Key Issues in Healthy Aging:
Strategies for Health Promotion

An Integrated Population Health Approach

DRAFT – for discussion purposes

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> ***"… Sometimes it feels like this. There I am standing by the shore of a swiftly flowing river, and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back in the river again, reaching, pulling, applying, breathing and then another yell. Again and again, without end, goes the sequence. You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who is upstream pushing them all in."***
>
> *McKinlay, J.; 1979*

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Population aging is one of the most significant trends of the 21st century. It has important and far-reaching implications for most of society and is one of the most widely discussed topics in Canada.[i, ii] Since the 1980s, the proportion of older adult Canadians has increased from 9% to 14%. Further, it is estimated that by 2050, older adults will make up more than one quarter (27%) of the total population nation-wide.[iii] While it is a tremendous success that people are living later into life, this socio-demographic phenomenon will require increased and focused attention to support the physical, mental and social well-being of this growing population.

The population in northern BC is aging at a much quicker rate than the rest of the province. As populations age, communities, agencies, families and individuals must mobilize to support healthy aging. Northern Health is seeking to support healthy aging in northern B.C. Using the comprehensive approach outlined in the Ottawa Charter, Northern Health is continually seeking to improve the health, well-being and quality of life of those living, working, learning, playing and being cared for in northern B.C. Northern Health has engaged with community partners and individuals to support increased health, well-being, and quality of life for all individuals in Northern B.C. Additionally, the fall 2013 community consultation will take a special focus on healthy aging and seniors wellness.

This paper provides an overview of the older adult population in northern B.C. Following this, it presents a number of factors important in supporting the health of older adults, including healthy behaviours (physical activity, healthy eating, living safely, and substance use), mental health (depression, dementia, and delerium) and more "upstream" factors. Within each of these sections, the challenges and promising practices are discussed. The paper also presents some of the opportunities for communities that will support healthy aging. The paper concludes with a set of overarching principles that can support healthy aging in northern B.C. communities. The principles apply to communities, agencies, families, and individuals alike.

1.0 Background

Developing and consistently using accurate terminology for this population is not an easy task. This section defines some key terms to support the discussions that follow.

- **Older adult:** This paper uses the term "older adult" to describe someone who is age 65 and over. Traditionally, this group has been referred to as "seniors." This paper acknowledges that this age group is not homogenous and includes great variety across ages, culture, and gender.[iv]
- **Population aging:** When the proportion of older adults in a population increases. This is typically due to mortality of a younger population, decrease in fertility of a younger population, or out-migration of a younger population.[v] Reasons for this experience in northern B.C. are discussed below.
- **Health:** A positive resource for everyday living.[vi]
- **Healthy aging:** Improving, preserving and optimizing people's health across the lifespan, including physical, social and mental wellness, independence, and quality of life.[vii]

2.0 The Older Adult Population: A Snapshot of a Diverse Group

The older adult population is diverse in values, culture, traditions, education, and socioeconomic status. Further, there are differences between those who are 65 years old compared to those who are 75 years old, and again when compared to those who are 85 years and over. In terms of rates of growth, centenarians, the group of people who were young children at the time of World War I, are the second fastest growing population segment in Canada. Between 2006 and 2011, this population grew by 25.7%.[viii] Similar trends are experienced in northern B.C., as will be discussed below.

Men and women experience aging differently and, as with all health care, gender matters to older adults, too. Aside from life expectancy differences,[1] women experience higher rates of long-term disability and chronic disease than men, but men are more prone to injuries and extreme forms of social exclusion.[ix] This results in a variable quality of life within life expectancy among men and women. Generally, these trends are exacerbated in northern and rural communities due to decreased access to care over the life span.

There are other factors that influence the health of older adults. These are commonly referred to as the 'determinants of health.' For example, segments of the population who are of lower socioeconomic status tend to have shorter life expectancy and a greater vulnerability to the most common diseases.[x] Despite this, in all situations, we know that even with chronic disease and disability, healthy lifestyle improvements will have a positive impact on the physical, mental, emotional and social health of older adults across all segments of the population.

2.1 The Older Adult Population in Northern Health

In northern B.C., people are - on average - younger than in other regions of B.C. (average in the north is ~37 years old compared to ~41 years old in B.C.).[xi] However, the population in northern BC over the age of 55 is increasing more quickly than the rest of the province. As seen in Table 1, in the northern interior health service delivery area (HSDA), between 2001 and 2006, the percentage of the population over the age of 65 increased by 21%. By comparison, this increased only 13% on average in B.C. While the absolute numbers of older adults in northern BC are quite small, their relative increases as a proportion of the population will impact how we can support people to age well in communities.

Table 1: Northern B.C. Population Age Structure (Age 55+)

	Northwest HSDA		Growth Rate (%)	Northern Interior HSDA		Growth Rate (%)	Northeast HSDA		Growth Rate (%)	BC		Growth Rate (%)
	2001	*2006*		*2001*	*2006*		*2001*	*2006*		*2001*	*2006*	
% age 55+	16.4	22.0	23	17.2	22.3	24	15.2	17.8	24	23.4	26.9	21
% age 65+	7.7	9.9	19	8.2	10.3	21	7.5	8.3	17	13.6	14.6	13
% age 75+	2.7	3.9	30	3.0	4.0	29	2.8	3.2	20	6.3	7.0	16
% age 85+	0.6	0.8	23	0.6	0.9	34	0.6	0.7	8	1.5	1.8	27

Source: Statistics Canada, 2001, 2006.

