

2

Wellness Frameworks and Indicators: An Update

As noted in the first edition of the Atlas, wellness is not easily defined. It implies more than just the absence of disease or illness; wellness is generally viewed from a holistic perspective, and represents the positive aspects of physical, mental, social, and spiritual health (Foster & Keller, 2007; Kindig, 2007; Panelli & Tipton, 2007; Miller, 2005; Larson, 1999). This notion is supported by the World Health Organization's definition of human health as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity" (WHO, 1948). It can be argued that wellness is subjective and has a value judgment about what it is and what it isn't (Miller & Foster, 2010). This chapter provides a brief update to the literature that was included in the original *BC Atlas of Wellness*, and describes many of the frameworks and indicators that have more recently been developed to measure wellness and its broad attributes.

The Broadening of Wellness Concepts

Historically, health was focused on disease and illness, or negative attributes rather than positive factors (Millar & Hull, 1997; Foster & Keller, 2007); however, the last half-century has seen a shift to view health from a more positive perspective. It has also seen health used interchangeably with well-being and wellness (Miller & Foster, 2010; cited in Edmunds, 2010), which are holistic in nature, encompassing more than just the physical aspects of an individual, but also the mental, spiritual, emotional, and social dimensions. In some cases, wellness includes a much broader range of dimensions that will be discussed later in the chapter. While this concept of health is being 'rediscovered' by most western societies, it was never truly lost to indigenous populations who have always defined health from a holistic viewpoint (Elliott & Foster, 1995).

The modern use of the word "wellness" dates to the mid-

twentieth century from the work by Halbert Dunn and his book *High-Level Wellness*, in which Dunn defined wellness as "an integrated method of functioning which is oriented to maximizing the potential of which an individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning" (Dunn, 1961, pp 4-5). Although the book and use of the term wellness received little attention at the time, his ideas were later embraced and expanded upon in the 1970s (SRI International, 2010).

Current literature reveals additional terms corresponding and interrelating to the concept of wellness, such as well-being, life satisfaction, quality of life, human development, flourishing, and happiness. The following represents just a few of the many parameters and dimensions found in the literature to describe aspects of wellness and its close component, well-being.

High levels of wellness involve "progress toward a higher level of functioning, an optimistic view of the future and one's potential" (Larson, 1999, p. 129), and this involves the "integration of the total individual – body, mind and spirit – in the functioning process" (Neilson, 1988, p. 4, as quoted in Larson, 1999). Travis and Callander (2010) argue that to understand the underlying causes of disease we must recognize the levels of disconnection around us. They state "full-spectrum wellness is a multidimensional approach to health and well-being that extends from the individual to the collective and ultimately planet itself" (p. 8). It is about the connections between our state of well-being and our:

- Body, emotions, mind, and spirit;
- Earliest life experiences and our health over our entire lifespan;

- Family, friends, and community;
- Personal and work life; and,
- Environment – from our internal space, to our home, our neighbourhood, and the entire planet.

Another way to consider wellness is by using Antonovsky's salutogenic (or origins of health) model that focuses on factors that support and increase well-being rather than on factors that merely prevent disease (Antonovsky, 1996; Eriksson & Lindstrom, 2008; Lindstrom & Eriksson, 2009). Salutogenesis assumes that illness rather than health is perhaps the norm for people, and looks at factors that enable people to remain healthy despite being bombarded by disease and illness. Two key factors are seen to promote salutogenesis. The first refers to so-called "Generalised Resistance Factors," which consist of such components as: social support, knowledge, experience, intelligence, financial resources, and traditions. The second is a "Sense of Coherence," which is a positive way of viewing life and the ability to manage the stresses of living. Increasingly, salutogenesis is gaining acceptance as a useful model for promoting health and wellness and addressing health inequities (Billings & Hassem, 2009). In a similar context, the *BC Atlas of Wellness* looks at positive approaches to health, and views key influencers as wellness assets that enable people to stay well and lead happy, satisfying lives. Indeed, the idea of health or wellness assets that we used in the first edition of the Atlas is also being used more often (Morgan & Ziglio, 2007).

