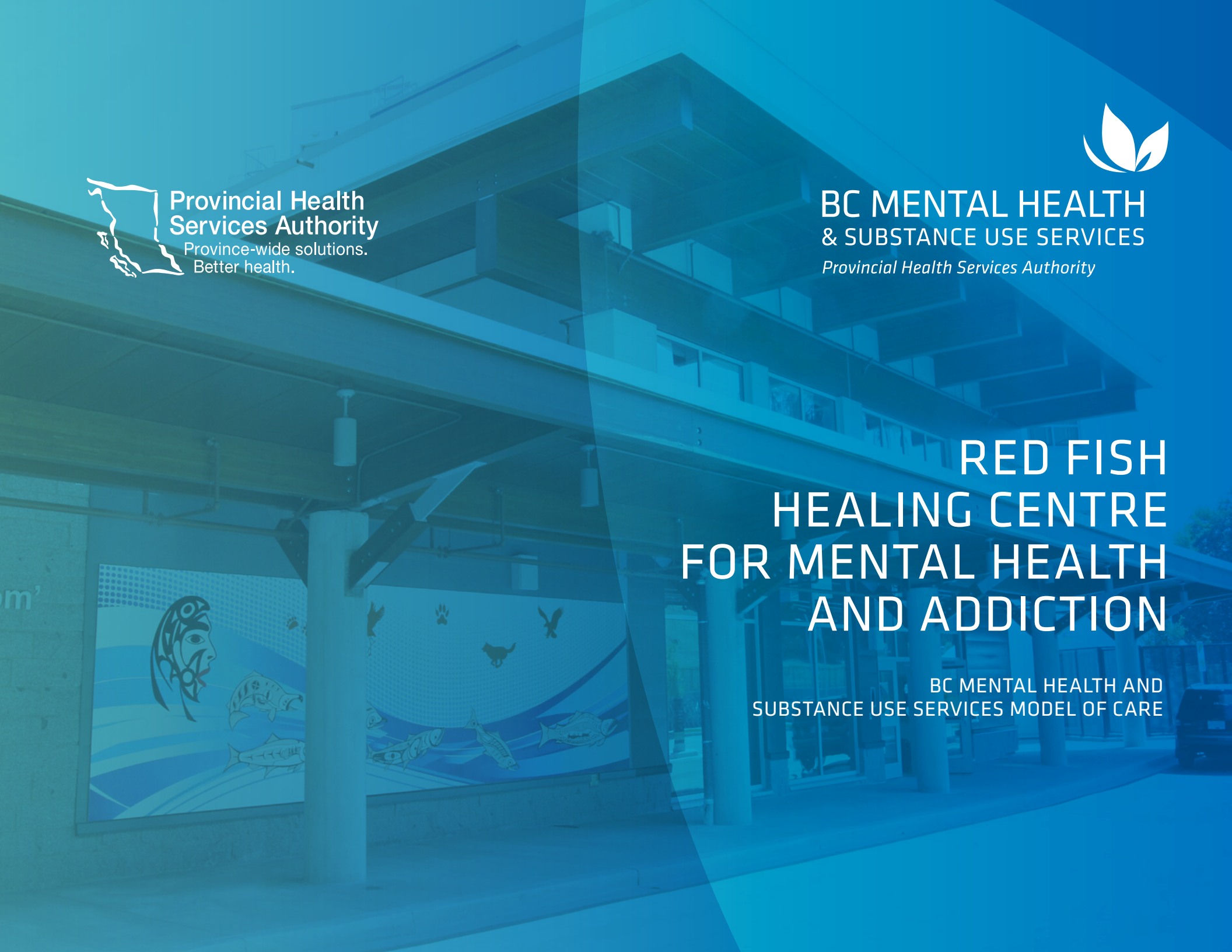

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BC MENTAL HEALTH & SUBSTANCE USE SERVICES
Provincial Health Services Authority

RED FISH HEALING CENTRE FOR MENTAL HEALTH AND ADDICTION

BC MENTAL HEALTH AND SUBSTANCE USE SERVICES MODEL OF CARE

The Red Fish Healing Centre for Mental Health and Addiction is situated on səmiq̓ʷəʔelə (the Place of the Great Blue Heron), which is within the unceded territory of kʷikʷəƛ̓əm, or the Kwikwetlem First Nation.

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EXECUTIVE SUMMARY

The BC Mental Health and Substance Use Services (BCMHSUS) is a program of the Provincial Health Services Authority (PHSA) that provides a range of provincial, specialized services for people with complex needs in British Columbia. The service includes several programs, one of which is the Red Fish Healing Centre for Mental Health and Addiction (Red Fish Healing Centre) which provides specialized inpatient services for people with severe and persistent complex concurrent disorders.

The Red Fish Healing Centre for Mental Health and Addiction is a purpose-built, state-of-the-art facility in Coquitlam, B.C. It has 105 beds across seven units, and includes an enhanced care unit for individuals with severe illness who require more intensive, specialized and secure services.

The clients admitted to the Red Fish Healing Centre display high degrees of distress, concurrent serious mental illness and severe substance use disorders, and may also have problems with cognitive functioning, high levels of impulsivity, chronic health conditions, and difficulties engaging with treatment providers. Over two-thirds of the clients are male, with an average age of 36 years. Few have any recent employment, a high-school education or access to market housing. Over half have a history of suicide attempt(s) while almost half have experienced moderate to severe levels of emotional.

Key principles guiding BCMHSUS, including the Red Fish Healing Centre, include implementing evidence-based and data-driven practices, person- and family-centred care and team-based decision-making to provide integrated, high quality care for these clients and their families. In addition, care is provided with sensitivity to the impacts of previous trauma(s), in a culturally safe manner, with humility, and with a recovery-oriented focus. A recovery-oriented approach aims to support clients to live hopeful lives where they can find meaning despite ongoing limitations caused by mental health and substance use issues. The importance of a positive therapeutic relationship between a caregiver and a client is paramount, while communication and coordination with partners is both seamless and integrated.

The Red Fish Healing Centre clinical framework applies these guiding principles to the therapeutic approach in six overlapping domains – physical wellness (including self-care and activities of daily living), mental wellness, substance-free living, addressing problem behaviours, family and intimacy, and meaningful life.

The Red Fish Healing Centre admits both voluntary clients, and involuntary clients who are certified under the BC Mental Health Act. Voluntary clients may initiate their own discharge, while involuntary clients may not. Referrals from the Regional Health Authorities (RHAs) are vetted by the Access and Transition Committee at the Red Fish Healing Centre to ensure that referrals meet intake criteria.

The average length of stay in the centre is 4.5 months. Clients may stay longer if required, and those who require additional support after discharge can be transitioned to the Recovery and Rehabilitation Program operated by Coast Mental Health Society on behalf of BCMHSUS.

In its new setting, the Red Fish Healing Centre will provide four levels of care across seven units, to assist clients with a progressive approach to recovery and eventual reintegration to their RHAs and local communities. Each of the seven units at the Red Fish Healing Centre will have 15 private bedrooms and a seclusion room.

Most Red Fish Healing Centre clients will be admitted to one of two assessment and stabilization units (ASU) to begin their recovery journey. The ASUs are dedicated to the comprehensive assessment and stabilization of acute symptoms and feature close observation (assessment), withdrawal management, and initiation of intensive treatment.

Clients who are at the highest risk for aggression or other significant problem behaviours as a result of their complex mental health and substance use disorders, will be admitted to the enhanced care unit (ECU), which provides assessment and stabilization in a safe and secure environment.

Three treatment units (TU) provide intensive pharmacological and psychosocial interventions, in alignment with the client's individualized care plan. Care planning and interventions continue to enhance the client's long-term substance use recovery skills, mental health symptom management and emotion regulation abilities; the focus is on the client acquiring the independent living skills necessary for a successful discharge into the community.

One enriched treatment unit (ETU) will be reserved for clients who are cognitively or behaviourally unable to participate fully in treatment on other units.

The four types of treatment unit, or levels of care, are a recognition that a client's recovery journey is nonlinear; individuals may require differing levels of care during the course of their treatment. Co-location of the units enhances the ability to provide the most appropriate level of care while maintaining consistency and continuity of the client's treatment pathway and care plan.

No two client journeys are identical, however, there are three primary clusters of mental illness in the complex concurrent disorders population: mood disorders, psychotic disorders, and disorders associated with substantial cognitive impairment. Clients are therefore assessed upon admission for assignment to one of three clinical pathways, based on their needs. These three clinical pathways have distinct focuses of assessment and treatment, with wraparound elements and flexibility for individualized customization depending on the client's clinical needs, preferences and strengths.

The goal of treatment at the Red Fish Healing Centre is to support clients with mental health, substance use, and other co-occurring challenges to be able to live successfully with the support of resources available in their home RHA. Connection to a community support team (e.g., family, friends, an Assertive Community Treatment [ACT] team) and secure stable housing, for example, supported housing, residential care, independent living, is crucial to community reintegration. As part of each client's discharge plan, the Red Fish Healing Centre evaluates and recommends the housing arrangement and support team requirements for each client to best enable them to stay in the community.

Available evidence on client outcomes at the current centre indicates a clinically significant improvement in behaviours and social functioning, reduced impairment, and a significant decline in the prevalence of substance use between admission and discharge.

Research, education and teaching are formally embedded into the Red Fish Healing Centre program and considered integral to achieving organizational excellence and supporting translational science. The Red Fish Healing Centre intends to assume a provincial leadership role in the creation of new knowledge, identification of evolving and emerging research, and translation and integration of evidence into practice related to mental health and substance use treatment and care.

Successful partnerships are integral to the success of each client's overall journey of recovery. The key stakeholders that influence and integrate with care to ensure smooth transitions back to the community include family and friends, the RHAs, BC Housing and correctional services.

Within the broad system of specialized care provided by BCMHSUS, the Red Fish Healing Centre provides a comprehensive program addressing physical wellness, mental wellness, substance-free living, problem behaviours, and family and intimacy, to result in a meaningful life that gives clients a sense of hope – the belief that recovery is possible and that there is a potential for a better future. Integrated treatment is provided by a specialized interdisciplinary team to deliver coordinated and comprehensive individualized care, ultimately leading to sustained treatment success, minimization of relapse and overall enhancement of the quality of care. Care occurs within a safe and healing environment, with engagement from clients, family members and partners in care. The Red Fish Healing Centre provides evidence-based treatment and facilitates skill building, allowing clients to grow and succeed both during their treatment and after their return to their home community.

INTRODUCTION

BC Mental Health and Substance Use Services (BCMHSUS) is a program of the Provincial Health Services Authority (PHSA) that provides a range of provincial, specialized services for people with complex mental health and substance use needs in British Columbia. The service continuum includes the Red Fish Healing Centre for Mental Health and Addiction, Heartwood Centre for Women, Forensic Psychiatric Hospital, Forensic Regional Clinics, Correctional Health Services and provincial contracted services. Programs and services are accredited by Accreditation Canada and are guided by a directional plan outlining the approach to care, scope of services, core principles and values, and directional priorities. As an academic program, BCMHSUS also conducts ground-breaking research, participates in student teaching programs, leads provincial planning initiatives and partners with not-for-profit organizations to address mental health promotion and the prevention and reduction of stigma.

POPULATION

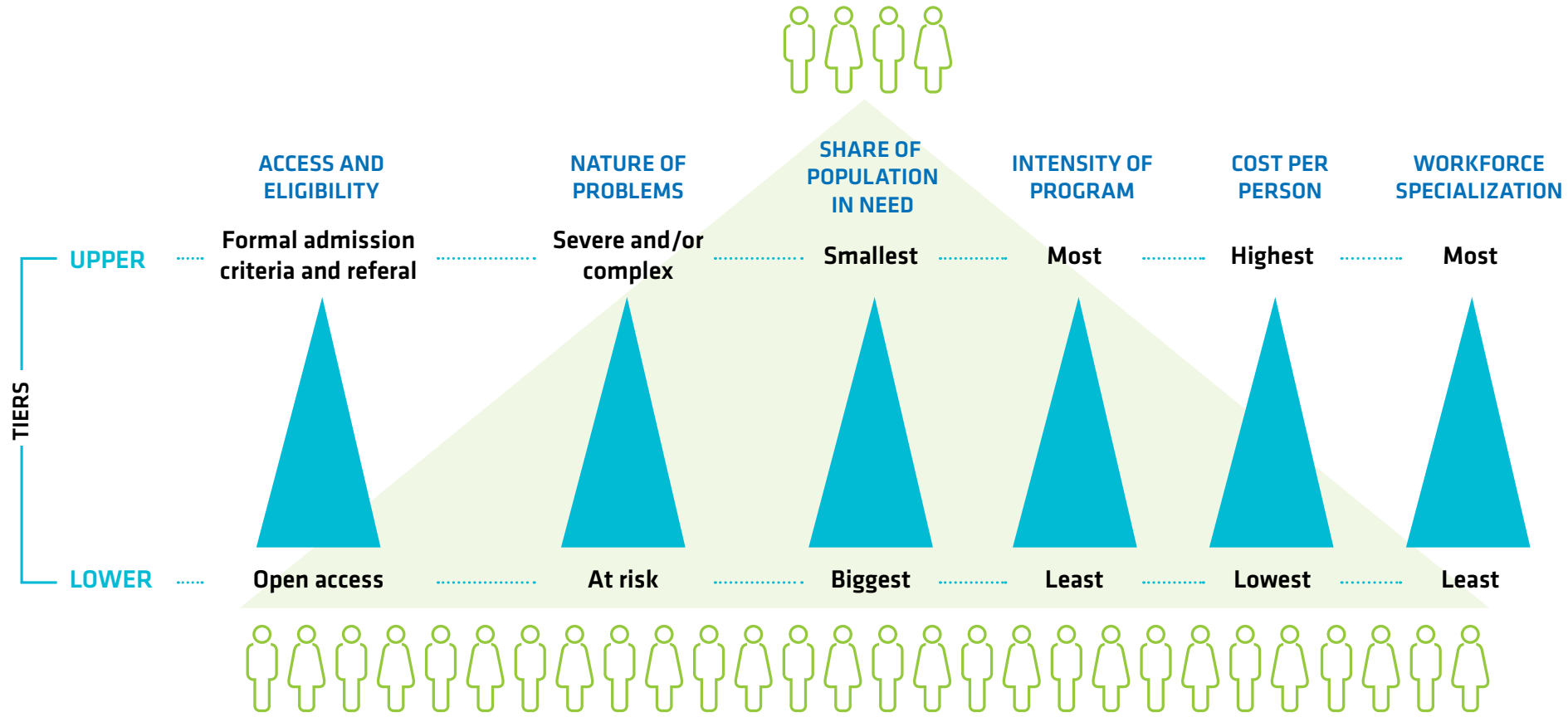
The individuals that are referred to BCMHSUS programs are unique, with their own history, personality, and preferences; however, most have extreme needs and share certain characteristics including the following:

- Complex physical, mental health and addiction needs
- Vulnerability to homelessness, victimization and stigma, domestic violence, trauma, poverty, incarceration and social isolation
- Experiences of trauma and adverse childhood experiences (ACEs)
- Shorter life expectancy than that of the general population, mostly due to preventable causes
- Increased likelihood of repeat emergency department visits and hospitalization

In the conceptual model below (Figure 1), BCMHSUS programs fall into the upper tiers providing highly specialized services delivered to a small number of people with complex needs.

TIERS OF SERVICE

Figure 1: Tiers of Service



MODELS OF CARE

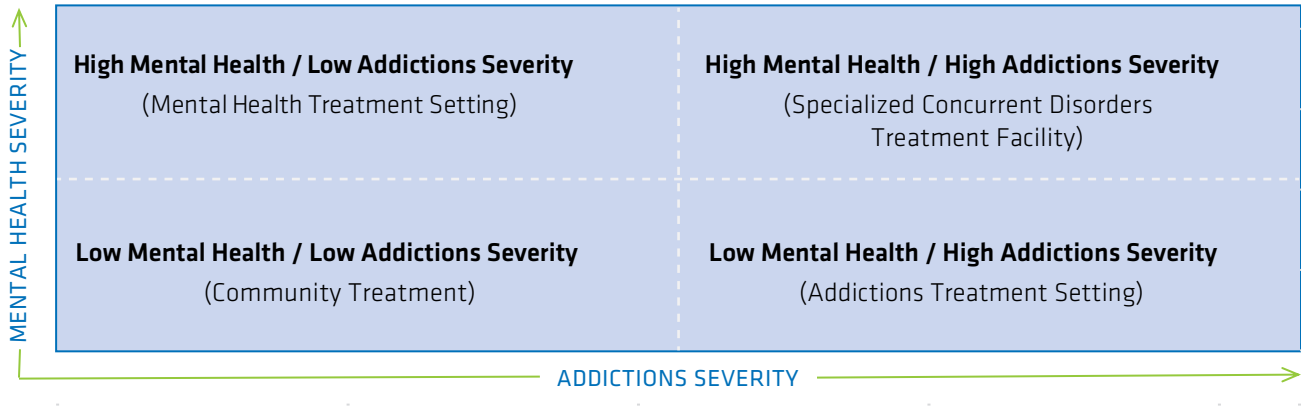
Each BCMHSUS program is underpinned by a set of core values and principles and operates in accordance with an evidence-informed model of care that articulates the target population, legislative framework, evidence-informed core services and clinical program components, interventions, admission and discharge criteria and expected outcomes. The model of care is informed by research literature, clinical guidelines, expert opinion, and consultation with stakeholders including people with lived experience. The following document outlines the model of care for the Red Fish Healing Centre for Mental Health and Addiction.

