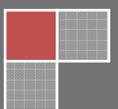


2011

A Call to Action

Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area

Developed in collaboration by Wellington-Dufferin-Guelph Public Health, Region of Waterloo Public Health, and Grey Bruce Public Health for the Waterloo Wellington Local Health Integration Network



Acknowledgements

Call to Action

Primary Authors

Daniela Seskar-Hencic, Lead Author
Jennifer McLeod, Program Manager, Health Analytics
Wellington-Dufferin-Guelph Public Health (WDGPH)

Secondary Authors

Andrea Roberts, Director, Child & Family Health
WDGPH
Sharlene Sedgwick Walsh
Director, Healthy Living, Planning & Promotion
Region of Waterloo Public Health (ROWPH)

The findings of this Call to Action are primarily based on work of the Steering Committee for the following report:

Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network: A Public Health Perspective on Local Health, Policy, and Program Needs (2011).

Steering Committee

Co-Chairs

| | |
|-------------------------|---|
| Andrea Roberts | Director, Child & Family Health, WDGPH |
| Sharlene Sedgwick Walsh | Director, Healthy Living, Planning & Promotion, ROWPH |

Members

| | |
|---------------------|--|
| Wing Chan | Health Data Analyst, WDGPH |
| Jessica Deming | Epidemiologist, ROWPH |
| Melissa Kwiatkowski | Planner, System Design & Transformation, WWLHIN |
| Alanna Leffley | Senior Epidemiologist, Grey Bruce Health Unit (GBHU) |
| Jennifer MacLeod | Program Manager, Health Analytics, WDGPH |
| Kristina Schmidt | Health Data Analyst, WDGPH |
| Patrick Seliske | Epidemiologist, WDGPH |
| Erin Tardiff | Public Health Planner, ROWPH |

Authors

| | |
|-------------------------|---|
| Daniela Seskar-Hencic | Lead Author |
| Wing Chan | Health Data Analyst, WDGPH |
| Jennifer MacLeod | Program Manager, Health Analytics, WDGPH |
| Andrea Roberts | Director, Child & Family Health, WDGPH |
| Sharlene Sedgwick Walsh | Director, Healthy Living, Planning & Promotion, ROWPH |
| Kristina Schmidt | Health Data Analyst, WDGPH |

Primary Contributors

| | |
|-----------------|------------------------------|
| Jessica Deming | Epidemiologist, ROWPH |
| Stephen Drew | Health Data Analyst, ROWPH |
| Alanna Leffley | Senior Epidemiologist, GBHU |
| Patrick Seliske | Epidemiologist, WDGPH |
| Heather Snider | Program Assistant, WDGPH |
| Erin Tardiff | Public Health Planner, ROWPH |

Additional Contributors

| | |
|--------------------|---|
| Nam Bains | Team Lead, LHIN Support Team, MOHLTC |
| Lynn Bestari | Early Years Data Analysis Coordinator, Guelph Community Health Centre |
| Linda Davies | Program Manager, Child and Reproductive Health, GBHU |
| Sarah Ellis | Program Manager, Vaccine Preventable Diseases, GBHU |
| Melissa Horan | Health Promotion Specialist, WDGPH |
| Virginia McFarland | Health Data Analyst, GBHU |
| Asma Razzaq | Epidemiologist, ROWPH |
| Andrea Reist | Director, Child and Family Health, ROWPH |
| Amy Romagnoli | Data Analysis Coordinator, YMCA Ontario Early Years |
| Amanda Tavares | Health Data Analyst, ROWPH |

Funding for the development of this report was provided by the Waterloo Wellington LHIN.

Contents

- Introduction 1
- A Call to Action..... 2
- Understanding the Issues: 5
 - Healthcare Crisis and the Cost of Poor Social Conditions..... 5
 - The Impact of Social and Economic Conditions on Health 7
- Social Determinants of Health in the Waterloo Wellington LHIN Area..... 9
 - “Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area” – The Highlights..... 10
 - Income/Employment and Health 10
 - Education and Health 10
 - Housing and Health 11
 - Early Childhood Indicators and Health 11
 - Priority Neighbourhoods and Health Indicators in Waterloo Wellington..... 12
 - Evidence from the Policy and Practice 13
 - Recommendations..... 14
- Conclusion..... 16
- References 17

Introduction

This report is a **call to action** to address health inequities that contribute to the healthcare crisis in Ontario. It provides evidence that factors such as income, education, and child development have a profound impact on health. The report offers evidence describing the effectiveness of policy development and promising interventions. This information will be used to assist in determining the focus of our coordinated efforts to address the social determinants of health in each community in the Waterloo Wellington LHIN area. Clear and specific recommendations are provided.

Information about specific neighbourhoods will be made available after the completion of a community consultation and validation process. This will allow stakeholders to ensure that community members have an opportunity to clearly identify assets and challenges within their respective neighbourhoods and to avoid assumptions or decisions that could negatively impact identified neighbourhoods.

