Stearn, Anne HLTH:EX

From: Glynn, Keva HLTH:EX
Sent: Tuesday, February 7, 2017 4:44 PM
To: Brown, Stephen R HLTH:EX; Hughes, Doug J HLTH:EX
Cc: Kiewiet, Nargis HLTH:EX; Casanova, Tamara HLTH:EX
Subject: Best practices by substance
Attachments: Stimulant Fact Sheet.docx; Opiate Fact Sheet.docx; Hallucinogen Fact Sheet.docx; Depressant Fact Sheet.docx; MHSU SoC - Draft - 05AUG16 (KG-BB).docx

Hi Stephen, I've attached material in follow up to your question regarding best practice treatment modalities by substance. An earlier draft of the MHSU policy paper also includes a summary of the literature on best practices by substance (see p.45). I've made copies of the fact sheets for you and Doug and will drop them off.

Keva

Stimulant Fact Sheet

Substance Clinical Names/Alternative Names	Common Methods Of Consumption	Effects on the Body During Use and Desired Feeling	Common pairings	Withdrawal Symptoms Physical/Psychological	Overdose Symptoms	Overdose Best Response	Potential Long Term Use effects On The Body	Clinical Treatment Methods	Trends/ Vulnerable Populations
Cocaine. Also known as Coke, Charlie, Blow, Snow, Rock, and Powder. In rock form it's also known as Crack, Rock or Freebase (Police)[1] Comes in powder form as well as little white rocks (Crack), colors ranging from white to brownish. (Police)	Inhalation (Smoking), Absorption across mucous membranes (snorting), and injection.	**Desired feeling:** Increase of energy and alertness. A feeling of euphoria. (Monica Jobe-Armstrong)[2] Vigorous feeling, enhanced sensory perception (visual, auditory, kinesthetic, and sexual). (Police) **Possible Side Effects:** Increased body temperature, heart rate, and blood pressure. Agitation, paranoia, suppressed appetite, muscle spasms, stroke, and fainting. (Police)	Opiates. Also known as "Speedballs" (CCSA)[3]	**Physical symptoms:** Excessive sleepiness, excessive appetite, tiredness, low energy, abdominal pain, chills/tremors, and restlessness. (Monica Jobe-Armstrong) [4] **Psychological symptoms**: Severe depression, irritability, mood swings, vivid or unpleasant dreams, and drug hunger. (Monica Jobe-Armstrong)	Chest pain, Seizures, heart failure, respiratory suppression, coma, possible death. (Police)[5]	Because cocaine overdose often leads to a heart attack, stroke, or seizure, first responders and emergency room doctors try to treat the overdose by treating these conditions, with the intent of: restoring blood flow to the heart (heart attack), restoring oxygen-rich blood supply to the affected part of the brain (stroke), and stopping the seizure. (United States National Library of Medicine)[6]	Sleep disturbances, weight loss, tolerance to drug, depression, cardiovascular problems, nasal damage (when snorting used as method of consumption), throat and bronchial damage (through smoking), headaches, hallucination, seizures, attention and memory disruptions. Maternal use during pregnancy can result in low birth weight. (CCSA)	For Stimulants: Mild to Moderate: Motivational Approaches. Severe: Supportive-Expressive Therapy (SET), Cognitive Behavioural Therapy (CBT), Matrix Model (CBT, family education, social supports, and individual counselling). (Branch)	When mixed consecutively with opiates as a "speedball", this increases the risk of an overdose. (CCSA) Harm reduction material is being distributed to mitigate risks involved with sharing crack pipes and injection materials. (CCSA)
Amphetamines: **Dexedrine**: Found in many diet pills. **Methamphetamine**: When in powder form it is known as Meth or Speed. When in transparent crystal form, known as Crystal Meth, Glass, Ice, Shard. (Police)	Ingestion, Inhalation (Smoking), Absorption across mucous membranes (snorting), and injection.	**Desired Feeling:** Increased wakefulness, general sense of wellbeing (Monica Jobe-Armstrong) **Possible Side Effects:** Anxiety, irritability, impaired judgement, increased heart rate/body temperature, decreased appetite, excessive talking, aggressive thoughts, paranoia, and insomnia. (Police)	Opiates (CCSA)	**Physical Symptoms:** Excessive need for sleep, excess appetite, especially for carbohydrates. Severe agitation, uncontrollable jerking movements, chills/tremors, aching muscles. (Monica Jobe-Armstrong) **Psychological Symptoms:** Severe irritability, easily provoked aggression, Intense/rapid mood swings, panic attacks, scattered thinking, poor concentration, cognitive impairment (poor memory, poor concentration, poor abstract thinking), hyper-vigilance, suspiciousness, paranoia, severe anxiety, obsessive thoughts and behaviours. (Monica Jobe-	Hypertension, chest pain, kidney failure, convulsions, psychosis. (Police) Heart attack or other grave cardiac events. (Sober Media) [7]	Once at the hospital, medical personnel will treat the symptoms as they present. This can include gastric lavage (stomach pumping), administration of activated charcoal (absorptive of stomach contents), breathing support, intravenous fluids, and medicines to treat heart, kidney, muscle, and brain problems. (United States National Library of Medicine)	Structural damage to the brain, inflammation of the heart lining, dental health problems decreased sexual functioning. Memory loss, hallucinations, paranoia, mood disturbances, repetitive behaviour and formication (sensation of insects crawling on skin). (CCSA) Paranoia, hallucinations, convulsions, respiratory problems, loss of coordination, obsessive behavior. (Sober Media)	See above	

[1] Police, Royal Canadian Mounted. "Drug Awareness Sheets." *Royal Canadian Mounted Police.* n.d. http://www.rcmp-grc.gc.ca/qc/pub/sens-awar/drogue-drug/fiches-sheets-eng.pdf (accessed November 2016).
[2] Monica Jobe-Armstrong, Carol Saveage Todd. *Core Addictions Practice: Foundational Concepts and Practices for Substance Use Services and Supports* . 2013.
[3] CCSA. *Cocaine.* 2015. http://www.ccsa.ca/Resource%20Library/CCSA-Cocaine-Drug-Summary-2015-en.pdf (accessed November 2016).
[4] Monica Jobe-Armstrong, Carol Saveage Todd. *Core Addictions Practice: Foundational Concepts and Practices for Substance Use Services and Supports* . 2013.
[5] Police, Royal Canadian Mounted. "Drug Awareness Sheets." *Royal Canadian Mounted Police.* n.d. http://www.rcmp-grc.gc.ca/qc/pub/sens-awar/drogue-drug/fiches-sheets-eng.pdf (accessed November 2016).
[6] *United States National Library of Medicine.* n.d. https://medlineplus.gov/ency/article/007480.htm (accessed November 2016).
[7] Sober Media. *Drug Abuse Effects.* 2016. http://drugabuse.com/ (accessed November).

Stimulant Fact Sheet

				Armstrong)					
Caffeine Comes in many liquid forms ie: coffee and energy drinks. Caffeine also comes in pill form over the counter It is also used in over the counter medications for its own symptom relief and its amplification of other pain relieving medications. (Hoey)[8]	Ingestion	**Desired Feeling**: Increased level of dopamine, epinephrine and adrenaline in the body, increasing alertness, concentration and mood. (Hoey) **Possible Side Effects:** Increase in heart rate and blood pressure, stomach upset and insomnia. (Hoey)	Depressants – Alcohol and Nicotine (CCSA)	**Physical Symptoms:** Headache, tiredness/fatigue, decrease in energy and alertness, drowsiness, flu-like symptoms, nausea, vomiting and muscle pains. (Richard K. Ries) **Psychological Symptoms**: Decrease in contentedness/wellbeing, depressed mood, difficulty concentrating, irritability, foggy/not clear headed, anxiety/nervousness. (Richard K. Ries)[9]	Tremors, nausea, vomiting, fast/irregular heartrate, confusion, panic attacks, and seizures. (Alcohol and Drug Foundation)	The provider will measure and monitor the person's vital signs, including temperature, pulse, breathing rate, and blood pressure. Symptoms will be treated. The person may receive: activated charcoal, blood and urine tests, breathing support, chest x-ray, electrocardiogram, intravenous fluids, laxative, medicine to treat symptoms, and shock to the heart for serious heart rhythm disturbances. (United States National Library of Medicine)	Chronic caffeine use can lead to abdominal pain, insomnia, irritability, and anxiety. Heavy caffeine use has been linked to osteoporosis, ulcers, gastrointestinal diseases, dehydration and possible cardiac disease. (Richard K. Ries)	See Above	Youth and caffeinated alcoholic drinks i.e.: red bull and vodka (CCSA)

[8] Hoey, Nicole M. "Caffeine's Effect On The Body." *Addictions and Substance Abuse*. Salem Press Encyclopedia of Health, 2012.
[9] Richard K. Ries, David A Fiellin, Shannon C. Miller, Richard Saitz. *Principles of Addiction Medicine.* Philadelphia: Lippincott Williams & Wilkins, a Wolters Kluwer buisness, 2009.

Opiate Fact Sheet

Substance Clinical Names/Alternative Names	Common Methods Of Consumption	Effects on the Body During Use and Desired Feeling	Common pairings	Withdrawal Symptoms Physical/Psychological	Overdose Symptoms	Overdose Best Response	Potential Long Term Use effects On The Body	Clinical Treatment Methods	Trends/ Vulnerable Populations
Heroin. Also known as China White, Point, Smack, Down. (Police)[1] Can be sold in powder or tar in texture with color varying from white to brown. (Police)	Smoked/Inhaled, injected	**Desired Feeling:** Euphoria, overall sensation of well-being, and sedation. (Police) **Possible Side Effects:** Apathy (suppression of emotions), mood disruption, agitation or slowness of movements, lack of concentration, slurred speech, blurred vision, and drowsiness. (Police)	Opiates and Benzodiazepines Opiates and Cocaine. Also known as "Speedballs" (CCSA)[2] Opiates and Amphetamines (CCSA)	**Physical Symptoms**: Muscle, bone and joint pain, especially in the legs and lower back. Sweating, chills and waves of goose bumps, loss of appetite, nausea, vomiting, stomach cramps, diarrhoea, restlessness, nervousness, weakness, muscle spasms, kicking movements, insomnia, fever, headache, flu-like feeling, rapid heart rate, runny nose, sneezing, and yawning. (Monica Jobe-Armstrong) [3] **Psychological Symptoms**: Anxiety, obsession with getting the drug, irritability, unable to tolerate stress, and overly concerned with physical discomfort. (Monica Jobe-Armstrong)	No breathing, shallow breathing or slow and difficult breathing. Dry mouth, extremely small pupils, discolored tongue, low blood pressure, weak pulse, bluish-colored nails and lips. Constipation, spasms of the stomach and intestines. Coma, delirium, disorientation, drowsiness, uncontrolled muscle movements. (Medline)[4]	Naloxone with immediate medical attention for supervision. Naloxone will wear off and people are at risk of overdose again. (N. I. Abuse)[5]	Repeated heroin use changes the physical structure and physiology of the brain, creating long-term imbalances in neuronal and hormonal systems that are not easily reversed. Studies have shown some deterioration of the brain's white matter due to heroin use, which may affect decision-making abilities, the ability to regulate behavior, and responses to stressful situations. Infection of heart lining and valves, arthritis and other rheumatologic problems, liver and kidney disease. (N. I. Abuse)	Opioid Substitution Treatment (OST) e.g.: methadone and suboxone, withdrawal management, motivational approaches, counselling, Cognitive Behavioural Therapy (CBT), Supportive-Expressive Therapy (SET), relational psychotherapy for mothers on OST (Branch)[6]	
Morphine is a non-synthetic narcotic. Also known as Morf, Dreamer, First Line, M, Miss Emma, Monkey, White Stuff. (National Institute on Drug Abuse) Comes in tablet, and liquid forms. (National Institute on Drug Abuse)	Ingested and Injected	**Desired Feeling:** Euphoria, relief from pain, relaxation, sedation, and control of opiate withdrawal symptoms. (Police) **Possible Side Effects:** Dizziness, depression, anxiety, decreased breathing, blurred vision, decreased libido, loss of appetite, constipation, sweating, dry mouth, nausea, vomiting. (Police)	Opiates and Cocaine. Also known as "Speedballs" (CCSA) Opiates and Amphetamines (CCSA)	**Physical Withdrawal:** Muscle aches, restlessness, eye tearing, runny nose, excessive sweating, inability to sleep, yawning, diarrhea, abdominal cramping, goose bumps on the skin, nausea and vomiting, dilated pupils and possibly blurry vision, rapid heartbeat, high blood pressure. (Healthline)[7] **Psychological Withdrawal:** Anxiety (Healthline)	Dropping blood pressure, slow breathing, clammy, cold, bluish skin, deep sleep, stupor, coma, death by respiratory depression. (Police)	See Heroin	Constipation: Opioids decrease gastric motility–the natural movement of contents through the intestine–resulting in constipation. Decreased Libido: Some men on high doses of long-term morphine may experience decreased testosterone levels. This can cause decreased libido and decreased potency. (Us)[8]	See Above	
Methadone is a synthetic narcotic. Also known as Chocolate Chip Cookies, Fizzies, Maria, Street Methadone, and Wafer. (Administration)[9] Comes in pill, oral solution or injectable	Ingested or injected	**Desired Feeling**: Used in opiate treatment. The desired feeling is to take away the withdrawal symptoms of opiates. **Possible Side Effects:** Sweating, itchy skin, or sleepiness. (Administration)	Alcohol or Benzodiazepines (D. Abuse, Methadone)	**Physical Withdrawal**: Muscle tremors, nausea, diarrhea, vomiting, and abdominal cramps. (Administration) **Psychological Withdrawal:** Anxiety (Administration)	Slow, shallow breathing, blue fingernails and lips, stomach spasms, clammy skin, convulsions, weak pulse, coma and possible death. (Administration)		Lung and respiration problems. (Research) May cause impairment to a person's reward system in their brain, and over time- damage to a person's brain chemicals can occur causing mood swings, have difficulties dealing with emotions, and can cause a person to become		

1 Police, Royal Canadian Mounted. "Drug Awareness Sheets." Royal Canadian Mounted Police. n.d. http://www.rcmp-grc.gc.ca/qc/pub/sens-awar/drogue-drug/fiches-sheets-eng.pdf (accessed November 2016).
2 CCSA. *Cocaine.* 2015. http://www.ccsa.ca/Resource%20Library/CCSA-Cocaine-Drug-Summary-2015-en.pdf (accessed November 2016).
3 Monica Jobe-Armstrong, Carol Saveage Todd. Core Addictions Practice: Foundational Concepts and Practices for Substance Use Services and Supports. 2013.
4 Medline. Heroin Overdose. Nov 2016. <https://medlineplus.gov/ency/article/002861.htm>
5 Abuse, National Institute on Drug. Heroin. n.d. November 2016. <https://www.drugabuse.gov/publications/research-reports/heroin/what-are-long-term-effects-heroin-use>
6 Branch, Mental Health and Substance Use. "Establishing a System of Care for People Experiencing Mental Health and Substance Use Issues ." 2016.
7 Healthline. Opiate Withdrawal. n.d. http://www.healthline.com/health/opiate-withdrawal. November 2016.
8 Us, Drugs Effect. Morphine. n.d. 2016. <http://drug-effects.us/morphine-effects-short-long-term/>.
9 Administration, U.S Department of Justice Drug Enforcement. "Drugs of Abuse: A DEA Resource Guide." 2011

forms.							more sensitive to pain. (Center)		
OxyContin (Oxycodone), Percodan (Oxycodone and Acetaminophen), Codeine. Also known as: Oxy, oxycotton, hillbilly herion (National Institute on Drug Abuse) Semi-Synthetic narcotic. Comes in pill form	Ingested, injected, inhalation (smoking).	**Desired Feeling**: Euphoria, feelings of relaxation, pain relief, sedation, control of withdrawal symptoms. (Police) **Possible Side Effects**: Constipation, confusion, dry mouth, altered mental state, light headedness, headache, sedation, sweating, respiratory depression, nausea, and vomiting. (Police)	Depressants - Alcohol	Similar to the withdrawal effects of heroin – see heroin **Physical Withdrawal:** lack of appetite, nausea and vomiting, diarrhea, chills, cold sweats Increased pain sensitivity, Diffuse body aches, increased restlessness and agitation, insomnia. (Abuse) **Psychological Withdrawal:** Anxiety (Administration)	Extreme drowsiness, muscle weakness, confusion, cold/clammy skin, pinpoint pupils, shallow breathing, slow heart rate, fainting, coma, and possible death. (Administration)	See Heroin	Chronic or long term use of oxycodone use containing acetaminophen may cause liver damage. (Administration)	See Above	
Demerol (Meperidine, Pethidine). Also known as Demmies. (National Institute on Drug Abuse) Comes in pill or liquid forms. (National Institute on Drug Abuse)	Ingested, injected and snorted	**Desired Feeling**: **Possible Side Effects:** Blurred or double-vision or other changes in vision, constipation, dizziness, light-headedness, drowsiness, dry mouth, false sense of well-being, headache, mood changes, nausea, stomach cramps or pain, sweating, weakness, vomiting. (Rexall)[10]	Opiates and Cocaine. Also known as "Speedballs" (CCSA)[11] Opiates and Amphetamines (CCSA)	**Physical Withdrawal:** Nausea, vomiting, runny nose and eyes, shortness of breath, muscle aches, sweating, chills, dry mouth, increased blood pressure. (Rexall) **Psychological Withdrawal:** Anxiety, paranoid thinking, agitation, insomnia, restlessness, hallucinations. (Rexall)	Cold, clammy skin, confusion, convulsions (seizures), dizziness, drowsiness, low blood pressure, nervousness or restlessness, "pinpoint" pupils of eyes, slow heartbeat, slow or troubled breathing, weakness. (Rexall)	See Heroin	Hypoxia (inadequate oxygenation of blood and tissues), brain damage. Psychological problems, such as anxiety and depression. (D. Abuse, Demerol)[12]	See Above	
Fentanyl and Dilaudid (Hydromorphone). Also known as China Girl, China White, Dance Fever, Good Fella, Jackpot Crash and TNT. (National Institute on Drug Abuse) Comes in powder (white to brownish in color), lozenge, suppositories, patches, and pills in various different shapes and colors. (Police)	Ingested, injected and snorted	**Desired Feeling**: Euphoric feelings, relaxing sensation, sedation, reduced anxiety. (Abuse) **Possible Side Effects:** Severe fatigue, chest pain, respiratory distress, loss of consciousness, seizures, headache, confusion, anxiety, dry mouth, constipation, nausea, vomiting, stomach pain, impaired coordination, urinary retention, difficulty falling or staying asleep, appetite loss, heightened sensitivity to pain, excessive sweating, itching, changes in blood pressure, slowed breathing rate, and heart rate	Opiates and Cocaine. Also known as "Speedballs" (CCSA)[13] Opiates and Amphetamines (CCSA)	**Physical Withdrawal:** Loss of appetite, runny nose, teary eyes, yawning, restlessness, fast breathing, increased heart rate, sweating, chills, stomach pain, diarrhea, nausea, vomiting, muscle or joint pain, insomnia. (Abuse) **Psychological Withdrawal**: Irritability, depression, and mood changes. (Abuse)	Cold, clammy skin, blue tint to lips, tongue, fingernails, and toenails. Decreased muscle strength, constricted or pinpoint pupils, dilated, non-reactive pupils indicating brain injury from lack of oxygen, bradycardia (slowed heart rate), hypotension (low blood pressure), fatigue, dizziness, fainting, stupor respiratory depression, respiratory collapse, coma and possible death. (Abuse)	See Heroin	Increase your risk for anoxic injury (damage due to significantly decreased oxygen in the body tissues) and multiple organ system damage and significantly increase your risk of overdose and death. (D. Abuse, The Effects of Fentanyl Use)[14]	See Above	With the Fentanyl crisis in Canada, many people are dying at an alarming rate. The expansion of the take home Naloxone program is hoping to help decrease the deaths throughout the province. Fentanyl is being cut with many different substances and many aren't aware they're

