Health Impact Assessment and the Inclusion of Migrants

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List of Acronyms

HIA: health impact assessment

HEIA: health equity impact assessment

LHIN: local health integration network

MOHLTC: Ministry of Health and Long-Term Care (of Ontario)

OPHS: Ontario public health standards

PHU: public health unit

PHO: Public Health Ontario

SDH: social determinants of health
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Preface

The reasons compelling individuals to leave their home-country for foreign lands are varied and complex; often leaving them swaying between a trepidation before new horizons and the anxiety of the unknown. This was certainly the case for my family and me upon our arrival to Canada. As the weeks went by, however, the trepidation slowly dissipated as uncertainty settled in. Uncertainty of our capacity to navigate the institutional systems, uncertainty of our capacity to relate to our new society... Despite having highly educated and multicultural parents, who fluently spoke both official languages of our new home, our willingness to integrate did not seem to be sufficient to influence our ultimate capacity to integrate in our new society. Some reasons for our situation were expected as they are inherent to the migration process, such as a lack of social capital and a lack of knowledge of the system. Others were surprisingly systemic barriers, such as institutionalised racism in its various forms. My family's story wouldn't be interesting if it weren't so common. Indeed, a large number of migrants live similar experiences to varying degrees; and these experiences affect their health in many ways.

Having always been interested in the factors influencing the health of individuals beyond those relating to the curative health care system, it only seemed natural that I gravitate towards the exploration of the health impact assessment process. Although my interest is in the way in which it can affect the health of any minority group, my experiences as an immigrant provided me a certain affinity to that segment of the population and compelled me to dedicate my doctoral work to it.

This affinity, however, also means that my work was not unbiased. I sincerely believe and want health impact assessment to have a greater capacity to respond to the decline in health experienced by migrants. My personal context also influenced my perception of how migrant issues are defined. Being from a multi-ethnic and multi-cultural background, it was my experience that although there
is a convergence between the issues encountered by ethnic minorities and migrant groups and that migrants from certain ethnic groups have particular experiences and barriers, migrants face certain challenges irrespective of their ethnic background. It is for that reason that I chose to focus on migrants as a whole rather than particular ethnic or racialized groups. Indeed, my experience and my bias defined the very nature of the research questions for this doctoral thesis.

It is with this in mind that I still hope for the findings of this thesis to be useful to advancing the practice of health impact assessment and particularly, the consideration of disadvantaged groups within its process.
Thesis Abstract

There is an increasing number of international migrants\(^1\) worldwide and in Canada. The majority of migrants arrive with a health status higher than the average of their host country. This advantage is often lost within ten years of migration due to various reasons, most notably through the social determinants of health. These determinants are the conditions in which individuals live and work and the most relevant to migrant health include racialization, education, employment, housing, social capital, and gender.

Health impact assessment (HIA) is a process with the capacity to address changes in health due to the social determinants of health by assessing the intended and unintended impacts on health that a policy, program, or project might have and recommend ways to promote positive and mitigate negative impacts. For this reason, HIA has the potential to address the observed decrease in health experienced by migrants. Various frameworks have been developed to guide the undertaking of HIA including frameworks explicitly aiming at addressing health inequities by considering particular socially disadvantaged population groups. One such example is the Health Equity Impact Assessment (HEIA) tool developed by the Ontario Ministry of Health and Long-Term Care. Although there have been a few studies addressing the inclusion of inequities in HIA in general, there has been no previous assessment of the inclusion of migrants in HIA.

This doctoral thesis sought to assess the degree and way in which migrants are included in HIAs globally and across various types of HIAs and contexts. It also sought to assess the degree to which migrants were considered in local initiatives through an examination of the implementation of the Ontario HEIA tool in public health units.

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\(^1\) Migrants were here defined according to the United Nations definition where a migrant is any individual living in a foreign country for at least one year for either voluntary or involuntary reasons. It also includes temporary foreign workers as an exception (International Organization for Migration, 2011).
A scoping review of the international literature including 117 HIAs and two HIA evaluations found that only 14% of hand-searched HIAs mentioned migrants, 5% analysed migrants and only 2% included them in their recommendations. Although migrant groups were sometimes included in the process, this was seldom the case for citizens. The main reported barriers to considering migrants were a lack of available data and the significant additional resources needed. In order to undertake an evaluation throughout the province, it was first necessary to assess the way in which the Ontario HEIA had been implemented and used by public health units across the province. The scan found that nearly half of public health units had used the HEIA tool either in its original form or modified to the needs of the unit. The use of the tool was found to be influenced by the following factors: the available inputs or resources, the nature of the HIA tool, the actors and stakeholders involved, the decision-making processes within the unit or team involved, the context of the social, economic, and political environments, the nature of the project, program, or policy being assessed, and lastly, the various outputs of completing the HEIA process. Lastly, a Process and Impact evaluation assessed the way in which PHUs with a high proportion of migrants considered these migrants in their HEIAs. This study found that although migrants had been included in HEIAs, this tended to be done when the impact on migrants was anticipated. Additionally, there remains an incoherent terminology accompanied by a confounding of the concepts of migration, racialization, and ethnicity, which are reflected in the type of recommendations developed. These recommendations often focused on translation of documents into various languages and the acquiring of greater information through community partnerships. The process and capacity to include migrants in HEIAs were influenced by the availability of resources and evidence, the prioritisation of recommendations relating to migrants, and the overall impressions the staff had on the HEIA process. Nonetheless, the HEIA process was beneficial in that it strengthened relationships with migrant community organisations.
This thesis work also resulted in the development of a HIA-specific theoretical framework based on the literature and empirical findings of this work. This framework is conducive to adopting a tactical approach to HIA by considering the various contextual factors influencing the completion of an HIA and implementation of its recommendations.

In conclusion, although migrants are understood to be an important group often facing circumstances of disadvantage, they are only sometimes considered in HIAs. Several procedural and contextual barriers are encountered which influence their consideration. Significant guidance is still required to facilitate their adequate consideration and ensure the development of optimal recommendations. HIA frameworks should explicitly mention migrants as a potentially disadvantaged group and guidance documents could be developed to address the current gaps in understanding migrant issues.
Chapter 1 Introduction

Context, Rationale, and Research Objectives
Context

Migrants move to new countries for various reasons, but almost always in the hopes of obtaining a better life for themselves and/or their loved ones. Unfortunately, many often face challenges and barriers in their new environment and society which negatively impacts their health. This has been well documented in the case of immigrants and refugees whereby their health status is initially superior to the average health of the host country and subsequently declines within the first ten years of arriving (De Maio, 2010; Kennedy, McDonald, & Biddle, 2006). While some of these challenges are inherent to the migration process, others are systemic and/or institutionalised barriers within the new society (Vissandjee, Desmeules, Cao, Abdool, & Kazanjian, 2004). As such, the main reason for their health decline is not because of inherent characteristics or behaviours possessed by migrants, but rather because of the structural and social determinants of health in place in our society which creates circumstances of disadvantage for migrants (Benkhalti Jandu, Dimitrescu, Mohamed, & Najafizada, 2011). It could therefore be argued that it is the responsibility of the host country or society to address these barriers. This is particularly true given that the main purpose of migration policies in many receiving countries, including Canada, is focused on economic growth. Indeed, healthier residents and citizens are greater contributors to the economy and decrease burden on the health care system (Chui, 2003; Immigration and Refugee Protection Act, 2001).
One way to address health changes influenced by the social and structural determinants of health, not only in the case of migrants, is through a health impact assessment (HIA). HIA is a process which systematises the evaluation of intended and unintended impacts on health resulting from policies, programs, or projects within and, just as importantly, external to the health system. The main result of an HIA is a set of recommendations to mitigate negative impacts and promote positive impacts on health (SOPHIA, 2014). The provision of recommendations should also be followed by an evaluation on the implementation of these recommendations and the ultimate impacts on the health of the affected populations (Taylor, Gowman, & Quigley, 2003). A diagram depicting the generic steps of an HIA can be found in Figure 1.1. In recent years, there has been a greater push for

**Figure 1.1 Generic HIA**

- **Screening** (identify projects or policies for which an HIA would be useful)
- **Scoping** (identify which health effects to consider; determine approach)
  - Issues scoping
  - Setting Parameters
- **Impact Identification** (search literature and consult stakeholders)
  - Assessment of Impacts (weighting and synthesis of evidence and consideration of equity impacts in settings at this time)
  - Recommendations development (suggest changes to promote positive or...
- **Monitoring & Evaluation** (tracking the effectiveness of the

Modified from Orenstein and
the explicit mention and assessment of the particular issues differentially affecting disadvantaged groups. Several frameworks and tools have been developed to support this. Among them is a health equity impact assessment (HEIA) tool developed by the Ontario Ministry of Health and Long-Term Care (Ontario Ministry of Health and Long-Term Care, 2011). As such, the term “HEIA” will be used throughout this thesis when referring specifically to the tool developed by the Ontario Ministry of Health and Long-Term Care whereas the term “HIA” will be used when referring to the endeavour of health impact assessment in general.

Because of the purpose of HIA to act on the factors influencing the health of a population beyond the health care system, it presents an approach with great potential to address the barriers affecting migrants’ decline in health. Surprisingly, the success and processes with which disadvantaged groups have been included in HIAs have seldom been explored, with the exception of the Whanau Ora HIA approach adopted by New Zealand targeting the Maori population (New Zealand Ministry of Health, 2014). For that reason, it was difficult to find sufficient background literature on the consideration of specific population groups; and even more so on migrants. Therefore, I had to first map out the inclusion of migrants in HIAs in disseminated HIA reports before being able to study a specific case (HEIA within Ontario) in greater depth.

**Purpose**

The overarching goal of this thesis is to understand how the health impacts of policies, programs, or projects where migrant populations are relevant can be better addressed using HIA. It is necessary to understand the advantages and disadvantages of the factors affecting their inclusion and the methods used to do so. This is because migrants are often omitted from, or not explicitly

Note that I have used an active voice in the introduction and discussion chapters to reflect those statements decided and taken by me. A passive voice was used in the chapters constituting the articles to be published in accordance with the majority of academic journals targeted.
considered, in HIAs and HIA research literature. Research and international organisations on migrants have expressed the need to explicitly assess and address the need of migrants. Indeed, if it is not measured, their health status may continue to suffer an inequitable decline. A better understanding of these issues can influence the adequate inclusion of migrants in HIAs and how this affects the implemented policies, programs, or projects concerning migrant groups.

**Literature review**

The International Organization for Migration (IOM) estimates that there are 214 million international migrants and this number continues to increase (International Organization for Migration, World Health Organization, & United Nations Human Rights, 2013). A myriad of reasons explain this increase including globalisation and economy, environmental changes, violence, access to transportation, etc. Although migrants can be either internal, moving within their country of origin but to a different region, or international, by moving to a different country, this thesis focuses on international migrants (Canada, 2010; International Organization for Migration, 2011). Global migration flows show that 40% of international migrants move to a neighbouring country. Additionally, 37% move from a low and middle income country to a high income country (International Organization for Migration et al., 2013).

**Defining migrants**

Migrants do not necessarily follow a unidirectional, simple path and also do not necessarily experience the same degree of disadvantage, as further detailed below. They may have had multiple countries of residence for various reasons, their migration might be permanent or temporary, chosen or forced upon them, etc. (International Organization for Migration et al., 2013). There is no universal definition for migrants. The United Nations refers to “migrant” as any individual living in a foreign country for at least one year for either voluntary or involuntary reasons.
Generally, however, temporary foreign workers, who are present for a defined period of time according to a working contract with an enterprise, are also considered migrants (International Organization for Migration, 2011). Other types of migrants include economic immigrants who have left their country of origin to improve their quality of life, generally through employment, international students in pursuit of a specific post-secondary degree, and refugees who have left their country of origin due to fear of persecution or a crisis situation (Citizenship and Immigration Canada, 2014a; International Organization for Migration, 2011). Thus, migrants come to a destination country reflecting a range of experiences and push/pull factors. Economic immigrants and their family members constitute nearly 90% of migrants globally (International Organization for Migration et al., 2013).

In Canada, the term “permanent resident” is used to denote migrants and includes economic immigrants and refugees, but not temporary foreign workers and international students (Citizenship and Immigration Canada, 2014b). In order to include the last two types of migrants as well as remain consistent with international nomenclature throughout the thesis, I used and clarified the term “migrant” as needed. Canada has one of the largest proportions of migrants worldwide, with nearly a fifth of its population being foreign-born. In light of current trends, it is estimated that by 2030 up to a quarter of the Canadian population will be foreign-born. In 2010, Canada welcomed 280 000 permanent residents, 66.6% of which were economic immigrants (Statistics Canada, 2006). In Ontario, immigrants comprise approximately 31% of the population and is the most popular province in which to settle (Dall & Ward, 2010; Health Canada, 2010). There has been a decline in the proportion of economic immigrants in Ontario by 20% in the last ten years whereby in 2011 they constituted 52% of migrants. Conversely, there has been a large increase in temporary foreign workers whereby their numbers rose by 196% in the last decade (Ontario Ministry of Citizenship Immigration and International Trade, 2012).
In Canada, as in many other Western nations, there has been a shift in the predominant cultural and ethnic background of migrants entering the country. Whereas in the previous centuries most migrants to Canada originated from European countries, they are now increasingly from other continents. In Canada, they mainly arrive from China, India, and the Philippines (Health Canada, 2010; Statistics Canada, 2006). This change in major countries of origin appears to have led to associating migrants with different (i.e. non-European) cultural backgrounds and perceiving them as “other” from the established norm of what a native-born Canadian looks like. This has resulted in not only seeing migrants as equivalent to ethnic minorities, and vice versa, but also to stereotyping them as lacking knowledge of the country’s official languages and education in general along with other racist notions of inferiority (Galabuzzi, 2006; Hyman, 2009; Vissandjee et al., 2004). In fact, many non-European ethnic minorities have been established in Canada for several generations. For instance, Canadians of Japanese descent have been established in Canada since the late 19th century (National Association of Japanese Canadians, 2014). Although these minorities might still encounter certain common barriers, such as racism and discrimination, they do not face many of the challenges faced by migrants, such as a lack of knowledge of the institutional structures and social isolation (Hyman, 2009; Vissandjee et al., 2004).

Because of its prominence in the migrant experience, it is worth noting that racism is here defined as the discriminatory interactions between individuals or experienced by individuals systemically within a given society or institution based on their colour, culture, or ethnic origin. The term “racism” derives from the concept of “race”, which categorises populations based on biological and genetic traits. It has now been demonstrated that these categories are mere social constructs (Galabuzzi, 2006; Hyman, 2009). Racialization is the process by which external forces of society interpret and assign the ‘race’ to which an individual belongs and interact with that individual accordingly (Isajiw, 1999).
Health inequities in the migrant population

Whitehead defines health inequities as differential health outcomes of a certain population group, which is unfair, unjust, and preventable (Whitehead, 1991). Braveman and Gruskin’s definition builds on Whitehead’s to provide a definition of equity better suited to “guide measurement and hence accountability for actions at the policy and program levels” (Braveman & Gruskin, 2003). They define health equity as “the absence of disparities in health (and in its key social determinants) that are systematically associated with social advantage/disadvantage” (Braveman & Gruskin, 2003, p.254). Braveman and Gruskin use the term “social disadvantage” to refer to power relations between levels in social hierarchies, which are reflected in deprivation among certain groups, who are termed “socially disadvantaged”. In order to achieve health equity, action must be taken to counter uneven power relations and provide equal opportunity to be healthy. This means that resources and efforts must also be targeted to socially disadvantaged groups and/or be proportionate to the disadvantage they face (Braveman & Gruskin, 2003).

Because of their newness to a certain country and their lack of power in their new country and setting, most migrants are socially disadvantaged (Vissandjee et al., 2004). This position negatively affects the health of migrants and results in its inequitable decline (De Maio, 2010; Health Canada, 2010; Vissandjee et al., 2004). This decline has been observed across different types of migrants including economic immigrants as well as family reunification class and refugees (De Maio, 2010). Nonetheless, different types or groups of migrants can be affected differently, some more negatively than others, as further explained below. The need to promote and protect migrant health has been recognised internationally with the 61st World Health Assembly Resolution on the health of migrants, which called, amongst other things, for migrant-sensitive policies, cooperation, and intersectoral action (WHA61.17, 2008). This was followed by other international initiatives, including a Global Consultation on Migrant Health in 2010 (World Health Organization, 2010). These
initiatives were taken because in many cases the health of many migrants is diminished and sub-optimal after arriving to the host country (Health Canada, 2010; WHO Regional Office for Europe, 2010).

In fact, migrants typically have a better health status than the average population in both their countries of origin and arrival, a phenomenon referred to as the “healthy immigrant effect”.

Although the expression used refers to “immigrants”, the effect has been observed in other type of migrants as well. For instance, McDonald & Kennedy (2004) analysed cross-sectional data from the National Population Health Survey (1996) and the Canadian Community Health Survey (2000-2001) and found that the incidence of all chronic conditions assessed was lower in recent immigrants who have been in the country for less than 10 years. There were some minor exceptions including migraines, which were higher in immigrant men and high blood pressure which was similar in immigrant and native-born women. The Longitudinal Survey of Immigrants to Canada (LSIC) found similar trends where 78% of newly arrived immigrants rated their health status as excellent or very good and only 3% as fair or poor, whereas 61% of Canadian-born respondents rated as excellent or very good and 12% as fair or poor. Additionally, 16% of newly arrived immigrants reported having some physical health problem and 5% emotional health problems, which is considered low compared to the Canadian-born population (Chui, 2003).

This phenomenon is in part a result of policies from host countries requiring most migrants to prove they meet certain health requirements before they are welcomed into the country. These policies are the legacy of a protectionist approach based on the “Sick Immigrant Model”, which sees new migrants as possible vectors for new diseases and a burden on the system and therefore aims to keep those out (Beiser, 2005). Many countries, including Canada, also now have a selection process based on various criteria such as education and work experience to select economic immigrants,
which consequently selects individuals in better social positions and therefore healthier (Beiser, 2005; *Immigration and Refugee Protection Act*, 2001). Additionally, there is an implicit process of self-selection whereby it is generally those individuals who are in good mental and physical health who choose to uproot their lives for foreign lands (Beiser, 2005).

Unfortunately, this advantage often disappears after some years of living in the host country. This often rapid decrease in their health status is a particular inequity experienced by migrants in their host country. As explained further below, this inequity is influenced by different social determinants of health and are experienced differently by different migrant sub-groups. This trend has been observed globally (WHO Regional Office for Europe, 2010) as well as in Canada (De Maio, 2010; McDonald & Kennedy, 2004).

A systematic review of studies exploring changes in immigrant health status after residing in Canada has found that the health outcomes of several diseases, including diabetes, obesity, depression and other mental health conditions, and gestational and birth outcomes deteriorate with increasing years spent in the country. These findings are consistent with self-assessed measures of health status (De Maio, 2010). There have been a few studies which found no difference in the reporting of chronic conditions between immigrants and Canadian-born respondents (Laroche, 2000; Newbold, 2006). Given that the vast majority of studies have indeed found evidence for the decrease in migrant health, De Maio (2010) suggests that the use of a dichotomous approach which pools the presence of a handful of chronic conditions and contrasts them with the absence of diagnosis may have decreased the statistical power of the analyses “by virtue of conflating a number of diseases with distinct etiologies and epidemiologies” (De Maio, 2010, p. 12). A more recent analysis of the Longitudinal Survey of Immigrants to Canada supported findings of a decrease in health whereby
15% of respondents reported a decline in their health within the first four years of residing in the country whereas only 3% reported an improvement (Fuller-Thompson, Noack, & George, 2011).

The outcomes assessed by De Maio (2010) were also related to racialized groups. For instance, the Longitudinal Survey of Immigrants to Canada found that 58.6% of respondents had not experienced any discrimination because of their race or skin colour, ethnicity, language, or religion (Fuller-Thompson et al., 2011). Those individuals having experienced such discrimination had increased odds of experiencing decreased self-reported good mental health (OR= 2.33, 95% CI=2.05-2.64) (De Maio, 2010). The review also assessed the relation with socioeconomic status and noted that different publications have found complex patterns of effect which do not always follow the common trend where a lower socioeconomic status necessarily results in diminished health status (De Maio, 2010). For instance, one study found men of lower socioeconomic status had lower levels of depression than men with mid- to high-income. This was the opposite for women (De Maio, 2010; Smith, Matheson, Moineddin, & Glazier, 2007). Dunn & Dyck (2000), on the other hand, found no relationship between the socioeconomic status of immigrants and their health status (Dunn & Dyck, 2000). However, as for the studies mentioned above, De Maio (2010) notes that the pooling of all chronic conditions may have resulted in diminished statistical power.

This complexity of the mediation of health outcomes by different factors could be linked to the fact that changes in migrant health are not mediated by socioeconomic status and racialization alone nor are they impacted by a series of discrete factors. Instead, many determinants of health are responsible for modulating migrant health in a cumulative or synergistic manner. Specifically, this accumulation is not a simple summation of the individual effects of each determinant but rather a complex interaction between them (Hankivsky & Christoffersen, 2008). The social determinants of
health (SDH) are the conditions in which individuals live and work influencing their health status (Dahlgren & Whitehead, 1991).

In addition to the SDH, there have been other hypotheses attempting to explain the decrease in migrants’ health status advantage. One of them suggests that as migrants settle into their new environment and become more familiar with the institutions and specifically the health care system, their utilisation of the health care system increases leading to an increase in diagnosis. The use of the health care system, however, changes at a faster rate than the decline in health, which generally occurs over a period of 10 years (McDonald & Kennedy, 2004). Another hypothesis is the acculturation of migrants to a North American lifestyle characterised by a nutritional intake greater in salt and sugar and lower in fresh fruits and vegetables as well as a more sedentary routine (De Maio, 2010; Health Canada, 2010).

I and colleagues (2011) suggested a framework considering the relevant social determinants of health (SDH) influencing migrant health based on a literature review. It organises them into a societal structure relevant to the Canadian reality. Based on Dahlgren and Whitehead’s model of SDH (Dahlgren & Whitehead, 1991), we adopted three levels of social structure: macro (in green), meso (in red), and micro (in blue) through which different SDH interact, see Figure 1.2.
The macro level generally includes determinants relating to economic, political, and cultural conditions of the entire society. One of the most relevant factors to migrant health is the racialization of different groups and individuals. Racialization modulates all other determinants whereby individuals of non-European descent (in the Canadian context) generally experience greater barriers and therefore worse outcomes, as further explained below (De Maio, 2010; Hyman, 2009).

Figure 1.2 Social determinants of health framework relevant to migrants

Benkhalti Jandu, Najafizada, Mohammed, Jandu, 2011
At the meso level, access to health care, education, employment, and housing have been found to be the most relevant determinants differentially affecting migrant health. Access to health care becomes comparable to that of average native-born Canadians relatively quickly, but this does not necessarily translate into similar quality of care (Hyman, 2009; McDonald & Kennedy, 2004; Zhao, 2007). Indeed, it has been found that migrants are less likely to be admitted to hospital despite the same number of visits to their general practitioner or specialist. Although most immigrants have higher levels of education than the Canadian average, they are more likely to be underemployed, resulting in a greater proportion of immigrants being in the lower income quintiles (Alboim, Finnie, & Meng, 2005; Deri, 2005; Dunn & Dyck, 2000; Wayland, 2007). Lower income has been linked with increased chances of experiencing a decrease in health within the first four years of immigration (Fuller-Thompson et al., 2011). Even when employed, racialized individuals are less likely to be promoted and are not paid commensurate wages regardless of skills (Galabuzzi, 2006). Lower wages result in greater incidence of living in precarious housing conditions with overcrowding and poor ventilation. Housing conditions are also influenced by racism. It was found that certain racialized groups have greater difficulty accessing rental housing due to discrimination (Hadi & Labonte, 2011).

Lastly, the micro level relates to social and community networks which influence well-being. They also impact the navigation of all aspects of society and thus other SDH. Notably, stronger social networks have been linked with greater access to the health care system and greater employment opportunities (Dunn & Dyck, 2000; Zhao, 2007; Zhao, Xue, & Gilkinson, 2010). Surprisingly, analysis of the Longitudinal Study of Immigrants to Canada (LSIC) found that married individuals had 32% higher chances of reporting a decline in health and being part of various social networks had limited effect on health status, with the exception of participating in non-religious organisations, which was somewhat beneficial (Fuller-Thompson et al., 2011). Fuller-Thompson et al. (2011) suggest the need
for greater qualitative investigation to clarify the complex interaction of social and community networks on the health of migrants. Intersecting with all these SDH is gender whereby women are generally at a greater disadvantage (E. Tastsoglou, 2006; Evangelia Tastsoglou & Preston, 2005). The LSIC found that women had 27% higher odds of reporting a health decline than men (Fuller-Thompson et al., 2011).

Overlaid on all these determinants is the break in life course pathway experienced by migrants. The *life course pathway theory*, as described by Hertzman & Power (2006), acknowledges the way in which the experiences faced since childhood and throughout ones entire life affect health. In addition to physical experiences, it recognises the challenges and opportunities faced at a societal level and can be mapped onto similar levels (macro, meso, and micro) as those of the SDH framework. Thus, at the *macro* level are found patterns of income and social service distribution and the policies influencing them, at the *meso* level are the characteristics of the community and workplace in which one lives, and lastly the *micro* level are all the personal relationships and social support and networks an individual possesses (Hertzman & Power, 2006). Migrants experience a break in their life course since they have lost the continuity of the societal dynamics to which they belonged and which shaped their lives at all three levels (Benkhalti Jandu et al., 2011). Figure 1.2 shows a depiction of the framework of SDH relevant to migrants.

The role of the SDH in the change of migrants’ health provides a compelling argument for the host country and society’s responsibility for actively preventing it from worsening beyond simply “educating” migrants on available services and the means by which they can ameliorate their own health. There are different approaches useful in addressing the SDH. HIA is one of these which has recently gained recognition as having a great potential in achieving this by various institutions, including the WHO (World Health Organization, 2014).
Health Impact Assessment – Definitions and context

As noted above, a health impact assessment (HIA) is a methodological approach that seeks to standardize the evaluation of potential intended and unintended impacts of policies, programs, or project on the health of population groups and subsequently provides recommendations to mitigate negative impacts and promote positive ones (SOPHIA, 2014). The policies, programs, or projects assessed may not necessarily be directly related to health or the health care systems, thus giving it the potential of tackling the broader social determinants of health (World Health Organization, 2014). More specifically, the HIA process is comprised of a series of steps generally involving screening, scoping, impact identification, assessment of impacts, development of recommendations, and monitoring and evaluation (Orenstein & Rondeau, 2009). Figure 1.1 above depicts the steps of a general HIA process.

The screening step is meant to determine whether the completion of an HIA is indeed necessary for a particular policy, program, or project. It is possible that a HIA might not be necessary if there is reason to believe that no significant impacts on health are anticipated or the probability for the recommendations to be implemented is unlikely. Often, the screening step happens implicitly as a result of political priorities or community mobilisation (Orenstein & Rondeau, 2009).