Communities within the boundaries of the Waterloo Wellington LHIN have demonstrated their commitment to improving the health of our residents by addressing the factors that determine health. However, many of the existing health initiatives could be strengthened by using a “whole of community” approach, whereby action is taken collectively with concerned citizens, the private sector, business, faith communities, and other service providers and results are measured and demonstrated. Thus, addressing social determinants of health becomes everybody’s responsibility.

This call to action stems from a fuller report, *“Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area: A Public Health Perspective on Local Health, Policy, and Program Needs.”* The initial report was created with the guidance of a steering committee comprising representatives from the Grey Bruce Health Unit, Wellington-Dufferin-Guelph-Public Health, the Region of Waterloo Public Health, and the Waterloo Wellington Local Health Integration Network. The initial report reflects evidence from various sources and examines conditions in the neighbourhoods across the Waterloo Wellington area. It describes the different perspectives of need, as well as the capacity and actions to address social determinants of health.

A Call to Action

There are seven (7) steps identified in the **Call to Action**. Each step is a critical move towards addressing the social conditions influencing people's health. The **Call to Action** outlines key principles and suggestions that will support the validation of the initial report and the collaboration needed to move forward.

- 1. Communities in the Waterloo-Wellington area need to introduce a collaborative, community-wide process to explore and validate the findings and recommendations from this report and determine the most suitable course of action. This should include a commitment to engage broad membership from the health, education, business, and other sectors. In order for this process to be meaningful to each geographic area within the LHIN, the validation process should be separate and tailored to the communities of Waterloo Region and Wellington County.**

Suggestions for next steps:

Following endorsement of the initial report, it will be important for agencies in each community to:

- Begin a discussion to define a process and structure that will address social determinants of health in a collaborative, action-oriented way.
- Identify a lead agency to take responsibility for facilitating the identified process.
- Identify stakeholders from the broader community who need to be part of this process.

We need to improve understanding across sectors (public, private, and non-profit), such that the creation of public policies and programs avoids widening health disparities and that actions to reduce health disparities are collective, coordinated, and integrated (Health Council of Canada, 2010).

- 2. Engage priority neighbourhoods, communities, and service providers in the development of optimal solutions that match their needs and unique circumstances. It is important to ensure that no further harm or stigmatization occurs in this process.**

Suggestions for next steps:

One of the critical issues is to ensure a meaningful engagement of the neighbourhoods and communities in understanding and validating the initial report. The data shared in this report reflects indicators that need to be further explained and understood in the context

of the experience of particular neighbourhoods. The report has not considered the capacities, existing services, and supports in neighbourhoods; these need to be assessed in the context of choosing recommended interventions.

Agencies must find the most suitable approach to sharing information from the report with identified communities. Communities must be given an opportunity to review the suggested recommendations in the initial report¹ and to assess their relevance and compatibility within the context of their current programming and other activities. The consultations and engagement should be community member focused. Community members should be asked:

- Whether the findings of the initial report resonate with their experience of living in the community
- Whether the recommendations in the initial report are relevant within the context of their community
- To describe their vision for success in pursuing action on this report

3. Share evidence about the cost effectiveness of public health policies and interventions with private, public, business, and other sectors and invite them to join the health sector in investing in early years interventions and poverty reduction. In order for this process to be meaningful to each geographic area within the LHIN, the evidence sharing and recruitment should be separate and tailored to the communities of Waterloo Region and Wellington County.

Suggestions for next steps:

Public Health has been working with a range of stakeholders in the social, education, and health sectors. Some of the questions to consider in creating a multi-sectoral support for this action may be:

- Who else needs to join in order to make the action successful?
- How can we reach out to those stakeholders?
- What expectations do we have of them?
- What are the best ways to engage them?

¹ Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area: A Public Health Perspective on Local Health, Policy, and Program Needs

4. Introduce mechanisms that link existing community networks in Waterloo Region and Wellington County across the issues (e.g., linking early years and poverty reduction networks) in order to strengthen their impact and maximize policy and intervention outcomes.

Suggestions for next steps:

Each of the Waterloo-Wellington communities has many strong networks that are built to support specific issues such as poverty, early years, education, chronic disease, etc. This call to action must avoid duplication and build on these existing networks. Waterloo-Wellington communities are encouraged to seek optimal and efficient solutions to advance multi-sectoral action. Engaging decision makers is critical to this process, but does not require communities to create another network with regular meetings that are often time consuming and hard to sustain. Instead, this action may mobilize a flexible, but committed and supportive, network or alliance of individuals and organizations. Such groups can act as champions for action, add a strong voice in key stages of policy advocacy, or support resources needed to pursue promising interventions. Networks can be linked using strategies such as:

- Presentations to each network to raise awareness of the social determinants of health
- Identifying a person on each network or planning table to liaise with the social determinants of health group
- Developing a system of knowledge exchange using vehicles such as e-bulletins, reports, and evidence sharing

5. Develop mechanisms to monitor population health of the residents of Waterloo Region and Wellington County and to monitor progress in narrowing health equity gaps in identified areas.

