

2.1 Context for the Review

Substance use treatment and support systems, and the services that comprise them, are always evolving (Rush & Ogborne, 1992; Ogborne et al., 1998). This evolution results from many inter-related forces which include, but are not limited to:

- Changing conceptualization of substance use (e.g., the evolution of moralistic, biomedical, behavioural and spiritual perspectives on its root causes)

[1] Refer to the Appendix for a glossary of all acronyms used in this report.

- Changing patterns of substance use (e.g., the emergence of prescription opiates as major drugs of concern)
- Evolving professional practices that may follow from changing theoretical orientation (e.g., the emergence of motivational interviewing as a core practice) and/or new research evidence)
- Blending and merging of substance use services with other broad systems of care (e.g., mental health and primary care)
- Shrinkage of available resources and increased accountability pressures, both of which may dictate closer examination and control of how resources are being used and how effectiveness and efficiency are being monitored (e.g., ensuring the most costly services are reserved for the most severe and complex cases who require a high degree of risk management)

In the face of such broad trends it is necessary from time to time to take a snapshot of existing services and systems and contrast this snapshot with current trends, research evidence, and professional/expert opinion. It is in this spirit that the current review of Island Health substance use services was initiated. In addition, more locally driven factors included:

- The fact that Island Health substance use services have not received focused attention for some time, other than being part of the intense efforts related to substance use and mental health integration led by Dr. Ken Minkoff in a consultant role
- The re-distribution of resources for community services following the closure of Riverview Hospital (e.g., ACT teams, maintenance substitution services) and the need to focus on potential remaining service gaps as well as coordination issues broadly
- The desire for a tool to increase awareness and provide education around substance use issues within and outside Island Health

In short, the review of Island Health substance use services was intended to describe the current Island Health -based system of substance use services on Vancouver Island[2], to contrast this description with evidence-informed practices from the literature, and to identify gaps and priorities for consideration for system and service enhancement.

This system review and the resulting reports[3] should not be considered in isolation from other recent complementary work in Canada, including British Columbia. Some of the key national initiatives and reports include:

- The report from the National Treatment Strategy (National Treatment Strategy Working Group, 2008) and subsequent work related to the implementation of a systems approach to substance use services and supports (Canadian Centre on Substance Abuse, 2010)
- Key reports on concurrent disorders and the integration of mental health and substance use services (Health Canada, 2002; Rush, Fogg, Nadeau & Furlong, 2008; Rush and Nadeau, 2011; Canadian Centre on Substance Abuse, 2009)

[2] We acknowledge that the ISLAND HEALTH catchment area is larger than just Vancouver Island and use the Island as a convenience term to reflect this overall jurisdiction.
[3] An executive summary is also available.

- The Canadian Centre on Substance Abuse (CCSA, 2007) report on *Core Competencies for Canada's Substance Abuse Professionals*
- A series of new reports prepared for an initiative co-sponsored by CCSA, the Mental Health Commission of Canada (MHCC), and the Canadian Executive Council on Addictions (CECA) that are concerned with the rationale, evidence base and implementation challenges related to collaboration between mental health and substance use services and other sectors such as primary care
- The national renewal process for First Nations, Metis and Inuit substance use services funded through the National Native Alcohol and Drug Abuse program (NNADAP)
- The report from the national Needs-based Planning Project funded through the Drug Treatment Funding Program (DTFP; Rush et al., 2013b)
- Other reports emanating from the DTFP initiative which has provided a tremendous opportunity in Canada to review key issues, develop evidence-informed advice and policy and share results across jurisdictions
- Recent literature reviews on the effectiveness of substance use services treatment (Martin et al., 2012; Lev-Ran et al., 2012; Rush, 2012)[4] and published through a special "In Review series" of the Canadian Journal of Psychiatry.

In addition to these national initiatives and reports the present review of Island Health substance use services builds upon other work in BC, including work on Vancouver Island. This includes:

- The report on the ten-year plan to address mental health and substance use in British Columbia (*Healthy Minds, Healthy People;* Ministry of Health Services and Ministry of Children and Family Development, 2010*)*
- The report on the addiction and recovery services plan for Mt. Waddington (*Changing Together – A Healing Journey;* Services Planning Committee, 2012)
- The report on the review of Clearview Detox Services (James, 2011)
- The service model and provincial standards for adult residential substance use services recently released by the BC Ministry of Health (2011)
- The service model and provincial standards for youth residential substance use services recently released by the BC Ministry of Health (2011)
- The Aboriginal Health Plan, 2012-2015 (Remember the Past, Reflect on the Present, and Build a Healthy Future; Island Health, 2012)
- The report on increasing capacity of primary care providers in accessing mental health and substance use services (Victoria Division of Family Practice and the Mental Health & Addictions Care Access Working Group, undated)
- The 10 Year Plan for BC First Nations and Aboriginal Peoples (*A Path Forward*; First Nations Health Authority, British Columbia Ministry Health, Health Canada, 2013)

[4] There are many other reports and research syntheses that were utilized for the present project and these are well-referenced to facilitate the reader's subsequent access and review.

- A report regarding system-level performance measures for Methadone maintenance services in British Columbia (Office of the Provincial Health Officer, 2013)

Lastly, there are relevant Island Health initiatives that are underway, or emergent, and which have helped shape the report and recommendations, in particular the Mental Health and Addictions Accountability Framework and a pending review of Island Health -funded mental health services. The Tripartite agreement for self-governance of BC aboriginal health services is also critically important to our observations and recommendations *vis a vis* substance use services and the Island's aboriginal people. These latter initiatives will no doubt signal additional system enhancement relevant for people with substance use-related challenges, including but not limited to those with co-occurring conditions.

2.2 Review Objectives

The review includes the following three objectives:

1. Conduct a literature review, with a focus on evidence-informed principles and practices for substance use services, including concurrent disorders.

2. Conduct a baseline inventory of the models of substance use services provided within Island Health and information pertaining to the respective demographic group, with consideration of provider and consumer experiences within the current system.

3. Provide recommendations for Island Health Substance Use Services that will be sufficiently specific to guide service delivery development, including concurrent disorders.

3.0 METHODS

A conceptual framework was used to structure the overall methodology for data collection and analysis for this review. This framework articulates the universal treatment functions, core service categories, and system supports of an "ideal" substance use treatment and support system. The review involved the collection, analysis and synthesis of multiple sources of data from:

1. Literature Reviews – to summarize key evidence-informed principles and practices from published and unpublished ("grey") literature and to identify relevant findings and data from key policy, review and practice documents.
2. Interviews/Focus Groups – to obtain feedback from a range of stakeholders (approximately 165 in total) including clients, service providers, community partners, management and executive leadership from South Island (SI), Central Island (CI) and North Island (NI).
3. On-line Survey - to collect feedback from a broad range of stakeholders regarding perceived strengths and challenges in the substance use system.

4. Dual Diagnosis Capability in Addiction Treatment (DDCAT) - to pilot the application in the Vancouver Island context of a standardized, validated instrument used to assess providers' ability to provide integrated co-occurring disorder services

3.1 Literature review

The aim of the literature review is to summarize key evidence-informed principles and practices from published and grey literature (i.e., literature from government, academic business and industry that has not been commercially published). These principles and practices are contrasted with current Island Health substance use services, and the system-level supports for these services so as to prompt consideration of the difference between current and "ideal" practice in the Island Health context and implications for improvement.

This strategy prompts the obvious question about what we mean by "evidence-informed practice" since there are many highly relevant questions for treatment system design that can still benefit from more research and evaluation but which nonetheless have been carefully considered by experts in the field, been published in peer-reviewed journals and/or have been heavily scrutinized by diverse, multi-sectoral, collaborating stakeholders. For the purposes of this report, evidence-informed principles and practices were gleaned from:

- Published research syntheses, in some cases detailed meta-analyses, and, in other instances, comprehensive narrative reviews
- Reports in the peer-reviewed or grey literature that have been based on a structured , expert consensus panel approach (e.g., the development of treatment matching criteria by the American Society for Addiction Medicine (ASAM) or similar work by other bodies)
- Reports or publications that have combined research syntheses, expert opinion and the involvement of diverse stakeholders, including people with lived experience (e.g., the Canadian best practice report on concurrent disorders and the integration of mental health, substance use, and collaborative care generally)

3.2 Conceptual Framework for Review

A conceptual framework, based in part on recommendations from the National Treatment Strategy (NTS) and on the results of the literature review described above, was used to structure the overall methodology for data collection and analysis for this review. This framework articulates the universal treatment functions, core service categories, and system supports of an "ideal" substance use treatment and support system as follows:

1. Universal Functions – the key functions of a system of substance use services and supports that one would consider to be universal across cultures and jurisdictions
2. Core Service Categories – the pan-Canadian services required to deliver the universal functions
3. System Supports – factors that have been identified as important in supporting a comprehensive, evidence-based substance use service-delivery system

The elements contained within each of these three components are presented in Table 1.

TABLE 1 CONCEPTUAL MODEL FOR REVIEW: CORE FUNCTIONS, SERVICE CATEGORIES AND SYSTEM SUPPORTS

Treatment System Functions	Service Categories	System Supports
Early Identification and Intervention	Screening, Brief Intervention, Referral to Treatment (SBIRT)	Policy
Provision of Information, Engagement and Linkage Supports, Outreach	Withdrawal Management Services (including home, social/community and medical)	Leadership
Problem Identification, Assessment of Strengths and Needs, and Individualized Treatment and Support Planning	Community Services and Supports (including opioid substitution)	Funding
Delivery of Substance Use Specific and Biopsychosocial Interventions and Supports	Residential Services	Performance measurement and accountability
Continuing Care/Recovery Monitoring	Complexity Enhanced Residential Services	Information management
Delivery of Substance Use, Specific and Highly Integrated Psychosocial, Medical and Psychiatric Interventions and Supports	Internet and Mobile Services and Supports	Research and knowledge exchange
Prevention and Health Promotion (including addressing stigma and discrimination)	Mutual Aid/Self-Help	
Harm Reduction		

3.3 Dual Diagnosis Capability in Addiction Treatment (DDCAT)

The Dual Diagnosis Capability in Addiction Treatment (DDCAT) tool is a standardized, validated instrument used to assess providers' ability to provide integrated co-occurring disorder services. The DDCAT is intended to guide the development and evaluation of integrated treatment services for individuals with co-occurring mental health and substance use problems. The DDCAT instruments were

validated in substance abuse treatment, mental health treatment, primary care and general medical settings. The three primary sources of data used for the DDCAT are interviews, direct observations, and documented materials.

For the purposes of this review, components of the DDCAT were applied in full-day site visits at two separate agencies —identified by the Review Advisory Committee and intended to reflect different types of Island Health services available on Vancouver Island—one at the Victoria Community Medical Detox unit (South Island; SI) and one at the Courtenay (Comox Valley) MHSU Clinic (North Island; NI). The intent of this process was to pilot the application of the DDCAT in the Vancouver Island context and to assess the extent to which the tool could be applied more broadly to the substance use and mental health sectors in the Island Health jurisdiction. Lessons learned regarding data collection and analyses are therefore intended to inform recommendations for the DDCAT's future application within Island Health. Refer to the Technical Report for examples of ratings for these two sites on select indicators.

3.4 Interviews/focus groups

The project team, in consultation with the Review Advisory Committee, developed an interview and focus group guide based on the conceptual framework described above to collect feedback pertaining to perceived strengths and challenges related to the core functions, service categories and system supports available on Vancouver Island.

Two separate site visits were conducted. The first site visit, conducted in February, 2013, involved approximately 60 stakeholders representing 17 programs on Central Island (CI) and North Island (NI). The second site visit, conducted in March 2013, involved approximately 85 stakeholders representing 13 programs on South Island (SI). Refer to the Technical Report for a complete list of programs. Agencies and stakeholders were identified by the Review Advisory Committee with input from the consultant team.

Since it was not possible to visit all relevant communities and programs during the two weeks of site visit, additional follow-up telephone interviews, using the same interview guide, were conducted with 19 stakeholders, representing 15 programs, who were identified by the Review Advisory Committee. All were interviewed within one month of the conclusion of site visits.

A separate phone interview was also conducted with the Director of Clinical Programs, Fraser Health Mental Health and Addiction Services, in order to explore system design in that jurisdiction for relevant lessons learned applicable to the Island Health context.

3.5 On-line survey

A brief, web-based survey was administered using the Fluid surveys platform to collect feedback from a broad range of stakeholders regarding perceived strengths and challenges in the substance use system. The link to the survey was distributed by representatives of the Review Advisory Committee and was targeted toward Island Health direct service providers, contracted providers and others with a vested

interest in the substance use system on Vancouver Island, including people with lived experience and their families. The survey also collected some demographic information to allow analyses by particular stakeholder groups, service sectors and regions of the island as appropriate. A total of 122 respondents completed the survey. Refer to the Technical Report for a list of all survey questions and further details regarding the demographics of survey respondents.

3.6 Analysis

All qualitative data were coded for key themes using a systematic analysis process (see Technical Report for more details) and compared by region (SI, CI, NI, Island-wide), sector (youth, adult, older adult, general) and type of respondent (management, community partner, front-line service provider, client, executive leadership) to facilitate cross-referencing of themes to relevant respondent groups as applicable.

The relatively small amount of quantitative data from the online survey – primarily respondent demographics—were first exported from Fluid surveys into Excel and then into SPSS to determine frequency distributions.

3.7 Limitations in Scope

In conducting this review, there were several issues of scope. Therefore, we have focused on the principles and practices of most salience, based in part upon the feedback from those interviewed, who participated in focus groups, or who completed the on-line survey questionnaire as well as on feedback from the Review Advisory Committee. Clearly not all areas can be covered to the same depth, for example, our literature review was not able to fully cover the current state of the art in client information systems, specific screening and assessment instruments or a detailed review of clinical interventions.

The following limitations in scope also apply:

- Information pertaining to mental health services, including the services provided and the relationship to substance use, was obtained only from the perspective of substance use services. Direct data collection from mental health services would be ideal to better understand and address issues related to service integration.
- Given the time and resources available for the review, the review team conducted a large number of on-site consultations. However, it is acknowledged that there were gaps—especially in the North Island and with relevant agencies within health, justice, education etc. Some of these gaps were filled with follow-up phone interviews as described above.
- The review team obtained important feedback directly from clients or former clients; if more time had been available, more feedback from clients and family members would have been ideal.

- Gambling services were out of scope for this review.
- Other disorders or problem areas such as eating disorders or process addictions such as video gaming or sex addition were not the main focus of this review.
- No data using *bona fide* outcome measures were available by which to evaluate program effectiveness from the point of view of client and family outcomes. Collection of new outcome data was outside the scope of the review.
- We were not able to accurately determine substance use service utilization and related costs separately from mental health services in general (e.g., substance use clients seen by ACT teams) and these were challenges regarding the availability and integration of data from contract versus Island Health direct services and other important services such as opioid replacement therapy. Thus, it was not possible to accurately examine the variability in cost service utilization and substance use resource allocation across Island Health regions.

