Externally-Informed Annual Health Systems Trends Report – Third Edition
Trend Backgrounder

Trend 8 – DISPARITIES IN HEALTH

INTRODUCTION

The Public Health Agency of Canada has identified 12 key determinants of health (represented in Box 1).[1] Defined as differences in health status among population groups, health disparities are often a result of inequalities in the distribution of the underlying determinants of health across populations.[2] It has been suggested that it is not the absolute level of income of a society that determines health, but rather how evenly that income is distributed that affects mortality and health in an industrialized society.[3, 4, 5]

Box 1: Public Health Agency of Canada: Key Determinants of Health

1) Income and Social Status
2) Social Support Networks
3) Education and Literacy
4) Employment/Working Conditions
5) Social Environments
6) Physical Environments
7) Personal Health Practices and Coping Skills
8) Healthy Child Development
9) Biology and Genetic Endowment
10) Health Services
11) Gender
12) Culture

SUMMARY OF KEY FINDINGS

Growing Challenges:

- The 'healthy immigrant effect' is a pattern in health outcomes experienced by immigrants to Canada. Immigrants tend to experience an initial level of superior health that eventually worsens and converges towards health outcomes of those born in Canada. The decline in health may be linked to persistent barriers in access to health services, environmental factors, and/or the adoption of health behaviours of Canadian-born residents.
- Health disparities for women have been identified in various areas of clinical practice including intensive care use.
- Findings from the recent POWER study and a Wellesley Institute report show wide health disparities between low and high income Ontarians.
- Rural and remote regions of Canada have trouble accessing health services due to physician shortages and long travel times to hospitals. This is a major problem especially with maternal and child health.
- Aboriginal peoples are among the poorest of all Canadians, and are more likely than any other segment of the population to live in environments that have a negative impact on their health and well-being.

Emerging Responses:

- Health Equity Impact Assessment tools have begun to surface around the globe to help better identify the potential impacts a policy, program or project may have on the health of marginalized or disadvantaged populations.
- Health in All Policies (HiAP) is a developing concept that can be thought of as a mechanism for achieving positive outcomes in health and wellbeing in all sectors using a Social Determinants of Health Equity lens.
- Other sectors in Canada are beginning to recognize the importance of health disparities and specifically the social determinants of health. The Conference Board of Canada released a report on why the socio-economic determinants of health are important for businesses and employers to address.

- The Sioux Lookout Meno Ya Win Health Centre (SLMHC) is a unique obstetrics program that has a model of care that incorporates Aboriginal values and promotes delivering maternal care close to home. The program has also started using telehealth to aid with the delivery of newborns.

GROWING CHALLENGES

Health Disparities for Immigrants

- The 'healthy immigrant effect' is a pattern in health outcomes experienced by immigrants to Canada and other countries – they tend to experience a level of good health that is higher than Canadian-born individuals. [6] For instance, a recent report found that the Canadian-born population was significantly more likely than immigrants to report some risk factors that relate to health, including smoking, heavy drinking, and obesity.[7] However, this relatively higher health level tends to be followed by a worsening of health and convergence towards Canadian-born levels. [8]
- Lifestyle choices may moderate health effects among immigrants.[9] In some immigrant groups, men's alcohol consumption and smoking levels increase with years in Canada – which can lead to various chronic diseases. In women, lower rates of vigorous physical activity and consumption of fruits and vegetables may explain health outcome decreases. In light of these findings, maintenance of ethnic or home-country attitudes and beliefs may be beneficial.[10]
- Recent research indicates that not all immigrant groups in Canada experience the same loss of the 'healthy immigrant effect.'[11, 12] One study found that white male immigrants had a BMI similar to that of Canadian-born individuals, while non-white immigrants (both males and females) had lower BMIs.[13] Another recent study found that, controlling for several relevant factors (e.g., age, income), risk for diabetes was higher among immigrants from South Asia, Latin America, the Caribbean, and sub-Saharan Africa than among immigrants from western Europe and North America.[14]
- Recent qualitative studies of diverse groups of immigrants living in Mississauga and the neighbourhood of St. James Town in Toronto have revealed that immigrants face geographic, socio-cultural and economic barriers when attempting to access health care services in their community.[15, 16]
- Although recent immigrants tend to be highly educated with better overall health than those native born, they have been shown to access health care services less often, including preventative care such as cervical and breast cancer screening.[17]
- Although a recent study of influenza vaccination uptake in Toronto school children found that vaccination was more likely in foreign-born children than Canadian-born children,[18] and a population based cohort study of two-year-olds in Ontario found new immigrant mothers are accessing immunization for their children at least as effectively as non-immigrant mothers, other American and Canadian studies have found overall immunization coverage lower for immigrants. [19]
- In the US, a 2006 ethnographic study of the social context of migrant health revealed that structural racism and anti-immigration practices determined the poor health of migrants.[20]
- Despite the observed decrease in overall cancer death rates in the US, immigrant minorities continue to experience disproportionately higher cancer incidence and mortality for many cancers, with late stage diagnosis being partially responsible for higher mortality rates.[21]
- Recent US reports on disparities include *The National Healthcare Disparities Repor*t (NHDR)[22] and *The National Healthcare Quality Report*[23] released by the Agency for Healthcare Research and Quality (AHRQ). These reports suggest access to health care is a major barrier to successful health outcomes in the US especially for minorities. Overall, disparities in quality and access for minority groups and poor populations have not been reduced since the first NHDR was released in 2003 and in some cases have increased for some minority groups (e.g.