PROVINCIAL QUATERNARY INPATIENT SERVICES

BC Mental Health and Substance Use Services delivers specialized quaternary[1] inpatient services for people with severe and persistent complex concurrent disorders through the Red Fish Healing Centre for Mental Health and Addiction (Red Fish Healing Centre) and the Heartwood Centre for Women (HCW).

The Quadrant Model, originally developed by the Substance Abuse and Mental Health Services Administration (SAMHSA)[2] and modified by the Canadian Centre on Substance Abuse (CCSA)[3] , demonstrates how mental health and substance use disorders exist along a continuum.

Figure 2: The Quadrant Model



The Quadrant Model proposes that "clients with the highest mental health and addiction severity should receive services in a highly specialized concurrent disorders treatment setting, albeit in a time-limited manner. When either mental health or addiction severity diminishes, the patient can be transitioned to specialized addiction or mental health treatment setting. Eventually when both mental health and addiction severity are low, a community treatment setting would be appropriate."[4] The Red Fish Healing Centre and Heartwood Centre for Women address the needs of those in the high mental health / high addictions severity quadrant.

[1]Quaternary Care = Highly specialized care and treatment for the most complex cases provided by a team of specialists, often in purpose-built facilities and often involving a one-of-a-kind program in the province. The progression is typically linear, with secondary care being provided to clients for whom primary care is insufficient, tertiary care being provided to clients for whom secondary care is insufficient and quaternary care being provided to clients for whom tertiary care is insufficient.

[2]U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Substance Abuse Treatment for Persons with Co-Occurring Disorders: A Treatment Improvement Protocol TIP 42. 2005. Available online at https://www.ncbi.nlm.nih.gov/books/NBK64197/pdf/Bookshelf_NBK64197.pdf. Accessed March 2020.

[3]Canadian Centre on Substance Abuse. Substance Abuse in Canada: Concurrent Disorders. December 2009. Available online at https://www.ccsa.ca/sites/default/files/2019-04/ccsa-011811-2010.pdf. Accessed April 2020.

[4]Canadian Centre on Substance Abuse. Substance Abuse in Canada: Concurrent Disorders. December 2009. Available online at https://www.ccsa.ca/sites/default/files/2019-04/ccsa-011811-2010.pdf. Accessed April 2020.

TARGET POPULATION

People with concurrent disorders "have at least one diagnosable mental illness along with one or more substance use disorders."[5] A wide range of terms are used to describe this population, including co-occurring disorders, dual diagnosis, dual disorders, mentally ill chemically addicted (MICA), chemically addicted mentally ill (CAMI), mentally ill substance abusers (MISA), mentally ill chemically dependent (MICD), coexisting disorders, comorbid disorders, and individuals with co-occurring psychiatric and substance symptomatology (ICOPSS).[6]

The clients admitted to the Red Fish Healing Centre display high degrees of distress, serious mental illness, problems with cognitive functioning, histories of severe substance use disorders, high levels of impulsivity, chronic health conditions, and problems with engagement with treatment providers.[7] They often present with two to three psychiatric diagnoses; concurrent with these psychiatric diagnoses, the typical client will have at least three substance use disorders. Co-morbid physical illnesses (e.g. COPD, ischemic heart disease, diabetes, hypertension, infectious diseases such ashepatitis C, HIV) are also highly prevalent.[8]

In addition to a diagnosis of concurrent disorders, this population tends to have some of the following distinguishing characteristics:[9]

- Social marginalization, poverty, unsafe housing, or homelessness
- Neurological impairment associated with substance use (including acquired brain injury, fetal alcohol spectrum disorder, etc.)
- Significant histories of early, repeated, and pervasive trauma
- Serious behavioural problems, which may include police contact, aggression, and violence
- Difficulty with engagement, including histories of unique challenges when it comes to treatment engagement in the existing mental health and substance use services continuum.

[5]Tennessee Department of Mental Health & Substance Abuse Services. Substance Use Best Practice Tool Guide: Co-occurring Disorders. 2016. Available online at https://www.tn.gov/content/dam/tn/mentalhealth/documents/FINAL_Co-occurring_Disorders_Module.pdf. Accessed February 2020.

[6]American Society of Addiction Medicine. National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. 2015. Available online at https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf. Accessed February 2020.

[7]Schütz C, Linden IA, Torchalla I et al. The Burnaby treatment center for mental health and addiction, a novel integrated treatment program for patients with addiction and concurrent disorders: results from a program evaluation. BMC Health Services Research. 2013; 13(1): 288.

[8]Dr. Christian Schütz, Associate Professor UBC and Research and Education Medical Manager CMHA/PHSA. Personal Communication. November 2019.

[9]BC Mental Health & Substance Use Services. Characteristics, Prevalence, Treatment and Care Options for the Complex Behaviours Patient Population. Final Report on the Proceedings of the Clinical Expert Panel and Key Informant Interviews for the Ministry of Health 120 Day Action Plan. 2014. British Columbia.

Historically marginalized groups (e.g. women, LGBTQ+, gender diverse people, Indigenous peoples, visible minorities, and older adults) may be at increased risk of, and/or have different presentations and needs to, the above characteristics.[10,11]

Based on a cross sectional assessment completed in 2019, the majority of clients at the Red Fish Healing Centre, formerly the Burnaby Centre for Mental Health and Addiction, are male (69%) with an average age of 36 years. Few have any recent employment (5%), most have less than 12 years of school (39%) and only 18% come from market housing. As expected, the prevalence of alcohol (66%) and drug (78%) use disorders are high. Over half (56%) of clients have a history of suicide attempt(s). Between 39% and 51% of clients have experienced moderate to severe levels of emotional, physical and/or sexual abuse as children.

A particular challenge for individuals with concurrent disorders is their high level of exposure to adverse childhood experiences (ACE), including psychological, physical or sexual abuse; violence against the mother; or living with household members who experience negative effects of substance use, mental illness, suicidal ideation, or imprisonment.[12,13] Exposure to ACE results in an increased risk of mental and physical challenges, including substance use disorders,[14,15] depression,[16] psychotic disorders, attempted suicide[17] and increased use of prescribed psychotropic medications[18] as an adult.

There is limited incidence and prevalence data on concurrent disorders in the general population due to multiple barriers in accessing and identifying individuals with concurrent disorders, particularly for those at the most severe end of the spectrum.[19] Evidence for B.C. suggests that there are between 1,800[20] and 2,200[21] individuals in the province in the high mental health / high addictions severity quadrant requiring potential access to a specialized concurrent disorders treatment facility such as the Red Fish Healing Centre or Heartwood Centre for Women. While many of these clients have some history of aggression, an estimated 10% have severe aggressive / violent tendencies.[22,23]

[10] Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychological Bulletin. 2003; 129(5): 674.
[11] Schütz C, Choi F, Jae Song M et al. Living with dual diagnosis and homelessness: marginalized within a marginalized group. Journal of Dual Diagnosis. 2019: 1-7.
[12] Felitti V, Koss M and Marks J. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. American Journal of Preventative Medicine. 1998; 14(4): 245-58.
[13] Felitti VJ. Origins of the ACE Study. American Journal of Preventive Medicine. 2019; 56(6): 787-9.
[14] Dube SR, Anda RF, Felitti VJ et al. Adverse childhood experiences and personal alcohol abuse as an adult. Addictive Behaviors. 2002; 27(5): 713-25.
[15] Dube SR, Felitti VJ, Dong M et al. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the adverse childhood experiences study. Pediatrics. 2003; 111(3): 564-72.
[16] Chapman DP, Whitfield CL, Felitti VJ et al. Adverse childhood experiences and the risk of depressive disorders in adulthood. Journal of Affective Disorders. 2004; 82(2): 217-25.
[17] Dube SR, Anda RF, Felitti VJ et al. Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. Journal of the American Medical Association. 2001; 286(24): 3089-96.
[18] Anda RF, Brown DW, Felitti VJ et al. Adverse childhood experiences and prescribed psychotropic medications in adults. American Journal of Preventive Medicine. 2007; 32(5): 389-94.
[19] O'Brien CP, Charney DS, Lewis L et al. Priority actions to improve the care of persons with co-occurring substance abuse and other mental disorders: a call to action. Biological Psychiatry. 2004; 56(10): 703-13.
[20] Vigo D. Needs-based Planning for People with High Need / Treatment Refractory Concurrent Disorders with Aggression and Neurocognitive Harms. March 31, 2020.
[21] Somers J, Moniruzzaman A, Rezansoff S et al. The prevalence and geographic distribution of complex co-occurring disorders: a population study. Epidemiology and Psychiatric Sciences. 2015: 1-11.
[22] Lussier P, Verdun-Jones S, Deslauriers-Varin N et al. Chronic violent patients in an inpatient psychiatric hospital: Prevalence, description, and identification. Criminal Justice and Behavior. 2010; 37(1): 5-28.
[23] Vigo D. Needs-based Planning for People with High Need / Treatment Refractory Concurrent Disorders with Aggression and Neurocognitive Harms. March 31, 2020.

LEGISLATIVE FRAMEWORK

The Red Fish Healing Centre is designated as a provincial mental health facility under Schedule A of the BC Mental Health Act which articulates the rules and regulations for admission and detention of patients.[24,25] As a designated facility, the program admits both voluntary and involuntary clients.

The BC Ministry of Health's Guide to the Mental Health Act notes the following:[26]

Most people in British Columbia requiring hospital treatment for mental disorders are voluntarily admitted to hospital, just like people with other illnesses. A sizable number of people with serious mental disorders, however, refuse to accept psychiatric treatment. (In 2003 there were approximately 8,000 involuntary admissions.)

Without involuntary admission and treatment made possible by the Mental Health Act, these seriously mentally ill people would continue to suffer, causing significant disruption and harm to their lives and the lives of others.

With involuntary hospital admission and treatment, most people quickly improve to the point that they can continue as voluntary patients or resume their lives in the community.

[24] The Office of the Ombudsperson. Committed To Change: Protecting the Rights of Involuntary Patients under the Mental Health Act. 2019. Available at https://bcombudsperson.ca/sites/default/files/OMB-Committed-to-Change-FINAL-web.pdf. Accessed January 2020.

[25] BC Mental Health Act. Available online at http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96288_01. Accessed February 2020.

[26] BC Ministry of Health. Guide to the Mental Health Act. 2005. Available online at https://www.health.gov.bc.ca/library/publications/year/2005/guide-mental-health-act.pdf. Accessed February 2020.

RED FISH HEALING CENTRE FOR MENTAL HEALTH AND ADDICTION

The Red Fish Healing Centre for Mental Health and Addiction has 105 beds in seven distinct units including a 15 bed enhanced care unit (ECU) for individuals with severe illness who require more intensive, specialized, and secure services. The ECU will be implemented when the new Centre opens in 2021.

The Red Fish Healing Centre provides care in concert with two BCMHSUS programs, the Heartwood Centre for Women (HCW) and the Coast Mental Health Recovery and Rehabilitation Program (R&R). HCW is a 30-bed, female-only program currently located at BC Children's and Women's Hospital in Vancouver, with a focus on treating concurrent disorders using a trauma-informed lens specific to women's experience. This program serves women where a co-ed treatment model is deemed not the ideal option for the individual client at that time. R&R is a 40-bed provincial resource currently located in Coquitlam, B.C., which provides continued mental health and addiction support to people who have completed treatment at the Red Fish Healing Centre or HCW but who may benefit from continued treatment and additional support services before they transition back to their home communities. The focus of this document is the Red Fish Healing Centre for Mental Health and Addiction. Reference to the HCW and R&R programs are noted above as Red Fish Healing Centre clients may transition to either of these two programs.

CORE VALUES AND PRINCIPLES

The following core values and principles underpin all BCMHSUS programs and services including the Red Fish Healing Centre.

CORE VALUES

HOW WE SHOW UP

- Genuine and genuinely care
- Seeing the best in people
- Relentlessly dedicated

WHAT WE BELIEVE

- Health is a human right
- There is no health without mental health
- Every person is important
- Recovery is possible
- Quality care makes a difference

GUIDING PRINCIPLES

EVIDENCE BASED AND DATA DRIVEN

We advance knowledge and practice through research, evaluation, and continuous quality improvement. We use data and evidence from a range of sources – research, clinical expertise, and lived experience – to inform our work, while remaining open to innovation and new ideas.

PERSON AND FAMILY CENTRED

We focus on the person in our care and seek to meet them where they are, not where we think they should be. We provide personalized, holistic care to meet the needs, values and preferences of clients, their families and loved ones. We engage people with lived experience in the planning and co-design of our programs, research, and services.

TEAM BASED

We work in teams to provide integrated, high quality care for clients and families. With the client in the centre, we collaborate across disciplines to address their needs and support them on their road to wellness.

SEAMLESS AND INTEGRATED

We communicate and coordinate with health authorities, community providers, BC Housing, and other partners to ensure seamless transitions and continuity of care for our clients. We share information and collaborate between agencies to streamline the pathway of care from admission to discharge and through transitions in care.

TRAUMA INFORMED

We recognize that trauma has played a part in the lives of many of our clients and families and endeavor to interact with them considering the contexts and narratives of their lives. We are sensitive to the impacts of trauma and focus on healing-centered engagement.

CULTURALLY SAFE AND HUMBLE

We ensure that all people, regardless of age, gender, sexual orientation, occupation and socio-economic status, ethnic origin, migrant experience, religious or spiritual beliefs, and disability, feel respected and safe when they interact with our system. We foster a climate where the unique history of Indigenous peoples is recognized and respected in order to provide appropriate care and services in an equitable and safe way, without discrimination.

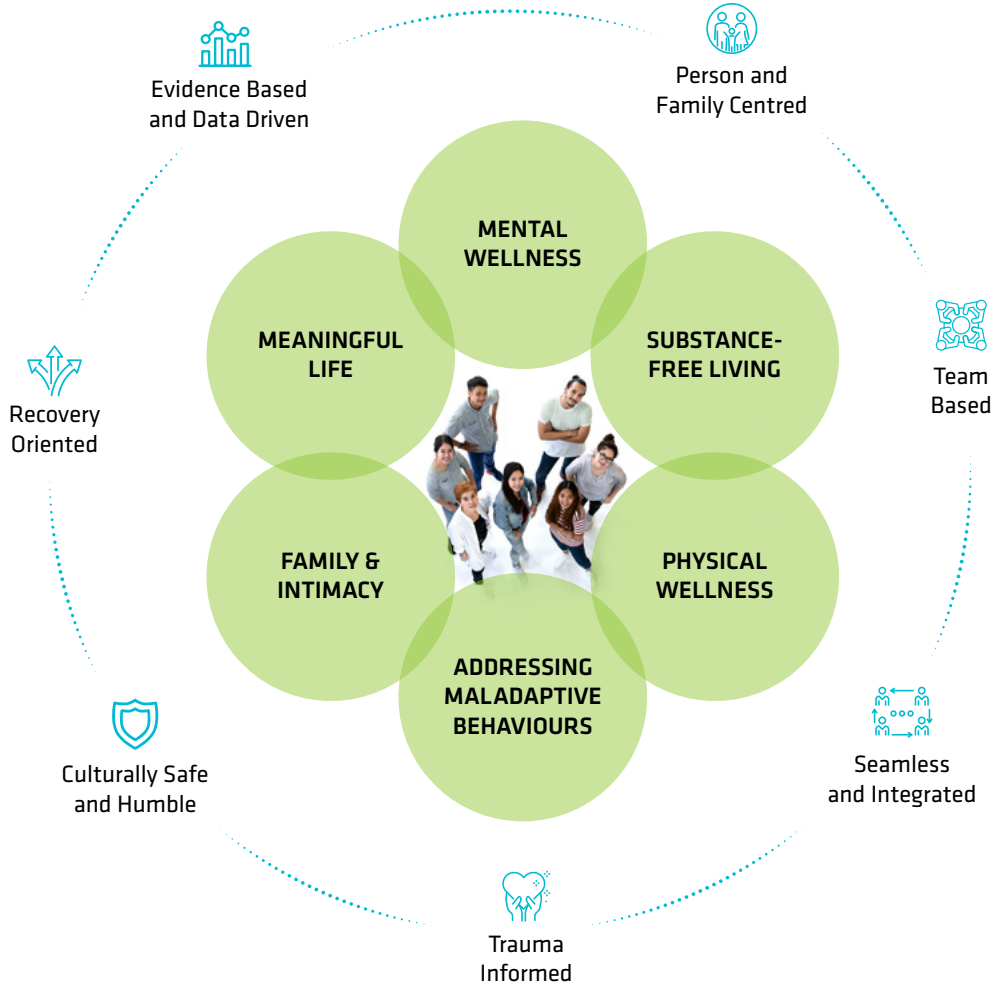
RECOVERY ORIENTED

Recovery oriented care emphasizes client participation, choice, and engagement in their treatment and recovery planning. We recognize that recovery is a personal, non-linear journey guided by accountability, informed by each client's wellness goals, the pace they desire to go, the relationship they have with their illness, the agency they exercise, and the opportunity they are offered to lead their most satisfying and meaningful lives.