4.0 RESULTS

4.1 Literature review of evidence-informed practice

As discussed previously, the aim in this section of the report is to summarize key evidence-informed principles and practices from published and grey literature.

Principle #1: Substance use and related problems exist along a continuum of risk and severity.

It is now recognized that commonly used constructs such as "addiction" or "substance use problems" are multi-dimensional, comprised of substance use (frequency, quantity and variability), substance abuse (essentially negative consequences of use), and substance dependence (Hasin et al., 2006; Rehm, 2008).[5] In addition, evidence from studies involving people from the general population and treatment/health care settings also show that heavy substance use, abuse and/or dependence frequently co-occur with mental health problems, physical illness and a range of psychosocial needs.

A further conceptualization of problem severity suggests that substance use consists of three inter-related dimensions: acuity, chronicity and complexity (Rush, 2010; Reist & Brown 2008). Acuity refers to short duration and/or urgent risks or adverse consequences (e.g., accidents or criminal charges) that are associated with use. Chronicity refers to the development or worsening of enduring conditions (e.g.,

[5] Refer to Technical Reportfor DSV-IV criteria for substance abuse and substance dependence and an overview of relevant changes reflected in the new DSM-V.

major depression or other mental disorders, chronic pain, Hepatitis C). Complexity refers to the degree of co-occurrence of acute or chronic index problems with health and social factors such as homelessness and unemployment that complicate the process of addressing the index problem(s).

In the general population, the highest levels of severity are associated with the fewest number of people who need the most costly specialized and/or intensive care. Those with lower levels of problem severity are more numerous and their needs can be met by less intensive or less specialized care which is more widely available in a variety of health and social service contexts, as well as in more informal community and/or family networks of support. People at low risk of substance use problems are ideally served by secondary and primary prevention. Simply put, the broad "treatment system" must be planned in such a way as to respond effectively and efficiently to this *full spectrum* of acute, chronic and complex needs. And the large majority of people seeking help do so multiple times, and move in and out of recovery and remission several times before achieving sustained recovery (White, 2011).

Principle #2: A broad systems approach is needed in order to address the range of substance use and related problems in the community, including severe substance use problems, and achieve a population-level impact.

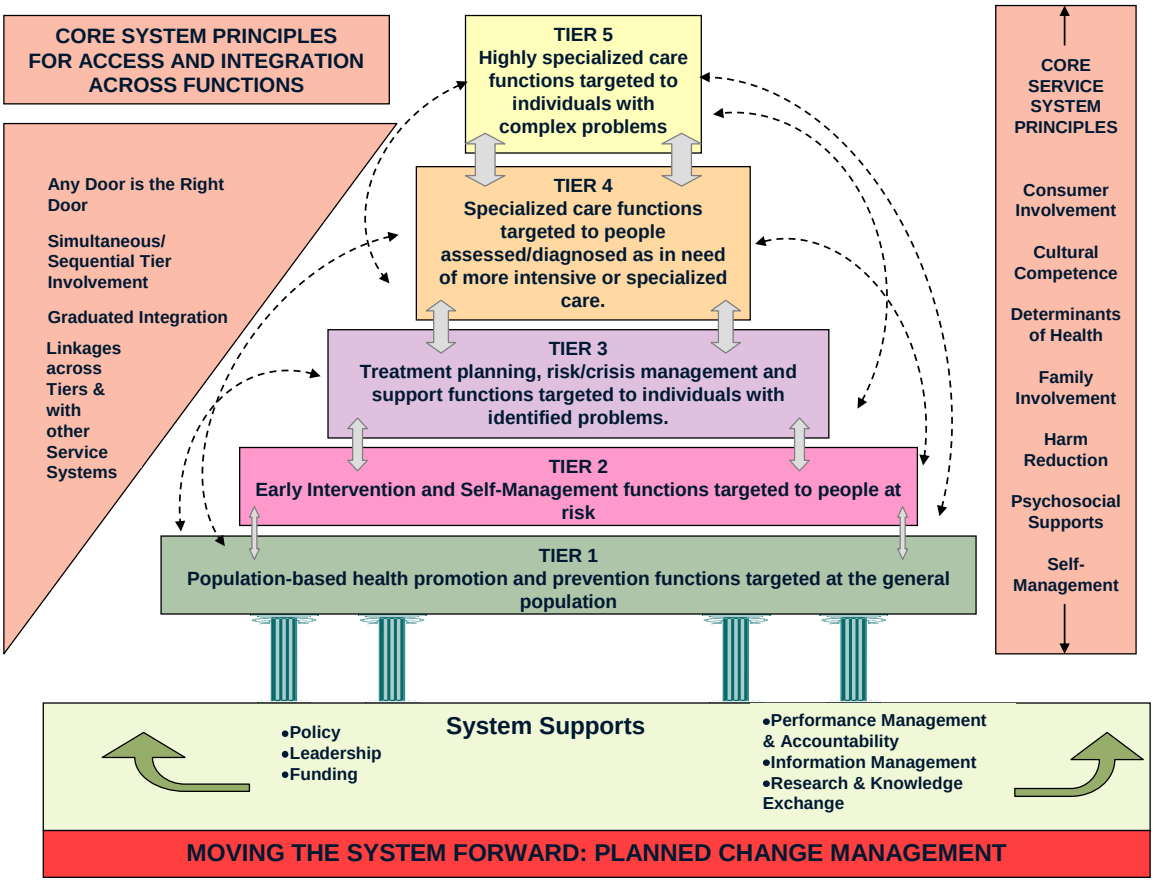
It is now well established that a relatively small proportion of people in the community who experience substance use problems seek assistance from the specialized sector of services that has been commissioned specifically to provide treatment and support. Data regarding the gap between need and treatment, the so-called "treatment gap," have supported the case for a more comprehensive view of the substance use treatment system, arguing that a discernible impact at a population level is not likely to be achieved only through substance use agencies and services mandated specifically to serve people with the most severe and complex needs (e.g., Babor, Stenius, & Romelsjo, 2008).

A broader population health approach is needed; one that engages multiple sectors such as health, social welfare, criminal justice, and education in a comprehensive system of services and supports. This requires building service capacity in the settings where people with substance use problems are more typically engaged (e.g., primary care, emergency departments, criminal justice). It also requires the implementation of early intervention, health promotion and prevention policies and services for those at risk of developing substance use problems and working to link these initiatives to the specialized treatment system. Policies and programs designed to reduce stigma and discrimination of people with substance use problems are also critical since they can impact help-seeking and engagement in treatment and early intervention services.

A related conceptual framework that supports the planning of multi-sectoral community treatment systems is the so-called tiered model (see Figure 1), a model that articulates various levels of service that correspond to need, and the various system supports that are required to operationalize and monitor the success of the treatment system. Essentially, the tiered framework puts the delivery of substance use services and supports within the scope and mandate of a wide variety of formal

service/sectors, as well as informal community resources, in order to deliver a comprehensive array of core functions and contribute to a population-level reduction in substance-related harm (Heather, 2012).

FIGURE 1: TIERED FRAMEWORK FOR SUBSTANCE USE (AND MENTAL HEALTH) SERVICE PLANNING



Principle #3: Accessibility and effectiveness of services for people with substance use problems are improved through collaboration across multiple stakeholders

Consistent with a broader systems approach, including prevention and health promotion, it has now become commonplace in the planning, delivery and evaluation of substance use services and supports to look to "collaboration" as a solution, or at least a partial solution, to challenges in giving timely access to individuals in need of these services in ways that also capitalize upon their strengths and address their often complex array of needs. There are many forms of collaboration including, but not limited to, full structural and functional integration. Even the term "integration" has multiple meanings and can be implemented in a host of ways (Rush & Nadeau, 2011; Health Canada, 2001).

Generally stated, the purpose of collaboration, or any form of cooperative enterprise, whether it be shared or collaborative care, a partnership, a network, a community coalition or various forms of integration, is to increase the chances of achieving some objective compared to acting alone as an individual or organization. Collaboration is seen as important not only to increase the effectiveness of services at the *individual level* in order to address their full range of needs and treatment trajectories, but also at the *population level* in order to maximize societal impact. The literature highlights several key benefits that are expected from collaboration, including:

- Being better equipped to support people with complex conditions
- Improved access to services
- Earlier detection and intervention
- Clinical value in integrated care
- Improved continuity of care
- More satisfied health care consumers
- Improved client/patient outcomes and reduced costs

One important distinction in the integration literature is that between service and systems level integration (Rush & Nadeau, 2011; Voyandoff, 1995; Minkoff, 2007). *Service-level integration* refers to the interface between service providers and their clients and families (e.g. collaborative assessment; treatment planning; transition/linkage management; multi-disciplinary clinical teams) whereas *systems-level integration* is concerned with administrative or management linkages to improve planning, budgeting, and operations (e.g. common or joint clinical information systems and electronic records; structural or functional linkage in policy development, strategic planning, co-location, organizational culture and leadership).

It is imperative that those embarking on the development of collaboration/integration across mental health, substance use and other services/sectors such as primary care, justice, education and social welfare, be very clear at which of these levels they will work (or both). One reason relates to the attribution challenge experienced in the evaluation of integration initiatives – it is extremely difficult to link changes made at the system-level to health outcomes. Thus, appropriate evaluation expectations and indicators of success need to be established and well-communicated from the outset, particularly for system-level integration efforts and targets.

In light of these methodological challenges with respect to evaluation, it is not possible at present to pinpoint the most effective collaborative models or the "active ingredients" of these models (Rush & Reist, 2013; Reimer et al., 2013). Some models of collaborative care which are particularly relevant for substance use services include:

- *Single assessment processes incorporating multidisciplinary assessment* - Single assessment processes reduce the number of assessments conducted by substance use, mental health and various health and social service professionals in order to enable a seamless access and care process.

- *Screening, Brief Intervention and Referral to Treatment (SBIRT)* - This approach requires health and social service professionals to use brief screening instruments to identify people at risk of, or experiencing, substance use and/or mental health problems. Depending on severity, individuals then receive brief treatment on-site or are proactively linked to specialist providers. The evidence for this approach is very strong in terms of identifying people at risk of future problems, providing brief but effective advice or counselling; and linking people to further assessment and treatment as indicated (Babor et al., 2007; Kaner et al., 2009; McQueen et al., 2011; Madras, et al., 2009). The growing body of evidence of the effectiveness SBIRT in different settings for adolescents is also suggestive of positive impact (Mitchell et al., 2013).

- *Substance use specialists co-located in generic settings:* In this approach one or more substance use specialists are located within generic community settings to do the in-house screening and brief assessment. These specialists may be employed by the generic organization or be employed by the specialized substance use or mental health treatment service and co-located into the non-specialized setting.

The literature regarding the impact of mental health and substance use integration on client-level outcomes is suggestive but far from conclusive (see Rush & Nadeau, 2011 for a summary of the extant reviews of this literature: Drake and colleagues (1998, 2004, 2008); Donald et al., 2005; Cleary et al., 2008)). At the system-level, there is some evidence supporting integration if it is targeted, relatively circumscribed and person-focused on access and navigation. More work needs to be done in the area of collaborative care for substance use specifically (Chalk et al., 2011), although the evidence is quite strong with respect to collaborative screening, brief intervention and referral to treatment (SBIRT) and other forms of substance use consultation/liaison in health care settings.

Principle #4: Prevention and health promotion policies and services should be planned in concert with treatment and support services[6]

According to the World Health Organization, "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[7] This construct of a positive state of health provides the grounding for the multiple dimensions of wellbeing captured within a broad bio-psycho-social-spiritual model that is foundational to substance use (and mental health) services in most jurisdictions in Canada, and in many other countries.

There is increasing recognition of the interaction of genetic endowment and environment in the determination of mental and physical wellness, the importance of early exposure to "disadvantage", and

[6] The contributions of Dan Reist and colleagues at CARBC in developing the important link between prevention and health promotion and treatment system planning are gratefully acknowledged. Some of the following material is drawn from reports prepared for the Canadian Centre on Substance Abuse (Rush & Reist, 2013; Reimer et al., 2013).

[7] http://www.who.int/about/definition/en/print.html

the accumulation of that disadvantage over the life course. So called "public mental health" has also emerged which calls for a concerted effort in the area of health promotion and prevention and which requires us to keep our sights on other strategies to improve overall population health while at the same time strengthening the health care system. It is also an emergent truism that, in the short and long run, these other strategies aimed more directly at the social determinants of health will have a greater impact on population health and health inequalities, than any attempts to transform/reform health service delivery.

Substance use, addiction, and mental health issues are not separate or isolated from the other dimensions of an individual's overall personal well-being, nor isolated from political, economic, and social conditions around them. Any adequate system designed to promote the health of individuals will need to have the capacity to intervene at multiple levels (e.g., individual, institutional setting, community). Even if we restrict ourselves to considering the services and supports offered to individuals who present for care, we need to keep these complex interconnections in mind and ensure a level of collaboration and integration that meets client needs. In theory, at least, systems that can seamlessly address multiple aspects of the person's health offer greater opportunity for positive outcomes (Reimer et al., 2013).

In situations limited by scope and resources, or perhaps by the authority of those initiating the systems review and needs analysis, it must be acknowledged that 'health services' is but one element of a comprehensive approach to health promotion and prevention. Each jurisdiction or community engaged in a needs assessment process for substance use services and supports must consider: (a) the relative balance of resource allocation for population-level health promotion and prevention and resources to be devoted for substance use services and supports, and (b) the operational details and resources required to embed health promotion and prevention functions inside and alongside substance use treatment services and supports.

Principle #5: A core, universal set of service and support functions should be available to those at different levels of risk and need.

In treatment system planning there is an important distinction between treatment functions (e.g., assessment; intervention) and the service delivery settings in which these are offered (e.g., community treatment; supportive residential). Typically, a treatment setting provides more than one function. With significant input from a stakeholder-based Project Advisory Committee, Rush and colleagues (2013b; under review) identified and defined eight core treatment functions considered to be universal across substance use treatment systems. These are noted below. In contrast to the universal nature of these functions, the service delivery settings in which they are offered are quite culture and context dependent. These service delivery settings were defined for the pan-Canadian context by the same group (see Principle #7 below).

The essential, prescriptive treatment functions are:

- Prevention, Health Promotion and Addressing Stigma and Discrimination
- Harm Reduction
- Early Identification and Intervention
- Provision of Information, Engagement, and Linkage Supports, including Outreach and Case Management
- Problem Identification, Assessment of Strengths and Needs, and Individualized Treatment and Support Planning
- Delivery of Substance Use Specific Bio-Psycho-Social-Spiritual Interventions and Supports
- Delivery of Substance Use Specific and Highly Integrated Psychosocial, Medical and Psychiatric Interventions and Supports
- Continuing Care/Recovery Monitoring

Importantly, these functions can be operationalized either in specialized substance use treatment settings or collaboratively within generic settings. And the populations needing each of these core functions in the treatment system are "nested". For example, the prevention and health promotion function should be delivered to people in ALL severity categories (or tiers); whereas individuals with more complex problems would require only those treatment functions aimed at severe co-occurring substance use, health-related and mental health problems.