10 Rexall. Demerol. n.d. November 2016. <http://www.rexall.ca/articles/view/797/Demerol>.
11 CCSA. Cocaine. 2015. http://www.ccsa.ca/Resource%20Library/CCSA-Cocaine-Drug-Summary-2015-en.pdf (accessed November 2016).
12 Abuse, Drug. Demerol. n.d. November 2016. <http://drugabuse.com/library/effects-demerol-abuse/>.
13 CCSA. *Cocaine.* 2015. http://www.ccsa.ca/Resource%20Library/CCSA-Cocaine-Drug-Summary-2015-en.pdf (accessed November 2016).
14 Abuse, Drug. . The Effects of Fentanyl Use . n.d. November 2016. <http://drugabuse.com/library/the-effects-of-fentanyl-use/>.

		changes. (Abuse)							taking it – resulting in overdose.
Buprenorphine (Suboxone). Comes in pill form that dissolved under the tongue. There are two forms. Suboxone – contains buprenorphine plus Naloxone. The Naloxone is added to prevent misuse – it brings on withdrawal in people who abuse buprenorphine by injecting it. Subutex contains only buprenorphine. (Services)[15]	Ingested	**Desired Feeling** : A feeling or "normal", not high and keeps opiate withdraw symptoms from happening. (Services) **Possible Side Effects:** Body aches, headaches, cold or flu-like symptoms, dizziness, constipation, sweating, sleep problems, upset stomach or vomiting, mood swings, dark colored urine, yellowing of the eyes and skin, light colored bowel movements. (Services)	Opiates, alcohol, other sedative hypnotic substances to mitigate withdraw symptoms. (Medsafe)[16]	**Physical Withdrawal**: Cold or flu-like symptoms, headache, sweating, ache and pains, difficulty sleeping nausea, loss of appetite. **Psychological Withdrawal:** Moods wings	Sedation, hypotension, respiratory depression and possible death. (Medsafe)	Close monitoring of respiratory and cardiac status of the patient and Naloxone may be administered. As Buprenorphine is long acting, close monitoring of the patient should be a priority. (Medsafe)	Some of the long-term risks are associated with exacerbations of pre-existing health conditions, including reactive airway disease (e.g., asthma) and liver disease. (D. Abuse, Effects of Subutex Use)[17]		Those who are under dosed with Suboxone, may use opiates to mitigate withdrawal symptoms. (Medsafe)

[15] Services, U.S Department of Health and Human. "Buprenorphine: for Treatment of Opioid Treatment ." 2011.
[16] Medsafe. *Suboxone Data Sheet*. 11 December 2015. November 2016. <http://www.medsafe.govt.nz/profs/Datasheet/s/Suboxonetab.pdf>.
[17] Drug Abuse. *Effects of Subutex Use*. n.d. Nov 2016. <http://drugabuse.com/library/the-effects-of-subutex-use/>

Hallucinogens Fact Sheet

Substance Clinical Names/Alternative Names	Common Methods Of Consumption	Effects on the Body During Use or Desired Feeling	Common pairings	Withdrawal Symptoms Physical/Psychological	Overdose Symptoms	Overdose Best Response	Potential Long Term Use effects On The Body	Clinical Treatment Methods	Trends/ Vulnerable Populations
Psilocybin Also known as Magic Mushrooms, and Shrooms (Administration)[1] Come available in fresh and dried forms, usually rusty brown in color with white in the center. (Administration)	Ingested. Eaten or steeped in teas (Administration)	**Desired Feeling:** Relaxation, daydreaming, sensitivity, illusions and hallucinations. (Police)[2] **Possible Side effects**: Nausea, vomiting, abdominal cramps, and diarrhea. Muscle relaxation, weakness, and twitches. Yawning, drowsiness, dizziness, lightheadedness, and lack of coordination. Pupil dilation, tearing, dry mouth, and facial flushing. Increased heart rate, blood pressure, and body temperature. Sweating followed by chills and shivering. Numbness of tongue, lips, or mouth. Feelings of physical heaviness or lightness and feelings of floating. Heightened sensory experiences and perceptual distortions. Auditory, tactile, and visual hallucinations. Difficulty focusing, maintaining attention, concentrating, and thinking. Impaired judgment. Sense of detachment from body and surroundings and loss of boundaries between the two. Altered perception of space and time. Inability to distinguish fantasy from reality. Feelings of involvement with intense spiritual experiences, (Center for Substance Abuse Research)[3]		**Physical Symptoms**: No known physical withdrawal symptoms (Center for Substance Abuse Research) **Psychological Symptoms**: May have difficulty discerning reality from fantasy. (Center for Substance Abuse Research)	Long, intense psychosis, and possible death (Administration) Highly adverse reactions ("bad trip"), including frightening hallucinations, confusion, disorientation, paranoia, agitation, depression, panic, and/or terror. (Center for Substance Abuse Research) Poisoning may occur if the plant incorrectly identified as a psilocybin mushroom. (Administration)	In most cases, a mushroom overdose can be allowed to run its course without medical treatment. Feelings of panic and anxiety can be treated with anti-anxiety medications. When mushrooms are combined with other drugs, the situation can be more severe for the patient, and doctors may use a number of methods to stabilize the body's systems to prevent long term damage or death.	Limited information on long term effects of Psilocybin's	Evidence-based treatment modalities for hallucinogen related problems have not been established. Treatments methods offered for stimulants may be effective. (Branch)[4]	Researchers note that active ingredients in psilocybin's help reduce anxiety and depression in cancer patients. (Healthline)[5]
MDMA/Ecstasy Also known as the love drug, hug drug, lovers speed, E, X or Molly. MDMA comes in pill, powder and liquid forms. Ecstasy is MDMA that's generally cut with a number of different substances. Effects, withdrawal etc may vary. Ecstasy comes in a number of forms, most commonly in pill form stamped with logos and brand names. Effects, withdrawal, and overdose symptoms are influenced by what it may be cut with.	Ingested, inhaled (Snorted).	**Desired Feeling**: Acts like a stimulant and a psychedelic. Produces an energizing effect, distortions of time and perception, and enhanced enjoyment of tactile experiences (need to be touched and need for stimulation). (Administration) **Possible Side Effects:** Confusion, anxiety, depression, paranoia, sleep problems, muscle tension, tremors, involuntary teeth clenching, muscle cramps, nausea, blurred vision, faintness, chills, and sweating. (Administration)	Common for users to mix MDMA with alcohol and cannabis. (Abuse)[6]	**Physical Symptoms:** sleep problems and decreased appetite (Abuse) **Psychological Symptoms**: Irritability, impulsiveness, aggression, depression, anxiety, memory, attention problems, decreased interest in and pleasure from sex (Abuse)	In high doses it may interfere with the body's ability to regulate temperate. The drastic spike on temperate may lead to kidney, liver and cardiovascular system failure. (Administration)	Attention to the airway, breathing, circulation, and vital signs, provide oxygen if needed, and perform cardiac monitoring. Patients presenting with severe hyperthermia require aggressive cooling measures and adequate fluid resuscitation. (Medscape) [7]	Some studies suggest that MDMA use increases the risk of long-term (or permanent) problems with memory and learning. Long term use may damage the serotonin system. (Administration)	See above	MDMA is being used in clinical trials to treat PTSD with structured psychotherapies. (Healthline)

[1] Administration, U.S Department of Justice Drug Enforcement. *Drugs of Abuse: A DEA Resource Guide.* US Department of Justice, 2011.
[2] Police, Royal Canadian Mounted. "Drug Awareness Sheets." *Royal Canadian Mounted Police.* n.d. http://www.rcmp-grc.gc.ca/qc/pub/sens-awar/drogue-drug/fiches-sheets-eng.pdf (accessed November 2016).
[3] *Center for Substance Abuse Research* . n.d. http://www.cesar.umd.edu/cesar/drugs/psilocybin.asp (accessed November 2016).
[4] Branch, Mental Health and Substance Use. *Establishing a System of Care for People Experiencing Mental Health and Substance Use Issues* . Ministry of Health, 2016.
[5] Healthline. *Can Ecstasy Help with PTSD*. Noember 2016. <http://www.healthline.com/health-news/can-ecstasy-help-with-ptsd#3>
[6] Abuse, Nation Institue on Drug. *MDMA.* n.d. https://www.drugabuse.gov/publications/drugfacts/mdma-ecstasymolly (accessed November 2016).
[7]Medscape. *MDMA Toxicity Treatment & Management*. n.d. November 2016. <http://emedicine.medscape.com/article/821572-treatment#d10>.

Hallucinogens Fact Sheet

Acid/LSD Also known as: Dots, Mellow Yellow, Window Pane (Administration) Comes in pill capsule form as well as liquid. It is odorless and colorless with a slight bitter taste. LSD is also soaked in absorbent paper and divided into individual doses. (Administration)	Ingested	**Desired Feeling**: Used for its psychedelic effect like: Visual hallucinations, intensification of smells, sounds, and other sensations, sense of heightened understanding, distorted sense of time, distorted perception of body and a sense of one's mind has left one's body, the sense that one is undergoing a profound mystical or religious experience. (Research)[8] **Possible Side Effects:** Dilated pupils, raised body temperature, rapid heartbeat, elevated blood pressure, increased blood sugar, salivation, dry mouth, tingling fingers/toes, weakness, tremors, palpitations, facial flushing, chills and goosebumps, sweating, nausea, loss of appetite, dizziness, blurred vision, and sleeplessness. (Research)		**Physical Symptoms:** Limited physical withdrawal symptoms. **Psychological Symptoms:** Flashbacks of bad trips may be experienced. Acute anxiety and depression. (Administration)	Psychosis (Administration) Despite the psychological danger posed by LSD overdose, this drug has a low toxicity, and the amount needed to produce a dangerous physical reaction is very large. Dangerously elevated body temperature. Vomiting. Gastric bleeding (bleeding in the stomach). Difficulty breathing. Coma. (D. Abuse)		Hallucinogen Persisting Perception Disorder (HPPD) Known familiarly to LSD users as "flashbacks," HPPD episodes are "spontaneous, repeated recurrences of some of the sensory distortions originally produced by LSD." The flashback experience may include visual disturbances such as halos or trails attached to moving objects or seeing false motions in the peripheral vision. (Research)	See above	
Ketamine Also known as: Cat tranquilizers (Administration), Kit Kat, Special K, Vitamin K (Police) Ketamine comes in both a clear liquid and a white/off white powder (Administration)	Ingested, orally and snorted or injected	**Desired Feeling:** Typically used to induce a state of sedation, relief from pain, amnesia and used to induce out of body experiences (hallucinations). (Police) **Possible Side Effects**: Increased heart rate and blood pressure, nausea, involuntary rapid eye movement, dilated pupils, salivation, tear secretions, stiffening of muscles, agitation, cognitive difficulties, and amnesia. (Administration)	Often in combination with MDMA, amphetamine, methamphetamines, or cocaine. (Administration)	**Physical Symptoms**: Chills, sweating, irregular heart rate or blood pressure, rapid breathing, tremors, lack of motor skills, fatigue, double vision, hearing loss, nausea, diarrhea, and decreased appetite. (Ketamine) **Psychological: Symptoms**: Intense cravings, depression, suicidal or violent tendencies, aggression, hostility, restlessness, irritation, anxiety, paranoia, hallucinations, nightmares, insomnia, and psychosis. (Ketamine)[9]	May cause unconsciousness and or dangerously slow breathing and depression of the CN system. (Administration) Paralysis, convulsion, prolonged sedation, death by respiration depression. (Police)	Various medications may be administered to help counteract the effects of the Ketamine and to stabilize the patient. Such drugs will help to keep the respiratory system and the central nervous system of the user in a stabilized point so that serious long-term damage does not occur. (Ketamine)		See above	Typically used in sexual assaults. (Administration)

[8] Research, Center for Substance Abuse. *LSD.* 2016. http://www.cesar.umd.edu/cesar/drugs/lsd.asp (accessed November 2016).
[9] *Ketamine.* n.d. http://ketamine.com/ketamine-withdrawal/ketamine-withdrawal-symptoms-you-may-experience/ (accessed November 2016).

Depressant Fact Sheet

Substance Clinical Names/Alternative Names	Common Methods Of Consumption	Side effects on the Body During Use or Desired Feeling	Common pairings	Withdrawal Symptoms Physical/Psychological	Overdose Symptoms	Overdose Best Response	Potential Long Term Use effects On The Body	Clinical Treatment Methods	Trends/ Vulnerable Populations
Alcohol comes in liquid form and in a variety of colors ranging from clear to dark brown. Also known as beer, booze, liquor, wine and spirits. (C. C. Abuse n.d.)[1] There are two different types of alcohol. Ethyl alcohol (or ethanol) is made when vegetables, fruits and grains break down and are fermentation. This type of alcohol is found in alcoholic drinks such as beer, wine, hard liquor or spirits. Methyl alcohol (or methanol) is found in household and industrial products like antifreeze and paint removers. This type of alcohol is poisonous to drink. (Saskatchewan n.d.)[2]	Ingestion	**Desired Feeling:** Disinhibition of normal social functioning, euphoria, and overall feeling of wellness. **Possible Side Effects:** Disinhibition of normal social functioning, euphoria (excessive talking, showing off), ataxia (uncoordinated gait-walking), poor judgment, loss of memory, slurred speech, vomiting , confusion, disorientation, progressive lethargy, coma, ultimately the shutdown of the respiratory centers and death.		**Physical Symptoms**: Fast heartbeat, sweating, facial flushing, muscle trembling, muscle spasms hand, body tremors, insomnia, restlessness, nausea, vomiting, ringing in ears, dry mouth, itching, seizures, stomach, pain, chest infections, poor balance when walking. In severe cases of withdrawal, delirium tremens may occur. (Monica Jobe-Armstrong 2013)[3] **Psychological symptoms:** Anxiety, depression, mood swings, irritability, poor concentration, poor memory, impulsiveness, paranoia, difficulty in thinking clearly, making plans or decisions. (Monica Jobe-Armstrong 2013)	Changes in mental state, confusion, vomiting, pale or blue skin, a decrease in body temperature (hypothermia), and passing out (unconsciousness). Alcohol depresses the nervous system: slowing or stopping breathing, heart rate, and gag reflex, all of which are controlled by your nervous system. Cardiac arrest following a decrease in your body temperature (hypothermia) or seizures as a result of low blood sugar levels (Healthline n.d.)[4]	An alcohol overdose is typically treated in the emergency room. The physician will monitor your vital signs, including your heart rate, blood pressure, and temperature. If you develop seizures, your doctor may need to provide additional treatments, including: fluids or medications provided through your vein (intravenously), oxygen may be provided, nutrients, such as thiamin or glucose, to prevent additional complications of alcohol poisoning such as brain damage. (Healthline n.d.)	Alcohol interferes with the brain's communication pathways, and can affect the way the brain looks and works. These disruptions can change mood and behavior, and make it harder to think clearly and move with coordination. Can damage the heart, causing problems including: Cardiomyopathy – Stretching and drooping of heart muscle, arrhythmias – Irregular heartbeat, stroke, high blood pressure. Liver problems/liver inflammations including: Steatosis, or fatty liver, Alcoholic hepatitis, Fibrosis, Cirrhosis, Alcohol causes the pancreas to produce toxic substances that can eventually lead to pancreatitis, a dangerous inflammation and swelling of the blood vessels in the pancreas that prevents proper digestion. Increase your risk of developing certain cancers, including cancers of the: mouth, esophagus, throat, liver, and breast. Research also shows that drinking moderate amounts of alcohol may protect healthy adults from developing coronary heart disease. (National Institute on Alcohol Abuse and Alcoholism n.d.)[5]	For alcohol related problems/disorders: Mild to Moderate: Brief advice from a physician, Motivational Enhancement Therapy (MET), Social Network and Behaviour Therapy (SNBT). Severe: Withdrawal Management, Cognitive Behavioural Therapy (CBT), Narrative Therapy. (Branch 2016)[6]	Youth and caffeinated alcoholic drinks i.e.: red bull and vodka (CCSA)[7]
GHB (Gama hydroxybutyrate) Also known as: Liquid Ecstasy, Fantasy, Date Rape drug (Police n.d.)[8] Clear liquid, sometimes odorless, sometimes with a light salty and soapy taste	Ingestion	**Desired feeling**: A feeling of sedation and anaesthesia. (Police n.d.) **Possible Side Effects**: Slurred speech, sedation, dizziness, nausea, vomiting, diarrhea, urinary incontinence, muscle spasms, lack of coordination,	Alcohol primarily, other depressants, stimulant, hallucinogens and marijuana (Administration 2011) [9]May increase the	**Physical Symptoms:** Restless sleep, muscle cramps and tremors **Psychological Symptoms:** Anxiety, agitation, restlessness, insomnia, (Richard K. Ries 2009) [10]Severe symptoms of	Seizures, hallucinations, decreased heart rate, hypotension, watering eves, respiratory depression, unconsciousness, coma, death. (Police n.d.) Withdrawal commonly treated with	No known antidote for GHB intoxication. (Administration 2011)	Not much is known about the long term effects of GHB use.	Sedative Related Problems/Disorders: Withdrawal Management Cognitive Behaviour Therapy (CBT) with concurrent drug taper. (Branch 2016)	Became popular by teens and young adults at dance clubs and raves. (Administration 2011)

[1] Abuse, Canadian Center on Substance. "Alcohol." *Canadian Center on Substance Abuse.* n.d. http://www.ccsa.ca/Resource%20Library/CCSA-Canadian-Drug-Summary-Alcohol-2014-en.pdf (accessed November 2016).
[2] Saskatchewan, Ministry of Health. "Alcohol Fact Sheet ." n.d. healthysask.ca (accessed November 2016).
[3] Monica Jobe-Armstrong, Carol Saveage Todd. *Core Addictions Practice: Foundational Concepts and Practices for Substance Use Services and Supports* . 2013
[4] Healthline. *Alcohol Overdose.* n.d. http://www.healthline.com/health/alcoholism/overdose#Overview1 (accessed November 2016)
[5] National Institute on Alcohol Abuse and Alcoholism. *Alcohol's Effects on the Body.* n.d. https://niaaa.nih.gov/alcohol-health/alcohols-effects-body (accessed November 2016).
[6] Branch, Mental Health and Substance Use. *Establishing a System of Care for People Experiencing Mental Health and Substance Use Issues* . Ministry of Health, 2016.
[7] CCSA. "Alcohol and Caffeine - Youth and Young Adults at Greatest Risk." *Canadian Center on Substance Abuse.* 2012. http://www.ccsa.ca/Resource%20Library/CCSA-Alcohol-and-Caffeine-Policy-Brief-2012-en.pdf (accessed November 2016)
[8] Police, Royal Canadian Mounted. "Drug Awareness Sheets." *Royal Canadian Mounted Police.* n.d. http://www.rcmp-grc.gc.ca/qc/pub/sens-awar/drogue-drug/fiches-sheets-eng.pdf (accessed November 2016).
[9] Administration, U.S Department of Justice Drug Enforcement. *Drugs of Abuse: A DEA Resource Guide.* US Department of Justice, 2011
[10] Richard K. Ries, David A Fiellin, Shannon C. Miller, Richard Saitz. *Principles of Addiction Medicine.* Philadelphia: Lippincott Williams & Wilkins, a Wolters Kluwer buisness, 2009.