Hispanics).[24, 25] Findings from the 2009 NHDR show that disparities in care for cancer, heart failure, and pneumonia exist across populations, and that although quality of hospital care for heart failure and pneumonia has improved overall, care for white individuals continues to improve at a higher rate than for minority populations.[26]

Health Disparities for Women

Important gender disparities have been identified in various areas of clinical practice:

- A large retrospective cohort study reported that women aged 50 or older in Canadian Critical Care Research Network hospitals and intensive care units (ICUs) were less likely than their male counterparts to be admitted to the ICU or to receive life-saving interventions and more likely to die when admitted because of critical illness.[27]
- Although women are more likely to have higher utilization rates than men for general practitioners, specialists, and hospitals, research in Canada, the US, and Scotland show that higher utilization does not necessarily translate into greater access to health care services for women.[28]
- A recent Ontario women's health study found women were more likely to report having arthritis, depression, and multiple chronic conditions than men. One in three women reported having two or more chronic conditions (vs. only one in four men) and the burden of chronic illness and disability was found to be the highest among low-income and Aboriginal women. Older women were the most likely to report that their activities were limited due to pain or discomfort, with 35% of low-income women aged 65 and older reporting activity limitations. Reported incidence rates of gonorrhea infection among women aged 15–19 were more than twice as high as rates reported for adolescent men.[29]

Health Disparities Due to Geography

- A big challenge faced by rural and remote residents in Canada is the problem of access to timely and continuous primary health care and linkages to specialist care. Physician and nurse shortages in rural regions mean that many residents must travel (considerable distance in some cases) to urban centres for care.[30]
- Patients sometimes have to make trade-offs between receiving care and paying high costs associated with traveling and safety aspects of reaching urban areas (e.g. hazardous driving conditions due to seasonal weather).[31, 32] Communities that lack specialists often rely on their primary care practitioners and other health care providers to perform a wider variety of tasks.[33]
- Rural citizens in farming communities face distinctive environmentally hazardous factors that urban centres do not. For example, intensive livestock operations can pose a threat to a region's water supply and air and soil quality (e.g., the Walkerton water crisis).[34]
- In British Columbia, standardized rates of avoidable, non-avoidable, and total hospitalizations are consistently higher in rural areas compared to urban areas.[35]
- Access to gynaecological, obstetrical, and maternity services has steadily decreased outside of urban centres, and these services are often not readily available to women in rural and remote regions.[36,37] However, travel for labour and delivery is associated with higher delivery complications and rates of prematurity, as well as increased financial, emotional and psychological stress. Many women choose to deliver in their home community despite limited obstetric services.[38]

Health Disparities Due to Income

- Health disparities associated with socio-economic status (SES) have been well documented in Canada, the US, and the United Kingdom for decades (e.g., UK Marmot Review).[39] [40] A gradient exists between health and income – health status increases with every step up the income and social hierarchy.[41]
- Those with higher SES in Canada tend to utilize preventative measures (e.g. PAP tests and mammograms), whereas lower SES

individuals are less likely to do so. People with lower SES use more primary care and hospital services than the general population Higher SES groups also tend to use more specialist medical services.[42]