Principle #6: Since a significant number of people with substance use problems are in contact with helping agencies and professionals but their problems remain unidentified, proactive systematic screening is necessary to improve detection and access to required services.

It is widely recognized from Canadian and international research that only a minority of people with mental health and substance use-related concerns seek help from either community professionals or less formal services (Urbanoski et al., 2007; Kohn et al., 2004). Reasons behind this are many and varied across communities, and include limited access to services and/or just not knowing how/where to seek help; stigma and discrimination that challenge people to seek help or that impact the attitudes and behaviour of the helping agents they encounter; feeling able to manage on their own; and personal challenges related to such responsibilities as work, school and child care (Sareen et al., 2007; Urbanoski et al., 2008). Research in Canada and elsewhere has also informed us for some time that, among those who seek help, the largest proportion will access a primary health care provider or other health and social service professional and not a specialist provider (Shapiro et al., 1984; Kessler et al., 1996; Urbanoski, et al., 2007).

Unfortunately, mental health and substance use-related risks or actual problems are often **not identified** for those individuals in contact with various service providers (Barnaby et al., 2003; Weaver et

al., 2003; Mitchell et al., 2012). These contacts are "teachable moments" and as such, are missed opportunities for offering advice, more extended consultation, or referral for additional treatment support. They also represent missed opportunities for the prevention of future problems, especially for children and youth, since mental health challenges more often than not predate high risk substance use and addiction in later adolescence or young adulthood (Adair, 2009).

Screening is one strategy that holds significant promise in ensuring that risks and problems are proactively detected (and ideally addressed) in a variety of service settings. Screening refers to the use of evidence-based procedures and tools to identify individuals with problems, or those who are at risk for developing problems, either as part of the intake and assessment process of a substance use or mental health treatment service (e.g., screening all prospective substance use clients for co-occurring mental disorders; Rush & Castel, 2011), or in more generic services and undertaken opportunistically among non-treatment seekers (e.g., targeted screening in a primary care or emergency room setting (e.g., SBIRT; Babor et al., 2007). The goal of screening is to detect these problems and to set the stage for subsequent assessment and treatment – not to provide a detailed description of problem areas or to make a diagnosis.

In recent years the literature on screening for substance use and other mental health problems has burgeoned, in large part because of the increased availability of brief validated screening tools and the evidence of impact of combined screening and brief intervention protocols. Screening is part of a larger staged approach that also includes assessment and outcome monitoring. The objective of this staged approach is to reserve the tools that require more staff time, resources and training for those individuals who score above the cut-off on the briefer, more economical tools. There are two stages in screening (Rush & Castel, 2011):

- *Stage 1 – Risk Assessment/Case Finding:* The use of single, highly predictive questions or very short tools to determine either the level of risk associated with substance use and/or the possibility that a client has any disorder/problem or broad groups of disorders/problem areas.
- *Stage 2 - Case Definition:* The use of more detailed tools to tentatively identify one or more specific disorders or problem areas.

It is essential that screening be accompanied by a screening response protocol for a follow-up intervention. For people with low to moderate risk of problem severity the provision of a brief on-site intervention has been shown to be effective in many settings. As noted earlier, the evidence is overwhelmingly supportive for brief interventions and brief treatment for both alcohol and other drug use in a range of generic services particularly for short-term outcomes (Bertholet et al., 2005; Babor et al., 2007; Moyer et al., 2002; Cherpitel et al., 2010; McQueen et al., 2011; Kaner et al., 2009; Bien et al., 1993; Madras et al., 2009). Although most studies have involved adult populations, SBIRT has also been shown to be effective for adolescents (Tait & Hulse, 2005). For people at higher levels of severity, the appropriate response entails linkage/referral to substance use specialists. The research is very strong in terms of the ability of systematic screening initiatives to link people to treatment, including for adolescents (Madras et al., 2009; Krupski et al., 2010; Bernstein et al., 1997; D'Onofrio & Degutis, 2010; Dunn & Ries; 1997; Tait et al. (2004)).

Screening (and assessment) is not just about "tools" and related scoring procedures. An evidence-based approach encompasses clinician expertise, person characteristics and contextual variables, and integrates the results from psychometrically sound tools with critical-thinking skills, personal and collateral input and knowledge of evidence-informed interventions (Jordan & Franklin, 2011). Screening and assessment must be seen as a process that continues over time as more information is shared and therapeutic relationships strengthen. A collaborative, longitudinal approach is particularly critical for the assessment of complex, co-occurring disorders (Kranzler et al., 1994) given the need to disentangle etiological sequencing (e.g., depressive symptoms induced by heavy alcohol use; Health Canada, 2001). In a collaborative approach to screening and assessment, the sharing of information across service providers is also critical. If possible, this should be done through e-health technology, but minimally through telephone, email, or written communication. Inter-professional communication has been shown to be an effective component of collaborative care (Foy et al., 2010).

Depending on community context, it may be the case that the required level of care is not readily available due to waiting time or the lack of service availability in the jurisdiction, or due to realistic distance/travel time for referral. Collaborative arrangements with existing services may be required to offer the best available service at that point in time to maintain client engagement. One of the challenges in the Canadian mental health system today that impacts service accessibility is the strict criteria for accessing specialized mental health services, namely severe and persistent mental illness. At this high level of severity and case complexity, and for those with challenges that are more moderate in terms of severity, collaborative arrangements with substance use services, primary care and other community services are particularly important for the purposes of assessment as well as subsequent treatment and support. In rural and remote areas, where resources may be limited, tele-psychiatry may also be an option. Therapist-assisted screening, assessment and intervention via the Internet or mobile technology is also an area of high need for research and development (see, for example, Cunningham & Van Mierlo, 2009; Andrew et al., 2010; Fjeldsoe et al., 2009).

Principle #7: A staged approach to assessment is required to ensure comprehensive exploration of strengths and challenges and to connect the person to the right level of care (i.e., placement matching).

An obvious assumption underlying needs assessment and treatment system design initiatives is that treatment services and supports "work"; that is to say, they accrue positive benefits to the people being treated, to their families and social networks, and to the community as a whole. This assumption is unequivocally supported by research evidence (e.g., White, 2011; Miller et al., 2003; Timko et al., 1999; Martin & Rehm, 2012; Rush, 2012; Lev-Ran et al., 2012; Tanner-Smith et al., 2013) including evidence on the return on investment in economic terms (e.g. California Department of Alcohol and Drug Programs, 2008; Raistrick et al., 2006; UKATT Research Team, 2005). The field now focuses on who does best with what treatment options.

In line with the staged model of Screening, Assessment and Outcome Monitoring, comprehensive assessment and the development of a client-centred, individualized treatment plan are required to maximize the chances of a positive outcome for the individual, and to improve the cost-efficiency with which people are engaged in a treatment and support system (Hilton, 2011). This staged approach helps operationalize the "any door is the right door" principle for system design. When placed in the context of an integrated screening and assessment *process*, sequentially implemented tools work together to ensure progressive but judicious and efficient use of assessment resources to guide the planning of client-centred treatment and support. Outcome monitoring (see below for Principle #10) also involves two stages – one during treatment itself and one post-intervention which includes a "return-to-treatment" protocol[8] (Dennis et al., 2003; Scott & Dennis, 2009). Assessment, intervention and outcome monitoring are all linked to results from initial screening tools at conceptual and measurement levels and ideally through shared information technology. Collectively, the resulting information and decision-making processes inform both on-going treatment and support planning for the individual as well as evaluation and performance measurement at the program and system levels.

In the staged framework, assessment is conceptualized as continued information gathering involving two stages, each using valid tools and structured interviews. Stage 1 assessment is focused primarily on information gathering and placement/referral to the most appropriate service setting (i.e. level of care). Upon engagement in the appropriate setting, Stage 2 assessment goes further in examining strengths and needs across several bio-psycho-social-spiritual domains including health and mental health status, family/social situation, environmental risk factors, etc., in order to match clients to the optimal clinical approach and intervention(s).

It is critical to emphasize that the initial placement/referral based on the Stage 1 assessment be undertaken in the context of a ***stepped care***, potentially multi-service model – that is stepping up to a higher level-of-care if required and stepping down on the basis of progress toward the individual's goals. At moderate to high levels of severity and case complexity, this typically requires transition support, including case management and shared e-health information. It also requires monitoring of outcomes, both within and post-treatment (see below) and adjusting the level of care accordingly based on the outcome results.

The placement model developed by the American Society of Addiction Medicine (ASAM) specifies the dimensions across which a clinician must explore strengths and needs in order to make the appropriate placement match (Gastfriend & Mee-Lee, 2003). These dimensions include:

- acute intoxication and/or withdrawal potential
- biomedical conditions and complications
- emotional, behavioural, or cognitive conditions and complications
- readiness to change
- relapse, continued use or continued problem potential

[8] When people are re-contacted for a follow-up interview for outcome monitoring, they are asked if they would like additional service via a motivation-based protocol.

- recovery environment

It is highly recommended that these areas be examined with a semi-structured or a structured interview approach facilitated by the use of validated instruments that support the initial placement/referral.

Defining the Continuum of Care

The concept of the "continuum-of-care" remains a useful planning tool and fits within the broader tiered model for substance use and mental health services as presented in Figure 1 (Rush et al., 2013b). The ASAM criteria, and made-in-Canada counterparts, are intended to serve multiple purposes including: (a) efficient use of the most costly resources; (b) an appropriate level of risk management; and (3) optimal treatment outcomes. The research base underlying the ASAM criteria and these other matching protocols is limited but growing (e.g., Magura et al., 2003). They have been developed on the basis of well-constructed expert consensus rather than on clinical trials or comparative evaluation studies. ASAM criteria were developed for adults and adolescents separately.

A common set of categories for use in a pan-Canadian model for estimating capacity requirements for substance use services was developed in the context of the national Needs-based Planning initiative. (These categories are also reflected in the conceptual model for this review; see also Section 2.2 for a list). As with the ASAM service categories and matching criteria, the pan-Canadian service categories are based on expert opinion and reflect conventional practice wisdom rather than results of detailed clinical trials testing matching hypotheses. Expert opinion and conventional practice wisdom hold that individuals experiencing higher levels of risk and harm, who have more complex substance use-related problems, and whose environment presents challenges for relapse prevention, will have better outcomes in residential treatment services compared to non-residential services.[9] Similarly, expert opinion and conventional practice wisdom maintain that the same holds true for non-residential services that vary in duration and intensity of interventions and program structure. Referral criteria for the more intensive day/evening and residential services typically include severity of dependence, social stability including homelessness, environmental risk for relapse (e.g., heavy alcohol or drug use in the home or immediate social network), and mental health co-morbidity, including suicide risk.

Principle #8: Once an individual is placed in the initial level of care more detailed assessment is required to further match an individualized treatment plan with the right mix and duration of psychosocial and clinical interventions. This is referred to as "modality matching".

The next stage of the assessment process involves the creation of a case conceptualization, formulation and/or diagnosis, leading to an individualized and adaptable treatment plan. The language around this overall process changes depending on the discipline and service delivery setting. The central idea,

[9] See Technical Report for the matching criteria recommended for use in referring to BC's residential services.

however, is to pull together all the information that has been gathered from validated screening and assessment tools and to undertake additional information gathering through structured and semi-structured interviews, collateral contacts and case notes from previous service contacts (if available). The resulting case conceptualization or diagnosis informs the individualized treatment plan, including responding to instrumental and clinical needs and providing indicated referrals.

Increasingly, Stage 2 assessment is seen as being grounded in the present context of the person's life situation and as being problem-focussed (Jordan & Franklin, 2011). This approach, however, should not exclude consideration of critical underlying factors such as trauma, including inter-generational trauma, and neurobiological mechanisms. A thorough health assessment, including a full psychiatric assessment, may also be required and is especially indicated for individuals presenting with more complex co-occurring conditions.

At the present time, neither research nor consensus-based expert opinion provides good criteria for matching to various treatment modalities (Project Match Research Group, 1998).There is a tremendous variety of interventions specifically aimed at reducing substance use and ameliorating related problems. Of the non-pharmacological interventions, those with the strongest empirical support are motivational enhancement therapy, a variety of cognitive-behavioural interventions and brief interventions. Martin and Rehm (2012) conclude that there is little basis on which to recommend one of the available modalities over another, but good reason to select among them.

In the core principles of treatment effectiveness advanced by Miller and Carroll (2006), after their review of evidence, the following points were particularly salient:

- Effective substance use interventions facilitate and perhaps accelerate natural change processes.
- The person's motivation is central to program participation and success.
- Once established, substance use and related problems become self-perpetuating and difficult to "de-stabilize". An initial period of abstinence can be helpful in destabilizing dependent substance use and supporting treatment effectiveness. Longer term abstinence is the recommended goal for severe dependence.
- Substance related problems do not occur in isolation but as part of social and behavioural clusters. Interventions should, therefore, target a broad range of life functioning, not just the substance use alone.
- Substance related problems typically occur within a family context and family involvement is important to the treatment process and positive outcomes. Services for family members should also be delivered irrespective of the involvement of the person with the substance use problem.
- Multiple and extended interventions may be needed for the people with severe dependence and in the most severe living situations.
- The strength of the therapeutic relationship is critical to the success of treatment and support efforts (see below).

In addition, it is widely recognized that client engagement can also be addressed by ensuring a welcoming attitude among all staff as well as the creation of a welcoming physical environment (e.g., non-institutional look-and-feel; physical layout; or posters with content reflecting a diversity of people (e.g., age, gender, sexual orientation, cultural and ethnic heritage). Engagement is also impacted by the overall length and efficiency of the treatment entry process, including the intake, screening and assessment tools and processes (Hilton, 2011; Quanbeck et al., 2013). Trained "engagement specialists" may also be employed and incorporated into the intake process to assist in removing barriers to treatment entry, such as transportation, child care, work commitments, basic necessities such as toiletries and appropriate clothing for appointments, or overnight stays in residential programs (Scott et al., 2009).

There are also many forms of "outreach" services, all of which share the feature of extending the point of service contact into the client's (or prospective clients') natural environment. This can include street services for marginalized youth or homeless populations; engagement with parents in the home to support participation of youth in treatment; or co-located substance use workers in schools or health care settings.

The literature on substance use services and supports advocates a conceptual shift to a chronic disease or chronic care paradigm that acknowledges the likelihood of variable stages of recovery (e.g., "relapse") and multiple service episodes over time, particularly for individuals at higher levels of severity. As with other chronic, relapsing conditions, there is a need for some level of service to continue after an official discharge. There are many terms applied to these continuing or "extended intervention" services, for example, continuing care, aftercare, and more recently, recovery monitoring checkups (Dennis et al., 2003; Rush et al., 2008). The literature on the effectiveness of these continuing services is reasonably strong, but also points toward adaptive protocols that can be adjusted up or down in response to changes in symptoms and functioning over time (as in a stepped care model). Examples of these continuing services include connection to self-help groups such as Alcoholics Anonymous, telephone or periodic face-to-face contacts, regular "alumni" meetings, and more recently, e-mail, text messaging or other internet/mobile-based interventions such as a Web forum with or without therapist support.