CLINICAL FRAMEWORK

The following clinical framework highlights how the guiding principles of BCMHSUS fit with the Red Fish Healing Centre domains of care to inform the therapeutic approach. The six overlapping domains – mental wellness, substance-free living, physical wellness (including self-care and activities of daily living), addressing problem behaviours, family & intimacy, and meaningful life – capture the inter-relatedness between client needs and the range of services and activities required to support them on their journey of recovery.

Figure 3: Clinical Framework



In the following section we provide an overview of the six domains of care. Before doing so, however, we address what may be the single most component of effective treatment, the therapeutic relationship.

THE THERAPEUTIC RELATIONSHIP

Research wholeheartedly supports the fact that clients are much more responsive when the therapist acts consistently in a nonjudgmental and nurturing way.[27]

An overarching theme in the related literature, particularly with respect to the effectiveness of interventions, is the importance of the therapeutic relationship.

The US Substance Abuse and Mental Health Services Administration (SAMHSA) notes that "successful pharmacologic interventions are most likely to occur in the context of a relationship in which the prescriber positions himself or herself as a collaborator in the recovery process, with the goal of helping the individual achieve his or her life goals. The relationship should be empathic, hopeful, and strength-based, and the prescribing clinician should be prepared to work with the individual in a continuing process of assessment and reassessment."[28] The first recommendation of the Canadian guidelines is that the clinician "take time to engage the person from the start and build a respectful, trusting, nonjudgmental relationship in an atmosphere of hope and optimism."[29]

Indeed, research evidence suggests that the psychotherapeutic relationship, in particular the working alliance and empathy, have a greater effect size on therapeutic outcomes than treatment methods or technical interventions.[30,31] The working alliance tends to include an agreement on therapeutic goals, consensus on tasks that make up therapy and a bond between the client and therapist.[32,33] Empathy, by one definition, involves "the therapist's sensitive ability and willingness to understand the client's thoughts, feelings and struggles from the client's point of view."[34,35] The initial interaction between therapist and client is also critical as more patients prematurely terminate from therapy after the first session than at any other point.[36]

[27] Tennessee Department of Mental Health & Substance Abuse Services. Substance Use Best Practice Tool Guide: Co-occurring Disorders. 2016. Available online at https://www.tn.gov/content/dam/tn/mentalhealth/documents/FINAL_Co-occurring_Disorders_Module.pdf. Accessed February 2020.

[28] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. General Principles for the Use of Pharmacological Agents to Treat Individuals with Co-Occurring Mental and Substance Use Disorders. 2012. Available online at https://store.samhsa.gov/system/files/sma12-4689.pdf. Accessed May 2019.

[29] Crockford D, Addington D. Canadian Schizophrenia Guidelines: Schizophrenia and other psychotic disorders with coexisting substance use disorders. The Canadian Journal of Psychiatry. 2017; 62(9): 624-34.

[30] Wampold BE. How important are the common factors in psychotherapy? An update. World Psychiatry. 2015; 14(3): 270-7.

[31] Norcross J and Lambert M. Psychotherapy relationships that work III. Psychotherapy. 2018; 55(4): 303-15.

[32] Norcross J and Lambert M. Psychotherapy relationships that work III. Psychotherapy. 2018; 55(4): 303-15.

[33] Horvath A. The psychotherapy relationship: Where does the alliance fit? In Developing the Therapeutic Relationship: Integrating Case Studies, Research and Practice. 2018. The American Psychological Association.

[34] Elliot R, Bohart A, Watson J et al. Empathy. Psychotherapy. 2011; 48(1): 43-49.

[35] Elliot R, Bohart A, Watson J et al. Therapist empathy and client outcome: An updated meta-analysis. Psychotherapy. 2018; 55(4): 399-410.

[36] Connell J, Grant S and Mullin T. Client initiated termination of therapy at NHS primary care counselling services. Counselling and Psychotherapy Research. 2006; 6(1): 60-67.

DOMAINS OF CARE

MENTAL WELLNESS

Clients with severe concurrent mental health and substance use problems have the best success when both problems are addressed at the same time, in a coordinated way. The treatment approach usually depends on the type and severity of the person's problems. He or she might receive psychosocial treatments (individual or group therapy) or biological treatments (medications), or often both.[37]

Research on integrated treatment approaches for individuals with concurrent disorders "qualitatively and quantitatively demonstrate improved social and clinical outcomes, with comparable costs to standard care, consistent across a variety of outcomes and populations."[38] The Red Fish Healing Centre provides an integrated, unified and comprehensive treatment program for people with concurrent disorders, recognizes that an individual's psychiatric illness and substance use disorder are equally important concerns and treats both in an integrated manner.[39,40,41]

Treatment for mental illness usually involves a combination of both medications and psychosocial treatments (individual or group therapy). Common categories of medications include antidepressants, anti-anxiety medications, mood stabilizers and antipsychotic medications.[42] Common psychosocial treatments include cognitive-behavioral therapy, dialectical behavior therapy, psychoeducation, motivational interventions, self-help groups, social skills training, and contingency management (see Appendix A for an overview of these interventions). The Red Fish Healing Centre offers a range of evidence based psycho-social treatments in both individual and group modalities.

In addition, a variety of novel medications and psychosocial treatments are currently being considered for use in clients with concurrent disorders (see Appendix A).

[37] Centre for Addiction and Mental Health. Concurrent Disorders. Available online at https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/concurrent-disorders. Accessed May 2020.
[38] Karapareddy V. A review of integrated care and concurrent disorders: Cost effectiveness and clinical outcomes. Journal of Dual Diagnosis. 2019; 15(1): 56-66.
[39] Essock SM, Mueser KT, Drake RE et al. Comparison of ACT and standard case management for delivering integrated treatment for co-occurring disorders. Psychiatric Services. 2006; 57(2): 185-96.
[40] McKee SA, Harris GT and Cormier CA. Implementing residential integrated treatment for co-occurring disorders. Journal of Dual Diagnosis. 2013; 9(3): 249-59.
[41] Urbanoski KA, Rush BR, Wild TC et al. Use of mental health care services by Canadians with co-occurring substance dependence and mental disorders. Psychiatric Services. 2007; 58(7): 962-9.
[42] Skinner W, O'Grady C, Bartha C et al. Concurrent substance use and mental health disorders: An information guide. Centre for Addiction and Mental Health. 2010. Available online at https://www.camh.ca/-/media/files/guides-and-publications/concurrent-disorders-guide-en.pdf?la=en&hash=C32D7F0277A97650BEEE37DB0B2822ED1103EF46. Accessed May 2020.

SUBSTANCE-FREE LIVING

SUBSTANCE-FREE LIVING

The term "abstinence-based" is used frequently in substance use treatment and may have many different definitions and meanings for different people and organizations.[43] At the Red Fish Healing Centre, "abstinence-focused" is defined as the expectation that a client's ultimate goal is to cease use of substances that negatively impact his/her life. However, overcoming addiction can be a cyclical, non-linear journey, especially when substance dependency is accompanied by one or more psychiatric problems.[44,45,46,47] Therefore, the Red Fish Healing Centre works with clients through relapse and uses harm reduction practices to reduce the negative consequences of drug use, as appropriate. According to Harm Reduction International, harm reduction refers to "policies, programs and projects that aim primarily to reduce the health, social and economic harms associated with the use of psychoactive substances."[48] The Red Fish Healing Centre adopts a variety of harm reduction approaches while maintaining an abstinence focus. Services and levels of care are designed to reflect a non-linear recovery process, and in some instances clients may return more than once to continue their recovery process. The possibility of relapse and readmission are recognized as part of an individual's recovery journey, and are evaluated on a case-by-case basis.

The Red Fish Healing Centre's definition of "abstinence-focused" includes substitution treatment and other medications supporting management of substance use disorders and reduction of relapse.[49,50,51] Use of non-prescribed medications, non-medical drugs, tobacco, cannabis, and alcohol are not considered compatible with the goal of abstinence-focused treatment and healthy living.[52,53] The Red Fish Healing Centre utilizes all available harm reduction strategies within its model of care that do not involve substitution of unprescribed intoxicants for prescribed intoxicants. This is because the benefits of intoxication substitution strategies have been poorly defined for the concurrent disorders population as they are often excluded from clinical trials involving these strategies. Moreover, intoxicated individuals can disturb the therapeutic milieu and can trigger relapse for patients who are striving to achieve abstinence.

In describing the Red Fish Healing Centre as "abstinence-focused", it is important to clarify that a client is not discharged after use of a substance. Instead, use of drugs is viewed as a symptom of an illness indicating that additional intervention is warranted. However, use or behavior that endangers fellow clients (e.g. selling drugs, repeated use of drugs on site, encouraging others to use drugs, severe violence after use of drugs), or a use pattern indicating abstinence and addiction treatment are no longer the client's goal, may result in discharge to a treatment option more aimed at their phase of recovery. The Red Fish Healing Centre works with clients with varying levels of motivation as much as possible

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with an understanding that their motivation is anticipated to fluctuate throughout recovery.[54] Motivational interviewing and enhancement of a client's desire for recovery is central to the Red Fish Healing Centre program and its goal of client self-determination.

PHYSICAL WELLNESS

Co-morbid physical illnesses and health problems are a significant issue for individuals with concurrent disorders. Depending on severity, challenges within this domain may need to be addressed before work on other domains can be effective.

One important challenge is the high rate of infection with blood-borne viruses, in particular HIV and hepatitis B and C, with incidence rates five to ten times that of the general population.[55,56,57] These higher rates are largely attributable to increased engagement in high-risk behaviours such as unprotected intercourse, multiple partners and injection drug use.[58]

Individuals with severe mental illness also have a higher risk of coronary heart disease,[59] diabetes[60] and venous thromboembolism[61] than the general population. Rates of alcohol misuse and tobacco smoking are also particularly high in this cohort, resulting in a disproportionate experience with alcohol- and tobacco-related harms.[62,63,64] All of these physical health challenges contribute to a substantial lowering of life expectancy in individuals with concurrent disorders.[65,66,67]

The coronavirus 2019 (COVID-19) pandemic has also highlighted a number of additional health risks in the population with concurrent disorders. Individuals who smoke, vape or use certain drugs (e.g. methamphetamines) are at increased risk for infection and more severe consequences due to compromised cardiac and respiratory systems.[68,69] In addition, they may have some challenges understanding and adhering to public health safety measures.[70] Finally, individuals in recovery may face an increased risk of relapse due to the isolation and stresses caused by the public health response to the pandemic. In an inpatient environment such as the Red Fish Healing Centre, increased vigilance is required for suspected COVID-19 symptoms. COVID procedures and provincial health directives continue to evolve and inform safe care at the site.

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Proper nutrition is an important aspect of physical wellness, particularly in individuals with concurrent disorders. Nutritional psychiatry is an emerging discipline but intriguing evidence of the relationship between psychiatric illnesses and diet type and quality is beginning to emerge.[71,72,73,74] The importance of diet and, in particular, malnutrition and micronutrient imbalances in substance use disorder patients has been known for some time.[75,76,77,78] Red Fish offers dietician support and interdisciplinary care planning regarding long term nutritional health.

ADDRESSING MALADAPTIVE BEHAVIOURS

ADDRESSING MALADAPTIVE BEHAVIOURS

A maladaptive behaviour has been defined as a "behaviour that, because of its intensity, frequency or duration, poses a threat to the quality of life and/or physical safety of the individual or others and is likely to lead to restrictive or aversive responses or exclusion."[79] Maladaptive behaviours include self-injury, aggression / violence towards others, destruction of property, and inappropriate social and sexual conduct.

Approximately 10-15% of individuals with developmental disabilities and a serious mental illness exhibit problem behaviours.[80,81,82,83,84] Some maladaptive behaviours in individuals with concurrent disorders, such as violent crimes, tend to be mediated by substance use comorbidity. That is, there is a research consensus of a modest, yet statistically significant, relationship between severe mental illness and violence but when substance use is also included, the risk of violence increases by 4 to 8 fold.[85,86,87,88]

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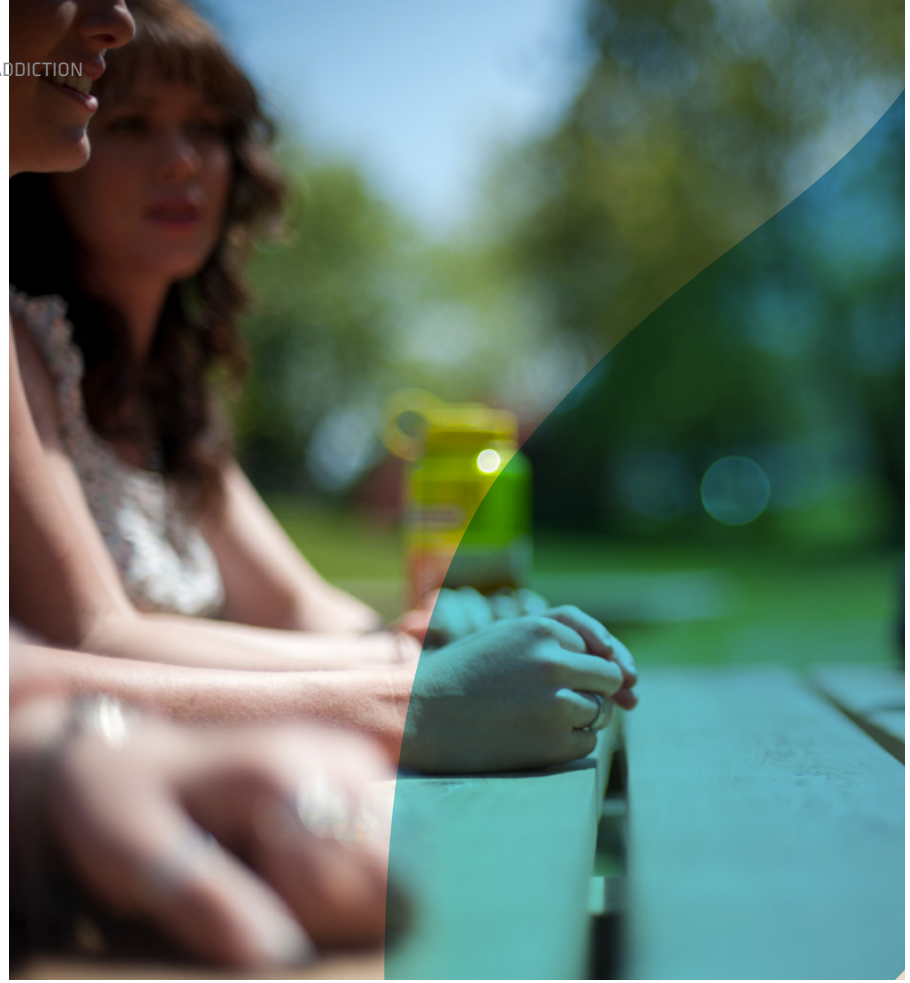
FAMILY & INTIMACY

FAMILY AND INTIMACY

A challenge for individuals with concurrent disorders is that many are disconnected from family and friends. Social networks are often defined by size (number of individuals in the network), frequency of contact and quality of the interactions.[89] Individuals with severe mental health problems tend to have smaller and poorer quality social networks than the general population.[90,91] High levels of unemployment, periodic institutionalization and homelessness further reduce opportunities to engage in reciprocal social activities.[92,93] In B.C., over half (55%) of homeless individuals have a concurrent disorder.[94]

Affirmative social connections or networks have a positive influence on the course of mental illness and recovery from substance use.[95,96] Social relationships, however, are not always supportive and may involve conflict and stress potentially resulting from emotional over-involvement, hostile interactions and unstable family situations, all of which are associated with reduced treatment initiation and poorer treatment outcomes.[97,98] In addition, the number of substance users within one's social network is associated with poor treatment outcomes among substance users.[99]



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A MEANINGFUL LIFE

The guiding principle of recovery-oriented care at the Red Fish Healing Centre aims to equip and support clients in living satisfying, hopeful, and contributing lives, despite the challenges caused by mental health and addiction issues.[101,102] According to the Mental Health Commission of Canada's Guidelines for Recovery-oriented Practice, being recovery-oriented means extending beyond a traditional clinical definition of pathology and helping clients reach optimal mental health beyond reducing or managing symptoms.[103]

A 2014 literature review by Ness and colleagues assessed facilitators of recovery in persons with concurrent disorders from their perspective.[104] Three overarching themes stood out:

1. A meaningful everyday life – including working and having meaningful activities such as playing sports, visiting friends, and filling days with interests that they like to pursue.