[1] In British Columbia at birth, women have a life expectancy of 83.9 years and males have 79.5 years. At age 65, women have a life expectancy of 22 years and men 19.2 years. (Statistics Canada. (2012). Table 2: Life Expectancy at Birth and at Age 65 by Sex, Canada, Provinces and Territories, 2007-2009. Retrieved October 11, 2012 from http://www.statcan.gc.ca/daily-quotidien/120531/t120531e002-eng.htm)

The socio-cultural demographics of northern BC are different than other regions in B.C. and so it is important to compare the north to regions in Canada with similar social, cultural, and economic mixes. Statistics Canada's Peer Groups data provide these comparisons across regions.[2] As can be seen in Table 2, peer regions tend to have a greater percentage of older adults than northern B.C. (as of 2001 and 2006); however, as a population group, older adults are increasing at much faster rates in northern B.C. than in their peer regions. For example, on average, Peer Group H has 12% of its total population over the age of 65. In the northwest HSDA, approximately 10% of the total population is over the age of 65. However, between 2001 and 2006, this age group grew by 19% in the northwest HSDA. In comparison, this age group grew by 11% in the peer region over the same period. The rate of aging is happening more quickly in northern B.C. than in most other places.

Table 2: Population Age Structure (Age 55+) of Peer Regions

	Peer Group E		Growth	Peer Group H		Growth
	2001	*2006*	Rate (%)	*2001*	*2006*	Rate (%)
% age 55+	18.4	20.2	19	19.7	23.5	16
% age 65+	10.2	10.5	11	10.6	12.0	11
% age 75+	4.5	4.7	14	4.5	5.3	14
% age 85+	1.1	1.2	19	1.1	1.3	18

Source: Statistics Canada, 2001, 2006.

The rapidly increasing proportion of older adults in northern B.C. is attributed to two different processes that are occurring at the same time: youth outmigration and adults choosing to remain in communities as they age.[3] Over 90% of older Canadians live independently in the community and want to remain there and this is similar if older adults live in rural or urban areas. However, for rural and remote areas, this has implications for the delivery of health services. It will be necessary for health care systems to redefine the approach to providing support to aging adults, tending to assess needs for housing, home support, etc. and allocating funds to support growth in this area. In short, it is a shift to health promotion, prevention, and community support for healthy aging.[xii] This will create challenges in northern B.C. where existing services have evolved to support a younger population.[xiii]

Older adults who live in rural and remote places have different needs than their urban counterparts. For example, rural older women have greater needs and fewer resources and this increases their vulnerability and risk.[xiv] In Northern Health, studies document that women's health and wellness is influenced by isolation, expensive travel and lack of health care services.[xv] While the studies confirm this for women, the issues may also be similar for men. Additionally, complex chronic conditions and unintentional injury rates are higher in Northern Health and this affects the ability for people to age healthfully.[xvi] Further complexities in these variables are related to cultural differences too.

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[2] **Peer Group E**, comparable to the Northeast HSDA, is comprised of the following health regions: Central Zone (AB), North Zone (AB), Northeast HSDA (BC), Northwest Territories, South Eastman Regional Health Authority (MB) and the Yukon. **Peer Group H**, comparable to the Northwest and Northern Interior HSDAs, is comprised of the following health regions: Labrador-Grenfell Regional Integrated Health (NFLD and Labrador), Nor-Man Regional Health Authority (MB), Northern Interior HSDA (BC), Northwest HSDA (BC), Northwestern Health Unit (ON), Parkland Regional Health Authority (MB), Prairie North Regional Health Authority (SK), Prince Albert Parkland Regional Health Authority (SK), Region de la Cote-Nord (QC) and Region du Nord-du Quebec (QC).

[3] While these processes are happening at the same time generally across the north, they will vary across the region. For example, the northeast has an influx of young people related to the economic boom, so the effect will be moderated in that sub-region. (For more information on the influx of young people, please refer to Understanding Resource and Community Development in Northern British Columbia: A background paper.

3.0 Healthy Older Adults

Individual health reflects a complex web of physical, mental and social issues.[xvii] In the context of a life-course approach,[4] older adults will be faced with unique like course transitions. They are at higher risk of social isolation, poverty, and problematic access to good quality health and social services. At the same time, they are at a phase in their life when they have the time to enjoy activities and hobbies. In this transition, many drastic changes can occur in a relatively short period of time, including loss of spouse, shrinking social circles, change of living space (into smaller housing, a facility or to reside with family members) and death.[xviii]

Compounding the challenge of these transitions for older adults are changes in personal health and society's response to older adults. Personal health changes can include physical changes of the body and mind and can be correlated with changing activity levels, eating habits and increased risk of injuries and chronic disease. Of course, with such physical changes also comes mental and emotional changes that must be addressed (e.g., grief or loss of loved ones). In attempting to address physical, mental or emotional changes, older adults may be placed on various medications which, while supporting the situation, may also further compound the issues. Other important changes can include retirement, social participation and support, ageism and elder abuse.[xix]

Reasons to Invest in Healthy Aging[xx]

- Older adults make a significant contribution to the richness of Canadian life and to the economy.
- Healthy aging can delay and minimize the severity of chronic diseases and disabilities in later life, thus saving health care costs and reducing long-term care needs.
- Canadians of all ages believe that efforts to enable older adults to remain healthy and independent are "the right thing to do."