(Police n.d.)		general anaesthesia, amnesia. (Police n.d.)	depressant effects of alcohol or other sedative, hypnotic, opioid drugs. (Administration 2011)	withdrawal may include: delirium, with hallucinations, psychosis, tremor, tachycardia. (Richard K. Ries 2009)	benzodiazepines. (Abigail J Herron 2015)[11]			Hallucinogen Related Problems/Disorders Evidence-based treatment modalities for hallucinogen-related problems have not been established Clients may benefit from treatments offered for stimulant-related problems (Branch 2016)	
Benzodiazepines: Valium (Diazepam), Ativan (Lorazepam), Xanax (Alprazolam), Serax (Oxazepam). Also known as: Downers, Nerve pills, Sleepers, Tranks, Bars, Barbs. (Police n.d.) Prescription pills not accessible over the counter. Frequently used to treat alcohol withdrawal	Ingestion	**Desired Feeling:** Main function is to diminish anxiety and induce sleep, relax muscles and sedation. (Police n.d.) **Possible Side Effects:** Fatigue, lethargy, altered judgement/mood, decreased awareness, anterograde amnesia, blurred vision, vertigo, depression, hostility, aggressiveness, sexual disorder. (Police n.d.)	Commonly taken in conjunction with a variety of other substances (Richard K. Ries 2009)	Abrupt discontinuation of Benzodiazepines means you may be at risk of seizure, delirium and hallucinations (if used in large amounts for a prolonged period of time). (Abigail J Herron 2015) **Psychological Symptoms:** Anxiety symptoms, (emotional lability, insomnia, agitation, irritability, poor concentration and panic attacks).	Central nervous system depression. Overdoses usually involved a combination of other substances like alcohol or opioids. (Publishing n.d.)[12]	Acute management consists of maintaining airway, respiration, and hemodynamic support while assisted ventilation may be necessary. (Publishing n.d.)	Impaired thinking or memory loss, anxiety, depression, irritability, paranoia, aggression, personality change, weakness, lethargy, lack of motivation, drowsiness, sleepiness, fatigue difficulty sleeping or disturbing dreams, headaches, nausea, skin rashes and weight gain. (Info n.d.)[13]	Sedative Related Problems/Disorders: Withdrawal Management Cognitive Behaviour Therapy (CBT) with concurrent drug taper. (Branch 2016)	

[11] Abigail J Herron, Timmothy Koehler Brennan. *The ASAM Essentials of Addiction Medicine.* Phillidelphia: Woltsers Kluwer, 2015
[12] Publishing, BMJ. *Best Practice: Benzodiazepine.* n.d. http://ca.bestpractice.bmj.com/best-practice/monograph/343.html (accessed November 2016)
[13] Info, Drug. *Benzodiazepines.* n.d. http://www.druginfo.adf.org.au/drug-facts/benzodiazepines (accessed November 2016).
[13] Baydala, L. *First Nations, Inuit and Métis Health Committee.* Canadian Pediatric Society, 2010.

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Inhalants Glue, fuel, paint, aerosol propellant	Inhalation, Absorption across mucous membranes ("Sniffing", "bagging" "huffing", snoring).	**Desired Feeling**: Generally used for the desired effect of a rush followed by light-headedness, excitability and perceptional changes. Initial effects are similar to those of anesthetics: stimulation, disinhibition and euphoria. (Baydala 2010)[14] **Possible Side Effects**: Hallucinations, depression, slurred speech, dizziness, disorientation, drowsiness and sleep. (Baydala 2010)		**Physical Symptoms:** Nausea, loss of appetite, sweating, involuntary muscle moments, and sleep disturbances. (National Institute on Drug Abuse 2016) **Psychological Symptoms:** Depressed mood, fatigue, anxiety, difficulty concentrating and mood swings (Abigail J Herron 2015)	Sudden death may occur due to cardiac arrhythmia or death by asphyxiation from repeated inhalations, which lead to high concentrations of inhaled fumes displacing the available oxygen in the lungs, suffocating by blocking the air from entering the lungs when inhaling fumes from a plastic bag placed over the head and chocking from swallowing vomit after inhaling substances. (Administration 2011)	Emergency department care begins by protecting the patient's airway (intubation may be required), cardiac monitoring, and measuring electrolytes. Severe patient agitation may be treated with benzodiazepines. (Medscape n.d.)[15]	Possible irreversible neurological and neuropsychological effects from damage to myelin and neuronal membranes. Possible brain stem dysfunction, moto, [16]cognitive and sensory deficits. (Baydala 2010) Weight loss, muscle weakness, disorientation, inattentiveness, lack of coordination, irritability, depression. (Administration 2011)	For Inhalant related problems or disorders: Evidence based modalities for Inhalants have not yet been established. Clients may benefit from extended withdrawal management, family therapy, activity based programs, Indigenous led approaches, and narrative therapy. (Branch 2016)	Aboriginal children and youth (Baydala 2010)

[14] Baydala, L. *First Nations, Inuit and Métis Health Committee.* Canadian Pediatric Society, 2010.
[15] Medscape. *Inhalents.* n.d. http://emedicine.medscape.com/article/1174630-treatment (accessed November 2016).

Establishing a System of Care for People Experiencing Mental Health and Substance Use Issues

DRAFT – August 5, 2016

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1. Executive Summary

The model outlined in this document is intended to strengthen the entire system of care for people experiencing mental health and substance use issues, from health promotion and prevention through to highly specialized services. Areas of focus include strengthening community-based resources and simplifying pathways of care and making it easier for clients, families and service providers to navigate and access services specific to their needs in a timely manner. The local cornerstone of health services across the province will be the Patient Medical Home and Networks of Patient Medical Homes linked to HA/community delivered primary care services (Primary Care Home). A Primary Care Home is a community-based network of Patient Medical Homes linked with health authority or community-delivered primary care services that are locally accessible for all health related concerns. The Primary Care Home will be linked to specialized programs, including programs consisting of inter-professional teams that support individuals with moderate to severe mental illness and/or substance use (MHSU).

Guiding principles for the model include:

- Client and family-centred;
- Integrated and comprehensive: pathways are simple and clear;
- Equity: distribution according to population need; and
- Quality and value for money.

Health authorities, in collaboration with clients and families, physicians, community organizations, institutional stakeholders (e.g., schools, justice, BC Housing) and partnering ministries will establish local, regional and provincial system-level pathways of care for clients and their families based on the policy direction set out in this document.

2. Introduction

The Ministry of Health has identified MHSU services as key priorities for improvement. The present service delivery system has many of the key elements of a quality system and a range of well-trained health care professionals. However, clients and their families experience it as fractured, difficult to navigate and access, and in some instances inadequate to respond to the large proportion of individuals with moderate to severe MHSU conditions enter the system in times of crisis via emergency departments or other emergency services.

The current infrastructure of office-based services is not appropriate for all. There is a need for greater flexibility in the types of services and the service delivery models, including outreach and virtual services (e.g., telehealth, chat lines). The proposed system of care builds on the existing strengths and successes in BC's health care system, including efforts over the past decade to improve primary and community care, and numerous innovations at the practice, health authority and provincial level.

Foundational to this model is developing clear, simple and well-understood pathways for individuals to access appropriate services in a timely manner. However, the concept of "every door is the right door" will be critical given that many individuals will enter at different points, particularly during times of crisis. The Primary Care Home will be a key access point. Depending on the size of the community, there are likely to be a number of MHSU teams, or Specialized Care Programs, linked to specific Primary Care Homes. The Specialized Care Programs will be designed to optimize a nimble response to patients' needs.

The health system is only one component of a wider system of support. As such, the proposed system of care will be integrated into a broader effort across several government ministries and sectors to strengthen supports for individuals and their families. Key partner ministries include Social Development and Social Innovation, Children and Family Development, Justice, Education, Advanced Education, Aboriginal Relations and Reconciliation, and the Ministry Responsible for Housing.

This policy paper will be used by the Ministry of Health, health authorities, physicians, community stakeholders and academic partners to plan and deliver a standardized MHSU system across the province.

Policy Context

The Ministry of Health has been engaged in a strategic planning process with its partners. This multi-step process can be traced through several key documents. *Setting Priorities for the B.C. Health System* (http://www.health.gov.bc.ca/library/publications/year/2014/Setting-priorities-BC-Health-Feb14.pdf) was published in February 2014 and presented the strategic and operational priorities for health services across BC. The plan was founded on a vision of a sustainable health system that supports people to stay healthy and provides high quality publicly funded

health care services that meet their needs when they are sick. It focused on delivering a patient-centred culture, while improving the quality of service outcomes. One of the priority areas was a provincial system of primary and community care built around inter-professional teams, with a strong focus on populations and individuals with high health and support needs, including people with severe mental illness and/or substance use problems.

In 2015, a cross-sector discussion paper entitled *Primary and Community Care: A Strategic Policy Framework* was released (http://www.health.gov.bc.ca/library/publications/year/2015/primary-and-community-care-policy-paper.pdf). This reviewed the complex system of primary and community services. The framework highlighted the need to build a model to better meet the needs of patients with moderate to severe mental illness and/or substance use problems by creating a more coherent and comprehensive community-based system of care, including health promotion, illness prevention and harm reduction.

Through strategic planning with system partners, more in-depth work on a priority focus on MHSU was developed. The initial version of the *Establishing a System of Care for People Experiencing Mental Health and Substance Use Issues* paper was released for a feedback forum in October 2015. Overall themes of the feedback included:

- the need for greater clarification on the application and implementation plans;
- a shift in perspective to reflect a person and family-centred approach to the system of care;
- representation of psychiatrists as part of team of specialized resources;
- inclusion of indigenous approaches; and
- acknowledgement of the role of community organizations and informal networks of support in individuals' paths to recovery.

The feedback has been used to produce this revised final report. It will also be incorporated into the more detailed implementation and operational planning that will follow.

This document presents the vision for the MHSU system of care in BC. The paper provides strategic direction to stakeholders, most notably service providers, for a shared vision of an integrated, cohesive system of MHSU services accessible to all British Columbians. To achieve this vision requires the participation and commitment of all partners, including clients, families, health authorities, community organizations and academic institutions.

The MHSU sector has its own history of strategic planning and cross-stakeholder engagement to improve services and outcomes. In 2010, *Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia* (the Plan), was jointly published by the Ministry of Health and the Ministry of Children and Family Development. The plan laid out milestones for achievement and corresponding actions from health promotion through to specialized care, and emphasized collaboration across ministries and service areas. The majority of the actions have been completed, forming the foundation for the refreshed vision presented in this paper. Since the release of *Healthy Minds, Healthy People*, other initiatives

such as *British Columbia's Provincial Domestic Violence Plan*, and the development and implementation of a plan to *Improve Health Services for Individuals with Severe Addiction and Mental Illness*, as well as government's commitment to creating 500 new substance use treatment spaces, have all strengthened the services available within the MHSU sector.

Despite the early accomplishments of *Healthy Minds, Healthy People*, systemic challenges continue to confront British Columbians in need of mental health and substance use services. In particular, limited access to primary care and dependence on emergency department and acute services to meet mental health and substance use needs have been ongoing challenges. The stigma associated with mental illnesses and substance dependence continues to discourage those who need help from seeking it at an early stage, and has isolated individuals and families when they are most in need of support. Stigma from service providers has restricted the potential of health care and social services to fully meet the medical, psychological and social needs of people with mental health and substance use problems. Other challenges include difficulty accessing affordable counseling in the community; the lack of collaboration across substance use and mental health services; transitions in care from acute to community services, and transitions from youth to adult and from adult to older adult services. There is strong evidence that many MHSU problems establish their roots early in the life course.

Nearly 70 percent of those aged 15-24 years with mental illness reported that their symptoms started before the age of 15. Without timely and early intervention, this can compromise quality of life, impair functioning, and diminish productivity in later life. Further, for a variety of social, ethno-cultural and/or physiological reasons, some populations or groups of people experience a disproportionate vulnerability to, and corresponding prevalence of, MHSU problems. In BC, these populations include: First Nations/Aboriginal Peoples; children of a parent(s) with a mental illness or substance use disorder; lesbian, gay, bisexual, transgender, two-spirited and questioning people (LGBT2SQ); refugees or immigrants from countries of conflict or other significant trauma; and people with physical disabilities or significant chronic illnesses. Effective action requires engaging vulnerable groups and affected populations to develop and adapt evidence-based interventions in culturally appropriate and sensitive ways.

3. The Mental Health and Substance Use Population in B.C.

MHSU Client Population

Cohort and Assumptions/Methodology
For the purposes of this analysis, three data bases were used to create a cohort of MHSU clients for 2013/14: physician billing; acute care; and emergency department use. Some information on medication use was also included. This enabled the Ministry of Health to map the cohort to communities and understand characteristics of the client population, such as age, gender, primary diagnosis and use of hospital and physician services.

The cohort includes all people who had a primary diagnosis of a MHSU condition from a physician encounter, emergency room visit or hospital visit.

Clients only diagnosed with dementia were excluded from this analysis because they are a part of the chronic disease cohort, and do not generally require the same types of services as the MHSU population.

Physician services provided through contracted sessional services are excluded given their data are not reported to the ministry in the three systems used for this analysis. As a result, utilization of physician services, particularly in the non-urban centres, is underrepresented.

Findings
The 2013/14 MHSU cohort is estimated to be 800,000 people, about 17 percent of the total BC population of 4.7 million. Females make up 59 percent. Sixty-three percent are between the ages of 25 and 65. Almost 20 percent are over 65.

Geographically, the higher volumes of people receiving services are in the metro and urban centres. The overall BC rate is 167/1,000 population, with a range from 39/1,000 in the Telegraph Creek Local Health Authority (LHA) to 225/1,000 in Penticton LHA. Other LHAs with rates greater than 200/1,000 population include Vancouver-Downtown Eastside, Greater Victoria, Lake Cowichan, Campbell River, Mission, Summerland, Princeton, Southern Okanagan, Vernon, Central Okanagan (Kelowna) and Merritt.

A review of the geographies assigned to the Divisions of Family Practice revealed similar overall patterns of distribution, with the urban areas having higher volumes.

Diagnostic Groups

Individuals with a MHSU diagnosis were grouped into 12 categories. However, when the data were analyzed there was a high volume of clients with more than one primary diagnosis recorded in the year, which meant that people were being counted more than once. For example, a person with a diagnosis of self harm in hospital and a diagnosis of depression by a

physician in the community, would be counted in both the self harm and depression groups. While each person is counted in the total MHSU cohort only once, those with more than one diagnosis in the year are counted in each category for which they had a diagnosis.

Categories of Primary MHSU Diagnosis

Figure 1 shows the number of people presenting for services in 2013/14 by primary diagnosis.[1]

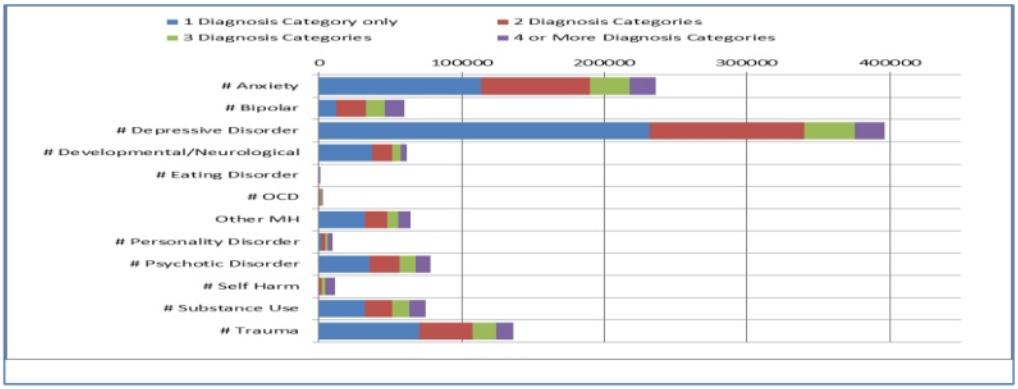

Figure 1: Diagnosis counts of clients within each primary diagnostic category, 2013/14

- Depressive disorder is the largest category, at almost 50 percent of the MHSU cohort.
- Anxiety disorder is the second largest category, at 30 percent.
- Trauma is the third largest category, at 17 percent.
- Substance use and psychotic disorders make up nine percent and 10 percent respectively.
- Bipolar disorder affects eight percent and at least 79 percent of these clients have multiple diagnoses.

Client Pathway Interpretation

The diagnoses were grouped into five categories based on the types of services and use patterns (of hospital and primary care services), and the number of diagnoses/conditions. In Table 1, to address service design needs, the five groups are labelled to represent patterns of service use and to be more client-centered. In many cases, individual diagnoses do not adequately capture the complexity of service use.

[1] Clients receiving a combined anxiety/depression diagnosis have been included only in the depression category, consistent with historical reporting.

Table 1: Service use pattern in five identified client groups

Client Group	Service Utilization Pattern
Substance Use *(Repetitive Service Use with Substance Use Problems)*	• Multiple primary diagnoses; high Emergency Department (ED) use (57 percent, with 20 percent of these more than five times) • Frequent hospitalizations • Primarily comprised of people with substance use disorders (concurrent with other conditions)
High Risk Mental Health Conditions *(High Acuity/Risk of Harm)*	• High ED use (45 percent); frequent hospitalizations • High acuity: urgent risks and/or adverse consequences • Risk of harm to self and/or others • Primarily comprised of people diagnosed with psychotic disorders, bipolar, personality disorders, obsessive-compulsive disorder, eating disorders, self harm
Anxiety/Depression *(High Prevalence/Community)*	• 30 percent of the group uses the ED; however, low hospitalization rates • Most are identified through community-based physician services • Primarily diagnosed with anxiety and depressive disorders
Developmental/Neurological	• 90 percent present with only one MHSU diagnosis/condition within a year • 25 percent use the ED • Primarily diagnosed with developmental/neurological disorders • Identified through community-based physician services, but may need additional specialized diagnostic/ treatment services
Trauma and Other Mental Health Disorders	• Primarily presenting with a stress/trauma or other related issue • Not hospitalized for their MHSU issue

Lifespan Considerations

A lifespan approach informs our understanding of the development of MHSU problems and disorders and of appropriate interventions and services. There are periods when the occurrence of particular problems or disorders is more likely. Onset for most disorders occurs during adolescence or young adulthood, while preliminary signs or symptoms may manifest at an even earlier age.