2. Focus on strengths and a future orientation – acknowledging that the change process is difficult and painful but it is important to look to the future and acknowledge strengths, including hope, a sense of humour, self-awareness and self-advocating for full participation in treatment and determination to overcome one's problems.

3. Re-establishing a social life and supportive relationships – this is critical in addressing loneliness and boredom, and of being understood, loved and accepted.

A 2017 systematic review by Ruysscher et al. summarized the existing research on the meaning of recovery from the perspective of persons with concurrent disorders and found the following four overarching themes:[105]

1. Feeling supported by family and peers and being able to participate in the community.

2. The need for a holistic and individualized treatment plan.

3. Having personal beliefs, such as fostering feelings of hope, building a new sense of identity, gaining ownership over one's life and finding support in spirituality.

4. The importance of meaningful activities that structure one's life and give one motivation to carry on.

In sum, a recovery-oriented approach to care aims to support clients to live satisfying, hopeful lives where they can contribute even when facing ongoing limitations caused by mental health and substance use issues. At the Red Fish Healing Centre, recovery-oriented care is operationalized throughout the program, as evidenced by activities such as care planning, comfort planning, gender-specific programming, spiritual care and contingency management. It is also evident in the way that staff interact with clients.

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PROGRAM COMPONENTS AND CLINICAL PATHWAY

The Red Fish Healing Centre cares for individuals who have exceeded the capacity of regional health authority (RHA) resources. While at the centre, clients receive highly intensive and specialized services. The goal is to first assess and stabilize the individual, treat them and facilitate recovery, and finally to re-integrate them into a community outside the Red Fish Healing Centre in partnership with the RHAs.

The Red Fish Healing Centre admits both voluntary and involuntary clients who are certified under the BC Mental Health Act. One differentiator between voluntary and involuntary clients is that voluntary clients may initiate their own discharge, while involuntary clients may not. Referrals from the RHAs are vetted by the Access and Transition Committee at the Red Fish Healing Centre to ensure that referrals meet the intake criteria.

The average length of stay in the Red Fish Healing Centre is currently 4.5 months.[106] However, clients may stay longer and those who require additional support after discharge from the Red Fish Healing Centre can be transitioned to the Recovery and Rehabilitation Program operated by Coast Mental Health Society on behalf of BCMHSUS.

Clients work with a multidisciplinary team based on their needs. The multidisciplinary team is made up of psychiatrists, physicians, nurses, social workers, pharmacists, occupational therapists, psychologists, mental health and addiction support workers, spiritual care practitioners, and numerous types of therapists and coordinators.

REFERRAL AND ADMISSION

REFERRALS

All referrals to the Red Fish Healing Centre are made through a designated referral agent, the health authority liaison, within one of the five RHAs. Each RHA has its own internal system for triaging the individuals in its care. When an RHA determines that an individual would benefit from care at the Red Fish Healing Centre, an application package is filled out by the RHA and submitted to the centre.

Each RHA is assigned a set number of beds according to their population. However, there is sufficient flexibility in the admissions system to allow an individual from one RHA to occupy a bed assigned to another RHA by mutual agreement of the RHAs and the Red Fish Healing Centre.

[106] AnalysisWorks. BCMHA Current State Review Summary. August 23, 2019.

ADMISSION

Each application package is reviewed by the Red Fish Healing Centre Access and Transition Committee, consisting of an access/discharge coordinator, the medical director, program manager and a social worker.

Admission and intake is based on the client's needs and level of acuity. Enhanced care units (ECU) and assessment and stabilization units (ASU) each have their own inclusion and exclusion criteria and access protocols.

Admission Criteria for ECU Beds

- Certified under the BC Mental Health Act; and
- Complex concurrent disorders (severe substance use and mental illness); and
- B.C. resident age 19 and older; and
- Independent in activities of daily living; and
- Presenting with significant risk of aggression/violent behavior to self or others, other problem behaviours that requires ECU level of care, history of sexual activities involving minors, or has history of such behaviors; and
- Requires treatment and containment in a secure, locked facility; and
- Client not required to sign treatment consent form to access an enhanced bed

Exclusion Criteria to ECU Beds

- Medically unstable
- Severe cognitive impairment
- Is more appropriately treated in a different specialty bed

Admission Criteria for Assessment and Treatment Beds

- Complex concurrent disorders (substance addiction and mental health disorder); and
- B.C. resident age 19 and older; and
- Independent in activities of daily living
- Agreeing to attend as per participation agreement form

Exclusion Criteria to Assessment and Treatment Beds

- Imminent risk of severe violence
- Sexual activities involving minors
- Medically unstable
- Severe cognitive impairment

The following will also be considered when assessing clients for appropriateness for admission or timing to the Red Fish Healing Centre programs:

- Health Authority resources: The referring health authority must demonstrate that the client has exhausted the resources in their health authority region.
- Activities of daily living: Clients need to have the ability to be independent in their activities of daily living including eating, toileting, and mobilizing.
- Capacity to benefit from the Red Fish Learning Centre programming
- Current milieu of units and ability to manage specific client needs

MENTAL HEALTH AND ADDICTION UNITS AT THE RED FISH HEALING CENTRE

The Red Fish Healing Centre provides integrated assessment, stabilization and treatment for individuals with complex concurrent disorders in a patient-centred, trauma informed setting. In its new setting, four levels of care will be delivered across seven units, to assist clients with a progressive approach to recovery and eventual reintegration to their RHAs and local communities.

Each of the seven units at the Red Fish Healing Centre will have 15 private bedrooms and a seclusion room. Care will be aligned with the Red Fish Healing Centre core principles, domains, and treatment pathways, and will match client level of acuity, motivation and capacity to engage and participate in treatment.

The four levels of care, described below, are uniquely structured to recognize, triage and safely address acuity presented by clients at admission and during treatment.

ENHANCED CARE UNIT (ECU)

Individuals with the most severe and complex mental health and substance use disorders, who are at high risk for aggression or other significant problem behaviours, will be admitted to enhanced care. The enhanced care unit (ECU) will provide secure care with an emphasis on relational security practices that ensure the safety of clients, staff and physicians. Motivational interviewing will be used as a primary intervention to facilitate client engagement, interest and confidence in entering treatment. The ECU will feature close observation, withdrawal management, and initiation of intensive assessment and treatment. Therapeutic interventions will be low barrier and accessible, focusing on stabilization and emotion regulation skills. Medical treatment will include physiological detoxification and initiation of pharmacological treatment of comorbid mental illness and substance dependence. The ECU is intended to provide intensive treatment for up to 3 months, with ongoing client evaluation for suitability to transition to another level of care at the Red Fish Healing Centre for continued treatment or to their home RHA. The ECU will provide diagnostic assessment and differentiation for all clients, with treatment recommendations for the RHA to pursue if the client is returned. Passes for ECU clients will be significantly limited.

ASSESSMENT AND STABILIZATION UNIT (ASU)

Most Red Fish Healing Centre clients will be admitted to one of two Assessment and Stabilization Units (ASU) dedicated to comprehensive assessment and stabilization of acute symptomatology. This is the beginning of the recovery journey for clients with severe and complex mental health and substance use disorders meeting the standard admission criteria for the Red Fish Healing Centre. The ASUs feature close observation, withdrawal management, and initiation of intensive assessment and treatment. Motivational interviewing, withdrawal management, early recovery, and stabilization of acute psychiatric symptoms will be emphasized. Programming will be low barrier, with the goal of engaging clients and increasing readiness for transition to treatment. Passes will initially be limited but may increase depending on client factors and readiness. Interventions will include physiological detoxification and addiction medicine, initiation of pharmacological treatment of mental illness, and psycho-social therapeutic interventions. Most clients will move from the ASUs to one of the four treatment units listed below. Some will discharge directly from the ASUs if further treatment is not indicated.

TREATMENT UNIT (TU)

Three Treatment Units (TU) will provide treatment; the units are functionally identical providing opportunities to balance client mix. Intensive therapy is provided, in alignment with the client's individualized care plan. Clients will be encouraged to take a proactive role in planning their care in collaboration with their clinical teams, incorporating interests and goals for life post-discharge. Increased community passes to assess and facilitate improved functioning and independent living skills are intended to be available to TU clients. Medical treatment will include refining medication regimes for mental health and substance use, including transitioning to self-administered medications prior to discharge where possible. Care planning and interventions will continue to enhance the client's emotion regulation abilities, long-term substance use recovery skills, and mental health symptom management, as well as focusing on discharge planning and independent living skills. Upon completion of the client's care pathway and stay on the treatment unit, discharge home to their RHA for follow-up service and housing location will be arranged as part of a comprehensive long term plan of care.

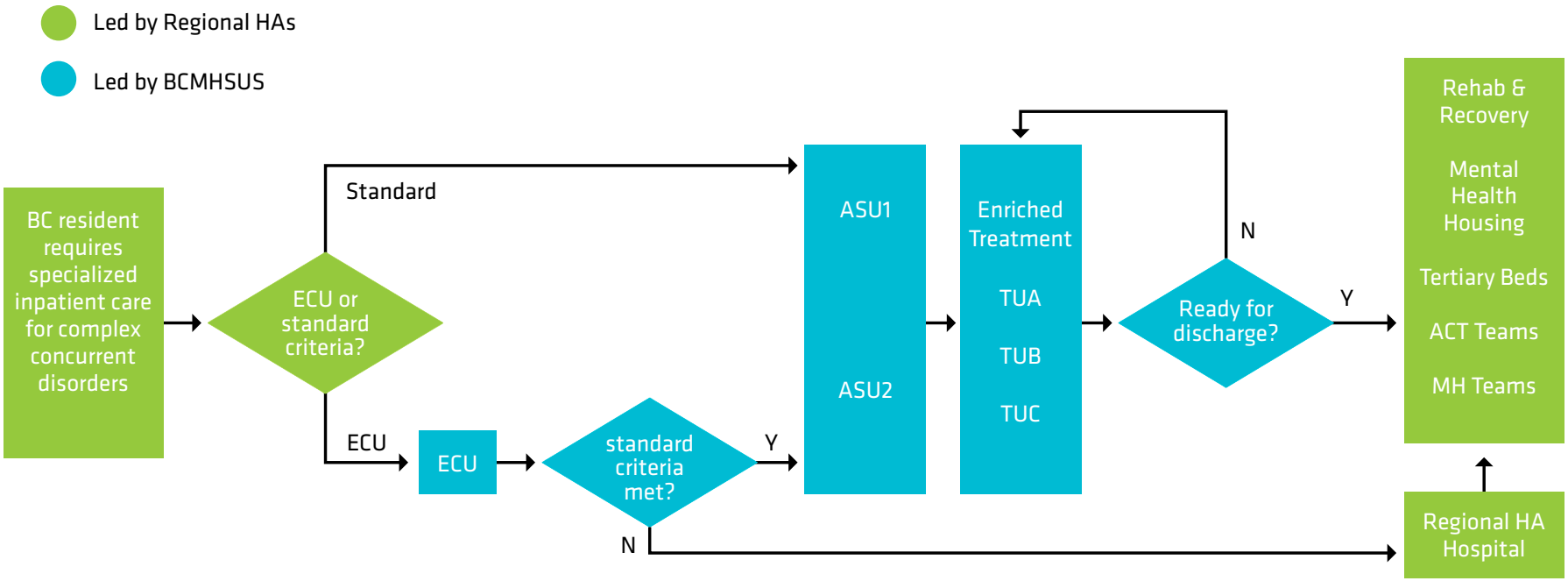
ENRICHED TREATMENT UNIT (ETU)

One enriched treatment unit (ETU) will be reserved for clients who are cognitively or behaviourally unable to participate fully in treatment on other units. These clients will receive specialized care, with the same emphasis on enhancing emotion regulation, long term substance use recovery skills, mental health symptom management, and an increasing emphasis on discharge planning and independent living skills. Therapeutic interventions will, however, be lower barrier to support individuals with lower cognitive abilities, low literacy levels, or other impairments that impact the complexity of treatment that they can tolerate. Staffing will support an increased need for prompting with activities of daily living (ADLs) and treatment protocols, and cognitive and other neurological assessments will be provided.

The four levels of care across seven units are a recognition that a client's recovery journey is nonlinear; individuals may require higher levels of care during the course of treatment. Co-location of the seven units enhances the ability to provide the most appropriate level of care while maintaining consistency and continuity of the client's treatment pathway and care plan. Upon completion of the client's care pathway and stay on the treatment unit, discharge home to their RHA for follow-up service and housing location will be arranged as part of a comprehensive long term plan of care.

Figure 4 provides an overview of the various units and the potential flow of clients through the units.

Figure 4: Overview of the Red Fish Healing Centre Units and Client Flow



ASSESSMENTS UPON ADMISSION

After being vetted and accepted for admission, arrangements are made for clients to arrive at the Red Fish Healing Centre. Upon arrival at the Red Fish Healing Centre, the first step is to ensure the client is comfortable. This is done by providing clean clothing, a shower and a meal to the admitted client.

An interdisciplinary team of clinicians and staff then conduct standardized assessment tests to gain an understanding of the client's mental health, addiction(s), physical health, social needs and risk profile, and develop an individualized treatment plan. A client is then seen individually by several different professionals. A member of the nursing staff administers intake assessments for violence risk (e.g. the Brøset Violence Checklist [BVC])[107], suicide risk and falls risk. Following this, either a nurse practitioner or general practitioner will conduct a primary care assessment and, within 24-hours of intake, a psychiatrist conducts a psychiatric assessment. Based on these initial evaluations, an individualized treatment plan is established with an initial focus on addressing immediate physical health concerns, stabilizing the client's mental health and managing their substance dependency.

Within one week, three additional assessments are carried out; an occupational therapist administers the Addiction Severity Index (ASI)[108], a nurse administers the Brief Symptom Inventory (BSI)[109], and a psychiatrist administers the Health of the Nation Outcome Scales (HoNOS).[110] Each of these three assessments is repeated at three and six months after intake (if applicable), and prior to discharge.

CLINICAL PATHWAYS

The Red Fish Healing Centre provides assessment, stabilization and treatment across the six domains of care. Individualized client care means that each client will engage in different aspects of the Red Fish Healing Centre program; no two client journeys are identical. A survey of B.C. complex concurrent disorder population needs revealed that although all clients have substance use concerns and histories of trauma, there are three primary clusters of mental illness in the complex concurrent disorders population: mood disorders, psychotic disorders, and disorders associated with substantial cognitive impairment.

All clients at the Red Fish Healing Centre receive structured support for instrumental activities of daily living (iADL[111]), meaningful activities and relationships, and medical treatment with a special focus on addiction and psychiatric medicine. In addition, targeted treatments for substance use, trauma, and community reintegration are offered. To treat primary mental illness, clients are engaged in either the psychosis pathway or the mood disorder pathway. Interventions are provided through regular psychiatrist consultations, group therapy sessions and individual care planning in collaboration with the client, their families, and their community supports.

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107 The BVC is a 6-item checklist designed to predict imminent (i.e. within 24 hours) violent behaviour. This is completed at intake and then daily by nursing staff.

108 The ASI is a semi-structured, comprehensive test across seven dimensions (medical, employment/support, alcohol use, drug use, legal, family/social and psychological) intended to provide a holistic picture of client health. It is facilitated within one week of intake by an occupational therapist.

109 Derogatis LR and Melisaratos N. The brief symptom inventory: an introductory report. Psychological Medicine. 1983; 13(3): 595-605.

110 The HoNOS is a simple, general assessment test given within a week of intake, three months after intake, six months after intake and prior to discharge. CMHA uses a modified 14-question version of the test.

111 ADLs are basic self-care tasks that include eating, bathing, dressing, toileting, mobility, and grooming. IADLs are slightly more complex skills including managing finances, handling transportation, shopping, preparing meals, using the telephone or other communication devices, managing medications, doing laundry, housework, and basic home maintenance.