Suggestions for next steps:

Once the findings from the initial report are validated and complemented by additional data to form baseline community information, it is important to establish a system to monitor the progress of action over time. Continuous reporting on social conditions and their relationship to health would increase understanding of how community interventions and policy decisions influence changes in this relationship. Creating a surveillance system with this type of data at the community level may serve multiple purposes, from recording the community's progress, to informing the community on a continuous basis, to identifying new and emerging needs that need to be addressed.

6. Support intervention research and continue to build on the existing evidence base for promising practices in addressing social determinants of health.

Suggestions for next steps:

The suggested interventions in this report have been evaluated and have proven to deliver substantial positive outcomes. These and other interventions that may be implemented across our communities need to be examined for their contribution to reducing health equity gaps and improving the overall health of the communities. Evaluation research that provides evidence on the outcome of these interventions is a valuable source for learning how to overcome the adverse effects of social inequities. Public Health Units and other service providers may look for opportunities to engage academia and other sectors in this type of research. This will assist with increasing our collective knowledge of what interventions prove to be most successful in reducing health inequities.

7. Raise public awareness about the importance of addressing social determinants of health. It will be essential to present social determinants of health in a manner that people will understand and that is meaningful to them.

Suggestions for next steps:

- Develop key messages to clearly convey the idea of social determinants of health in a way that is convincing to community members, whose attitudes ultimately have to be shaped or reflected.
- Develop resources to share these messages such as fact sheets, presentations, kits, and videos.
- Share the messages and resources widely with agencies and community leaders.

Understanding the Issues:

Healthcare Crisis and the Cost of Poor Social Conditions

In today's world, healthcare systems are dealing with a growing problem: more people need more healthcare services, and at the same time there is less and less money available to healthcare facilities to provide those services. This problem demands consideration of new, sustainable solutions. Policies and practice need to focus on how to make healthcare more efficient, and how to find long-term ways to prevent illness so the demand for services does not continue to grow.

The dollars spent on healthcare by the Ontario government increases by almost 8% each year. From 1999 to 2009 the amount of government spending on health doubled from 21.6 to 45.3 billion dollars. In the same time period, the amount it cost to provide healthcare grew from approximately \$1,900 to \$3,500 per person, or 84%, while the gross domestic product (GDP)² has grown by only 39%. This difference in growth calls for an examination of ways to decrease the pressure on the healthcare system. Many reports dealing with the healthcare crisis acknowledge this issue as well as the fact that chronic diseases present the single most important source of burden on the healthcare system. It is believed that successful solutions may lead to substantial cost savings. It is estimated that if we could achieve a 10% reduction in expenditures on chronic illnesses with only 1% of the population, we would be able to save up to 1.2 billion dollars per year (Ideas and Opportunities for Bending the Health Care Cost Curve, 2010).

Many healthcare spending reports acknowledge that healthcare costs are the highest in the first year of life, as well as among the oldest populations (Canadian Institute for Health Information, 2010). However, in the last few years new international and Canadian reports have emerged that offer analysis of how various social factors contribute to increased healthcare costs. In the European Union, one study determined that over 700,000 deaths and 33 million cases of ill health per year occur among people who live in poor social conditions (low income, unemployment or underemployment, low education etc). This further translates into 20% of the total cost of healthcare, 15% of the cost of social security benefits, and a 1.4% loss to the GDP every year. The overall financial impact was estimated to be €980 billion per year, or 9.4% of the GDP (Mackenbach, Meerding & Kunst, 2011).

The public health sector has continuously looked at ways to prevent chronic illnesses through primary prevention and is aware that dealing with the factors that influence risk behaviours and illness may be the most important long-term strategy for reducing demand on the healthcare system. A very recent study conducted by the Public Health Agency of Canada looked at how healthcare costs are distributed across five income groups. The results suggest that more than half of all healthcare expenditures are linked to 20% of Canadians—those who live with the lowest income. The study estimates that this results in a direct cost of \$6.2 billion, which is 14% of the total estimated health cost. The estimated difference in cost between 20% of the

² “Gross domestic product (GDP) refers to the market value of all final goods and services produced within a country in a given period. GDP per capita is often considered an indicator of a country's standard of living” (European Parliament's Committee on the Environment, Public Health, 2007).

population with the lowest income and 20% with the highest is approximately \$3.7 billion, or 60% of the estimated burden (Milliken, Long & Jacobsen, 2011).

Poverty costs the healthcare system. Experts have determined that total healthcare spending declines as a person's income increases. If we plot a population's income level on a graph and divide it into sections showing 20% in each section we will see that individuals whose income is in the bottom 20% use 30.9% of overall health spending, the second lowest 20% group uses 24.2%, and the middle 20% uses 16.2% of health expenditures. With these initial findings, a scenario was created to project the effects on healthcare costs by raising the income of those in the lowest 20% to the next income level. This scenario resulted in an anticipated cost savings of about 2.9 billion for the province of Ontario (Laurie, 2008).