The scoping step has the goal of determining the parameters and terms of reference of the HIA. The depth, set of relevant outcome measures, and specific methods to be used will be established based on need and available resources (Orenstein & Rondeau, 2009). These methods can include a combination of the following: collation of published literature, analysis of quantitative or qualitative secondary data, or the collection of quantitative data such as surveys, geographic information systems data, or any outcome measure relevant to the HIA, or qualitative primary data through the
involvement of community members and/or stakeholders (Kemm, 2013). The scoping step is also used to determine the geographical areas and population groups on which to focus the assessment.

The impact identification step utilises the methods agreed upon during the scoping step to analyse and summarise the impacts. The impact assessment step involves weighing the degrees of potential risk each potential impact might have. This is dependent on the magnitude, frequency, or likelihood, of the risk of impact. The impact assessment step can also involve the steering committee of the HIA process or community members in order to contribute to the assessment of the perceived importance of each potential impact.

Based on the evidence gathered, previously effective mitigation approaches, and preferences voiced by stakeholders, community, and the steering committee, recommendations are developed. These recommendations are then communicated in a tailored manner to different relevant stakeholders and community groups. Lastly, it is ideal to evaluate whether the recommendations were indeed implemented, whether negative impacts were averted, and whether novel emerging negative impacts require action (Kemm, 2013; Orenstein & Rondeau, 2009). To date, the evaluation step is unfortunately seldom completed, often due to a lack of resources.

HIA can be undertaken as an independent process or as part of other types of impact assessments. Historically, HIA has been tied to environmental impact assessment. This has led to a largely biophysical perspective of health, as opposed to one encompassing the social determinants of health. Shademani & van Schirnding argue that this approach did not allow for the appropriate response to public health concerns at the population level (Shademani & von Schirnding, 2002). In addition, Banken suggested that adequate resources were not allocated to the process which led to the impression that HIA was ineffective and resulted in a loss of interest in the process. It also did not
allow for the adequate capacity building of a critical mass of experts and expertise in HIA (Banken, 2001).

In 1999, the Gothenburg Consensus paper reignited the momentum for a wider use of HIA. The Consensus was undertaken and published by the WHO Regional Office for Europe; its purpose was to clarify main concepts and provide an approach to undertaking HIA on the common understanding that its core values are democracy, equity, and sustainability (WHO European Centre for Health Policy, 1999). Although it is still common for HIA to be a part of an environmental impact assessment, it may be useful for it to no longer be a mere appendix of the environmental impact assessment as well as consider social determinants of health in addition to the bio-physical determinants (Banken, 2001; Shademani & von Schirnding, 2002).

**Equity in HIA**

The Gothenburg Consensus also stressed the importance of incorporating equity and considering the differential impacts experienced by minority groups into the HIA process (WHO European Centre for Health Policy, 1999). Although the concept of healthy equity is theoretically intrinsic to the HIA process, it has not historically been adequately incorporated. In response to this, different tools and frameworks have been developed to guide HIA (Mahoney, Simpson, Harris, Aldrich, & Williams, 2004; Orenstein & Rondeau, 2009). Specific frameworks have been developed to guide the explicit consideration of equity. These frameworks promote the use of methods conducive to assessing differential impacts on health between different population groups and sometimes list potential socially disadvantaged groups to consider according to the context within which they have been developed (Orenstein & Rondeau, 2009). The majority of these frameworks are generic in that they draw attention to generic methods of including any disadvantaged groups. One framework has been developed, however, specifically targeting the Maori indigenous population of New Zealand.
The Whanau Ora tool adopts the entire vision of health and community relevant to the Maori and a culturally sensitive manner of approaching an assessment and gathering data (New Zealand Ministry of Health, 2014). Whether guidance frameworks should maintain a generic approach to assessing inequities or focus on specific disadvantaged groups has been subject of debate. Aside from very particular contexts such as the one of the Maori population, it is generally accepted by the HIA practitioner community that generic approaches are most appropriate since the value added of HIA is to identify and mitigate unintended impacts and as such, it is necessary to assess any potentially disadvantaged group.

Irrespective of the frameworks utilised, HIAs can have different emphases and approaches to addressing inequities depending on their type. Harris-Roxas and Harris (2011) have identified a typology of HIA based on the purpose for which the HIA is undertaken. This purpose in turn influences how the HIA is conceived and undertaken. Four different types of HIAs have been identified. First, an HIA may be mandated to meet a regulatory requirement. Historically, this type of HIA has been derived from environmental impact assessment methodologies and is primarily concerned with the effects of the physical environment on health, which is defined with a bio-physical lens. Although it may still include the consideration of minority groups via the utilization of disaggregated quantitative data, it leaves little room for value judgements and qualitative aspects of the assessment are mainly utilized as a tool to prioritise potential harms determined a priori through quantitative means. Its main goal is to minimize any anticipated negative impacts. Second, an HIA may be used to aid policy or program decision-making. While this type is also rooted in environmental assessment, it also acknowledges the social implications and effects on health. It aims to mitigate any negative impacts as well as maximise positive impacts of the proposed policy or program. Third, an HIA may be intended for advocacy to ensure under-recognised health concerns are considered in decision-making. Its main approach to health is generally a social one.
and thus explicitly recognises the importance of value judgement. Lastly, an HIA may be

**community-led.** This type tends to be the most explicitly concerned with equity as its goal is to ensure the community’s health concerns are considered. It also promotes the greatest amount of community engagement throughout the entire HIA process (Harris-Roxas & Harris, 2011; Mindell, Boltong, & Forder, 2008).

Each HIA can also be of different depths depending on the breadth of the scope and complexity of the data gathered to inform the assessment. There are three general depths at which an HIA can be completed. These should be seen as a continuum rather than discrete categories. The first level: a **desk-top assessment** generally only utilises published literature and data to rapidly inform a decision. Some do not consider it an actual HIA but rather a means of informing the screening process (Mindell et al., 2008). The second level: a **rapid appraisal** generally comprises already published and readily available data with minimal stakeholder or community involvement, generally in the form of a short, half-day to a day workshop. It is generally completed in a few weeks (Kemm, 2013; Mindell et al., 2008). Thirdly: a **comprehensive appraisal** can take several months to complete since in addition to published literature, it may involve the collection of primary data and a more extensive involvement of stakeholders and community representatives (Mindell et al., 2008; Ontario Ministry of Health and Long-Term Care, 2011).

There is disagreement about whether communities and stakeholders should always be involved in the HIA process and the degree to which this involvement should occur. The Gothenburg Consensus states democracy as one of HIA’s core values, which can be achieved by ensuring the participation of people in the process and the consideration of their opinions on the assessment either directly or indirectly through the involvement of elected decision-makers (WHO European Centre for Health Policy, 1999). Nonetheless, there is divergence and laxity on the requirement of including
community perspectives. This depends on the type and depth of HIAs, as explained above, but also on the context of the environment where the HIA is undertaken as well as the guidance frameworks utilised (Gauvin & Ross, 2012; Harris-Roxas & Harris, 2011; Mindell et al., 2008). Indeed, some guidance frameworks do not enforce, or reinforce, the importance of including different types of stakeholders within the process; this is the case of the Ontario Health Equity Impact Assessment tool, as further detailed below (Ontario Ministry of Health and Long-Term Care, 2012).

Engagement can take on different forms. Different types of stakeholders can be engaged either separately or jointly, at either different stages of the HIA or concomitantly. It is possible to engage different community organisations, community members themselves, or other stakeholders such as health care professionals or government representatives. Each of these have different implications and their inclusion is not mutually exclusive since they can each contribute different perspectives and have insight on different aspects of the assessed impacts (Gauvin & Ross, 2012; Krieger et al., 2003; Wise, Harris, Harris-Roxas, & Harris, 2009). For example, health care professionals and community organisations can have a better understanding of the system and institutional implications, whereas community members can provide insight on their realities and the direct effect they will encounter. The inclusion of stakeholders also ensures the acceptability and sustainability of implemented recommendations (Gauvin & Ross, 2012; Wise et al., 2009).

Methodologically, different approaches can be used such as surveys, focus groups, continuous involvement as part of a steering committee, etc. (Gauvin & Ross, 2012). Each of these can be more suited to different types of groups engaged and different purposes for engagement.

Because of the resource-intensive nature of HIA, there has been criticism and demand for greater demonstration of its effectiveness in altering interventions and thus avoid negative health impacts (Bekker, Putters, & van der Grinten, 2005). For instance, the HIA practitioner group Human Impact...
Partners have outlined several examples where their HIAs have resulted in changes in program or policy such as the denial of a waste facility in a low-income neighbourhood, better housing conditions for a low-income development, amongst many others (Human Impact Partners, 2014). There are also examples of HIAs specifically affecting the health of migrants. For instance, an assessment was undertaken on a U.S.A. federal immigration policy and the way in which the deportation of irregular migrants affects the health and well-being of their entire family. Several of the recommendations of this HIA have been included in the final bill passed by the senate (Human Impact Partners, 2014). Despite some evidence for the effectiveness of HIA to result in the implementation of mitigation measures and promote health, there often remains mixed responses to the recommendations both from the part of the community impacted as well as other stakeholders and decision-makers. Some suggestions on how to remedy this situation have revolved around procedural alterations such as a greater involvement of the community, and greater advocacy efforts (Bekker et al., 2005). Others, however, have called for greater sensitivity and guidance on the consideration of the contextual realities surrounding the HIA. In essence, there is a need for adopting a tactical approach to completing HIAs, rather than a strict focus on procedural aspects (Harris, Sainsbury, & Kemp, 2014).

Since the drafting of the Gothenburg Consensus, there have been great advancements in the development of general HIA methodology. In addition, there have been geographically-focused developments to tailor the HIA process to different contexts. These generally involve the development of specific guiding frameworks, followed by ongoing refinement of the framework and supporting methods and tools. In addition to the Whanau Ora mentioned above, a more generic HIA tool has been developed in New Zealand called the Health Equity Assessment Tool. The Centre for Health Equity Training Research and Evaluation in Australia has also developed a widely known tool called the Equity-Focused HIA and continue to develop methodological considerations as well as be
involved in capacity building globally. The International Health Impact Consortium in the UK is another prominent group which has developed its own tool and expertise on HIA methods and equity considerations. In fact, several different frameworks and guidelines have been developed throughout the UK. The WHO has developed an HIA toolkit for cities, which has been mainly focused on the European context (Orenstein & Rondeau, 2009). Ontario has also relatively recently been involved in such a process through the development and implementation of a Health Equity Impact Assessment tool.

**Health Impact Assessment in Canada and Ontario**

There has been a long standing interest in health impact assessment in Canada. In 2004, Health Canada developed the Canadian Handbook on Health Impact Assessment whose purpose was to inform the inclusion of health considerations within an environmental impact assessment (Kwiatkowski, 2004). It consists of four volumes containing detailed information on the historical context and procedural requirements for HIA. Although it did not have an explicit focus on equity, it did dedicate an entire chapter to considering Aboriginal knowledge and realities (Kwiatkowski, 2004). Despite the richness of the handbook itself, its use was never widely implemented. At the federal level, the Public Health Agency of Canada also explored the potential of using HIA and was particularly interested in ways to include greater equity considerations in the Canadian context. It commissioned a scan of existing HIA tools explicitly considering equity and held a meeting in 2009 with local and international experts to further discuss applicability and future directions (Orenstein & Rondeau, 2009). Since then, no tangible further developments have occurred and no national HIA approach has been discussed. It seems that provincial initiatives have been capable of gaining more traction.
While all provinces and one territory, North West Territory, have considered or discussed the development and/or implementation of an HIA approach, the provinces of Quebec and Alberta are the most advanced in their implementation (St-Pierre, 2013). The Quebec approach has implemented a legal basis for HIA whereby all governmental departments must ensure no harm to health will occur as a result of their activities and puts health promotion on the same standing as other public health functions. Alberta, on the other hand, does not have a legal approach but rather promotes stronger relationships between the health and other sectors through the implementation of a health lens in public policy. Both of these initiatives are led by the ministries of health (St-Pierre, 2013).

In 2010, the Ontario Ministry of Health and Long-Term Care developed a tool (the Ontario Health Equity Impact Assessment (HEIA) tool) which is a HIA tool specifically suited for the Ontario context, which explicitly leads to the consideration of differential impacts between socially disadvantaged groups (Ontario Ministry of Health and Long-Term Care, 2011). The tool guides practitioners through the different steps of HIA and provides a grid to document the evidence used as well as decisions and recommendations developed accordingly (Ontario Ministry of Health and Long-Term Care, 2012). To date, the tool has mainly been promoted and used in the health sector. It was first disseminated and used by Local Health Integration Networks (LHINs) as well as a few other organisations, including the Centre for Addiction and Mental Health. In 2012, the Ministry collaborated with Public Health Ontario to develop a public health supplement tailored for the utilisation by public health units (PHUs). The supplement outlines the way in which the different steps of the HEIA tool are aligned with the Population Health Assessment and Surveillance Protocol and the Ontario Public Health Standards Foundation Standard (Ontario Ministry of Health and Long-Term Care & Public Health Ontario, 2012). These standards outline how regional boards of health must operationalise mandatory programs set by the Ministry of Health and Long-Term Care (Ontario
Ministry of Health and Long-Term Care, 2008) and are therefore responsible for the way in which public health is undertaken in Ontario.

**Summary of the State of the Knowledge**

There has recently been significant development in the knowledge and guidance on considering differential impacts on health between population groups and using HIA as a platform to addressing health inequity. There still remain considerable differences in the ways in which HIAs are undertaken and a lack of standardization on the necessary elements of an HIA, notably the degree to which stakeholders should be engaged. In Canada, different provinces have considered HIA to different degrees. A tool has been developed which explicitly prompts to the assessment of inequities in the Ontario context. To date, little evaluation has been done to assess the way in which any particular disadvantaged group is included in the HIA process; this is the case with migrants.

Given the significance of the social determinants of health on the decline of migrant health and the purpose of HIA to act on these determinants, a lack of understanding of the inclusion of migrants in HIA could represent a missed opportunity. Indeed, if migrants are and continue to fail to be included in HIAs our societies might continue to experience an unnecessary opportunity cost.

**Research Questions & Objectives**

The specific research questions that I will address are:

1. How do HIAs address the specific needs of immigrant groups by considering migrant issues within the HIA itself?
2. How do HIAs address the specific needs of immigrant groups by including migrants within the process?
3. How has the intersectionality between migrant status and other vulnerabalising factors been considered within HIAs?
4. How have HEIAs undertaken throughout Ontario Public Health Units (PHUs) impacted policies and programs responding to the specific needs of migrant groups?

   a. What factors have affected this?

My first objective, which sought to answer the first three research questions, was to systematically map out the existing evidence relating to the inclusion of migrants within HIA globally. I completed a scoping review in order to summarize the breadth and depth of the existing international literature. Scoping reviews constitute an ideal initial step in fields with emerging evidence.

My second objective sought to answer all research questions and understand how and why HEIAs have been used to impact the development of policies, programs, and project which affect the life and health of migrants in Ontario. The sub-objectives were:

- Determine the degree to which Ontario PHUs have used the HEIA tool and how disadvantaged groups have been included. This was achieved through an environmental scan.

- Explore the degree and processes through which the implementation and use of the HEIA tool in PHUs have impacted the policies, programs, and projects affecting migrants in different regions of Ontario. This was achieved through a combined Process and Impact evaluation.

An Orienting Heuristic Framework

Context

While much effort in HIA research has been put into developing guidance on the technical steps to obtain the content of an HIA, there remains a gap on guiding the contextual considerations of an HIA which influence how the HIA is undertaken and whether the recommendations are followed
and implemented (Crosier, 2004; Harris, Sainsbury, & Kemp, 2014; St-Pierre, 2014). There is also a particular void regarding the factors influencing the implementation of recommendations targeting or affecting disadvantaged groups (Povall, Haigh, Abrahams, & Scott-Samuel, 2013). Such a theoretical and contextual consideration was required to frame the research questions and data analysis of the work of this doctoral thesis.

Many frameworks have been developed to guide the undertaking of HIA and, more recently, to better gather data on disadvantaged groups (Mindell, Boltong, & Forde, 2008; Orenstein & Rondeau, 2009). These frameworks have been useful at informing the procedural steps to optimally obtain the scientific and contextual information necessary to determine the potential impacts and means to mitigate any negative impacts. More specifically, the contextual information acquired generally pertains to the situation affecting the impacts on health. Seldom, if any, information regarding the powers influencing the ultimate implementation of recommended mitigation measures is considered (Harris et al., 2014). Ensuring HIA recommendations are implemented at the end of the process facilitates and galvanizes the continued use and institutionalization of HIA, thus rendering it a worthwhile and beneficial exercise (Banken, 2001). This is particularly key when attempting to decrease health inequities in disadvantaged groups (Mahoney, Simpson, Harris, Aldrich, & Williams, 2004). Furthermore, achieving this requires the consideration of the political and contextual reality within which a HIA takes place. A tactical approach to HIA is necessary to ensure the effective use of the HIA process and the resources input into it (Harris et al., 2014). Indeed, achieving this was pivotal to environmental impact assessment’s success in terms of preventing negative impacts on the environment and ecosystems, but also in terms of gaining global credibility and institutionalizing the process (Banken, 2001). HIA is at a crucial point where if it does not find a way to replicate what was achieved by EIA, the momentum and buy-in for the process might be lost.
Effectively considering political and contextual realities to adopt a tactical approach requires an analytic rather than descriptive assessment of such realities. To do so, it is necessary to embed HIA in theory to allow for the understanding of the causal relationships between the different factors influencing the implementation of recommendations resulting from a HIA (Brousselle & Champagne, 2011; Yin, 2002). Such understanding also facilitates the application of findings to different contexts, thus decreasing duplication of efforts. In fact, there is a growing recognition of the need for HIAs to incorporate theory within their process and analysis (Crosier, 2004; Valentine & Solar, 2011). To date, there has been little discussion about the adequacy of existing theories and new models to pragmatically respond to the call for a tactical approach to HIA. I here present the initial considerations for the development of an orienting heuristic HIA framework based on existing literature. This framework continued to be refined based on the themes emerging from the work of this thesis as further described in future chapters.

**The need for a heuristic framework specific to HIA**

Program evaluation theory

The purpose of HIA is to assess – or evaluate – the impact of a policy, program, or project on health (SOPHIA, 2014). Consequently, the process of undertaking an HIA should follow the general components of program evaluation theory. A program theory consists of a series of statements which seek to explicate the reasons and conditions under which a program will result in a particular set of outcomes (Rogers, Petrosino, Huebner, & Hacsi, 2000; Sharpe, 2011; Sidani & Sechrest, 1999). Program evaluation theory refers to the evaluation of the program based on the pre-defined theory (Rogers et al., 2000; Sharpe, 2011). Thus, for every program, a different and contextually-informed logic model is developed. Nonetheless, the program theory evaluation literature has identified common recurring elements necessary to develop a program theory and undertake a subsequent
evaluation. In particular, reviews by Sharpe (2011) and Rogers, Petrosino, Huebner & Hacsi (2000) have identified the components below.

Every program theory, and its consequent heuristic model, is composed of three main components: inputs, process, and outputs. Each component is composed of specific elements, which might vary according to the context of the program evaluation. Inputs consist of program activities and often include elements relating to the components of the program, how the program components are delivered, the amount of treatment required, the resources to be utilized (human and material), and any required aspects vital in producing outcomes. The process relates to the different aspects of the actions to complete the evaluation. This can contain elements about the different phases of a program and the links between them, implementation issues, and integrity of the program components utilized. Lastly, outputs are the intended program outcomes, which can be either immediate, intermediate, or long-term outcomes. Figure 1.3 depicts a general program evaluation framework.

![Program Evaluation Theoretical Framework](image)

**Figure 1.3 Program Evaluation Theoretical Framework**

While program evaluation theory forms a strong backbone for a HIA heuristic framework, the significant potential of HIA to alter policy requires further consideration of policy analysis theory. Thus, a simple program evaluation framework is not sufficient. Additionally, the process component in program evaluation frameworks is typically undertheorized and does not mention the specific elements contributing to the mechanism. Policy analysis, on the other hand is generally concerned...
with processes, while inputs and outputs remain either implicit or undiscussed. Consequently, for the purposes of an HIA, program evaluation frameworks could include more explicitly the elements relating to policy analysis theory as well as any existing understanding of the conceptual interactions between these elements.

Policy analysis frameworks

Policy analysis seeks to understand the dynamic interactions between institutions, interests, and ideas which result in policy and decision-making (Dubozinskis, Howlett, & Laycock, 2005; John, 1998). While a wide range of policy analysis theories and frameworks have been developed, policy analysis in the health field has been restricted to a smaller number of frameworks. Three models in particular have been judged salient for health policy analysis (Overseas Development Institute, 2007; Kingdon, 1984). First is the Kingdon Model of Agenda Setting, which helps frame the policy making process by first anticipating the occurrence of a ‘policy window’. A ‘policy window’ is an opportunity to alter policy, created by factors in the problems, politics, and policies streams (Overseas Development Institute, 2007). Although this model has been used extensively and shown to be robust, the HIA process can arguably be seen as creating a policy window in itself and as such, does not provide suggestions for elements influencing changes in a policy that has already been suggested to be modified.

A second policy analysis model previously referred to in the health field is that of Lipsky’s Street Level Bureaucrats, which emphasizes the importance of the practitioners responsible for implementing policies. It stipulates that the role and knowledge of practitioners not only influence whether a policy is implemented or not, but also shape the policy itself. This is based on the practitioners’ understanding of the policy, their interest, and the previously existing process and routines. This is particularly important to consider when understanding whether, why, and how
recommendations for mitigation produced at the end of an HIA are indeed implemented (Lipsky, 1980; Overseas Development Institute, 2007). The HIA process and the implementation of recommendations, however, is influenced by a greater number of factors and is seen as more than just to implement policy; it can also contribute to formulate it (Harris, 2014). It consequently requires a more complex model to explain the forces influencing the HIA process.

Walt and Gilson’s General Policy Analysis Triangle model acknowledges four key factors to be dynamically involved in the creation and the modification of policy: the context of the environment; the content of the policy or suggested policy modifications; the policy-making process itself; and the actors involved in policy-making, which can consist of either individuals or groups. Together, these form a pyramidal dynamic relationship (Figure 1.4) (Walt & Gilson, 1994). As opposed to the previous two models discussed above, this model is useful for understanding the different factors influencing policy-making and explicitly drawing out their relationships (Walt & Gilson, 1994). It therefore could allow for understanding the influences behind whether or not the changes in policy suggested by an HIA are followed. Additionally, this theory has been used extensively in the field of health policy and health reform (Overseas Development Institute, 2007). There were other potential policy analysis approaches including the Ottawa Charter for Health Promotion, or Michael Reich’s Policy Maker, amongst others. Although, many of these amount to similar elements as those outlined by Walt & Gilson (1994), the General Policy Analysis Triangle was favoured because it explicitly draws out the relationship between elements. It was therefore deemed to be most suitable to further detail the process component of the program evaluation framework, modified for the purposes of HIA. As such, its factors were placed instead of the process component.
Combining the program evaluation theory framework and the policy triangle model results in the HIA theoretical framework depicted in Figure 1.5. The depiction of the framework reflects to a certain extent the structure of a logic model given the elements included. Its use here is rather as a heuristic framework to help tease out and apart the contextual factors influential on the process of an HIA and therefore to be analyzed explicitly throughout the studies included in this thesis. This framework served as an orienting framework, which was further refined through a literature review, a scoping review, and key informant interviews as explained further below. Indeed, because this orienting framework is based on program evaluation and policy analysis theory, rather than the HIA literature directly, each factor in the orienting HIA theoretical framework could be revised not only in terms of its definition, but also in terms of determining sub-factors more relevant to HIA.
This heuristic framework was the first to be explicitly geared at guiding the tactical undertaking of an HIA. It also served as a framework to the environmental scan of the use of the HIA tool in Ontario PHUs and the evaluation of the inclusion of migrants in Ontario HEIAs.
Thesis Overview and Rationale

This thesis is comprised of three separate articles joined together by one overarching discussion chapter. Each article informs the next both in terms of methods and conclusions. As such, the order in which the projects were completed was intentional and purposeful.

The articles are also joined by a common epistemology: constructionist. Constructionism views meaning as being constructed through the interpretation of individuals as they interact with their environment. As such, it denotes the ‘social construction of reality’ (Crotty, 1998). In the context of this thesis, I must acknowledge the central object of the issue, international migrants, as being a blatant social construction based on nation-state lines arbitrarily formed throughout history. These lines define individuals across those lines as “different”, while ignoring differences within them. Beyond research questions and operational definitions, I adopted a constructionist approach for the methodological decisions which lead to using a mixed-methods analysis. The use of quantitative data provided me with an environment from which I derived meaning through qualitative information. This meaning itself was influenced by my previous engagement with the world (i.e. my constructions) as briefly described in the preface. Mixed-methods approach thus allowed for a multi-layered analysis based on a numerical and dichotomous statement of facts complemented by a more nuanced understanding and interpretation of the observations. The constructionist approach also impacted the analysis by having not only a deductive approach, based on a framework and supporting literature, but also a combined inductive approach to explore any themes emerging from the data while the analysis was taking place (Thomas, 2006).

In order to achieve the objectives of this thesis, I first assessed the extent and way in which migrants have been included in HIAs globally. To do this, I undertook a scoping review by screening HIAs found through indexed and non-indexed databases for their mention of migrants (Article 1). This
allowed me to estimate the degree to which migrants’ issues are acknowledged, assessed, and mitigated as well as reasons explaining this. Additionally, it provided background and perspective for equity-related elements of the HIA-specific theoretical framework to be developed as well as provided a global context with which to compare the findings on migrants in Ontario assessments.

The Ontario Ministry of Health and Long-Term Care, having developed and launched a new HEIA tool, provided an opportunity to explore the implementation of a tool and the inclusion of migrants within that process. Additionally, the Ministry also developed a supplement tailored to Ontario PHUs in collaboration with Public Health Ontario. Given the evidence that most of the decline in health impacting migrants to Canada are related to the broader social determinants of health, that addressing the social determinants of health is intrinsic to the PHUs’ work, and that HEIA presents a way to tackle the social determinants of health, assessing the consideration of migrants by Ontario PHUs within their HEIAs constituted an ideal case to study the relevance of HIA at the local level.

Before being able to assess the inclusion of migrants in HEIAs completed by Ontario PHUs, the purposive sampling required a knowledge of the PHUs that had already been using the tool. The analysis and conclusions would also be strengthened by an understanding of the attitudes and perceptions of the tool and the HIA process in general. Thus, I completed an in-depth environmental scan of the use and perceptions of the Ontario HEIA tool throughout PHUs. I used key informant interviews from 31 of the 36 Ontario PHUs as well as collected any relevant documents the informants could share such as modified versions of the tool, reports, etc. (Article 2).

Lastly, I undertook a Process and Impact evaluation of the consideration of migrants in Ontario PHUs (Article 3). To do so, I purposefully sampled four PHUs based on their use of the tool and a significant migrant population within their area. The evaluation was informed by the findings of all previous projects and resulted in a better understanding of the inclusion of migrants in HEIAs, the
way in which it has affected the consideration of their unique circumstances, and the reasons and processes through which this has occurred.