Principle #9: The strength of the therapeutic relationship is more important than the specific psychosocial or clinical intervention that is employed.

Researchers have recently placed emphasis on the need to consider "therapist effects" in the interpretation and application of the literature on treatment effectiveness (Martin and Rehm, 2012; Rush, 2012). Therapist effects are widely accepted in the substance use treatment literature (e.g., Miller & Carroll, 2006; Project MATCH Research Group, 1998), as they are in the mental health literature on the effectiveness of psychotherapy (Pilgrim et al., 2009; Norcross, 2002). What is not so widely known is that the therapeutic relationship may account for as much as 30% of the variance in treatment outcome; about ***double*** that associated with the specific therapeutic model or technique employed (Asay & Lambert, 2002). Suffice it to say that a significant portion of studies in the substance use field has been

devoted to the quest for the Holy Grail – that is, the best therapeutic model and the most effective intervention. Unquestionably a clear clinical model provides a needed framework to interpret past, present and future events associated with a substance use disorder. However, while numerous models and interventions have been shown to be effective for the treatment of substance use problems, including for co-occurring mental health and substance use disorders, no one intervention has been shown to be superior in all cases and for all individuals. To complicate the search, research also demonstrates that models and interventions are not enough - other necessary factors include the need for professionals to believe their approach is effective and to be able to convincingly communicate this belief to the individual. The therapeutic relationship embodies these critical factors.

The therapeutic relationship emphasizes, for example, the importance of empathy, warmth, acceptance, problem solving, encouragement of risk taking, communication, and trust-building. In addition to "therapist effects", there are many aspects of the treatment service itself that may have an impact on the effectiveness of the interventions being delivered. These domains have been identified as important aspects of the client's "perception of care" and include issues related to access and entry into the service (e.g., convenience, welcoming); their participation in the treatment process (e.g., goal setting); their rights (e.g., right to privacy and a complaint process); the program environment (e.g., safety and accommodation for disability); and discharge planning and continuity-of-care (e.g., being adequately informed of where to get subsequent support).

Rush and Nadeau (2011) have highlighted that within the discussion and planning of more integrated mental health and substance use services, and with respect to collaborative care in general, the importance of the therapeutic relationship is not sufficiently emphasized. Outcomes of such integration processes may be dependent not only on structural conditions such as co-location and integrated clinical teams, but also on factors associated with effective clinical interventions, the most important of which is the therapeutic relationship. Whatever integrative model is applied, the quality of interactions with clients at intake and during and after treatment must be factored into the mix of effective integrated systems and services.

Principle #10: People and their families receiving service should be supported as needed in transitioning from one service or sector to another as part of their treatment and support plan.

One of the most consistent types of feedback from people with lived experience in contact with the substance use treatment system, and the mental health system broadly, is the lack of coordination across services and challenges making the transition from one service to another. These transitions are often at the specific request of a particular program but accompanied by little or no support or linkage.

Linkage can be operationalized formally via case management or "wrap-around" services that support clients by linking them with other services in the community. Some treatment systems have created specific positions referred to as "linkage managers" or "system navigators," recognizing the difficulties

many clients have accessing services and experiencing continuity across multiple service providers. These positions are particularly needed for the most severe and marginalized client populations, including those with severe co-occurring mental disorders that may experience challenges accessing integrated mental health and substance use treatment (Health Canada, 2001; Rush & Nadeau, 2011). Another important development with respect to the linkage function comes from the area of outcome monitoring, and specifically the inclusion of a "return-to-treatment" protocol as part of the routine follow-up (Scott et al., 2009; Rush et al., 2012). This protocol encourages re-entry into treatment if needed.

An area of particular concern in many community treatment systems is the difficulty young people have in transitioning from youth to adult services (e.g., Davis, 2003; While et al., 2004; Davidson & Cappell, 2011). Many of the evidence-informed practices and models for transitioning youth to adult mental health systems undoubtedly apply to youth with substance use challenges with or without significant co-occurring mental health problems. Examples of these practices include (Davidson & Cappell, 2011):

- Establishing and maintaining a formal transition system and a formal framework/model that may include a paid transition coordinator
- Increased flexibility when it comes to defining age of "youth in transition" taking into account both chronological age as well as developmental age
- Starting transition planning earlier rather than later
- Creating and sustaining effective channels of communication between multiple sectors and Ministries/government departments
- A focus on shared responsibility rather than transfer of risk
- Close involvement of youth and their families
- Using outcome data to evaluate success and make ongoing improvement

Specific program models to support youth to adult transitions include Wraparound (Bruns & Walker, 2010; Debicki, 2012); the Ottawa Transitional Youth Pilot project (OTYPP: Davidson et al., 2012) and Transition to Independence Process (TIP: National Network on Youth Transition for Behavioral Health (NNYT), 2013).

Transition challenges are also an area of particular concern for older adults as the complexity of health and mental health conditions increases with age and, for a variety of reasons, the capacity to successfully advocate and navigate multiple services and sectors diminishes at the same time (Rand Europe, 2012). Many of the points above apply equally well for establishing transition supports for older adults.

Haggerty et al., (2003) conducted a comprehensive, multi-disciplinary review of continuity of care and summarized three types of continuity and various interventions aimed at each type. These include:

- *Information continuity:* the use of information on past events and personal circumstances to make current care appropriate for each individual

- *Management continuity:* a consistent and coherent approach to the management of a health condition that is responsive to a person's changing needs
- *Relational continuity:* an ongoing therapeutic relationship between a person and one or more providers

Principle #11: A wide range of systems supports are needed to support and facilitate the effective delivery of services.

One of the strengths of the tiered model for planning substance use treatment systems (Figure 1) is the distinction drawn between the functions and services needed for people at different levels of severity and the system supports required to ensure adequate infrastructure, as well as other factors. The following system supports were identified:

- policy
- leadership
- funding
- performance measurement and accountability
- information management
- research and knowledge exchange

Each of these system supports would be worthy of its own synthesis of evidence-informed practices. Indeed, many have been identified as critical to the delivery of substance use services and mental health services more broadly. For example, a review undertaken by CAMH (Health Systems Research and Consulting Unit, 2009) in the early stages of developing a new mental health and substance strategy for Ontario cited the following list of evidence-informed service integration mechanisms for both mental health and substance use services:

- Service information that is centralized and accessible to providers and the general public
- Centralized intake and assessment, or at least a coordinated intake and assessment process with common, standardized tools and processes
- Integrated, single records or protocols for sharing information
- Shared best practice clinical guidelines/protocols
- Interagency service delivery teams with formal contracts/agreements
- Co-location of services/programs
- Case management models (Intensive Case Management, Assertive Community Treatment)
- Boundary spanning positions (case managers, system navigators)
- Protocols for sharing clients with multiple, complex needs

Rush and Nadeau (2011) synthesized the following list of key ingredients associated with effective change management for substance use treatment systems, in the context of mental health and substance use services integration:

- **Shared Vision** - Ensure that there is a clear, accessible and shared vision, supported by common values, which informs all aspects of organizational and network activities, policies and planning.
- **Culture** - Strive to foster an organizational culture that is committed to learning and experimentation and that is consistent with the shared vision while still embracing diversity.
- **Leadership** - Recognize as a primary responsibility of executive leaders the need to consistently champion the new shared vision, support a developing organizational culture and actively seek out and foster leaders at all levels.
- **Social Capital** - Recognize the potential of an organization's social capital—in particular teams—to shape and impact change. Invest, through training, support and development, individuals and teams who share the organization's vision of change. Be sure to recognize clients seeking services as a key component of this social capital.
- **Change Process** - Devote sufficient resources, both financial and human, to support all stages of the change process—from planning to implementation to performance monitoring—always with a focus on engagement of all members and at all levels.
- **Communication** - Support open, regular, two-way communication that facilitates understanding of the need for change, problem-solving to work through change, and feedback to maintain and enhance change.

With respect to performance measurement and accountability, Rush et al., (2009) report on a matrix model adapted from the mental health field for substance use services and systems. The matrix requires system planners and administrators to distinguish between indicators of *need*, *process* and *outcome* and the level of observation—*client*, *program* or *the system* as a whole. Measuring client satisfaction/perception of care remains an important element of a performance measurement framework, especially as new research identifies the link between perception–of-care and other indicators of client safety and clinical outcomes (Doyle et al., 2013).

Concerning outcome measurement at the client level, considerable progress has been made conceptualizing and measuring both within-treatment and post-treatment outcomes (McLellan et al., 2000; Rush et al., 2012) and in the context of the overall staged approach to screening, assessment and outcome monitoring. Importantly, both within-treatment and post-treatment outcome monitoring consider the follow-up of clients for program evaluation purposes to be an extension of the treatment and support process itself (Dennis et al., 2003; Scott & Dennis, 2009). This process, referred to as "recovery monitoring check-ups" is conceptually quite different than a traditional "research" follow-up, and is much more likely to engage administrative and clinical staff, as well as clients themselves, in the outcome monitoring process. Work on outcome measurement in other areas at the client level is also

relevant, for example, a set of system-level outcome indicators recently identified for Methadone maintenance services in British Columbia (Office of the Provincial Health Officer, 2013).

The last system support that is important to highlight is research and knowledge exchange, given the lag between the identification of new evidence-informed practices and their subsequent application in routine practice. Several authors have noted the gap between the interventions with strong evidence of treatment effectiveness (i.e., what we know) and what is routinely delivered in practice settings (i.e., what we do; Miller, 2007; National Center on Addiction and Substance Abuse at Columbia University, 2012; McGlynn et al., 2003; Lamb et al., 1998). Some areas that have been highlighted as lagging well-behind the research literature are the implementation of continuing care interventions (Lash et al., 2011) and screening, brief intervention and referral to treatment programs (SBIRT; Roche & Freeman, 2004; Nilsen et al., 2006; Johnson et al., 2010; Williams et al., 2011; Anderson et al., 2004).

Importantly, there remains a heavy reliance on "training" as the core approach to building individual and organizational treatment competency whereas the literature on implementation science couldn't be clearer about the limitations of relying on a training model alone without additional supports and the analysis of system-wide, organizational and professional drivers and incentives (Fixsen et al., 2005).

Principle #12: Age/developmental considerations and a range of equity and diversity issues are critical to effective treatment system design.

Most adult substance use problems have their onset in adolescence and, indeed, there is considerable evidence concerning the link between early childhood mental health problems (e.g., behavioural challenges such as conduct disorder) and subsequent substance use problems (Adair, 2009). Treatment for mental health problems in children is therefore a critically important preventive action for the onset of problematic substance use in adolescence and young adulthood. There is large body of literature on the need for well-integrated collaborative systems of mental health and substance use services for children and youth. Unfortunately the significant challenges youth face when transitioning to adult services at a certain age are well-documented. Children and adolescents also often have a very complex profile of needs and strengths that bring them into contact with multiple service delivery systems (Pepler & Bryant, 2011). The consequences of missed opportunities for early intervention and poor continuity of care may be lifelong and extremely costly in terms of human suffering and economic burden.

For purposes of planning and design of substance use treatment systems, the usual interpretation of "population" includes all people living in a particular jurisdiction irrespective of age. In many respects, this is the optimal interpretation since it allows for consideration of the life course trajectories of problematic substance use and co-occurring conditions—trajectories that often begin in early childhood—as well as trajectories of service utilization, again often beginning in early adolescence, if not before. The practical reality, however, is that health and social services, including mental health and substance use services and supports, are often funded through departments of government with

specific age mandates and each with their own needs assessment and decision-making processes. Although this separation is often cited as a major challenge to continuity-of-care in the transition from adolescence to young adulthood, separate funding silos remain entrenched in Canadian jurisdictions. Although there is flexibility in some jurisdictions (e.g. YFSUS) depending on the individual seeking help, the usual cut-off for access to child and youth services is between 17 and 18 years of age.

For all ages, developmental stage, an important determinant of health, is a core element of the conceptual framework for screening and assessment and important for the choice and delivery of treatment interventions. Adolescents may be more susceptible to Influence from peers than their older counterparts. Further, because of their smaller body size and developmental stage, they may be more vulnerable to adverse effects of substances and experience greater long-term cognitive and emotional damage. They may also be more resilient and recover faster from some effects of heavy substance use. For older adults, the aging process increases vulnerability to problems resulting in high physical and mental co-morbidities, including cognitive impairment, and is often coupled with a diminished social network and loss of financial resources. Older people are also more susceptible to the impacts of alcohol and other drugs and there are increased concerns for safety (e.g. falls, fire prevention), housing stability, and suicide risk (CAMH, 2008; Kuerbis & Sacco, 2013). As with children and youth, services need to be tailored to the older adult population—for example, reduced use of reading materials; more focus on safety; fostering self-advocacy and medication management; group or individual sessions of shorter duration due to older adults' tendency to fatigue earlier than others; and a larger role for a spiritual component as values shift towards this area at a later stage in life.

Age cut-offs for each developmental stage may vary for the individual, although most programs and funders allocate services by age rather than stage. Similarly, most screening and assessment tools are validated for use with groups of individuals defined by age rather than stage. For example, some transitional-age youth in the 18-24 range would be well-served by screening and assessment with adult measures and being treated in the adult sector; for others, adolescent measures and the youth sector are more appropriate. Therefore, tools and services that can be applied differentially to match developmental stage, rather than being bound by strict age boundaries are preferred.

Developmental stage, and the consideration of service delivery settings that may be unique to specific stages, are also important factors for determining ***when*** during the engagement, treatment and support processes to ask different types of screening questions. For example, for young people being seen on an outreach basis in their school or street environment, it is not appropriate to begin asking screening questions about sensitive topics such high risk sexual behaviour, trauma experiences, or illegal behaviour before a trusting relationship has been initiated. This is also the case for the adult population, including seniors, and is dependent on the specifics of the situation.

Interpretation and action in response to screening and assessment results also need to be developmentally informed. More attention has been paid to this issue with respect to children, adolescents and adults but insufficient attention has been paid to further articulating the role of developmental stages in service transitions for transitional-aged youth/emerging adults and older adults. Grisso and colleagues (2005) discuss this issue from the perspective of child to adult

development and point out that the developmental perspective seeks to describe and explain how mental health problems/disorders of young people emerge and change over time. Thus, "*mental disorders of adolescents, including substance use disorders, are not just 'older' versions of childhood disorders; neither are they 'less mature' versions of adult disorders*" (Grisso et al., 2005). Similarly, issues faced by emerging and older adults are unique and specific to their developmental stage.