THE PSYCHOSIS CLINICAL PATHWAY

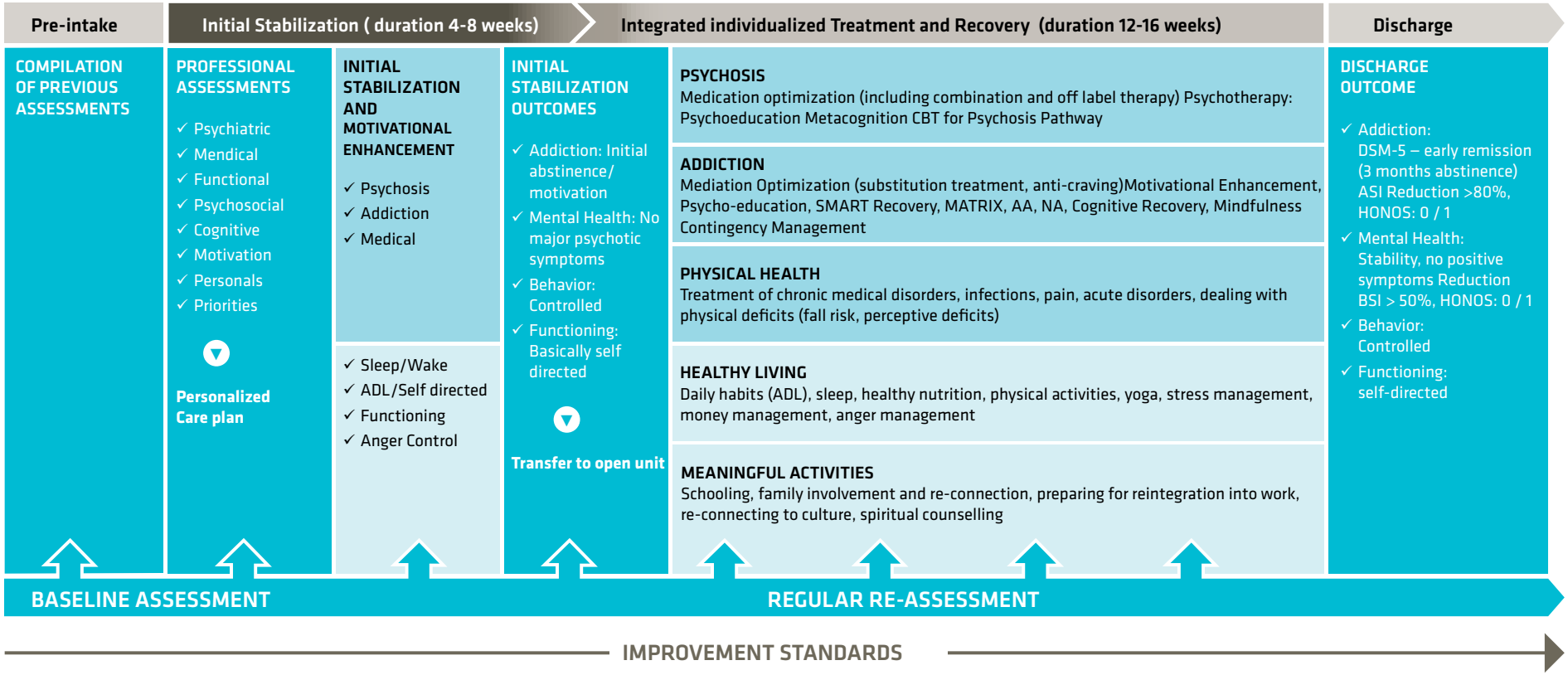
An example of a male client admitted to the psychosis clinical pathway is presented below.

A client is admitted to the assessment and stabilization unit (ASU) with complex substance use disorders and severe hallucinations and delusions. He is assessed and diagnosed with substance-induced psychosis and assigned to the psychosis pathway of care. In his first week at ASU, he undergoes detoxification from substances under close medical attention and is started on opioid agonist therapy and antipsychotics such as risperidone, quetiapine, or clozapine. He is oriented to meal times, group times, and the contingency management program, where he earns vouchers for each group he attends. He goes to daily check-in groups to discuss daily planning and basic coping skills. He identified exercise as a coping skill, and engages in physical fitness groups on the unit.

As his signs and symptoms of withdrawal and psychosis ameliorate, he attends psychoeducation groups on antipsychotic medications. He has demonstrated responsible use of his passes and his psychosis is responding well to antipsychotics, so he is transferred to a treatment unit. In the treatment unit, he attends SMART recovery for his substance use, pain management for his chronic pain, and CBT for Psychosis, to learn ways to recognize and challenge his delusional thoughts. Research indicates that the most debilitating problem in schizophrenia-spectrum conditions is impairments in everyday functioning, which spans major functional domains of independence in residence, productive activities, and social interactions.[112] Therefore, he works on increasing functioning in iADLs by participating in cooking groups, money management, and community integration groups. He engages in cognitive remediation therapy and social skills training with his peers, and eventually demonstrates readiness for self-administered medications. He is discharged back to his home health authority where he will be followed by an assertive community treatment team.

[112] Harvey P. Cognitive functioning and disability in Schizophrenia. Current Direction in Psychological Science. 2010; 19(4): 249-54.

Figure 5: Overview of the Psychosis Clinical Pathway



- ASSESSMENTS: Standardized screening and assessments.
- PATHWAY SPECIFIC CARE: Evidence based integration of medication, psycho-education and psychotherapeutic groups. Groups are initially shorter and simpler, increasingly demanding. Medication includes exhausting available medication, combination and in some cases off-label treatment.
- UNIVERSAL CARE: client-centered, strength-based support of personal functioning in society.
- IMPROVEMENT STANDARDS: Implementation of new treatments including new medications, new psycho-therapies, and new approaches such as eHealth and mHealth. Continued Teaching and Education for all staff.

THE MOOD DISORDERS CLINICAL PATHWAY

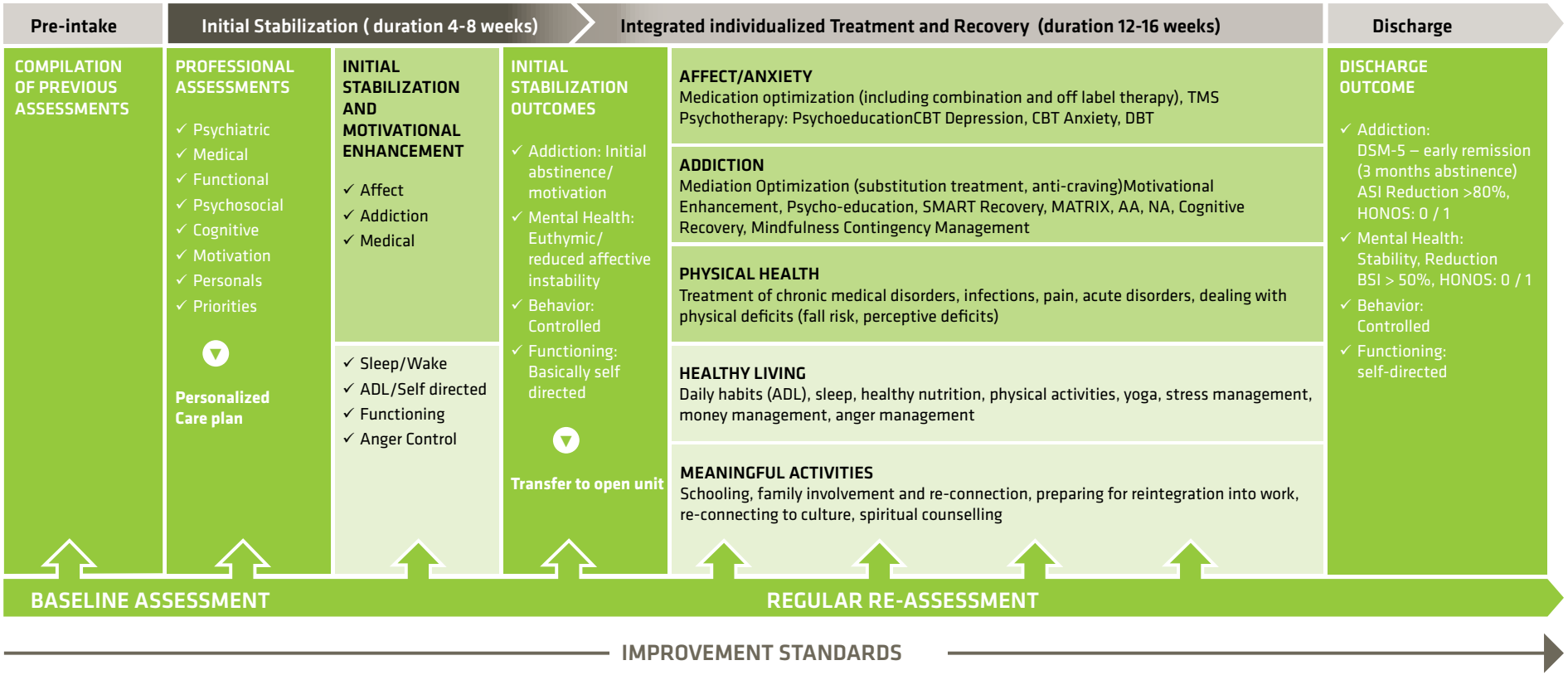
An example of a female client admitted to the mood disorders clinical pathway is presented below.

A client with recent violence history is admitted to the enhanced care unit with suicidal ideation, mood lability, and substance use disorders. The team diagnose her with bipolar disorder and borderline traits, and determine that she would be appropriate for the mood disorders pathway. She receives medications to stabilize her mood, help her with drug withdrawal and cravings, and manage her hepatitis C. Transcranial magnetic stimulation has been determined to be warranted to treat her refractory bipolar depression.

She develops a comfort plan with her team, so that she can better identify when she is in distress and how she and others can help. During her stay on the ECU, an occupational therapy assessment using the Independent Living Scale (ILS) has found evidence of difficulty with iADLs, prompting daily support and training. Based on a collaborative case conference with the client and her community team, they decide on transfer to a treatment unit, with an individualized care plan for iADL support.

Through motivational enhancement work with her team, she attends more treatment groups, including anger management, smoking cessation, and Alcoholics Anonymous. In a case conference, she and her family revealed a significant history of early adverse childhood experiences, so she is encouraged to participate in Women Seeking Safety and a DBT Skills group. She expressed an interest in obtaining her G.E.D. and a tailored program is created for her. She shows improvement in iADLs but still needs ongoing support and training, therefore she stays at the Red Fish Healing Centre for four more months. At the end of her stay, she has well-formed daily routines and skills for independent living and symptom management.

Figure 6: Overview of the Mood Disorders Clinical Pathway



- ASSESSMENTS: Standardized screening and assessments.
- PATHWAY SPECIFIC CARE: Evidence based integration of medication, psycho-education and psychotherapeutic groups. Groups are initially shorter and simpler, increasingly demanding. Medication includes exhausting available medication, combination and in some cases off-label treatment.
- UNIVERSAL CARE: client-centered, strength-based support of personal functioning in society.
- IMPROVEMENT STANDARDS: Implementation of new treatments including new medications, new psycho-therapies, and new approaches such as eHealth and mHealth. Continued Teaching and Education for all staff.

THE COGNITIVE IMPAIRMENT CLINICAL PATHWAY

An example of a male client admitted to the cognitive impairment clinical pathway is presented below.

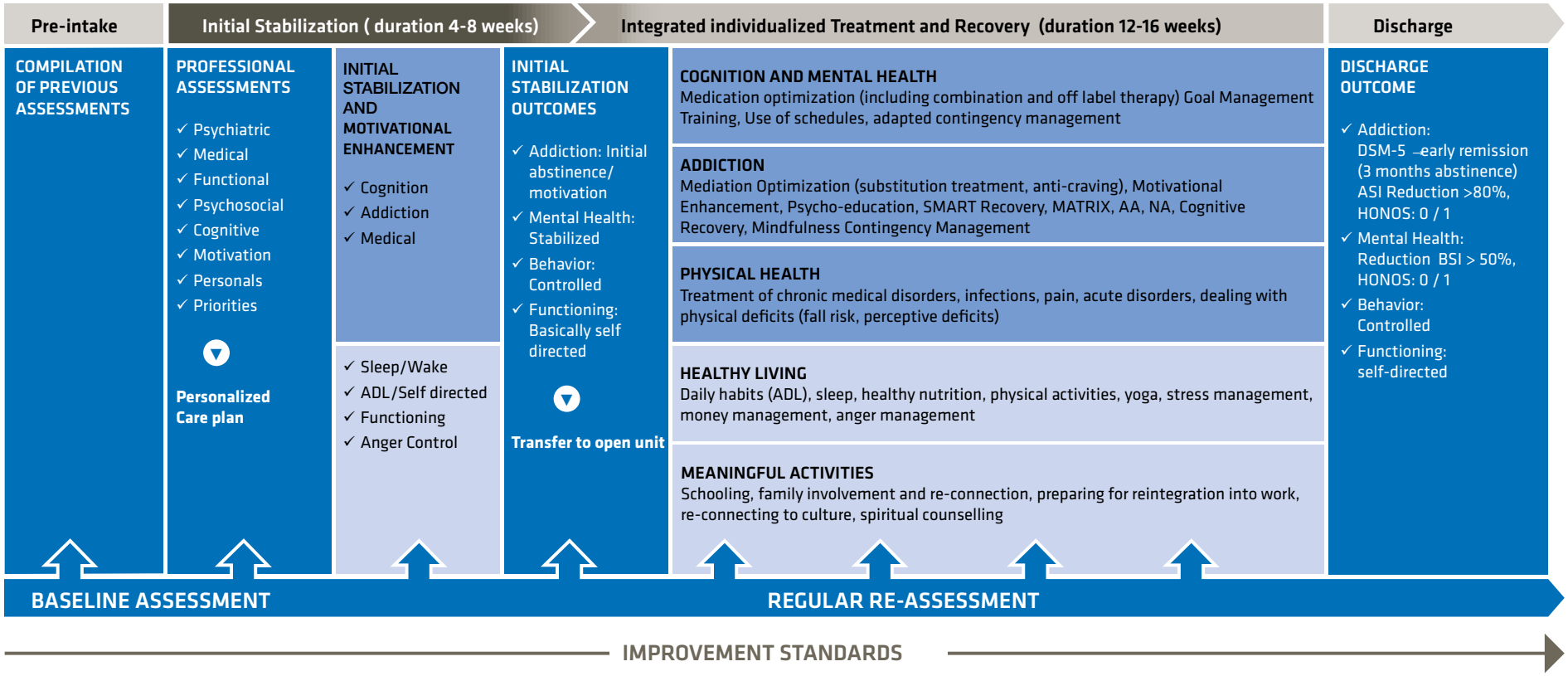
A client is admitted to the assessment and stabilization unit (ASU) with complex substance use disorders, ADHD, and generalized anxiety. After a few weeks in which he has stabilized from acute withdrawal symptoms, he participates in a psychology assessment, which reveals that he has moderately-severe cognitive impairment from an acquired brain injury.

His team develops an individualized care plan which reflects increased use of contingency management, cognitive aids such as written reminders of verbal discussions, and comfort planning. He attends daily check-in groups, and participates in many art therapy groups, as this helps him manage his anxiety. He is trialed on passes, but struggles to return on time, and has had several AWOLs. He is encouraged to attend accompanied group outings, where he receives support from staff.

His Red Fish and community teams collaboratively decide to transfer him to the enriched treatment unit. There, he spends a few weeks engaging in music and art therapy, so he can find low barrier ways to express himself in healthy ways. He participates in simplified cognitive behavioural therapy using “catch it, check it, change It” for his anxiety symptoms. His team helps him document plans for money management, comfort planning, and emotion regulation through mindfulness. These plans are shared with his community team so that his new tools can continue to be used after discharge.

After 10 weeks in ECU, he has an effective medication regime for treating his anxiety and his cravings, and has demonstrated adoption of healthy habits and improved communication skills. He is discharged back to his community team, who have arranged for supportive housing.

Figure 7: Overview of the Cognitive Impairment Clinical Pathway



- ASSESSMENTS: Standardized screening and assessments.
- PATHWAY SPECIFIC CARE: Evidence based integration of medication, psycho-education and psychotherapeutic groups. Groups are initially shorter and simpler, increasingly demanding. Medication includes exhausting available medication, combination and in some cases off-label treatment.
- UNIVERSAL CARE: client-centered, strength-based support of personal functioning in society.
- IMPROVEMENT STANDARDS: Implementation of new treatments including new medications, new psycho-therapies, and new approaches such as eHealth and mHealth. Continued Teaching and Education for all staff.

DISCHARGE AND COMMUNITY REINTEGRATION

The goal of treatment at the Red Fish Healing Centre is to support clients in their recovery from mental health, substance use, and other co-occurring challenges to be able to live successfully with the support of resources available in their home RHA. Most clients are discharged from the Red Fish Healing Centre into the care of the referring RHA. Planning for this transition begins with the development of the initial treatment plan, and is a continuous and collaborative process between the client, the Red Fish Healing Centre interdisciplinary care team, community-based programs and resources, family/support, and referring agencies (i.e. the RHAs).

Connection to a community support team (e.g. family, friends, an assertive community treatment [ACT] team) and secure stable housing (e.g. supported housing, residential care, independent living) is crucial to community reintegration. The Red Fish Healing Centre evaluates and recommends the housing arrangement and support team requirements for each client. It is the responsibility of the RHA to secure an appropriate care team and housing for the client.