A recent publication from the Health Council of Canada, *Stepping it Up: Moving the Focus from Health Care in Canada to a Healthier Canada*, confirms that Canadians with the lowest incomes are more likely than others to suffer from chronic conditions such as diabetes, arthritis, and heart disease; to live with a disability; and to be hospitalized for a variety of health problems (Health Council of Canada, 2010). People with the lowest 20% of income are 60% more likely to have two or more chronic conditions, four times more likely to live with disability, and three times less likely to have additional health and dental coverage. They are twice as likely to use healthcare services as those with the highest incomes (Ontario Physicians Poverty Work Group, 2008).

In Canada, serious and ongoing concerns about the role of social factors, the increasing number of people with chronic conditions, and the need to look at how to stabilize the healthcare system are creating a sense of urgency and are changing the focus of healthcare from health treatment to health promotion and disease prevention. Since the greatest gains in improving health can be made in vulnerable and marginalized sub-groups of our population, it is important to understand which interventions may be most efficient in addressing these concerns and which populations may benefit most from them.

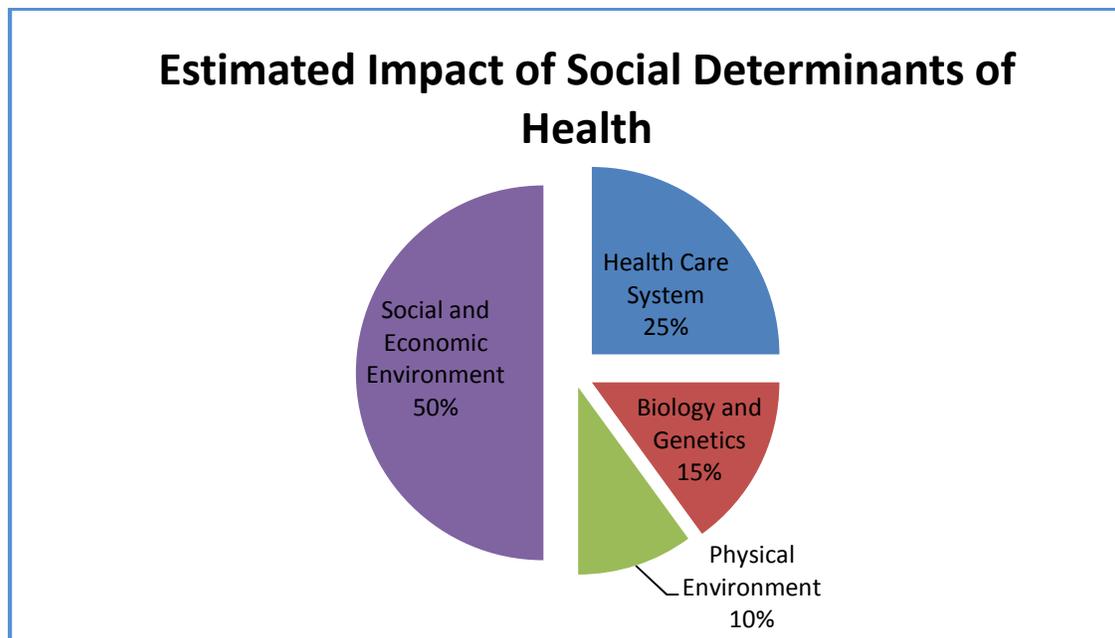
The Impact of Social and Economic Conditions on Health

The health and well-being of individuals depends on social, economic, and environmental factors as well as individual behaviours, living conditions, and genetics. This list of factors is often referred to as determinants of health (Ontario Ministry of Health and Long-Term Care, 2009).

A subset of these factors that refers to social and economic conditions is defined as social determinants of health. Social determinants of health are the conditions in which people are

born, grow, live, play, work, and age. Unlike biological factors such as genetics and age, these conditions can change and can be influenced by public policies and other interventions (World Health Organization, 2011).

Social determinants of health have a significant influence on overall health. About 50% of people's health can be attributed to socioeconomic factors while 10% is attributed to physical environment factors, 15% to biological factors, and 25% to the healthcare system itself (Keon & Pepin, 2009).



A recent report in the United States confirms these statements. After reviewing all articles published between 1980 and 2007 that looked at the relationship between social factors and mortality (death), this report estimated that factors such as low education, racial segregation, low social support, and low income contribute to mortality as much as physiological and behavioural causes combined (Galea, Tracy, Hoggatt, DiMaggio & Karpati, 2011).

A specific list of **social determinants of health** from a Canadian context includes the following factors:

- Aboriginal Status
- Early Life
- Education and Literacy
- Employment and Working Conditions
- Unemployment and Job Security

- Disability
- Social Safety Net
- Social Exclusion
- Food Security
- Gender
- Healthcare Services
- Housing
- Race
- Income and its distribution

(Raphael, 2009; Mikonnen & Raphael, 2010)

Biological factors such as genetics and age create health inequalities that cannot be avoided and prevented, but social conditions can be modified and improved and therefore they contribute to creating health inequities that are unnecessary, avoidable, and unjust (Whitehead, 1992; Gardner & Ticoll, 2007). People with low incomes or lower education, or racial/ethnic minorities who experience poor health often repeatedly experience disadvantages that put them even further behind those who have a health advantage (Braveman, 2009). Unlike the health gaps that result from biological factors, health disadvantages are the products of living in poor conditions that are created in a social context; therefore, they can be changed and improved by policy and other interventions (International Society for Equity in Health, 2011).