It is beyond the scope of this research to focus on any other particular sub-population defined by gender, sexual orientation/identity, racial, ethnic, linguistic or cultural background or immigration and/or refugee status. Rather we encourage an equity lens be placed over all work with respect to collaborative service delivery and system design for substance use as these factors play a large role, including related to access to appropriate services and supports. In the Canadian multicultural context, it is critical to attend to differences in language and cultural meaning attached to substance use and addiction. There is a plethora of issues related to women, including their heightened sensitivity to the effects of substances and issues related to trauma and safety. Similarly, there are unique treatment needs for those of varying sexual orientation and gender.

Principle #13: Aboriginal peoples (in Canada referred to as First Nations, Metis and Inuit) have unique strengths and needs with respect to substance use and related problems and benefit from services and support that blend principles and practices of non-indigenous people with those based on traditional healing.

In Canada, the needs and strengths of Aboriginal people are unique in many ways and call for broad cross-sectoral action including, but by no means limited to, collaborative delivery of mental health and substance use services and supports (Health Canada, 2011). The poor health status of Aboriginal people in Canada, indeed internationally, is well-documented, as are the poorer conditions related to the social determinants of health (e.g., employment, income, housing). Alcohol and other drug use are particular concerns that are also well-documented and linked to high rates of morbidity such as accidents and mortality, including suicide. There are many root causes of these differences in health status and risks of poor health, not the least of which are the inter-related impacts of colonization, the residential school experience and inter-generational trauma. The remoteness of many communities also presents many challenges in accessing health services, including substance use services.

Aboriginal people and their traditional culture bring many strengths to the planning and delivery of substance use services, including a traditional focus on the whole person, a wellness rather than disease orientation, and a strong role for the family and community. Efforts to review and renew substance use services in Canada and elsewhere have emphasized the need to incorporate more culture-based healing practices into mainstream treatment services and to undertake more research and evaluation on the effectiveness of integrating these practices (NNADAP, 2011). There is also a need to address the challenges of stigma and discrimination and ensure a welcoming environment and culturally appropriate environment for all health services including substance use services. The need for a different

understanding of “evidence” is also acknowledged, for example “community-based evidence” and “practice-based evidence”, as is the need for different evaluation paradigms consistent with an indigenous world view and processes of working together for the benefit of the community and not just for the individuals requiring assistance (Caldwell et al., 2005; Chouinard & Cousins, 2007; LaFrance et al., 2012).

5.0 DISCUSSION AND RECOMMENDATIONS

This review of substance use services falling under the umbrella of Island Health was intended to describe the current system of services based on existing service profiles and service provider and client input and to contrast this description with evidence-informed practices from the literature, including expert opinion. By contrasting the "ideal" with current "reality", gaps and priorities could be identified for consideration for system and service enhancement. The literature was synthesized to 13 key, evidence-informed principles and practices for substance use treatment system design. The current system was mapped and qualitative themes identified which reflect the extensive feedback obtained from multiple stakeholder perspectives.

As noted earlier, this report on the Island Health system review should not be considered in isolation from other recent complementary work in Canada and British Columbia, including Island Health specifically (e.g., the reports from the Mt. Waddington and Clearview Detox reviews). Many of the observations and recommendations echo those in this previous work and this is noted where relevant in the discussion and consideration of implications that follow. We have also been cognizant of the work done to date on the Island Health Mental Health and Addictions Accountability Framework and the plans for a review of Island Health mental health services.

To keep the report focused, we present seven major cross-cutting themes grouped under the key principles identified in the literature review and which draw upon the mapping exercise, qualitative feedback and review of previous reports. We also draw upon the template used for data collection and the reporting of themes, namely treatment and support *functions*, *service categories*, and *system supports*. We anticipate that, over time, various stakeholders may wish to draw out other areas of the findings for discussion and quality improvement purposes. In each of the seven areas we comment on the major strengths as well as challenges and offer recommendations/implications to consider for improvement. Suggestions for improvement fall into the following major thematic areas:

- a collaborative systems approach, including improved substance use and mental health integration (system design principles 1-3)
- health promotion, prevention and stigma reduction (system design principle 4)
- gaps in the continuum of care and need for agreed upon level-of-care placement criteria (system design principles 5-7)
- regional variation in service delivery including screening and assessment (system design principles 8-9)
- treatment access, transitions and continuing care (system design principle 10)
- system support and stewardship (system design principle 11)
- specific populations – youth, older adults, Aboriginal people - (system design principles 12-13)

It is important to recognize that these themes are closely inter-connected, albeit presented separately. Also the strengths and challenges related to the themes do not apply universally across all three of the Island Health regions (SI, CI and NI) or communities within the regions. We have tried to highlight regional differences where the data allow.

5.1 The need for a collaborative systems approach, including improved substance use and mental health integration

In the project literature review we presented three inter-related principles for substance treatment system design that resonate with this cross-cutting theme. These are:

Principle #1: Substance use and related problems exist along a continuum of risk and severity.

Principle #2: A broad systems approach is needed in order to address the range of substance use and related problems in the community, including severe substance use problems, and achieve a population-level impact.

Principle #3: Accessibility and effectiveness of services for people with substance use problems are improved through collaboration across multiple stakeholders.

Together these principles call for a response across the full continuum of health promotion/prevention, early intervention and treatment/support with an emphasis on various types and levels of collaboration across specialized substance use services and mental health, primary care and other sectors such as education and justice. Across Canada, as in most high income countries, this broad systems approach has been recommended for the design and performance measurement of substance use treatment systems. Two fundamental elements of this approach are that the system be planned to (a) address the full spectrum of substance use severity and (b) that the responsibility for addressing related needs for services and support should NOT rest solely with specialized substance use services which traditionally have focused their efforts at the extreme end of that continuum. This systems approach was employed in the regional review of Mt. Waddington treatment services, as well as in the development of the higher level overviews that formed the basis of the 10-year BC Mental Health and Addiction Strategy and the provincial systems snapshot undertaken in 2006 and 2010 by the Association of Substance Abuse Programs of British Columbia.

It is important to highlight the consistency with which all stakeholders participating in this review endorsed this vision of a comprehensive, coordinated and multi-sectoral response to substance use issues as being the ideal to which Island Health and its contracted providers are striving to achieve. In addition, there were many examples of dedicated efforts and pockets of success in this direction, for

example, the earlier work led by Dr. Ken Minkoff on concurrent disorders on the integration of mental health and substance use services; efforts by Dr. Bayla Schecter on building substance use capacity in the primary care sector; collaboration between the Island Health youth services and the school system; partnerships with Aboriginal leaders and services; and expansion of many key elements of the specialized substance use sector (e.g., withdrawal management in SI and CI).

Mental health and substance use services: One of the strongest themes to emerge among those working in the substance use sector was concern with the marginalization of substance use services within the MHSU system, reflected in the funding and the continued separation of service delivery processes and challenges accessing mental health services for those with co-occurring disorders (even in the context of co-location); and with few exceptions, a paucity of substance use sector expertise at senior management levels. These concerns were much stronger in the adult versus youth sectors.

The review of the literature on collaboration, including the integration of mental health and substance use services, highlights the full continuum of collaborative activity ranging from communication, consultation, coordination, co-location, and integration. All planning regions in Canada, including the Health Authorities of BC, have approached things differently with respect to improving the relationship between substance use and mental health services. The emphasis in Island Health has clearly been on the integration side of the collaboration continuum, with a strong emphasis on administrative and structural integration and co-location. On the basis of the qualitative feedback and observations of the consultant team there is little evidence of integrated clinical teams or shared assessment and treatment planning[10]. It was common to hear of the "mental health side" and the "addiction side" and many participants cited challenges in the working relationship between the two even in co-located venues. Some of these challenges appear to be related to the limited capacity of mental health services to work with substance use issues but also the often cited predilection of mental health services to refer to a parallel but not integrated system of support in the substance use sector (Health Canada, 2001). Although the research evidence on the integration of mental health and substance use services is not strong enough to point to the critical ingredients of service integration that contribute to positive client outcomes it is safe to say that co-location and administrative integration are not sufficient in and of themselves. The wider literature on integrated health care points to the critical importance of "normative integration"- namely the need to respect and work with difference in inter-professional culture and to work towards a common approach that respects these differences. This aspect of integration appears to have been lost in the integration processes following Ken Minkoff's work with Island Health. Feelings of marginalization and stigmatization were commonly expressed as was a lack of understanding among administrative and clinical leaders of common elements of substance use service delivery such as the need for engagement and motivational supports, the need to address the full spectrum of severity not just those with the most severe substance use issues, harm reduction including individualized treatment goals, outreach as well as continuing care, and performance measures that

[10] These concerns were not uniform across all parts of the Island but were very strong thematically. Collaboration was seen as stronger in some smaller communities.

emphasize client health outcomes more than system throughput. Much of this concern was expressed as the "over-medicalization" of substance use service delivery that came with administrative integration and co-location with mental health services. In the view of the consultant team the system does appear to be weighted on the medical management side of substance use service delivery and quite risk aversive compared to most jurisdictions in Canada

Much of the ongoing concern about challenges related to service integration and coordination must be seen in a historical context given the many shifts in system administration and governance at the government level (e.g., Health, MCFD, Health Authorities, integration with Mental Health). Not only has there been a perceived erosion of the distinctiveness and perceived value of substance use services but this "over-medicalization", whether it is real or perceived, has impacted operations as well as the morale of the staff working in Island Health's Substance Use Services. The commitment that Island Health has made to integrating Mental Health and Substance Use Services should be lauded, but renewed with a stronger focus on how the partnership with Substance Use Services can be better recognized and service delivery models reconciled toward a common, client-centred approach.

Collaboration with primary care and other sectors: With respect to broadening the base of treatment and support to include primary care and other health services, progress has been made. However, the feedback obtained in this review highlights the significant levels of stigma and discrimination that people with substance use challenges experience when they access many health services, in particular emergency services. Challenges related to stigma and discrimination are particularly acute for Aboriginal people and we return to this point below.

Recommendations and implications

- Island Health leadership should renew their commitment to the key principles of the systems approach, including improved integration of mental health and substance use services and more effective collaborative linkages with other sectors.

- Re-engage the regional substance use sector as a distinct and valued sector, including contracted service providers, starting with the discussion and implementation of the findings of this system review. The emphasis should be on identifying strategies for regaining a strong "identity" of the substance use sector while retaining the advantages of partnership, collaboration and, where appropriate, integration at the clinical level with mental health (and other sectors).

- Strengthen the leadership and oversight of adult substance use services, with a particular focus on the implementation of the report's recommendations, and the associated change management.

- Arrange facilitated consultation with other BC health authorities on lessons learned in their efforts to partner with and integrate mental health and substance use services.

- Review rationale underlying the Island Health policy with respect to admission requirements prior to admission to withdrawal management and for "nurse-to-nurse" referral to withdrawal management, and other policies that appear grounded primarily in a risk management perspective rather than a client-centered perspective.
- Explore ways to integrate Older Adult Services within the broader Adult system.
- Undertake training and education for emergency department workers and other health care professionals on substance use and how to support people with substance use issues in a non-stigmatizing manner.

5.2 Health promotion, prevention and stigma reduction

This cross-cutting theme relates directly to the fourth principle from the literature review, namely:

Principle #4: Prevention and health promotion policies and services should be planned in concert with treatment and support services.

It must be acknowledged that it is not possible, in the context of a system review focused primarily on treatment services and supports to fully address the needs and gaps in programs/policies aimed at the broad determinants of health (e.g. housing, income support, education, neighborhood safety and green space), and those aimed at substance use and addiction specifically (e.g., drinking age, alcohol pricing and availability, server intervention, school-based prevention programs, control of drug supply, pharmaceutical-related policy with respect to opioid and other medication). That said it must be acknowledged that 'health services' is but one element of a comprehensive approach to health promotion and prevention and that each jurisdiction or community engaged in a needs assessment process for substance use services and supports must consider: (a) the relative balance of resource allocation for population-level health promotion and prevention and resources to be devoted for substance use services and supports, and (b) the operational details and resources required to embed health promotion and prevention functions inside and alongside substance use treatment services and supports.

Importantly, a person-centred approach to treatment service delivery means working with the individual to make sense of the complexity of factors that influence, and continue to influence, health and well-being and that increase personal capacity to manage those factors to achieve personal aspirations. A person-centred approach, however, does not mean that interventions should focus only on the individual. Substance use, addiction, and mental health issues are not separate or isolated from the other dimensions of an individual's overall personal well-being, nor isolated from political, economic, and social conditions around them. Ensuring adequate housing and access to food are but two highly salient examples of this intervention matrix. It must also be recognized that factors in the person's community environment (e.g., housing, access to food, employment opportunities, recreational

activities and green space) – so-called community recovery capital – are more important than individual factors such as motivation, skills related to relapse prevention, and prior treatment experience – individual recovery capital - in determining the success of substance use treatment (White, 2011). Thus there is an important role that managers and staff of substance use services have to play in community-level health promotion and prevention.

Although this review is focused on substance use treatment services and supports, the literature review on evidence-based practice/policy for system design, as well as considerable input from stakeholders, strongly encourages Island Health system planners, managers and staff to incorporate health promotion and prevention and early identification/intervention into system design. This can be challenging at times, for example: at the service-level, strictly enforced no smoking policies in Island Health withdrawal management services can be seen as a barrier to access; at the system-level, close collaboration required with government departments responsible for alcohol/drug control and interdiction/enforcement.

Recommendations and implications

- Carve out a prevention/health promotion "set-aside" in the Island Health MHSU budget to support communities' work on prevention/health promotion projects (with evaluation criteria).
- Increase supports, including guidelines and expand the mandate for Managers to participate in community engagement and awareness activities.
- Explore community partnerships for the development of health literacy and anti-stigma and discrimination programs, at both the population level and those aimed specifically at various service delivery sectors (e.g., emergency departments across the Island).

5.3 Gaps in the continuum of care and the need for more standardized screening, assessment and level-of-care placement criteria

In the project literature review we presented three inter-related principles that resonate with this theme. These are:

Principle #5: A core, universal set of service and support functions should be available to those at different levels of risk and need.

Principle #6: Since a significant number of people with substance use problems are in contact with helping agencies and professionals but their problems remain unidentified, proactive systematic screening is necessary to improve detection and access to required services.

Principle #7: A staged approach to assessment is required to ensure comprehensive exploration of strengths and challenges and to connect the person to the right level of care (i.e., placement matching).

Together these three evidence-informed principles call for a wide range of treatment and support related functions that address the full range of problem severity and which can be operationalized in a wide range of specialized and non-specialized substance use service delivery settings as per the broad systems approach. Proactive identification of people with high risk substance use or current problems related to their substance use, including substance dependence, is critical to system design since a large majority of people needing assistance are not routinely identified in the service delivery settings where they do present (e.g., primary care). A staged, incremental approach to screening is called for in generic settings such as primary care and linked to brief intervention or brief treatment as well as facilitated referral when needed. A staged approach to screening is also needed in specialized settings such as mental health services (to identify co-occurring substance use risk and concerns) and in substance use services (to identify co-occurring mental health related risks and concerns). A staged approach to *assessment* is also advocated by experts in the substance use field, the first step being the placement in the correct level of care so as to ensure optimal client outcomes and cost efficiency in the use of scarce resources, in particular residential-based resources and costly medically-oriented services. One of the essential features of a comprehensive substance use treatment "system" is the availability of a range of services along the continuum of care coupled with screening, assessment, agreed-upon decision-rules and a "stepped-care" perspective to planning and resourcing that service continuum. The stepped care model includes different service delivery settings and in Canada, is comprised of Generic Services that offer SBIRT or liaison to specialized substance use services, and various levels of withdrawal management (i.e., three levels including home/mobile services); community treatment (i.e., three levels including an intensive level such as day or evening treatment); and residential treatment (also with three levels). There is clearly a role for residential services for a small but important minority of clients who need such environmental safety, stabilization and milieu-based peer supports.