The following sections will address many of the factors that can help or hinder the health of older adults.[5] They are organized into behavioural factors, mental health, and societal factors. By looking at the various issues this way, we understand that individuals have greater control over individual behaviours than societal factors, or other factors that are considered to be more "upstream" (Figure 1).[6]

While there are many issues facing older adults, there are also strategies (promising practices) that highlight some of the ways that communities, agencies, families and individuals can support healthy aging and healthy older adults. By reducing or helping people manage chronic disease and injury prevention, we can create supportive environments for social engagement, enjoyable physical activity, healthy eating, safe and tobacco-free living. Such initiatives are highly cost-effective and can have a positive impact on the health of older adults.[xxi, xxii]

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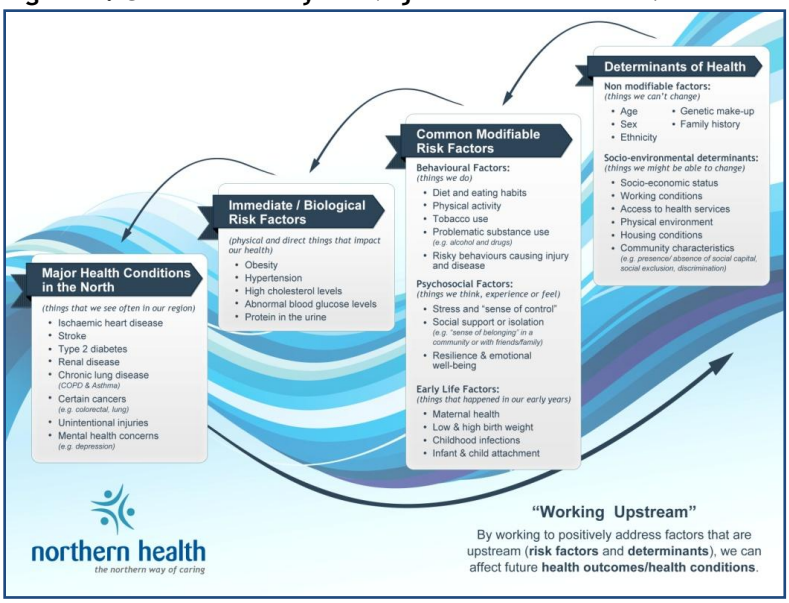
[4] A comprehensive view of the life-course approach and key transitions is outside the scope of this paper; however, as a framework, it is important for the context of this paper. More can be found online here: http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2011/cphorsphc-respcacsp-05-eng.php

[5] While they are addressed independently, it is important to recognize that the issues addressed here are artificially separated for the purposes of this paper. In reality, as the introduction suggests, the issues are co-occurring and can compound an already complex situation.

[6] Of note, housing is an important determinant of health and one that is very important for older adults. While NH acknowledges that some work is being done in this important area of work, the issue is not discussed here.

Figure 1: Causal Pathway for Major Diseases in the North



3.1 Behavioural Factors

Behavioural factors are the things that people do. They are influenced by culture, attitudes, emotions, values, ethics, authority, genetics and persuasion.[xxiii] This paper will address physical activity, eating, injuries, and substance use as behavioural factors in healthy aging.

3.1.1 Physical Activity

A solid evidence base supports the positive relationship between regular physical activity and healthy aging and we are still learning more about benefits of physical activity for older adults.[xxiv] The positive effects include: improved functional capacity, mental health, psychological functioning, and management of chronic disease. Also, physical activity may delay of some of the loss of function associated with aging. Research shows that physical activity can also support social connections and networks to further promote overall health.[xxv]

Despite this evidence, most older adults are not as active as they should be. Recent research demonstrates that – for all adults – sedentary behaviour is associated with an increased risk in diabetes, cardiovascular disease, and all-cause mortality. Results suggest that even if individuals meet the physical activity guidelines, their health is still at risk if they sit for long periods.[xxvi] Many factors impact how physically active an older adult can be. The Active Living Coalition for Older Adults (ALCOA) identifies common barriers for older adults to be more physically active, including: accessibility (transportation, class scheduling, and safety), programming (appropriate for older adults, available information about classes, fear for safety in the class), cost (transportation and participation), and social support (motivation, social network).[xxvii] People over the age of 80, those with low incomes and/or low education levels, those with a disability and/or chronic condition, those who live in facilities or in isolation, and those who are members of ethnocultural or ethnolinguistic minority population groups are less likely to be physically active.[xxviii] Therefore it is important that a lens be applied to such marginalized groups when thinking of strategies to support physical activity.

Inactivity is further compounded by the development of a functional limitation.[7] As one is less active, they are more likely to develop a functional limitation that will then hinder their ability to become more physically active.[xxix] However, as one becomes physically active, the benefits may be realized immediately.

Canada's Physical Activity Guidelines for Older Adults

To achieve health benefits and improve functional abilities, the Canadian Physical Activity Guidelines suggest the following for adults aged 65 years and older: [xxx]

- Accumulate at least 150 minutes of moderate-to-vigorous intensity aerobic physical activity per week, in bouts of 10 minutes or more.
- It is beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week.
- Those with poor mobility should perform physical activities to enhance balance and prevent falls.
- More physical activity provides greater health benefits.

More leisure time activity is associated with longer life expectancy across a range of activity levels – physical activity of 75 minutes per week is associated with an increased life expectancy of 1.8 years and higher levels of activity are associated with greater gains in life expectancy.[xxxi, xxxii] Similarly, reduced time sitting (being sedentary) reduces the risk for diabetes, heart disease, and death.[xxxiii] For more of the benefits of physical activity and the concerns about being sedentary, please go to the Northern Health Position on Sedentary Behaviour and Physical Inactivity.