Social Determinants of Health in the Waterloo Wellington LHIN Area

The Waterloo Wellington Local Health Integration Network (WWLHIN) is made up of Waterloo Region, Wellington County, and the southern tip of Grey County. Waterloo Region consists of 45 neighbourhoods, Wellington County consists of 7 municipalities as well as 13 neighbourhoods within the City of Guelph, and the portion of Grey County that is part of the WWLHIN includes the Municipality of Southgate and a small area of the Municipality of West Grey. In 2006, the total population for the WWLHIN was 679,375.

“Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area” – The Highlights

Income/Employment and Health

Populations that are most affected by low income include children and youth, new immigrants, visible minorities, Aboriginal peoples, seniors, people living with disabilities, and those living in remote rural communities. Low income affects housing security and is often accompanied by a poor physical environment and accessibility to healthy food. New immigrant families and their children have been identified in many studies as a priority population. Even though the poverty that many immigrants experience is transitional in nature, it lasts long enough to potentially have a serious impact on their growing children.

- Eight neighbourhoods in the WWLHIN had more than 10% of persons in private households with low income.
- Approximately one-quarter of neighbourhoods in the WWLHIN received government transfer payments that represented more than 10% of their total family income.
- The unemployment rate among recent immigrants (i.e., immigrants arriving between 2001 and 2006) was two times greater (11%) than the unemployment rate of the Canadian-born population (5%) or established immigrants (5%) (Workforce Planning Board of Waterloo, Wellington and Dufferin, 2009).
- In Waterloo Region, 45% of children access food banks (Food Bank of Waterloo Region, 2008, as cited in Tardiff, 2009).
- In Wellington County, 29% of children 14 years of age depend on food banks (United Way, 2007, as cited in Wellington-Dufferin-Guelph Coalition for a Report Card on the Well-Being of Children, 2009).

Education and Health

The higher and the more successful the education experience of children and adults is, the better their health will be (Public Health Agency of Canada, 2008). The highest mortality rates in Canada are identified among people who did not complete secondary school, those who are unemployed or who are not seeking jobs, and those who have unskilled jobs and are consequently living on low incomes (Population Health Promotion Expert Group: Working Group on Population Health, 2009).

- In 2006, in all of Waterloo Region 58.1% of adults between 25 and 64 years of age completed post-secondary education, which was higher than the proportion in Wellesley (41.4%), Woolwich (53.4%), and Wilmot (57.6%) townships (Woolwich Community Health Centre, 2010).
- In Wellington County, 58.5% of adults between 25 and 64 years of age completed post-secondary education.
- In the municipalities of Southgate and West Grey (i.e., the portion that is part of the WWLHIN), 43.1% of adults between 25 and 64 years of age completed post-secondary education.

Housing and Health

Affordability of suitable housing is directly related to income. The consequences of not being able to afford suitable housing can lead to either food deprivation or substandard housing conditions, where either or both have direct negative health consequences (Public Health Agency of Canada, 2008).

- In 2006, in the Kitchener-Cambridge-Waterloo Census Metropolitan Area (CMA), 39.2% of tenant households spent 30% or more of their gross household income on rent compared to 41.2% in the Guelph CMA (Statistics Canada, 2011).
- In 2006, in the Kitchener-Cambridge-Waterloo CMA, 16.7% of homeowners spent 30% or more of their household income on major payments compared to 18.3% in the Guelph CMA (Statistics Canada, 2011).

Early Childhood Indicators and Health

Children are particularly vulnerable to living in low income conditions because the complexity of the implications affects their families, even pre-birth, and continues to do so well into adulthood. Children who live in low income households are at higher risk of having a number of health problems later in life, even if their socioeconomic status changes. Since these childhood issues are common to all sub-population groups and communities, commitment to addressing these needs in various environments means addressing other potential vulnerabilities such as living in remote rural areas, being a recent immigrant, being a visible minority, etc.

- In 2006, 12.2% of children/youth aged 18 years and under in Waterloo Region were living in a private home with low income (Woolwich Community Health Centre, 2010).
- In 2005, 7.0% of children/youth aged 18 years and under in Wellington County were living with low income (Wellington-Dufferin-Guelph Public Health, 2010).

- In 2006, 5.7% of persons aged 18 years and under in the Municipality of Southgate and 6.4% in the entire Municipality of West Grey were living with low income after tax (Glenda Clarke and Associates, 2010).
- Six neighbourhoods had over 20% of families headed by lone parents.
- Four neighbourhoods in Wellington County (excluding children with special needs) and five neighbourhoods in Waterloo Region (including children with special needs), had higher proportions of senior kindergarten children who were vulnerable (i.e., scoring below the tenth percentile in two or more Early Development Indicator domains that measure "readiness" to learn).