Copestake (2007, p.5) sees well-being as "a state of being with others in society where (a) people's basic needs are met, (b) they can act effectively and meaningfully in pursuit of their goals, and (c) they feel satisfied with their life." Well-being has also been defined as "the presence of the highest possible quality of life in its full breadth of expression, focused on but not necessarily exclusive to: good living standards, robust health, a sustainable environment, vital communities, an educated populace, balanced time use, high levels of civic participation, and access to and participation in dynamic arts, culture and recreation" (Institute of Well-being, 2009, p.i). More recently, Brown and Alcoe (2010) define well-being as essentially how we relate *inwards* to ourselves and come to understand ourselves through the physical, mental, spiritual, and emotional levels, and how we relate *outwards* to others, our community, and our environment.

It is quite apparent that wellness and well-being are indeed often used and defined interchangeably.

Wellness and Well-being Framework Dimensions

Measuring wellness is an inexact and changing science (Millar & Hull, 1997) made up of both objective and subjective indicators. In some cases, emphasis is placed entirely on subjective indicators, from both a personal (health, relationships, safety, standard of living, achieving, and community connectedness) and national perspective (the economy, the environment, social conditions, governance, business, and national security) (Cummins et al., 2008).

Most models of wellness include many dimensions (SRI International, 2010). In exploring wellness related frameworks from around the world, it is clear that there is no specific formula for measuring wellness, but there are many recurring dimensions that have been included in various frameworks. It is also interesting to note that while some frameworks have begun to use the terminology 'wellness' or 'well-being,' others have remained with an overall health perspective yet include many subjective wellness indicators. A recent example of this is *Population and Public Health Indicators for British Columbia* (Provincial Health Services Authority, 2008a).

In the past couple of decades, wellness and well-being frameworks have been viewed internationally on quite a broad scale, and especially in the last decade, the indicators they have used have been both objective (quality of life) and subjective (happiness or life satisfaction as self-reported by individuals) (Lepper & McAndrew, 2008). Such frameworks are taking the place of, or complementing, as a key indicator, Gross Domestic Product (GDP), which was routinely used to approximate a country's standard of living, and also considered an equivalent to the population's well-being (Ferdjani, 2010; Hamilton & Redmond, 2010). A few international and Canadian examples are described in the following paragraphs, along with one from BC.

International examples

In Holland, the Institute for Social Research has used the 'life situation index' (*leefsituatie-index*) to present an overview of life of the Dutch population since 1974. The index has indicators in eight domains: housing, health, sports, social participation, socio-cultural leisure activities, ownership of durable consumer goods, holidays, and mobility; and all focus on outcomes, not inputs (Boelhouer, 2010).

In 1989, more than 260 benchmark well-being indicators were approved by the Oregon State legislature, and the first *Oregon Benchmark Progress Report* was published in

1991 and contained nearly 160 separate indicators related to Oregon's well-being. The key domains were related to people, quality of life, and economy (Oregon Progress Board, 1991). Benchmark reports have been published every 2 years, and over time the number of indicators reported has been refined to approximately 90. The last report (2009) had indicators focused on the following: economy, education, civic engagement, social support, public safety, built environment, and natural environment (Oregon Progress Report, 2009). While funding for the Oregon Progress Board was eliminated in 2009, the indicators are being maintained by the state government (State of Oregon, 2009).

The United Nations Development Programme published its first *Human Development Report* with its new Human Development Index (HDI) in 1990. "The premise of the HDI, considered radical at the time, was elegantly simple: national development should be measured not simply by national income, as had long been the practice, but also by life expectancy and literacy" (United Nations Development Programme, 2010, p. iv). The 2010 report contained numerous sub-indices that measure issues of inequality, including gender inequality, multi-dimensional poverty, empowerment, sustainability and vulnerability, human security, perceptions of individual well-being and happiness, civic and community well-being, demographic trends, decent work, education, health, financial flows and commitments, economy and infrastructure, and access to information and communication technology.