Most MHSU problems and disorders develop along a trajectory, with gradually increasing frequency and severity of symptoms. There are often no clear-cut stages where a disorder is not present at one moment and present at the next. Some disorders develop slowly, such as some substance use disorders, while others can be episodic in nature, such as schizophrenia

and depression. A severely traumatic event may trigger anxiety, depression or post-traumatic stress reactions in people who would otherwise not experience an MHSU problem.

Figure 2 shows the MHSU cohort by age group and diagnostic group.

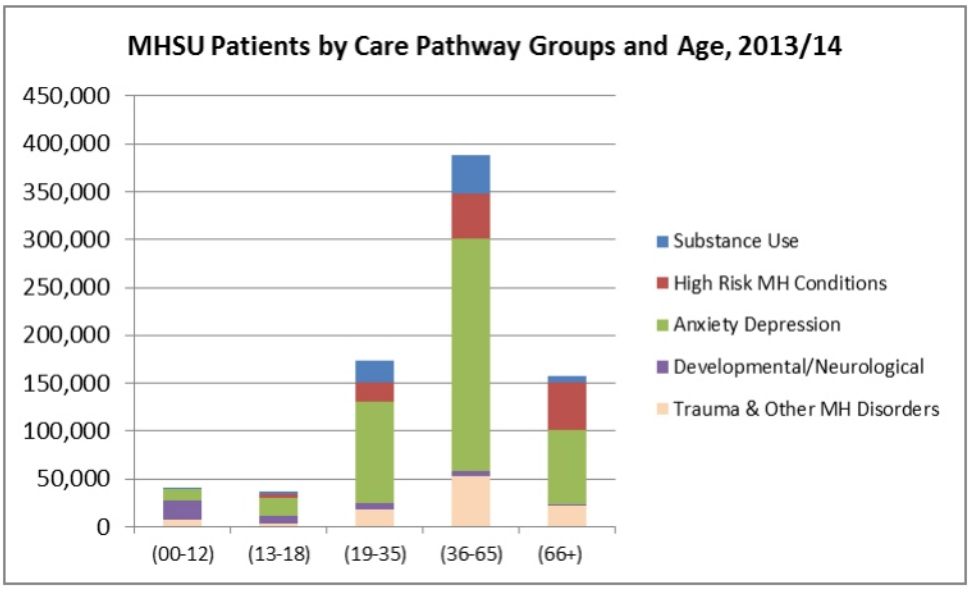

Figure 2: MHSU cohort by age and diagnostic group, 2013/14

Infancy and Childhood

As shown in Figure 2, the Developmental/Neurological client group has the highest number of presentations (51 percent), followed by Anxiety/Depression (27 percent), in children up to 12 years old.

Studies have confirmed that the quality of nourishment and nurturing in the early years has far-reaching effects. Major influences that help to prevent MHSU disorders later in life include sound maternal and perinatal health, adequate nutrition, and secure attachment between infant and caregiver.

Experiences in early childhood lay the foundation for good mental health and a healthy pattern of substance use later in life. There is very clear evidence showing the continuity of disorders between childhood, adolescence and into the adult years. Many prevention activities for MHSU problems are, therefore, ideally placed in childhood. Prevention interventions for children are not necessarily targeted directly at the child. Interventions need to improve the environment experienced by the child so that a range of factors are supported to enhance resilience. Interventions need to increase the protective factors and reduce the risk factors within the environment, while simultaneously considering their complex interplay. Consequently, interventions that improve the parenting skills, the mental and physical health of parents, and their socioeconomic status are known to prevent the development of MHSU problems in children.

Signs and symptoms of mental health problems can be evident very early in life, although before the ages of three or four, it is the risk factors that are more likely to be evident, rather than actual manifestations of disorders.

Generally, the earliest signs of mental disorder to emerge in childhood are those related to attention deficit hyperactivity disorder (ADHD), and conduct, anxiety and depressive disorders. Anxiety disorders are the most common mental health problem in childhood, and if left untreated they tend to persist into adulthood.

Adolescence and Emerging Adulthood

In youth aged 13-18 years, Anxiety/Depression was the most frequent presentation (50 percent), followed by Developmental/Neurological (18 percent). Anxiety/Depression was also the most frequent presentation (50 percent) in younger adults aged 19-35 years, followed by Substance Use (14 percent).

Many first episodes of mental disorder occur in mid-to-late adolescence and young adulthood. Most mental disorders—depression, problematic substance use, anxiety disorders and psychosis—have their peak period of incidence at this stage. Mental disorders account for a 55 percent of disease burden in young people aged 15–24 years. Anxiety disorders are the most common mental health problem in adolescence. Such disorders are also very likely to be comorbid with depression, problematic substance use and disruptive behaviour disorder.

Substance use disorders tend to emerge in adolescence and peak in late adolescence and early adulthood, before gradually declining throughout adulthood. A similar pattern of onset is evident for psychotic disorders, which generally occur after puberty. The peak age of onset is the early to mid-twenties for males and mid-to-late twenties for females.

Young women are most affected by eating disorders. The most commonly reported are anorexia nervosa and bulimia nervosa.

Early adulthood is a time of particular vulnerability and risk for suicide, although in BC the prevalence of deaths as a result of suicide is highest among older adults and seniors, and older males in particular.

The disruptive and disabling effects of MHSU problems are exacerbated by the mid-to-late adolescence and early adulthood developmental period. This is a critical developmental period, particularly in terms of social and emotional wellbeing. Socially, emotionally, physically and cognitively, major changes are occurring. For example, the process of separation from parents and the establishment of an independent individual identity occurs, critical educational and vocational decisions are made, and peer group affiliations and intimate relationships are formed. All these processes have major long-term influences on the individual. The onset of even a relatively mild mental health or substance use problem at this time can have profound effects. Both the individual and their family can experience considerable trauma and multiple losses. It is crucial to ensure that intervention is provided in a timely manner.

Adulthood
Anxiety/Depression was the most frequent presentation (63 percent), followed by Trauma and Other Mental Health Disorders (14 percent), in adults aged 36-65 years.

After peaking in late adolescence and early adulthood, the prevalence of most MHSU disorders decreases with age. The incidence of new MHSU disorders also declines, and many disorders in adulthood are a recurrence of earlier mental health and/or substance use problems. Anxiety disorders affected about one in ten adults in the past 12 months, followed by substance use disorders and affective disorders. Men were more likely to have a substance use disorder and women were more likely to have an anxiety or affective disorder (Commonwealth Department of Health and Aged Care, 2000).

For adults, stressful life events are strongly associated with the onset of MHSU problems. In half the cases of depressive disorder, an external stressor was found to precede the depression (Commonwealth Department of Health and Aged Care, 2000). Divorce and bereavement are particularly significant events. Involuntary unemployment can also contribute to mental health problems and mental disorders. Imprisonment can have a negative effect on mental health.

Perinatal depression is a disorder of major concern to women. Ten to 15 per cent of women will suffer a major depressive episode within the first three to six months after childbirth (Phillips, 2011). Postpartum psychosis is rare, but potentially very damaging to both mother and child, and affects about two women per thousand deliveries (Seyfried and Marcus, 2003).

There is also substantial evidence that the rates of MHSU disorders are higher among those who have physical impairments, cancer, chronic conditions such as arthritis, or are experiencing the effects of a stroke. Studies in primary care settings confirm the link between physical illness and mental disorder, particularly depression (Evans et al, 2005). People with severe physical illness are more likely to develop an MHSU disorder, and when physical illness is present, symptoms may be more severe.

Older Adults: Ages 66+
Anxiety/Depression was the most frequent presentation (49 percent), followed by High Risk Mental Health conditions (31 percent), in adults aged 66 years and over.

Psychogeriatric services (excluding those specifically for dementia) are emerging as an important area for development within the MHSU system of care due to the aging population. Prevalence of mental health problems is particularly high in older adults who use emergency hospital services (Goldberg et al, 2012). Depression is the most common mental health problem among older adults living in the community, and widowed, divorced or single women are at high risk of untreated depression (Chou & Cheung, 2013). Older adults experience numerous traumatic stressors, such as increased health problems, bereavement, and diminishing physical and cognitive abilities. Between 1.5 and 4 percent are estimated to meet the criteria for Post Traumatic Stress Disorder (PTSD) (Morgen et al, 2015).

The highest suicide rate of any age group is in older adults, especially older Caucasian men, who die by suicide at five times the age-adjusted rate (Garand et al, 2006). Seven percent of older adults suffer from anxiety disorders (Gum et al, 2009), with 15-45 percent estimated to experience impairing sub-clinical anxiety symptoms (Mehta el al, 2003). Prevalence of substance use disorders among older adults is rising due to the higher levels of drug use among the baby boomers, and this age group consumes large amounts of prescription and over-the-counter medications. Concurrent MHSU disorders are high (Morgen et al, 2015). Behaviour disorders in those over the age of 65 years can take the form of physical aggression, wandering and disruptive verbal outbursts. Common causes of behaviour disorders include delirium, depression, dementia, and psychosis (APA, 1998).

Older adults require age-sensitive treatment (Schutte et al, 2015; Wuthrich, 2015). Assessment should include risk of elder abuse, including physical, sexual, emotional, and financial abuse by family members and/or caregivers (Office of the Ombudsperson, 2014).

Emergency Department Services

People experiencing MHSU issues use emergency departments at a rate greater than the rest of the BC population. Of the approximately 1.96 million visits to emergency departments in 2013/14, almost 682,000, or 35 percent, were by people in the MHSU cohort.

Table 2: ED visits by identified client groups and age in 2013/14

Client Group	0-12	13-18	19-35	36-65	66+	Total ED visits
Substance Use	1,067	4,767	43,812	78,068	16,616	144,330
High Risk Mental Health	581	4,676	22,137	45,970	79,696	153,060
Anxiety/Depression	4,883	11,605	75,712	138,108	70,991	301,299
Developmental/Neurological	9,146	2,570	3,050	3,114	2,802	20,682
Trauma and Other Mental Health Disorders	3,291	2,192	12,389	25,916	18,337	62,125
Total	18,968	25,810	157,100	291,176	188,442	681,496

Those with Anxiety/Depression conditions have a higher number of emergency department visits than any other group – about 301,000 visits. Those in the High Risk Mental Health group are the second most frequent visitors, making about 153,000 visits, closely followed by those with Substance Use – 144,000 visits. While children in the Developmental/Neurological group make up almost 50 percent of the total visits for that age group, overall the percent of total emergency department visits is low (3 percent).

Repeat Emergency Department Visits

Table 3 shows the percentage of clients within each age group who are particularly frequent visitors to the emergency department, as indicated by five or more visits in one year, in both the MHSU cohort and other clients.

Table 3: Percentage of clients with five or more ED visits in 2013/14, by age

Age Group	Life Stage	Percentage of MHSU Clients (5+ visits)	Percentage of non-MHSU Clients (5+ visits)
0-12	Childhood	4 percent	2 percent
13-18	Adolescence	6 percent	2 percent
19-35	Emerging/ Early Adult	11 percent	4 percent
36-65	Stable Adult	11 percent	4 percent
66+	Seniors	15 percent	8 percent
Total		11 percent	4 percent

- The percent of the MHSU cohort that has five or more emergency department visits in the year is higher (11 percent) than the non-MHSU population (4 percent).
- Of seniors, those in the “High Risk Mental Health” group account for 42 percent of the visits, followed by 38 percent in “Anxiety/Depression” group.
- Historical analysis shows that mental health clients who visit emergency departments do so later in the day, likely when physician/community services are unavailable.
- Additional analysis is underway to review the pharmacy data to determine if some clients are visiting emergency departments for anxiety/depression prescriptions and renewals.

Use of Emergency Department by MHSU Cohort

Table 4 shows the use of emergency departments by the five client groups identified in Table 1.

- The Anxiety/Depression category has the highest number of visits; however, only 9 percent visited more than five times.
- 57 percent of clients in the Substance Use category used the emergency department and 20 percent of those visited more than five times in a year. This pattern suggests that for this group, the emergency department may currently be the primary point of access to care.

Table 4: ED use in five identified client groups in 2013/14

Client Group	ED Users	ED Visits	ED Visits per 1,000 Users	Percent of Cohort Using ED	Percent of ED Users with 5+ ED Visits
Substance Use	42,564	144,330	3,391	57 percent	20 percent
High Risk Mental Health	55,177	153,060	2,774	45 percent	15 percent
Anxiety/Depression	139,355	301,299	2,162	31 percent	9 percent
Developmental/ Neurological	11,035	20,682	1,874	26 percent	6 percent
Trauma and Other Mental Health Disorders	29,930	62,125	2,076	29 percent	8 percent

Hospitalizations

There were approximately 22,400 people in the MHSU population (2.8 percent) hospitalized in 2013/14 for an MHSU primary diagnosis. This represents 4 percent of all hospital users.

Figure 5 shows the MHSU cohort, by age group, as a percentage of total hospital users.

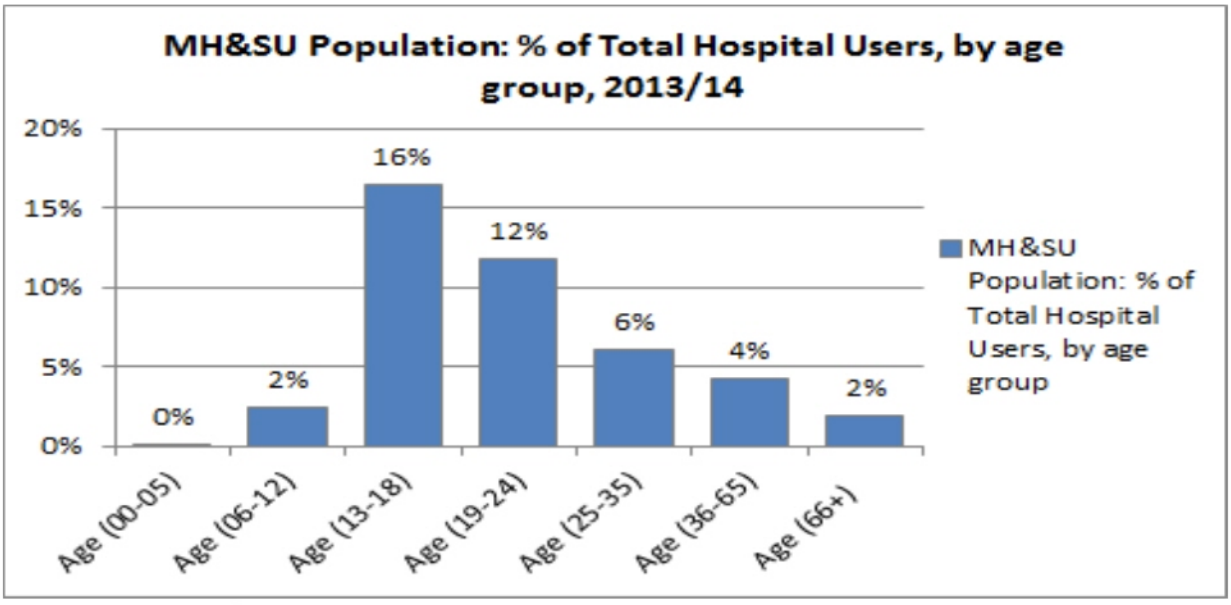

Figure 5: MHSU cohort as a percentage of total hospital users, by age group in 2013/14

Figure 5 shows that within the MHSU population, adolescents and emerging adults tend to be hospitalized for MHSU reasons more than other age groups.

Table 5 shows the average length of stay in hospital. The Substance Use and High Risk Mental Health groups have higher hospital rates than the three other groups.

Table 5: Hospitalizations rates per 1,000 population and average length of stay (ALOS) by identified client groups, 2013/14

Client Group	MHSU Diagnoses Only Hospital Stay Rate/1,000	Any Diagnoses Hospital Stay Rate/1,000	ALOS MHSU Only	ALOS Any Hospital Stay
Substance Use	127	324	9	8
High Risk Mental Health	91	352	16	14
Anxiety/Depression	3	180	8	8
Developmental/ Neurological	8	116	12	10
Trauma and Other Mental Health Disorders	2	188	5	12

The Substance Use client group has particularly high numbers of hospital stays, both for MHSU and for other medical reasons. A similar pattern is observed in the High Risk Mental Health client group.

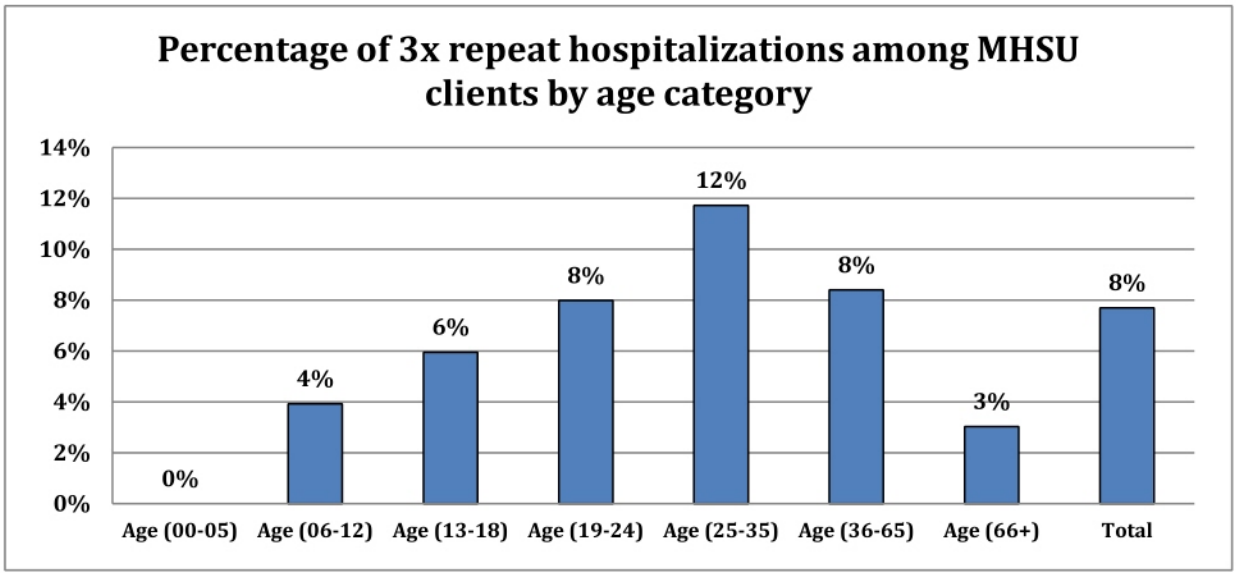

Figure 6: Repeat hospitalizations in MHSU clients by age, in 2013/14

Figure 6 shows that adults (age 25-35 years) have the highest rate of repeat hospitalization among MHSU clients (12 percent). The Mental Health Commission of Canada suggests that readmission shortly after hospitalization might be due to a lack of stabilization during the previous visit, poor discharge planning or not enough community supports.