DISCHARGE / TRANSFER LOCATIONS

Clients may be discharged or transferred to:

- The community, with access to an appropriate level of housing and with follow up support (e.g. ACT or mental health team), under supervision of the sending RHA
- The Recovery and Rehabilitation (R&R) program, for clients who need additional rehabilitation support following their treatment at the Red Fish Healing Centre prior to discharge into the community
- Heartwood Centre for Women, should the client benefit from a female-only unit
- Other specialized provincial programs (e.g., BC Psychosis)

A recent review of transitions at the Red Fish Healing Centre found that 83% of clients are discharged to the community under the supervision of the sending RHA, 12% are transferred to the R&R program and 1% are transferred to Heartwood. The remaining 4% are sent to other locations (or did not have their discharge destination recorded). [113]

The decision of where to discharge a client is made by the interdisciplinary treatment team in consultation with the RHA liaison officer, the client and their family.

Clients are ready for discharge from the Red Fish Healing Centre once the goals established with them at admission, and subsequently adjusted during monthly treatment plan meetings, are met and the client is stable, and sufficiently established on the road to recovery to allow reintegration into their community and the care of the RHA.

Voluntary clients may wish to discharge themselves before their goals have been met and they are sufficiently established on the road to recovery. In this situation, the Red Fish Healing Centre staff counsel them not to pursue discharge when they are upset by a certain set of circumstances, urging them to wait at least a day to discuss their desire for discharge with their interdisciplinary treatment team.

There are situations in which the Red Fish Healing Centre treatment team may decide to discharge a client before reaching treatment goals. This could occur under the following circumstances:

- There is no benefit to continued care, or their treatment goals could be met equally well in a less intensive care environment (e.g. in community treatment). If a client continuously does not participate in interventions, the integrated care team may consider discharging them, recommending an alternate treatment path, and welcoming them at a different time when the Red Fish Healing Centre program better matches their desired treatment and/or stage of recovery.
- The client's condition, whether mental or physical, deteriorates to the point where the Red Fish Healing Centre does not have the appropriate resources to deal with the acuity of the client's condition.
- The client's actions are incompatible with recovery and/or putting recovery of co-clients at risk. For example, their violent behaviour is putting other clients and/or staff at risk of harm, the client is caught dealing drugs to vulnerable clients and/or encouraging others to use drugs, or the client is coercing others into gangs or the sex trade.

A client in the Red Fish Healing Centre is not automatically discharged after use of a substance. Instead, use of drugs is viewed as a symptom of an illness indicating that additional intervention is warranted. However, if the client exhibits a use pattern indicating that abstinence and addiction treatment are no longer their goals, the client will be discharged and recommended to a different type of treatment that better matches their needs.

[113] AnalysisWorks. BCMHA Current State Review Summary. August 23, 2019.

VIRTUAL HEALTH

The COVID-19 pandemic has transformed the practice of medicine worldwide; there has been a dramatic increase in the number of patients seen virtually through telemedicine.[114] During the COVID-19 pandemic, a virtual health infrastructure was created at BCMHSUS programs that allowed for the provision of psychiatric and medical care for clients by providers, remotely. This virtual health infrastructure allowed for robust provision of services during pandemic conditions while minimizing the risk of infection to both clients and providers. Looking ahead to the post-pandemic period, virtual health will allow flexibility for providers to care for clients when they are unable to attend the Red Fish Healing Centre. Moreover, many of the providers have different schedules and virtual health will allow prescribers to join case conferences such as iCare and ID rounds on days where they are not scheduled to be at the facility. This would provide for greater input and participation from members of the client's care team, ultimately enhancing client care.

Beyond the current treatment, the Red Fish Healing Centre will utilize virtual care to extend the provision of health care beyond its walls. According to Elrod and Fortenberry, the hub and spoke organization of health care "arranges service delivery assets into a network consisting of an anchor establishment (hub) which offers a full array of services, complemented by secondary establishments (spokes) which offer more limited service arrays."[115] The Red Fish Healing Centre can be conceptualized as the hub in this model and community teams would be the spokes. Community teams often do not have the same expertise in the evaluation and provision of concurrent disorders care that is available at the Red Fish Healing Centre and clients may start to decompensate following discharge. Increased utilization of virtual care by the Red Fish Healing Centre for outpatient follow-up of discharged clients can help outpatient teams stabilize these clients and prevent readmission. As part of the Provincial Health Services Authority, the Red Fish Healing Centre can leverage the virtual health resources to provide expert consultation to concurrent disorders patients in rural, remote, and otherwise underserved areas, thereby establishing the Red Fish Healing Centre a truly provincial service.

[114] Calton B, Abedini N and Fratkin M. Telemedicine in the time of coronavirus. Journal of Pain and Symptom Management. 2020. https://doi.org/10.1016/j.jpainsymman.2020.03.019
[115] Elrod J and Fortenberry J. The hub-and-spoke organization design: An avenue for serving patients well. BMC Health Services Research. 2017; 17(1): 25-33.

CLIENT MEASUREMENT AND OUTCOMES

MEASUREMENT

The qualitative and quantitative measurement of client and program outcomes plays a critical role in assessing progress and readiness for discharge at the client level, and the operationalization of the Red Fish Healing Centre MOC at the site-level, respectively.

The Red Fish Healing Centre collects and tracks three assessment results for clients at both intake and discharge: the addiction severity index (ASI), the brief symptom inventory (BSI) and HoNOS. These measures are used in determining client readiness for discharge. Some of the quantitative target outcomes that would indicate a client is ready for discharge include early remission of addiction (three months of abstinence), a reduction in ASI score of at least 80%, a reduction in BSI score of at least 50% and a HoNOS score decrease. Outcome measures for the 3 client pathways are indicated in Figures 5, 6, and 7.

BCMHSUS is continuously evolving its suite of scorecards, indicators, and management reports that capture the key operational- and client-centered performance indicators necessary to support the management of services provided by the organization. The metrics to be used to track client outcomes are used for baseline quantification and ongoing tracking. Examples of measures obtained and reported on include the following:

Clinical

- Client changes in alcohol, drug, and tobacco use
- Client changes in mental health status
- Client subjective ratings of the program, including Patient Care Quality Office (PCQO) complaints
- Continuity of care after discharge, connection to appropriate services
- Staff education on best practices

Access and Flow

- Wait times to access the program
- Occupancy rates
- Percent of client who complete the program, compared to early exits
- Client lengths of stay

Safety

- Seclusion room use
- Client aggression events, suicide attempts, overdoses
- Medication errors
- Staff injuries

OUTCOMES

The published 2013 evaluation by Schütz and colleagues assessed 92 Burnaby Centre for Mental Health and Addiction clients within six weeks of entry into the program, with a follow-up assessment at six months for 47 (51%) of the initial 92 clients.[116] The average age of clients was 40.2 years, 65.2% were male and the average stay at the centre was 4.8 months. Based on the 47 clients for whom follow-up data was available, the Brief Symptom Inventory (BSI)[117] indicated a significant improvement in the dimensions of somatization, obsessive-compulsive behaviour, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. There was also a significant decline in the prevalence of substance use for alcohol (10.6% vs 34.0%), heroin (12.8% vs 31.9%) and cocaine (19.1% vs 63.8%) in the cohort of 47. Unfortunately, this study, like so many of the studies assessing this challenging population, suffers from a simple before-after study design with significant attrition. The 45 clients not included in the follow-up assessment had all left the facility prior to six months and the study was not adequately funded to include tracking these clients. This is the only available published study assessing client outcomes at the centre.

An unpublished 2019 review by Analysis Works found a mean length of stay (LOS) of approximately 4.5 months (with a median LOS of 4.0 months), similar to the 4.8 months observed by Schütz et al. above. Patient outcomes were assessed using the results from the Burnaby Centre's version of the Health of the Nation Outcome Scales (HoNOS) score, which measures behaviour, impairment and social functioning. In 2017/18, the average HoNOS score on admission was 22.3, declining to 11.8 on discharge. Similar results were observed for 2019 (21.3 declining to 12.1). An average improvement of 10.7 points was observed in the 162 clients with a HoNOS score at both admission and discharge.[118] The overall HoNOS score ranges from 0 to 48 (a lower score is 'better') and a change of between 4 – 8 points is clinically relevant.[119,120]

A study following individuals' transition into the community is currently being conducted (Reducing Overdose and Relapse: Concurrent Attention to Neuropsychiatric Ailments and Drug Addiction (ROAR CANADA)), funded by Health Canada.

116 Schütz C, Linden IA, Torchalla I et al. The Burnaby treatment center for mental health and addiction, a novel integrated treatment program for patients with addiction and concurrent disorders: results from a program evaluation. BMC Health Services Research. 2013; 13(1): 288.

117 The Brief Symptom Inventory is a brief psychological self-report symptom scale found to be an acceptable short alternative to its longer parent instrument, the SCL-90-R. The BSI evaluates psychological distress and psychiatric disorders in people and can be used to evaluate patient progress, determine effective treatment, and conduct psychological assessment. See Derogatis LR and Melisaratos N. The brief symptom inventory: an introductory report. Psychological Medicine. 1983; 13(3): 595-605.

118 AnalysisWorks. BCMHA Current State Review. August 23, 2019.

119 Parabiaghi A, Kortrijk H, Mulder C. Defining multiple criteria for meaningful outcome in routine outcome measurement using the Health of the Nation Outcome Scales. Social Psychiatry and Psychiatric Epidemiology. 2014; 49: 291–305.

120 Egger S, Weniger G, Prinz S et al. Health of the Nation Outcome Scales in a psychiatric inpatient setting: Assessing clinical change. Journal of Evaluation in Clinical Practice. 2015; 21: 236–41.

ACADEMIC AND PROVINCIAL CAPACITY BUILDING MANDATE

Research, education and teaching are formally embedded into the Red Fish Healing Centre program and considered integral to achieving organizational excellence and supporting translational science. The Red Fish Healing Centre intends to assume a provincial leadership role in the creation of new knowledge, identification of evolving and emerging research, and translation and integration of evidence into practice.

TEACHING

As a teaching organization, the Red Fish Healing Centre plays a key role in educating medical students, residents, fellows, nurses, social workers, occupational therapists and other allied health professionals. This practical, hands-on training is crucial to developing a workforce with the required skills to successfully treat individuals with complex concurrent disorders.

Training and research is based on close collaboration with local universities and colleges, including the University of British Columbia, Simon Fraser University, Langara College and Douglas College.

RESEARCH

Recommended practice for clinical interventions for individuals with both a psychiatric illness and a substance use disorder recognizes them as equally important concerns, and recommends concurrent treatment for both disorders in an integrated manner.[121,122,123] However, few individuals with concurrent disorders receive both mental health and substance use treatment, because of the historical separation and specialization of services and the tendency not to screen for both substance use disorders and mental illness.[124,125]

[121] Essock S, Mueser K, Drake R et al. Comparison of ACT and standard case management for delivering integrated treatment for co-occurring disorders. Psychiatric Services. 2006; 57(2): 185-96.

[122] McKee S, Harris G and Cormier C. Implementing residential integrated treatment for co-occurring disorders. Journal of Dual Diagnosis. 2013; 9(3): 249-59.

[123] Urbanoski K, Rush B, Wild T et al. Use of mental health care services by Canadians with co-occurring substance dependence and mental disorders. Psychiatric Services. 2007; 58(7): 962-9.

[124] McKee S. Concurrent substance use disorders and mental illness: Bridging the gap between research and treatment. Canadian Psychology. 2017; 58(1): 50-57.

[125] Drake R and Bond G. Implementing integrated mental health and substance abuse services. Journal of Dual Diagnosis. 2010; 6(3-4): 251-62.

Research and evidence-based clinical practice is constantly evolving. Recognizing that significant gaps in knowledge about individuals with severe and complex concurrent disorders remain,[126] the Red Fish Healing Centre will use the best available evidence to guide practice, and also constantly monitor the state of the literature and contribute to research to advance practice. Individuals with multiple comorbid diagnoses are regularly excluded from studies, leading to research being focused on single disorders, and populations that are easier to treat.[127] This means that evidence for medication, psychosocial, and psychotherapeutic interventions often are based on single disorder evidence and at times, needs to be adapted. Given the scarce evidence, research, education, and academic training are an integral component of the new Red Fish Healing Centre model of care, in order to facilitate sustained improvement of the health of this population. In light of this, the Red Fish Healing Centre will be both evidence-informed and evidence-informing.

Being evidence-informed refers to the utilization of a systematic approach ensuring the integration of evidence-based interventions into a treatment plan, while incorporating the unique values, preferences and circumstances of the client in a person-centred manner. Evidence-informed practice brings together local experience and expertise with the best available evidence from research.[128]

The Red Fish Healing Centre is uniquely positioned to contribute to the knowledge base about the complex concurrent disorder population. As a result, the Red Fish Healing Centre is committed to being evidence-informing by improving outcomes through embedding systematic quality improvement, program evaluation, and research into the model of care. An overarching knowledge exchange strategy promotes synergies and alignment of research and clinical practice across the BCMHSUS continuum of care. Ongoing research and evaluation will assess the effectiveness of leading practices for the Red Fish Healing Centre's unique, complex population. The adoption and creation of best-available evidence will include assessment tools, interventions, goals, and philosophies.

The research focus at the Red Fish Healing Centre will be on tangible clinical research evaluating clinical interventions to improve patient outcomes, with the goal of disseminating this research through publication in peer-reviewed scientific journals and presentation of the results at scientific conferences.

[126] McKee S. Concurrent substance use disorders and mental illness: Bridging the gap between research and treatment. Canadian Psychology. 2017; 58(1): 50-57.
[127] Ma H and Weng C. Identification of questionable exclusion criteria in mental disorder clinical trials using a medical encyclopedia. Biocomputing 2016: Proceedings of the Pacific Symposium. 2016; 219-30.
[128] Tasmanian Government. Department of Health. Evidence Informed Practice. Available online at https://www.dhhs.tas.gov.au/wihpw/principles/evidence_informed_practice. Accessed June 2020.

One excellent example of this philosophy is Red Fish's participation as one of two Canadian treatment facilities participating in ROAR CANADA, a 5-year research study funded by Health Canada that will focus on people being treated for severe concurrent disorders. The study will interview 1,500 clients on four different occasions and supplement this direct assessment with chart reviews and administrative data from medical and legal services.

By collecting data before, during, and after a client's stay at either of the two treatment facilities, the study results will identify what treatment-as-usual looks like, how the two sites differ, and how new integrated treatments change outcomes. This study will provide information on an often overlooked, but vulnerable section of the population and inform treatment protocols in the future.

Academic and applied research activities in the future are intended to encompass program evaluation, quality improvement, and innovation research. Embedded opportunities to gather data may include, but are not limited to:

- Standardized assessment data, using evidence-informed measures and cognitive assessments
- New pharmacotherapy
- The use and/or development of complementary and alternative medicine (CAM) treatments
- Novel psychosocial interventions and innovative modalities, e.g. transcranial magnetic stimulation, neuromodulation/biofeedback
- Longitudinal studies, e.g. changes in cognitive function associated with recovery
- Research related to population-specific treatments and clinical outcomes
- Understanding the role of culture in modulating illness, suffering and promoting recovery
- Cost-effectiveness and efficacy of conventional and CAM treatments

PROVINCIAL CAPACITY BUILDING AND PARTNERSHIPS

Successful partnerships are integral to the success of each complex client's overall journey of recovery. The key stakeholders that influence and integrate with care and ensure smooth transitions include the following:

REGIONAL HEALTH AUTHORITIES

The RHAs are key partners in the success of the Red Fish Healing Centre clients, acting as both referring agents seeking admission for their clients and receiving agents upon client discharge. The RHA Liaisons are the primary health authority connection to the Red Fish Healing Centre and participate in all of the monthly treatment plan meetings along with the client and the interdisciplinary team. The RHAs have responsibility for critical issues such as housing and ongoing care for their clients and therefore are crucial to the long-term outcomes of clients that have completed treatment at the Red Fish Healing Centre.

As one of the provincial expert groups on complex clients, the Red Fish Healing Centre actively partners with the RHAs through consultation and participation in case conferences regarding complex clients that are under RHA jurisdiction, regardless of whether those clients have been or will be Red Fish Healing Centre clients.

FAMILY AND FRIENDS

In order to support client recovery through client-centred care, family and friends are encouraged to participate in each client's recovery journey and can be a much-needed source of support for clients both during and after their stay at the Red Fish Healing Centre. Wherever possible, and with client approval, family and friends participate in the monthly treatment planning meetings with the interdisciplinary team.

BC HOUSING

The RHAs are responsible for housing their clients after discharge from the Red Fish Healing Centre. The Red Fish Healing Centre will help clients with housing and follow up in collaboration with the RHA case manager.

COMMUNITY RESOURCES

As the most highly specialized concurrent disorder treatment facility in British Columbia, the Red Fish Healing Centre acts as a resource to community partners in the area of concurrent disorder treatment.