The Australian Bureau of Statistics (2010) released the first issue of *Measures of Australia's Progress* (MAP), then called *Measuring Australia's Progress*, in April 2002. A suite of social, economic, and environmental indicators was developed that aimed to measure the country's progress. Social indicators included: health; education and training; work; crime; family, community, and social cohesion; and democracy, governance, and citizenship. Economic indicators included: national income; national wealth; household economic well-being; housing; and productivity. Environmental indicators included: biodiversity; land; inland waters; oceans and estuaries; atmosphere; and waste.

The New Economics Foundation (NEF) launched the *Happy Planet Index* in 2006. The Index "identified health and a positive experience of life as universal human goals, and the natural resources that our human systems depend upon as fundamental inputs. A successful society is one that can support good lives that don't cost the Earth. The index measures progress towards this target – the ecological efficiency with which happy and healthy lives are supported" (NEF, 2009a, p. 3). It includes factors such

as: community, technology, healthcare, economy, values, family and friends, education, governance, employment, consumption, and leisure time. More recently, NEF has introduced a National Accounts of Well-being which included indicators related to personal well-being (e.g., self-esteem, positive feelings, emotional well-being, satisfying life, competence, meaning, and purpose), social well-being (e.g., supportive relationships, trust, and belonging), and well-being at work (e.g., job satisfaction, satisfaction with work-life balance, the emotional experience of work, and assessment of work conditions) (NEF, 2009b).

Also established in 2006 was the *Sustainable Society Index* (SSI) (van der Kerk & Manuel, 2010). The objective of developing this index "was to have an easy and transparent instrument at hand to measure the level of sustainability of a country and to monitor progress to sustainability" (van der Kerk & Manuel, 2010, p. 12). Initially, the SSI was comprised of 22 indicators, but the most recent SSI has 24 indicators. These indicators are rolled up into three major indices: the first, Human Well-being, consists of 9 indicators divided among human sanitation, personal development, and well-balanced society; the second, Environmental Well-being, also consists of 9 indicators divided among healthy environment, climate and energy, and natural resources; the third, Economic Well-being, consists of 6 indicators divided among preparation for the future and economy. For 2010, Canada had a rank of 42 out of 151 countries.

New frameworks have been developed in the past couple of years, such as the *Melbourne Charter* (2008), which focuses on assets and risks related to mental health and well-being, while the *Genuine Progress Index* (GPI) values natural, social, and human capital as well as equity, environmental quality, security, and population health (Canadian Population Health Initiative, 2009). In the US, a well-being index was created that has been calculated on a monthly basis nationally by Gallup since January 2008 (Gallup & Healthways, 2011). Gallup and Healthways also produce a biannual report on the well-being of each of the US states and their respective cities, as well as an annual report on each of the 435 US congressional districts' overall well-being composite score and a score in each of six sub-indices, including life evaluation, emotional health, physical health, healthy behaviour, work environment, and basic access.

In early February, 2008, France established *The Commission on the Measurement of Economic Performance and Social Progress* (Stiglitz, Sen, & Fitoussi, 2009a,b) because of dissatisfaction with current indicators of economy and society. A key message and

unifying theme emerging from the report of the Commission was the need to “*shift emphasis from measuring economic production to measuring people’s well-being*. And measures of well-being should be put in a context of sustainability” (Stiglitz, Sen, & Fitoussi, 2009a p.12). The report went on to note that well-being is multi-dimensional, and the following should be considered simultaneously: material living standards (income, consumption, wealth); health; education; personal activities including work; political voice and governance; social connections and relationships; environment (present and future conditions); and insecurity, of an economic as well as physical nature. Further “Quality-of-life indicators in all the dimensions covered should assess inequalities in a comprehensive way” (Stiglitz, Sen, & Fitoussi, 2009a, p.15).

One of the more novel frameworks has been constructed to develop the *Gross National Happiness Index*, developed by the Centre for Bhutan Studies and launched in late 2008 to account for many more dimensions than are included in traditional GDP figures. The index consists of factors in nine key domains: psychological well-being, time use, community vitality, culture, health, education, environmental diversity, living standard, and governance (The Centre for Bhutan Studies, 2008).