Priority Neighbourhoods and Health Indicators in Waterloo Wellington

In the original report “Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area,” priority neighbourhoods were identified through a system of ranking all neighbourhoods according to eight social determinants of health (SDOH) indicators. These indicators were chosen based on evidence from existing literature and the data examined in that report. All 65 neighbourhoods were ranked on each of the eight indicators. The indicator ranks were then summed for every neighbourhood. Neighbourhoods appearing in the highest 20% of the overall rank were identified as priority neighbourhoods. A general assessment of priority populations was completed in the context of public health programming in the three health units and through the Healthy Community Partnership consultations. **Low income populations, young mothers, children, and new immigrants** were consistently identified as priority populations. Some areas, particularly in Grey Bruce, also face unique issues with **Aboriginal** and **rural populations**.

- There are thirteen priority neighbourhoods in the Waterloo Wellington LHIN area. These neighbourhoods showed higher rates of low income, unemployment status, low education, and lack of social and community support, relative to other neighbourhoods in the Waterloo Wellington area.
- Not all thirteen priority neighbourhoods that were identified using the eight selected indicators showed higher rates of hospitalizations (related to cardiovascular disease, injury, and diabetes) and mortality (due to lung cancer). Of the non-priority neighbourhoods that ranked highest for negative health outcomes, six were rural areas and four were urban areas.
- Thirteen neighbourhoods in the WWLHIN had more than 10% of children aged 6 years and under who lived in low income households. Ten of these neighbourhoods were previously identified as priority neighbourhoods.
- Based on the Early Development Instrument (EDI), three out of four neighbourhoods in Wellington County with the highest rates of vulnerable senior kindergarten children

(excluding children with special needs) were priority neighbourhoods. In Waterloo Region, six out of seven neighbourhoods with the highest rates of vulnerable senior kindergarten children (including children with special needs) were priority neighbourhoods.

- Six of the thirteen neighbourhoods had high rates of immigrants, recent immigrants, and visible minorities.
- There were only two neighbourhoods in the LHIN in which over 2% of people declared Aboriginal status. Aboriginal populations may be vulnerable to discrimination, stigmatization, and marginalization, and may not have access to or receive culturally appropriate resources and services.
- Five neighbourhoods in the WWLHIN had hospitalization rates for cardiovascular disease of more than 1500 hospitalizations per 100,000 people on average over three fiscal years.
- Seven neighbourhoods had hospitalization rates for injury between 800 and 1,255 hospitalizations per 100,000 people on average over three fiscal years.
- Three neighbourhoods had hospitalization rates for diabetes of nearly 200 hospitalizations per 100,000 people on average over three fiscal years.
- Five neighbourhoods in the WWLHIN had between 75 and 116 deaths related to lung cancer per 100,000 people on average over three calendar years.

Evidence from the Policy and Practice

A thorough review of the evidence, from both a national and local perspective, and promising practices related to the social determinants of health is included in the full report. The following are key strategies to consider when developing a local implementation plan.

- **Development of policies** to support sustainable employment and living wage; improved housing; child development conditions; improvements in the built environment; affordability and accessibility to recreation and sports; and improvements in food security. Interest in policy advocacy exists in each of the WWLHIN communities and could be further expanded by improving connections with and supporting local coalitions and groups that are spearheading poverty reduction strategies and early childhood, new immigrant, and other policy initiatives that are unique to addressing the social determinants of health.
- **Comprehensive community interventions for families with children** that include collaboration of health, education, and social service agencies. The purpose of these initiatives is to provide seamless services, opportunities for policy advocacy, community-wide planning activities, and systems-based approaches that build on existing strengths and capacities within communities.

- **Neighbourhood-based interventions and peer programming** that offer intensified and complementary interventions to community action and institution-based support. These interventions address the unique needs of priority populations in an informal, accessible, flexible, and culturally appropriate way. This approach also considers co-location of services, and offering services close to where people live or places they frequent.
- **Interventions that focus on specific priority populations and local issues** that have proven to have a strong and positive impact in closing the health equity gap, such as smoking cessation interventions, **Triple P** parenting initiative, the **Nurse Family Partnership**, and **Pathways to Education**.
- Use of **health equity impact assessments** in both planning and delivery of services in order to design equity-focused interventions within universal and targeted programs. Promoting the use of equity impact assessment beyond the health sector is another domain that is gaining momentum across the province.
- **Intervention research** to build an evidence base for promising practices that addresses the social determinants of health in order to justify the decision to use and expand these interventions in our communities as well as secure substantial financial support. There are many examples of promising practices and interventions at the neighbourhood level across the WWLHIN area, for example, peer-based programs/supports in Waterloo and Guelph. Research should also focus on directions for further policy development.