I expected that migrants would be rarely mentioned and analysed in HIAs both globally and throughout Ontario PHUs. I expected that various factors would be responsible for this situation; some of which were inherent to considering migrants while others could be prevented through capacity building, notably the provision of further specific guidance on the inclusion of migrants in the HIA process. I expected this situation to be emphasized in the Ontario context given the relative novelty of the HEIA tool within PHUs.

Throughout the undertaking of the different studies, I developed an HIA-specific heuristic framework. This framework is based on the integration of relevant frameworks from program-evaluation and policy analysis theories, supporting HIA methodological literature, process findings of the scoping review, as well as interviews with key informants involved in either overseeing or undertaking health impact assessment or other evaluation processes in public health. It was developed in an iterative manner as the findings of each study described above were analysed. In turn, each refined version informed the data collection and analysis of the following study. In order to reflect the chronology of its development the framework is presented throughout the chapters with a final iteration detailed in the discussion chapter.
References


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Chapter 2

The Inclusion of Migrants in Health Impact Assessments:

A Scoping Review

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The Inclusion of Migrants in Health Impact Assessment: A Scoping review

Abstract

This article reports the findings of a scoping review assessing the extent and ways in which migrants have been included in health impact assessments (HIAs) and HIA evaluations worldwide. A total of 117 HIAs and two HIA evaluations were included. Only 14% of hand-searched HIAs mentioned migrants, 5% analysed migrants and only 2% included them in their recommendations. Although it is possible for HIAs to mention migrants without needing to further analyse them separately, the reasons for which they were most commonly mentioned herein would lead to expect them to be part of the analysis more frequently. Although the majority of HIAs included in the review mentioned migrants in baseline conditions and impact analysis steps, migrants were seldom included in recommendations. The main barriers to including migrants in the HIA impact analysis were the lack of available data on migrants and the significant additional resources required to gather and analyse additional data on migrants. Although workshops and stakeholder engagement were a frequent way of including migrants in HIAs, this usually involved organizations representing migrants, and only seldom included members of the migrant community themselves. Furthermore, the use of frameworks or tools guiding the completion of an HIA was negatively associated with the inclusion of migrants in recommendations. Frameworks need to specifically include migrants to ensure their special needs are met. Guidance is needed on ways to optimally include migrants in HIAs and ensure recommendations for mitigation measures are optimal.

Key words: health impact assessment, equity, migrants, immigrants, refugees
**Background**

Health impact assessment (HIA) provides a pragmatic approach to tackling the social determinants of health. It has the potential to create policies that better attend to the determinants of ill health by assessing the anticipated positive and negative impacts projects, programs, or policies may have on health and recommending alternatives to mitigate the anticipated negative impacts and promote positive impacts (Mindell, Boltong, & Forder, 2008; WHO, 2011). More recently, there have been efforts to develop HIA frameworks and tools which ensure disparities in impacts across population subgroups are addressed in order to reduce health inequities. These Health Equity Impact Assessment (HEIA) approaches promote the consideration of minority and vulnerable groups by emphasizing the use of methods conducive to determining differential outcomes and perceptions between population groups in addition to explicitly mentioning population groups that may be more vulnerable.

An HEIA can be one of four different types depending on its purpose: (1) one that is mandated in order to meet regulatory requirement, (2) one that aids policy or program decision-making, (3) one for advocacy, or (4) one that is community-led (Harris-Roxas & Harris, 2011; Mindell et al., 2008). HIAs can also be of different depths according to the timelines and financial resources, which are in turn reflected in the extensiveness and detail of the data collection and analysis. A general way of categorising the depth of HIAs is as rapid (or desk-top), intermediate, or comprehensive (or in-depth) (Ison, 2000). Different types and depths of HIAs have been found to include vulnerable groups to different degrees. This is particularly true of those groups which are not explicitly mentioned in HIA frameworks (Harris-Roxas & Harris, 2011). One such group is different types of migrants, including immigrants and refugees.
It has been observed that migrants experience a decline in their health during the first decade of migration (De Maio, 2010). According to the International Organization for Migration (IOM) there are 214 million migrants worldwide (International Organization for Migration, 2012). There are different types of migrants according to the context and reason for which they migrate. These include, but are not limited to: economic immigrants who have left their country of origin to ameliorate their quality of life, generally through employment; refugees who have left their country of origin due to fear of persecution; temporary migrant workers who are present for a defined period of time according to a working contract with an enterprise; and international students in pursuit of a specific post-secondary degree (CIC, 2011; Key Migration Terms, 2011). Migrants may be socially disadvantaged because they have experienced a break in their life and find themselves in a novel context with new societal and institutional norms and realities (Health Canada, 2010).

Evidence shows that although access to curative health care services constitutes a barrier to preserving their health, the decline in health is also equally mediated by the broader social determinants of health (SDH); that is, the conditions in which they live and work (Benkhalti Jandu, Dimitrescu, Mohamed, & Najafizada, 2011).

It is necessary to distinguish between the factors influencing the health of different ethnic minority groups versus those affecting migrant groups. Indeed, while these factors may overlap, they have different ramifications which may in turn translate into different considerations for the analysis and recommendations of an HIA. The concept of ethnicity is complex but implies the presence of either “shared origins or social background; shared culture and traditions which are distinctive, maintained between generations and lead to a sense of identity and group-ness; and/or a common language or religious tradition” (Bhopal, 2007). To date, the concepts of migrant status and ethnicity remain often wrongfully conflated in health research.
Despite the ever increasing number of migrants worldwide and the importance of their impact on global societies and economies as well as evidence suggesting that HIA could have a significant impact in reducing the decline in migrant health, the inclusion of migrants in HIA has never been systematically assessed.

This scoping review sought to map out the extent and nature of the inclusion of migrants in HIAs. Although HIA and HEIA are technically different (Orenstein & Rondeau, 2009), in practice, the distinction is seldom made and HIAs often consider minority groups without defining themselves as HEIAs. For this reason, the research question and methods did not only focus on HEIAs per se. The research question of a scoping review must be kept broad in order to capture as much evidence in the discipline within the scope of interest as possible (Arksey & O’Malley, 2005). Consequently, the research question of this scoping review was “What is the extent of the literature on the inclusion of migrants in HIAs, how extensively the literature on HIAs includes migrants, how have migrants been included, have HIAs addressed the needs and contextual reality of migrants and why?”

Methods

Although there is a range of definitions and purposes describing scoping reviews, they generally refer to a systematic way of summarising existing evidence and mapping gaps in a particular field (Levac, Colquhoun, & O’Brien, 2010). Scoping reviews differ from systematic reviews since their research questions are kept broad and their analytical components, including inclusion criteria and outcome measures, do not need to be completely determined a priori (Brien, Lorenzetti, Lewis, Kennedy, & Ghali, 2010). Scoping reviews differ from simple literature reviews since they include a systematic and clearly outlined search of the literature and an analytical interpretation of the evidence (Davis, Drey, & Gould, 2009; Levac et al., 2010). Scoping reviews therefore provide a valuable synthesis to inform and contextualise subsequent systematic reviews and primary studies.
The following scoping review followed the methodology suggested by Arksey and O’Malley (2005), who outline five broad steps (identifying the research question; identifying relevant studies; study selection; charting the data; collating, summarizing, and reporting results) and informed by the recommendations for application made by Levac et al. (2010). This methodology was deemed as most appropriate given its systematic nature and its use in several other scoping reviews exploring issues in health policy and impact assessment (Brien et al., 2010; Povall, Haigh, Abrahams, & Scott-Samuel, 2013). A brief description of the considerations for each step is provided in Box 1.
Identifying relevant literature

The literature identified was published worldwide. According to Arksey and O’Malley (2005), the literature should be identified using a determined search strategy, which is developed based on the research question and scope of the review. The literature search encompassed three strategies.

First, the following databases were systematically searched: OVID (Medline), SCOPUS, ProQUEST, 

### Box 1: Steps of a scoping review

1. **Identifying the research question**
   
   Research questions are broad in nature as they seek to provide breadth of coverage.

2. **Identifying relevant studies**

   Comprehensiveness and breadth are important. Sources might include electronic databases, reference lists, hand searching of key journals, organizations, and conferences. Breadth should be determined and may be limited by resources available to complete the review.

3. **Study selection**

   Study selection includes post hoc inclusion and exclusion criteria. These criteria are based on the research question and on new insight on the subject matter through reading the studies. This process should be iterative.

4. **Charting the data**

   A data extraction form is created. Charting data should be an iterative process in which the extraction form is updated continually. Two authors should independently extract data.

5. **Collating, summarizing, and reporting results**

   An analytic framework or thematic construction is used to provide an overview of the breadth of the literature. Numerical and thematic analyses are presented.
European Centre for Minority Issues, EMBASE, Canadian Public Policy Collection. A major part of the relevant evidence was expected to have been published in the grey literature and not in formal scientific journals and books. Thus the Institute for Scientific and Technical Information (INIST) database was also searched for grey literature, as suggested by the Cochrane Handbook (Higgins & Green, 2011). The search strategy was developed in consultation with a University of Ottawa medical librarian (Lindsey Sikora). It was purposefully kept broad to allow for sensitivity rather than specificity. Appendix A includes the search strategy for each database. Secondly, the documents from 31 key organizations and conferences for reports, HEIA evaluations, policy briefs, and other governmental documents were hand-searched. The “find” function was used in each document to search for the specific terms which would capture the included population. These terms were *migr*, ethn*, new comer, rac*, temp* worker, asylum seek*, refugee*. These terms were chosen based on those terms emerging from the literature and in consultation with the University of Ottawa medical librarian. Appendix A includes the list of organisations that were hand-searched. Lastly, experts in the field were contacted for any additional relevant documents with which they may be familiar. A list of those individuals contacted is included in Appendix A.

**Study selection**

The study selection was done according to specific inclusion and exclusion criteria. These criteria were established *post hoc* based on the research question as well as the new information gathered from the studies found based on the qualitative analysis further described below and revised in an iterative fashion. The establishment of inclusion and exclusion criteria *post hoc* is a major difference with the systematic review methodology which requires an *a priori* determination of criteria (Arksey & O’Malley, 2005). Below is a list of the final inclusion and exclusion criteria. Of these, certain publication types and methodologies, as well as the definition of certain population types, notably travellers and Roma, could not have been determined *a priori.*
**Inclusion criteria**

1. Self-identified as a health impact assessment or the evaluation of a health impact assessment
2. Publication types and methodologies: HIA reports, HEIA reports, EFHIA reports, Health and Wellbeing Impact Assessments, Mental Wellbeing Impact Assessments, HIA evaluations (impact, process, outcome)
3. Population: Mention of migrants, immigrants, refugees, newcomers, asylum seekers. Mention of ethnicity or ethnic groups was also considered but not in the absence of the mention of migrants.
4. Methods: Clear and complete description of methods used
5. Focus: Policy, programme, and project assessment
6. Publication dates: All years
7. Language: English
8. Country: All

**Exclusion criteria**

1. Publication types and methodologies: Non-HIA methodologies, other integrated impact assessments methodologies, commentaries, letters, reviews
2. Population: No mention of migrant or ethnic groups, mention only general potential migration of population (in and out of geographical region) without discussion of migrants as population groups, mention impact of potential migrants on native population but not on migrants themselves, mention travellers or Roma ethnic groups\(^3\).

\(^3\) Travellers and Roma populations are considered ethnic groups rather than migrant groups (Hancock, 2002)
3. **Methods:** No or unclear methods description. Methods only including a generic description of a HIA were not sufficient; methods needed to be specific to the HIA reported.

4. **Focus:** No exclusion

5. **Publication dates:** No mention of a publication date and author

6. **Language:** HIAs and HIA evaluations not in English

7. **Country:** No exclusions

I first screened abstracts for relevance based on the inclusion and exclusion criteria. Full texts were retrieved for those abstracts deemed relevant for further detailed screening. All HIAs included in the first screening but subsequently excluded are detailed in table 2.5.

**Charting the data**

I separated the included HIAs into one of five HIA Categories:

1. **Specifically identified and analysed:** Migrants are specifically identified and analysed quantitatively or qualitatively in at least one aspect of the HIA, not necessarily for direct or indirect impact on health. Migrants are not considered to have been analysed if they are only discussed in the context of the current population being concerned by the potential arrival of new immigrants, nor if it consists of a discussion around in/out-migration relating to general population trends; thus, the analysis must be concerned with the migrants themselves.

2. **Specifically identified but not analysed:** Migrants are identified but not analysed as per the description above.

3. **Identified interchangeably with ethnicity and analysed:** Migrants are identified and mentioned interchangeably with ethnicity or any construct relating to ethnicity, including
‘race’, ‘black and minority ethnic groups’, cultural groups, etc. and have been analysed qualitatively and quantitatively in at least one aspect of the HIA.

4. **Identified interchangeably with ethnicity but not analysed:** Migrants are identified and mentioned interchangeably with ethnicity but are not analysed as per the description above.

5. **Identified only in checklist used to guide HIA:** Migrants are only mentioned within a checklist used as a guide to the HIA.

The process of charting the data was iterative in its nature whereby the extraction form was continuously revisited and followed a constructionist approach to knowledge generation (Crotty, 1998).

The data was extracted using a data extraction form developed according to the inclusion and exclusion criteria chosen *post hoc*. It was also based on the predetermined outcomes based on those outcomes identified by Taylor (2003) for evaluating HIAs, the outcomes identified by Arksey and O’Malley (2005) for scoping reviews, as well as the orienting heuristic framework developed for

**Figure 2.1 Orienting HIA Heuristic Framework**
this thesis which was based on components of program theory evaluation and Walt and Gilson’s General Policy Analysis Triangle theory as described in Chapter 1 (Figure 2.1) (Arksey & O'Malley, 2005; Rogers, Petrosino, Huebner, & Hacsi, 2000; Sharpe, 2011; Sidani & Sechrest, 1999; Taylor, Gowman, & Quigley, 2003; Walt & Gilson, 1994; Welch et al., 2012).

Based on this, the data for each of the above HIA Categories was extracted separately and according to the information sought from each Category. The HIA Category “Specifically identified and analysed” contained the most relevant information to answer the research question. For this reason, it had the most outcome items. In addition to the approach above, the items for this HIA Category were also informed by relevant elements from the PRISMA-Equity guidelines (Welch et al., 2012), modified for the purposes of determining the inclusion of immigrants, were used to determine items. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Statement are reporting guidelines which “encourage completeness and transparency in reporting methods and results of systematic reviews” (Welch et al., 2012). Recently, these guidelines have been extended to more explicitly include the consideration of differential impacts by population subgroups and vulnerable groups. Thus, including relevant elements of the guidelines within the scoping review ensured the reporting of this scoping review adequately included the consideration of migrants as a vulnerable group. Lastly, any additional items found to be relevant as the data extraction was proceeding and themes were emerging as further described below under qualitative data analysis were included. A final list of items extracted for the HIA Category “Specifically identified and analysed” can be found in Appendix A.

The data from the remaining HIA Categories were mainly meant to complement, support, and strengthen the findings from the Category “Specifically identified and analysed”. A list of these
items can be found in Appendix A. A random subset of 20 HIAs was extracted by a second researcher (Bruno Canuto de Medeiros) to ensure consistency and coherence.

**Methodological quality**

As explained above, given that the HIA Category “Specifically identified and analysed” was the one providing the basis of the analytical data, it was the only category where methodological quality was assessed. Few tools have been developed to assess the quality of HIAs. One notable tool is that developed by Ben Cave Associates ((Fredsgaard, Cave, & Bond, 2009)). This detailed tool was originally developed based on Environmental Impact Assessment review tools, modified for the health context. It is intended to provide reviewers with one final score to indicate the overall quality of an HIA. More recently, the Society of Practitioners of HIA (SOPHIA) has developed its own tool to assess the quality of HIAs (Hebert et al., 2013). This tool was based on several HIA guides on standards of practice and evaluation, including amongst others, the tool developed by Ben Cave Associates described above. SOPHIA’s HIA review tool is concise with 16 assessment criteria. The scores from these criteria are not meant to be added. Rather, each criterion should be considered separately. Although this tool has not yet been formally validated, this approach is ideal for this scoping review since it allowed the identification of methodological gaps across all included HIAs mentioning migrants. Thus, methodological quality of each HIA in the Category “Specifically identified and analysed” was assessed based on the quality criteria defined by SOPHIA. It is worth noting that this assessment is not capable of considering the quality of the process but rather must limit itself to assessing what the authors of the HIA have reported. In this sense, it is necessary to acknowledge that an HIA may have been of better quality than found through this methodological assessment, since it was only possible to assess those characteristics that were reported. Indeed, any characteristic that was not mentioned in the report was assumed to have not been undertaken. These were summarised in Figure 2.3 Methodological Quality Assessment. The methodological
quality of the same random subset of 20 HIAs was assessed by a second researcher (Bruno Canuto de Medeiros).

**Data analysis**

Both qualitative and quantitative analyses were undertaken. The qualitative analysis comprised a combined deductive and inductive analysis. The deductive analysis was based on the theoretical framework determined *a priori*. This framework was developed based on policy analysis theory and program evaluation theory. A depiction of the framework can be found in Figure 2.1. More specifically, the key elements of *program theory evaluation* encompassed by inputs, mechanism, and outputs formed the frame of the theoretical framework and the policy components from *Walt & Gilson’s General Policy Analysis Triangle* were incorporated within the mechanism element. These are the context of the environment, the content of the policy or suggested policy modifications, the policy-making process itself, and the actors involved in policy-making (Rogers et al., 2000; Sharpe, 2011; Walt & Gilson, 1994). The inductive analysis used the general inductive approach for analysing qualitative data as described by Thomas (2006). This approach adopts a constructionist epistemology since the results are shaped by the researcher’s underlying assumptions in order to eventually construct a model (Crotty, 1998; Thomas, 2006). Indeed, with the general inductive approach, the findings arise from the data itself rather than from a predetermined model. Themes emerging from this combined analysis were used to develop categories. These categories informed the inclusion criteria and outcome measures determined post hoc. Through this, the qualitative analysis contributed to guiding the subsequent quantitative analysis. Themes relating to the process of including migrants were also explored and reported in the findings.

The quantitative analysis consisted of a basic statistical synthesis of the items extracted. Cross-tabulations of interest were also undertaken. The crux and value added of HIA resides in the recommendations. It is the nature of the formulated recommendations resulting from the HIA that
lead to specific ways in which negative impacts on health are mitigated. Therefore, without recommendations, migrants being analysed in HIA is not sufficient to diminish the observed decrease in their health status. For that reason, the links between specific characteristics of HIAs and including migrants in recommendations were the focus. The Chi Square test of association was used to determine the existence of a relationship between different variables and the inclusion of migrants in recommendations. This test was deemed as most suitable since all included variables are nominal. Indeed, the use of nominal data prevents the assumption of normality. In addition, the data set obtained in this scoping review meets all the assumptions of the Chi Square test: (1) sample not biased, (2) independent observations, (3) mutually exclusive row and column variables which include all observations, (4) large expected frequencies (Michael, 2013).

To determine the percentage of HIAs that mentioned migrants, it was assumed that the hand-search constitutes a representative sample of HIAs produced. This assumption was plausible because the majority of HIAs completed remain unpublished. As such, those HIAs posted on individual organisation websites constitute a more representative sample of publicly available HIAs. The proportion of HIAs included in the analysis found through hand-search over the total number of hand-searched HIAs (i.e. the total number of HIAs posted on the sites searched) were tabulated. Duplicates were accounted for by assuming that the number of duplicates found in the HIAs included for analysis would be representative of the number of duplicates across the HIAs posted on the sites searched.

The analysis of HIAs falling under each category was separate and tailored to the type of information each category could provide to answer the research question. As explained above, the category “Specifically identified and analysed” was most extensively analysed given its capacity to elucidate and inform the ways in which migrants were included within HIAs.
Results

Description of HIAs

The systematic search from all six databases (OVID (Medline), SCOPUS, ProQUEST, European Centre for Minority Issues, EMBASE, Canadian Public Policy Collection) yielded 9043 results and 8347 results after de-duplication. In addition, there were 815 different HIAs posted on the website of key organizations were hand-searched. This hand-search yielded 195 results. No additional different documents were found by contacting experts in the field. Across these two methods of data collection, a total of 227 full articles were retrieved. Of them, 119 were included, 44 were excluded with reason, and 64 were found to be duplicates. Thus, the search resulted in 117 included HIA’s mentioning migrants and 2 included HIA evaluations mentioning migrants. Figure 2.2 provides a PRISMA Flow diagram of the screening process. Table 2.5 provides the reasons for excluded HIAs.

When only considering those HIAs included from 815 hand-searched HIAs, 14% (114 HIAs) were included for mentioning migrants. Of these, 39% (44 HIAs) analysed migrants (that is, 5% of the total screened) and of these 33% (16 HIAs) included migrants in their recommendations (that is, 2% of the total screened). There was a wide range of topics covered in the HIAs included. These topics consisted of suggested government laws, national and regional policies on health, transportation, social issues, urban development, energy use, employment, etc. They also consisted of projects on airport expansions, urban development and transportation, community centres and social services,
mining, energy production projects, waste disposal, etc.

**Figure 2.2 PRISMA Flow**

Records identified through hand-searching organisations in April-May 2013 
(n = 195) → Records identified through database search in June 2013 
(n = 9043) → Records screened after de-duplication 
(n = 8347) → Records excluded 
(n = 8315) → Full-text articles assessed for eligibility 
(n = 227) → HIAs and HIA evaluations included in analysis 
(n = 119) → HIAs mentioning migrants 
(n = 117) → HIA evaluations mentioning migrants 
(n = 2)

- Records identified through hand-searching organisations in April-May 2013 
(n = 195)
- Records identified through database search in June 2013 
(n = 9043)
- Records screened after de-duplication 
(n = 8347)
- Records excluded 
(n = 8315)
- Full-text articles assessed for eligibility 
(n = 227) → HIAs and HIA evaluations included in analysis 
(n = 119)
- HIAs mentioning migrants 
(n = 117)
- HIA evaluations mentioning migrants 
(n = 2)
There was no trend for specific types of topics being more likely to mention HIA than others.

The general characteristics of HIAs falling exclusively under each of the five HIA Categories and HIA evaluations are summarised in Table 2.1 and were as such:

1. **Specifically identified and analysed**

   There were 45 HIAs included exclusively in this category. The range of publication dates was from 1998 to 2013 with a median of 2008. The HIAs were undertaken in 7 different countries: 27 in the UK, 9 in the USA, 5 in New Zealand, 1 in Australia, 1 in Kenya, 1 in Vietnam, and 1 in South Africa. With respect to the depth of HIAs, 21 were rapid HIAs, 0 were intermediate, 3 were comprehensive, 20 were not defined, and 1 was unclear whether it was rapid, intermediate or comprehensive. Regarding what the HIAs were assessing, 28 assessed projects, 9 assessed policies, 7 assessed programs, and 1 assessed a social phenomenon (violence against migrants). Although the determination of the typology of included HIAs as defined by Harris-Roxas & Harris (2011) (i.e. meet regulatory requirement, aid policy or program decision-making, advocacy, or community-led) was planned, the type each HIA would fall under was often unclear since it was not explicitly defined by the authors of the HIAs and HIAs often could fall under more than one type. For this reason, typology was not assessed.

   When exploring whether certain types of HIAs were more likely to analyse migrants, there was no statistical relationship found between the depth of an HIA (rapid, intermediate, in-depth, unclear) and whether migrants were analysed (95%CI, p=0.33). There was also no statistical relationship between the nature of the HIA (project, policy, program, social behaviour) and whether migrants were analysed (95%CI, p=0.20). Due to the small sample size, it is possible that a lack of power prevented the detection of differences.
2. **Specifically identified but not analysed**

There were 32 HIAs included in this category. The range of publication dates was from 2002 to 2012 with a median of 2007. The HIAs were undertaken in 4 countries: 22 in the UK, 5 in the USA, 3 in New Zealand, and 2 in Sweden. With respect to the depth of HIAs, 10 were rapid, 4 were comprehensive, 1 was intermediate, and 17 were not defined. Regarding what the HIAs were assessing, 12 assessed projects, 11 assessed policies, 8 assessed programs and 1 assessed a societal behaviour.

3. **Identified interchangeably with ethnicity and analysed**

There were 34 HIAs included in this category. The range of publication dates was from 2002 to 2013 with a median of 2007. The HIAs were undertaken in 6 different countries: 18 in the UK, 10 in the USA, 2 in New Zealand, 1 in Germany, 1 in Ireland, and 1 in the Netherlands. Additionally, 1 HIA was across the whole European Union. With respect to the depth of HIA, 8 were rapid, 4 were comprehensive, 1 was intermediate and 21 were not clearly defined. Regarding what the HIAs were assessing, 20 assessed projects, 11 assessed policies, and 3 assessed programs.

4. **Identified interchangeably with ethnicity but not analysed**

There were no HIAs included in this category. For that reason, it will not be mentioned hereafter.
5. **Identified only in checklist used to guide HIA**

There were 6 HIAs included in this category. The range of publication dates was from 2005 to 2011 with a median of 2008. The HIAs were all undertaken in the UK and were all rapid.

### Table 2.1 Characteristics of HIA Categories

<table>
<thead>
<tr>
<th></th>
<th>Specifically identified and analysed</th>
<th>Specifically identified but not analysed</th>
<th>Identified interchangeably with ethnicity and analysed</th>
<th>Identified interchangeably with ethnicity but not analysed</th>
<th>Identified only in checklist used to guide HIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total number of HIAs</strong></td>
<td>45</td>
<td>32</td>
<td>34</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>Countries</strong></td>
<td>UK: 27 USA: 9 New Zealand: 5</td>
<td>UK: 22 USA: 5 New Zealand: 3 Sweden: 2</td>
<td>UK: 18 USA: 10 New Zealand: 2 Germany: 1 Ireland: 1 Netherlands: 1 European Union: 1</td>
<td>n/a</td>
<td>UK: 6</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>Rapid: 21 In-depth: 3 Unclear: 21</td>
<td>Rapid: 10 Intermediate: 1 In-depth: 4 Unclear: 17</td>
<td>Rapid: 8 Intermediate: 1 In-depth: 4 Unclear: 21</td>
<td>n/a</td>
<td>Rapid: 6</td>
</tr>
</tbody>
</table>

HIAs. Regarding what they were assessing, 4 assessed projects while 2 assessed policies.

6. **HIA evaluations**

There were 2 HIA evaluations including migrants. Both were published in 2010 in New Zealand and were both evaluations of HIAs assessing policies. Furthermore, both were process evaluations. In both evaluations, member of migrant communities took part in
workshops for community appraisal. One was a general community appraisal whereas the other was specific for ethnic minorities.

Findings

The findings were reported according to the four categories in which HIAs were found and the two separate HIA evaluations.