More recently, the UK government has become interested in measuring well-being (Thomas & Evans, 2010; Waldron, 2010). Initially, an All-Party Parliamentary Group on Well-being Economics was established in 2009 to: promote the enhancement of well-being as an important government goal; encourage the adoption of well-being indicators as complementary measures of progress to GDP; and promote policies designed to enhance well-being. Through the Office for National Statistics (ONS), the new UK Conservative government launched a debate on national well-being. It started in November 2010 and ended in April 2011. The consultation document notes no fewer than 25 indicators that the literature has described as being important in measuring well-being, and has established a Well-being Knowledge Bank (ONS, 2010).

Just as the Atlas was going to press, the Organization for Economic Cooperation and Development (OECD), announced that it was developing comparative information on the conditions of the lives of people in developed market economies. The result, to be published in late 2011 will allow the comparisons of well-being across OECD countries based on material living conditions and quality of life (OECD, 2011a). The index is comprised of the following topics: housing, income, jobs, community, education, environment, governance, health, life satisfaction, safety, and work-life balance, and includes a

total of 21 indicators. The index currently covers 34 member countries of the OECD, and data are provided in such a manner that users can develop their own weighting of the indicators, similar to the manner suggested in the our original Atlas, to develop their own index (OECD, 2011b).

Some Canadian examples

Within Canada, several wellness/well-being frameworks have been developed. In 1999, the Federation of Canadian Municipalities (FCM) introduced the *Quality of Life Reporting System (QOLRS)* (FCM, 1999; 2010). Starting with 16 municipalities, the QOLRS now has 24 communities in 7 provinces that report indicators. Only Vancouver and Surrey are included from BC. Eight domains of indicators were included: population resources; community affordability; quality of employment; quality of housing; community stress; health of community; community safety; and community participation. Soon after, the Toronto Community Foundation published Toronto’s first *Vital Signs* report in 2001, and has published periodic reports on key quality of life issues in the community. Since that time, 16 communities, including Vancouver and Victoria in BC, now provide similar reports. Each community chooses its own indicators, but every year there are a set of common issues and core indicators that all foundations include in their reports, and upon which Community Foundations of Canada bases its national report. Community foundations consult with a wide range of local groups to ensure their indicators capture their area’s unique issues and attributes (Toronto Community Foundation, 2010).

In January 2007, May identified 13 domains of well-being: production; infrastructure and production capital; knowledge capital; natural resource capital; ecosystems; social relationships; income consumption leisure; employment and working conditions; education, literacy, skills, and training; society, culture, politics, and justice; community safety and social vitality; demographics; and health. Later that year, the Conference Board of Canada published its *Report Card on Canada*, which was designed “to identify relative strengths and weaknesses in Canada’s socio-economic performance,” and has provided annual updates since that time. Although earlier reports had been issued, this new report card covered six key domains: economy, society, innovation, environment, health, and education and skills. The Conference Board of Canada indicated that a high, sustainable quality of life for Canadians was dependent on high and sustainable performances in these six domains. Canada’s performance is regularly compared with 17 other “peer” nations based on population size, land mass, and income

per capita (Conference Board of Canada, 2011).

Human Resources and Skills Development Canada (2010) developed a series of indicators to measure well-being starting in 2008. “Individual Canadians and their families interact with each other and with social institutions over the course of their lives, building up and expending resources of different kinds (such as time, finances, goods and services, and social networks). Resources can be personal assets such as health and skills. Resources can also be the goods and services provided by social institutions. Finally, resources can be societal assets such as the environment and social order.” Ten key domains have been recognized: learning; financial security; environment; security; health; leisure; social participation; family life; housing; and work.

More recently, the *Canadian Index of well-being* (CIW) has started to measure well-being from the perspective of quality of life, including items such as: standard of living, health, the quality of our environment, education and skill levels, the way we use time, the vitality of communities, participation in the democratic process, and the state of leisure and culture (Canadian Index of Well-being, 2010a).

A BC example

Within BC, perhaps the best known group that measures issues of well-being on a regular basis is the BC Progress Board, which was established in 2001 to measure and benchmark BC's performance over time and relative to other jurisdictions. This approach was to help to determine if competitiveness and quality of life are improving, and to advise on strategies, policies, and actions that could enhance BC's economic and social well-being regardless of whether government, business, or individual actions are required (BC Progress Board, 2002). Key areas that are measured include economic growth, standard of living, jobs, environmental quality, health outcomes, and social condition, and the number of key indicators have been increased over time (BC Progress Board, 2010). BC is ranked on its “performances” relative to other Canadian provinces, neighbouring jurisdictions, and certain OECD countries.