Recommendations

Communities in Waterloo Wellington have demonstrated a commitment to working on improving the health of our residents. A number of local initiatives could be strengthened by using a “whole community” approach, whereby action is taken collectively and results are measured and demonstrated. Based on an extensive review of the literature and analysis of local data, the Steering Committee for the report “Addressing Social Determinants of Health in the Waterloo Wellington Local Health Integration Network Area,” generated the following specific recommendations to address social determinants of health and narrow the health equity gaps in the WWLHIN area communities:

1. Share and validate the findings and recommendations of the initial report with the affected communities, networks, organizations, and decision makers and invite their action.
2. Enable the use of accessible, culturally appropriate, and meaningful interventions that have proven to increase health benefits and reduce healthcare costs.

- a. **To improve high school graduation rates:** invest in the **Pathways to Education** program in priority neighbourhoods. Staying in school and educational achievements lead to improvement in socioeconomic conditions and therefore minimize or remove barriers to health. This program is a proven social and health investment that delivers between 40 and 70 percent reduction in high school drop-out rates. The program has been successfully implemented in vulnerable neighbourhoods in collaboration with parents, community agencies, volunteers, local school boards, and secondary schools. Pathways delivers a \$24 return for every \$1 invested.
- b. To address **low income, accessibility, and cultural barriers**, invest in peer-based programs such as the **Peer Health Worker and Community Nutrition Worker** programs in **Waterloo** region and the **Community Development Neighbourhood** programs in Guelph that have proven to assist people in gaining access to information and build skills in a non-threatening way while keeping their unique needs in mind. These interventions reduce social isolation in at risk populations including new immigrant families; improve adoption of healthy living practices; and improve parenting skills (including reducing the need for intervention related to child protection), nutrition, and physical activity. Despite the proven benefits and being very cost effective, some of these programs operate on limited, very modest funds or inconsistent, pilot funds. In the case of the neighbourhood programs supported by community development workers in Guelph, the program has recently been discontinued due to lack of funding, despite the widely-based support of health and social service partners.
- c. **To address early childhood development:** support the existing work of community agencies by investing in an evidence based parenting support program like the **Triple P** initiative that has proven to prevent behavioural, emotional, and developmental problems in children by enhancing the knowledge, skills, and confidence of their parents. It is important to offer both universal and targeted supports to families as there is clear evidence that while vulnerabilities in children exist in low income areas, they are also seen across social gradients.
- d. **To address chronic disease:** support the combination of interventions and policies that include legislation/policy change, and individual and population health interventions such as those for smoking cessation that include nicotine replacement therapy, physician's advice, individual behavioural counselling, combined with tobacco tax increases and local/provincial legislation (policies). A combination of universal and targeted interventions is essential for creating and sustaining significant behavioural changes that ultimately impact acute healthcare costs.

3. **Develop and support policies** to enable sustainable livelihoods and optimal living conditions of all individuals and families in the WWLHIN area. This includes:
- a. Policies to end persistent poverty
 - b. Policies to support employment and living wage
 - c. Policies to increase food security
 - d. Policies to improve housing
 - e. Policies to support child development and child care
 - f. Physical environment policy actions must be supported by the following working principles and support mechanisms:
 1. Priority neighbourhoods and communities need to be engaged in the development of optimal solutions that fit their needs and unique circumstances. It is important to ensure that no further harm or stigmatization occurs in this process.
 2. Sharing evidence about the cost effectiveness of public health policies and interventions with private, public, business, and other sectors and inviting them to join the health sector in investing in early years interventions and poverty reduction.
 3. Introducing mechanisms that link existing WWLHIN community networks across the issues (e.g., linking early years and poverty reduction networks) in order to strengthen their impact and maximize policy and intervention outcomes.
 4. Developing mechanisms to monitor population health of the WWLHIN area residents and to monitor progress in narrowing down the health equity gaps in identified areas.
 5. Supporting intervention research and continuing to build on the existing evidence base for promising practices in addressing social determinants of health.

Conclusion

Much has been written about the impact that social determinants of health can have on a community. We have local data to support the existence of these determinants and we have a beginning inventory of promising practice and policies to begin addressing the health inequities. Now, we need ACTION. Only by working together across the entire geographic area that makes up the Waterloo Wellington LHIN can we truly impact the health of our residents in a positive way, and ultimately see improvements that will support the future generations of our communities.