1. Specifically identified and analysed

Type of evidence

Amidst the HIAs included in this category, there were a total of 18 different types of evidence used. Of these, 11 different types of evidence were used to gather data on migrants. These were literature review (18 HIAs), stakeholder workshops (10 HIAs), secondary data analysis (7 HIAs), interviews (5 HIAs), survey (3 HIAs), focus groups (2 HIAs), questionnaires (2 HIAs), policy analysis (1 HIA), observation (1 HIA), primary data analysis (1 HIA), media reports (1 HIA). Additionally, there were 9 HIAs where the type of evidence used to analyse migrants was unclear.

Migrants in analysis

Migrants were analysed in at least one step of the HIA process: 1 HIA included migrants during scoping (which included the needs assessment component), 27 HIAs included migrants during baseline conditions analysis (which included the community profiling component), 25 HIAs included migrants during impact analysis, 14 HIAs included migrants in the recommendations and 2 HIAs included migrants throughout the entire HIA. There were also 20 HIAs that had general recommendations for vulnerable groups which may have been
relevant to migrants; 10 of these were regarding ethnic or cultural groups. Overall, 33 HIAs had a clear rationale for including migrants in the analysis whereas 12 did not.

**Migrants as stakeholders**

15 HIAs included the analysis of migrants as part of the stakeholder engagement. This did not mean that migrants themselves were included as stakeholders. Indeed, most often (11 HIAs), this consisted in 3rd party organizations speaking on behalf of migrants or experts mentioning concern for migrant health. Only 4 HIAs included migrants themselves as stakeholders whereas 25 did not and 17 were not clear on whether or not they were included.

**Special considerations for migrants**

There were 6 HIAs which specified using special methodological considerations to include migrants in the analysis. These considerations included one or more of the following: (1) the literature review explicitly searched for information on migrants, (2) stakeholders were explicitly asked about migrants, (3) ensured organizations representing migrants were included, (4) translation of documents and workshops or interviews, and (5) tailored approach including a component of cultural sensitivity.

**Cross tabulations**

The inclusion of migrants in the HIA process, as for other minority groups, has the best chance at impacting migrants’ lives if the recommendations of the HIA actually include and relate to migrants (Haigh, Harris & Chock, 2013). For this reason, the cross-tabulation analyses sought to find links between the inclusion of migrants in recommendations and relevant HIA characteristics. The cross-tabulation analyses are depicted in tables 2.2 – 2.4.
I first assessed the link between the presence of a rationale for including migrants and the inclusion of migrants in HIA recommendations. The presence of a rationale was not significantly linked with the mention of migrants in the recommendations (95% CI, p=0.729).

The second analysis assessed the link between the use of a framework to guide the HIA and the inclusion of migrants in HIA recommendations. Given the lack of consistency in the distinction between the terms HEIA and HIA and the actual consideration of vulnerable groups within the HIAs, I did not distinguish between the types of framework used; i.e. between equity-oriented frameworks and those that are not explicitly equity-oriented. Those HIAs using a framework guiding the HIA process were significantly less likely to include migrants in their recommendations whereby 5/27 (18%) of HIAs using a framework included migrants compared to 9/18 (50%) of HIAs not using a framework included migrants (95% CI, p=0.025). When looking further into whether the frameworks themselves mentioned migrants as a group to consider in the assessment, it was found that only four frameworks did mention migrants while 12 did not.
### Table 2.2 Cross-tabulation – Presence of rationale

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Migrants in recommendations</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>no</td>
<td>9</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>yes</td>
<td>23</td>
<td>10</td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>32</td>
<td>13</td>
<td>45</td>
</tr>
</tbody>
</table>

**CHITEST "P"** 0.728530196

### Table 2.3 Cross-tabulation – Use of framework

<table>
<thead>
<tr>
<th>Framework</th>
<th>Migrants in recommendations</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>no</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>yes</td>
<td>22</td>
<td>5</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>31</td>
<td>14</td>
<td>45</td>
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</tbody>
</table>

**CHITEST "P"** 0.025431827
The last analysis assessed the link between HIAs with general recommendations for vulnerable groups that might be relevant to migrants and the inclusion of migrants in HIA recommendations. There was a non-statistically significant trend (95% CI, p=0.428) for those HIAs including general recommendations for vulnerable groups not to mention migrants explicitly. The proportions this represented were as such: 16/25 (64%) of HIAs which did not have any recommendations explicitly relating to vulnerable groups also did not mention migrants compared to 15/20 (75%) of HIAs which had recommendations related to vulnerable groups did not mentioned migrants.

Table 2.4 Cross-tabulation – Vulnerable groups

<table>
<thead>
<tr>
<th>Observed</th>
<th>Migrants in recommendations</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Recom for vulnerable groups</td>
<td>no</td>
<td>yes</td>
<td>Total</td>
</tr>
<tr>
<td>no</td>
<td>16</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
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<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
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<td>45</td>
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</table>

<table>
<thead>
<tr>
<th>Expected</th>
<th>Migrants in recommendations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recom for vulnerable groups</td>
<td>no</td>
<td>yes</td>
<td>Total</td>
</tr>
<tr>
<td>no</td>
<td>17</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>yes</td>
<td>14</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

CHITEST "P" 0.428345898
Process themes

Themes addressing barriers to adequately include migrants within an HIA that were mentioned by the authors of HIAs were explored. There were two such major themes emerging across HIAs. The first was the difficulty to find data about migrants; including the lack of availability of evidence in the literature and in secondary data. Secondly, the inclusion of migrants in analyses is resource intensive. This includes the additional primary data required for collection as well as the need for resources to translate and tailor culturally sensitive approaches.

2. Specifically identified but not analysed

The findings for this category involved highlighting the different contexts in which migrants were mentioned. There were a total of ten general contexts in which migrants were mentioned but without any further analysis. These were divided into two types:

Migrants mentioned without expectation of further analysis

- Mention information gap to include migrants
- Mentioned that migrants would not influence the scope
- Mentioned in recommendations to include migrants in future HIAs

Migrants mentioned in a context where further analysis would be expected

- Mentioned by current residents for the potential impact an increase in migrants could have on local setting
- Migrants were acknowledged as part of the general population but no further consideration
- Mention migrants for the change in demographic characteristics (including change in languages spoken)
- Recommendation for mitigation measure specific to migrants (but without rationale)
- Migrants were used as example of vulnerable groups
- Migrants are mentioned as an explanation for increase in certain diseases
- Long term goal of region is to attract migrants for the positive effects that would have on the local setting

3. **Identified interchangeably with ethnicity and analysed**

   There were no additional findings from the HIAs under this category other than those outlined under ‘general characteristics’ above since the main goal of this category was to explore any links between the interchangeable use of ethnicity and migrants with particular countries or what the HIAs were assessing (i.e. project, policy, program).

4. **Identified only in checklist used to guide HIA**

   The findings under this category involved the presence of a rationale for not including migrants in the analysis although they were prompted in a checklist. In three HIAs, the priority vulnerable groups were determined by the steering committee but the prioritisation process was unclear. In one HIA, vulnerable groups were prioritised through a workshop and migrants were not found to be a priority group. Two HIAs did not give any clear rationale for the exclusion of migrants from the analysis.

5. **HIA evaluations**
Regarding the inclusion of migrants in HIAs, the following themes emerged from the HIA evaluations: HIAs should have been more open-minded, had greater diversity of people and needed more sensitivity to the context of migrants, notably clearer information which took into consideration those for whom English is not a first language. One evaluation noted that city officials had a great interest in migrants’ views that went beyond the purpose of the HIA report.

Quality of the evidence

As described above, a quality assessment was undertaken only for the HIAs under the HIA Category “Specifically identified and analysed”. Additionally, this assessment was not used for exclusionary purposes but rather to determine trends in the quality gaps of those HIAs analysing migrants. Figure 2.3 shows the graph depicting the aggregate scores of all HIAs for each of the 16 factors from the SOPHIA quality assessment tool (Hebert et al., 2013).

All reports were well written, described a rationale for conducting the HIA, and assessed determinants of health. In addition, they all had some consideration of effects on vulnerable groups although in the majority of HIAs this was not done in a robust or systematic manner. Conversely, the greatest gaps in quality were in (1) identification of sponsors and team members, (2) the lack of inclusion of logic model proposal to health determinants and outcomes, (3) discussion of possible future evaluation or monitoring.
Figure 2.3 Methodological quality of HIAs which identified and analysed migrants

The description of each criterion associated with the column number is below.

1 - Identify sponsor, team and all involved in HIA
2 - Describe level of stakeholder input
3 - Describe rationale for conducting HIA
4 - Describe impacts to vulnerable groups
5 - Describe methods of the HIA
6 - Includes logic model proposal to health determinants and outcomes
7 - Describes evidence sources used throughout HIA
8 - Profiles existing conditions
9 - Assessment includes discussion of both health determinants and outcomes
10 - Assessment: for each specific health issue analysed, details the analytic results
11 - Includes recommendations clearly connected analysis and proposal/decision
12 - Recommendations are prominently written
13 - Report includes executive summary or similar
14 - Report well written (grammar, spelling, etc.)
15 - Report organization logical
16 - Discussion of possible future evaluation/monitoring
Discussion

Summary of results

This review found that only 14% (116 HIAs) of the searched HIAs mentioned migrants, 5% (44 HIAs) analysed and 2% (16 HIAs) included migrants in their recommendations to mitigate negative health effects. The included HIAs fell under four categories: Specifically identified and analysed, Specifically identified but not analysed, Identified interchangeably with ethnicity and analysed, Identified in checklist. In addition, there were two HIA evaluations included in this analysis.

Most findings were gathered from the HIA Category “Specifically identified and analysed” where 45 HIAs (39% of included HIAs) were included. Although workshops and stakeholder engagement were a frequent way of including migrants in HIAs, this seldom consisted of including members of the migrant community themselves and rather involved organizations representing migrants. Only a small number of HIAs (7 HIAs) explicitly mentioned using methodological considerations specifically to include migrants in their analysis.

The presence of a rationale for including migrants was not significantly associated with the inclusion of migrants in the recommendations. Furthermore, the use of a framework was negatively associated with the inclusion of migrants in recommendations. Lastly, there was a non-significant trend for those HIAs stating general recommendations for vulnerable groups which may be relevant to migrants, to not mention migrants explicitly in their recommendations. The main barriers highlighted to including migrants in the analysis were the lack of available data on migrants and the significant additional resources required.

There were 30 HIAs which included migrants but did not analyse them. Although there were some instances where migrants were identified and further analysis would not have been expected, this was not the case for the majority of contexts. There were 35 HIAs identifying migrants
interchangeably with ethnicity; the large majority of which assessed projects. Of the five HIAs where migrants only appeared in the checklist, only one provided a clear explanation for how vulnerable groups were prioritised. Lastly, there were two HIA process evaluations both of which included migrant communities as part of their workshops. The inclusion of migrants played a role in bringing to light the needs for migrants to be included in HIAs.

**Overall applicability of the evidence**

The findings of this scoping review demonstrate that migrants remain seldom included and analysed in HIAs in contexts in which they would be expected to be analysed. When migrants are included, they are unlikely to be mentioned in the recommendations for mitigation measures, which represent the crux of the HIA process. A recent review assessing the reporting of HIAs in Australia and New Zealand (Haigh, Harris, & Chok, 2013) similarly found that minority groups are often acknowledged, but are not analysed clearly for the potential impacts they may incur and corresponding recommendations.

Additionally, migrants are often incorrectly mentioned interchangeably with general minority ethnic groups, who may not necessarily be migrants. It is possible that the use of HIA frameworks which list specific vulnerable groups may inadvertently lead to the omission of other groups which may be relevant on certain instances, notably migrants. Nonetheless, it must be recognised that additional resources need to be allocated if considering a greater inclusion of migrants and minority groups in general within HIAs. Furthermore, migrants are seldom engaged as stakeholders and when they are, special methodological considerations needed to ensure their adequate participation are rarely taken.

The evidence of this review was found in a wide range of international databases. The majority of included HIAs were from UK and USA. Migrants form an ever increasing portion of the population in
most countries and prioritising the response to the issues they encounter should be considered. Furthermore, the marginalization issues encountered by migrants are influenced by the specific contexts of both their home and host countries but are nonetheless experienced by all migrants by virtue of the migration process itself (Vissandjee, Desmeules, Cao, Abdool, & Kazanjian, 2004). Thus, the findings of this scoping review should be considered by anyone undertaking an HIA where there is a migrant population irrespective of specific context.

Migrants play an ever increasing role in economic, infrastructural and social development. This potential, however, is not currently used to its full extent (Global Forum on Migrantion & Development, 2013). Given the significant impact migrants have on the well-being of communities, it is necessary for more HIAs to mention migrants and provide a clear rational for the inclusion or exclusion of migrants from further analysis. The inclusion of migrants in HIA provides greater potential for project, programs, and policies to avoid negatively impacting the health of migrants. Conversely, it can promote positively impacting their health, which can in turn strengthen society at large by enabling migrants to participate and contribute to the economic and social strengthening of communities.

**Current and future endeavours**

Nonetheless, there are a few examples providing promising guidance for future research on the different components and considerations to optimally include migrants within the HIA process. For example, the WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity is spearheading an international collaboration for the development of methodological guidelines on the inclusion of migrants within HIA. The findings from this review will inform the specific focus and gaps to be addressed by the collaboration and will thus allow for a pragmatic application of this review in a timely manner. Notably, the collaboration will address the
need for guidance in including migrants at the scoping stage depending on the context of the assessment, guidance on engagement of migrant communities within the process, as well as guidance on sourcing and analysing data.

Lastly, the evidence found supports the idea that the inclusion of migrants through the entire HIA process including recommendations and evaluations of HIAs provides a value added that goes beyond a generic consideration of all vulnerable groups grouped together.

**Potential biases in review process**

A significant bias in this review stems from the nature of the HIAs found to screen. There are currently no standards on the dissemination of HIAs. Although some HIAs have been published in peer reviewed journals, the vast majority remain posted in organizational databases on a voluntary basis. Furthermore, it is seldom possible to access HIAs completed within the private sector. This is concerning since the private sector is responsible for a large number of HIAs completed via the requirement of the Equator Principles (Equator Principles, 2011). Thus, it is possible that the frequency and inclusion of migrants within these HIAs are different in nature than those included in this scoping review. Additionally, only HIA reports published in English were included. This restriction was unavoidable since this was the only language that all reviewers could understand at an academic level and there was no translation capacity. It is possible that HIAs published in languages other than English have included migrants to a different degree or in a different way. Nonetheless, English remains the primary language in which HIAs are published and consequently, the findings from this review can still be seen as representative of overall HIA reports. Lastly, the screening method used for the HIAs found through the key word search may have missed different means of referring to migrants. Nonetheless, the method used did include an extensive list of the most commonly used terms referring to migrants and omissions are likely minimal.
Conclusion

Implication for practice

There is a need for HIA practitioners to consider the potential relevance of migrants more frequently and provide more explicit rationale for the decision to include or exclude migrants from the analysis. When migrants are included and analysis is relevant, practitioners could also draft recommendations which explicitly consider migrants. When stakeholders are engaged in the assessment and migrants are a relevant minority group in the population assessed, adequate resources should be allocated to the use of specific considerations to facilitate their inclusion such as translation, cultural brokers, or tailored workshops. Lastly, practitioners using HIA frameworks to guide their process should be careful of remaining restricted to only considering those groups explicitly listed in the framework. Indeed, such specific lists often found in HIA frameworks may have the unexpected effect of omitting groups who might be vulnerable in certain contexts even if they are not listed.

In terms of the broader practice of HIA, there is a need for greater standardization of reporting. Indeed, not only is it necessary for each particular step of an HIA be reported, but the reporting of specific items under each step, including the methods, can be standardized. HIA practitioners could adopt a greater use of the novel terminology developed including the typology of HIAs (Harris-Roxas & Harris, 2011) and the depth of HIAs (Ison, 2000). This would allow for more optimal comparisons between HIAs. Additionally, many HIAs do not use a theoretical framework to analyse their data. Since many HIA approaches are called frameworks, this might lead to confusion about the need to use a theoretical framework in addition to the HIA approach framework. Nonetheless, it is necessary for HIAs to use theoretical frameworks and subsequent logic models. Lastly, there is a
need for a concerted effort from the international HIA community to push for greater peer-reviewed publication of HIA reports, which would necessitate more funding for this kind of research.

**Implication for research**

The findings of this review highlighted the need for better guidance and methods to determine which vulnerable groups to prioritize. Of specific interest for the inclusion of migrants is the distinction between their needs and those of ethnic minorities who may not necessarily be migrants. Although there have been a considerable number of publications discussing the distinction between ethnicity and migrant groups, and the ramifications of these differences in health, the continued conflation of both concepts indicates the need for guidance on when the use of each concepts is most suitable.

Lastly, there is a need to develop guidance and general principles on the way to include migrants at each step of an HIA on five major themes: (1) determining the degree of inclusion and analysis of migrants according to scope and context, (2) quantitative analysis considerations, (3) qualitative analysis considerations, (4) the inclusion of migrants as stakeholders by considering when it is sufficient to only involve organizations representing them or involving the community members themselves as well as the most suitable methods to do so, (5) how to determine whether recommendations specific to migrants are necessary rather than combining recommendations for vulnerable groups in general.

**Acknowledgements**

I would like to thank the following for their contribution to this review:

- Bruno Canuto de Medeiros for his data extraction and quality assessment of a subset of HIAs;
• Fiona Haigh (CHETRE), Liz Green, Eva Ellitott (Wales HIA Support Unit), and Hillary Dreaves (IMPACT Research Group), Jonathan Heller (Human Impact Partners) for their support in finding relevant HIAs;

• Marla Orenstein (Society of Practitioners of HIA) for her help in finding a suitable quality assessment tool;

• Rajiv Bhatia and Julie Castonguay for their valuable feedback and comments on the methods of this review;

• Lindsey Sikora (University of Ottawa) for her help in developing the search strategy;

• Peter Tugwell and Ivy Bourgeault for their comments on the review and continuous support of this work.

Table 2.5 Characteristics of Excluded HIAs

<table>
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<th>Title</th>
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<th>Date of publication/release</th>
<th>type of evidence/methodology</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Castlefields Regeneration Masterplan</td>
<td>Debbie Abrahams</td>
<td>2004</td>
<td>HIA</td>
<td>Does not discuss migrant groups but rather potential general migration patterns (out and in)</td>
</tr>
<tr>
<td>A Rapid Health Impact Assessment of the Enable Project in Wrexham</td>
<td>Perrera</td>
<td>2006</td>
<td>HIA</td>
<td>Refugees only mentioned in the checklist for vulnerable groups but not actually identified as a vulnerable group within the HIA</td>
</tr>
<tr>
<td>Isle of Anglesey HIA Toolkit</td>
<td>Health Challenge Anglesay</td>
<td>2009</td>
<td>HIA Toolkit</td>
<td>Not an HIA</td>
</tr>
<tr>
<td>HIA of Acute Service Reconfiguration in Hertfordshire</td>
<td>unknown (NHS)</td>
<td>2007</td>
<td>HEIA</td>
<td>No clear description of methodology</td>
</tr>
<tr>
<td>Study Title</td>
<td>Author</td>
<td>Year</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>---------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>HMO Additional Licensing Scheme</td>
<td>Health Challenge Anglesay</td>
<td>2012</td>
<td>HIA</td>
<td>No clear description of methodology</td>
</tr>
<tr>
<td>A Child HIA of Energy Costs and Low Income Home Energy Assistance Program</td>
<td>Smith</td>
<td>2007</td>
<td>HIA</td>
<td>Unclear Methods</td>
</tr>
<tr>
<td>EIS Zone d'activités d'intérêt cantonal et accélération des procédures</td>
<td>Equiterre</td>
<td>2011</td>
<td>HIA</td>
<td>Migrants not mentioned for potential effect on them but for their effect on the economy</td>
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<tr>
<td>HIA of Modifications to the Trenton Farmers Market</td>
<td>UCLA HIA Group, Cole</td>
<td>2007</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
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<td>The Way Home: A Strategy to address adult homelessness in Ireland</td>
<td>Department of the Environmen t, Heritage and Local Government</td>
<td>2008</td>
<td>Strategy</td>
<td>not an HIA - although discussed HIA undertaken, HIA report not included</td>
</tr>
<tr>
<td>Climate Change and Public Health: Impact Assessment for the NYC Metropolitan region</td>
<td>Kinney</td>
<td>unknown</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
<tr>
<td>HIA of Donneraile Traveller Accomodation Proposal</td>
<td>Glackin</td>
<td>2008</td>
<td>HIA</td>
<td>Concerns traveller community</td>
</tr>
<tr>
<td>The Real Cost of Casinos: HEIA</td>
<td>Wellesley Institute</td>
<td>2013</td>
<td>HEIA</td>
<td>Does not include included population</td>
</tr>
<tr>
<td>Integrating Public Health with European food and agricultural policy</td>
<td>Eurohealth</td>
<td>2004</td>
<td>newsletter</td>
<td>Not an HIA report</td>
</tr>
<tr>
<td>Possible Illnesses: Assessing the health impacts of the Chad pipeline project</td>
<td>Leonard</td>
<td>2003</td>
<td>study</td>
<td>No report of HIA or HIA evaluation</td>
</tr>
<tr>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>HIA of Development Projects with Reference to Mosquito-borne Diseases</td>
<td>National Institute of Malaria Research</td>
<td>unknown</td>
<td>Profile</td>
<td>No methods</td>
</tr>
<tr>
<td>HIA of Leeds’ Gypsies &amp; Travellers Accommodation Needs Assessment</td>
<td>Swift and Summers</td>
<td>2008</td>
<td>HIA</td>
<td>Population are travellers (excluded population)</td>
</tr>
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<td>HIA of New Hospitals, Medical School and Related Developments in North Staffordshire</td>
<td>unknown</td>
<td>unknown</td>
<td>HIA</td>
<td>Unknown author and date of publication</td>
</tr>
<tr>
<td>Transport and land-use policies in Delhi</td>
<td>Tiwari</td>
<td>2003</td>
<td>article</td>
<td>Not HIA report</td>
</tr>
<tr>
<td>Report on Rapid HIA of Advocacy Works!</td>
<td>Green and Williams</td>
<td>2007</td>
<td>HIA</td>
<td>Not final version of the report</td>
</tr>
<tr>
<td>Isle of Anglesey HIA Tool</td>
<td>unknown</td>
<td>unknown</td>
<td>tool</td>
<td>Not HIA report and unknown author and date</td>
</tr>
<tr>
<td>Healthcare for London Health and Equalities Scoping paper</td>
<td>Mott MacDonald</td>
<td>2009</td>
<td>scoping report</td>
<td>Not full HIA report</td>
</tr>
<tr>
<td>Health Impacts of Large Dams</td>
<td>Lerer and Scuder</td>
<td>1999</td>
<td>article</td>
<td>Not HIA report</td>
</tr>
<tr>
<td>Conwy County Borough Council</td>
<td>Kingscott and Burchell</td>
<td>2011</td>
<td>tool completed</td>
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<tr>
<td>Report Title</td>
<td>Author</td>
<td>Methodology</td>
<td>Year</td>
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<td>for Mental Health</td>
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<td>Page Avenue HIA</td>
<td>Hoehner et al</td>
<td>unknown</td>
<td>HIA</td>
<td>No date</td>
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<td>A Rapid HIA of the draft Denbighshire Health Social Care and Well-being Strategy 2008-2011</td>
<td>unknown</td>
<td>2007</td>
<td>HIA</td>
<td>Unknown author</td>
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<td>Swale Borough Council Core Strategy rapid HIA</td>
<td>NHS of Eastern and Coastal Kent</td>
<td>2010</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
<tr>
<td>Transport, Environment and Health</td>
<td>Dora and Phillips</td>
<td>2000</td>
<td>Book</td>
<td>Not HIA report</td>
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<tr>
<td>Community Profile West Tyrone Area Plan</td>
<td>unknown</td>
<td>2008</td>
<td>HIA</td>
<td>Unknown author and unclear methods</td>
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<tr>
<td>Strategic Environmental Assessment for the Norwich Area Transportation Strategy, Implementation Plan: Environmental Plan</td>
<td>Norfolk City Council</td>
<td>2010</td>
<td>Environmental Impact Assessment</td>
<td>Unclear methods</td>
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<tr>
<td>Sustainability Appraisal of Stockport Core Strategy</td>
<td>Stockport Metropolitan Borough Council</td>
<td>2010</td>
<td>Sustainability Appraisal</td>
<td>Not HIA</td>
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<tr>
<td>Sustainability Appraisal Scoping Report of Basingstoke</td>
<td>unclear</td>
<td>2007</td>
<td>Sustainability Appraisal</td>
<td>Not HIA</td>
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<tr>
<td>Sustainability Appraisal of Bristol Core Strategy</td>
<td>Bristol City Council</td>
<td>2009</td>
<td>Sustainability Appraisal</td>
<td>Not HIA</td>
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<tr>
<td>Project Description</td>
<td>Consultant</td>
<td>Year</td>
<td>Assessment Type</td>
<td>Notes</td>
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<td>--------------------------</td>
<td>--------------------------------------------</td>
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<tr>
<td>Community Health Assessment: Bernal Heights Preschool</td>
<td>Bhatia</td>
<td>2008</td>
<td>HIA</td>
<td>Not full assessment - only baseline</td>
</tr>
<tr>
<td>Rapid HIA on Conwy Health Social care and Well-Being Strategy</td>
<td>Welsh HIA</td>
<td>2008</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
<tr>
<td>EIS del Plan de Reforma Integral de Uretamendi-Betolaza (EIS_PRI)</td>
<td>Gasteiz</td>
<td>2009</td>
<td>HIA</td>
<td>Not in English</td>
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<td>London Health Commission HIA - Draft London Plan</td>
<td>Cameron and Cave</td>
<td>2002</td>
<td>HIA</td>
<td>Unclear definitions of migrants</td>
</tr>
<tr>
<td>Assessing Health and wellbeing impacts of Urban Planning in Avondale: a New Zealand Case Study</td>
<td>Quigley</td>
<td>2006</td>
<td>HIA</td>
<td>Not full HIA report</td>
</tr>
<tr>
<td>Cambridgeshire and Peterborough Structure Plan Review</td>
<td>Land Use Consultants</td>
<td>2002</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
<tr>
<td>Study Title</td>
<td>Authors</td>
<td>Year</td>
<td>Type</td>
<td>Details</td>
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<td>----------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>An Age-Friendly Community: Shaping the Future of Waihi Beach</td>
<td>Gordon and Van der Pas</td>
<td>2009</td>
<td>HIA</td>
<td>Unclear methods</td>
</tr>
<tr>
<td>Assessing the Health Impacts of Glasgow's Local Housing Strategy</td>
<td>Glasgow Centre for Population health</td>
<td>2010</td>
<td>HIA</td>
<td>Not reporting full HIA (only Scoping exercise)</td>
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<td>Health Evidence Base for the Mayor's draft Cultural Strategy</td>
<td>Cave</td>
<td>2002</td>
<td>HIA</td>
<td>Not full HIA only part of evidence used</td>
</tr>
</tbody>
</table>
References of Included HIAs

Specifically identified and analysed

28. Matzopoulos R, Cirrigall J, Bowman B. (2009). HIA of Internal Migrants Following the Xenophobic Attacks in Gauteng and Western Cape, South Africa
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Chapter 3

The Use of the Ontario HEIA Tool by

Public Health Units: an Environmental Scan

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The Use of the Ontario HEIA Tool by Public Health Units: an Environmental Scan

Abstract

Throughout the world and in Canada, there have been different approaches to institutionalizing and implementing health impact assessment (HIA). Ontario has been unique in that it has allowed organizations and units within the province to decide whether to use its newly developed Health Equity Impact Assessment (HEIA) tool and how to implement it. An environmental scan is described herein that has taken advantage of this to assess the degree of use of the tool and the factors influencing this across public health units. The scan was completed by interviewing key informants from 31 of the 36 Ontario public health units as well as collecting any additional documents relating to HEIA or other evaluation processes. The use of the tool was found to be influenced by the following factors: the available inputs or resources, the nature of the HIA tool, the actors and stakeholders involved, the decision-making processes within the unit or team involved, the context of the social, economic, and political environments, the nature of the project, program, or policy being assessed, and lastly, the various outputs of completing the HEIA process. The use of the HEIA tool was not influenced by settings such as geographical area, population density, staff size of the unit, or the population size per staff. This scan suggests that irrespective of the context and institutionalization approach, there are common factors that require consideration when attempting to implement and use HIA.