CORRECTIONS

Some Red Fish Healing Centre clients are involved with the criminal justice system, meaning that the centre may be engaged with criminal justice system and law enforcement. Certain situations, such as a certified client who is absent without leave, require the Red Fish Healing Centre to contact police to facilitate the return of that client to the site.

SUMMARY

The province of British Columbia recognizes the need for effective, evidence-informed services for individuals with complex co-occurring mental health and substance use challenges. The Red Fish Healing Centre provides inpatient quaternary care that includes assessment, stabilization, treatment and support for the complex concurrent disorders population.

Driving the Red Fish Healing Centre's leadership, operations, and clinical care is a core program philosophy to provide care and treatment which is evidence-informed and data driven, person- and family-centred, team based, seamless and integrated, trauma informed, culturally safe and humble, and recovery oriented. These principles guide the Red Fish Healing Centre to adapt to evolving practices and client needs while remaining grounded in a foundation of values-driven priorities.

As part of the broad system of specialized care provided by BCMHSUS, the Red Fish Healing Centre provides a comprehensive program that addresses physical wellness, mental wellness, substance-free living, problem behaviours, family and intimacy and a meaningful life that gives clients a sense of hope – the belief that recovery is possible and that there is a potential for a better future. Integrated treatment is provided by a specialized interdisciplinary team, an approach enabling coordinated and comprehensive individualized care, ultimately leading to sustained treatment success, minimization of relapse and overall enhancement of the quality of care. Care occurs within a safe and healing environment, with engagement from clients, family members and partners in care. The Red Fish Healing Centre provides evidence-informed treatment and facilitates skill building, allowing clients to grow and succeed during their treatment and after their return to their home community.

A 2015 Australian review[129] identified the Red Fish Healing Centre program as one of the few established integrated concurrent disorders treatment programs worldwide and international researchers have visited to get a firsthand impression of the facility. The new state-of-the-art, virtually connected facility provides the environment that promotes innovation, evidence-based practice, and continuous quality improvement through excellence in research, education, and academic teaching and builds capacity to more effectively address the needs of people with concurrent disorders in B.C.

[129] Deady M, Barrett E, Mills K et al Effective Models of Care for Comorbid Mental Illness and Illicit Substance Use: An Evidence Check Review. 2015. NSW Mental Health and Drug and Alcohol Office. Available online at https://www.saxinstitute.org.au/wp-content/uploads/Comorbid-mental-illness-and-illicit-substance-use.pdf. Accessed September 2019.

APPENDIX A: EVIDENCE-INFORMED CONCURRENT DISORDERS SERVICES

Research on the effectiveness of pharmacological agents and psychosocial interventions for treating individuals with concurrent disorders continues to evolve. A key theme in the research literature, however, is the importance of combining both pharmacological agents and psychosocial interventions in the individualized treatment plan. The US Substance Abuse and Mental Health Services Administration (SAMHSA) clearly states that "pharmacotherapy alone is not an adequate treatment plan for individuals with co-occurring disorders." [130] Canadian guidelines for the treatment of individuals with concurrent disorders also indicates that "the best outcomes are achieved with combined use of antipsychotic medications and addiction-based psychosocial interventions."[131]

Recognizing the critical importance of combining both pharmacological agents and psychosocial interventions in an individualized treatment plan, the following section provides an overview of the research evidence associated with pharmacological therapies, psychosocial therapies and novel interventions. The separation of these therapies, especially of pharmacological and psychosocial therapies, is done strictly for the purposes of readability.

[130] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. General Principles for the Use of Pharmacological Agents to Treat Individuals with Co-Occurring Mental and Substance Use Disorders. 2012. Available online at https://store.samhsa.gov/system/files/sma12-4689.pdf. Accessed May 2019.

[131] Crockford D, Addington D. Canadian Schizophrenia Guidelines: Schizophrenia and other psychotic disorders with coexisting substance use disorders. The Canadian Journal of Psychiatry. 2017; 62(9): 624-34.

PHARMACOLOGICAL THERAPIES

In the US, the 2012 SAMHSA guidelines for the use of pharmacological agents to treat individuals with co-occurring mental and substance use disorders (COD) note that:[132]

Prescribers should be familiar with the full range of pharmacologic strategies available for both the mental and substance use disorders. Prescribers should not be limited to a single model, approach, category, or formulation of medications. In populations with COD, additional consideration should be given to the potential for abuse of prescribed medication. Side effects should be monitored carefully and differentiated from the effect of ongoing alcohol and/or drug use. Prescribers must also consider potential toxicities and drug interactions that may occur between medications prescribed, medications being considered, and tobacco, alcohol, and/or drug use to treat individuals with COD.

The 2017 Canadian guidelines for the treatment of individuals with schizophrenia and other psychotic disorders with coexisting substance use disorders note that there is "no evidence for any differential benefit for one antipsychotic over another for people with psychosis and coexisting substance use disorder". The guidelines, however, recommend the use of second-generation instead of first generation antipsychotic medications due to their "greater tolerability" and "potentially decreased likelihood for developing extrapyramidal side effects in persons with substance use disorders." For persons with alcohol use disorder and mental illness, there is "some evidence of efficacy for naltrexone, limited evidence for disulfiram and no current evidence for acamprosate." Results of research to date on effective pharmacological interventions for cocaine and marijuana use disorders have been negative.[133]

Numerous reviews have been published on potential pharmacotherapies for co-occurring substance use and psychiatric disorders, often with a focus on a particular class of substance use,[134] psychiatric disorder[135,136] or a specific treatment drug.[137,138] In 2019, two reviews were published which provide an up-to-date overview of the available evidence for the use of pharmacological agents in treating individuals with concurrent disorders.

The first review, by Murthy et al., drew the following conclusions:[139]

- Clozapine may be more efficacious than other antipsychotics in individuals with schizophrenia and comorbid substance use disorder.
- Valproate may be preferred over lithium and quetiapine in individuals with bipolar disorder and comorbid substance use disorder.
- Naltrexone is useful as an anti-craving agent in individuals with concurrent disorders.
- Varenicline is well tolerated and efficacious for individuals with severe mental illness and nicotine dependence.

Psychosocial interventions should start early in the course of treatment for individuals with concurrent disorders.

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[132] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. General Principles for the Use of Pharmacological Agents to Treat Individuals with Co-Occurring Mental and Substance Use Disorders. 2012. Available online at https://store.samhsa.gov/system/files/sma12-4689.pdf. Accessed May 2019.

[133] Crockford D, Addington D. Canadian Schizophrenia Guidelines: Schizophrenia and other psychotic disorders with coexisting substance use disorders. The Canadian Journal of Psychiatry. 2017; 62(9): 624-34.

[134] Lev-Ran S, Balchand K, Lefebvre L et al. Pharmacotherapy of alcohol use disorders and concurrent psychiatric disorders: A review. Canadian Journal of Psychiatry. 2012; 57(6): 342-9.

[135] Bennett M, Bradshaw K and Catalano L. Treatment of substance use disorders in schizophrenia. The American Journal of Drug and Alcohol Abuse. 2017; 43(4): 377-90.

[136] Coles A, Sasiadek J & George T. Pharmacotherapies for co-occurring substance use and bipolar disorders: A systematic review. Bipolar Disorders. 2019; 21(7): https://doi.org/10.1111/bdi.12794.

[137] Sawicka M & Tracey D. Naltrexone efficacy in treating alcohol-use disorder in individuals with comorbid psychosis: A systematic review. Therapeutic Advances in Psychopharmacology. 2017; doi.org/10.1177/2045125317709975.

[138] Arranz B, Garriga M, Carcia-Rizo et al. Clozapine use in patients with schizophrenia and a comorbid substance use disorder: A systematic review. European Neuropsychopharmacology. 2018; 28(2): 227-42.

[139] Murthy P, Mahadevan J, Chand P. Treatment of substance use disorders with co-occurring severe mental health disorders. Current Opinions in Psychiatry. 2019; 32: 293 – 99.

The second review by Iqbal et al. focused on therapeutic recommendations for substance use disorder in relation to major depressive disorder (MDD), anxiety disorders and attention-deficit hyperactivity disorder (ADHD).[140] With respect to MDD, antidepressant medication may be successful in "alleviating depressive symptoms, and possibly reducing substance use." The overall effect size is small to moderate and positive outcomes usually require at least six weeks of treatment.

With respect to anxiety disorders, buspirone may alleviate anxiety and decrease the frequency and quantity of alcohol consumption among persons with alcohol use disorder and anxiety but "the long-term utility of buspirone in reducing anxiety and substance use remains uncertain, and the high placebo response rate makes detecting any possible effects of the treatment difficult." Paroxetine has demonstrated its efficacy over placebo in treating social anxiety and alcohol use disorder simultaneously but treatment is "often discontinued" because of the "high rates of sexual dysfunction as a side effect."

Finally, with respect to ADHD, the use of stimulant and nonstimulant medications "has been controversial over the years. The main reason for reluctance to prescribe psychostimulants is their "high abuse potential" or that "stimulant treatment could worsen the substance use disorder." Close monitoring for potential misuse, abuse and diversion can reduce the concern about abuse potential.

The review by Iqbal et al. also concludes that psychotherapeutic approaches should be used when treating substance use disorders in relation to MDD, anxiety disorders and ADHD.

[140] Iqbal M, Levin C, Levin F. Treatment for substance use disorder with co-occurring mental illness. Focus. 2019; 17: 88-97.

HARM REDUCTION

Overcoming addiction to harmful substances can be a cyclical journey, even when a client's goal is abstinence. This is especially true when substance dependency is accompanied by one or more psychiatric problems.[141] Evidence suggests that a majority of individuals will require multiple episodes of treatment over several years to achieve stable recovery.[142,143] That is, "relapse is the norm rather than the exception."[144] Substance use disorders are now recognized as a "chronic relapsing disorder from which it is nevertheless possible to achieve successful recovery whilst remaining alert to the propensity to relapse."[145]

The following section provides a brief overview of the research evidence supporting harm reduction approaches.

OPIOID AGONIST THERAPY

Opioid use disorder is one of the most challenging forms of addiction facing the health care system in British Columbia and a major driver of the recent surge in illicit drug overdose deaths in the province.[146]

For individuals with a concurrent disorder, "a harm-reduction model is more appropriate than an abstinence model, especially during the early stages of treatment when the patient has uncertain motivation to change." [147]

Buprenorphine and methadone appear to be equally effective for reducing illicit opioid use.[148,149,150] Nevertheless, the B.C. Guideline for the Clinical Management of Opioid Use Disorder "strongly endorses the use of buprenorphine/naloxone as the preferred first-line treatment" unless contraindications to buprenorphine/naloxone exist.[151] Buprenorphine is 4 – 6 times safer than methadone in terms of overdose risk[152,153] and has a lower potential for cardiotoxicity[154] and for drug-drug interactions with many common medications (e.g., antibiotics, antidepressants, antiretrovirals).[155]

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[141] Scott CK, Foss MA and Dennis ML. Pathways in the relapse–treatment–recovery cycle over 3 years. Journal of Substance Abuse Treatment. 2005; 28(2): S63-S72.
[142] Clarke P, Lewis T, Myers J et al. Wellness, emotion regulation, and relapse during substance use disorder treatment. Journal of Counselling & Development. 2020; 98: 17-28.
[143] Simoneau H, Kamgang E, Tremblay J et al. Efficacy of extensive intervention models for substance use disorders: A systematic review. Drug and Alcohol Review. 2018; 37(1): S246-62.
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[145] Strang J, Volkow N, Degenhardt L et al. Opioid use disorder. Nature Reviews: Disease Primers. 2020; 6(3): 28.1-
[146] British Columbia Centre on Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder. 2017. Available online at https://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf. Accessed January 2020.
[147] Bellack A, Bennett M, Gearon J et al. A randomized clinical trial of a new behavioural treatment for drug abuse in people with severe and persistent mental illness. Archives of General Psychiatry. 2006; 63: 426-32.
[148] Mattick R, Breen C, Kimber J et al. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. Cochrane Database of Systematic Reviews. 2009; 3: CD002209.
[149] Mattick R, Breen C, Kimber J et al. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Database of Systematic Reviews. 2014; 2: CD002207.
[150] Volkow N, Jones B, Einstein E et al. Prevention and treatment of opioid misuse and addiction: A review. JAMA Psychiatry. 2019; 76(2): 208-216.
[151] British Columbia Centre on Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder. 2017. Available online at https://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf. Accessed January 2020.
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[154] Chou R, Weimer M, Dana T. Methadone overdose and cardiac arrhythmia potential: Findings from a review of the evidence for an American Pain Society and College on Problems of Drug Dependence clinical practice guideline. The Journal of Pain. 2014; 15(4): 338–65.
[155] Kapur B, Hutson J, Chibber T et al. Methadone: A review of drug-drug and pathophysiological interactions. Critical Reviews in Clinical Laboratory Sciences. 2011; 48(4): 171-95.

The B.C. guideline "does endorse the use of methadone as a first-line therapy when appropriate and contraindications to buprenorphine/naloxone exist, and supports the use of methadone as a second-line option when buprenorphine/naloxone treatment proves to have limitations or is initially ineffective."[156] Furthermore, the B.C. guideline indicates that "slow-release oral morphine (prescribed as once-daily witnessed doses) can be considered for patients who have been unsuccessful with first- and second-line treatment options, or who have contraindications to first- and second-line treatment options."[157]

PSYCHOSOCIAL INTERVENTIONS

In the 2015 report Psychosocial Interventions for Mental and Substance Use Disorders: A Framework for Establishing Evidence-Based Standards, the US Institute of Medicine (IOM) defines psychosocial interventions for mental health and substance use disorders as "interpersonal or informational activities, techniques, or strategies that target biological, behavioral, cognitive, emotional, interpersonal, social, or environmental factors with the aim of reducing symptoms of these disorders and improving functioning or well-being."[158]

The report further notes that the efficacy of a broad range of psychosocial interventions has been established "through hundreds of randomized controlled clinical trials and numerous meta-analyses."[159]

The psychosocial interventions most recommended, especially during the active treatment phase, include:[160,161,162]

- Cognitive-behavioral therapy
- Dialectical behavior therapy
- Psychoeducation
- Motivational interventions
- Self-help groups
- Social skills training
- Increasing healthy pleasures
- Contingency management
- Relapse prevention

[156] British Columbia Centre on Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder. 2017. Available online at https://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf. Accessed January 2020.

[157] British Columbia Centre on Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder. 2017. Available online at https://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf. Accessed January 2020.

[158] Institute of Medicine. Psychosocial Interventions for Mental and Substance Use Disorders: A Framework for Establishing Evidence-Based Standards. 2015. Available online at http://www.nationalacademies.org/hmd/Reports/2015/Psychosocial-Interventions-Mental-Substance-Abuse-Disorders.aspx. Accessed May 2019.

[159] Institute of Medicine. Psychosocial Interventions for Mental and Substance Use Disorders: A Framework for Establishing Evidence-Based Standards. 2015. Available online at http://www.nationalacademies.org/hmd/Reports/2015/Psychosocial-Interventions-Mental-Substance-Abuse-Disorders.aspx. Accessed May 2019.

[160] McKee S. Concurrent substance use disorders and mental illness: Bridging the gap between research and treatment. Canadian Psychology. 2017; 58(1): 50-57.

[161] Zik J. Updated review on the integrated treatment of co-occurring disorders. Addiction and Clinical Research. 2019; 3(1): 1-9.

[162] Cristea IA, Gentili C, Cotet CD et al. Efficacy of psychotherapies for borderline personality disorder: a systematic review and meta-analysis. JAMA Psychiatry. 2017; 74(4): 319-28.