MHSU Medication Utilization

The PharmaNet database captures information on the dispensing of prescriptions from community pharmacies. This analysis includes medications in the mental health-related categories, including:

- Antidepressants
- Antimanic agents
- Anxiolytic, sedative, hypnotic (non benzodiazepine)
- Barbiturates (anxiolytic, sedative, hypnotic)
- Benzodiazepines (anticonvulsants)
- Benzodiazepines (anxiolytic, sedative, hypnotic)
- Miscellaneous anxiolytic, sedative, hypnotic
- Opiate agonists
- Opiate partial agonists
- Resp & cerebral stimulants
- Tranquilizers

Figure 7 shows the mental health-related medication use by age and identified client groups for fiscal year 2013/14. Prescriptions are particularly pronounced in the adult (36-65 years) Anxiety/Depression group.

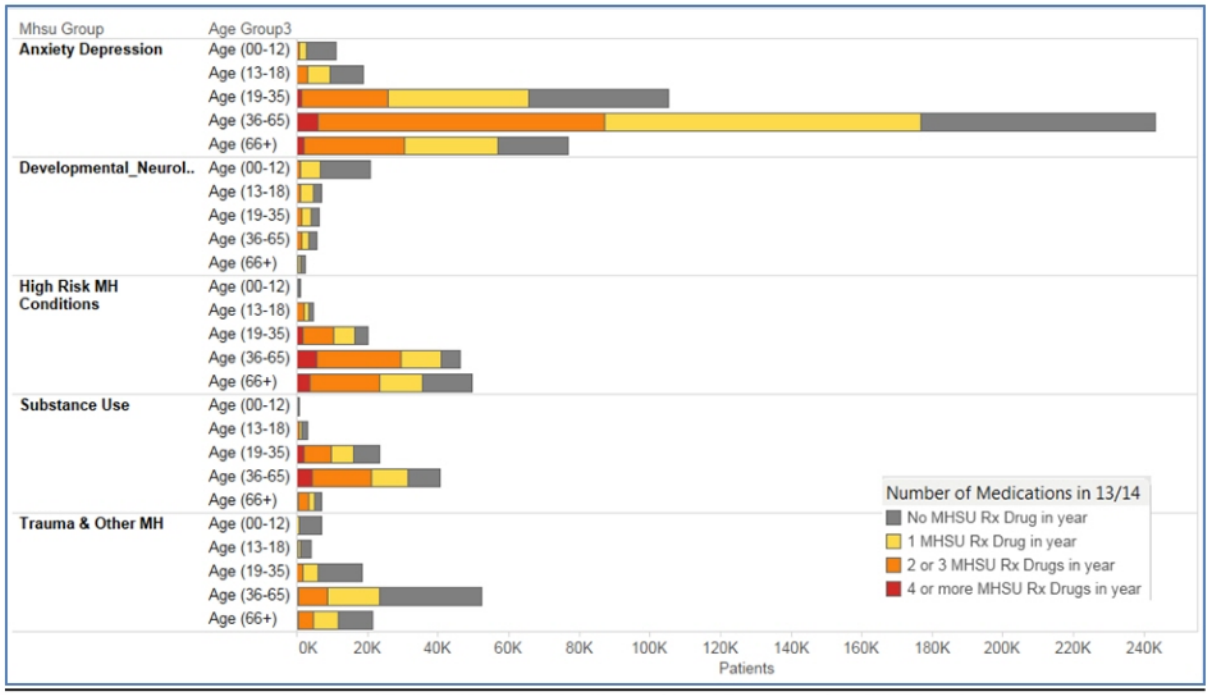

Figure 7: Multiple MHSU medication use, in 2013/14

Severity

The distinctions made between mild, moderate and severe MHSU problems span a range of dimensions. Diagnosis is not an indicator of severity; all MHSU conditions can be experienced as mild, moderate or severe, even within the same person at different times. For this reason, the system of care should not be organized around diagnosis, but rather level of need. Severity is determined based on the following indicators:

- **Functioning:** The extent to which a person's functioning is affected by their mental health and/or substance use.
- **Acuity:** Short duration and/or urgent risks or adverse consequences (e.g., accidents or criminal charges that are associated with the index problem, e.g., intoxication) (Rush et al, 2013).
- **Chronicity:** The development or worsening of long duration or enduring conditions, (e.g., major depression, chronic pain, Hepatitis C) (Rush et al, 2013).
- **Complexity:** The degree of co-occurrence of the acute or chronic index problems and/or the existence of health and social factors such as homelessness, unemployment, family dysfunction that complicate the process of addressing the index problem (Rush et al, 2013).
- **Risk of harm:** The risk of harm to oneself, including suicide, or to other people, including domestic violence.
- **Number of symptoms:** MHSU disorders typically have a variety of symptoms. An indication of severity, for example, for the diagnosis of substance use disorders is the number of diagnostic criteria: mild is indicated by the presence of two to three symptoms; moderate is four to five symptoms; severe is six or more symptoms (DSM-V, p. 491).
- **Time:** The symptoms of MHSU problems are rarely experienced constantly, so the amount of time that symptoms are occurring is an indication of severity. In general, symptoms are considered mild if they occur on several days within a two-week period, moderate if they occur more than half the days, and severe if they occur nearly every day (DSM-5, p. 739).
- **Distress:** The level of distress experienced by the person is an indication of severity; some people experience intense symptoms, but are able to manage without a high level of distress. Others experience occasional or mild symptoms, but are very upset by them. The level of distress also has an impact on family, work, and other relationships.
- **Control:** The degree of control felt by a person over the symptoms of MHSU disorders varies. For example, some people experience intense cravings for alcohol and other drugs, but are able to manage these cravings. Some people with anxiety disorders experience intense feelings of panic, but are able to control them.

Depending on the degree to which these indicators are impacting them at any given time, people will require varying levels of support and/or intervention. Data on severity experienced by people within the MHSU cohort is not readily available for systems planning.

People Vulnerable to Mental Health and/or Substance Use Problems

Healthy Minds, Healthy People identified the vulnerability of certain populations or groups of people developing MHSU problems at certain times of their lives, and proposed targeted prevention interventions to reduce risk and enhance protection. While many of the initial actions have been completed, health disparities persist among certain vulnerable groups, suggesting the need for further focused attention across the continuum of services. Specific data on the experiences of people in these vulnerable groups in the MHSU cohort is not readily available for systems planning.

First Nations and Aboriginal People

BC First Nations and Aboriginal people face numerous health disparities, including higher rates of suicide, depression, substance use and family violence (BC Provincial Health Officer, 2009). As a result, rates of hospitalization for mental wellness issues and behavioural disorders remain significantly higher than the rest of the population. First Nations youth are four to five times more likely to die by suicide compared to non-First Nations and suicide remains the fourth highest overall cause of death. The Ministry of Health has received feedback on this paper from the First Nations Health Authority (FNHA). The FNHA expressed support for some components of the initiative, such as including a focus on mental wellness. However, it is clear that the current framework is seen as a western medical model and not inclusive of Indigenous perspectives such as the circle of wellness in *A Path Forward: BC First Nations and Aboriginal People's Mental Wellness and Substance Use – 10 Year Plan*. To address the health disparities experienced by BC First Nations and Aboriginal people, it is necessary to work in partnership with FNHA and other stakeholders throughout the upcoming operational planning processes.

Children of Parents Living with MHSU Disorders

MHSU disorders in parents represent a risk for their children—they are among those at highest risk for psychiatric problems. While many children in this situation cope well, especially when parental illness is short-term or well-managed, children of depressed parents face a roughly 50 per cent risk of developing a depressive disorder before age 20 (Beardslee, Keller, Lavori, Klerman, Dorer & Samuelson, 1988). The risk of developing a mental disorder is stronger when the parent's disorder is bipolar disorder, schizophrenia, alcohol use or other substance use, or major depression. Risk is exacerbated when both parents have mental illness or when children have been abused, neglected, witnessed violence, or live in poverty or inadequate housing (Goepfert, Webster & Seeman, 1996; Scott, Shaw & Joughin, 2001). Preventing transgenerational transfer of MHSU disorders requires addressing risk and protective factors in both children and their families.

Immigrants and Refugees

Immigrants and refugees are a diverse group with varying MHSU needs. Refugees are more likely to develop post-traumatic stress disorder (PTSD) as a result of experiences prior to their arrival in Canada, such as war, torture, violence, persecution and family separation (AMSSA, 2015). They can also face significant challenges in adjusting due to language barriers, poverty, cultural differences and stigma.

Not all immigrants and refugees are fleeing conflict or trauma. Immigrants in the family class may be rejoining relatives who may themselves have been exposed to conflict-related trauma. Given the trans-generational impact of conflict-related trauma and the available evidence-based approaches to preventing depression, anxiety and post traumatic stress, BC residents who have been exposed to conflict merit special attention.

People with Chronic Health Conditions and People with Physical or Development Disabilities

Physical health and mental health are interconnected. People who have physical issues like heart problems and diabetes are more likely to develop mental health problems. 65 percent of individuals who experience acute myocardial infarction subsequently report symptoms of depression, 15 to 22 percent of whom report major depression. Conversely, depression is itself a risk factor in the development of cardiovascular disease in otherwise healthy persons. People who are depressed and who have pre-existing cardiovascular disease have a 3.5 times greater risk of death than those who are not depressed and have cardiovascular disease (Guck, Kavan, Elsasser & Barone, 2001).

Depression and anxiety are seen more frequently among people with disabilities—people who have activity limitations report having had more days of pain, depression, anxiety and sleeplessness and fewer days of vitality (Centers for Disease Control, 1998). Individuals with developmental disabilities have significantly higher prevalence of mental health disorders—10 percent higher for adults and 25 percent higher for children and youth (Byrne et al., 2007).

Lesbian, Gay, Bisexual, Transgendered, 2-Spirit and Questioning People (LGBT2SQ)

Discrimination based on sexual orientation and gender is known to negatively impact mental health (MHCC, 2012). Lesbian, gay, bisexual and transgendered people's experiences of discrimination can lead to higher rates of mental health problems than in the heterosexual population. Rates of sexual and physical assault and bullying are higher among LGBT2SQ youth, potentially leading to trauma-related mental health issues (ibid).

LGBT2SQ youth were more likely than their heterosexual and/or cisgendered peers to report problems with alcohol or other drug use, self-harm and attempted suicide (McCreary Centre Society, 2011). Awareness of the stress associated with discrimination based on sexual and gender orientation, and interventions that increase resilience, are an important addition to traditional evidence-supported therapies when working with LGBT2SQ clients (Hendricks & Testa, 2012; Cochran 2001; CPA 1995).

Individuals Experiencing Homelessness

The homeless are more likely to have MHSU issues and homelessness and housing insecurity exacerbates these problems. A 2009 survey found that 93 percent of the homeless individuals surveyed met the criteria for an MHSU disorder at some point in their lives and 56 percent met the criteria for a concurrent disorder (Krausz & Schuetz, 2011).

Individuals Involved with the Justice System

MHSU problems are well recognized as the norm among provincial offenders (Somers, Carter & Russo, 2008). Based on a 2015 study, 60 percent of the corrections population had been diagnosed with an MHSU problem (Somers Research Group, 2015).

4. Integrated Quality MHSU Health Services System – Value Propositions

The BC MHSU system of care will be a responsive and integrated network of services that provides clients and their families with the treatment services and supports needed to enable them to live, work, learn and participate fully in their communities. It will be guided by client and family-centred values and principles, and supported by a provincial enabling infrastructure including a performance management and reporting framework. More specifically:

Value Proposition for Clients and Families
Clients and their families will have access to a comprehensive range of core MHSU services, including evidence-based treatment for the major MHSU disorders. Those who are coping with MHSU problems will experience improved health outcomes via timely access to effective care, appropriate to the level of need.

Value Proposition for the Wider Community
Community services agencies, schools and workplaces will have access to health promotion and prevention resource materials and programs related to MHSU. Guidance for accessing effective resources at local, regional and provincial levels will be readily available online or through the Primary Care Home.

Fiduciary Value Proposition
The Ministry of Health will require health authorities to increase spending on primary and community MHSU services over the coming three years, and fully implement the policy directions set out in this paper over the same time. Key service benchmarks will be applied and monitored by community to ensure timely service access.

The design and delivery of specialized care programs will be within budget allocations including health authority global budgets and the existing available amount for Medical Services Plan insured services. It is critical to ensure that innovation is scalable and sustainable. Resources for specialized and highly specialized MHSU services must not be reallocated to the primary care sector.

Physicians working within specialized care programs will have access to a range of funding models including salaried, blended and contracted.

5. An Integrated, Functional Framework for Mental Health and Substance Use

The MHSU system of care framework is a tool for understanding how MHSU services will be provided across multiple medical, psychological and social sub-systems. The purpose of the system of care is to describe how these sub-systems, comprising clients and families, health authorities, and private and non-profit partners, work together, ensuring continuity of care for clients and families and closing gaps identified in the current fragmented system.
The system of care was developed with the recognition that each client's journey is unique and the model is not reflective of an assumed client pathway. Rather, clients can enter the system at any point and receive the right services for their level of need at that time. As their needs change, seamless transitions between services are facilitated through intentional links across services and across tiers (see Figure 8 on page 26 for a description of the tiers).
Primary care is an integral part of the system, across all tiers, because access to primary care is essential to all levels of need to maintain optimal health. Primary care is the cornerstone for the client – it is the home base for the client's care plan and the hub from which connections are made to more specialized levels of MHSU care.

Meeting Diverse Client Needs

Positive mental health is essential to physical health and is more than the absence of mental illness. It allows people to experience life as meaningful and to be healthy, productive members of society. BC's health system includes a range of activities focused on promoting mental well-being, preventing mental disorders, and treating people affected by MHSU problems/disorders.

The treatment of problematic substance use is also based on the recognition that instances and patterns of substance use occur on a spectrum. Some people use psychoactive substances in ways that could cause harm to themselves, their families or society, but do not necessarily constitute an addiction; this is considered problematic substance use. A small minority of people who use alcohol, medications and other drugs become addicted to these substances. The type and intensity of substance use intervention/treatment will be determined according to where an individual is on the spectrum, in addition to individual characteristics and circumstances.

BC's MHSU system is founded on the principle of recovery – the belief that recovery from MHSU problems is not only possible, but is expected when the proper services and supports are in place (Mental Health Commission of Canada, 2015). In this context, recovery refers to living a satisfying, hopeful and meaningful life, as defined by the individual. Recovery is possible for everyone, even when individuals continue to use substances or when mental health problems and mental illness continue to cause ongoing limitations. The principle of recovery embraces the notion, increasingly supported by research, that the diagnosis of an MHSU disorder is not a life sentence -- clients and families are supported in creating a future that is not defined by their disorder and they may not always require MHSU specific services. However, supports are available if difficulties arise. In addition, recovery includes harm reduction.

Recovery from an MHSU disorder is not negated by ongoing or fluctuating symptoms, relapse, and/or continued substance use, including prescribed medications and substitution treatments.

A client-centred health system should reflect the fact that health status varies over. Individuals may not move through stages in a linear fashion; services must reflect where clients are in relation to making changes in their lives.

Since people with MHSU problems are often cared for by family members, the system needs to recognize the importance of families and their unique role in building and sustaining resilience. When the supportive role and needs of families are not acknowledged and facilitated, and the context of family is absent from the care provided, the health, well-being and functioning of both the individual and the family may be compromised. Not only does this potentially undermine the effectiveness of the care and treatment, it can increase the risk of MHSU problems for other family members. In a family-centred approach, those working within and across systems consistently view individuals in the context of their families and communities. They recognize families as experts on their own needs and view them as partners in decision-making and planning wherever desired, practical and safe.

BC's MHSU system is also based on the recognition that MHSU problems have many causes, including biological, psychological, social and spiritual factors. In particular, there is a higher prevalence of MHSU conditions among individuals who experience discrimination or face other social and health challenges. These populations also frequently experience systemic barriers to accessing care. Client needs for MHSU services differ according to a wide variety of factors. In developing a client-centred system, the optimal treatment pathway must be highly individualized and responsive to each client's needs, goals and current context. Treatment is also voluntary and reflects personal choice except in very specific circumstances consistent with the *Mental Health Act*'s legislative mandate for involuntary treatment and extended leave provisions.

Objectives and Principles

The overall objective of the system of care is to achieve meaningful outcomes for clients and their families by providing accessible, safe, quality MHSU services for all British Columbians.

Underpinning the dimensions of quality is a commitment to key principles:

- Client and Family-Centred: Centered on the health needs of individuals, their families and communities to provide high-quality care, improve the overall client experience, and improve client outcomes. Clients should be active participants in developing plans for individualized services that reflect their unique goals, needs and potential. Services should be responsive to factors such as gender, culture, ethnicity, socioeconomic status, disability, sexual orientation, migration status, age and geography.
- Integrated and Comprehensive: Ensuring integrated and comprehensive MHSU care, including health promotion and disease prevention. Services are integrated around individuals and simple, clear pathways exist to ease navigation.

- Equity: Ensuring the fair distribution of health care services according to population need.
- Quality and Value for Money: Built on the domains of quality, the system achieves value for money and budget sustainability. The system ensures the optimal use of resources to yield maximum benefits and results.

Functional Framework

The proposed MHSU system of care is based on a five tier model (see Figure 8). Service functions meet population and client needs outlined in the World Health Organization's *Pyramid for Optimal Mix of Services for Mental Health* (2007) and Rush et al.'s (2013) needs-based planning model.

Critical to the model is varying levels of access based on prevalence and acuity. Additionally, as the complexity and severity of MHSU conditions increase, an individual requires a broader menu of treatment and intervention approaches. Addressing the barriers created by stigma, especially at the service provider level, will be important to the success of strategies to improve access.

Description of the Tiered Functional Model

Tier 1 services are designed to build the capacities of individuals and families, to improve their ability to cope with adversity, and to create supportive community environments. Services equip people to thrive, cope with adversity, and make health-promoting decisions.

Tier 1 is focused on enhancing natural systems and networks of support. This includes an emphasis on the social determinants of health and education and policy functions aimed at the whole population, with the objective of promoting optimal mental health and well-being and preventing the development of MHSU problems (Rush et al, 2013).

The focus of mental health promotion is different for each stage of life. Initiatives focusing on children set the groundwork for healthy early development and healthy behaviours that can be sustained into adulthood. Community support for families facilitates positive development of cognitive, social and self-regulation skills for children and youth. For adults, creating environments that support mental wellness, such as healthy workplaces, and recreational opportunities that promote healthy attitudes and behaviours concerning substance use, are important. For older adults, strong interpersonal and community connections and opportunities for physical activity are central (Government of BC, 2010).