- In 2007–2008, rates of hospitalized heart attack events were 66% higher among people living in the least affluent neighbourhoods compared to people in the most affluent neighbourhoods; rates of hospitalized stroke were 54% higher.[43]
- The Project for an Ontario Women's Health Evidence-Based Report (POWER) released their third chapter in June 2009 which focused on the burden of illness experienced by Ontarians and how it differs by sex, socioeconomic status, ethnicity, and geography of residence. The report found that Ontarians of lower socioeconomic position experienced much higher levels of chronic disease and disability than those who were more advantaged. They also were more likely to die prematurely.[44]
- A recent ICES study found that despite Ontario having a wait times strategy for specific health care services such as MRI scans, individuals living in the wealthiest neighbourhood quintile were 38% more likely to receive MRI scans than individuals in the poorest neighbourhood quintile. Thus it appears that individuals residing in the wealthiest neighbourhoods have benefited most in terms of access from Ontario's investments in MRI scanning.[45]
- According to a recent Wellesley Institute report, the poorest 20% of Canadians when compared to the richest 20% of Canadians have more than double the rate of diabetes and heart disease, a 60% greater rate of two or more chronic health conditions, more than three times the rate of bronchitis, and nearly double the rate of arthritis or rheumatism.[46]
- According to a recent AHRQ-funded study, both housing instability and food insecurity were independently associated with children's poor access to health care in the US.[47]

Health Disparities in Aboriginal People

- Aboriginal peoples are among the poorest of all Canadians, and are more likely than any other segment of the population to live in environments that have a negative impact on their health and well-being.[48] For example, 17% Aboriginal Peoples live in crowded conditions versus 7% of the general population[49]. As well, 33% of Aboriginal households are food insecure compared to nine percent of non-Aboriginal households.[50]
- Aboriginal people's marginalization is furthered evidenced with a shorter life span and higher infant mortality rate than non-Aboriginal people. In 2001, Aboriginal women's life expectancy was 77 years and Aboriginal men was 71 years. In comparison non-Aboriginal women's life expectancy was 82 years and non-Aboriginal men was 77 years.[51] The infant mortality rate for Aboriginal peoples is estimated at seven deaths per 1000 live births while for non-Aboriginals it is five deaths per 1000 live births.[52]
- Disproportionate rates of multiple conditions including heart disease, diabetes, tuberculosis, hypertension, and HIV/AIDS also affect Aboriginal peoples.[53] According to the POWER study, Aboriginal adults (48% of women and 41% of men) reported having two or more chronic conditions.[54]
- Mental health and addictions issues also are disproportionately high among Aboriginals compared to non-Aboriginals. The suicide rate for Aboriginal peoples is twice that of the non-Aboriginal population.[55]
- Improving access to health care for Aboriginal people in Ontario is hampered by the lack of an information system that documents fundamental facts about Aboriginal people's health status and service utilization in a manner that gives Aboriginal people collective entitlements to the information that is gathered.[56]
- It is suggested that the only way to reduce Aboriginal peoples' health disparities is to address the legacy of colonialism.[57] "Any approach which fails to consider Aboriginal people as active in response to their colonial situation, rather than simply as passive

victims, will fail to comprehend not only the past changes in health status and health care, but more importantly the future direction that will be taken in these areas."[58]