Background

Health impact assessment (HIA) provides a pragmatic approach to tackling the social determinants of health, which are the conditions in which individuals live and work (CSDH, 2008; SOPHIA, 2014). It has the potential of preventing ill health by assessing the unintended positive and negative impacts
that projects, programs, or policies may have on health and recommending alternatives to mitigate the negative impacts and promote positive impacts (Mindell, Boltong, & Forder, 2008; SOPHIA, 2014; WHO, 2011). Although there are an increased number of HIA guidance frameworks, the level of implementation and use of these frameworks often remain unclear. This paper describes the specific HIA framework developed by the Ontario Ministry of Health and Long Term Care Health - the Health Equity Impact Assessment (HEIA) tool - and its use within Public Health Units throughout the province. Understanding the use of these frameworks is becoming more salient given the recent efforts to develop various HIA frameworks and tools which explicitly promote the consideration of disparities in impacts across population subgroups to reduce health inequities (Mindell et al., 2008; Orenstein & Rondeau, 2009). These Equity-Focused Health Impact Assessment or Health Equity Impact Assessment (HEIA) approaches promote the consideration of minority and socially disadvantaged groups by emphasizing the use of methods conducive to determining differential health and social outcomes and perceptions between population groups. In addition, many of these HIA guidance frameworks explicitly mention population groups that may be at a greater disadvantage. These frameworks are often tailored to the demographic and political realities of a region (Orenstein & Rondeau, 2009). Despite the increase in the development of HIA guidance frameworks, there have been few documented assessments of the level of implementation and use of such frameworks. This report describes the results of an environmental scan exploring the degree of implementation of the Ontario HEIA tool within Ontario PHUs and the broad barriers and facilitators encountered while considering marginalized population groups. It also ends by comparing the implementation of health impact assessment approaches throughout the country and discusses ways in which it can inform the implementation of evidence-informed decision-making processes.
In 2010, the Ontario Ministry of Health and Long-Term Care launched an HEIA tool tailored to the Ontario context. The purpose was the development of a tool to support the consideration of potential health inequities encountered by minority groups in the province during policy and program planning and evaluation; hence the inclusion of the word “equity” to describe the tool. The tool provides guidance on how to undertake the various steps of a health equity impact assessment including the initial scoping, appreciating potential impacts, mitigation of negative/unintended effects, developing recommendations, and monitoring and dissemination of the findings. It also provides a concise template to explicitly consider a list of potentially vulnerable minority groups relevant to the Ontario context at each step of the HEIA. The Ontario HEIA tool was initially piloted and implemented in Local Health Integration Networks (LHINs) throughout the province. Nonetheless, it is meant for use by any organization aiming to prevent the negative impacts of its endeavours on the health of communities, both within or outside the healthcare system (Ontario Ministry of Health and Long-Term Care, 2011). Although it was initially tailored for the Ontario context, the tool has broader application and has been used by organizations catering to the entire country, such as the Centre for Addiction and Mental Health (CAMH Knowledge Exchange, 2014; Ontario Ministry of Health and Long-Term Care, 2011).

In 2012, the Ministry partnered with Public Health Ontario to develop and launch a public health supplement of the tool geared for use by Public Health Units (PHUs) in the province (Ontario Ministry of Health and Long-Term Care & Public Health Ontario, 2012). This supplement outlines the alignment between the HEIA approach, the Ontario Public Health Standards (Ontario Ministry of Health and Long-Term Care, 2008a), and the Population Health Assessment and Surveillance Protocol (Ontario Ministry of Health and Long-Term Care, 2008b) and how the HEIA tool can assist in responding to their requirements. Moreover, it provides additional recommendations at each step specifically relevant to PHUs.
There are 36 PHUs across the province, which are governed by local boards of health and administered by the medical officers of health. All PHUs operate under the Health Protection and Promotion Act under whose authority the Ontario Ministry of Health and Long Term Care publishes the Ontario Public Health Standards (OPHS) and Protocols. The OPHS outline the mandatory programs and services to be offered by PHUs as well as the way in which boards of health must operationalize them (Ontario Ministry of Health and Long-Term Care, 2008a).

Ontario public health units are uniquely positioned to act on the social determinants of health not only because of their mandate, which intrinsically includes these determinants (Ontario Ministry of Health and Long-Term Care, 2008a; Ontario Ministry of Health and Long-Term Care & Public Health Ontario, 2012), but also because of their increased capacity to partake in intersectoral projects at the municipal and/or regional level by virtue of their boards of health. Thus, understanding their use and views of the Ontario HEIA tool is crucial and can provide insight into how the tool could be used to respond to the social determinants of health within the Ontario context.

**Methods**

**Study design**

This environmental scan consisted in a single-case design with embedded units of analysis, where the case was the implementation of the Ontario MOHLTC HEIA tool and the units were different PHUs (Green & Thoroughgood, 2009). Environmental scans are an approach used to gather information about the trends and realities of an organization’s environment in order to inform its future planning and actions (Choo, 2001). It generally focuses on issues and potential pitfalls that may affect an organization (Albright, 2004). Environmental scans have historically been used more extensively by the private sector, but are increasingly adapted and used for public sector issues and realities as well (Rowel, Dewberry Moore, Nowrojee, Memiah, & Bronner, 2005). As such,
environmental scans have been found to be useful for the successful implementation of changes to programs and organizational approaches. They have been used to assess a variety of public health issues in Canada and the U.S.A. (Hodges et al., 2011; Rodger, Hoffman, & Practice, 2010; Rowel et al., 2005). They are also useful for raising awareness and identifying any need for further clarification on project and programmatic approaches to public health issues (Rowel et al., 2005).

**Heuristic framework**

The work of this environmental scan was initially guided by an orienting heuristic framework (Figure 1.5). This orienting framework was developed based on a literature review presented in Chapter 1 as well as policy analysis and programmatic evaluation theory as also described in greater detail in Chapter 1. Specifically, the orienting framework informed the interview questions as well as the initial analysis of findings.
Figure 3.1 Iteratively Revised HIA Heuristic Framework
Data collection

This environmental scan was completed by using semi-structured telephone key informant interviews with the intention of involving all 36 Ontario PHUs as well as collecting any relevant documents mentioned and used by the PHUs. All Medical Officers of Health were initially contacted electronically and asked for a short 20 to 30-minute interview or referral to a suitable person within their public health unit to respond to the request. In some instances, participants were recruited via telephone after a lack of response from electronic communication. For each PHU, at least one informant involved in the use of the HEIA tool was interviewed. All interviews were digitally recorded with the consent of the participants. This ensured accuracy of transcripts and facilitated analysis. All interviews were transcribed by the main author. Anonymity was kept by ensuring that only the authors had access to transcripts and data linking the names of participants.

Appendix C contains the interview guide. The interview guide was developed based on those components of the orienting theoretical framework described above which were relevant to answering the research question.

Additional documents were sought out to provide further context on the ways in which equity and programmatic decision-making were considered within PHUs either through the use of the Ministry’s HEIA tool or the use of other tools and approaches. These documents included examples of other tools used, examples of how the Ministry’s tool had been modified to suit the needs of the unit, or reports on equity within their region.

Ethics

The procedures for this study were approved by the University of Ottawa Research Ethics Board and by the Ontario Ministry of Health and Long Term Care (Health System Strategy and Policy Division). Appendix D contains the Approval Notice from the University Research Ethics Board as well as a
Letter of Permission from the Ontario Ministry of Health and Long Term Care. Specifically, a letter of information was distributed to each participant and asked for verbal consent, which was digitally recorded (Appendix D). Any required clarifications on the project and/or process were discussed during the completion of the verbal consent and were also recorded. Anonymity was important to participants to allow them to comment freely on the tool developed by the Ontario MOHLTC and its application within their units without straining their relationships with the Ministry or within their unit. Thus, anonymity was guaranteed to all participants by randomly number-coding each PHU, not referring to any characteristics that might distinguish a particular PHU, and not providing any direct quotes referring to specific participants. The authors were the only ones with access to the original names of key informants.

Data analysis

The data collected was analyzed by adopting a mixed methods approach using the analytical software Dedoose, which was developed explicitly for mixed methods analyses. The use of a mixed methods approach is epistemologically sound given the constructivist epistemology adopted in this study. Indeed, constructivism maintains that reality is constructed by the individual’s position, irrespective of whether it is quantitative or qualitative (Crotty, 1998). Thus, both quantitative and qualitative data are true in as much as they reflect the author’s construction of the phenomenon being analyzed.

Quantitative analysis

The quantitative data analysis consisted of descriptive and frequency statistics. Quantitative descriptors of PHUs were identified to explore links between these PHU characteristics. Of particular interest were links between the type of tool used by PHUs and other characteristics of the unit, which were explored using the chi square test of association. This test is adequate given the
nominal nature of the data and the compliance of the data set with the assumptions of the Chi square test (Dedoose, 2013; Micheal, 2014). To ensure the anonymity of PHUs was kept, these characteristics were reported in ranges as such: staff size (in ranges of 100 staff), population size (in ranges of 50 000), geographical area (in ranges of 2500 km²), population density (in ranges of 50 people/km²), and population size/staff (in ranges of 250 people/staff). Defining ranges as such resulted in a large number of categories. Doing so was nonetheless necessary given the nature of Ontario PHUs, which fall under extremes of characteristics. Indeed, they cover either very small or very large geographical areas and similarly, either have a very small or very large population densities. For that reason, defining wider ranges would have clustered too many PHUs into few ranges, therefore losing the meaning of the analysis. A non-quantitative descriptor was also added in order to explore any links between emerging themes and the type of tool used. The descriptor ‘type of tool used’ identified the way in which impact assessments and/or programmatic priorities are determined by PHU. The categories were either “Ontario HEIA”, “Modified Ontario HEIA”, “Other tool”, or “No tool/unclear”. There was no minimal amount of use of the Ontario HEIA tool for a PHU to be categorized under “Ontario HEIA”. Thus, even if a PHU only used the Ontario HEIA tool as a trial, it was categorized as having used the tool in order to assess their impressions of it. If the Ontario HEIA tool was used in parallel, but separate, from another approach, the PHU was classified as having used the “Ontario HEIA”. Showing interest or plans to use the HEIA tool but not having used it at the time of the interview did not warrant classification as having used the tool. When components of the tool were included within pre-existing approaches, it was categorized as “Modified Ontario HEIA”. If a PHU used the same Ontario HEIA tool but provided additional guidance documents, this was classified as “Modified Ontario HEIA”. Therefore, within the “Modified Ontario HEIA” category, there were two types of approaches: (1) HEIA tool was altered
but still a standalone tool, (2) HEIA components were incorporated within other decision-making approaches.

Qualitative analysis

The qualitative analysis consisted of a thematic framework analysis (Green & Thoroughgood, 2009). The analysis was initially based on the orienting framework but was revisited and revised as the framework evolved iteratively with emerging themes. More specifically, the revisions informed the definition of a seventh additional factor (nature of the tool) as well as contributed to defining sub-factors and contextualizing the facilitators and barriers to completing health impact assessments. The data was first analyzed by creating codes from interview transcripts. Codes were created by vertically analyzing across interviews and using a combined inductive and deductive approach (Green & Thoroughgood, 2009). Deductive codes were first established a priori based on the orienting theoretical framework. Those initially established codes found not to be relevant within the interviews gathered were ultimately deleted. Deductive codes were supplemented by codes which emerged inductively from the interviews themselves.

Secondly, in order to extract data relevant to the objective of this scan from the additional documents received following the interviews, questions to frame the information to be retrieved from those documents were developed (Appendix B). The information retrieved was then coded using a similar combined deductive and inductive analysis as that used for the interviews. The codes from both interview transcripts and additional documents were triangulated to create categories which mapped onto the heuristic framework’s factors. A diagram of the qualitative analytical steps is found in Appendix B.

Because the findings from the interviews and additional documents were seen as representing the overall perspectives of PHUs rather than each individual PHU, the interviews were synthesized. For
that reason, quotes to support the findings were used selectively where they were most representative of particular issues.

As themes were emerging inductively, the orienting framework was revised. Each new iteration informed further the analysis of the data in an iterative fashion. Thus, the final findings presented in this chapter are organized according to the revised framework. This revised framework had seven main factors: nature of the tool; inputs; context of the environment; decision-making process; actors; nature of policy, program, or project assessed; and outputs. Figure 3.1 depicts this revised framework. The findings of this scan are presented according to the final seven factors of the revised framework.

Results

Description of PHUs included

A total of 31 PHUs were included in this analysis where 30 PHUs accepted to partake in verbal interviews and one PHU sent in responses in writing. Five public health units declined to participate in the scan. There was a wide variation in the geographical area covered by included PHUs across the province with 29% covering an area between 0-2499 km\(^2\), 19.4% between 2500-4999 km\(^2\), 9.7% between 5000-7499 km\(^2\), 12.9% larger than 50 000 km\(^2\), and the rest (29%) fell between 7500 and 50 000 km\(^2\). The majority of PHUs had a low population density with 29% having less than 10 people/km\(^2\) and 32.3% having between 10-49.9 people/km\(^2\). Only 12.9% of PHUs had a population density above 500 people/km\(^2\). Of the five PHUs which declined to participate, four were relatively rural with a population density between 10-70 people/km\(^2\) while one had a population density above 300 people/km\(^2\).

The majority of included PHUs (32.3%) had a staff of between 100-199 people. Additionally, 19.4% of PHUs had between 200-299 staff and 16.1% had between 0-99 staff. The number of staff
required to optimally serve a population is dependent, amongst other factors, on the size of the population. Thus, the population size/staff was calculated. The majority of PHUs (38.7%) had between 1000-1249 people/staff. A small percentage of PHUs had a relatively high proportion of people/staff whereby 6.5% had more than 2000 people/staff and 6.5% had between 1750-1999 people/staff.

**Use of the tool**

The number of PHUs having used the HEIA tool as of the date they were interviewed (between December 2013 and February 2014) and a general overview of the degree to which the tool had been used was first assessed. This provided a “snapshot” of the state of acceptance and implementation of the tool at that point in time. It also allowed exploring whether certain characteristics of PHUs have influenced the use of the tool.

Nearly half of the PHUs interviewed (n=15; 48.3%) had used the Ontario HEIA tool. Nearly half of these (n=7; 25.8% of total PHUs) had used a modified approach to the HEIA either by modifying the tool itself or by incorporating the elements of the tool within a broader decision-making approach. The majority of these 15 PHUs were in the pilot stage of the implementation of the HEIA tool. While some had chosen to pilot only one or two specific projects or programs first, others had given the tool to all their teams or divisions to pilot or try on a project of their choosing. Some PHUs are still in the process of completing their first pilot. Other PHUs are in a second pilot phase whereby they have tried the tool once, have adapted their approach and training to their needs and context, and are now piloting it with a second set of programs or projects.

The rest of the PHUs did not use the HEIA tool. 41.9% of PHUs (n=12) used an impact assessment or programmatic prioritization tool other than the Ontario HEIA tool and 9.6% of PHUs (n=4) either did not use any or it was unclear whether they used a tool in particular. While many of these PHUs
simply had their own approaches already in place, some are planning to start using the Ontario HEIA tool and others have looked at it with interest but have found the large number of available tools to choose from difficult to priorities. Figure 3.2 depicts the percentage of Ontario PHUs in each category.

**Figure 3.2 Number of PHUs in each category of tool used**

<table>
<thead>
<tr>
<th>Type of tool</th>
<th>Number of PHUs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario HEIA tool</td>
<td>20%</td>
</tr>
<tr>
<td>Modified Ontario HEIA tool</td>
<td>30%</td>
</tr>
<tr>
<td>Other tool</td>
<td>40%</td>
</tr>
<tr>
<td>No tool or unclear</td>
<td>10%</td>
</tr>
</tbody>
</table>

Links were explored between the type of tool used and either geographical area, population density, staff size, and population size per staff in unit. There were no statistically significant differences in association between any of the pairs. Figures 3.3 to 3.6 depict the frequency of each pair along with the chi square test result underneath.
Figure 3.3 Type of tool frequency by geographical area

Type of tool and geographical area: $X^2$ 39.61, df 33
Figure 3.4 Type of tool frequency by population density

Type of tool and Population density: \(X^2 19, \text{df} 24\)
Figure 3.5 Type of tool frequency by staff size

Type of tool and Staff size: \(X^2\) 22.52, df 18
Figure 3.6 Type of tool frequency by population size per staff

Type of tool and Population size per staff: $X^2 25.9$, df 21
Thematic findings

The thematic findings on impressions of the tool and the reasons for using (or not using) the Ontario HEIA tool are organized under each factor of the HEIA heuristic framework.

Nature of the Tool

Upon analyzing the interviews, it became apparent that an additional factor needed to be included: the nature of the tool or guidance framework used to complete an HIA. The nature of the tool refers to the way and degree in which each step is developed and described, the way in which the graphical representation of these steps is conducive to explicitly describing the process adopted and the flexibility of the tool to adapt to the needs of different HEIAs. Indeed, the nature of the tool used to assess and aid decision-making was found to influence whether an equity lens would be adopted and the way in which it would be implemented and used. It is true that a tool is merely meant for guidance and that in fact, an experienced HIA practitioner might not see the need for such a tool at all. Nonetheless, a tool is useful to those new to the field. It can also be useful to promote a standardized approach to HIA within a certain context. It could be argued that the nature of the tool is in fact part of an input. Nonetheless, it was felt that in this context, the nature of the tool constitutes a factor separate from the inputs. Indeed, while inputs tend to influence the scope of the assessment, as explained above, the tool used to guide the HIA is explicitly developed and chosen and impacts the entire perspective and approach to the assessment process. “Well, I think it’s the only tool I’ve seen that sort of asks those particular policy questions, but also it’s the fact that it is clear, brief, simple, and it really just guides you to ask the key questions that then help you come up with a position statement or a policy strategy.” (PHU 20).

Firstly, a tool can greatly facilitate or hinder the undertaking of an HIA depending on the way in which each step is developed and explained. For instance, it was found that a lack of guidance on
whether to undertake an HIA at all (i.e. screening step) as well as determining the scope of an HIA can render the entire exercise challenging to complete. Having tools with more guidance on whether, where, and how to gather relevant data was thought to render the process of completing an HIA more accessible and efficient.

Secondly, the nature of the tool influences the level of transparency the HIA report might have by prompting (or not) the explicit logging of the evidence and rationale for the decisions and conclusions taken. Examples discussed were of a tool having space to explicitly detail the prioritization exercise to select relevant ‘at risk’ or disadvantaged groups; a tool’s formatting might also be more conducive to providing a link between the evidence and the mitigation measures recommended; a tool might have explicit space to log the input from stakeholders; amongst others. This can in turn influence whether recommendations will be followed.

Lastly, the flexibility of a tool to different depths of assessments can affect the degree to which a tool is used in different contexts and assessments and therefore its standardization.

The nature of the tool can influence the approach to HIA through the purpose and perceived purpose of the tool. Those PHUs having used the Ontario HEIA tool or a modified version tended to see it as useful to identify gaps within a proportionate universalism approach to public health and to document and provide stronger rationale for suggested changes in a program. Furthermore, defining the scope of the assessment was seen as crucial to delimiting the purpose of using the tool and ensuring the feasibility of the assessment. While some PHUs use the tool at the micro-level, others see it more pertinent to decision-makers in a top-down fashion. Some PHUs have used the HEIA tool in conjunction with another decision-making or program planning tool. Some PHUs using other tools instead of the HEIA tool perceive the Ontario HEIA tool as perhaps being more suited for programmatic level assessments or more complex issues. Other PHUs, however, were more critical
of the tool as a whole and perceived it as being too subjective and only providing ‘Band-Aid’ solutions whereas they felt the focus should instead be on considering various the population groups from the beginning rather than seeing what has been done wrong. “You should be doing your planning, not see what have you not done well” (PHU 1). Some of the PHUs not using the HEIA tool, are using other tools which might in fact have a complementary purpose to the HEIA tool. For example, the Social Determinants of Health (SDOH) Mapper could be very useful to providing background information for the scoping and potential impacts stages of the HEIA tool. Lastly, some of the PHUs felt that the tool is merely useful as initial guidance to ingrain the consideration of inequity but that the specific tool used then becomes irrelevant.

Required Inputs

Inputs refer to the different resources provided or available to undertake an HIA. The different inputs available influence the scope of an HIA as well as the ease with which an HIA is completed. Inputs for HIAs have been found to fall under three broad types: data, human resources, and additional resources (mainly time and financial). “And it takes time to delve into the literature. It took a lot of resources and time. Which is precious, right.”(PHU 12).

Data availability influenced both the scope of the HIA and the perception of the feasibility of the HIA. In addition to its availability, data was found to influence an HIA through its quality. This can either be the quality of the already available secondary data or the capacity to collect primary data. Both the process findings from the scoping review as well as the interviews of the environmental scan revealed that the availability of data also influences the capacity to consider different minority groups, especially migrants. The quality of available data impacts the applicability and strength of the impact assessment analysis and resulting recommendations. Availability of data can also be dependent on the variety of data sources considered relevant to the HIA. Indeed, the wider the
range of data considered and capable of being utilized, the greater the chances of finding data informing the impacts on all relevant population groups, notably minority groups. A wider range of data also allows for greater depth to be acquired on the context surrounding the data and potential impacts assessed. The capacity to consider a wider variety of data is also influenced by human and other resources available.

When undertaking and considering HEIA, there was a clear lack of data voiced by most PHUs. This lack of data was particularly salient when attempting to assess the impact on certain disadvantaged groups (dependent on the region) “Well, I mean, data is always a big one. So, for sure, there were certain groups that we just didn’t have data on… but I mean, there is lots of diversity within that population as well” (PHU 2) and even more so when exploring the reality of populations falling under more than one disadvantaged group, termed intersectionality (Hankivsky & Christoffersen, 2008). The difference was seen in the way in which the PHUs dealt with this lack of data. While some felt it precluded them from using the tool at all, others included the need to collect additional data as a recommendation following the completion of the HEIA; some of these also suggested means to collect such data. Lastly, in one case, a tool was specifically developed to facilitate the collection of some data. Many participants felt that the provision of explicit places and ways to access data or the availability of a toolkit to do so would be beneficial to overcoming these barriers.

There was also uncertainty around how to balance the data available from the literature and that provided by community partners. While some viewed the latter as crucial to giving a fuller view of the impact within the community context, others mainly sought it to complement gaps in the literature. Some participants felt that the HEIA tool does not grant enough importance to stakeholder and community input. In addition, some of the larger PHUs found that they do not have
the resources or guidance to reach their scattered populations. Lastly, there were serious concerns regarding the quality of the available population data, notably census data.

Human resources first refers to the number of people involved in an HIA. Indeed, the consideration of human resources under the ‘inputs’ factor strictly refers to the capacity available rather than the leadership and knowledge they provide, which is further described under the ‘actors’ factor. Indeed, the completion of an HIA generally requires a team of people to cover a range of different skills as well as ensure different perspectives are considered regarding the potential impacts. However, it is preferable that those people involved also have adequate training on the HIA process and the nature of the tool used to ensure efficiency. They also need to have an adequate background and knowledge of population and public health as well as health equity. This contributes to ensuring a full and complex consideration of the social determinants potentially at play as well as considering, prioritizing, and assessing the different disadvantaged population groups and involving the relevant partners, stakeholders, and community actors.

Undertaking an HEIA requires a significant commitment of human resources. This has been pointed as a major barrier to adopting the tool by certain PHUs. Indeed, a multidisciplinary team is required to provide different data analyses and perspectives. “You can’t just have one person sitting down and filling it out, because that sort of defeats the purpose” (PHU 3). In addition, the team must be knowledgeable on issues of equity and social determinants of health, particularly within their own community as well as adequately trained in the HEIA process. As such, there were some questions regarding the adequacy of the nursing curriculum to prepare for leading the implementation and completion of HEIAs. Lastly, while many participants felt that the support from higher management greatly aided the full completion of the HEIA, others felt that a lack of support rendered the process difficult.
Even the available human resources, however, are dependent on other resources, including time and money. Indeed, HIAs are resource-intensive endeavours. Despite scoping exercises based on context and need, the time and financial resources available might ultimately be the greatest influence on the amount of data sought out, the size of the team, the degree of inclusion of stakeholders, and lastly, the degree and depth with which disadvantaged groups will be analyzed separately. It is necessary to ensure that the amount of resources available for the completion of an HIA is sufficient to prevent it from becoming a tokenistic exercise.

Some participants expressed that the additional time and financial resources required to complete the HEIA also represented barriers to using the HEIA tool. Even to those who have completed an HEIA, time and financial resources often dictated, or at least greatly impacted, the scope and depth of the HEIA. “It took a lot of resources and time; which is precious, right” (PHU 12). Additionally, for these reasons, many PHUs have also attempted to integrate the HEIA within existing processes so as to streamline the use of resources.

**Decision-making process**

The name of this factor was changed from policy-making process to decision-making process to better reflect the fact that HIA is not only concerned with policy but also projects and programs and the decisions made at different stages of each of these. Additionally, it may have been misleading or off-putting to HIA practitioners not assessing a policy. It should be acknowledged that the HIA process is not only influenced by the decision-making process but is also able to influence it and provide a feedback loop for future HIAs undertaken in the same decision-making context. “She [supervisor] knew from her perspective, at her higher level, where the timing would make the most sense to make some of the changes that we were recommending” (PHU 29).
The HIA process is influenced and influences the collaborative capacity of the context. Indeed, the capacity and willingness to collaborate impact the depth, subtlety, and complexity of the issues considered, the data collected, and the analysis. The HIA process is also influenced and influences the level of transparency of the decision-making process. The use of HIA necessitates a pre-existing transparency and/or openness to greater transparency in the decision-making process. HIA was also found to in turn increase transparency by rendering more explicit the rationale and support behind certain decisions and provides justification for future decisions in the event that recommendations cannot be implemented immediately following the completion of the HIA.