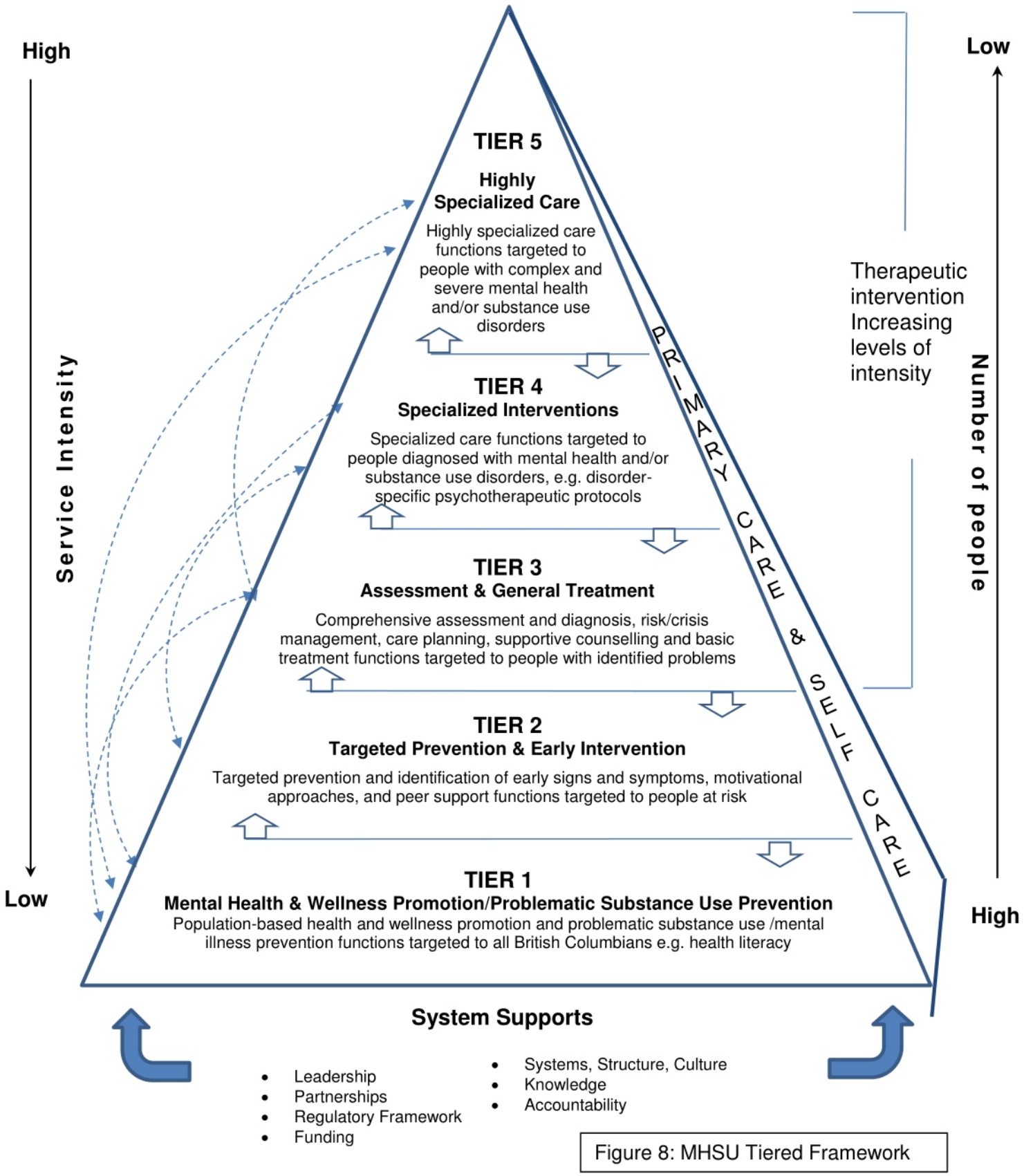

Figure 8: MHSU Tiered Framework

Examples of Tier 1 services include health promotion and prevention activities and online health literacy information. Strategies that address opportunities for interaction and connectedness in key settings or environments are also important.

Tier 2 focuses on vulnerable populations at risk of developing MHSU problems, with the goal to providing appropriate support at an early stage.

In BC, some people and groups of people are more vulnerable to mental health and/or substance use problems than others. Vulnerability may be influenced by social and cultural inequities or be due to family history or genetic predisposition. Social factors, such as exposure to violence and trauma, poverty, inadequate housing, or lack of social support, can be mitigated through the strategic provision of appropriate supports. Targeted prevention interventions attempt to identify and mitigate problems at an early stage, to reduce risk, and enhance protective factors, particularly at key developmental stages or transition points in people's lives. People with Tier 2 needs include those with emerging or unidentified mental health or substance use.

Examples of Tier 2 services include early identification of MHSU problems and vulnerabilities, community-based peer support, motivational counseling, school-based mental wellness services, family support, child care and parenting programs and assistance with housing. Harm reduction services such as condom and sterile syringe distribution, take-home naloxone programs, and supervised consumption services are also Tier 2 services. The non-profit sector is important in providing these services, which are integrated into community-based services, such as counseling centres, peer support services, youth centres, family places, recreation centres, public libraries, homeless shelters and Aboriginal friendship centres.

Tier 3 focuses on: people with identified MHSU problems who are not yet engaged in treatment; people who are currently receiving treatment; and those who may have completed treatment or specialized care, but require ongoing support in the community.

A key goal of Tier 3 services is to provide timely, accessible and appropriate services in the community to minimize the frequency and severity of acute episodes and reduce the need for hospital care or emergency department visits.

Early intervention and timely access to appropriate supports and treatment services can reduce the negative impacts of MHSU problems, and contribute to healthier outcomes. Many children, youth and adults with MHSU problems, including those that do not fully meet diagnostic criteria, experience troubling symptoms that can be effectively alleviated through low-intensity community-based services (Clossick & Woodward, 2014).

Tier 3 also includes general support functions, such as continuing care, supportive counseling, support groups, walk-in services, and functions designed to reduce the risks and consequences associated with the identified problems, such as emergency and acute medical care, psychosocial crisis intervention, and needle exchange services (Rush et al, 2013). MHSU

services are linked to community resources, such as financial assistance and housing, and harm reduction services such as supervised injection.

Tier 3 services include comprehensive assessment and diagnosis (by appropriately qualified regulated professionals) through office-based or outreach models. These could take place in the Primary Care Home, in the client's home, or in alternative community settings. Additional services include crisis services, telephone support and rapid response mobile outreach to address immediate and urgent needs, and online MHSU self-assessment, counseling and support services.

Examples of evidence-based treatment provided at Tier 3 include structured group Cognitive Behavioural Therapy (CBT), Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT) for people with mild to moderate anxiety and depression. Pharmacotherapy can be provided as an adjunct to therapy when appropriate, or provided to people with more complex conditions such as bipolar disorder and schizophrenia who have been stabilized at higher tiers.

Tier 4 services provide treatments to people with diagnosed disorders. It is comprised of, but not limited to, most of the functions generally considered to be part of the specialized MHSU treatment systems. The functions include ambulatory and structured residential interventions, pharmacotherapy and psychotherapy. These are specialized treatment functions intended to be delivered by professionals with appropriate training, to people who have been assessed and diagnosed as requiring this level of specialized intervention. The function is unrelated to setting or service provider, but will be primarily provided by specialized care programs.

Tier 5 functions are designed for people with the highest level of need for support, and who are experiencing particularly complex and/or severe MHSU problems. Tier 5 needs can include inpatient medical withdrawal management, comprehensive inpatient/residential concurrent disorder services and in-patient forensic services. Higher intensity treatment services for complex conditions include Assertive Community Treatment (ACT), intensive, longer term therapeutic programs led by psychologists or psychiatrists with specialized training.
The expertise required to deliver Tier 5 services is higher than the standard professional specialization and requires a significant commitment of specialized staff resources, time and accommodation.

6. MHSU Health Services System Template

Health authorities will establish local, regional and provincial system level pathways of care for MHSU clients and their families based on the policy set out in this section. This work is being done in collaboration with clients and families, primary and specialist physicians, community agencies, institutional stakeholders and partnering ministries.

Figure 9 shows the required elements for a comprehensive MHSU system of care. All elements should be accessible to clients and their families, but will vary in how they are implemented across metro, urban, and rural/remote settings. Key components of the system-level pathways will include:

- Health Promotion and Primary Prevention online and setting/population-specific services,
- Primary Care Homes (full service family practices linked and/or integrated with inter-professional teams),
- specialized care programs connected to a broad array of services and supports.

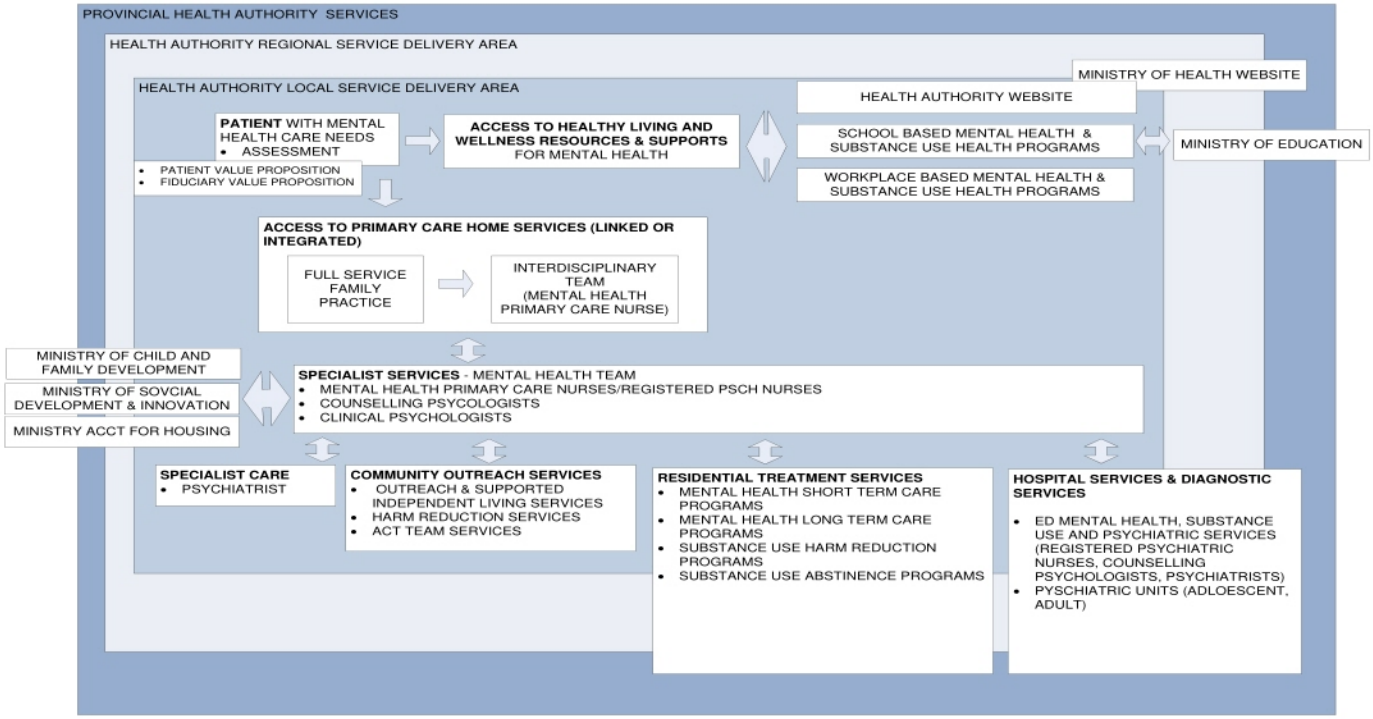

Figure 9: MHSU Service System

MHSU Service Information and Health Promotion

The Ministry of Health, in collaboration with health authorities, clients and families, community-based service partners and other government ministries, will provide clients and their families accessible, online information that sets out in plain language what local, regional and provincial services are available and how they can be accessed.

They will also provide easily accessible online information and materials linked to mental health promotion and early intervention strategies to maintain good mental health. These materials will be linked into school and work-based programs.

A revamped health help line will underpin these online services.

Patient Medical Homes and Networks linked with Health Authority/Community Primary Care Services (Primary Care Home)

The local cornerstone of health services across the province will be the Patient Medical Home (PMH) and Networks of Patient Medical Homes linked to HA/community delivered primary care services (Primary Care Home or [PCH]). A PCH is a community-based network of PMHs linked with health authority or community-delivered primary care services that are locally accessible for all health related concerns.

In the case of MHSU care, those services will include assessment, short-term and long-term care, and medication monitoring. Health authorities will work with local primary care physicians and community agencies to shape the PMH/PCH model as a client-centred care setting where:

- Clients have a family physician or a nurse practitioner who provides and directs their medical care;
- Care is holistic and client- and family-centred;
- Care is coordinated, continuous and comprehensive with clients having access to an inter-professional team;
- Greater flexibility with timing of appointments;
- Information technology supports the practice, including an electronic medical record;
- Remuneration supports the model of care; and
- Quality improvement and client safety are key objectives.

The PMH/PCH is built on the ongoing relationship between the client and their practitioner/team. With respect to the MHSU population, it will provide easy access to MHSU supports, responding early to a person's mild to moderate needs while providing seamless referral to services for clients requiring more specialized care. The PCH will support individuals with emerging or unidentified MHSU problems and those with severe conditions who have been successfully stabilized through access to intensive services.

Specific MHSU services accessible through the PCH include:

- Assessment and diagnosis and early support for emerging or unidentified MHSU problems;
- Individualized care plans;
- Information and tools to enhance resilience, including health literacy and self-management for MHSU conditions, and specific mental health promotion and substance use prevention materials and related services;
- Harm reduction education and resources;
- Time-limited, solution-focused counseling;

- Shared care with community-based services, including social services, for mild to moderate MHSU health needs;
- Treatment and medication monitoring;
- Shared care and/or referral to specialized care programs for clients with complex conditions; and
- 'Step down' care for those with more severe problems who have successfully completed intensive treatment.

Where appropriate, the PMH/PCHs may also include:

- Nurses (RN, LPN, or NPs) working in conjunction with GPs and medical office assistants to deliver team-based supports and meet the population health needs; and
- Visiting health professionals who augment the local Patient Medical Homes and/or virtual telehealth services, with consultations for both clients and providers using shared-care principles.

In addition, MHSU clients will have access to the full range of primary care services available to the whole population, but for which they may have higher need and more difficulty accessing, including:

- Health promotion and illness prevention services, such as screening and health assessments;
- Primary care for minor or episodic illnesses, such as diagnostic services and referral for surgery;
- Primary reproductive care;
- Chronic disease management;
- Coordination and access to rehabilitation;
- Support for hospital care and care provided in-home and in long-term care facilities; and
- Support for the terminally ill

Specialist Services: Mental Health and Substance Use Specialized Care Programs

The PCH is formally linked to designated MHSU specialized care programs. The specialized care programs will be health authority delivered or contracted services. The services provided by inter-professional teams are targeted towards individuals with moderate to severe mental illness and/or substance use, including those with severe and complex mental illness, co-existing problematic substance use and multiple social and functional challenges.

The MHSU specialized care programs team consists of multidisciplinary MHSU professionals providing individualized care for each client. In addition to providing individualized treatment, the MHSU team coordinates a comprehensive array of services and supports, including:

- Psychiatric services:
- Community Outreach Services: outreach services and supported independent living, ACT Teams, harm reduction services:
- Substance Use Treatment Services: Daytox and facility-based withdrawal management;

- Linkages and referrals to higher levels of out of home services, including assisted living and residential care services (including both harm reduction and abstinence-based programs);
- Step down capacity for clients who have been hospitalized in a level 4 or 5 acute hospitals. This will provide continuity of care, allow proactive care management and rapid mobilization in emergencies and bypass the often-damaging process of going through a traditional emergency department/inpatient hospital process;
- Rapid access to pharmacy, diagnostic and hospital outpatient, emergency and inpatient acute psychiatric care services; and
- Access to and coordination of services linked to comprehensive long-term patient records and planning.

In most cases, the PCH will act as the conduit to specialized mental health care; however, direct access to a specialized care program, or access from acute care are also options. The specialized care programs will also support individuals to access higher levels of services.

The specialized services will provide full integration of specialized care for clients, including children and adolescents. Within an integrated case management approach, evidence informed interventions and access to appropriate medication will reflect best practice for specific diagnoses.

There will be formalized partnerships with services and supports provided by:

- Ministry of Children and Family Development
- Ministry of Social Development and Social Innovation
- Ministry of Natural Gas Development & Ministry Responsible for Housing, and BC Housing
- Provincial Health Services Authority, including the forensic hospital, correctional services and Tier 5 residential care. These services are offered at a provincial level and are designated for individuals requiring the most intensive services for their MHSU concerns.
- Non-governmental organizations.

Core attributes of the specialized care programs include:

- Capacity to provide comprehensive, evidence-based services to address the health care needs of individuals, including children and adolescents, with moderate to severe MHSU issues, including those with co-existing problem substance use, and social and/or functional challenges.
- Care is organized through shared or linked electronic medical records, single shared care plans and team charting.
- Responsive access with same-day and prescheduled appointments, and emergency response contingent on need.
- Virtual care options including access to appropriate telephone or videoconferencing advice/consultations.

- Access to appropriate patient self-management and group care services (including support for family caregivers).
- Extended hours of operation with appropriate arrangements for 24/7 on call response.
- Specialized care programs will be responsible for defined geographic areas.

Teams Working With Teams

An important focus in the proposed system is the concept of teams working with teams. In contrast to the current, fragmented system, PCHs will be comprised of inter-professional teams working together to provide responsive, holistic primary care. These teams will work collaboratively with specialized care programs, which will be comprised of inter-professional teams, including psychiatrists, psychologists, psychiatric nurses, counsellors, social workers and other allied health professionals, to meet the needs of clients with more severe and complex needs. Rather than a hand-off process, the teams within PCHs will stay engaged with clients to ensure their primary care needs continue to be met. A schematic of this relationship is shown in Figure 10. A specialized care program may be linked to one or more PCHs depending on geography and the size of the population served. A specialized care program will also have links to acute and tertiary core services.

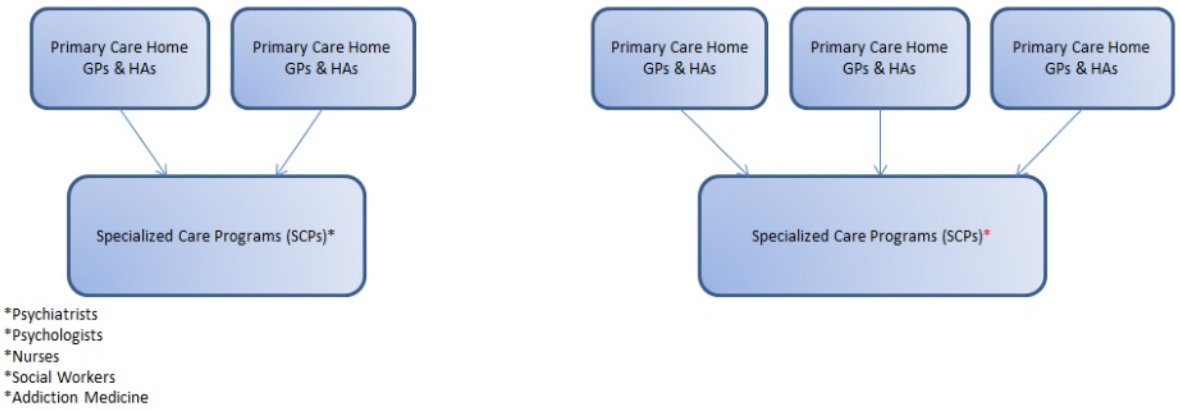

Figure 10: Teams working with Teams

Broader Community Context

The MHSU system of care will not operate independently of community supports. In many circumstances, community-based, non-medical services provided by the non-governmental sector work hand in hand with PCHs and specialized care programs. In other situations, community-based services provide alternative supports that may be more accessible to clients who do not feel ready to seek services from mainstream MHSU services, and provide an important role of engaging and supporting clients and their families, and preparing them for receiving care when they feel ready.