COGNITIVE-BEHAVIORAL THERAPY

Cognitive-behavioral therapy (CBT) refers to a "class of interventions that share the basic premise that mental disorders and psychological distress are maintained by cognitive factors... The basic model posits that therapeutic strategies to change the maladaptive cognitions lead to changes in emotional distress and problematic behaviors."[163] The strongest support for the effectiveness of CBT exists for anxiety disorders, somatoform disorders, bulimia, anger control problems and general stress.[164]

The 2019 meta-analysis by Magill and colleagues found that CBT leads to a 15-26% improvement in outcomes for alcohol and other drug use disorders compared with untreated or minimally treated controls.[165] Turner et al. found that CBT "was significantly more efficacious than other interventions pooled in reducing positive symptoms" associated with psychosis.[166] Laws and co-authors, in their meta-analysis of CBT and schizophrenia concluded that CBT "has a small therapeutic effect on functioning at end-of-trial, although this benefit is not evident at follow-up."[167]

DIALECTICAL BEHAVIOR THERAPY

Dialectical behavior therapy (DBT) is a specific model of CBT that was originally developed for individuals with borderline personality disorder (BPD). [168]Historically, individuals with BPD, who have high rates of suicide and parasuicidal behavior, have been difficult to treat with high rates of treatment failure. DBT focuses on the following behavioural targets: "(1) decrease life-threatening suicidal and parasuicidal acts; (2) decrease therapy-interfering behaviors (e.g. extensive phoning of therapist, premature leaving of therapy); (3) decrease quality of life-interfering behaviors (e.g. depression, substance abuse); and (4) increase behavioral skills (e.g. emotional regulation, mindfulness, and self-management)."[169]

A 2017 systematic review of the efficacy of psychotherapies for BPD found that only DBT and psychodynamic approaches were more effective than control interventions.[170] A 2014 systematic review focusing specifically on the effectiveness of DBT found that DBT was effective in reducing suicide and suicidal behaviour. DBT was only marginally better that treatment as usual (TAU) in reducing attrition during treatment and had no effect in reducing depression symptoms.[171] A more recent meta-analysis found that DBT reduced self-directed violence and reduced the frequency of psychiatric crisis interventions but did not reduce suicidal ideation. The authors suggest that "our findings may reflect the prioritization of behavior over thoughts within DBT."[172]

[163] Hofmann S, Asaani A, Vonk I et al. The efficacy of cognitive behavioral therapy: A review of meta-analysis. Cognitive Therapy and Research. 2012; 36(5): 427-40.
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[165] Magill M, Ray L, Kiluk B et al. A meta-analysis of cognitive-behavioral therapy for alcohol or other drug use disorders: Treatment efficacy by contrast condition. Journal of Consulting and Clinical Psychology. 2019; 87(12): 1093-105.
[166] Turner D, Gaag M, Karyotaki et al. Psychological interventions for psychosis: A meta-analysis of comparative outcome studies. American Journal of Psychiatry. 2014; 171(5): 523-38.
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171 Panos P, Jackson J, Hasan O et al. Meta-analysis and systematic review assessing the efficacy of dialectical behavior therapy (DBT). Research on Social Work Practice. 2014; https://doi.org/10.1177/1049731513503047.
172 DeCou C, Comtois K and Landes S. Dialectical behavior therapy is effective for the treatment of suicidal behavior: A meta-analysis. Behavior Therapy. 2019; 50: 60-72.

PSYCHOEDUCATION AND MOTIVATIONAL INTERVENTIONS

Psychoeducation involves providing clients with clear and accurate information about mental illness and substance use. In a systematic review, group-counselling interventions, all of which included education, were "remarkably consistent in terms of positive effects on substance use outcomes and a wide range of outcomes other than symptoms of mental illness."[173] It is an essential service for individuals with concurrent disorders.[174] Since many clients with concurrent disorders are ambivalent about reducing or eliminating substance use, motivational interventions such as motivational interviewing (MI) or motivational enhancement therapy (MET), can be helpful in reducing substance use.[175,176] Both MI and MET are evidence-based practices recommended by the US Substance Use and Mental Health Services Administration (SAMHSA).[177] Some evidence is emerging that MI can be effective even absent its directive elements, indicating the vital importance of the therapeutic relationship.[178] The strongest evidence for the effectiveness of MI is its value in increasing abstention from alcohol use.[179]

[173] Drake RE, O'Neal EL and Wallach MA. A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. Journal of Substance Abuse Treatment. 2008; 34(1): 123-38.
[174] Substance Use and Mental Health Services Administration. Substance Abuse Treatment for Persons with Co-Occurring Disorders. 2013. Available at https://store.samhsa.gov/system/files/sma13-3992.pdf. Accessed January 2020.
[175] Zik J. Updated review on the integrated treatment of co-occurring disorders. Addiction and Clinical Research. 2019; 3(1): 1-9.
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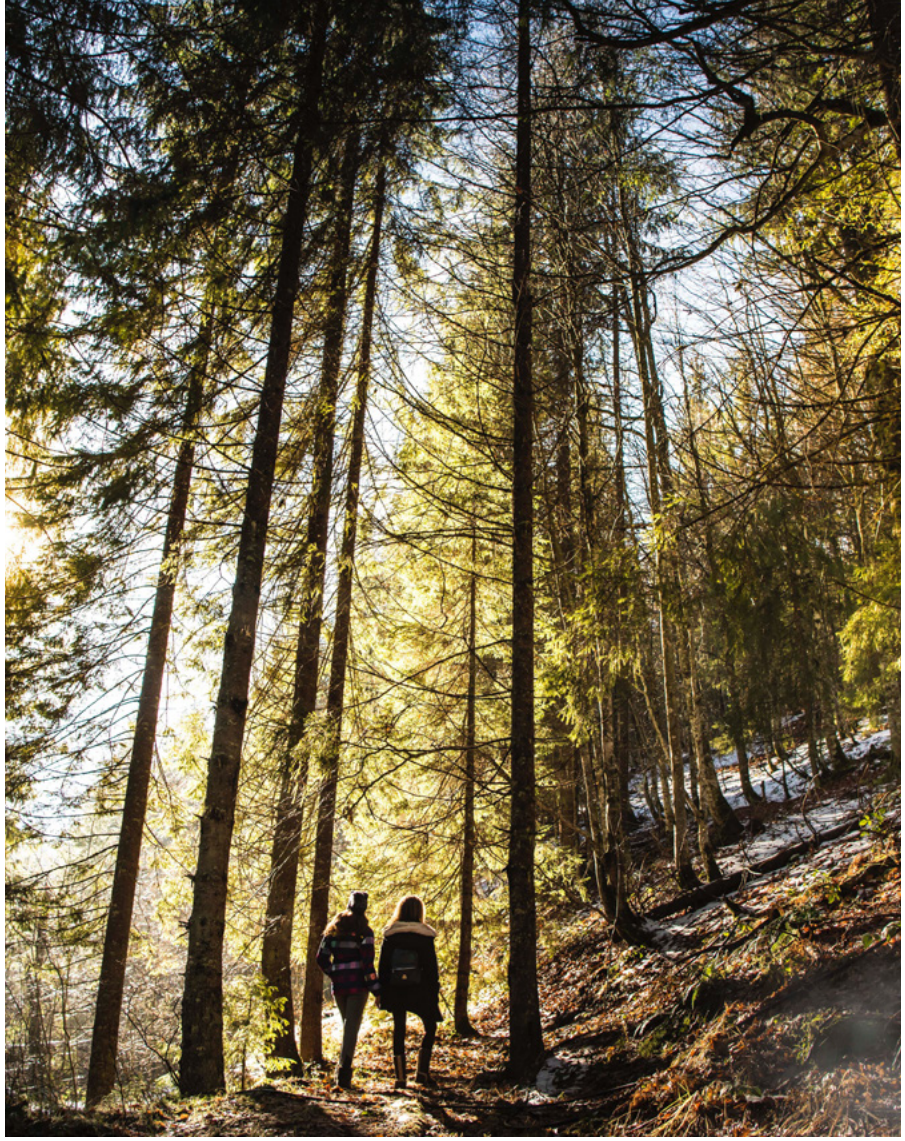
[177] Substance Use and Mental Health Services Administration. Enhancing Motivation for Change in Substance Use Disorder Treatment. 2019. Available at https://store.samhsa.gov/system/files/pep19-02-01-003_0.pdf. Accessed January 2020.
[178] Kuerbis A, Lynch KG, Shao S et al. Examining motivational interviewing's effect on confidence and commitment using daily data. Drug and Alcohol Dependence. 2019; 204: 107472.
[179] Hunt G, Siegfried N, Morley K et al. Psychosocial interventions for people with both severe mental illness and substance misuse. Cochrane Database of Systematic Reviews. 2019, https://doi.org/10.1002/14651858.CD001088.pub4.

SELF-HELP GROUPS

Self-help groups, alternatively referred to as support groups, mutual-aid groups, peer-led support groups, consumer-led support groups, multifamily groups or family-led support groups, operate on the belief that a group of individuals with common problems can facilitate recovery in one another.[180] The research evidence suggests that self-help groups for individuals with lived experience of mental illness are effective and have positive outcomes. After reviewing the available literature, Worral and colleagues state that "across many types of support groups, there is a strong, scientifically rigorous evidence base for the effectiveness of support groups in providing positive improvements to wellbeing and the recovery of participants. Outcomes include reduced symptoms, number of crisis hospitalizations and use of services, as well as improved social competence and social networks, increased healthy behaviors and perceptions of wellbeing."[181]

Individuals with dual diagnoses can sometimes find "a lack of acceptance and empathy" at "single focus" groups, which has led to the creation of similar groups specifically for individuals with concurrent mental health and substance use disorders (e.g. Double Trouble in Recovery [DTR], Dual Recovery Anonymous [DRA], Dual Disorders Anonymous [DDA]).[182] Several research studies suggest that attending a DTR group leads to reduced drug/alcohol use and an improved perception of mental health[183,184] but the overall evidence base of effectiveness is limited.[185]



[180] Worrall H, Schweizer R, Marks E et al. The effectiveness of support groups: A literature review. Mental Health and Social Inclusion. 2018; 22(2): 85-93.
[181] Worrall H, Schweizer R, Marks E et al. The effectiveness of support groups: A literature review. Mental Health and Social Inclusion. 2018; 22(2): 85-93.
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[185] Worrall H, Schweizer R, Marks E et al. The effectiveness of support groups: A literature review. Mental Health and Social Inclusion. 2018; 22(2): 85-93.

SOCIAL SKILLS TRAINING

Social skills training, such as practicing conversational skills, assertiveness and drug-refusal skills can help the client reach recovery goals. Social skills training (listening, self-disclosure, expressing feelings/desires, and addressing conflict) are usually offered in a group setting, which allows the group to discuss the skills to be gained, observe the group leader model the skills and then role play situations in which the skill could be used.[186] Active practice of social skills in group settings, with encouraging feedback, is "more engaging and memorable" than discussion-based teaching would be.[187]

Social skills training is invariably included as one component of a broader approach to treatment, such as the behavioural treatment for substance abuse in severe and persistent mental illness (BTFAS).[188] This intervention included a social skills training component offered in groups of 4-6, twice per week for six months, led by trained therapists. The focus of the social skills training was to "teach participants how to refuse drugs, engage in alternative social activities, and develop non-drug using social contacts."[189] An evaluation of the program showed a significant improvement in clean urine tests, length of time in treatment, medication adherence, relapse rates and quality of life.[190] It is challenging, however, to tease out the specific role of social skills training from the other elements of BTFAS in achieving this success. Nevertheless, it is important to remember that "programs integrating multiple interventions are more likely to be positively related to better outcomes than single interventions."[191]

INCREASING HEALTHY PLEASURES

Another intervention that is often included as one component of a broader approach to treatment is increasing healthy pleasures. Boredom, anxiety, depression and craving present risks to recovery so an important goal is to increase healthy pleasures, or meaningful activities, with the intent that these will become part of the client's daily routine. For individuals with substance use, a great deal of time is spent seeking and using substances; while in recovery, a great deal of time is spent doing the work of recovery. Eventually, other meaningful activities must be found to fill the time freed up by no longer using substances.[192] Several small qualitative studies report that having a meaningful routine with structured activities, such as work, school, volunteering and recreation are a key component of not using substances.[193,194] SAMHSA recommends that clinicians dealing with concurrent disorders provide sufficient structure to their clients to allow each day to have meaningful activities, and avoid risky activities, so that new "pleasurable activities… derive 'highs' from sources other than substance use."[195]

[186] Substance Use and Mental Health Services Administration. Substance Abuse Treatment for Persons with Co-Occurring Disorders. 2013. Available at https://store.samhsa.gov/system/files/sma13-3992.pdf. Accessed January 2020.
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CONTINGENCY MANAGEMENT

Contingency management (CM) is the systematic application of incentives and/or disincentives for the purpose of modifying behaviors. CM posits that external rewards can take the place of internal motivation to help achieve a goal (e.g. drug abstinence) until the individual's recovery has progressed sufficiently to allow their own internal motivation to move them towards their goals.

More recent evidence appears to support the effectiveness of including contingency management in a treatment program in terms of increased treatment retention times and longer periods of abstinence.[196,197] One critique of contingency management is its durability. The review by Davis et al. found a statistically significant during-treatment effect in 59 of 69 (86%) studies. Of the studies with follow-up data, 8 of 28 (29%) found that the effect continued after CM was discontinued, indicating a reduction in the effectiveness of CM following treatment termination.[198]

196 Davis DR, Kurti AN, Skelly JM et al. A review of the literature on contingency management in the treatment of substance use disorders, 2009–2014. Preventive Medicine. 2016; 92: 36-46.
197 Fazzino T, Bjorlie K and Lejuez C. A systematic review of reinforcement-based interventions for substance use: Efficacy, mechanisms of action, and moderators of treatment effects. Journal of Substance Abuse Treatment. 2019; 104: 83-96.
198 Davis DR, Kurti AN, Skelly JM et al. A review of the literature on contingency management in the treatment of substance use disorders, 2009–2014. Preventive Medicine. 2016; 92: 36-46.

RELAPSE PREVENTION

As noted earlier, overcoming addiction to harmful substances can be a cyclical journey, even when a client's ultimate goal is abstinence, especially for individuals with concurrent disorders. One specific model of CBT that is designed to assist in this area is the relapse prevention (RP) model. RP "helps clients identify internal and external high-risk situations and triggers, and then offers behavioral and cognitive interventions to promote the use of new skills and effective coping strategies to increase self-efficacy in managing high-risk situations without using substances."[199] Both SAMHSA and the BC Ministry of Health recommend teaching skills that will aid in relapse prevention.[200,201] SAMHSA's recommendations to clinicians include practicing damage control (e.g. if you do slip, quit early), escaping or avoiding high-risk situations and seeking healthy pleasures.

The RP model of CBT was first described in 1985. In 2010, the mindfulness-based relapse prevention (MBRP) program, an eight-session, group-based program, was developed.[202] Part of the value of group therapy, in addition to lower costs than individual therapy, appears to be "the public nature of group therapy (that) can represent a more powerful incentive to avoid relapse by providing a robust source of external control that can counterbalance a disorder characterized by the breakdown of internalized control mechanisms."[203] The theory behind mindfulness training, based on neuroimaging studies, is that "mindfulness training will result in less dysfunction in the brain systems and pathways that have been implicated in addictive behaviors and addictive behavior relapse."[204]

Evidence of the effectiveness of MBRP in treating substance use disorders is mixed. One recent review found that MBRP reduced the frequency and severity of substance misuse, the intensity of cravings and the severity of stress.[205] Another review also identified the benefits with respect to the intensity of cravings but found no significant differences between MBRP and comparators on relapse, treatment dropout or symptoms of depression or anxiety.[206] There is also the recognition that individuals with concurrent disorders tend to be more challenging to treat that those with either condition alone, with lower retention in treatment and poorer treatment adherence.[207] At the Red Fish Healing Centre, a variety of modalities are used to determine best fit and response is monitored for the individual client.

[199] Morin J, Harris M and Conrod P. A Review of CBT Treatments for Substance Use Disorders. Oxford University Pres. 2018.
[200] Substance Use and Mental Health Services Administration. Substance Abuse Treatment for Persons with Co-Occurring Disorders. 2013. Available at https://store.samhsa.gov/system/files/sma13-3992.pdf. Accessed January 2020.
[201] BC Ministry of Health. Provincial Guidelines for Biopsychosocialspiritual Withdrawal Management Services – Adult. 2017. Available at: http://www.health.gov.bc.ca/library/publications/year/2017/adult-withdrawal-management-services-guidelines-final.pdf. Accessed January 2020.
[202] Morin J, Harris M and Conrod P. A Review of CBT Treatments for Substance Use Disorders. Oxford University Pres. 2018
[203] Coco G, Melchiori F, Oieni V et al. Group treatment for substance use disorder in adults: A systematic review and meta-analysis of randomized-controlled trials. Journal of Substance Abuse Treatment. 2019; 99: 104-16.
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[205] Li W, Howard M, Garland E et al. Mindfulness treatment for substance misuse: A systematic review and met-analysis. Journal of Substance Abuse Treatment. 2017; 75: 62-96.
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NOVEL INTERVENTIONS

Newer potential interventions for treating complex concurrent disorders include non-invasive brain stimulation through repetitive transcranial magnetic stimulation, deep brain stimulation via surgically implanted electrodes and the use of virtual reality.

Non-invasive brain stimulation (NIBS) through repetitive transcranial magnetic stimulation (rTMS) or transcranial direct current stimulation (tDCS) is being investigated as an approach to treating SUD and MDD, particularly in cases where conventional therapy has failed.[208] NIBS refers to a "set of technologies and techniques with which to transcranially (i.e., noninvasively) modulate excitability of specific brain areas and the large-scale networks in which they participate."[209] Current research evidence suggests that NIBS may be effective in reducing cravings and/or consumption of nicotine, stimulants such as methamphetamine and cocaine, and alcohol.[210]

Computerized retraining of cue responses. Given the activation of approach behavior by cues such as seeing the substance paraphernalia or situations associated with substance use, the Red Fish Healing Centre is currently testing a computerized approach which trains avoidance behavior, when these cues appear.

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