Promising Practices to Support Increased Physical Activity for Older Adults

- Follow the Canadian Physical Activity Guidelines.
- Use British Columbia's Physical Activity Strategy.
- Examine barriers to physical activity faced by older adults in northern communities.
- Emphasize social connectedness.
- Support culturally-appropriate leisure activities for older adults.

3.1.2 Eating

For most Canadians, including older adults, there is a gap between their current eating habits and healthy eating. It is estimated that less than 1% of Canadians follow a diet that is consistent with Canada's Food Guide.[xxxiv] Older adults who are faced with poor nutrition or food insecurity[8] can have diets that are inadequate in quality and quantity.[xxxv] Further, as people age, their need for calories decreases, but their need for nutrients increases.[xxxvi] Dietary deficiencies can increase the likelihood of getting a chronic disease and can cause feelings of being mentally unwell, including stress and uncertainty, which can further impact health.[xxxvii]

Common reasons for poor nutrition in older adults include: physiological (diminished appetite and impaired senses), social (eating alone, depression, grief), financial constraints, absence of help

[7] A functional limitation is defined as any physical problem that prevents a person from completing a task (Northern Health Position on Sedentary Behaviour and Physical Inactivity).

[8] Food insecurity is the inability to obtain safe, culturally appropriate, and nutritionally adequate diet. (Northern Health (2012). *Position on Healthy Eating*. Available online: www.northernhealth.ca/Portals/0/About/PositionPapers/documents/HealthyEatingPosition_V1_2012_01_31WEB.pdf).

with shopping or cooking, transportation challenges, poor dental health, and side effects of medication (involvement with ingestion, absorption, or metabolic processes).[xxxviii] This is particularly challenging for older adults because symptoms of malnutrition can be mistaken for illness. However, as dietary improvements are made, the benefits may be realized immediately.

Canada's Food Guidelines for Older Adults

To achieve health benefits, Eating Well with Canada's Food Guide recommends that each day adults over the age of 51 consume: [xxxix]

- 7 food guide servings of vegetables and fruit.
- 6-7 food guide servings of grain products.
- 3 food guide servings of milk and alternatives.
- 2-3 food guide servings of meat and alternatives.

However, between birth and old age, you will have different nutrition needs. Talk to a health care practitioner.

When older adults eat a healthy diet, they benefit from increased mental acuity, improved resistance to illness and disease, faster recovery from illness and injury, a more robust immune system, higher energy levels and improved management of chronic health issues.[xl] For more in-depth discussion of the benefits of healthy eating, please go to the Northern Health Position on Healthy Eating.

Promising Practices to Support Healthy Eating for Older Adults

- Build awareness, engagement and capacity to promote healthy eating.
- Support community-based and culturally-appropriate education.
- The *Healthy Eating for Seniors* handbook addresses many of the barriers to healthy eating.[xli] It provides a range of information on nutrition including how to eat to prevent or manage chronic disease.
- To increase accessibility, work with stakeholders such as stores, workplaces, and community partners to make healthy foods more available and affordable (i.e. Nunavut/Northwest Territories' Healthy Foods North program).
- Develop policies to support older adults' access to healthy eating.

3.1.3 Living Safely

Older adults are at an increased risk of unintentional injury. Injury prevention is a key consideration for older adults to remain independent and with a higher quality of life in communities. Living safely includes delaying the onset of poor mental health and early diagnosis of mental health issues.[xlii] Living injury-free prevents suffering, disability and death.[xliii]

Prevention strategies must focus on the primary causes of injury to older adults in northern BC, including falls and suicide.[xliv] For more in-depth discussion of preventing injuries in northern BC, please go to the Northern Health Position on Preventing Injuries.

3.1.3.1 Falls

As the leading cause of injury among older adults, falls are particularly concerning. Among older adults, falls are responsible for 84% of injury-related hospital admissions and 40% of admissions to nursing homes or long-term care facilities. Falls cause approximately 95% of all hip fractures among those over the age of 65. Of those injured, 20% will die within one year of the fracture and 50% never regain their pre-fracture function.[xlv]

Falls are most commonly due to physical weakness and/or environmental hazards. Environmental control and reversing strength loss among older adults are important for mitigating the risk of falls.[xlvi] Falls can also be associated with the use of medications. Age related conditions may require a variety of medications, there is increased potential for medications not to be prescribed or taken correctly. It is estimated that between 18% and 50% of medications taken by older adults are inappropriate.[xlvii] In long-term care facilities, the most common cause of falls is incorrect weight shifting and tripping.[xlviii] As falls happen in predictable patterns, they are preventable. This means that the suffering, disability, deaths and even system stresses are preventable.[xlix]

3.1.3.2 Suicide

Risk of suicide among older adults is often overlooked and dismissed as a real problem.[l, li] According to Statistics Canada, nearly 400 Canadians over the age of 65 took their own lives in 2009; the highest suicide rate amongst the population is among men aged 85-89 (30.6 suicides per 100,000 Canadians).[lii] These findings are similar to rates in Northern Health, which also sees a spike of suicide rates amongst older men.[liii] However, women have an overall higher rate of attempted suicide compared to older adult men.[liv] Further research is needed in this area to understand why and some of the more complex implications.