Geographical Distribution of Services

Health service delivery in BC is organized around five regions which are then subdivided into 16 Service Delivery Areas and, within these, 64 Geographical Service Areas. The Geographical Service Areas are categorized as metro, urban or rural/remote. Additionally, the Provincial Health Services Authority and the First Nations Health Authority also provide varying degrees of MHSU services consistent with their respective mandates. This includes the Ministry of Health working with the First Nations Health Authority through the Joint Project Board, to make strategic investments in primary care and mental health services in First Nation communities.

The number and type of the health care practices in each community differs based on community needs, with location playing a key determining factor.

Service Level Pathways in Urban/Metro Communities

In metro and urban areas of the province, it is expected that health authorities will provide all service elements linked to a local service delivery area.

Service Model in Rural and Remote Communities

In rural and remote areas of the province, it is expected that health authorities will support PCHs with access to specialized care programs and specialist support services being provided within a Service Delivery Area.

While elements of the system will vary across rural/remote and urban/metro settings, the core components and functions remain consistent. Building from generalist primary care, the model requires effective clinical pathways and linkages to higher levels of MHSU services when required through a hub and spoke service model. In line with the principle of "closest to home", a variety of innovative approaches are required to facilitate the hub and spoke model including tele-health technology, shared care, expert consultation models, and mobile clinics and visiting practitioners. Travel assistance for clients is also important as a last resort for accessing the most specialized services that are only available in regional or provincial centres.

Specialized Provincial Resources

For some high acuity, low prevalence MHSU disorders, it is not feasible to provide services at either the community or regional level. In those circumstances, specialized care may need to be provided via technology (phone, video-conferencing) or travel to a specialized provincial service. These will be provided through the Provincial Health Services Authority, which is accountable to maintain links to the regional health system and specifically to the client's PCH.

7. Leveraging and Aligning Health Human Resources, Information Technology and Organizational Capacity to Deliver a High Quality System of Care

Health Human Resources

Health authorities working with Divisions of Family Practice (or where not in operation directly with Family Practices) will establish a network of PCHs across their communities. This network will have capacity to meet the needs of mild to moderate MHSU issues (Tiers 2 – 3) through core training and development for general practitioners and primary care nurses augmented by the use of registered psychiatric nurses where demand warrants.
Health authorities will implement integrated service centres staffed by psychologists, psychiatric nurses and social workers to provide specialized MHSU services.
Health authorities will also provide qualified specialist care, community outreach services and residential care staff.
All emergency departments and inpatient units will have adequate numbers of staff qualified to meet the needs of clients with MHSU issues.

Information Management and Communication

The Ministry of Health will support health authorities and PCHs to ensure there is adequate and rapid flow of information to support the care of clients and their families.

Organizational Capacity

Communication: The Ministry of Health will work with partners to communicate with clients, their families and service providers about the system of MHSU care and about the resources that are available to them. This will include a single website that provides access to online services and information.

Governance and Management: As a key area of focus, the MHSU system of care will be a standing item for health authority boards over the coming two years. Each health authority will assign a senior executive team sponsor. All management within the health authorities will be oriented to the model of care as part of their broader orientation to strategic priorities.

Alignment and Team Work: Health authorities will ensure that their staff understand the system of care. The Ministry of Health will work with health authorities to include and build alignment with Doctors of BC, professional associations, advocacy and community groups, and unions.

Innovation and Knowledge Management: The Ministry of Health will host two forums starting in the spring of 2016 and 2017 to report out on progress and enable the sharing of best

practices. The ministry will ensure access to best practice information through its Library Services Branch, linked into the central website.

Financial and Cost Management: Detailed costing and budget modelling to ensure sustainability will be facilitated by the Ministry of Health in collaboration with health authorities and the Doctors of BC.

Monitoring, Reporting, and Evaluation: The Ministry of Health, in collaboration with health authorities and the Doctors of BC, will enable monitoring, public reporting and evaluation of this initiative.

8. Next Steps

The Government of British Columbia recognizes the need to work in a broad systems way to improve mental health and reduce harms from substance use. The 2016 Throne Speech announced a Cabinet working group on mental health. The working group represents a cross-government approach to MHSU involving eight ministries. It is currently taking stock of government's existing mental health programs and services, and developing a cross-system response to this challenging issue. This work will build on the significant and positive work already underway and consider how this work can be done in a more integrated way to meet the needs of BC Citizens. The Ministry of Health is working to ensure that the health sector-specific plans are coherently and supportively connected with this broader strategic undertaking.

The System of Care for MHSU will build on, better coordinate, expand and execute on work already underway. A number of services and programs are in operation within schools and in partnership with the justice system. Work is also in progress to better define the role and scope of mental health services provided by the Ministry of Children and Family Development for children and adolescents. Additionally, the work of the Child and Youth Mental Health and Substance Use Collaborative, sponsored by the Ministry of Health and Doctors of BC through the Shared Care, Specialist Services and General Practice Services Committees, is highlighting key areas that need to be addressed at a local, regional and provincial level to bring about system improvements.

9. References

Adshead, G. (2011). The Life Sentence: Using a Narrative Approach in Group Psychotherapy with Offenders. Group Analysis, 44(2), 175-195. doi: 10.1177/0533316411400969

Affiliation of Multicultural Societies and Services Agencies (AMSSA) of BC. (2015, February). Retrieved from http://www.amssa.org/wp-content/uploads/2015/05/AMSSA-Info-Sheet-Issue-21-Mental-Health1.pdf

Augusta-Scott, T., & Dankwort, J. (2002). Partner abuse group intervention: lessons from education and narrative therapy approaches. *Journal of Interpersonal Violence*, 17(7), 783-805.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, (fifth edition), DSM-V*. Washington DC: American Psychiatric Association. p. 491.

American Psychological Association. (1998). Older Adults' Health and Age-Related Changes: Reality Versus Myth. Retrieved from http://www.apa.org/pi/aging/resources/guides/older-adults.pdf

Ashouri, A., Atef Vahid, M. K., Gharaee, B., & Rasoulian, M. (2013). Effectiveness of meta-cognitive and cognitive-behavioral therapy in patients with major depressive disorder. *Iranian Journal Of Psychiatry And Behavioral Sciences*, 7(2), 24-34.

Beardslee, W., Solantaus, T. & van Doesum, K. (2005). Coping with parental mental illness. In: Hosman C, Jané-Llopis E, Saxena S, (Eds.) *Prevention of mental disorders: effective interventions and policy options*. Oxford, Oxford University Press.

Burns, J., & Birrell, E. (2014). Enhancing early engagement with mental health services by young people. *Psychology Research And Behavior Management*, 7

Byrne, C. D., Hurley, A. D., James R. (2007). Planning Guidelines for: Mental Health & Addictions Services for Children, Youth & Adults with Developmental Disabilities. Victoria, BC: British Columbia Ministry of Health.

Canadian Mental Health Association, Ontario. (2008, December). Backgrounder: The Relationship between Mental Health, Mental Illness and Chronic Physical Conditions. Toronto, ON: Canadian Mental Health Association, Ontario.

Canadian Psychological Association. (1995). Canadian code of ethics for psychologists. Ottawa, Ontario, Canada: Author. Retrieved from http://www.cpa.ca/ethics.html

Centers for Disease Control and Prevention (1998). Health-related quality of life and activity limitation—Eight states, 1995. *Morbidity and Mortality Weekly Report*, 47, 134-140.

Centre for Addictions Research of BC. University of Victoria. Substance use & emergency room visits. Retrieved from http://www.uvic.ca/research/centres/carbc/stats/emergency-departments/index.php

Chou, K.L., & Cheung, K. C. (2013). Major depressive disorder in vulnerable groups of older adults, their course and treatment, and psychiatric comorbidity. *Depression & Anxiety*, 30(6), 528-537.

Clossick, E., & Woodward, S. (2014). Effectiveness of alcohol brief interventions in general practice. *British Journal of Nursing*, *23*(11), 574-580.

CMHA – Ontario. Retrieved from https://ontario.cmha.ca/public_policy/the-relationship-between-mental-health-mental-illness-and-chronic-physical-conditions/

Cochran, S., Sullivan, J., Greer Mays, V. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, 71(1), 53-61.

Combs, G., & Freedman, J. (2012). Narrative, poststructuralism, and social justice: Current practices in narrative therapy. *The Counseling Psychologist*, 40, 1033-1060. doi: 10.1177/0011000012460662

Commonwealth Department of Health and Aged Care. (2000). P*romotion, prevention and early intervention for mental health—a monograph*. Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care, Canberra. Publications Production Unit (Public Affairs, Parliamentary and Access Branch)

Crombach, A., & Elbert, T. (2014). The benefits of aggressive traits: A study with current and former street children in Burundi. *Child Abuse & Neglect*, *38*(6), 1041-1050. doi:10.1016/j.chiabu.2013.12.003

Dickerson, F.B., & Lehman, A.F. (2011). Evidence-Based Psychotherapy for Schizophrenia: 2011 Update. *Journal of Nervous and Mental Disease*, 199 (8), 520-526.

Doherty, M., & Thompson, H. (2014). Enhancing person-centred care through the development of a therapeutic relationship. *British Journal Of Community Nursing*, 19(10), 502-507. doi: 10.12968/bjcn.2014.19.10.502

Evans, D.L., Charney, D.S., Lewis, L., Golden, R. N., Gorman, J.M., Krishnan, K. R. R., … Musselman, D. (2005). Mood Disorders in the Medically Ill: Scientific Review and Recommendations. *Biological Psychiatry*, 58(3), 175-189.

Foster, K., Lewis, P., & McCloughen, A. (2014). Experiences of Peer Support for Children and Adolescents Whose Parents and Siblings Have Mental Illness. *Journal Of Child & Adolescent Psychiatric Nursing*, 27(2), 61-67. doi: 10.1111/jcap.12072

Garand, L., Mitchell, A.M., Dietrick, A., Hijjawa, S.P., Pan, D. (2006). Suicide in older adults: nursing assessment of suicide risk. *Issues in Mental Health Nursing*, 27(4), 355-70.

Gilligan J. & Lee B, (2005a). The Resolve to Stop the Violence Project: Reducing violence in the community through a jail-based initiative. *Journal of Public Health*, *27*(2), 143-8.

Gilligan, J. & Lee, B. (2005b). The Resolve to Stop the Violence Project: Transforming an in-house culture of violence through a jail-based programme. *Journal of Public Health*, *27*(2), 149-55.

Gilligan, J. (2003). Shame, guilt, and violence. *Social Research, 70*(4), 1149-1180.

Goepfert, M., Webster, J. & Seeman, M. (Eds.). (1996). *Parental psychiatric disorder—distressed parents and their families*. Cambridge: Cambridge University Press.

Goldberg, S.E., Whittamore. K. H., Harwood, R. H., Bradshaw, L. E., Gladman, J.R.F., Jones, R.G. (2012). The prevalence of mental health problems among older adults admitted as an emergency to a general hospital. *Age & Ageing*, 41(1), 80-6.

Goldenson, J., Spidel, A., Greaves, C., & Dutton, D. (2009). Female perpetrators of intimate partner violence: within-group heterogeneity, related psychopathology, and a review of current treatment with recommendations for the future. *Journal of Aggression, Maltreatment & Trauma, 18* (7), 752-69.

Government of BC. (2010). Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia. Ministry of Health Services & Ministry of Children and Family Development.

Government of British Columbia. (2009). The BC Provincial Health Officer 2009 Report: Mental Wellness and Substance Use in BC. Victoria: BC.BC Provincial Mental Health and Substance Use Planning Council. (2013, May). Trauma-Informed Practice Guide.

Government of Canada. The Human Face of Mental Health and Mental Illness in Canada. Minister of Public Works and Government Services Canada. Catalogue No. HP5-19/2006E. 2006.

Guck, T., Kavan, M., Elsasser, G., & Barone, E. (August 2001). Assessment and Treatment of Depression Following Myocardial Infarction. *American Family Physician*, 64, 4.

Gum, A.M., King-Kallimanis, B., Kohn, R. (2009). Prevalence of mood, anxiety, and substance-abuse disorders for older Americans in the national comorbidity survey-replication. *American Journal of Geriatric Psychiatry*, 17(9), 769-81

Halpern, J. H., Suzuki, J., Huertas, P. E., & Passie, T. (2015). Hallucinogen abuse and dependence. In I. P. Stolerman & L. H. Price (Eds.), Encyclopedia of Psychopharmacology. Second edition, 722-726. New York: Springer.

Halpern, J. H., & Pope, H. G. (2003). Hallucinogen persisting perception disorder: What do we know after 50 years? *Drug and Alcohol Dependence*, 69(2), 109-110.

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460-467.

Herek, G. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*, 24(1), 54-74.

Hijazi, A. M., Lumley, M. A., Ziadni, M. S., Haddad, L., Rapport, L. J., & Arnetz, B. B. (2014). Brief narrative exposure therapy for posttraumatic stress in Iraqi refugees: a preliminary randomized clinical trial. *Journal of Traumatic Stress*, 27(3), 314-322. doi:10.1002/jts.21922

Horvath, A. T., & Yeterian, J. (2012). SMART Recovery: Self-Empowering, Science-Based Addiction Recovery Support. *Journal of Groups In Addiction & Recovery*, 7(2-4), 102-117. doi: 10.1080/1556035X.2012.705651

Ingamells, K., & Epston, D. (2014). Love is Not All You Need: A Revolutionary Approach to Parental Abuse. *Australian & New Zealand Journal of Family Therapy*, *35*(3), 364-382. doi: 10.1002/anzf.1069

Johansen, P.-Ø., & Krebs, T. S. (2015). Psychedelics not linked to mental health problems or suicidal behavior: A population study. *Journal of Psychopharmacology*, 29(3), 270-279.

Khoury, B., Lecomte, T., Gaudiano, B. A., & Paquin, K. (2013a). Mindfulness interventions for psychosis: A meta-analysis. *Schizophrenia Research*, *150*(1), 176-184. doi:10.1016/j.schres.2013.07.055

Khoury, B., Lecomte, T., Comtois, G. & Nicole, L. (2013b). Third wave strategies for emotion regulation in early psychosis: A pilot study. Early Intervention in Psychiatry. 1751-7893

Klingaman, E. A., Medoff, D. R., Park, S. G., Brown, C. H., Fang, L., Dixon, L. B., & Kreyenbuhl, J. A. (2015). Consumer satisfaction with psychiatric services: The role of shared decision making and the therapeutic relationship. *Psychiatric Rehabilitation Journal*, *38*(3), 242-248. doi: 10.1037/prj0000114

Krausz, R. M., & Schuetz, C. (2011). British Columbia Health of the Homeless Survey Report. University of British Columbia Institute of Mental Health. Retrieved from http://www.cheos.ubc.ca/wp-content/uploads/our-research/addictions-concurrent-disorders/BC-Health-of-the-Homeless-Survey-FINAL.pdf

Krebs, T. S., & Johansen, P.-Ø. (2013). Psychedelics and mental health: A population study. *PLoS ONE*, 8(8), e63972

Kröger, C., Schweiger, U., Sipos, V., Kliem, S. Arnold, R., Schunert, T. & Reinecker, H. (2010). Dialectical behaviour therapy and an added cognitive behavioural treatment module for eating disorders in women with borderline personality disorder and anorexia nervosa or bulimia nervosa who failed to respond to previous treatments. An open trial with a 15-month follow-up. *Journal of Behavior Therapy and Experimental Psychiatry 41*(4), 381-388; PMID: 20444442

Levensky, E.R., Forcehimes, A., O'Donohue, W.T., Beitz, K. (2007). Motivational interviewing: an evidence-based approach to counseling helps patients follow treatment recommendations. *American Journal of Nursing*. 107(10), 58-59.

Linehan, M. M., Armstrong, H. E., Suarez, A., & Allmon, D. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48*(12), 1060-1064.

Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice*, 20, 137-160.

Lussier, J. P., Heil, S. H., Mongeon, J. A., Badger, G. J., & Higgins, S. T. (2006). A meta-analysis of voucher-based reinforcement therapy for substance use disorders. *Addiction*, 101, 192-203. doi: 10.1111/j.1360-0443.2006.01311

Luthar, S.S. & Suchman, N.E. (2000). Relational Psychotherapy Mothers' Group: a developmentally informed intervention for at-risk mothers. *Development and Psychopathology*, 12(2), 235-53.

Luthar, S.S., Suchman, N.E. & Altomare, M. (2007). Relational Psychotherapy Mothers' Group: a randomized clinical trial for substance abusing mothers. *Development and Psychopathology*, 19(1), 243-61. doi: 10.1017/S0954579407070137

Lynch, T., Gray, K., Hempel, R., et al. (2013). Radically open-dialectical behavior therapy for adult anorexia nervosa: Feasibility and outcomes from an inpatient program. *BMC Psychiatry, 13,* 293.

McCreary Centre Society. (2011). Making the right connections: Promoting positive mental health among BC youth. Vancouver, BC: McCreary Centre Society.

McMahon, Thomas J., Winkel, Justin D., Luthar, Suniya S. & Rounsaville, Bruce J. (2005). Looking for Poppa: Parenting status of men versus women seeking drug abuse treatment. *American Journal of Drug and Alcohol Abuse*, 31(1), 79-91. doi: 10.1081/ADA-37567

Mehta, K.M., Simonsick, E.M., Penninx, B.W.J., Schulz, R., Rubin, S.M., Satterfield, S., Yaffe, K. (2003). Prevalence and correlates of anxiety symptoms in well-functioning older adults: findings from the health aging and body composition study. *Journal of the American Geriatrics Society*, 51(4), 499-504.

Mental Health Commission of Canada. (2010). Making the Case for Peer Support. Retrieved from http://krasmancentre.com/files/ENG_MHCC_Consultation_ Questions _ FINAL __Electronic_Jun_24_09.pdf

Mental Health Commission of Canada. (2012). Changing Directions, Changing Lives: The Mental Health Strategy for Canada. Calgary, AB: Mental Health Commission of Canada.

Mental Health Commission of Canada. (2015). Guidelines for Recovery-Oriented Practice.

Miller, W., & Rollnick, S. (2002). *Motivational interviewing: preparing people for change*. Second edition. New York: Guilford

Ministry of Health. (2012, August). Integrated models of primary care and mental health and substance use care in the community.

Ministry of Health. (2015, February). Rural Health Services in BC: A Policy Framework to Provide a System of Quality Care.

Mohlman, J. (2012). A community-based survey of older adults' preferences for treatment of anxiety. *Psychology and Aging*, 27(4), 1182-1190.

Newberry, M. (2010). A synthesis of outcome research at Grendon therapeutic community prison. *Therapeutic Communities*, *31*(4), 356-371.

Office of the Ombudsperson. (2014). The Best of Care: Getting it Right for Seniors in British Columbia (Part 2). Retrieved from https://www.bcombudsperson.ca/documents/best-care-getting-it -right-seniors-british-columbia-part-2

Petry, N. M., Alessi, S. M., & Ledgerwood, D. M. (2012). A randomized trial of contingency management delivered by community therapists. *Journal of Consulting and Clinical Psychology*, 80(2), 286-298.