EMERGING RESPONSES

Attempts to Monitor and Address Equity

- A Health Equity Impact Assessment (HEIA) is a way to help better identify the potential impacts a policy, program, or project may have on the health of marginalized or disadvantaged populations. The assessor can then make adjustments to the initiative to mitigate negative impacts as well as maximize positive impacts on the health of vulnerable and disadvantaged groups.[59] HEIA tools have been implemented in Australia,[60] New Zealand,[61] and the UK,[62] and the Ontario Ministry of Health and Long-Term Care is in the process of developing a HEIA tool.
- The Equity Unit of the Ontario Ministry of Health and Long-Term Care has developed a HEIA tool for Ontario which can be applied at the ministry, Local Health Integration Network (LHIN), or health-service provider level. The tool was developed based on a breadth of evidence including an inter-jurisdictional review, consultation and piloting within the ministry and LHINS. Internal implementation of the HEIA was initiated and it still underway. Following HEIA pilots in three LHINS, the ministry continues to work in partnership with LHINs to steward HEIA integration at the regional level.[63]
- Other sectors in Canada are beginning to recognize the importance of health disparities and specifically the social determinants of health. The Conference Board of Canada released a report that makes a business case for why businesses and employers should take action on the socio-economic determinants of health (e.g., employment and working conditions, education and literacy, food security). The report offers examples of successful initiatives already taken by Canadian and international firms and provides practical guidance and principles of success to businesses that may take action.[64]
- Health in All Policies (HiAP) is a developing concept that can be thought of as a mechanism for achieving positive outcomes in health and wellbeing in all sectors that uses a Social Determinants of Health Equity lens.[65] Currently, the European Observatory has published a report discussing HiAP and has developed a Medium-term Strategic Plan (2008-2013) to address the underlying social and economic determinants of health.[66] Sweden[67] and Australia[68] have both used HiAP in developing strategic health plans.
- In February 2010, the Marmot Review Team published Fair Society, Healthy Lives. This was the culmination of a year long independent review into health inequalities in England. The review proposes evidence-based strategies for reducing health inequalities in England from 2010 onwards. The major task of this Review was to assemble the evidence and advise on the development of a health inequalities strategy in England.[69]
- In response to a 2009 report which made recommendations for improving health equity,[70] St. Michael's Hospital, in Toronto has undertaken several new equity-focused programs and service or organizational changes. New initiatives include: 1) The Sick Kids Translation Project, an initiative to translate generic patient education documents into nine languages that could be used by all 18 Toronto Central LHIN hospitals, and 2) The Compassionate Care Committee, a cross-hospital initiative that brings together staff from various areas (e.g., clinical, finance, and inner city health staff), to discuss how best to provide necessary care to people without Ontario Health Insurance Plan (OHIP) cards while maintaining fiscal responsibility.[71]
- The US CLEAN Look checklist (Culture, Literacy, Education, Assessment, and Networking), identifies cues and strategies to achieve relevant community outreach.[72] The use of a checklist may help clinicians, educators, and researchers create a sustainable model of community outreach guided by a paradigm that incorporates a

multilevel approach to address outcomes for disenfranchised populations.

- To better understand the context of mental health inequities, the US National Institute of Mental Health (NIMH) has recently founded the Office for Research on Disparities and Global Mental Health (ORDGMH), which coordinates the NIHM's efforts to reduce mental health disparities both within and outside of the United States.[73] The ORGDMH recently convened a summit of leaders from academic and research centers, community organizations, and government agencies with wide array of expertise (e.g., genetics, service delivery); summit members made recommendations for research priorities, and suggestions about rethinking traditional study designs and measures.[74]

Addressing Immigrant, Income, and Geographical Health Disparities

- In the Calgary Health Region, The Refugee Health and Wellbeing project was initiated in 2007 to provide support and assistance to refugees. The program liaises and facilitates connections between refugee clients/patients, families, communities and Calgary Health Region staff and community organizations that provide services to the refugee population in Calgary.[75]
- In 2005, the Robert Wood Johnson Foundation created a national program to help communities across the United States set and achieve goals to improve quality of care for patients and their families—particularly patients from specific racial and ethnic backgrounds, who often receive lower-quality care. Among its other goals, *Finding Answers* is charged with providing grants to fund evaluation of health care interventions that hold promise for reducing racial and ethnic disparities and improving care for minority patients with one or more of the following conditions: cardiovascular disease, depression, and diabetes. The evidence base of this program can assist in shaping policies that facilitate the reduction of disparities by noting what does and does not work how to work with and modify the current health care infrastructure to implement effective interventions, and institutional challenges to enacting such changes.[76] In its third round of funding in 2009, the program awarded more than $1.5 million to seven research centres.[77]
- In England, Sure Start Local Programmes (SSLPs) are area-based interventions to improve services for young children and their families in deprived communities, promote health and development, and reduce inequalities. SSLPs have been found to be beneficial for young children and their families on various outcome measures. In SSLP areas, children show better social development, with more positive social behaviour and greater independence, and parents show less risk of negative parenting and provide a better home-learning environment.[78]
- In 2000, the Center for Immigrant Health, New York University School of Medicine, launched the Cancer Awareness Network for Immigrant Minority Populations (CANIMP) a network comprising community and faith-based organizations, local and national government health institutions, clinical services providers, researchers, and immigrant service and advocacy organizations. CANIMP was able to develop successful outreach, education, screening, survivorship training, and research programs to decrease cancer disparities.[79]
- A network of 12 pilot hospitals from the European Union member states implemented and evaluated the effectiveness of three health care models for migrants and minorities.[80] The models are:
    - The improvement of interpreting in-clinical communication.
    - The creation and distribution of migrant-friendly information and training in mother and child care.
    - Staff training in cultural competence.