Despite these high rates, it can be assumed – as with most statistics that track causes of death – that it is understated and not fully captured in the statistics. Among older adults, coroners have a more challenging time discerning between self-inflicted harm or unintended harm (e.g., "perhaps they forgot they had already taken their medication, didn't quite understand how to take it, maybe they were confused.").[lv]

By virtue of age, older adults are more likely to demonstrate risk factors for suicide, including social isolation and the death of a friend or family member. However, suicide amongst older adults is commonly not treated with the same alarm as for the general population. Instead, it is assumed that mental health issues are commonplace when it comes to older adults. For example, feelings of hopelessness or without purpose, or thinking a lot about death are common for many mental health issues, but are also common among older adults by the nature of their life stage transitions.[lvi] The challenge for intervention is to identify when they are due to depressive or other mental health issues or if they are due to current life situations. Evidence suggests that older adults who are contemplating suicide respond well to treatment.[lvii]

Promising Practices for Older Adults to Live Safely

- Injury prevention strategies with a comprehensive approach and tailored interventions targeted to address identified risk factors among seniors are most effective.[lviii]
- Innovative interventions tailored to specific risk factors applied in a comprehensive approach for older adults will be most effective.[lix] For example, to address suicide, innovative strategies should improve resilience and positive aging, engage families and community members, use technology to reach more vulnerable older adults, and evaluate clinicians' awareness of suicide among older adults.[lx, lxi]
- A number of countries have developed national, comprehensive suicide prevention strategies that incorporate the public health approach. [lxii]

3.1.4 Substance Use

The problematic use of substances among older adults is attributed to numerous factors; however, some certain risk factors are very common among this population. These include: retirement, chronic health problems, death of a spouse, or a dwindling circle of social supports.[lxiii] As people age, they can become more isolated, experience financial challenges, or be the victims of ageism or elder abuse. High rates of depression and suicide among older adults are closely associated with problematic use of substances.[lxiv]

Older adults may be reluctant to recognize or seek help for a mental health problem or a substance use problem.[lxv] Also, older adults' health conditions are not always readily accurately identified by health professionals, as signs may be attributed to other effects of aging.[lxvi] Two key substance issues as they relate to older adults are addressed below: alcohol and medications. For more information on the prevention of problematic substance use, please see the Northern Health Position on the Prevention of Problematic Substance Use.

3.1.4.1 Alcohol

Alcohol is the most commonly used substance by older adults.[lxvii] While adults of any age can have challenges that are related to, or exacerbated by, alcohol use, older adults are much more sensitive to the effects of alcohol. Older adults are more impacted by alcohol because of kidney and liver function changes, physical health changes related to aging (e.g., a slower metabolism), and interaction with medications. Moreover, alcohol can worsen existing health challenges or cause new ones.[lxviii] As such, their use may be problematic at much lower levels, especially if is negatively affecting their health.

3.1.4.2 Medication

Older adults often have to take medication and this can sometimes lead to the medication being used incorrectly. Medication misuse can occur if medication is taken in the wrong dose or at the wrong time or skipped, when it is taken if it is not or no longer needed, when medications are expired, when they are mixed with alcohol, or when medications are shared with someone for whom they are not prescribed.[lxix]

Physicians, also, may not be aware of the need to reduce dosages as people age and of the complex interactions between medications that can occur as new ones are added to treat age related conditions.

Narcotics and opioids are sometimes a concern among older adults, but the research suggests that these categories are less important than is commonly thought. The greatest concerns relate to benzodiazepines, sedatives, and hypnotics. This is because of the rate that they are prescribed to older adults and the difficulty in ensuring proper physician supervision. These medications can have problematic effects due to changes in drug metabolism, interactions with other medications/alcohol, and the longer half-life of the medication itself.[lxx]

Promising Practices for Older Adults to Avoid Problematic Use of Substances

- Promote Canada's Low-Risk Alcohol Drinking Guidelines with a range of available resources.[lxxi]
- Translate guidelines as required (e.g., Aboriginal languages).
- Dedicate that someone (e.g., a family member, caregiver, doctor, or pharmacist) supports the older adult with medications. Medication support considers side effects, interactions with other medications or some foods, that medication routines are manageable, and annual reviews.
- Educate physicians in appropriate prescribing and medication reviews for older adults.

3.2 Mental Health

Mental health is about the capacity of people to think, feel and act in ways that support their ability to enjoy life and cope with challenges.[lxxii] Poor mental health is a range of states from suboptimal positive mental health to diagnosed mental illness and can be characterized by altered thinking, mood and/or behaviour and is associated with distress and impaired functioning.[lxxiii] Positive mental health is a positive sense of emotional and spiritual well-being.[lxxiv] Early life experiences and circumstances contribute to mental health over the life span. For example, suffering abuse, living in poverty or during war can negatively impact mental health. Conversely, positive coping skills learned early in life may play a role in positive mental health during childhood and into adulthood. [lxxv]

With respect to older adults, positive mental health can assist coping with issues that are more prevalent in later years, such as chronic illness, loss of independence and loneliness due to the loss of partners and friends. Poor mental health and mental illness are incorrectly viewed as part of the normal aging process. Among older adults living in communities, it is estimated that 20% have some form of mental health concern. In a facility setting, it is estimated that 80% to 90% have some form of mental health concern.[lxxvi] However, three mental health concerns are of primary concern among older adults: dementia, depression, and delirium.[lxxvii] These will be discussed in the following sections.