Pfeiffer, P.N., Heisler, M., Piette, J.D., Rogers, M.A., Valenstein, M. (2011). Efficacy of peer support interventions for depression: a meta-analysis. *Gen Hosp Psychiatry*, 33(1), 29-36.

Phillips, M. L. (2011). Treating postpartum depression, Psychotherapy, rather than medication, should be the first line of treatment, research suggests. 42(2), 46. Retrieved from http://www.apa.org/monitor/2011/02/postpartum.aspxReif et al, 2014

Robins & Chapman (2004); Linehan, et al (2006); Stoffers, et al (2010).

Ross, M. (1990). The relationship between life events and mental health in homosexual men. *Journal of Clinical Psychology*, 46, 402-411.

Rostosky, S., Scales Riggle, E., Horne, S. & Miller, A. (2009). Marriage amendments and psychological distress in lesbian, gay, and bisexual (LGB) adults. *Journal of Counseling Psychology*, 56(1), 56-66.

Rush, B., Tremblay, J., Fougere, C., Behrooz, R., Perez, W. & Fineczko, J. (2013, April). Development of a Needs-Based Planning Model for Substance Use Services and Supports in Canada: Final Report. Toronto, ON: Centre for Addiction and Mental Health.

Savin-Williams, R. (2001). Suicide attempts among sexual-minority youths: Population and measurement issues. *Journal of Consulting and Clinical Psychology*, 69(6), 983-991.

Schneider, N., Korte, A., Lenz, K., Pfeiffer, E., Lehmkuhl, U. and Salbach-Andrae, H. (2010). [Subjective evaluation of DBT treatment by adolescent patients with eating disorders and the correlation with evaluations by their parents and psychotherapists]. Subjektive Therapiebeurteilung jugendlicher Patientinnen mit Essstörungen und deren Ubereinstimmung mit Eltern- und Therapeutenbeurteilungen. (German). *Zeitschrift Für Kinder- Und Jugendpsychiatrie Und Psychotherapie* [Z Kinder Jugendpsychiatr Psychother], *38*(1), 51-57.

Schutte, K., Lemke, S., Moos, R., & Brennan, P. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In Crome, I., Wu, L., Rao, R., Crome, P. *Substance Use and Older People*. Wiley-Blackwell. 314-339.

Scott N., Hanstock T., & Patterson-Kane, L. (2013). Using narrative therapy to treat eating disorder not otherwise specified. *Clinical Case Studies*, 12 (4), 307-321. doi: 10.1177/1534650113486184

Seyfried, L. S., Marcus, S. M. (2003). Postpartum mood disorders. *International Review of Psychiatry*, 15(3), 231-242.

Singh, S. P. (2009). Transition of care from child to adult mental health services: the great divide. *Current Opinion in Psychiatry*, 22(4), 386-390.

Solanto, M., Marks, D., Wasserstein, J., Mitchell, K., Abikoff, H., Alvir, J., & Kofman, M. (2010). Efficacy of meta-cognitive therapy for adult ADHD. *American Journal Of Psychiatry*, 167(8), 958-968. doi: 10.1176/appi.ajp.2009.09081123

Somers, J., Cartar, L, & Russo, J. (2008). Corrections, health and human services: Evidence-based planning and evaluation. Vancouver, BC: Centre for Applied Research in Mental Health and Addiction, Faculty of Health Sciences, Simon Fraser University.

Somers Research Group (2015). Mentally Ill Offenders: The Intersection of Public Health and Public Safety. Faculty of Health Sciences, Simon Fraser University.

Sue, D.W., Carter, R. T., Casas, J. M., Fouad, N. A., Ivey, A. E.,& Vazquez-Nutall, E. (Eds.). (1998). *Multicultural counseling compentencies: Individual and organizational development*. Thousand Oaks, CA: Sage Publications.

The World Health Organization. (2007, September). The Optimal Mix of Services for Mental Health. Geneva, Switzerland: World Health Organization, Mental Health Policy, Planning and Service Development.

Tober, G., Raistrick, D. (2007). *Motivational dialogue: Preparing addiction professionals for motivational interviewing practice*. New York: Routledge.

Trauma Informed Practice Guide. (2013). Retrieved from http://bccewh.bc.ca/wp-content/uploads/2012/05/2013_TIP-Guide.pdf

Treasure, J., Schmidt, U. & Hugo, P. (2005). Mind the gap: service transition and interface problems for patients with eating disorders. *The British Journal of Psychiatry*. 187(5), 398-400.

Vromans, L. P., & Schweitzer, R. D. (2011). Narrative therapy for adults with major depressive disorder: Improved symptom and interpersonal outcomes. *Psychotherapy Research*, 21, 4-15. doi: 10.1080/10503301003591792

White, M. (2007) *Maps of narrative practice*. New York, NY,: Norton.

Willetts, K. (2009). Transgender Health Program. *Visions Journal*, 6(2), 32-34.

World Federation for Mental Health. (2004). The Relationship between Physical and Mental Health: Co-occurring Disorders. Retrieved from www.wfmh.org

Wright, J. H., Turkington, D., Kingdon, D. G., Basco, & Ramirez, M. (2009). *Cognitive-behavior therapy for severe mental illness: An illustrated guide*. Washington, DC: American Psychiatric Publishing.

Wuthrich, V. (2015). Barriers to treatment for older adults seeking psychological therapy. *International Psychogeriatics*, 27(7), 1227-1236.

Appendix A: Core Treatment Approaches, Interventions and Considerations

An overview of the prevalence of major groupings of disorders across the lifespan is illustrated in Figure C1.

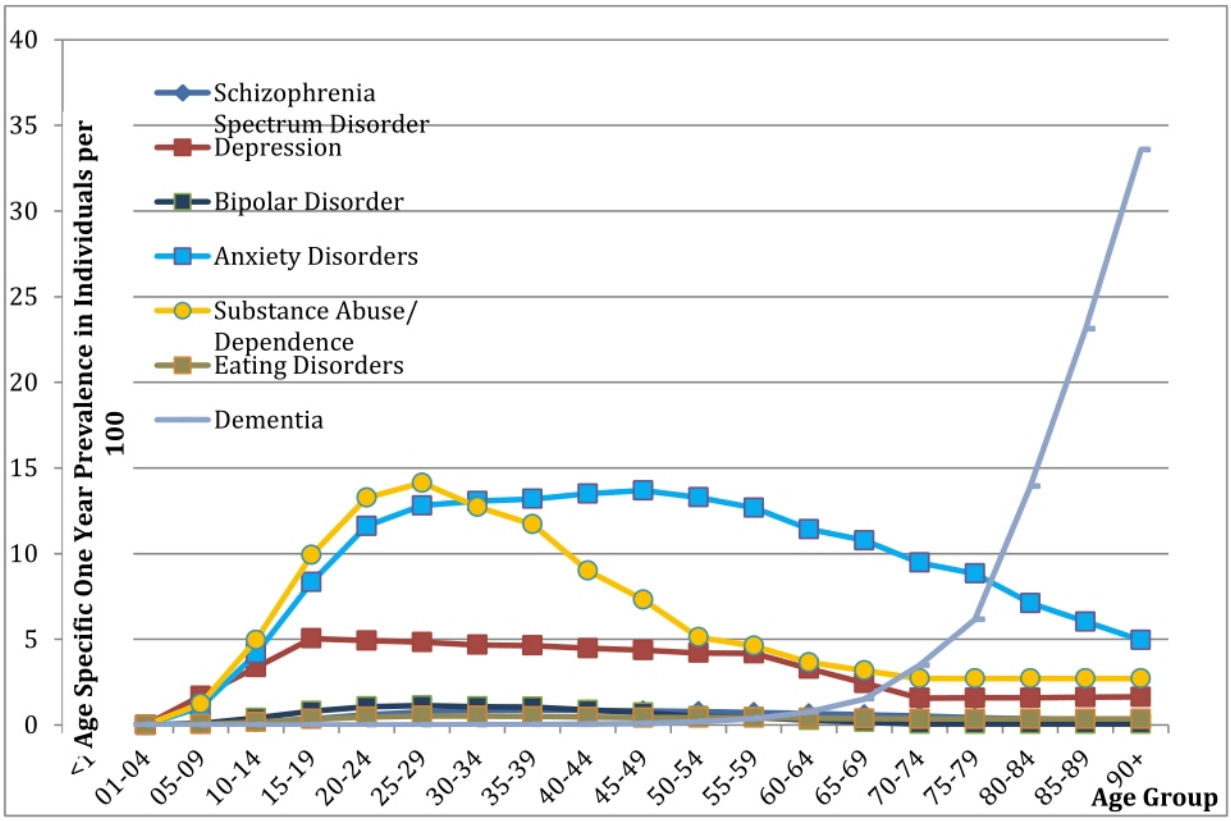

Figure C1: Age specific one year prevalence of mental health and substance use disorders based on epidemiological data (Goldner et al, 2011, reprinted with permission)

Evidence-Based Psychotherapies

Table C1 provides an overview of Evidence-Based Psychotherapeutic modalities, aligned with substance use problems and mental disorders which are shown to be effective in research. Some disorders have well established treatments, while others are under-researched. A lack of research evidence for a specific modality should not, in of itself, result in a client being denied the treatment option.

Table C1: Mental Health and Substance Use Problems/Disorders and Recommended Evidence-Based Treatment Modalities

Diagnostic Group	Description	System Considerations	Evidence-Based Treatment Modalities
Alcohol-Related Problems/ Disorders	Alcohol is widely consumed by British Columbians often without serious consequences. Problems related to alcohol use vary greatly, and range from intoxication-related injuries, accidents and social harms, to physical health problems such as cirrhosis, increased risk of cancer, stroke, heart disease, dementia, alcohol-induced mental disorders, and addiction.	• The majority of costs resulting from alcohol are for social harms and health system costs other than addiction. • Driving under the influence of alcohol is a leading cause of death. • Many people can learn to control their drinking, while others require abstinence to avoid relapse.	<u>Mild to moderate:</u> • Brief advice from a physician • Motivational Enhancement Therapy (MET) • Social Network and Behaviour Therapy (SNBT) <u>Severe:</u> • Withdrawal Management • Cognitive Behaviour Therapy (CBT) • Narrative Therapy
Cannabis-Related Problems/ Disorders	Cannabis has become more widely acceptable in British Columbia in recent years. Problems related to cannabis use may include short-term intoxication related effects, driving while impaired by cannabis, using more than intended, or for longer than intended, difficulty fulfilling other role obligations, and cannabis-induced mental health problems.	• Cannabis is available by recommendation of a health practitioner when medically implicated (e.g. for MS, glaucoma, cancer). • Some cannabis is more potent than in the past, which can lead to more pronounced intoxication and other effects. • Early age of onset (<15 years) predicts greater problems.	<u>Mild to moderate:</u> • Motivational approaches • Adolescent Community Reinforcement Approach with Assertive Care <u>Severe:</u> • Cognitive Behaviour Therapy (CBT) • Family Therapy
Stimulant-Related Problems/ Disorders	Stimulants are used in prescription medication and illicit forms. They include amphetamine, methamphetamine, which is associated with severe social and physical problems, and cocaine/crack, which is highly addictive.	• Available on prescription. • Athletes, people with eating disorders, and club/rave/festival goers are at risk. • Excessive methamphetamine use is associated with severe cognitive and dental problems, and psychosis.	<u>Mild to moderate:</u> • Motivational approaches <u>Severe:</u> • Supportive-Expressive Therapy (SET) • Cognitive Behaviour Therapy (CBT) • Matrix model (CBT, family education, social support and individual counseling)

Hallucinogen-Related Problems/ Disorders	Hallucinogens are typically used to change perceptions and thought processes, for recreation or spiritual exploration.	• Addiction to hallucinogens is rare in comparison with other drugs. • Accidents while intoxicated are a risk. • Hallucinogen persisting perception disorder and substance induced mental health problems are rare but significant risks for some individuals.	• Evidence-based treatment modalities for hallucinogen-related problems have not been established • Clients may benefit from treatments offered for stimulant-related problems
Inhalant-Related Problems/ Disorders	Volatile hydrocarbon inhalation is associated with social and interpersonal problems and suicidality, and is a particular risk for youth and for highly marginalized and impoverished children, youth and adults.	• Accidents and sudden death from cardiac arrhythmia are significant risks. • Neurological, gastrointestinal, cardiovascular, and pulmonary impairment may result from use. • Abstinence is advisable as a treatment goal, and social problems need to be addressed.	• Evidence-based treatment modalities for inhalant-related problems have not been established • Clients may benefit from extended withdrawal management, family therapy, activity-based programs, Indigenous led approaches, and narrative therapy
Opioid-Related Problems/ Disorders	Opioids are used in prescription medication and illicit forms. They may be inhaled, taken orally or via a skin patch, or injected. Problematic opioid use is associated with significant health and social problems and criminal activity. There is a high prevalence of trauma history among people with opioid dependence. People who use heroin have long trajectories of substance use, typically including polydrug use and numerous treatment attempts and relapses.	• Infectious disease transmission through needle sharing is a significant risk. • Prescription opioid problems have escalated in recent years, while illicit heroin use continues to affect an estimated 20,000 British Columbians. • Overdose, including fatality, is a significant risk. • People using heroin may need assistance with housing and financial support to successfully address their drug-related problems.	• Opioid Substitution Treatment (OST) e.g., methadone and suboxone. • Withdrawal management • Motivational approaches • Counseling • Cognitive Behavioural Therapy (CBT) • Supportive-Expressive Therapy (SET) • Relational psychotherapy for mothers on OST
Sedative-Related Problems/ Disorders	Sedative, hypnotic, or anxiolytic substances includes all prescription sleeping medications and almost all prescription anti-anxiety medications. These drugs	• High risk of overdose, especially when taken in combination with alcohol or other drugs. • Highly addictive.	• Tailored letter from a physician • Withdrawal Management • Cognitive Behaviour

	are depressants, carrying similar intoxication effects to alcohol, and are highly addictive.	• Pronounced, life-threatening withdrawal syndrome, requiring medical management.	Therapy (CBT) with concurrent drug taper.
Anxiety Disorders	Anxiety is an unsettling state of worry or fear about what might happen, often causing physical stress symptoms (e.g. pounding heart, muscle tension sense of impending danger.) Anxiety experienced is disproportionately greater than normal and continues for months or years.	• Less than half seek treatment • Socially isolated • Often unable to work • Exceptionally high medical services rates • Up to one quarter of ED and cardiology patients have a panic disorder	• Relaxation training • Cognitive Behavioural Therapy (CBT) • Mindfulness Based Stress Reduction (MBSR) • Couples therapy, if appropriate
Personality Disorders	Personality disorders are long-term, distressing patterns of coping that develop early in life and cause considerable difficulty functioning including: difficulty regulating emotions, problematic interpersonal relationships, disorganization of thoughts and behaviour. Disorders include schizoid, schizotypal, paranoid, borderline, antisocial, histrionic, narcissistic, obsessive compulsive, avoidant and dependent.	• Elevated risk of self harm, suicidal thoughts and behaviour, and aggression • Vastly over-represented among MHSU clients, but often misdiagnosed. • Extremely high service utilization rates, including family physician and emergency room usage, medication prescriptions, outpatient psychiatry and hospitalization	• Dialectical Behaviour Therapy (DBT) • Schema Therapy • Emotion Regulation Group Therapy and individual therapy • Systems Training for Emotional Predictability and Problem Solving group therapy and individual therapy • Anti-violence Therapy
Depressive Disorders	Depression is an extended period of sadness or an inability to enjoy pleasurable activities, which causes significant impairment in social, occupational or other important areas of life. The person's self-esteem can also be disrupted, sometimes to the point that feelings of hopelessness or even self-loathing	• Most common psychiatric disorder in people who die by suicide • Projected to become the leading cause of the worldwide disease burden by 2030 (WHO, 2008) • Higher prevalence in cities vs. rural areas	• Cognitive Behavioural Therapy (CBT) • Mindfulness-Based Cognitive Therapy (MBCT) • Interpersonal psychotherapy • Emotion-focused therapy • Narrative Therapy
Obsessive-Compulsive Disorders	OCDs are a spectrum of mental health problems that involve a combination of intrusive, unwanted thoughts, urges or images (obsessions) with seemingly uncontrollable and repetitive behaviours	• Hoarding disorder develops early in life, but treatment is often not sought until late adulthood • Hoarding disorder is associated with complications in living arrangements,	• Exposure and response prevention (ERP) • Cognitive therapy • Cognitive Behaviour Therapy for OCD • Family Skills Based

	(compulsions) that are highly ritualized and often performed to control or relieve the obsessive thoughts. Hoarding disorder entails accumulation of possessions, which excessively congest and clutter active living areas.	including fire and infestation hazards.	Training for Hoarding Disorder
Trauma and Stress Related Disorders	Trauma is exposure to a distressing, emotionally overwhelming experience such as exposure to violence or life-threatening situations, serious injury, or sexual abuse. Refugees, survivors of war, childhood apprehension and institutionalization, violence, life-threatening accidents, sexual abuse, as well as witnesses of such incidents, loved ones of victims, and people who are exposed to the aftermath of trauma and stress as part of their work, are at risk of developing trauma and stress related disorders.	• Conditions vary from uncomplicated, single incident reactions to stressors to highly complex and debilitating disorders resulting from ongoing abuse • Many Aboriginal people (Residential School Syndrome), refugees, and homeless people have experienced trauma • Trauma can be intergenerational, affecting whole families • Increased risk of suicide	• Eye movement desensitization and reprocessing (EMDR) • Cognitive Behavioural Therapy (CBT) for trauma • Stress Inoculation Training if the client does not want exposure • Narrative Exposure Therapy (refugees and asylum seekers; children, youth, and adults) • Narrative Therapy
Eating Disorders	Eating disorders are long-term problems with excessive and/or restricted eating behaviour, which affect the person's intake or absorption of food to the point where it impairs their physical or psychological health and well-being.	• Affects ten times as many women as men • High mortality rate if untreated	• Enhanced Cognitive Behaviour Therapy • DBT eating disorder-specific protocol • Family therapy, if appropriate • Narrative Therapy •
Bipolar Disorders	Bipolar disorders are a group of mental health problems that involve periods of mania (elevated, often energetic, and sometimes irritable moods) and periods of depression – often going back and forth between one and the other.	• Suicide rate 15-20 times the rate of the general population • Genetic vulnerability • Can involve periods of psychosis • May require hospitalization to prevent harm to self or others	• Individual or group cognitive therapy • Cognitive Behavioural Therapy (CBT) • Interpersonal and social rhythm therapy • Family focused therapy for bipolar disorder

Psychotic Disorders	Psychosis is a serious mental health condition in which a person loses touch with reality, through distorted perceptions or hallucinations (hearing or seeing things that are not really there), and disrupted thinking or delusions (believing things to be true that other people of the same culture do not believe to be true).	• Highly variable extent of disability • Strong genetic vulnerability • Stressful life events increase the lifetime risk by 80 percent • A small proportion make a full recovery • Most experience lifelong effects, even with medication	• Individual CBT for psychosis • Individual or group family therapy • Group art therapy if the client has persistent negative symptoms • Compassion, Acceptance, and Mindfulness (CAM) for negative symptoms