Addressing Health Disparities for Women

- In 2010, the UN launched the Global Strategy for Women's and Children's Health to improve the health of women and children around the world by improving assess to essential health services and proven, life-

saving interventions, such as access to vaccines, family planning, and treatment for HIV and AIDS.[81]

- In Toronto, the Women's Health in Women's Hands community health centre is devoted to providing primary health care to black women and women of colour from the Caribbean, African, Latin American, and South Asian communities. The health centre is committed to working from an inclusive environment to address barriers that prevent this population from being healthy.[82]
- Due to various barriers, many women in Northwestern Ontario have never had a mammography or are not screened regularly. To address these barriers, the local public health units have developed a mobile breast screening van that travels through the region to provide breast screening (mammography).[83]
- African American women are disproportionately affected by the HIV/AIDS epidemic in the United States.[84] To address this disparity, in 2009 the CDC sponsored a mass media campaign, Nine and a Half Minutes (the amount of time someone in the US is infected with HIV), to educate women and men about HIV prevention.[85]
- A breast health outreach program utilizing the application of the CLEAN approach was able to reach more than 80 Haitian women with mammograms and clinical breast examinations and 4,500 Haitian people with breast cancer education messages.[86]

Addressing Aboriginal Health Disparities

- It its budget for 2010, the Canadian government announced that it was investing in critical First Nations health infrastructure, as well as renewing funding for several Aboriginal health programs. Infrastructure investments included $9.4 million for expanding the Fort Hope Nursing Station in Northern Ontario, $15 million for the construction of the Fort Chipewyan Health Centre in Albert and $695,000 for the construction of an on-reservation nursing home in Manitoba. The budget also renews $285 million of funding over two years in several key areas including the Aboriginal Diabetes Initiative; the Aboriginal Youth Suicide Prevention Strategy; maternal and child health; and the Aboriginal Health Transition Fund.[87]
- The Eskasoni Primary Care Project is a tri-partite (Federal government – First Nations and Inuit Health Branch, the Nova Scotia government & the Eskasoni First Nations) approach to delivering health care to the Eskasoni First Nations. A steering committee was established to deliver better primary care, remove overlaps and address deficiencies in services. Some of the key successes from this project include: an 850% increase in referrals from local doctors to nutritionists for diabetic management; a 40% decline of outpatient/emergency department visits at the regional hospital by Eskasoni residents; and a savings of approximately $200,000 in the medical transportation budget. Notably, 89% of patients believed the quality of services to have improved.[88]
- The Sioux Lookout Meno Ya Win Health Centre (SLMHC) is a unique obstetrics program that has been in operation for 25 years and services 28 remote, fly-in Aboriginal communities and the town of Sioux Lookout, Ontario serving a total population of 25,000. The SLMHC has developed a model of care that incorporates Aboriginal values and promotes an environment of culturally sensitive care. The obstetrics program has caesarean delivery, ultrasonography and version capabilities, delivered by rural physicians with appropriate additional training. The program has also started to use telehealth technologies to decrease travel from communities for a broad scope of consultations, including mid-trimester assessments. Last year during a blizzard, two babies were born in remote communities, assisted by the on-call physician in Sioux Lookout via live video conferencing.[89]
- The Aboriginal Nurses Association of Canada, the Canadian Association of Schools of Nursing, and the Canadian Nurses Association have jointly developed a

framework to create cultural competencies and promote cultural safety in First Nations, Inuit and Métis nursing education.[90]

- In Australia, $20.8 million over five years has been given to an initiative to improve the Capacity of Workers in Indigenous Communities. The initiative trains Aboriginal and Torres Strait Islander Health Workers, counsellors and other clinic staff in Indigenous-specific health services to identify and address mental illness and associated substance use issues in Indigenous communities, to recognize the early signs of mental illness, and to make referrals for treatment where appropriate.[91]

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