The present system review identified some of these features of a functioning treatment "system," including a stepped care paradigm that included stabilization and medically-managed withdrawal management, community (outpatient) services, residential treatment (largely off-Island) and some capacity for supportive residential service (more so in the SI). However, this stepped care model was not supported by appropriate screening and assessment tools and processes and was challenged by the limited availability of some service categories within a reasonable distance and travel time.

Challenges to achieving a smoothly functioning continuum of care are being experienced on many fronts including different norms and beliefs underlying service delivery (e.g., largely competing models that are faith-based, abstinence/recovery orientation or with flexible goals/ harm reduction); over regulated processes of engagement and transitions; limited options for continuing care or recovery monitoring post-discharge; and major gaps in the type or supply of services in the local treatment area. Some of

these challenges are specific to each sub-region within the Island Health catchment area and to even smaller geographic units within these regions (Central and North Island in particular). This makes it very difficult to make firm recommendations for Island Health as a whole in terms of gaps in the continuum of care.

Aside from the significant challenges related to the variation in treatment models/norms and the rules and processes for accessing and transitioning across services, the overall picture is one of a heavy investment in front-end and acute-level services (e.g., stabilization, withdrawal management, short-term counselling) in comparison to the more intensive and longer duration services appropriate for people with substance dependence and the typical range of co-occurring challenges (e.g., unsupportive living environments; challenges related to housing, education, employment; moderate to severe mental health challenges; and criminal justice involvement). For adult outpatient services, many participants painted a picture whereby, after their work in short-term case management (i.e., getting someone to residential treatment), providing short-term counselling, and doing administrative paperwork and data entry, there was limited time left for intensive clinical intervention or continuing care. As per the continuum of care model intensive treatment services can include residential treatment, day/evening services with well-structured programs similar to residential treatment, and extended intensive counselling. While there is some limited capacity in Victoria for day/evening treatment, there is very little residential capacity in the Island Health jurisdiction as a whole, and the norm consists of off-Island referral which presents challenges in terms of both wait times and lack of continuing care upon return. This suggests the need for both resource investment in additional treatment resources and thoughtful investment or re-allocation to maximize the impact of these dollars for the Island population as a whole. It will also require prioritizing needed investments or reallocations into short, medium and longer term strategies ***within each sub-region.***

Recommendations and implications

- Standardize the intake process of all Island Health and Island Health -contracted substance use service providers to include staged, validated screening tools for mental health concerns. This must include a consultative process with Island Health managers and staff as well as the contracted providers to arrive at an appropriate set of options and to articulate the response protocol for accessing appropriate mental health assessment and interventions as indicated by the results.

- Standardize the intake process of all Island Health and Island Health -contracted mental health services providers to include staged, validated screening tools for high risk substance use and substance use-related concerns. This should be a focus of the upcoming review of mental health services and subsequently include a consultative process with Island Health managers and staff as well as the contracted providers to arrive at an appropriate set of options and to articulate the response protocol for accessing substance use assessment and intervention as indicated by the results.

- Standardize the use of a core set of validated substance use assessment tools and processes across all Island Health direct and contracted service providers and in concert with an agreed upon set of placement criteria for different levels of withdrawal management, community treatment and residential service and support. This must include a consultative process with Island Health managers and staff as well as the contracted providers to arrive at an appropriate set of options and to articulate the placement criteria and appropriate regional work based on current service availability and pending new service development.

- Initiate a focused project to explore the development of home/mobile withdrawal management services for all Island Health regions and including an in-depth assessment of why this failed to work previously in SI. Home/mobile withdrawal management should be prioritized for development in SI and NI, and subsequently CI. It is recommended that a direct, as opposed to a contracted, service model be explored.

- Explore the development of a withdrawal management service for NI given the distance to travel to Clearview and the issues of safety/risk associated with travel to Clearview (e.g., maintenance drinking to avoid withdrawal en route; or withdrawal en route).

- Expand opioid substitution services for youth and, in general, expand capacity/linkages for counselling for clients receiving opioid substitution therapy.

- Expand Addiction Outpatient Treatment for adults in SI, and as resources allow, in other locations as well.

- Explore capacity requirements and funding availability for

    - two co-ed residential treatment centres – one in NI and one in SI or CI—with strong connections to existing detox and stabilization services and to existing non-residential services and transition supports so as to minimize wait times for service and provide more seamless entry and step-down to less intensive community and supportive residential services upon completion of the residential treatment program. Funding these inpatient units can be a longer term plan, as articulated in the Mt. Waddington report. It is preferable that these resources be placed in CI for easier accessibility and to further distribute substance use treatment resources across the regions.

    - a residential facility for youth given challenges accessing off-Island resources.

    - supportive recovery beds for women, particularly in CI and NI, but also in SI as capacity is limited and especially for more complex cases and older adults.

    - day/evening treatment services as an adjunct to Island Health direct services in all three regions.

- Explore the feasibility of applying the revised screening and assessment tools and placement criteria processes to assess in detail the potential mismatch between client-level needs and

services provided on a regional basis (i.e., SI, CI and NI). This would allow for a recording of the ideal versus the available/accessible services so as to arrive at a prospective client level needs assessment process. An alternative is to apply the placement criteria to existing clients, or other levels of care to assess any mismatch between current and ideal level of care.

- Initiate a collaborative planning process with managers and key staff of Island Health and contracted services to prioritize options for investment based on short, medium and longer term plans and availability of funds.

- Ensure the planning and prioritization process includes an assessment of the extent to which the existing system of specialized services has sufficient capacity to absorb an influx of new clients should a more concerted effort be made to implement SBIRT in primary care settings on a regional basis.

5.4 Regional variation in service delivery and interventions provided

In this section we align this cross-cutting theme with the two following key principles for system design:

Principle #8: Once an individual is placed in the initial level of care more detailed assessment is required to further match an individualized treatment plan with the right mix and duration of psychosocial and clinical interventions. (This is referred to as "modality matching").

Principle #9: The strength of the therapeutic relationship is more important than the specific psychosocial or clinical intervention that is employed.

These two principles combined highlight the role of second phase of the two-staged assessment process involving the creation of an individualized and adaptable treatment and support plan that includes evidence-informed interventions with a strong emphasis on the therapeutic relationship. The central idea is to pull together all the information that has been gathered from validated screening and assessment tools and to undertake additional information gathering through structured and semi-structured interviews, collateral contacts and case notes from previous service contacts (if available). In this process there is a role for validated assessment tools (both core and supplementary tools) but also strong clinical skills and experience in interpreting the information, formulating a plan and both motivating and supporting the person to implement changes. In many respects the therapeutic relationship is the key to success.

The data gathered in this review highlight several system-wide strengths in relation to these two principles. Importantly, staff as a whole were viewed by clients and also observed by the consulting

team as being highly experienced and extremely dedicated while working within often challenging and demanding work situations. The feedback from the clients interviewed spoke directly to the support they had received from staff and the strength of the therapeutic alliance that had been formed. Laudably, among staff and managers alike, there was an almost universal and very strong commitment to a client-centered approach based on the core principles of harm reduction. That being said the administrative location of harm reduction services such as needle exchange under the Island Health Communicable Disease portfolio was cited as a system-level barrier to further integrating the provision of treatment services with harm reduction policies and practices.

At the present time, neither research nor consensus-based, expert opinion provide evidence-informed criteria for matching individual strengths and needs to various treatment modalities or counsellors of a particular therapeutic persuasion. Further, as noted in the literature review, there is a tremendous variety of interventions specifically aimed at reducing substance use and ameliorating related problems. Of the non-pharmacological interventions those with the strongest empirical support are motivational enhancement therapy, a variety of cognitive-behavioural interventions and brief interventions.

In addition to the wide variability in screening and assessment tools noted earlier, this system review also noted considerable variation in the individual approach to practice by the counsellor. Counsellors and managers across all Island Health sites very much appreciated management's hands-off approach to letting counsellors do their clinical work, and this latitude is consistent with the research literature that has yet to pinpoint the criteria for matching individual client needs to the actual intervention that will get the optimal outcome (i.e., modality matching). That being said, the qualitative feedback from staff and, reinforced by observations of the consultant team and the review of assessment tools and processes, suggests that the process of Stage 2 assessment and individualized treatment planning *vis a vis* interventions is less systematic than is desirable. The CERNER system for recording and sharing an electronic client profile is a good system-wide tool for documentation purposes and facilitates some aspects of treatment planning. However it is not a *bona fide* client assessment package. Further, it is unlikely that ALL therapeutic approaches that could potentially be used in Island Health or contracted services have a strong foundation in peer-reviewed research evidence. Thus, from both public accountability and client safety perspectives, some level of oversight is required. In part this is a function of clinical supervision, another area reported by respondents as occurring less frequently than desired and sometimes with administrative supervisors. Further, we noted wide variation across Island Health services in how clients get triaged (including the length of time and level of documentation) and then assigned to individual counsellors. In most sites workers have considerable latitude in client assignment during the intake process, guided by several factors including their knowledge of the counsellor and issues such as gender, known areas of expertise for particular therapists, and often a "feel" for a good client-therapist match. While no specific concerns were raised in this area during the project, a stronger link between interventions and evidence from clinical research is recommended.

Recommendations and implications

- Explore ways to formally acknowledge the important and dedicated work that the staff of Island Health and contracted substance use services have been contributing.

- Engage managers and staff in an "intervention mapping" and knowledge exchange exercise to document clinical interventions being employed across Island Health direct and contracted services, to contrast these services with the research literature where available and to assess appropriateness of the intervention at various levels of client severity; and profile those interventions with the strongest evidence base across Island Health Substance Use Services.

- Explore with staff those areas where selected theoretical models/frameworks might be adapted to provide more common ground across Island Health and contracted clinicians (e.g., trauma informed therapy).

- Undertake a review of clinical supervision processes and enhance as needed. It is further recommended that clinical supervision be undertaken only by those with strong substance use-related skills and experiences and not by managers with administrative oversight or line authority to the same staff member.

5.5 Treatment access, transitions, and continuing care

This cross-cutting theme relates to the following principle from the literature review:

Principle #10. People and their families receiving service should be supported as needed in transitioning from one service or sector to another as part of their treatment and support plan.

In most substance use treatment systems one of the consistent types of feedback from people with lived experience is the lack of coordination across services, and challenges they face making the transition from one service to another. These transitions are often at the specific request of a particular service provider but accompanied by little or no support or linkage. Support with access and linkage can be operationalized formally via traditional case management (e.g., facilitating access to psychosocial supports such as income and housing assistance; completion of an application process for the residential treatment per diem) or through specific positions known as "linkage managers" or "system navigators" that can include peer supports. Trained "engagement specialists" may also be employed and incorporated into the intake process to assist in removing barriers to treatment entry, such as transportation, child care, work commitments, basic necessities such as toiletries and appropriate clothing for appointments, or overnight stays in residential programs. These types of positions are particularly needed for the most severe and marginalized client populations, including those with severe co-occurring mental disorders that may experience challenges accessing integrated mental health and substance use treatment as well as primary health care services. The literature review also highlighted an area of particular concern in many community treatment systems related to the difficulty young people have in transitioning from youth to adult services. This is also an area of particular concern for older adults as the complexity of health and mental health conditions increases with age and, for a

variety of reasons, the capacity to successfully advocate and navigate multiple services and sectors diminishes at the same time.

Participants in the system review noted in some detail what might be called the complex “rules of engagement” whereby prospective clients and family members, as well as many service providers in the community, were said to simply have no idea and insufficient resources to successfully navigate the “system”. Examples related to age restrictions, admission requirements for risk management , lack of clarity or misunderstandings about access rules, motivational hurdles such as requirements for number of days abstinent; perceived barriers related to no-smoking policies; the challenges associated with accessing support for the per diem rate for inpatient services ; service location and transportation problems, and lack of flexibility in hours/days of operation.

Solutions to these access and transition challenges within the Island Health system are far from simple. The solutions need to be based on at least three approaches (1) education and awareness building, with simple tools and materials that explain access and transition requirements; (2) mapping care pathways which include a thorough review of policies and procedures that facilitate or challenge access, transitions and are accompanied with quality improvement processes (3) provision of access and linkage supports. The need for improved transition supports for youth to adult services is addressed in the section specifically on youth.

One area related to access to services that was cause for concern among the consultant team was the requirement for the client to have or to obtain financial resources to access residential services for substance use treatment. Repeatedly we heard the challenges in obtaining the financial aid or “fee subsidy” when needed, for example the manner in which the application process can interfere with the early stages of the therapeutic relationship and the length of time for confirmation of support from Income Assistance and the impact on client’s motivation to seek treatment. The consultant team conducted a rapid scan of policies in other Canadian jurisdictions and BC would appear to be the only province that has this requirement for a “user fee” to subsidize the cost of residential treatment. Importantly, this is not a requirement for accessing residential care or supported housing for mental health concerns in BC or elsewhere in Canada.

The literature also advocates for extensive outreach services which extend the point of service contact into the clients’ (or prospective clients’) natural environment. This can include street services for marginalized youth or the adult homeless populations; engagement with parents in the home to support participation of youth in treatment; or co-located substance use workers in schools or health care settings. Outreach capacity was seen as a strong feature of the Island Health youth system but viewed as lacking in adult services which had become largely office-based. Outreach services are also available to older adults through the Seniors Outreach Team. In fact, inability to access outpatient services is a defining criterion for eligibility for SORT services. It was also noted that existing systems of documenting staff activity and caseload do not adequately capture services being provided on an outreach basis.

It was also noted in the literature review that client engagement can be addressed by ensuring a welcoming attitude among all staff as well as the creation of a welcoming physical environment (e.g.,

non-institutional look-and-feel; physical layout; or posters with content reflecting a diversity of people (e.g., age, gender, cultural and ethnic heritage). While a formal environmental assessment was not undertaken by the consultant team, for the most part the physical environment was seen as appropriate for putting prospective clients at ease. There were exceptions however, including glassed-in reception areas, locked doors that prohibited smooth flow through the office and limited display of diversity-oriented materials. From an Aboriginal perspective some of the facilities had an institutional feel that many may find challenging and reminiscent of the residential school experience.