At every stage of the aging process, the goal is to ensure that older adults obtain the best possible quality of life, are treated with dignity and respect, and receive the best possible support.[lxxviii]

3.2.1 Depression

Depression is a common mental health problem for older adults.[lxxix] In older adults, depression is associated with functional decline, family stress, physical illnesses, reduced recovery from illness, and premature death due to suicide and other causes.[lxxx] Moreover, depression among older adults is commonly undiagnosed and undertreated.

Research suggests that between 14% and 20% of older adults living in the community experience symptoms of depression. In hospitals, it is estimated this increases to between 12% and 45% and it is estimated to be 40% in long-term care facilities.[lxxxi]

With treatment, depression is usually reversible, restoring a satisfying quality of life.[lxxxii] Beyond treatment, education about depression and treatment options in older adults needs to be more widely available in a variety of learning formats so as to increase knowledge among health care professionals.[lxxxiii]

3.2.2 Dementia

Dementia refers to a large class of disorders characterized by the progressive deterioration of thinking ability and memory as the brain becomes damaged. Alzheimer's disease (AD), a fatal brain disorder, is the most common form of dementia, accounting for approximately 63% of dementias. Mild cognitive impairment (MCI) is the intermediate stage relating to cognitive changes between normal aging and dementia.

Age is the single most important risk factor for late-onset AD. Those with MCI constitute a high risk group, making it critical to protect against MCI.[lxxxiv] Also, many age-related health problems are recognized as AD risk factors (e.g., heart disease, hypertension).[lxxxv] Currently, more than 70,000 British Columbians live with dementia. Approximately 15,000 British Columbians develop dementia each year, but this is expected to increase to over 35,700 people each year by 2038.[lxxxvi]

Engaging in certain cognitive activities is associated with decreased risk of MCI and AD. Overall, promoting brain health through lifestyle choices is the most effective way of reducing the risk and progression of dementias.[lxxxvii] Drug therapies may mitigate symptoms; however, there is no medical treatment that can stop or reverse disease progression.[lxxxviii]

3.2.3 Delirium

Delirium is common in all clinical domains, but older adults are at the greatest risk for delirium, particularly if there is underlying dementia or depression.[lxxxix] It is a serious and potentially preventable cause of morbidity and mortality for older adults. Delirium is the most frequent complication of hospitalization among older adults.[xc] Serious consequences include longer hospital stays, increased mortality, increased nursing care, development of dementia, immediate and long-term functional impairment and higher rates of permanent residency in long-term care facilities.[xci] Clinicians fail to recognize the delirium in up to 84% of cases.[xcii]

Promising Practices for Positive Mental Health Among Older Adults

- Promote the guidelines of the Canadian Coalition for Seniors' Mental Health project. Guidelines relate to delirium, depression, mental health issues in long-term care, and suicide.
- Delay the onset of mental illness, including dementia.
- Develop supports to mitigate the impacts of mental illness on persons and families.
- Seek early diagnosis of mental illness.

3.3 Chronic Health Conditions

To summarize the sections on behavioural risk factors and mental health issues, it is important to briefly discuss chronic health conditions, those diseases of long duration and generally slow progression and are a major concern for older adults.[xciii, xciv] The most common chronic conditions are heart disease, arthritis, diabetes and dementia. Adding to the complexity, 70% of older adults have more than one chronic disease, although the management of this "co-morbidity" (sometimes referred to as multi-morbidity)[xcv] needs more research.

Across the lifespan, four behavioural factors are known to contribute to the development of chronic non-communicable disease: physical inactivity, poor diet, tobacco use, and the problematic use of substances.[xcvi] These risk factors are commonly interrelated, but they are also modifiable. Reducing one risk factor may positively affect others and support improved health outcomes overall. For example, an active lifestyle can positively influence tobacco use and/or

substance use.[xcvii] The impact of risk factors related to chronic disease begins early in life and increases over the life course.[xcviii]

Self-management is an important issue for those with chronic health conditions of all ages.[xcix] As people are actively engaged and supported in their own care, they feel better and use health services differently. Self-management benefits the patient and the health care system. To effectively self-manage, patients must have the necessary information, skills and confidence. Fortunately, evidence-based guidelines exist to support and enhance an individual's ability to manage chronic conditions.[c]

In communities, the main factors that impact health are socioeconomic conditions, environment, culture and access to health services. Canadians with a chronic condition and who are in fair-to-poor health are more likely to be poorer, older, less educated and/or living in rural areas. Recommendations for improvement must reflect these realities. For example, advice to simply eat healthier foods may be ineffective if the structural issues are not also addressed. The challenge is for programs, services and policies to take such inequities into account so that older adults can benefit from self-management supports.[ci]

Promising Practices to Support Older Adults with Chronic Conditions

- Building healthy communities is an effective approach to addressing chronic disease risk factors. Effectively addressing risk factors is the responsibility of many sectors working in partnership.
- Support older adults to develop health literacy and self-manage their conditions. Seek evidence-based guidelines exist to support this process.
- Programs, services and policies should consider systematic inequities that older adults can benefit from self-management supports.
- Support and promote evidence-based self-management guidelines.[9]
- Consider how stakeholders can work together in B.C.'s Expanded Chronic Care Model.[10]

4.0 More "Upstream" Factors

There are a number of other factors that affect healthy aging. Many of these factors are exhibited at the level of the individual, but are not easily classified into behaviours or mental health factors. In this section, we review social participation and support, health literacy, and palliative care and advance care planning.