The buy-in from staff and higher management alike is essential to the ubiquitous use of HIA. The question of whether to mandate the use of HIA or implement it gradually on a voluntary basis is a contested issue which might be dependent on context. The manner in which the HEIA tool is implemented within the decision-making process ultimately influences the efficacy of the tool. While all informants agreed that buy-in from staff and upper management is key to adequately implementing the tool, there was disagreement on whether mandating its use would push for greater buy-in or, on the contrary, impede it. Additionally, buy-in is influenced by each directors’ perception of the tool and support for their staff to try out new decision-making approaches. This might therefore result in an incoherent implementation of the tool across one same PHU. Lastly, several PHUs have implemented the HEIA tool within existing decision-making processes to use resources more optimally and avoid the creation of various parallel reporting systems. Beyond the implementation of the HEIA tool, additional sub-factors also influence the use of the tool.

Some HIA literature maintains that community partners and citizen engagement is imperative to complete the assessment, but this is not agreed upon (Gauvin & Ross, 2012). Nonetheless, collaborating with partners is an option when completing an HEIA and is perceived as a beneficial
exercise. Although the majority of PHUs are not against collaborating outside of their unit, some preferred to pilot the use of the new tool within the unit alone until there is greater comfort with the process. “I don’t think anybody has taken it to community partners yet, because we’re still really developing some comfort with it ourselves” (PHU 5). By way of contrast, some units have used the new tool as an opportunity to link with organizations and leverage their resources and knowledge on specific socially disadvantaged groups. This has sometimes rendered the process more difficult in terms of the decision-making process, which can become more complex with different partners at the table.

Many PHUs found the tool increased transparency by providing a means to explicitly document the rationale behind the decisions taken. It was also felt it provided a means to document the rationale behind the choice of relevant disadvantaged groups to consider; albeit certain PHUs altered the tool to have a more explicit way of recording this via, for example, the addition of columns within the HEIA grid. Despite this, certain PHUs still viewed the tool as too subjective and offering a false sense of transparency. Additionally, there was skepticism about the capacity to implement recommendations based on the political realities of how decisions are taken. Thus, it was felt very important to ensure the assessments and recommendations are congruent and coordinated with the overall process of the program and unit cycles. “We have conducted one HEIA on another subject area but it was a little bit late in the process because it wasn’t part of the overall planning...” (PHU 22). These considerations lead to the next factor: context of the environment.

Context of the environment

The context of the environment represents the political, economic and social environment of the community or region implicated in the policy, program, or project being assessed. Although the goal of HIA is to maximize health and well-being, political and social priorities might conflict with
suggested mitigation measures as well as the acceptance of undertaking HIA as a whole. Thus, it is useful to find ‘policy windows’ to get acceptance from the different levels of political players and community leaders on the HIA process. This can become even more sensitive when the entity within which an HIA is undertaken is directly linked to political and governmental bodies.

PHUs noted the political context to be an important consideration when completing an HEIA. Specifically, considering timing and the presence of a ‘policy window’ (Overseas Development Institute, 2007) were deemed necessary to ensure recommendations on topics particularly seen as ‘controversial’ are ultimately implemented. For example, the then upcoming municipal elections may have been used as a way to include the issue to be assessed or the HIA process as a whole within the strategic plan. The degree to which a policy window might be necessary is affected by the structure of the PHU. For instance, when the board of health is linked with city council, the implementation of HEIA recommendations could become more influenced by political realities beyond those of the PHU. Some noted that the inclusion of citizen representation within the board of health can help balance out this effect. Overall it was pointed out that a strong management structure which supports the use of the HEIA tool is necessary to implement and use the process in an effective manner. “You need the structure in place, you need that support from the top for that to go through” (PHU 17).

The rest of the structure of the PHU also influences the environmental context of an HIA. HIA can be implemented using either a bottom-up or top-down approach. Although the bottom-up approach is most often favoured in theory by the different stakeholders, in practice it can encounter significant barriers without adequate structure. Indeed, having not only the support from higher management but also a structure with a strong upper management provides a greater ability to support and implement the resulting recommendations. Structure, however, is not sufficient on its own to
obtain buy-in and support for HIA, as it is also dependent on the overall organizational cultural context. Cultural context can signify a broad range of situations. Amongst the most salient here are the openness to procedural and organizational changes most likely to happen with the implementation and use of HIA which are tied to management style. Indeed, it is influenced by the openness or resistance of upper management to ideas coming from different levels (inherent to a bottom-up approach) as well as the quality of communication between the different divisions and levels of an organization.

The cultural context can also reflect the perception of a PHU regarding its responsibility to respond to the social determinants of health as well as its familiarity and commitment to concepts of health equity. While some units had specific teams dedicated to addressing the SDOH, others thought they should be integrated throughout all activities of the PHU since it is its “raison d’être”. Yet, other PHUs felt it is still necessary to convince the larger part of their unit of the need to consider disadvantaged groups in a “targeted universalism” approach. Targeted universalism refers to universal programs or policies which also include particular considerations and allocation of resources that disproportionately aid disadvantaged groups without stigmatizing them (Skocpol, 1991). A culture of sharing and communication between different divisions of a PHU were also found to facilitate more thorough HEIAs.

Influence of Key Actors/Stakeholders

A wide range of actors influence the HIA process. While those completing the HIA are key and central to the process, their work is also impacted by other staff and partners supporting the process such as staff acting as a node for advice on the process, specialized consultants, as well as team leads and managers. It is also impacted by senior upper management as well as external stakeholders and community partners. In contrast with the sheer availability of actors as human
resources described in the ‘inputs’ factors, the ‘actors’ factor can be encompassed within three themes: knowledge, support, openness to collaboration of the different actors.

Firstly, the knowledge of all different actors in terms of understanding the process involved with undertaking an HIA as well as knowledge of the social determinants of health and equity. As mentioned above, the knowledge of staff influences the HEIA process. Of course, there needs to be an adequate knowledge of equity concepts but there also needs to be a strong understanding of the HEIA process and tool, which was sometimes found to be lacking. Although many PHUs had one or two point-persons acting as a node to support the rest of the unit, there occasionally was difficulty with continuity of knowledge in the wake of structural or personnel changes. Indeed, although the majority of PHUs benefitted from and appreciated the training provided by Public Health Ontario, the knowledge was not always transmitted to staff more recently involved. Nonetheless, in some instances, the tool was in fact used as a way to build capacity and train, especially new staff, on addressing equity and the social determinants of health.

In addition, it is also necessary to have adequate support from the different actors. Indeed, some might not have an interest in implementing the use of the tool unless it is mandated and yet others might not be convinced that the targeted assessments promoted by HEIA are the ideal approach and would rather tackle the overall system instead of particular population groups. Have the support of all the staff involved in the overall policy, program, or project is also important since they will be acting on the implemented recommendations. As discussed earlier, support from higher management and/or decision-makers is also necessary to facilitate the implementation of recommendations. When HIA is institutionalized, support from higher decision-makers can also allow for greater allocation of resources and in turn allow for greater human resources allocated to provide knowledge and financial resources for more in-depth HIA analyses. The different support
from different actors might also influence and be influenced by the other factors within the process component of the framework, that is context of the environment, decision-making process, and nature of the policy, program, or project assessed.

Lastly, in addition to knowledge and support, the openness of actors to collaboration, which is inherent to the HIA process, affects the strength of the process. Indeed, collaboration is beneficial between the different levels of staff but also with different stakeholders and community partners. Some management styles might also not lend themselves to the HEIA process which requires a more collaborative approach to decision-making. Collaboration also varied with partners outside the unit. Although some PHUs did not feel ready yet to involve partners, many agreed that it is ultimately necessary to involve external partners as well as other sectors to respond to the social determinants of health more thoroughly. “It’s fine, public health uses it... but we don’t control housing, social services, etc. So we really need the... if we don’t get our municipal partners to adopt it, we’re gonna [sic] lose any momentum for this and lose the ability to apply the HEIA” (PHU 13).

The involvement of partners was also perceived to have created or strengthened relationships with community organizations.

Nature of policy, program, or project being assessed

The suggested policy, program, or project to assess influences the HIA process depending on the size and perceived importance of the issue being assessed to the organization or society. In fact, some PHUs felt that an HEIA might be mostly worth-while for larger programs or a piece of legislation. Completing HEIAs on such larger programs, however, also requires more resources and may be more challenging in terms of determining scope, purpose and relevant outcomes. This might ultimately become a barrier to adequately completing the HEIA at all. “[F]or the particular activity I
think it was manageable, but if we’re looking at those deeper agency activities or initiatives, that it would be very time and resource intensive, it would probably take months to complete” (PHU 30).

The nature of the policy, program, or project might dictate which disadvantaged groups are considered and examined, but it might also influence whether it is assessed at all. It also influenced the degree to which community groups and other partners were involved based on their receptivity to the issue as well as previously existing relationships with the partner groups.

The suggested policy, program, or project can also influence an HIA based on the potential for change that the policy, program, or project has. Previously existing relationships with the community might be reflective of a greater openness and willingness to change through the inputs of the community. Timing was also found to be key whereby the HIA and resulting recommendations should coincide with the decision-making cycle already in place.

Lastly, the nature of the policy, program, or project is also impacted by the prioritization it is given within the political and social context as explained above and the perception of its importance by the different actors. The potential for change might depend on the suggested recommendations themselves in terms of the capacity available to implement them and the existing competing priorities. The nature of the program was deemed by key informants to impact the probability for the resulting recommendations to be implemented based on competing priorities for funding, which lead to choosing one set of recommendations over another. Competing priorities might call for an assessment beyond the sole policy, program, or project on which the HIA was completed to determine and realign priorities and resource allocation.

Outputs
As of February 2014, there was a wide range of programs for which HEIAs were completed using either the original Ontario HEIA tool or a modified version of the tool. These included, amongst others, pre-natal classes, early health program, car seat clinics, sexual health clinics, needle-exchange harm reduction, expanding a dental program, the closure of a library, change to public transportation system, and the moving of a PHU building location.

Beyond the actual completed HEIAs, three main outputs emerged. The first main output is the institutionalized implementation of the HIA process. This institutionalization represents the more ubiquitous use of the tool but it can be done at different levels of an institution; i.e. either micro-level, macro-level, or both. Additionally, there are different degrees to which implementation can occur in terms of the systematic use of the HIA process as well as the level of completion of the entire HIA cycle; notably the evaluation of the HIA, which is often omitted.

The second is the development of recommendations. Indeed, whether or not they are implemented, the HIA process provides a documented rationale for reference on future decisions. It provides an accountability mechanism by which the rationale behind previously implemented decisions can be traced back and decisions to implement future recommendations can be adequately supported by evidence. “Well exactly; so this manager needed to make the case for her program for a number of reasons and everything was so well documented that nobody could poke holes in any of the documents made. And that’s what’s amazing.” Consequently, a completed HEIA can act as an accountability mechanism.

Lastly, there are future possibilities and expectations created by the HIA process. It also created future expectations in terms of creating stronger relationships with external partners. “So bringing all the players together and having it as a group thing, that was really ... and then integrating it into the whole planning process, so the HEIA forms a natural part.” It might also possibly create an
impact on leadership and power structures on the way in which decisions take place. “I’m just curious to see how that’s gonna [sic] be resolved, or what impact that’s gonna [sic] have on the program from a leadership standpoint; I’m curious to see how that’s gonna [sic] influence us” (PHU 18). For instance, there is a potential for change in the type of leadership and power dynamics by fostering greater bottom-up approaches to decision-making. In addition to the implemented recommendations, perhaps this output may be the most powerful and contribute to creating stronger evidence-based decision-making.

Discussion

This environmental scan revealed that although nearly half of the PHUs had used either the original or a modified version of the Ontario HEIA tool, the majority have not. PHUs not using the HEIA tool either had already pre-established approaches that they favoured, are still in the stage of deciding whether this tool is most suited and how to implement it, or do not see the use of a particular tool as the best approach to addressing inequity and the social determinants of health. The use of the Ontario HEIA tool was linked to the realities and considerations of the different factors within the theoretical framework. The use of the tool was not related to geographical area, population density, staff size, nor population size per staff in the unit.

Several strengths and positive aspects of the tool have been highlighted herein. The MOHLTC in conjunction with Public Health Ontario and the Association of Local Public Health Agencies could consider the barriers and concerns voiced to determine an optimal way of continuing the promotion of the health impact assessment process in general; either by promoting the use of any tool or the Ontario HEIA tool in particular. Ontario could benefit from the experiences of a range of different implementation and promotion approaches. These can be independent HIAs or integrated within
other impact assessment approaches (such as environmental or social) and can also be regulated or not.

As such, further support could be given to facilitate the exchange of knowledge and ideas between those PHUs who are already interested and engaged with HEIA. Indeed, while many already exchange information via the social determinants of health public health nurses networks, these may not necessarily include individuals involved with HEIA who are not public health nurses. Additionally, greater use could be made of the existing HEIA online community of interest, which has a focus on facilitating the use of the tool in mental and substance abuse issues (CAMH Knowledge Exchange, 2014). Similar communities of interest could also be developed for other frequently assessed domains. Such developments have the potential of creating a snowball effect in increasing the interest and use of the tool or a general HIA approach.

It is interesting to note that in some jurisdictions around the world, HIA is not regulated, but still formally promoted through the Public Health Act or regional health strategy. Such is the case in Ireland, Spain, or Switzerland, amongst others (Kemm, 2013). In Quebec, HIA was institutionalized through a legal process which requires the assurance that any law passed does not negatively impact health and gives the power to the Ministry of Health to enquire on any suspected negative impacts (Banken, 2001; St-Pierre, 2013). On the opposite side of the spectrum is the case of British Columbia which mainly relied on champions to promote and implement a novel HIA approach. Following a change of government, however, a consequent change in staff resulted in the disappearance of the initiative (Banken, 2001). The case of Ontario is an interesting one since there has been no province-wide plan, but rather the Ministry and Public Health Ontario presented the HEIA to PHUs as a suggested tool and provided them with support and training. This resulted in a wide range of implementation approaches across units. As such, this case study demonstrated that
regardless of the approach taken, the success of using health impact assessment is dependent on a range of factors that go beyond the type of tool, the context, and the specific implementation approach. These include the political will and support for the process by providing resources and facilitating training and exchange opportunities. This Ontario case provides relevant examples of the way in which these factors can influence the implementation, perception, and use of a health impact assessment approach, which could be applicable to other Canadian contexts. Similar factors were also reported by the recent briefing note drafted by the National Collaborating Centre for Healthy Public Policy on the “Organizational Conditions Favourable to HIA” (St-Pierre, 2014).

The framework further developed and revised throughout the analysis of this study can be seen as dynamic and continuing to evolve as it is applied and used in different situations. It can be seen as a starting point to guide the consideration of contextual factors influencing the completion of an HIA. Emerging themes, however, could be allowed to influence and reshape the framework as necessary and relevant to a particular context. As such, this revised framework served as a starting point to the Process and Impact evaluation described below. Interestingly, emerging themes from this study reinforced those factors and sub-factors described in this chapter but also informed further revisions to the framework. This is described in greater detail in the discussion Chapter 5 below.

**Limitations of the scan**

Key informants from each PHU represented different levels and different responsibilities, which could be seen as introducing a lack of coherence in the information gathered. However, it could also be seen as providing different perspectives and in fact representing different possible positions. Consequently, and given that in most cases only one informant from each PHU was interviewed, the thematic findings cannot be allocated to specific PHUs but must rather be considered as a general overview of the Ontario PHUs position.
By the time this scan is published, the figures representing the degree of use of the tool across Ontario PHUs will likely be obsolete. These numbers remain interesting because they provide a sense of the speed with which such a tool can be implemented across various geographical and institutional contexts. It also provides the relevant factors, challenges and facilitators which can influence the use of the tool.

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Chapter 4

Including Migrants in Health Equity Impact Assessment:

A Process and Impact Evaluation

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Including Migrants in Health Equity Impact Assessment: a Process and Impact Evaluation

Abstract

As health impact assessment (HIA) assesses policies, programs, and projects unrelated to health for their unintended impacts on health, it presents a key approach to preventing ill health by acting on the social determinants of health; that is, the conditions in which individuals live and work. The Ministry of Health and Long-Term Care of the province of Ontario (Canada) has developed an HIA tool, called Health Equity Impact Assessment (HEIA), to guide the explicit consideration of disadvantaged groups within the process along with a specific supplement for its public health units (PHUs). Given the large number of migrants in the province and the mandate of PHUs to act on the social determinants of health, the tool presents a unique opportunity to prevent the decline in health experienced by migrants staying in the country. Indeed, the health of migrants declines within ten years of residing in their new country because of the social determinants of health they face (Benkhalti Jandu, Dimitrescu, Mohamed, & Najafizada, 2011). This study evaluated the way in which migrants have been included in HEIAs completed by PHUs servicing a significant number of migrants. Process and Impact evaluations were undertaken through interviews and questionnaires with key informants from four mainly urban PHUs.

The Process evaluation found the HEIAs in which migrants were included covered a broad range of topics. The process of these HEIAs and their inclusion of migrants was influenced by four overarching themes: (1) the type and availability of resources including the nature of the tool, human, time, and financial resources; (2) evidence, which depended on the availability of data and the inclusion of community groups as a source of evidence; (3) the way in which recommendations were prioritized, implemented, and monitored; and (4) the overall impressions the PHU staff had on
the process, specifically as they relate to the decision-making process and the opportunity for intersectoral collaboration.

The main findings of the Impact evaluation included: (1) migrants were only partially included in HEIAs and this mainly occurred when an impact was already anticipated; (2) although some of the simpler, more easily actionable recommendations relevant to migrants had been implemented, it was too early to assess the implementation of the other recommendations; lastly (3) the HEIAs also resulted in stronger links with migrant community organizations.

The current inclusion of migrants in HEIA is encouraging but PHU staff require greater training on the HEIA tool and greater guidance on when and how to consider migrant issues. They also require greater support from upper management and higher levels of government to ensure the continued use of the HEIA tool and the greater acknowledgement of its potential to respond to the decline in migrant health.

**Background**

Canada’s immigration policy is purposively focused on driving economic growth by countering current demographic trends and low fertility rates (Chui, 2003; *Immigration and Refugee Protection Act*, 2001). Despite this clear mandate, it is countered by the decline in migrant health observed within ten years of residing in the country (De Maio, 2010). Evidence suggests that the social determinants of health are a main culprit for this decline (Benkhalti Jandu, Dimitrescu, Mohamed, & Najafizada, 2011; De Maio, 2010; Dunn & Dyck, 2000; Fuller-Thompson, Noack, & George, 2011). Health impact assessment offers a promising approach to prevent this decline due to its capacity to act on the social determinants of health (WHO, 2011). In recent years, the Ontario Ministry of Health and Long-Term Care has developed a tool explicitly guiding the inclusion of minority groups
within the health impact assessment process: the Ontario Health Equity Impact Assessment (HEIA) tool. This study evaluates the degree and process by which migrants have been included in HEIAs.

A large proportion of Canada’s population is constituted of migrants, with nearly a fifth of its population being born outside of the country (Statistics Canada, 2006). This proportion continues to grow with the majority of these migrants being economic immigrants (Health Canada, 2010; Statistics Canada, 2006). Other types of migrants to the country are those part of the family reunification program, refugees, international students, and temporary migrant workers (Citizenship and Immigration Canada, 2014). While the majority of migrants to the country have historically been from Western Europe, there has recently been a shift in this pattern whereby the majority now originate from China, India, and the Philippines, as well as other non-Western European countries (Statistics Canada, 2006).

Although the average health of migrants entering the country is higher than that of the Canadian-born population, this advantage declines and disappears compared to that of other Canadians within the first ten years of residing in the country (De Maio, 2010; McDonald & Kennedy, 2004). Several hypotheses have been posited to explain this phenomenon, including the acculturation of migrants and their adoption of unhealthy habits of many in North American societies, including a sedentary lifestyle (De Maio, 2010; Health Canada, 2010). Nonetheless, strong evidence suggests the decline in migrant health is due to a complex interaction between several social determinants of health; that is the economic, political, and social conditions in which individuals live and work, spanning all levels of social organization. These include racialization, education and employment, housing, social networks, and gender (M. Benkhalti Jandu et al., 2011; De Maio, 2010; Fuller-Thompson, Noack, & George, 2011; Galabuzzi, 2006; Hadi & Labonte, 2011; Tastsoglou, 2006;
Wayland, 2007). In order to prevent this decline in health, Canadian society and institutions could more systemically strive to remove or reduce the barriers faced by migrants.

Health impact assessment (HIA) presents a promising approach to tackling the social determinants of health. HIA assesses the unintended impacts a proposed policy, program, or project might have on health and presents recommendations to mitigate negative impacts and promote positive impacts (SOPHIA, 2014). Recent years have seen a renewed momentum for HIA with a particular focus on contributing to preventing inequities in health. Health inequities are differences in health outcomes which are also unjust and preventable and are generally experienced by particular socially disadvantaged groups (Braveman & Gruskin, 2003). Several frameworks and tools have been developed globally to guide the more explicit inclusion of disadvantaged groups in HIAs (Orenstein & Rondeau, 2009).

In 2009, the Ontario Ministry of Health and Long-Term Care developed a Health Equity Impact Assessment (HEIA) tool to provide similar guidance within the Ontario context (Ontario Ministry of Health and Long-Term Care, 2012). The tool contains an explanation of how to undertake an HEIA along with a grid to document the decisions made at each step of the process: scoping, potential impacts, mitigation, monitoring, and dissemination. The tool also provides a list of suggested disadvantaged groups to consider during the assessment. Migrants, referred to as ‘immigrants and refugees’ in the tool, are interestingly found as a subset of the ‘ethno-racial communities’ group, rather than as a group on its own (Ontario Ministry of Health and Long-Term Care, 2012). The Ministry subsequently partnered with Public Health Ontario to produce a supplement to provide additional guidance specific to public health units (PHUs) (Ontario Ministry of Health and Long-Term Care & Public Health Ontario, 2012).
PHUs are regional or municipal agencies responsible for overseeing public health issues and implementing interventions accordingly (Association of Local Public Health Agencies, 2004). PHUs are in a unique position given their intrinsic mandate to address the broader social determinants of health (Ontario Ministry of Health and Long-Term Care, 2008). Ontario is the province welcoming the largest number of migrants with 45% of all permanent residents and 27% of all temporary foreign workers entering the country (Health Canada, 2010). Thus, Ontario PHUs could be pivotal to acting on the decline in migrant health through the utilization of the HEIA tool.

This paper presents a combined Process and Impact evaluation of the inclusion of migrants in the HEIAs completed by Ontario public health units servicing a significant migrant population.

**Methods**

**Study design**

Three types of evaluations have been outlined in the health impact assessment literature: Process, Impact, and Outcome evaluations. The goal of a Process evaluation is to learn from the experience of undertaking an HEIA; that is, how and why an HEIA has worked or not. An Impact evaluation seeks to understand the effectiveness of the HEIA in changing the originally suggested policy, program, or project and the reasons that lie behind it. An Outcome evaluation evaluates the effects of the HEIA on the actual health outcomes of a population. This last type of evaluation, however, is more time consuming and resource intensive, requiring a longitudinal approach to best assess effects and has rarely been undertaken to date (O’Reiley, Trueman, Redmond, Yi, & Wright, 2006; Taylor, Gowman, & Quigley, 2003). In addition, it is extremely difficult to attribute causality to the HIA process with currently available methods. Therefore, completing an impact evaluation has been deemed a more efficient way of assessing the effectiveness of an HIA (Kemm, 2013); and particularly appropriate for a thesis based project. Figure 4.1 provides a visual representation of the
stages where each type of evaluation would be undertaken. It is worth noting that different disciplines may have different nomenclature for evaluation typology. One of the better known examples is the Donabedian framework of evaluation (2005) which evaluates structure, process and outcomes. This framework, however, was developed for clinical and medical care setting and is thus, not necessarily as appropriate for issues of public health and health impact assessment since it does not make the distinction between the potential effects of an HEIA on policy versus on the actual health of populations (Chen, 1996; Donabedian, 2005; IFAD, 2009). The evaluation nomenclature suggested by Taylor (2003) could be deemed more appropriate for this project since it is the one developed for the purposes of evaluating HIAs and is the one recognized and used by the HIA practitioner community (Kemm, 2013).

**Figure 4.1 Representation of HIA Evaluations**

There is no single agreed upon methodology for completing HIA evaluations. It is generally understood that this should be dependent on the nature of the HIA and the available resources (Hawe, 1990; Meyrick, 2002; Quigley & Taylor, 2004). This situation is rendered complex by the fact
that this project did not seek to evaluate a single HIA, but rather to evaluate the overall way in which a common HIA approach has influenced the consideration of migrants and the determinants affecting their health. While a few sets of criteria have been suggested to evaluate HIAs, these are often more suited to assessing single HIAs (Kemm, 2013; Quigley & Taylor, 2004). They are generally linked to specific HIA steps or goals particular to a single HIA. Quigley & Taylor (2004), however, suggest a set of criteria based on the type of evaluation. This renders the use of their criteria better transferable to the purposes of the project reported herein.

This evaluation consisted of a single-case design with embedded units of analysis, where the case was the inclusion of migrants in the Ontario MOHLTC HEIA process and the units were the different PHUs (Green & Thoroughgood, 2009). The research question was “How have HEIAs undertaken throughout Ontario Public Health Units (PHUs), impacted policies and programs responding to the specific needs of immigrant groups? And what factors have affected this?”

**Heuristic framework**

This evaluation was guided by a specific health impact assessment heuristic framework developed based on a literature review, policy analysis and programmatic evaluation theory, findings from a scoping review, and interviews with HIA practitioners throughout Ontario PHUs as further described in Chapter 1 and 4 above. This theoretical framework had seven main factors: nature of the tool; inputs; context of the environment; decision-making process; actors; nature of policy, program, or project assessed; and outputs. Each factor contains sub-factors as depicted in Figure 4.2. The framework served to guide the interview questions and questionnaire as well as the deductive thematic analysis. Lastly, the factors of the framework served to frame the recommendations for the inclusion of migrants summarized in Table 6.2. As inductive themes were emerging from the
analysis, final revisions to the heuristic framework were included. These are further described in the discussion below.
Figure 4.2 HIA Theoretical Framework
Data collection

Based on the findings from the environmental scan detailed in Chapter 3 above, four PHUs were purposefully sampled based on their use of the Ontario HEIA tool and a significant presence of migrants in the geographical area they service (Yin, 2003). These PHUs had a high proportion of foreign-born residents were included in this evaluation. These PHUs all serviced mainly urban, relatively small geographical areas (below 300 km²). The units also had relatively large staff size which were all above the provincial median of 200 (Refer to Benkhalti Jandu, Bourgeault, & Tugwell, 2015).

Key informants were sought out based on the reference provided by those informants’ contacts during the environmental scan project preceding this evaluation (Chapter 3). The informants consisted of either PHU staff having completed HEIAs (generally public health nurses or consultants) or team leads, supervisors, or directors responsible for overseeing the process. This allowed for different perspectives of their insight on the HEIA process and the inclusion of migrants within it. Between two and three key informants were included from each PHU, for a total of 10 informants. This sample allowed for at least one informant involved in the completion of HEIA and one responsible for the oversight, while ensuring saturation. In one case, the responses from two informants were provided jointly during a same interview as further described below.