Key Wellness Dimensions for the BC Atlas of Wellness

In the first edition of the *BC Atlas of Wellness* the following dimensions were identified, based on an extensive review of the literature: physical, psychological/emotional, social, intellectual, spiritual, occupational, and environmental (Miller & Foster, 2006). Key works included those by Adams et al. (1997), Anspaugh et al. (2004), Crose et al. (1992), Durlak (2000), Hales (2005), Helliwell (2005),

Hettler (1980), Leafgren (1990), Renger et al. (2000), Ryan and Deci (2001), and Ryff and Singer (2006), among others. As noted above, recent developments have centred on the importance of these established dimensions and added new dimensions into the framework. These new dimensions include economic, cultural, climate, as well as governance and social justice. What follows is a brief update to the material discussed in the first edition of the *BC Atlas of Wellness*.

Physical wellness

Physical wellness is probably the most common dimension included in health and wellness frameworks, and generally refers to an individual's physical health, physical activity level, nutrition, self-care, and vitality or longevity (Miller & Foster, 2006; Alcoe, 2010; Brown & Alcoe, 2010). Physical wellness can relate specifically to an individual's physical fitness, such as one's strength and flexibility, amount and type of physical fitness, or intent to participate in physical activities. It can also relate to whether or not there are organized sports, activities, or facilities available (Active Healthy Kids Canada, 2010). Physical wellness incorporates such things as diet and whether or not an individual has access to healthy food, whether they are a healthy weight, or whether their consumption of fat, salt, and sugar are at healthy levels.

Physical wellness can also relate specifically to an individual taking specific actions and avoiding potentially harmful behaviours such as smoking, illicit drug use, and excessive alcohol consumption. In addition, physical health includes both objective indicators such as life expectancy at birth (Veenhoven, 2008), and subjective indicators like self-reported health, which can often be a good predictor of objective health outcomes (OECD, 2008). However, physical wellness does not always correlate with a sense of well-being; a person can have poor health and at the same time experience positive well-being, or vice versa (Anspaugh, Hamrick, & Rosato, 2004).

Psychological /emotional wellness

Psychological/emotional wellness can include feelings, behaviour, relationships, goals, and personal strengths (Hamilton and Redmond, 2010). It encompasses indicators such as happiness, life satisfaction, and positive mental health. Happiness “incorporates a sense of individual vitality, opportunities to undertake meaningful, engaging activities which confer feelings of competence and autonomy, and the possession of a stock of inner resources that helps one cope when things go wrong” (New Economics Foundation, 2009a, p.10). A feeling of happiness can also help to heal the sick, and acts as a

protector against getting ill for people in good health (Veenhoven, 2008).

Psychological wellness includes having an element of control over one's life and the ability to deal with the demands and stresses experienced as part of our everyday lives, which evidence has shown can have a positive effect on our health and well-being (McEwan et al., 2008).

Psychological and emotional wellness include experiencing curiosity and enjoyment in life, having an optimistic outlook on life and the future, a feeling of fulfillment and self-esteem and self-acceptance, and the ability to bounce back from setbacks and failures, often referred to as resiliency (Foster & Keller, 2007). Psychological and emotional wellness can also reduce anxiety and distress, and give one the ability to stand back from difficult situations and react in a more resourceful way (Alcoe, 2010; Brown & Alcoe, 2010).

Social wellness

Social wellness relates to the relationships and interactions one has with others, the community, and nature (Foster and Keller, 2007). Included in social wellness is how an individual engages with and supports the community and environment in everyday actions such as volunteer work (May, 2007) or belonging to a community or social group (New Economics Foundation, 2004). "Giving time or money voluntarily to help others is seen by sociologists as a marker of cohesiveness in a society" (Charities Aid Foundation, 2010, p.1). Trust is also an important aspect of social wellness, and has been shown to increase well-being in communities (Drabsch, 2010; May, 2007).