4.1 Social Participation and Support

Social support and social relationships contribute to our health, as they give people emotional and practical resources.[cii] The relationship between social participation and health operates in multiple ways and may be particularly important for older adults. In

9 For example, see Registered Nurses of Ontario's *Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients*. Available online: http://rnao.ca/sites/rnao-ca/files/Strategies_to_Support_Self-Management_in_Chronic_Conditions_-_Collaboration_with_Clients.pdf

10 B.C. has a model to support the care of chronic conditions. The goal is to achieve improved health outcomes, healthier patients, more satisfied providers, and more effective use of health care resources. Expanding upon on the original Chronic Care Model, the Expanded Chronic Care Model builds on improved functional and clinical outcomes that result from interactions between prepared, practice teams and informed, activated patients. The model can support a variety of chronic health conditions, health care settings, and target populations. The Model identifies elements that support chronic care management, including the community, the health system, and self-management support. For more information, go to http://www.primaryhealthcarebc.ca/resource_eccm.html.

particular, elderly women may experience feelings of diminished self-worth if they do not have the social support necessary to assist them with maintaining self-competence and independence.[ciii]

The health benefits of good social support may include better cognitive health, self-rated health, and reduced risk of mortality, disability and depression.[civ] For example, one study found that social support can help women in rural areas to develop and sustain resilience when faced with hardships through developing hardiness, affirming their knowledge and abilities and in advocating for change.[cv] These strategies reflect both individual and collective action.[cvi] Another recent study found that as older adults were more socially vulnerable, their risk of death increased. There is value assessing an older adults' social vulnerability as a risk factor for adverse health outcomes.[cvii] As such, social participation is being integrated into research and policy frameworks for aging.

Aging is associated with many changes. Each change can affect an individual's health, and those who have been socially disadvantaged in the past are at the greatest risk.[cviii] Some indicators of social isolation include: living alone, having a small social network, infrequent participation in social activities, and feelings of loneliness.[cix] For example, retirement may, on the one hand, promote a sense of well-being as people move out of stressful jobs or, on the other hand, may lead to diminished well-being, as individuals lose their social network of co-workers.[cx] Not all older adults are socially engaged the same way. Societal barriers to meaningful participation in activities must be addressed in order to avoid stigmatizing vulnerable older adults.[cxi]

4.1.1 Volunteering

Research on volunteering and well-being suggests that formal community involvement is beneficial for older adults and is associated with improved self-help ratings, increased life satisfaction, decreased mortality, improved levels of contentment, and lower levels of functional dependence and symptoms of depression.[cxii] However, volunteering is not going to give each individual the same level of benefit. Some older adults may not find any benefit with volunteering. As such, it is not to be perceived as a universal recommendation.[cxiii]

Promising Practices for Older Adults to Become More Socially Involved

- Age-friendly communities help older adults live safely, enjoy good health and stay involved.
- Building a supportive, age-friendly community for older adults includes encouraging volunteers.
    - *Recruit older adults of all ages, as they have various points of view.*
    - *Encourage older adults who may be more shy or reluctant to volunteer to participate more (e.g., through a phone call, encouraging words).*
    - *Develop strategies for specifically recruiting older adults and motivating them to become involved (e.g., for short-term projects).*
- Build inclusive communities by showing kindness, respect and courtesy; this will contribute to respectful intergenerational interactions.
- Resource: Age Friendly Rural and Remote Communities: A Guide
- Resource: Age Friendly Communities Canada Hub: Research, Resource and Stakeholder Inventory
- Resource: Canadian Association of Gerontology

4.2 Health Literacy

Health literacy generally refers to the ability of individuals to access and use health information to make appropriate health decisions and maintain basic health.[cxiv] Health literacy links education to health outcomes; health disparities can be attributed to disparities in health literacy across different population groups. As such, health literacy is a predictor of overall health.[cxv] With respect to older adults, an effective information and communication strategy is important to enhance health, wellness, and quality-of-life. By investing in health literacy for older adults, we can empower them and promote this protective factor.[cxvi]

4.3 Palliative Care and Advance Care Planning

The Standing Senate Committee on Social Affairs, Science and Technology report entitled *Quality End-of-Life Care: The Right of Every Canadian*[cxvii] addresses issues and provides a template that will shape palliative care in Canada for years to come.[cxviii] There is an increasing interest in understanding what palliative care means for persons with chronic disease, including dementia, and in improving the quality of care that these persons receive when they are dying.[cxix]

Advance care planning[cxx] brings benefits in many situations, including palliative settings. For example, many people with advanced dementia have unplanned emergency admissions to the acute hospital – this is a critical event: half will die within six months. Research shows that advance care planning discussions can lead to more consistent supportive health care, a reduction in emergency admissions to the acute hospital, and better resolution of caregiver bereavement.[cxxi]

5.0 Societal Factors

Societal factors are external to the individual, but they have a profound influence on daily life. Social norms and practices are further influenced by a wider set of factors, including religion, ethnicity, familial roles, socioeconomic status, education, urbanity/rurality, and political systems. All of these influence health and aging.[cxxii] Two societal factors discussed here include ageism and elder abuse.

5.1 Ageism

Coined by Butler in 1968, "ageism" refers to the societal powerlessness, as a result of disease, disability or uselessness, due to age.[cxxiii] In practice, ageism results in prejudices and stereotypes that are projected onto an individual due to their age, often leading to older adults being treated with a lack of dignity and respect.[cxxiv] This includes a belief that older adults cannot or should not participate in societal activities or be given the same opportunities that are afforded to others.[cxxv] Myths and misunderstandings about older adults are based on preconceived characteristic qualities and this contributes to older adults being further isolated from society.[cxxvi]

A recent survey found ageism to be the most tolerated social prejudice in Canada.[cxxvii] Countering ageism is a vital part of keeping Canada's aging population healthy in the

future and includes shifting from "normal aging" to "successful aging."[cxxviii] One way to overcome ageism in your community is to engage older adults in age-friendly community planning.