The literature on substance use services and supports also advocates a conceptual shift to a chronic disease or chronic care paradigm that acknowledges the likelihood of variable stages of recovery (e.g., "relapse") and multiple service episodes over time. This model is especially appropriate for individuals at higher levels of severity. As with other chronic, relapsing conditions, there is a need for some level of service to continue after an official discharge. There are many terms applied to these continuing services, for example, continuing care, aftercare, and more recently, recovery monitoring checkups. The term "extended interventions" is a catch-all term to apply to post-treatment interventions longer than six months in duration. The literature on the effectiveness of these continuing services is reasonably strong, but also points to the need for adaptive protocols that can be adjusted up or down in response to changes in symptoms and functioning over time (as in a stepped care model). Feedback from participants suggested that service delivery had shifted significantly towards the provision of short term acute care and more limited opportunities for extended counseling or complex psychotherapy.

One aspect of treatment system design related to transition support that is getting increased attention in needs-based planning models for substance use services is the role of "supported recovery" facilities. There are different service models that fall under the term, the service category having evolved out of "halfway houses", "three-quarterway house" and "recovery homes" many years back. The evolution of terminology and definition is still underway as evidenced, for example, by recent work in the Fraser Health Authority to articulate the need for and prescribed services of "Stabilization and Transitional Living Residences (STLR). Essentially, these programs provide access to social and economic skill building to support community re-integration. They can be useful for pre-treatment stabilization, post-treatment continuing care, and long-term rehabilitation and support through the provision of linkage to housing, life skills, occupational training and supportive employment programs. As noted earlier the review showed the gap in the Island Health system for these types of services, particularly in CI and NI, and for women, youth and older adults and for people with more complex mental health and addiction challenges. Further, what supportive recovery programs do exist could benefit from a clearer Island Health -endorsed articulation of the core prescribed services as per the recent work in the Fraser Health Authority with respect to the STLR model.

Recommendations and implications

- Develop resource materials that clearly articulate how to access the Island Health direct and contracted substance use service providers and build an awareness program around these materials aimed at both service providers and the general public. These resource materials

should be in both print and Web-based formats and involve people with lived experience in their production and dissemination, including youth.

- Develop care pathways and conduct a detailed "pathways and access review" to identify specific blockages/processes amenable to quality improvement.
- Provide funding for expansion of Recovery Addiction Support groups in the regions of the Island.
- Consider strengthening and expanding SI Peer Outreach services to other parts of the region.
- Explore the feasibility of hiring or dedicating existing staff to formal, protocol-driven engagement or linkage functions.
- Bring Island Health youth services onto CERNER.
- Provide more adult outreach capacity and formally endorse the acceptability of outreach services for Island Health adult service providers.
- Review the physical environment of Island Health direct and contracted substance use services to ensure they are "engagement friendly".
- Consult with other Health Authorities Mental Health and Addiction Services concerning their processes for per diem funding/fee subsidy for residential treatment. In addition there is a need to explore Island Health funding for the fee subsidy associated with residential treatment for substance use.
- Review the model advanced for Stabilization and Transitional Living Residences (STLR) being advanced in Fraser Health Authority and its applicability and cost implications for Island Health.

5.6 System support and stewardship

This cross-cutting theme relates closely to the following principle from the literature review:

Principle #11. A wide range of systems supports are needed to support and facilitate the effective delivery of services.

As noted in the literature review one of the strengths of the tiered model for planning substance use treatment systems (Figure 1) is the distinction drawn between the functions and services needed for people at different levels of severity and the *system supports* required to ensure adequate infrastructure, as well as other factors necessary to the provision of accessible, efficient and effective services. The following system supports were identified: policy, leadership, funding; performance

measurement and accountability, information management, and research and knowledge exchange. These were given varying levels of attention in the literature review as well as the site visits and interviews due to time and resource limitations.

We return here to these various aspects of system support and stewardship, again giving more attention to some issues than others so as to best reflect the major themes that arose in the qualitative feedback and which resonate with the literature and the experience of the consultant team.

5.6.1 Leadership and change management

Rush and Nadeau (2011) synthesized a list of key factors associated with effective change management for substance use treatment systems and in the context of mental health and substance use services integration. This included a shared vision, an organizational culture committed to learning, experimentation and support for diversity, leaders that consistently champion the shared vision, foster leadership at all levels and engage staff and managers in the change process, support for training and development of teams who share the organizations vision and change processes, and open, regular two-way communication.

One of the strongest themes that emerged in the review was the need for improvements in several aspects of leadership and change management processes within the substance use portfolio of MHSU. Like most of the themes identified, this thematic area is multi-dimensional and does NOT apply across the board to all levels and domains of system management, nor to all geographic areas under the Island Health umbrella. Leadership and other system supports such as the relationship with contracted service providers in some jurisdictions was reported to be very strong, consultative and inclusive and in other jurisdictions much less so. That being said, several aspects of this thematic area need attention to ensure continued progress toward Island Health goals and elements of the emerging accountability framework.

As noted at the beginning of this Discussion and Recommendations section, it is recommended that, with the notable exception of the youth sector, MHSU's Executive Leadership build its expertise and experience in substance use services. This issue is not unique to Island Health as it is well-articulated in other provincial-level overviews of the current state of the substance use system in BC. To our knowledge, other areas of the province where this is also said to apply have not taken concrete action to address the concern. It is critical to healthy system change that leadership be better balanced in this regard, especially in the context of integration processes underway which are known to take some time and which require leadership to meet many challenges (Rush & Nadeau, 2011). Experienced senior leadership is necessary for:

- advocating for, and giving time to, substance use treatment issues at very senior levels (where substance use treatment is often erroneously thought NOT to be effective and therefore, not worth investing in)
- ensuring the models of care are appropriate to the unique needs of a diverse clientele and which are different from many aspects of mental health care

- ensuring that performance measurement requirements, processes and indicators adequately and fairly tell the story of both successes and learning opportunities in this sector

Feedback from participants in this review suggests that there is room for improvement in all of these areas that could benefit from more expertise at the senior levels. In short, a renewed and strengthened identity is recommended for substance use services within Island Health – an identity that can work collaboratively, and be functionally integrated, with mental health services and other sectors such as primary care. While progress is being made in the current integration process, some aspects of accessible and effective substance use service delivery appear to be getting lost along the way, for example, outreach for adults not just youth, extended counselling when indicated by problem severity, more intensive treatment and continuing care to supplement acute care services. It appears to the consultant team that many of these and other challenges have their roots in the multiple times that the substance use portfolio has been shifted in the BC government structure, with major changes in program philosophy and *modus operandi* occurring. Leadership, knowledge and experience working in the substance use field will be required to return the Island Health substance use treatment to a more balanced bio-psycho-social-spiritual approach as advocated in the current literature and as being played out in most other parts of Canada, North America and elsewhere.

Aside from the issue of executive leadership for substance use there were important issues related to management style and particularly "change management". Here again there was also considerable variability noted in the feedback - covering the range from minimal consultation, to consultation and effective collaboration on the particular issue in question. While there will always be some mixed perspectives expected in this area, the findings do suggest that senior leadership find ways to stay in direct contact with the front-line staff to ensure they are adequately informed, if not actively consulted, on key changes ahead that impact their work.

Recommendations and implications

- Leadership should undergo training in substance use and addictions that covers such topic areas as fundamental elements of substance use risk, prevention and addictive processes, the National Treatment Strategy and related planning frameworks, best practices in treatment and support and essential core competencies.

- As replacement opportunities present themselves (e.g., through retirement, people moving on to other opportunities) priority should be given to filling senior leadership positions with senior managers experienced in the substance use field.

- Consult with other BC Health Authorities on strengths and lessons learned related to the integration of mental health and substance use services.

- Create a senior (2-3 year) executive-level position or senior change agent with significant substance use experience to facilitate implementation of recommendations in this report.

- Conduct a focused environmental scan on the relationship between local Island Health direct services and contracted service providers to ensure optimal partnerships and coordination of services. This environmental scan should also explore facilitators and challenges for creating more synergy between screening and assessment processes and data collection/reporting on key system-level performance indicators. This scan should also address the balance of contract versus direct services and should be reviewed in relation to the service they offer as the perception is that Island Health services are becoming dominated by an overly medical perspective and are losing touch with the community.

- Increase opportunities for dialogue through exit interviews, all-staff webinars, more site visits and/or open door policies which may be helpful in alleviating some of the issues and stressors. A related area noted for enhancement is the relationship with contracted service providers and ensuring they are seen as true partners in one treatment system with common goals.

- Develop strategies to fill vacant positions in a timely manner so as to minimize the impact on staff stress levels.

5.6.2 Information management and performance measurement

Several features of good system management include having information that is centralized and accessible, a coordinated intake and assessment process, integrated records, shared best practice guidelines, inter-agency service delivery team with formal contracts or service agreements, case management models, boundary spanning positions such as system navigators or transition coordinators, co-location, and protocols for sharing clients with complex multiple needs. Laudably many of these features are already embedded in the Island Health system and provide significant strengths upon which to build, co-location being an excellent example as well as the common clinical profile (CERNER). Other elements have already been addressed in other sections offering recommendations and implications (e.g., more uniform screening and assessment protocols, placement criteria and clinical pathways and transition supports).

The literature review on system supports identified progress that has been made in the field concerning performance measurement and accountability including both process and outcome measures and models. Measuring client satisfaction/perception of care remains an important element of a performance measurement framework and new tools have been identified in both BC and Ontario for potential application across substance use service providers. In the review process there was an expressed desire for more standards of care and once established better implementation and performance measurement processes. Participants cited outpatient services generally, and for older adults specifically, as two areas that could benefit from clearer standards of care. Above we have already mentioned improved screening and assessment and agreed upon client placement protocols.

Related to improved standards/guidelines is the perceived need for system and program level performance measures that are more relevant to the goals and processes of substance use services, for

example, measures which acknowledge the clinical value of repeat admissions to withdrawal management or residential treatment; and extended versus short-term treatment episodes when warranted by case-mix adjustment). Performance measures related to "throughput" also need to be cognizant of the inherent tension between static funding and increasing population and community need. Common client perceptions-of-care tools should also be used that allow for comparison across Island Health jurisdictions and also across mental health, substance use and co-occurring disorders. There is as yet no concerted effort to track post-treatment outcomes.

While several lessons were learned in the present application of the DDCAT tools for assessing concurrent disorders capability, it remains a useful tool for exploration for both quality improvement and measuring progress on meaningful indicators of progress in the integration of mental health and substance use services. The DDCAT would be particularly helpful in the upcoming mental health services review to gain insight into the strengths and challenges of integration from that side of the fence.

Recommendations and implications

- Develop standards of service delivery for Island Health outpatient care, including separate standards for working with older adults.
- Harmonize core elements of data reporting across Island Health direct and contracted services.
- Review Island Health performance measures and the emerging accountability framework for suitability and application with Island Health Substance Use Services.
- Review/adapt and implement across the Island Health system of direct and contracted services common perception-of-care (client satisfaction) tools for mental health and substance use services with benchmarks established over time and results transparent to the public and potential prospective clients.
- Assess the feasibility of within-treatment outcome measures for adult services that support clinical work, such as Miller & Duncan's Client Directed Outcome Informed model.
- Consider a formal pilot test of a post-treatment outcome monitoring system.
- Consider use of the DDCAT (mental health version) in any future mental health review and ensure specific questions are being addressed in the review with respect to substance use services within the context of Island Health's mental health services, including capacity for pulling data specific to substance use (e.g., service utilization stats, FTE equivalents).

5.6.3 Human resources

The human resource element of a substance use treatment system is of critical importance given the research on the role of the therapeutic relationship in determining client outcome, core competencies, certification and other obvious aspects such as the need to minimize turnover and maintain a healthy

staff complement from a workplace wellness perspective. We have already touched on many of these elements and the need to address some key issues impacting staff morale. The current strengths in the system for training (e.g., CAP; core Island Health training that has been made available; Dr. Schecter's work with physicians) as well as the continued need for additional training and capacity building.

Recommendations and implications

- Review commitment to staff as valued resources.
- Increase training opportunities for staff (equally across youth/adult/older adults services).
- Clarify and harmonize policies across Island Health youth and adult services with respect to training for contracted service providers and offer access to Island Health sponsored training opportunities.

5.6.4 Knowledge exchange

The literature reviewed new developments related to knowledge exchange in the substance use field and specifically the move away from a sole reliance on training to enhance the uptake and sustained use of evidence-informed practices at the system or service delivery levels. The research now supports the use of more comprehensive models of capacity building that draw from implementation science and include additional supports such as coaching and the analysis of system-wide, organizational and professional drivers and incentives. At present there remains a heavy reliance on one-off training events in the Island Health system and while this is better than no training at all the evidence suggests it will have limited impact over the intermediate and long run as those trained struggle to incorporate necessary changes into their daily practice and within their organizational and community context.

There are important strengths in the Island Health system with respect to broader knowledge exchange functions, specifically the Practice Resource team and the Clinical Educators. Their work is critical to keeping managers and staff in touch with emerging developments in the field. However, better means are needed to identify innovation being developed or adopted/adapted within other BC Health Authorities (e.g., mobile/home detox; Stabilization and Transitional Living Residences (STLRs)) and across Canada and internationally. In addition, it is important that training also include medical aspects of substance use, e.g., the medical effects of alcohol and drugs on the body, such as cocaine induced heart attacks and inflammatory bowel changes leading to iron deficiency from alcohol. There is no, or very limited, linkage with academic institutions with expertise in substance use treatment.

Recommendations and implications

- Implement a more formal mechanism to keep pace with new developments in the field and ensure adequate training and implementation supports are provided and new competencies sustained (e.g., trauma informed therapy; culturally appropriate approaches for First Nations).

- Establish better linkage with provincial and national Drug Treatment Funding Projects (DTFP) knowledge exchange activities and networks, for example, Evidence Exchange Network (EENET) in Ontario.
- Explore possibility of closer linkage with an academic institution with expertise in substance use treatment such as CAMH in Ontario.

5.7 Specific Populations

In this closing section we combine information relevant to two key principles of system design that reflect the strengths and needs of key populations. We acknowledge that there are several additional populations of high priority in planning and delivering substance use services (e.g., gender-based, people with diverse sexual orientation, people living with disabilities, diverse cultural and linguistic groups) and that it was beyond the scope of this review to address the needs and system gaps of all these populations**.**

Principle #12: Age/developmental considerations and a range of equity and diversity issues are critical to effective treatment system design.

Principle #13: Aboriginal peoples (in Canada referred to as First Nations, Metis and Inuit) have unique strengths and needs with respect to substance use and related problems and benefit from services and support that blend principles and practices of non-indigenous people with those based on traditional healing

5.7.1 Youth

The literature review confirms unequivocally that substance use services for youth are effective, in terms of larger trajectories of substance use (abstinence and reduced use) and gains in health and wellbeing. Although a large percentage of youth do well following treatment, many also require additional services and support for treatment re-entry. Recovery is a process and it's important to keep this in mind, especially when working with youth at the early stages of this trajectory. The outcome data in this area also remind us that youth require a healthy environment (family, community) in order to facilitate the changes they are trying to make. Therefore, as noted earlier, community efforts focused on prevention and health promotion and the social determinants of health should not be seen as distinct from efforts more directly delivered through treatment and support agencies.