A short questionnaire and an interview guide were developed based on the criteria suggested by Quigley &Taylor (2004) for evaluating HIAs, modified for the purposes of this study (Box 1). The
Elements relating to the **Process evaluation** are:
1. How was the HEIA undertaken (such as time, place, population, which determinant(s) of health was assessed)?
2. What resources were used (financial, human, etc.)?
3. What evidence was used? – Is there any specific evidence for migrants?
4. How were the recommendations prioritized and how were priorities of migrants distinguished from those of native-born population?
5. What did those involved in HEIA think of the process as it relates to the inclusion of migrants?

Elements relating to the **Impact evaluation** are:
1. Which aims and objectives of the HEIA were met?
2. If any, which specific aims regarding migrant groups were met?
3. How and when were recommendations from the HEIA followed or rejected?
   a. What factors contributed to decisions about recommendations regarding migrants?
4. What other impacts were there as part of the HEIA? Example: promotion of intersectoral action, raising profile of previously less known health need.
5. Did any of the impacts from issue 4 above involve migrant groups in the community? Example: creation of links with specific ethnic minority organizations that are involved with migrants or organizations servicing migrants in general.

The questionnaire provided an initial overview of the status, number, and nature of HEIAs considering migrants and explored initial reasons for this status. This mainly informed the Impact evaluation portion but also contributed to streamlining and targeting the interview questions according to each informant’s responses. Refer to appendix C for a blank questionnaire. Following the completion of the questionnaire, 30 to 40-minute semi-structured interviews were conducted with each informant. Refer to appendix C for the interview guide. Two respondents were not able to submit their questionnaires prior to the scheduled interview. Those questions were therefore explored directly during the interview whereby the questionnaire questions were asked verbally first followed by the questions developed for the interview. All interviews were recorded to ensure accuracy of transcript and facilitate analysis. Thus, a total of seven questionnaires and nine interviews were completed. Table 4.1 clarifies this by detailing which number-coded informant responded to each format (questionnaire or interview).
## Table 4.1 Number-coded Informant in Each Format

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<th>Number-coded informant</th>
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<th>Interview</th>
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<td>Informant 4.2</td>
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<td>X</td>
</tr>
<tr>
<td>Informants 4.3</td>
<td>X</td>
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</tbody>
</table>
Data analysis

The data collected from both questionnaires and interviews were analyzed qualitatively using the analytical software NVivo10 through a combined inductive and deductive thematic framework analysis (Crotty, 1998; Green & Thorogood, 2009). Questionnaires were uploaded onto NVivo and codes were highlighted directly on the uploaded documents. Interviews were transcribed verbatim by the main author. The transcriptions were uploaded onto NVivo and codes were highlighted from the uploaded documents.

Codes were first determined deductively based on the factors and sub-factors of the theoretical framework described above, as relevant to answering the research question. Those initially established codes which were not used, were eventually deleted. Codes were also defined inductively as they arose from the data using the general inductive approach (Thomas, 2006). This analytical approach leaves some openness for the emergence of themes that were not expected and had been found to be useful in previous qualitative evaluations (Thomas, 2006).

The codes obtained from both the questionnaires and key informant interviews were triangulated. Triangulation allowed the data obtained from both questionnaires and interviews to complement each other, adding depth and accuracy to the findings. The triangulated codes were subsequently grouped and collapsed into broader/overarching themes. To complement this analysis and explore further any omitted themes, cluster visualizations generated by NVivo depicting word similarities between different codes were used. The most useful cluster is found in Figure 4.3. The lines connecting different codes depict the presence of different degrees of word similarities represented by different thicknesses of the lines. Therefore, when two codes appeared as connected, further exploration of a potential themes emerging from the link between these codes was undertaken.
Figure 4.3 Nodes clustered by word similarity
The themes obtained were then categorized based on their relevance to either the Process or Impact evaluation components and mapped onto the theoretical framework, as relevant. Figure 4.4 depicts the analytical process.

**Figure 4.4 Analytical process**

![Analytical process diagram]

Lastly, in addition to the gaps emerging from the analysis suggesting a need for further research, a visualization generated by NVivo depicting all the codes used according to the number of items...
coded was used. Those codes in Figure 4.5 with the smaller squares are those with the least items linked to them. Of particular interest are those in the bottom right corner since they are not nestled under any overarching wider code and therefore have been the themes least mentioned in the interviews or questionnaires. This allowed the determination of those codes which would benefit from greater exploration in future studies on similar topics.

Because the findings from the interviews and questionnaires were seen as representing the overall perspectives of PHUs rather than each individual PHU, the interviews and questionnaires were synthesized. For that reason, quotes to support the findings were used selectively where they were most representative of particular statements.

**Ethics**

The procedures for this study were approved by the University of Ottawa Research Ethics Board and approved by the Ontario Ministry of Health and Long Term Care (Health System Strategy and Policy Division). Appendix D contains the Approval Notice from the University Research Ethics Board as well as a Letter of Permission from the Ontario Ministry of Health and Long Term Care. Specifically, each participant was distributed a letter of information and was asked for verbal consent, which was digitally recorded (Appendix C). Any required clarifications on the project and/or process were discussed during the completion of the verbal consent and were also recorded. Anonymity was important to participants to allow them to comment freely on the tool developed by the Ontario MOHLTC and its application within their units without straining their relationships with the Ministry or within their unit. Thus, anonymity was guaranteed to all participants by randomly number-coding each PHU, not referring to any characteristics that might distinguish a particular PHU, and not

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4 One PHU required the submission of these forms and supporting documents to their ethics board before obtaining clearance to participate in the study. Aside from an electronic notification of an internal permission for the informants to participate, the authors did not receive any formal documentation of the process.
providing any direct quotes from participants. The authors were the only ones with access to the original names of key informants.

**Results**

All the themes uncovered for the Process evaluation fell under the pre-established categories based on the questions in Box 1: resources, evidence, recommendations, and impressions on the process. This was also the case for the Impact evaluation themes which fell under the following categories: aims, recommendations, and additional impacts. One major emergent theme was the definition of migrants, which was not consistent across informants. It was therefore necessary to begin the interview by defining this term. As such, the results herein also begin by demonstrating the way in which the concept of migrants was conceived - or misconceived - and the rationale for the definition ultimately adopted throughout the evaluation.

**Defining migrants**

“...immigrants is culture equal language” (Informant 4.1)

The issue of terminology became an important point in the interview process whereby agreement was needed on the consistent use of a common term with a clear understanding of its definition. This was mainly due to the fact that the term “migrants” is seldom used in PHU contexts. Instead, there was a tendency to focus on particular categories of migrants. The most common term referred to was “new comers”, who were defined as having immigrated within the last two to five years. Although the term “new comer” and “immigrant” were sometimes used interchangeably, in other instances “immigrants” denoted more established individuals. Refugees and other migrant categories were also referred to separately but only emerged marginally during the interviews held. There was also confusion on the difference between migrants and ethnic, cultural, and language minorities along with the different implications related to the different groups.
Most respondents had a good understanding of the overall definition of migrants and many acknowledged it as a separate concept from ethnicity. In practicality while completing the HEIAs, however, migrant and ethnic minority issues often remained conflated. As further detailed below, language was the most common response to migrant barriers, while the barriers resulting from the migration process itself were acknowledged to a much lesser degree. “New comers are sometimes embedded with Francophone... you know ‘there are problems with ethnic, Francophone people’ or ‘immigrants is culture equal language’, ‘we have to reach people in Chinese, Somalian, you know.” (Informant 4.1).

Several respondents also felt migrants are indeed a complex group with individuals falling into more than one disadvantaged group; that is, they were cognizant of intersectionality. It was nonetheless found difficult to apply this while undertaking the HEIA. This was thought to be due in part to the lack of complexity in the knowledge of the staff undertaking HEIAs, a lack of available information, and the nature of the tool whereby the rigidity of the grid rendered difficult the exploration of overlapping minority groups. “Some of the thoughts when I was completing it is that there are groups that come across several of the topics, it doesn’t mean that these people are at increased risk cuz [sic] you can have people from ethnic background, or an immigrant, or a refugee low income, who’s a teen mom, so what does that mean in terms of... are they three times greater risk? How does that all work out I guess?” (Informant 4.3)

The United Nations uses the term “migrant” as an umbrella term for any individual residing in a foreign country for either voluntary or involuntary reasons. Except for temporary migrant workers, the term also applies beyond one year of residence (International Organization for Migration, 2011). Nonetheless, this definition is not universally accepted. In Canada, the term “permanent resident” is used to denote similar foreign-born individuals as “migrants”, however this does not include
temporary foreign workers (Health Canada, 2010). Generally, however, terms referring to specific statuses are used, the most common of which are “immigrant” and “refugees”. Additionally, in certain contexts, yet other different terms are used, such as “new comers”. Given this lack of coherence in the terminology used within Canada and that this study seeks to include temporary foreign workers, the term “migrants” was used herein.

**Process evaluation**

All PHUs included in this evaluation completed HEIAs where migrants were considered to varying degrees between 2012 and 2014. The HEIAs in which most informants were involved considered migrants as an explicit minority group and had some recommendations targeting them. One of these HEIAs solely targeted migrants. As further explained below, the consideration of migrants was often done on the condition that they were already a group expected to be impacted. Migrant and community organizations were involved explicitly in a few cases but community members (i.e. citizens) were not directly involved. All assessments discussed were undertaken on programs or projects. Although the majority of these HEIAs were desktop or rapid, a few were comprehensive. All HEIAs were completed by employees within the PHUs rather than external consultants. The majority of them were completed by only one or two main individuals but could reach up to eight staff. Interestingly, those HEIAs involving more people were not necessarily the comprehensive ones.

A wide range of issues were covered by the PHUs included in the evaluation. Certain issues involved very specific topics such as active school transportation and other physical activity, tobacco-free living program, pre-natal services, and injury-prevention program. Others were broader topics such as parenting support during transition to adolescence or the adequacy of reach and consultation of populations and communities in programs relating to chronic disease.
Resources

Relevant processes relating to resources fell under three broad themes: nature of the tool, human resources (including management and political support), time, and financial resources.

A key and often underrated step of the HEIA process is the setting of a scope that can respond to the goals of the HEIA, respond to the needs of the community, and is manageable. The Ontario HEIA tool provides a good prompt for this step but the setting of the scope remains largely dependent on the resources available. Although informants recognized that it should ideally be dependent on other reasons such as needs, those completing the HEIA were often restricted to the limited resources they had available. The resources available were influenced by the buy-in obtained from upper management for the specific HEIA or the use of the tool in general. The tool itself is a good resource, although some informants felt it could be made more user-friendly. For instance, it was found that sometimes population groups overlapped or other times, defined too broadly for the needs of a specific HEIA. Thus, it was often felt that more flexibility was needed in defining population groups according to the context of the assessment. There was a need for more explicit means of considering and documenting intersectionality of different population groups. Consequently, HEIA practitioners did not always work within the tool grid per se, but rather used it as a guide. Indeed, it was acknowledged that an in-depth knowledge and critical thinking regarding defining relevant groups was needed, for instance determining which specific migrant groups are relevant. “And they talk about cultural minorities immigrants and refugees, so that is a good prompt, but I think you have to look specifically at the population that you’re looking at and what’s gonna [sic] be the best fit and what’s gonna [sic] be most appropriate for you. So I do think that it’s a good prompt to make sure that it’s something that you consider. But we certainly came at it from having past experience and interest in looking at new comer populations as well.” (Informant 2.1)
Particularly regarding migrants, it might be useful to have greater definition around migrant groups and an explanation of the ramifications the consideration of migrants might have. At minimum, links to such information already available through other organizations were said to be welcomed.

Higher regional political support and more direct buy-in from higher management translated into greater financial resources which enable a more thorough inclusion of migrants within the process along with the timely implementation of recommendations. Despite the availability of other resources, the time available greatly determined the scope of the HEIA. Indeed, in the presence of already established competing priorities, the staff may only have limited available time to undertake a new suggested HEIA.

Human resources were discussed heavily as a main driver of the HEIA process. Indeed, there was not always the capacity to complete HEIAs to the depth wanted. It was especially difficult to find the capacity to have adequate knowledge and engage with migrant communities and organizations.

It is useful for all staff involved in completing HEIAs to have a strong knowledge of the tool and overall HEIA process. It was felt that more guidelines and mentoring on the tool are needed. Indeed, additional training might increase the willingness and capacity to undertake HEIAs. In particular, some staff did not have a strong grasp on the distinction between intended and unintended impacts, and therefore the value added of HEIA compared to other evaluation approaches. The network of public health nurses has been a useful platform to exchange information, better understand how to use the tool and incorporate different groups. It was expressed that having access to a greater number of examples of completed HEIAs would be useful along with clearer guidelines on when and how it might be appropriate to leverage findings from these HEIAs, specifically in terms of findings relating to migrants.
Additionally, despite having large numbers of migrants in their region, there remained a weakness in understanding migrants. There was a need for greater understanding of the definition of migrants and the different types of migrants, as explained above, but also the particular issues they might encounter differently from non-migrants. Indeed, several respondents who had expertise in equity issues felt that there still remained significant assumptions within the majority of PHU staff that the majority of migrants are low-income individuals who do not speak Canada’s official languages and that these are the only – or main- determinants to address. “So, low income... and in some cases, it is automatically but with a lot of assumptions. But this is low income and new comers to Canada.” (Informant 4.1) There also remained a perspective that migrants’ deteriorating health is mainly due to “picking up bad habits” rather than the societal conditions to which they are exposed. The presence of specially trained support staff was seen as a significant option to help navigate the specific knowledge required to include migrants in the HEIA process. In addition, it was felt that staff who are themselves migrants might be able to provide a stronger perspective and have greater capacity relating and engaging particular communities. Nonetheless, the key informants reported that the majority of staff within PHUs remain Canadian-born Caucasian.

In addition to depending on migrant staff, it may be more effective to connect with community groups and organizations. It was felt that adopting a participatory exchange approach with community groups could facilitate a better knowledge of the population and aid in prioritizing as well as assessing their challenges. “The availability, or the ability to partner with the community... do address because we can’t reach these populations without the help of others...” (Informant 4.3) It was felt necessary to be careful with the way in which these organizations are engaged. As these organizations are faced with a greater number of requests for collaboration, they might find themselves unable to respond to the demand. It was therefore felt important to build a more structured process for inter-organizational knowledge-exchange. Lastly, buy-in from upper
management heavily influenced the importance given to migrant groups and therefore their inclusion in HEIAs and the subsequent implementation of recommendations.

Evidence

The adequate use of the HEIA approach requires an evidence-based (or evidence-informed) approach to decision-making. Evidence is needed for determining baseline conditions as well as impacts on health known to happen if exposed to certain factors or social determinants. The greatest concern expressed about adopting an evidence-based approach was the lack of availability of data and/or the limitation of data. Detailed data are first needed for determining whether migrants should be a priority group or focus of the HEIA as well as defining the types of migrant groups relevant to a particular context for a particular HEIA. The demographic data routinely collected often does not provide the level of detail required to respond to the needs of the HEIA process. Informants mentioned that practitioners were often limited to data on the languages spoken at home.

Data are also needed to assess the impacts and provide effective recommendations on migrants. The outcome measures used affect the assessment and conclusions drawn on the impacts on populations. There was an impression that evidence often remains medically oriented, focusing on morbidity and mortality, which prevents from assessing the root causes of diseases. This is particularly relevant for newly arrived migrants for whom mortality and morbidity data may not adequately reflect the barriers they encounter. “Because probably we would have gone as we often do, it’s sort of ‘mortality, morbidity’ you know, those kinds of populations. And for new comers, probably the mortality, morbidity is not there to begin with.” (Informant 3.1). The use of systematic reviews was seen as an ideal source of data, but these often did not provide the level of detail needed for minority groups, notably migrants. It was often necessary for practitioners to complete
their own literature review, which they acknowledged is not of the same quality. Nonetheless, the literature remains sparse, specifically within the Canadian context. It was often necessary to rely on US data, which has a very different context. When trying to remedy this by requesting more local information, there was a great dependency on epidemiologists within the unit. As the implementation and use of the HEIA tool becomes wider, it was felt unlikely that the current epidemiologists would have the capacity to meet the demand.

Having previously completed HEIAs helped in being capable of retrieving data more efficiently. This also created a cascade of knowledge whereby information could be drawn from colleagues having completed similar HEIAs in terms of topic or population. Despite all efforts, when sufficient data was not available, there was a feeling of too much reliance on assumptions and not enough guidance on how to address this problem. This in turn made some staff wonder about the use of the tool in such circumstances. Political support might trigger more data collection through funding initiatives. Nonetheless, it was felt by some supervisors that too much reliance is put on published evidence as opposed to community engagement as equally valid evidence.

Those teams that did include migrant community groups and organizations in their process found great added value in terms of assessing the need, providing knowledge on impacts relevant to the context, thus enriching the evidence found in the literature, and bridging gaps in knowledge. “...to be able to have that local feel and I think that’s obviously where our community partners and those connections have to come into play to know exactly what you should in a particular community because I think there’s a lot of difference there.” It also helped in determining mitigation measures and avoiding a paternalistic approach to the process. Despite these benefits, there was, at times, difficulty for these community groups to understand the goal of the social determinants of health.
approach and why the evidence requested was linked to health. Difficulty for the same reasons was encountered when disseminating the results and recommendations back to communities.

Recommendations

Findings relating to recommendations revolved around four main themes: link to adequate evidence, prioritization, unforeseen effects of specific recommendations, monitoring of implemented (or not) recommendations.

The determination of recommendations must be based on the evidence found. This was not always adequately linked whereby the evidence documented reflected in the rest of steps, notably the impact appraisal and recommendations. “It’s like I see a disconnect between the type of evidence that people show and the rest of the analysis.” (Informant 4.1). Some recommendations were also based on previously successful mitigation measures and interventions. Nonetheless, recommendations relating to migrants often remained simplistic; mainly focusing on the translation of information into different languages, instead of addressing the more complex set of determinants affecting migrant health, such as racialization, employment, social capital, etc. The exceptions to this situation were those HEIAs which focused solely on migrants. The need for more information and data on migrants was also a frequent recommendation in any type of HEIA.

The prioritization of recommendations seems to be based on three main reasons. The first is the degree to which a recommendation is seen as ‘easily actionable’. This was the case for implementing translation and communication strategies as main recommendations. Secondly, recommendations were prioritized based on the input provided by community organizations and perceived need. “Because if we went to the immigration centre, some of them were like ‘ten different languages they wanted translated’ but then when we went to find out ok well what is the main language spoken in our region, and then we categorized it accordingly ... and that was our
decision-making process.” (Informant 3.2). Thirdly, recommendations relating to migrants were also sometimes prioritized because of the focus of the team, the PHU in general, or specific political support for a particular migrant issue rather than because of the context and findings of a particular HEIA. An additional, indirect, way of prioritizing recommendations is by degree of recurrence across HEIAs. It was suggested that similar and complementary recommendations from various HEIAs could be pooled together and implemented at a higher level.

When implementing recommendations relating to migrants, it is necessary to ensure that these do not lead to stigmatization. It is also important to be particularly careful with undocumented migrants in terms of how they receive the recommended interventions. Indeed, by virtue of their illegality, it may be particularly difficult to reach these populations. For instance, if a certain program requires the provision of documentation to be sent to the Ministry, it may be avoided by undocumented migrants by fear of being found. Sometimes, ensuring adequate implementation is rendered difficult by the fact that some staff completing HEIAs are not aware of whether their recommendations are or will be implemented at all. “And I kinna [sic] don’t know what happens now with this... is it just a thing we fill out and that’s [that]...” (Informant 4.3). This lack of ownership is problematic not only for the monitoring process, but also the continued support for the HEIA process in general.

Some units voiced the intention to try pursuing the monitoring step. Unfortunately, some informants felt that they do not possess enough direction on how to proceed and would require further guidance on how to monitor the implemented recommendations as well as feedback on the HEIA process they have completed.

Impressions of the process
This last section seeks to report on the impressions of those involved in the HEIA on the process as it relates to decision-making, collaboration, and the HEIA process in general.

The decision to use the tool came from different levels in bottom-up versus top-down approaches. This might influence the way in which the whole process is perceived, that is, whether there is intrinsic buy-in or whether it is just completed out of expectation. It was generally agreed that HEIA should be used from the beginning of the project development for it to be most useful. The way in which migrants are treated and viewed politically, however, heavily influences how HEIAs are undertaken and the degree to which migrants are considered. This could be somewhat influenced by ensuring a citizen representation on the boards of health. Nonetheless, HEIA has been implemented to different degrees with inconsistent monitoring resulting from inconsistent guidance on how to proceed. “... and honestly, I wasn’t given any other direction as to next steps for that because that has to come from our director” (Informant 1.3). Some units, on the other hand, have received some instructions and have decided to complete a series of HEIAs and look at implementing recommendations all at once.

Collaborating with other teams in the PHU was seen as useful, but the size of the units and the number of teams sometimes rendered difficult knowing who was working on what topics. “So lots of divisions, lots of departments... we probably should collaborate more than we do, but because we’re so big, half the time you don’t know who should be involved” (Informant 1.3). Involving communities and community groups can be fruitful but is time and resource intensive. In addition to accounting for the resources needed for them to partake in the HEIA, it was necessary to account for the resources initially needed to convince them to partake in the HEIA. Firstly, creating the necessary relationships with key community organizations and leaders; and secondly, to adequately explain the purpose and nature of the HEIA and raise awareness about the issue at hand. “It’s hard
for anybody to understand what public health does... so what we're learning is that it's not one consultation that's needed, it's multiple conversations over a period of time to get that understanding ‘ok, this is actually what we can provide’” (Informant 3.1). It is important to ensure the migrant groups reached are not only those with which links have already been established to the detriment of involving other, likely more isolated, groups. It was also felt necessary to find the best way of communicating with different migrant communities; for instance, sometimes word-of-mouth is often the best form of communication. As previously mentioned, staff with certain backgrounds were thought to be helpful in facilitating or guiding the communication.

Overall, HEIA was perceived as a useful process, systematizing evaluation of effects of interventions and programs on migrants. It would be important to create a culture within the units where this process is valued and understood. This can be helped by allowing the opportunity for practitioners to take responsibility, or at least take part, in the implementation of the recommendations they have proposed for them to retain their interest and feel its value added.

**Impact evaluation**

This study did not evaluate the impact of a single HEIA, but rather the overall impact of HEIAs where migrants should have been relevant. Based on the criteria described above, the impact evaluation ultimately revolved around three main concerns: (1) whether the aims of undertaking the HEIA process were reached, (2) whether and why were recommendations implemented, (3) whether there were additional impacts that go beyond the expectations of completing the HEIA. In particular, the context of migrants was analyzed in all three concerns.

1. **Aims**

The Ontario Ministry of Health and Long-Term Care defined four main objectives for HEIA (Ontario Ministry of Health and Long-Term Care, 2011):
1. Help identify unintended potential health equity impacts of decision-making (positive and negative) on specific population groups
2. Support equity-based improvements in policy, planning, program or service design
3. Embed equity in an organization’s decision-making processes
4. Build capacity and raise awareness about health equity throughout the organization

Regarding the first aim, while some teams were successful in assessing the potential unintended impacts on migrants, certain team leads and supervisors were worried that a significant number of staff still required additional understanding on the concept of determining the unintended impacts, which characterizes HEIA. Indeed, although most informants said that migrants were considered amongst other groups and that specific recommendations were made targeting them, many teams tended to only consider those minority groups which were already the focus of the program rather than exploring unintended impacts on other population groups. As such, migrants would only be considered if they were already a group of focus in the program or project. Other teams simply did not seem to understand the concept of unintended impacts in general. “And then unintended positive impacts, both foster the relationship with PHN to discuss other health concerns, link to other OPH services, that’s intended... not unintended... the issue of intended and unintended, I don’t know if it’s being useful for people’s perspective and if it’s being used as intended... by staff...” (Informant 4.1).

The second aim relates to recommendations and is further explored below. When considering the third aim, it might be too early to evaluate whether equity is indeed being systematized and embedded in the decision-making process of PHUs. Indeed, although recommendations for migrant groups were developed and submitted, the decision to implement them was seldom in the hands of those undertaking the HEIA. In some instances, those completing the HEIA were completely
unaware of whether recommendations were to be implemented or even looked at. This led to questioning the use of the entire process as a means of informing decision-making. “I think the feeling was that it may not even go anywhere... it may literally just get saved on someone’s hard drive and sit there... it’s really unfortunately to say” (Informant 1.3). Conversely, there were teams which did know that their recommendations would be implemented, as further explained below. It is uncertain, however, whether the implementation of those particular recommendations would be sufficient to determine that HEIA has contributed to a greater consideration of migrant issues in decision-making, as it is too early to do so.

Lastly, the undertaking of HEIA contributed to capacity building of understanding and undertaking HEIA within the rest of the branch. It served as a means of determining gaps in services as well as starting a conversation about the importance of equity and migrant issues within the unit. In some instances, it also promoted greater dialogue between the different teams within the unit. This, however, was not the case for all teams as some noted instead having struggled with this aspect. As explained under “Impressions of the process” above, certain teams had difficulty determining who they should be collaborating with throughout the unit. Certain teams also had a tendency to work in insular ways and complete their HEIAs with little external input, even from support leads.

2. Recommendations

Some of the resulting recommendations have already been implemented. These were the least complex and most actionable ones, which most commonly consisted in translating materials into the more salient minority languages spoken in the region. For the most part, however, teams were either in the process of exploring ways to implement the recommendations and/or it was too early to tell whether they would be successfully implemented. This is because these recommendations were complex, require more resources and time, and were less directly actionable. These included
gathering further and more detailed information on migrant groups, increase outreach to different communities and community organizations, and build stronger relationships with communities. These were seen as ways needed to have a greater awareness of the needs of migrants, ameliorate knowledge exchange with the communities, and explore ways to increase access to the services provided by PHUs. “We are currently exploring potential partnerships to follow the recommendations made in order to reach specific immigrant groups.” (Informant 4.3). Despite these efforts, there were no actionable recommendations explicitly geared at addressing the social determinants of health relevant to migrant health. These recommendations also reflect issues of access to evidence discussed above.

3 Additional impacts

The main impact relating to migrants was increased networking and stronger partnerships with various migrant-related organizations. “Yeah, basically the main impact we had, is that we have an increase in networking and partnership opportunities that were created because of the HEIA” (Informant 3.2). One informant also noted that the process allowed for a first program-scale assessment of the various social determinants of health impacting migrants.