5.2 Elder Abuse

Elder abuse is an act (single or repeated) or a lack of appropriate action, occurring in any relationship, where there is an expectation of trust which causes harm or distress to an older adult. This can include physical, psychological/emotional, financial/material, or sexual harms to older adults, as well as intentional (active) and unintentional (passive) neglect. It may also take other forms such as spiritual abuse, rights violations, and broader systemic harms. Regardless of the type of abuse, it creates unnecessary and degrading outcomes for the older adult. Abusers may be a relative, health care provider, or casual acquaintance.

While elder abuse is likely underestimated in Canada, research estimates that between 4% and 10% of Canadian older adults experience some form of abuse or neglect from someone they trust or rely upon. Some research suggests the rate may be higher for those who have dementia.

Promising Practices to Address Abuse and Neglect of Older Adults

- Develop supports for caregivers and promote education to prevent burnout.
- Improve training for the continuum of human resource workers regarding the needs of older adults.
- Seek, share and apply best practices on the prevention of elder abuse.
- Sign the Hague Convention on the International Protection of Adults.[cxxix]

6.0 Supporting a Diverse Population: Aboriginal Peoples

In Canada, a population health approach must consider the diversity of the population and adjust accordingly to meet the needs of that population. Of specific importance in northern B.C., 18% of the total population self-identifies as Aboriginal[11] and it is well documented that the health of Aboriginal peoples is the result of physiological, psychological, spiritual, historical, sociological, cultural, economic and environmental factors.[cxxx]

With respect to Aboriginal peoples in Canada, older adults represented 4% of the total Aboriginal population in Canada in 2001. It is anticipated this will grow to 6.5% by 2017.[cxxxi] As such, the trend of an aging Aboriginal population is happening at a much slower rate when compared to the non-Aboriginal population. This is attributed to national rates of a slowly improving life expectancy and a declining birth rate. As a general trend in Canada, Aboriginals living in northern regions tend to have poorer health outcomes than their southern counterparts.[cxxxii]

In general, older Aboriginal adults have poorer health status and more chronic health conditions than their non-Aboriginal counterparts and the issues are not adequately addressed in the literature.[cxxxiii] Due to a history of dislocation, colonization and social

[11] Census records of Aboriginal peoples should be treated as an undercount, as content or reporting errors exist – potentially due to question misinterpretation, particularly related to Aboriginal identity.

exclusion, the health of Aboriginal peoples in Canada is severely negatively impacted by a variety of determinants of health.[cxxxiv] This results in poorer daily living conditions that negatively impacts physical, mental, social and cultural health. For example, Aboriginal adults over the age of 55 who attended residential schools report a higher rate of depression.[cxxxv] Also related to mental health, dementia appears to be increasing amongst older Aboriginal adults in B.C. due to an increase in life expectancy and the unique prevalence of risk factors.[cxxxvi, cxxxvii] With respect to chronic health conditions, diabetes, heart problems, cancer, hypertension and arthritis/rheumatism are significantly higher in Canada's Aboriginal communities.[cxxxviii]

Moving forward, to effectively support healthy aging of Aboriginal peoples, a variety of strategies need to be applied so policies, programs and services can be more responsive to Aboriginal peoples and their unique circumstances. Of greatest importance is ensuring that people understand culture in a way that stereotypes are not perpetuated.[cxxxix]

Promising Practices to Support Healthy Aging of Aboriginal Peoples

- Develop a greater critical awareness of culture, racism, colonialism, and the current political climate.[cxl] For example, New Zealand has a formal strategy[cxli] and the B.C. Provincial Health Services Agency offers Indigenous Cultural Competency training.
- Seek, share and support policies, programs and services that are culturally responsive and acknowledge the unique circumstances of Aboriginal peoples. They must be respectful, sensitive to, and reflect the rich traditional, cultural, geographical and linguistic delivery that exists among Aboriginal peoples.[cxlii] One example of this is working with health service providers and materials to understand how they are understood in the local Aboriginal culture and language.
- Take a whole-community approach. Evidence supports that the most important determinant of health is socioeconomic status and older Aboriginal adults often lack appropriate supports.[cxliii] System-level innovations are required for sustainable changes; this supports the interconnectedness and whole-system approach of the medicine wheel.[cxliv]
- A healthy aging framework and attention to the determinants of health provide guidance.[cxlv, cxlvi]

7.0 Guiding Principles to Support Healthy Aging

Northern Health wants to support strategies and forge partnerships that increase health and wellness and improve quality of life for older adults. The importance of healthy aging is recognized, with emphasis on healthy living across the life course. This may be achieved by working with individuals and community partners to promote healthy aging. The following principles are important to consider in moving this forward:

- Healthy aging is a process that occurs throughout the life course.
- Healthy aging needs to be supported by appropriate policy and programming in all sectors.
- Age-friendly rural and remote communities are a shared responsibility.
- Health professionals need to be well grounded in the issues and principles of healthy aging.
- Health literacy to support self-management of a population health approach, healthy lifestyles, and chronic health conditions should be encouraged and supported.

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