Social support networks are important for social wellness – having the support of family and friends "results in improved sense of well-being and is important in helping people to manage stress and the adverse impacts of challenging life events and circumstances" (Lightman, Mitchell, & Wilson, 2008, p.5). Supportive environments are also essential for social wellness, such as the types of supports available and the existence of networks and community organizations – all permit people to build connections with others and form relationships of trust (Lightman, Mitchell & Wilson, 2008; May, 2007).

Indicators for social wellness include one's sense of belonging, whether an individual has social, emotional, and informational support, and how connected they feel to their family, friends, and community.

Intellectual wellness

Intellectual wellness includes both a personal commitment to lifelong learning and an interest in sharing one's knowledge with others. Intellectual wellness can help with positive thinking and decision-making, and enable an individual to use creative problem-solving to overcome barriers and difficulties (Brown & Alcoe, 2010). It "is the degree to which one engages in creative and stimulating activities, as well as the use of resources to expand knowledge and focus on the acquisition, development, application, and articulation of critical thinking" (Foster & Keller, 2007, p.13). As such, education and literacy are important elements to achieving intellectual wellness, and are routinely shown to influence an individual's health and well-being as they enable coping mechanisms and other life skills (Lightman, Mitchell & Wilson, 2008; Field, 2009). Education and literacy can also help with the ability to function in various societal contexts and plan for and adapt to future situations (Institute of Well-being, 2009), and have been shown to have a strong correlation with future personal prosperity and well-being (BC Progress Board, 2008).

Education is particularly important during childhood, and is one of the major indicators used by *Save the Children* for their child well-being and development index (Save the Children, 2008). Other indicators that can be used to measure intellectual wellness include a child's readiness to learn, library use, awareness of cultural events, and an interest in future learning.

Spiritual wellness

Spiritual wellness includes an increased contentment and a sense of connection with something 'greater' than oneself, and involves learning more about "who you are" and recognizing inner values and resources (Alcoe, 2010; Brown & Alcoe, 2010). It can provide a feeling of fulfillment, giving one meaning in life and connection to other human beings (Canadian Institute for Health Information, 2008). Spiritual wellness can give a sense of purpose and help to create a personal set of beliefs and values to be used in everyday conduct and actions.

It is important to note that spiritual wellness is not synonymous with religion; however, religious beliefs can be included within the concept of spiritual wellness. Indigenous groups have recognized spirituality as a key element of health for a long time, while the relationship between spirituality, religion, and health has been an emerging issue in western research (McEwan et al., 2008). The Australian Unity well-being Index Survey 19 (Cummins et al., 2008) found that people who have a weak level of satisfaction with their spiritual/religious beliefs have low subjective well-being.

Occupational wellness

Occupational wellness includes the level of satisfaction one achieves from work, and the extent to which one's occupation allows for the expression of skills and values. It includes working conditions and whether or not the workplace is safe or stressful – all of which can contribute to one's health and well-being (Lightman, Mitchell & Wilson, 2008). Occupational wellness can include a sense of fulfillment in one's work, and the balance of work and leisure time (Foster & Keller, 2007).

More recently, occupational wellness has been associated with the workplace environment and the availability of wellness programs as it is recognized that people spend a large portion of their day in the workplace. Environments that prohibit tobacco use, serve healthy food in the canteen, offer physical activities or facilities to employees, and provide employees with a sense of control over their work can all contribute to occupational wellness.

Environmental wellness

Previous definitions of environmental wellness focused on the interaction of individuals to their home, work, community, and nature (Miller & Foster, 2006), however more recent literature defines it from an ecological perspective, focusing on the built, or physical, environment and the natural environment (Institute of well-being, 2009; May, 2007).

The built environment refers to how an area or neighbourhood is designed, and has been shown to have a significant effect on population health (Canadian Population Health Initiative, 2006; Provincial Health Services Authority, 2008b). A built environment that is conducive to wellness would include such things as adequate green space for recreation, areas built for walking and cycling, a safe environment to encourage outdoor pursuits, areas of vegetation to help improve air quality, good public transportation, and smoke-free public areas including parks and beaches (Provincial Health Services Authority, 2008b; Lightman, Mitchell & Wilson, 2008; May, 2007).