The evidence also suggests that the full continuum of treatment services is required, screening/brief intervention, withdrawal management, community and residential treatment. At present, there is no pan-Canadian guideline concerning the percentage of youth at different levels of severity that require residential treatment—matching guidelines are similar to those for adults (e.g., environment, relapse

risk, psychiatric co-morbidity, previous attempts with community treatment). The longer term residential treatment offered by the therapeutic community model is not well-supported in the research literature, but may be a helpful adjunct to the community treatment system for youth with significantly higher severity levels.

Developmental stage is a core element of the conceptual framework for screening and assessment and important for the choice and delivery of treatment interventions as well as transition supports. Age cut-offs for each developmental stage may vary for the individual, although most programs and funders allocate services by age rather than stage. Developmental stage, and the consideration of service delivery settings that may be unique to specific stages, are also important factors for determining ***when*** during the engagement, treatment and support processes to ask different types of screening.

As with adults, there are significant challenges with the coordination of services for youth with substance use problems, exacerbated, of course, for those with significant health and mental health challenges. However, unlike adults, youth receiving services face the additional challenge of transitioning to adult services and this has been recognized as major at a systems level for MHSU & YFSUS. Collaborative partnerships are essential for resolving these continuity-of-care challenges and progress is being made in developing and evaluating models to facilitate transitions.

Based on our system mapping exercise, site visits and stakeholder input, there were several significant strengths of the Island Health substance use system for youth. Some, but not all, of these strengths stand in contrast to the challenges identified in the adult system. Major strengths include:

- Strong leadership with substance use expertise
- High staff morale
- A strong collaborative network of community treatment services across the island (YFSUS)
- Within Discovery, a significant focus on outreach, early intervention/prevention, and some resource flexibility for the support of basic needs such as bus tickets, food and clothing
- Stronger collaborative ties with mental health services, but more work to be done in this area
- Youth detox services
- Youth prevention service in some communities
- Collaborative work with the school system aimed at early intervention was occurring in some School Districts
- Harm reduction street services
- Meaningful engagement with contracted agencies
- Youth & Family Substance Use Services leadership quarterly meetings ensure island wide engagement and planning

These significant strengths notwithstanding, several challenges remain, in particular related to service provision for youth with complex co-occurring disorders, screening and brief intervention in primary care, opioid substitution with counselling supports, residential treatment and supported recovery, withdrawal management in North Island, limited use of Internet and mobile technology, and

improvement needed in overall coordination of services and joint planning with MCFD. Formalized supports are also needed to assist youth in the transition from youth to adult services.

Recommendations and implications

- Assess potential resource implications for systematic, evidence-informed implementation of screening and brief intervention for adolescents in primary care settings, including emergency departments. Substance use liaison nurses focused on adolescent substance use may also be considered.

- Review models of youth-to-adult transition supports including focused consultation with experts in Ontario and other Canadian jurisdictions. Based on this review, formulate a multi-sectoral planning committee to implement and evaluate an Island Health -specific transition support program. This will require resourced project management and in due course funding for one or more transition coordinators as per recommendations in the literature and experts in the area.

- Ensure that transition supports for youth with mental health problems and co-occurring substance use disorders are given a specific focus in the upcoming Island Health mental health review.

- Develop an Island-specific youth residential program resource given the wait times, distance and appropriateness of services off Island

- Develop a continuing care protocol for youth returning from off-Island residential services.

- Assess specific capacity requirements for a youth focused withdrawal management service in NI (beyond Campbell River) and prioritize for funding.

- Investigate more optimal use of Internet/mobile enhanced services for youth, for example, texting information and motivational messaging to support treatment access and maintenance of gains and therapist-assisted group or individual interventions. This should include the engagement of youth in the investigation and development of these technology-based services and supports.

5.7.2 Older Adults

As noted in the literature review, substance use issues in the older adult population, including severe addiction, has emerged as a critical issue in systems planning for substance use services. The evidence indicates that help-seeking rates for substance use among older adults is increasing and treatment is just as effective as for younger adults. Also, although more research is needed, the data also suggest outcomes for older people are better in age-specific rather than mixed-age programs. Services need to be tailored in many ways to the older adult population—for example, reduced use of reading materials; more focus on safety; fostering self-advocacy and medication management; group or individual sessions

of shorter duration due to older adults' tendency to fatigue earlier than others; and a larger role for a spiritual component as values shift towards this area at a later stage in life.

Several factors have no doubt converged to bring this important population more into the spotlight, not the least of which are the demographics toward the increasing age of the population. In addition to this broad secular trend, and notwithstanding the higher mortality rates of people with substance use disorders, people across the full spectrum of substance use risk and problems are living longer. This fact, plus the usual pattern of increasing levels of health and social challenges faced by people as they age in our society, makes the already challenging issues related to treatment and prevention even more difficult to manage from a system planning perspective.

In this systems review for Island Health many of the issues identified in the literature came to the fore. The increasing demand for service on the Seniors Outreach Resource Teams (SORT) was noted and connected to the increasing older person population. Significant challenges are being faced and more resources appear to be needed. In addition, there were other highly salient issues demanding attention. Indeed one could describe the situation as the "perfect storm" brewing on the horizon, if not already upon those dedicated to serving this population. In this perfect storm or "silver tsunami" as it's referred to in the literature (Institute of Medicine, 2012) we identified the following elements (minimally):

- the aging population, augmented by the fact that many parts of Vancouver Island attract retirees from other parts of Canada
- a cohort effect, reflected in our feedback from the SORT teams, such that many people now in their 60s, 70s or older have been using substances for many years, and not only suffer severe health and psychosocial consequences but continue to use a wide range of substances at a level that would surprise if not shock, the average person given their age. In other words, while alcohol may remain the main substance of use/abuse, as in other demographic groups, older adults are being seen with a range of substance use including: abuse of solvent, cocaine, opiates and other prescription drugs, and very heavy cannabis use
- the severity and interplay of severe cognitive deficits and other mental health challenges, coupled with elder abuse[11], isolation, loneliness and depression, all of which increase suicide risk
- the lack of service options across the full continuum of care, tailored to the needs of older adults and in particular, the significant challenges accessing the range of housing options required, or any housing for that matter due to age and other admission restrictions
- risk management strategies embedded in Island Health practice and policy related to restriction on staff entering homes where people smoke (a more common behavior among substance users) which thereby critically limits needed outreach capacity

[11] Stakeholders reported the scenario whereby pension cheques may be one reliable source of income that is used to support substance use by other family members and, those family members are then resistant to placement of their elderly relative in alternate care setting as they would then lose this source of funds to support household drug use.

- the “double trouble” of stigma and discrimination associated with being a marginalized older person, coupled with the stigma and discrimination associated with substance use and typically involving a wide range of other mental health problems

- the administrative separation of the SORT teams from their counterparts in MHSU generally

As in all parts of the Island Health substance use system there are significant strengths embedded in this sub-sector, in particular the dedication of the staff working with this population but also the apparently better access to, and integration with, health and mental health services, including psychiatry. That said, the challenges are many and need to be addressed given the conditions being set by the silver tsunami.

Recommendations and implications

- Develop a task group to create an Island Health strategy specific to substance use and older people with action steps and an evaluation plan. Within this strategy:
    - Review policies limiting outreach capacity.
    - Consider pros and cons, and the feasibility of integrating Senior’s Substance Use Services into the broader MHSUS system. The anticipated benefits of this would need to be carefully assessed.
    - Review how Island Health can build collaborative partnerships aimed at improving/increasing housing stock appropriate to the wide range of needs, including “wet” and “dry” options. A harm reduction model will be critical to success in this area.
- Increase staff and services in Seniors Health to increase access to substance use and related mental health counselling that goes beyond the current focus on case management and triaging that results from inability to meet demand with current staffing levels.
- Focus on specific areas where stigma and discrimination are impacting the health and wellbeing of older people with substance use issues (clients or in the general population) and which can be addressed by policy or practice change (e.g. age restrictions on specific services).
- Consider how mobile/internet technology can be harnessed to engage a segment of this population in prevention and treatment interventions due to impact of stigma and resulting reluctance to seek face-to-face support.

5.7.3 Aboriginal Peoples

From the outset, it was recognized that the review had to speak to the needs of Aboriginal people in recognition of the available information on social determinants, poorer health status, and challenges related to substance use. We also recognized that while it was critical to include this component, the overall review had a broader focus and would not be able to drill down in much detail into the many important Aboriginal-related issues that may be identified and require action. To that end, our aim here is to complement other work with Island Health's aboriginal partners (e.g., Aboriginal Health Plan, 2012—2015) and identify potential areas for engagement and system enhancement. While we incorporated feedback from Aboriginal services and partners (including two site visits), it will be important to actively engage these partners in the discussion of the results, actioning various recommendations/implications, and perhaps undertaking a more focused review if deemed appropriate.

Aboriginal people and their traditional culture bring several strengths to the planning and delivery of substance use services, including a traditional focus on the whole person, a wellness rather than disease orientation, and a strong role for the family and community. Efforts to review and renew substance use services in Canada and elsewhere have emphasized the need to incorporate more culture-based healing practices into mainstream treatment services and to undertake more research and evaluation on the effectiveness of integrating these practices. This must be a critical component of any efforts to collaborate with and enhance Aboriginal services on the Island. Information gathered in this review also highlighted the challenges of stigma and discrimination (e.g., in the Island's emergency and other health services) and the need to ensure a welcoming and culturally appropriate environment for all health services including substance use services. There must also be recognition of the remoteness of many of the Aboriginal communities and sheer effort required to make a decision to seek help outside the community, make the necessary arrangements (e.g., child care), and then undertake the travel itself.

Background documents and stakeholder feedback, including from Aboriginal clients and counsellors, highlighted the severe impact of the residential school experience, trauma and intergenerational trauma. It would not be an over-statement to say that trauma is involved in the history of all, or almost all, of Aboriginal people who require substance use services. This clearly reinforces the need for both indigenous cultural competency training and trauma-informed therapy.

Other feedback brought to the fore highlighted challenges related to accessing services, for example, appropriate emergency health services, due to stigma and discrimination, related to being an Aboriginal person and impacted by substance use. As noted above, access was also challenged by the remoteness of many Aboriginal communities and, limited, or no local services, such as community or home/mobile withdrawal management.

If services are accessed, they are typically located some distance from home and this then presents challenges for sustained recovery upon return to the home community and the challenging conditions related to housing, employment, and other determinants of health (so-called community recovery capital (White, 2011)). Ahousat Holistic Centre on the West Coast of Vancouver Island has had a

treatment program going for the last several years in the community rather than the person with the substance use problem going away to residential treatment. This program has reportedly been successful and may be model for other places.

Given that there are 50 distinct First Nations, 6 Friendship Centres, and 6 Chartered Métis communities, there must be sensitivity to the unique expression of individual, family, and community strengths and needs and potential for healing. There are also some general strengths upon which to build. These include:

- The Tripartite First Nations Health Plan (2013) bringing health services under the direct control of an First Nations Health Authority, including mental health and substance use services
- The Island Health Aboriginal Health Plan for 2012-2015 (updated from 2006) which incorporated significant stakeholder input in developing many recommendations which resonate with the strengths and needs identified in this review

Based on this previous work and the current review the following recommendations and implications are submitted for consideration

Recommendations and implications drawn from previous reports:

- Expand and sustain indigenous cultural safety training for all Island Health direct and contracted staff/programs.
- Expand Telehealth in NI and CI where needed with a focus on Aboriginal access and culturally appropriate interventions.
- Increase Aboriginal volunteers in hospitals and other health facilities as well as the number of All Nations Healing Rooms and the number of Aboriginal Liaison Nurses as a means to minimize stigma and discrimination over the longer run through local capacity building.
- Explore ways to provide information about Island Health services and how to access them in ways that are useful for Aboriginal communities and are useful for supporting more collaborative service delivery.
- Celebrate successes with Aboriginal partners.
- Continue active partnerships and liaison with the First Nations Health Authority.

All of these recommendations and others would undoubtedly improve access to, and effectiveness of, substance use services for Aboriginal people on the Island. Other recommendations/implications from the present review include:

- Conduct a review of the experience of current Aboriginal Liaison nurses vis à vis substance use-related care and how their role and expertise might be enhanced in this area.
- Support and increase outreach capacity of Island Health adult outpatient services in order to more effectively engage Aboriginal people in need but who are reluctant to access formal services.
- Expand training in all Island Health services related to trauma-informed therapy with articulated core competency requirements and an evaluation component.
- Review and pilot test community/mobile withdrawal management services with consultation support from the Fraser Health Authority which reports significant buy-in success with Aboriginal communities, for example, use of the community longhouse and recognized “safe houses” on reserve.
- Explore factors related to challenges experienced by some Island Health staff in making referrals to Kackaamin Family Development Centre and work with the Centre to increase referrals.
- Continue support for Aboriginal culture-based healing practices in the context of Island Health direct and contracted services.

CONCLUSION

The Substance Use Review recognized the strengths inherent in our current provision of services. The dedication and skill of staff at all levels was cited by many as the cornerstone of responsive and effective services.

There is however, an opportunity to build on these strengths and improve the quality and efficacy of the structures and supports that guide Substances Use Services. Many of the recommendations will not require a substantial investment of new resources to develop more cohesive and integrated services, although in many cases it will require a reconceptualising of how we provide services. The report also identifies specific areas for improvement that will necessitate additional investment, and will therefore require more planning and consideration within the broader context of Island Health.

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7.0 APPENDIX: GLOSSARY OF ACRONYMS USED IN REPORT

Acronym	Full Name
AA	Alcoholics Anonymous
AAP	American Academy of Pediatrics
AMA	American Medical Association
AOT	Adult Outpatient Treatment
ASAM	American Society of Addiction Medicine
AUDIT	Alcohol Use Disorders Identification Test
CAMH	Centre for Addiction and Mental Health
CCSA	Canadian Centre on Substance Abuse
CECA	Canadian Executive Council on Addictions
CI	Central Island
DDCAT	Dual Diagnosis Capability in Addiction Treatment
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition
DSM-5	Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition
DTFP	Drug Treatment Funding Program
EENET	Evidence Exchange Network
MCFD	Ministry of Children and Family Development
MHCC	Mental Health Commission of Canada
MHSU	Mental Health and Substance Use
NI	North Island
NNADAP	National Native Alcohol and Drug Abuse Program
NTS	National Treatment Strategy
PDSQ	Psychiatric Diagnostic Screening Questionnaire
RAS	Recovery Addiction Support
SBIRT	Screening, Assessment and Referral to Treatment
SI	South Island
SORT	Seniors Outreach Team
SPSS	Statistical Package for the Social Sciences
STLR	Stabilization and Transitional Living Residence
YFSUS	Youth and Family Substance Use Services