References

- Braveman, P. (2009). A health disparities perspective on obesity research. *Preventing Chronic Disease*, 6(3), Retrieved June 29, 2011 from http://www.cdc.gov/pcd/issues/2009/jul/09_0012.htm.
- Canadian Institute for Health Information. (2010). *Hospitalization disparities by socio-economic status by males and females*. Retrieved June 29, 2011 from http://secure.cihi.ca/cihiweb/products/disparities_in_hospitalization_by_sex2010_e.pdf.
- European Parliament's Committee on the Environment, Public Health (2007). Alternative progress indicators to Gross Domestic Product (GDP) as a means towards sustainable development and Food Safety. Retrieved October 14, 2011 from <http://www.beyond-gdp.eu/download/bgdp-bp-goossens.pdf>
- Galea, S., Tracy, M., Hoggatt, K., DiMaggio, C., & Karpati, A. (2011). Estimated deaths attributable to social factors in the United States.
- Gardner, B., & Ticoll, M. (2007). *Health equity into policy action: FAQs*. Wellesley Institute. Retrieved June 29, 2011 from http://wellesleyinstitute.com/files/Health%20Equity%20into%20PA_faq.pdf.
- Glenda Clarke and Associates. (2010). A profile of child, youth and family health in Grey and Bruce counties; Technical report.
- Health Council of Canada. (2010). *Stepping it up: Moving the focus from health care in Canada to healthier Canada*. Toronto, ON: Health Council of Canada. Retrieved June 29, 2011 from <http://www.healthcouncilcanada.ca/docs/rpts/2010/promo/HCCpromoDec2010.pdf>.
- International Society for Equity in Health. (2011). *International Society for Equity in Health*. Retrieved June 25, 2011, from www.iseqh.org/workdef_en.htm.
- Keon, W. J., & Pepin, L. (2009). *A healthy, productive Canada: A determinant of health approach. Final report of the Senate Subcommittee on Population Health*. Retrieved June 29, 2011 from <http://www.parl.gc.ca/Content/SEN/Committee/402/popu/rep/rephealthjun09-e.pdf>.
- Laurie, N. (2008). *The cost of poverty: An analysis of the economic cost of poverty in Ontario*. The Atkinson Foundation.
- Mackenbach, J., Meerding, W., & Kunst, A. (2011). Economic cost of health inequalities in European Union. *Journal of Epidemiology and Community Health*, 65(5), 412-419. Retrieved July 29, 2011 from <http://jech.bmj.com/content/65/5/412.short>.
- Mikonnen, J., & Raphael, D. (2010). *Social determinants of health: Canadian facts*. Toronto, ON: York University School of Health Policy and Management.
- Milliken, O., Long, A., & Jacobsen, L. e. a. (2011). *The direct economic burden of socioeconomic inequalities in health in Canada*. Public Health Agency of Canada.

- Ontario Association of Community Care Access Centres (OACCAC), Ontario Federation of Community Mental Health and Addiction Programs (OFCMHAP) & Ontario Hospital Association (OHA). (2010). *Ideas and Opportunities for Bending the Health Care Cost Curve: Advice for the Government of Ontario*. Retrieved October 18, 2011 from <http://www.ccac-ont.ca/Upload/on/General/Bending%20the%20Health%20Care%20Cost%20Curve%20%28Final%20Report%20-%20April%202013,%202010%29.pdf>
- Ontario Ministry of Health and Long-Term Care. (2009). *Initial report on public health*. Public Health Division, Ontario Ministry of Health and Long-term Care.
- Ontario Physicians Poverty Work Group. (2008). Why poverty makes us sick: Physician backgrounder. *Ontario Medical Review*.
- Population Health Promotion Expert Group: Working Group on Population Health. (2009). *Closing the gap: Synthesis of the significant population health reports of 2008*. Retrieved June 29, 2011 from <http://www.phn-rsp.ca/pubs/chg-ceps/pdf/chg-ceps-eng.pdf>.
- Public Health Agency of Canada. (2008). *What makes Canadians healthy or unhealthy*. Retrieved June 29, 2011 from <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>.
- Raphael, D. (Ed.). (2009). *Social determinants of health, 2nd edition*. Toronto, ON: Canadian Scholars Press.
- Statistics Canada. (2011). *Owner households and tenant households by major payments and gross rent as a percentage of 2005 household income, by census metropolitan area (2006 Census) (St. Catharines-Niagara, Kitchener-Cambridge-Waterloo, Brantford, Guelph, London)*. Retrieved July 6, 2011, from <http://www40.statcan.ca/l01/cst01/famil129d-eng.htm>.
- Tardiff, E. (2009). *A community fit for children: A focus on young children in Waterloo Region, second edition*.
- Wellington-Dufferin-Guelph Coalition for a Report Card on the Well-Being of Children. (2009). *The well-being of children ages birth to six: A report card for Wellington-Dufferin-Guelph*.
- Wellington-Dufferin-Guelph Public Health. (2010). *Health status report: Social determinants of health in Wellington-Dufferin-Guelph*. Unpublished manuscript.
- Whitehead, M. (1992). *The concepts and principles of equity and health*. World Health Organization. Retrieved June 29, 2011 from http://salud.ciee.flacso.org.ar/flacso/optativas/equity_and_health.pdf.
- Woolwich Community Health Centre. (2010). *Community needs and capacity assessment*.
- Workforce Planning Board of Waterloo, Wellington and Dufferin. (2009). *A glance at employment and income of immigrants*. Workforce Planning Board of Waterloo, Wellington and Dufferin. Retrieved June 29, 2011 from <http://chd.region.waterloo.on.ca/en/researchResourcesPublications/resources/EmploymentandIncome.pdf>.
- World Health Organization. (2011). *Programs and projects: Social determinants of health*. Retrieved, June 29, 2011 from http://www.who.int/social_determinants/en/.