The environment might include the exposure to pollutants and safe water and food supplies, which all have a direct impact on health and wellness (Lightman, Mitchell & Wilson, 2008). Also included could be the ecosystem as a whole, and in some cultural contexts where people live in close harmony to the land, the well-being of herds or wild species can have a direct effect on the overall wellness of the people living within that ecosystem (May, 2007).

Economic wellness

Economic wellness was historically linked to Gross Domestic Product (GDP). The Index of Economic well-being (IEWB) looks at a much broader definition of economic wellness, such as average current consumption flows, aggregate wealth accumulation for future consumption, economic equality, and economic security (Osberg, 2009).

Income is obviously an important indicator in economic wellness as it determines living conditions and access to important things such as safe housing and neighbourhoods, food security, and aids individuals and families to purchase their basic needs. Increased income can, in some cases, help to alleviate stress (Lightman, Mitchell & Wilson, 2008); however, increased income past the point where those basic needs are attained has increasingly less influence on wellness (May, 2007).

Income can have a direct impact on the wellness and health of individuals and families, but it can also affect the overall health of a society. It has been shown that societies with a more equal income distribution have better overall health than those societies with a wider variation in the distribution of income (Mikkonen & Raphael, 2010).

Other indicators to measure economic wellness include the relative distribution of wealth, poverty rates, income volatility, and economic security, including the security of jobs, food, housing, and the social safety net (Institute of Well-being, 2009).

Cultural wellness

UNESCO has defined culture as “the set of distinctive spiritual, material, intellectual and emotional features of a society or a social group that encompasses not only art and literature, but lifestyles, ways of living together, value systems, traditions, and beliefs” (UNESCO, 2009, p.1).

Culture is deeply embedded within one's personal identity (Torjman, 2004), and thus cultural wellness has become a particularly important factor in measuring wellness in societies where there are substantial differences in cultural backgrounds. Many wellness and well-being frameworks out of Australia and New Zealand place an emphasis on cultural wellness (Hamilton & Redmond, 2010; Grieves, 2009; Ministry of Social Development, 2008).

Participation in cultural events or programs has “been found to promote social connectedness in communities and shape civic behaviour later in life” (Torjman, 2004, p.6). On the flip side, cultural groups that feel excluded or stigmatized can be associated with greater risks and poorer health outcomes (Lightman, Mitchell & Wilson, 2008).

Cultural wellness can include: acceptance of different cultures and having society accept one's own cultural identity (Lightman, Mitchell & Wilson, 2008); freedom from discrimination and feelings of exclusion due to ethnicity, race, religion, or values; the ability to participate in cultural events; access to and participation in the arts (Canadian Index of Well-being, 2010b; Pennock, 2009; Institute of Well-being, 2009); and such things as speaking an indigenous language and having the ability to retain that language (Ministry of Social Development, 2008).

The *Canadian Index of Well-being* (CIW) embraces leisure time and cultural participation and the significant contributions they make to the well-being of individuals, communities, and society at large (Canadian Index of Well-being, 2010b). In fact, Torjman (2004, p.5) found that “culturally based programs in the areas of art, drama, music and dance provide a different, but equally important, means of building skills in creative thinking, decision-making and problem-solving. They foster social skills including co-operative work, negotiation, conflict resolution and tolerance for difference as well as personal skills such as individual responsibility, perseverance, self-management and integrity,” thus contributing to individual and community well-being.

Indicators for the CIW include engagement in arts and culture activities, volunteering for culture and recreation, attendance at performing arts performances, visitation to parks and historic sites, nights away on vacation, and household expenditures on culture and recreation.

Climate wellness

It is not surprising that extreme weather and climate variations can have an unfavourable effect on well-being of both individuals and societies. While the dimension of climate wellness is not found in many frameworks as yet, it is an area that is likely to have a greater impact as extreme weather events such as heat waves, floods, snowstorms, and droughts increase in many parts of the world. Major changes in climate will necessitate adjustments for individuals, communities, and societies as a whole.

These effects of climate change have been shown to cause emotional distress and negatively impact on mental health (Miller & Foster, 2010). Extreme weather can also cause disruptions to social and economic activities within households, communities, or entire nations. The Australian Unity well-being Index found a decrease from 2007 to 2008 in Australians' satisfaction with the natural environment due to the effects of climate change in Australia (Cummins et al., 2008).

Governance/social justice wellness

Governance and social justice wellness is also a dimension found in only a few wellness frameworks, however the political environment in which one lives can greatly affect one's well-being (May, 2007). Rights and freedoms can also have an enormous impact on well-being (Pennock, 2009). Social justice includes such aspects as the distribution of resources, the application of the law, and the treatment by others as individuals and as members of society (May, 2007).

The Legatum Institute (2009, p.14) found that “countries in which sound governance leads to satisfied citizens are most likely to have the healthiest economic fundamentals and the most entrepreneurial societies. Accountable political institutions, protections for civil liberties, predictability in contracts, and reliable regulatory structures all help promote prosperity.”

Indicators for governance and social justice wellness include satisfaction with the electoral process, access to information, and the openness, transparency, effectiveness, fairness, and equity of governments (Helliwell, 2005; Pennock, 2009; Institute of Well-being, 2009).

Health determinants – wellness assets

In keeping with the WHO definition of health, the so-called “determinants of population health” can be viewed as assets for wellness. By assets we mean that possession of certain characteristics results in greater likelihood of a higher level of wellness. They do not “determine” wellness, but rather provide an increased potential for wellness.

While the Lalonde Report (1974) developed the framework related to important factors that determined health status (lifestyle, environment, human biology, and health services), research evidence now shows that the following are key “determinants” of health, or wellness assets: income and social status; social support networks; education; employment/working conditions; social environments; physical environments; personal health practices and coping skills; early child development; biology and genetic endowment; health services; gender; and culture (PHAC, 2003; Canadian Population Health Initiative, 2004, 2006, 2008a, b; Keon & Pepin, 2009). To these can be added: income distribution/equity; unemployment and job security; food security; aboriginal status; race; and disability (Mikkonen & Raphael, 2010).

But while these assets are individually important, many also act in concert with each other, and the Commission on the Social Determinants of Health (CSDH) (2008) takes

a broad holistic view of the social determinants of health: “The poor health of the poor, the social gradient in health within countries, and the marked health inequities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of peoples lives – their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities – and their chances of leading a flourishing life” (p. 1).

More recently, the issues of determinants and inequities have been raised by the Standing Committee on Social Affairs, Science and Technology of the Canadian Parliament. The Committee noted that at least half of the health of Canada's population could be attributed to socioeconomic factors that are complex and intertwined, and also noted the importance of these assets at different life stages of individuals. Finally, where an individual resides was viewed as being very important for health (Keon & Pepin, 2009). Further, Hayes (2007) has noted that the influence of social factors on health status has been known for over 150 years in Britain, and many studies have shown how certain of these assets (e.g., income and education) show consistent health- and wellness-related gradients, such that the higher the income or educational achievements, the greater the health and wellness status of the population (Keon & Pepin, 2009; Mikkonen & Raphael, 2010). Hayes has also described the importance of place on health and wellness (Hayes, 2007), and increasingly place, neighbourhood, and community are viewed as important because of their assets in health promotion and wellness generation, while differences among countries are often a result of differing policies related to wellness dimensions.

Summary

It is clear from the recent wellness-related frameworks developed around the globe and in Canada that wellness is viewed from an holistic perspective and represents a positive state of being rather than just the absence of disease. Although there are many different models and frameworks, they are all based upon similar core dimensions that include the attributes discussed above. Many of the components contribute to wellness through a series of complex and interacting mechanisms, but many of the factors are subjective in nature and involve perceptions by individuals. As frameworks continue to evolve, so too will indicators and dimensions of wellness, but the vast majority of the indicators included in this Atlas are included in one or more of the frameworks and studies discussed above, or relate to the original ActNow BC initiatives. However, it is important to note that while the

ActNow BC framework is still important for this Atlas, we have moved far beyond that initiative and incorporated additional dimensions that have been discussed in both the academic and grey literature.