Nonetheless, it was felt that the greatest corollary impact from undertaking an HEIA was the realization of different gaps regarding the HEIA process as well as their existing decision-making process in general. Indeed, informants mentioned that PHUs require greater guidelines on the follow up of an HEIA. That is, how to facilitate the implementation of recommendations and how to monitor and evaluate this. It was also felt that staff undertaking HEIAs need to ensure the HEIA process does not stigmatize migrants. In general, the HEIA process has enabled a better identification of certain minority groups needing greater attention and tailored services, notably migrants. It also led to realize the need for greater collaboration. Firstly, greater collaboration is
needed between the different branches and teams within the unit, which can be achieved via strategies increasing the knowledge of existing available internal support. Secondly, greater collaboration with different partners and agencies representing migrants is needed to harness their knowledge and the closer links they have already formed with the communities. Lastly, greater collaboration is needed with migrant communities themselves, specifically regarding the evaluation of their needs. This could allow for less vociferous opinions to also be accounted for. “So having setting up citizen advisory groups or setting up those kinds of things which we haven’t done yet” (Informant 3.1). As such, HEIA allows for an iterative process not only in terms of evaluating and reframing the recommendations, but also providing feedback to the general decision-making process for it to be more conducive to addressing migrant health.

Discussion

Overall, this study found that the Ontario HEIA tool is effective at assessing the impacts on health experienced by migrants. It is less clear, however, the degree to which it is effective at assessing the unanticipated impacts. Significant work is still needed to strengthen the knowledge of the tool itself as well as the ramifications of considering migrants in HEIAs.

Ontario PHUs servicing urban centres containing a large number of migrants considered migrants in HEIAs covering a wide range of topics. The terminology used to refer to migrants was inconsistent and differed from that used at the national and international levels. It was therefore necessary to first clarify a common understanding of the term ‘migrant’ used in this study. Of particular interest was the fact that migrants were often confounded with ethnic and language minorities both during the assessment of impacts and the development of recommendations. While much of the discussions with leads and supervisors revolved around the need for greater knowledge of the staff,
this may also be influenced by the HEIA tool itself given the inclusion of migrants as a subset of ‘ethno-racial communities’.

The Process of including migrants in HEIAs was influenced by resources, evidence, recommendations, and overall impressions of practitioners, which revolved around processes of decision-making and collaboration. The Impact evaluation found that although migrants were considered, this mainly occurred if they were already anticipated to be impacted by the program, project, or policy assessed. Additionally, there was often a narrow definition of the types of mitigation measures to address the barriers they encounter, which often revolved around acquiring greater knowledge on migrant issues and the translation of information into various languages.

The findings of this evaluation coincide with the literature assessing the inclusion of disadvantaged groups in HIAs globally (Benkhalti Jandu, Canuto de Medeiros, Bourgeault, & Tugwell, 2015). This included the fact that HIA provides a systematic way of evaluating impacts on health (Slotterback, Forsyth, Krizek, Johnson, & Pennucci, 2011), which several PHU key informants found useful. Including minority groups, such as migrants, however, was resource intensive in terms of human (both capacity and knowledge) and financial resources (Benkhalti Jandu et al., 2010; Gauvin & Ross, 2012). It seems particularly difficult for all practitioners, including the PHUs included herein, to find data relating to these groups (M. Benkhalti Jandu et al., 2010; Povall, Haigh, Abrahams, & Scott-Samuel, 2013). In addition to the required resources, it was also difficult to engage migrant citizens and community groups because of gaps in knowledge about the social determinants of health and the overburdening of community groups. Nonetheless, HIA provided a means of facilitating this engagement and resulted in the following important benefits to the overall process, which were also reflected in the literature, by: (1) ensuring that the needs of migrants are better met, (2) providing a way to consider and address existing power differentials, and (3) gaining greater
acceptability of recommendations to be implemented through local champions (Gauvin & Ross, 2012; Povall et al., 2013; Slotterback et al., 2011).

Different training and learning networks can provide capacity to overcome certain challenges (Povall et al., 2013). For example, the network of social determinants of health public health nurses in Ontario was found to be a valuable resource for practitioners completing HEIAs. Nonetheless, as was found in this study, it is always necessary to take into consideration the political context within which the HIA takes place which can influence priorities and time constraints set by direct upper management as well as higher governmental structures (Banken, 2001; Slotterback et al., 2011; St-Pierre, 2014).

**Limitations**

A significant limitation of this study is that although the research question was interested in assessing the way in which Ontario PHUs included migrants in their HEIAs, only four urban PHUs were included. Furthermore, these PHUs service a high number of migrants. Therefore, it is likely that the perspective of these PHUs does not reflect that of all Ontario PHUs with respect to the inclusion of migrants. Additionally, the discussions held with PHU informants only revolved around those HEIAs that they were interested in sharing and where migrants had been included. It is possible that migrants had not been included in particular HEIAs for reasons/factors which did not transpire in the findings.
Future research

Gaps in the themes explored are depicted in Figure 4.5 by the smaller squares located in the bottom right corner and served as a starting point to exploring areas for future research. Firstly, although all resources were heavily considered, time and financial resources were discussed to a much lesser degree than human resources. It would be useful to further explore whether this is because they are not as important as human resources, since human resources are the central concern, or because informants did not get the opportunity to discuss time and financial resources because of a bias in the questions posed. It would also be useful to explore further whether particular mitigation strategies specifically focused on migrants lead to the stigmatization of particular communities and if so, find ways to avoid this from occurring. Additionally, guidance documents could be developed to facilitate the inclusion of migrants in Ontario HEIAs as well as other specific HIA frameworks and contexts.

There have been recent efforts to develop tools to help support the greater inclusion of migrants in health impact assessment. The WHO Collaborating Centre for Knowledge Translation and Health
Technology Assessment in Health Equity has led a meeting with international experts to inform the development of such a tool. The findings of this evaluation suggest that a detailed tool would be beneficial to guide PHUs and other organizations consider migrants more efficiently. Table 4.2 below lists considerations that such a tool could include based on the factors of the heuristic framework (developed in Chapters 1 and 3) and according to the themes that emerged from this Process and Impact evaluation.

Table 4.2 Considerations for a HIA migrant supplement

| Inputs                                                                 | -Prompts the consideration of financial and time resources available to dedicate specifically to including migrants
|                                                                      | -List human resources available overall and any with particular affinity for migrant groups
| Nature of tool                                                        | -Provides definition of migrants and guidance on how to apply within tool
|                                                                      | -Explicitly leads to determine the scope
|                                                                      | -Type of evidence to use
|                                                                      | -Degree and type of migrant engagement
| Context of environment                                                | -Prompts to acknowledge the political context on migrants and how to approach it
|                                                                      | -Prompts to acknowledge the political context on the migrant issue involved
| Nature of policy, program, project assessed                           | -Prompts to consider relevance of migrants in the assessment even if they are not a major/explicit group of focus
| Decision-making process                                               | -Prompts to acknowledge decision-making process and outline a feasible approach to complete the HIA
|                                                                      | -How will migrant communities and stakeholders be engaged
|                                                                      | -How will recommendations be implemented
| Actors                                                                | -Prompts to acknowledge existing buy-in from upper management and what to expect
|                                                                      | -Prompts to list relevant community actors
|                                                                      | -Prompts to list other members of the organisation (example within the PHU) who might be relevant/knowledgeable on a topic
|                                                                      | -Provides examples of HIAs and HEIAs successfully considering migrant issues
|                                                                      | -Provides an overview of factors affecting migrant health and links to resources that provide more detailed explanation

Given this evaluation included a specific type of context, that is, Ontario PHUs in an urban setting with a large migrant population, future evaluations to further refine the considerations needed for such a tool would be welcomed. Nonetheless, the methods and analysis of the evaluation were
informed by previous, broader, findings including a global scoping review on the inclusion of migrants in HIA (Chapter 2) and an environmental scan assessing factors influencing the use of the HEIA throughout Ontario (Chapter 3).

Although the development and use of a guidance supplement may aid in the consideration of migrants, additional action is also needed in parallel. Notably, it is important to avoid over-burdening community partners with similar requests from various teams. For this, it may be useful to create coherent channels of collaboration between different organizations. For instance, various teams interested in collaborating with a particular group could first draft a common proposal for collaboration. HIA practitioners must also work with researchers and other governmental agencies to increase the available evidence on determinants affecting migrants’ health. There is a clear need for additional primary data collection based on the theory and knowledge of migrants’ context as well as greater reviews of existing literature to allow easier interpretation of the various determinants impacting migrant health.

**Acknowledgements**

I would like to thank the participants from all included PHUs as well as all support staff who helped me connect with them. I would like to thank members at Public Health Ontario for their input and support of this project and feedback on the report. I would like to thank the Ontario Ministry of Health and Long Term Care System Strategy and Policy Division of the Community and Population Health Branch for their support of this project. Lastly, I would like to thank PHIRNet and Ontario Training Centre for Health Services and Policy Research for scholarships and helping fund this work.
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SOPHIA. (2014). What is HIA, from www.hiasociety.org

St-Pierre, L. (2014). Organizational Conditions Favourable for Health Impact Assessment (HIA) Montreal, Quebec: National Collaborating Centre for Healthy Public Policy


Chapter 5

Discussion
Overview of findings and contributions to the field

Through the overlapping studies that form this thesis, I assessed the degree and way in which HIAs have included migrants globally through a scoping review as well as locally by assessing the implementation of a tool throughout the province of Ontario. I expected that migrants would seldom be included in the analysis of impacts and when this would happen it would not follow optimal methods. I expected this based on the general absence of migrants or migrant-specific considerations in HIA guidance frameworks as well as various conversations with experts present at the 12th International Conference on HIA and with colleagues at the Ontario Ministry of Health and Long-Term Care responsible for overseeing the implementation of the HEIA tool. Additionally, I expected that various contextual factors would influence this. Furthermore, these factors could be considered in future HIAs where migrants might be relevant. I had this expectation based on the lack of tactical guidance on including various specific socially disadvantaged groups, except for certain aboriginal groups such as the Maori of New Zealand.

There have been only a few recent studies assessing the inclusion of inequitable impacts on health within HIAs (Haigh et al., 2013; Povall, Haigh, Abrahams, & Scott-Samuel, 2013). These studies have found that the willingness to consider inequity often remains questionable. In addition, when the intent to consider whether health inequity is present, various barriers exist, including the availability of greater financial, human, and time resources (Haigh et al., 2013; Povall et al., 2013). The global scoping review provided the first assessment of the inclusion of a particular disadvantaged group in HIAs. The assessment of a particular group allows the specific challenges faced by that group to be studied. As more specific assessments become available, it will also allow for comparison between these minority groups and exploration of whether certain groups are at a greater disadvantage or considered to a lesser degree than others. The scoping review undertaken in this thesis provided a clear example of the points made by the studies mentioned above. It found that migrants are
seldom included in HIAs with only 14% of all hand-searched HIAs mentioning them and only 2% explicitly including them in their recommendations. A large number of HIAs mentioned migrants without further assessing the impact on their health even if further analysis would have been expected given the topic and context of the HIA. Those HIAs using procedural guidance frameworks were significantly less likely to analyse the impacts on migrants since the majority of these did not explicitly mention migrants as a minority group to consider. The most common way of including migrants in the assessments was by involving community organisations and other stakeholders representing them. The biggest reported barrier to assessing the impacts on migrants was the lack of data and resources.

The environmental scan component of this thesis provided a “snapshot” of the degree and way in which HEIA is being implemented throughout PHUs in Ontario. It was found that 48% of PHUs have utilised the tool and that nearly half of these have modified the tool to suit their needs. The use of the tool and approach to the process was influenced by different factors falling under the HIA theoretical framework described above. Broadly, the purpose and perceived purpose of the tool influence whether the tool is used or not. Additionally, the greatest influence of inputs was the difficulty in finding and prioritising data as well as having adequate access to human resources. Time and financial resources were a major driver to delimiting the scope of the HEIA. Different decision-making approaches also influenced the way in which the tool was implemented as well as the openness to engaging other organisations. The political and social environments influenced the acceptance of targeting inequities and the potential of implementing certain recommendations by taking advantage of “windows” in these environments (Overseas Development Institute, 2007). In terms of the actors, the knowledge and attitudes of staff toward the HEIA process and the concept of health inequity was a major factor. The support from upper management and collaboration with other organisations also heavily influenced whether and how an HEIA would take place. Specifically,
it is often felt that mainly larger endeavours are worthy of an HEIA. Lastly, in addition to recommendations, the completed HEIAs created stronger links with community partners as well as an accountability mechanism for future decisions made relating to each particular topic assessed.

The Process and Impact evaluation of the inclusion of migrants in Ontario HEIAs was unique in that it evaluated the overall use of a tool to respond to a particular population group’s needs rather than evaluate one specific HIA for its overall process and impact. In doing so, it outlined general barriers and facilitators influencing the consideration of migrants within the process. The evaluation found that migrants were included in HEIAs covering a range of topics such as pre-natal services, tobacco-free living, or physical activity, amongst others. It concludes with suggesting considerations for the development of a supplement to guide the inclusion of migrants in HIAs based on the factors outlined in the theoretical framework. It also pointed to the fact that while a supplement guide would be useful, additional action must be taken in parallel to adequately respond to the gap in the inclusion of migrants in HIA. Notably, it is necessary to increase available evidence on migrants, especially within the Canadian context, and create a coherent collaborative environment with community partners.

The studies that form this thesis together largely confirm the expectations stated above whereby migrants were not often nor adequately included in HIAs and a set of factors influence their inclusion. It is worth noting that the degree to which migrants were considered across PHUs servicing high proportions of migrants was unexpectedly significant. Nonetheless, considerable challenges and factors were also involved in the capacity to consider migrants and implement resulting recommendations.

Overall, the findings of this thesis contributed to better understanding current gaps in the inclusion of migrants in HIAs as well as the facilitators and barriers influencing this. Ensuring a continued buy-
in of the relevance and use of HIA requires a tangible demonstration of its capacity to alter a given policy, program, or project to in turn promote health (Banken, 2001; The European Observatory on Health Systems and Policies, 2007). It also requires a better understanding of the systems and powers influencing the consideration of minority and socially disadvantaged groups to render HIA more apt at tackling health inequities (Povall, Haigh, Abrahams, Scott-Samuel, 2013). Achieving this entails that the HIA process be undertaken in a way that is cognizant of the context and factors within which the process is completed and increase the probability for the resulting recommendations to be implemented. As described by Harris et al (2014), it requires “to be both tactical and technical rather than either tactical or technical”. Taking these factors into consideration by promoting facilitators and preventing, or at least anticipating, barriers can lead to a better consideration of the health impacts experienced by migrants and a greater implementation of adequate mitigation measures. The different studies of this thesis work also resulted in different discussions and considerations around the definition of migrants. The findings and conclusions are highlighted below.

**Defining migrants**

A central issue that emerged from this thesis was the definition and focus of the concept of migrants. Since the inception of the project and the formulation of the research questions, the question of whether I should focus on a particular group was posed. Given my bias, explained in the preface, as well as the evidence that migrants face common barriers irrespective of their background or status, I decided to include all international migrants in general as the population of interest. This decision led me to re-evaluate and re-assert my definition at various stages of this doctoral project. During the scoping review, it was necessary to determine the different ways and concepts used to refer to migrants. In doing so, I was also faced with deciding whether particular
population groups should be included and defined as migrants. This was the case for Irish Traveler and Roma communities since they were often mentioned as a separate group in procedural guidance frameworks, especially within the European Union (Benkhalti Jandu, Canuto de Medeiros, Bourgeault, & Tugwell, 2015; Orenstein & Rondeau, 2009). I decided not to include these communities since they pertain to a certain ethnic or cultural group rather than a migrant group and although they continue to have irregular residence and housing situations, they are seldom foreign-born (Hancock, 2002). Because of current nation-state laws barring individuals from crossing frontiers without adequate documentation, if such individuals are foreign-born, they would generally be considered refugees or undocumented migrants, whom are included in the migrant definition I adopt. In other words, Irish Travelers or Roma individuals would be included by virtue of their migrant status rather than their ethnic background.

The Process and Impact evaluation also required clarification on the definition of migrants. As explained in Chapter 4, the terminology used is inconsistent between different teams within the Canadian government, which is itself different from the international community’s. It was therefore necessary to reassert the choice of including all international migrants defined as individuals residing in a foreign country for either voluntary or involuntary reasons (International Organization for Migration, 2011).

Focusing on international migrants also resulted in the exclusion of internally displaced groups. These groups might also face similar barriers to optimal health as they also find themselves in novel contexts, having moved for example from a rural to an urban environment, or to a region with different jurisdiction and institutions. Additionally, focusing on international migrants as a whole precluded me from exploring potentially relevant specific implications of different cultures and
racialized groups. Similarly, it precluded me from considering the heterogeneity of migrants and the implications of these different groups in a detailed manner.

**Developing a heuristic framework**

During the process of the thesis work, I developed and modified an integrative heuristic framework specifically tailored to considering the various factors and contextual realities involved in influencing the completion of all the HIA steps (Figure 5.1). These factors first included the nature and makeup of the tool as well as the inputs, which include the various resources available. These two factors in turn influence factors involved in the process, including the following four: (1) the characteristics, knowledge, and support of the various actors involved; (2) the context of the social and political environment; (3) the decision-making process within the organisation or institution where the HIA is being undertaken; and (4) the nature of the policy, program, or project assessed.

Upon applying the framework to a case-example of the Process and Impact evaluation, I also found these process factors to act as a feedback loop to the inputs of the HIA whereby the priorities and perspectives within the different process factors influence the resources available and the way in which these resources can be allocated to different aspects (and disadvantaged groups) of the HIA. The contextual priorities in each of the process factors influence the nature and extent of the resources allocated to the overall HIA process. For instance, some public health units found that the degree of buy-in from higher management for a certain HIA influences the amount of resources allocated to completing the HIA. In another instance, the perceived importance or size of a program may influence the urgency of undertaking a HIA and the resources allocated accordingly.

This has implications for HIA practitioners in terms of understanding that allocated resources are not arbitrary or needs based, but instead often a result of priorities and interests. A tactical approach to HIA would need to be cognizant of this reality as it may be possible to explore ways of
influencing these interests or at least realistically working within them. Indeed, it may also be indicative of the willingness to implement recommendations or the nature of the recommendations which might be positively received.

Lastly, the process elements of the framework result in different outputs from the overall HIA; including recommendations for mitigation as well as increased intersectoral and community partnerships and future expectations, amongst others. Each of these factors was also further divided into sub-factors which further described the essence of these elements and incorporated equity considerations within them.
Figure 5.1 Final HIA Heuristic Framework
This framework provides new detailed considerations to facilitate a tactical approach to completing an HIA by incorporating the contextual realities of the HIA in addition to procedural ones (Crosier, 2004; Harris, Sainsbury, & Kemp, 2014; St-Pierre, 2014). This can lead to a greater implementation of recommendations and, therefore, the greater efficiency and return on investment of the HIA process required to ensure the continued buy-in and use of the approach (Banken, 2001; Beiser, 2005; Harris et al., 2014; Sudbury & District Public Health, 2014).

Implications for practice

The findings from this thesis are instructive for a number of stakeholder and decision-maker groups, including Public Health Ontario, the Ministry of Health and Long-Term Care, and the Association of Local Public Health Agencies. It suggests to further focus their efforts on implementing and understanding the value added of HEIA as further described under “Knowledge translation, dissemination, and impact” below. The understanding of these examples and the factors influencing them can act as a feedback loop to strengthen the implementation of HEIA in Ontario. The most frequently mentioned factor throughout all projects of this thesis was the availability of resources. The lack of human, financial, and time resources were mentioned as a limiting factor to establishing the scope of HIAs and the consideration of migrants. While the lack of resources might constitute a valid reason, it is necessary to understand the extent to which limited resources are in fact the true challenging factor. Indeed, the constant recurrence of this reason leads to question whether this is instead the reflection of a lack of commitment from decision-makers to address inequity through the HIA process. As mentioned above, several studies have alluded to similar findings. As well, the theoretical framework detailed throughout Chapters 1 and 3, based on the findings from the Process and Impact evaluation, show the way in which the priorities of various process factors do
indeed influence the resources allocated. The HIA practice community cannot accept a lack of commitment to be disguised behind a rhetoric of limited resources. It is necessary for practitioners to engage more consistently and tactically with decision-makers to redefine priorities. In some cases, legislation and/or regulation may be the most efficient way to ensure adequate resources are allocated in order for HIA scopes and the subsequent inclusion of migrants to be determined according to context and need.

The findings of this thesis may also serve to inform the development of a migrant-specific supplement tool to accompany the HEIA tool. Even without the development of a supplement tool, it would be useful for Ontario PHUs and other practitioners to utilise the considerations made for including migrants which go beyond procedural approaches. Above all, it would be necessary to adopt a common coherent definition of migrants and related sub-groups to be used across the country, or at minimum the province of Ontario. Without a common definition, it is difficult to compare the various data collected by different institutions and researchers in order to assess the overall potential impacts. It is also difficult to create and maintain collaborative environments between different organisations without the capacity to use a consistent common language. The absence of clear, explicit, and widely accepted common definitions can also lead to inadvertent inequities among certain sub-groups who may be systematically ignored or under-targeted.

HIA could be regarded as a valuable means of addressing the challenges of migrant health. This is under the condition that HIA practitioners adequately and explicitly include migrants’ issues within the process. In order to do so, it is necessary to consider all the contextual factors influencing the inclusion of migrants. This can be systematised through the use of a heuristic framework such as the one developed through this thesis. The framework presented herein could be an ideal option since
it is based on published literature as well as empirical evidence on both general health inequity considerations and specific findings relating to migrants.

HIA practitioners in general could benefit from using such a framework since it frames the consideration of factors influencing the undertaking of an HIA, the specific assessment of differential health impacts, and consequently the implementation of recommendations relevant to different socially disadvantaged groups. Considering the factors and sub-factors described in the framework has the potential of strengthening the overall HIA process and a greater probability of implementing the resulting recommendations. This can increase the use and effectiveness of HIA, which requires HIA practitioners to understand the working realities and concerns of decision-makers (Kemm, 2013). The use of frameworks such as the one presented here is crucial to the sustainability of the buy-in of the HIA process by decision-makers in various sectors. Such buy-in is required to ensure the continued undertaking of HIAs on various issues and thus contribute to acting on the social determinants of health (Banken, 2001).

The use of this theoretical framework can also be useful during the Process and Impact evaluations of an HIA. It provides an evidence-based rationale for investigating specific factors and exploring the relationships and impacts they have on one another. This can in turn facilitate and inform future HIAs and the institutionalization of HIA. A conceptual framework for assessing the impact and effectiveness of HIA has recently been suggested (Harris-Roxas & Harris, 2013). It proposes three main domains influencing HIA’s effectiveness: context (including decision-making, parameters, and purpose and goals of the assessment), process (including inputs and procedures), and impacts (proximal and distal). Although this model was developed with a different methodology than the framework described herein, it leads to considering several similar factors. It is more focused on evaluation and is less explicit on the role of the actors and other environmental contexts in the HIA
process. Interestingly, the National Collaborating Centre for Healthy Public Policy (NCCHPP) (Canada) has recently shared a briefing note on the organisational requirements conducive to HIA and have outlined similar elements as those discussed in this paper (St-Pierre, 2014). They suggest seven main conditions, which relate to either resources, methods and tools, or the organisation.

The framework presented herein is complementary to this since it provides a structure for the relationships between these factors, based on previous related theories, and is informed by the perspective of practitioners of HIA. Nonetheless, the heuristic framework is strengthened by the briefing note developed by the NCCHPP and the conceptual model developed by Harris-Roxas & Harris previously suggested in that they confirm and support the proposed heuristic framework. Together, these developments contribute to filling a much needed gap for a greater consideration of a tactical approach to HIA. Further determination of the optimal way to pragmatically incorporate such frameworks is needed and can become clearer as a greater number of HIAs adopt tactical approaches.

**Strengths and Limitations**

This thesis work was successful in assessing the inclusion of migrants in HIAs both internationally and in a local context within a relatively short time span. The strengths and limitations are here described according to each study for a more concise description. An exception to this is the issue of defining migrants which arose in all studies and is discussed first below.

Given the common barriers faced by migrants, I kept a broad definition of migrants for this thesis, encompassing all types. This was critical for the reasons noted above. Because migrants had not been specifically studied in HIA methodology in the past, this allowed for an understanding of the overall facilitators and challenges to including migrants in HIAs. Conversely, it may have hindered the understanding of considerations necessary or useful to particular migrant groups. It also
prevented a detailed analysis and explanation of the ramifications of the overlap and differences between ethnicity and migrant status as they relate and are relevant to different groups in different parts of the world and Ontario. For instance, migrant groups from particular regions might possess specific cultural traits intersecting with their migration experience. In addition, it is possible that certain groups are particularly under-represented or misunderstood in HIAs and this thesis work was unable to explicitly explore this.

The scoping review utilised a thorough and systematic methodology to screen and assess as many available HIAs as possible. These HIAs, however, were all already publically available. It is possible that HIAs completed in the private sector by different HIA consulting agencies or companies funded through banking agencies adhering to the Equator Principles⁵ (Equator Principles Association, 2011), which are generally not rendered public, have greater resources and therefore consider migrants to a different degree and a different manner. Given the requirement for greater confidentiality in the private sector, it can be challenging to have access to these HIAs. Nonetheless, it may have been worthwhile to contact different HIA consulting agencies or companies funded through banking agencies adhering to the Equator Principles to explore the possibility of gaining access to their HIAs.

A strength of the environmental scan was successful in obtaining the participation of 31 of the 36 PHUs in Ontario. Additionally, the involvement of a range of key informants from medical officer of health to public health nurse, allowed for a broad range of concerns and perspectives to be included. In terms of weaknesses, the interviews took place over a timeframe of three months. In that time, there may have been changes in the degree of implementation of the tool within different units. In addition, the analysis of the findings was delayed by a technological setback.

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⁵ The Equator Principles were adopted by financial institutions as a means of “assessing and managing environmental and social risks in projects” [ref EP website] and requires any large project funded through these institutions to complete a HIA [ref EP].
where much of the analysis completed over a span of two months was lost. Although it was thought that keeping the analysis in one encrypted cloud server would be safer and better meet the confidentiality requirements of the University of Ottawa ethics board, it is necessary to find more than one such safe storage spaces.

It is possible that the Process and Impact evaluation specifically focusing on migrants may have been undertaken too early in the implementation process of the tool. Indeed, many PHUs were still concerned with understanding the ramifications of assessing unintended impacts and the details of considering different disadvantaged groups in general. Although they did provide relevant insight on the inclusion of migrants, it is probable that a follow-up evaluation may be able to uncover greater details on the procedural facilitators and barriers in addition to the contextual ones found here. The Process and Impact evaluation could have included more informants from each unit to have a greater understanding of the different programs and projects being assessed as well as greater representation from different levels of staff within each unit. Although this was attempted, it was difficult to find enough willing participants from each unit during the recruitment period. The evaluation could have also included PHUs with particularly low numbers of migrants to see if and how they are considering them. Indeed, the literature on SDH finds that because of the lack of social and cultural networks, isolated migrants in smaller communities may be even more disadvantaged (Beiser, 2005). For that reason, considering them in HEIAs may be even more crucial than in cities such as Toronto which has strong migrant networks and therefore, greater coping mechanisms available to its migrant population.

**Implications for future research**

First, this thesis leads to future research considerations for general health inequity in HIA. Additional scoping reviews exploring the inclusion of other socially disadvantaged groups in HIAs would be
necessary to understand the existing gaps in considering other groups in particular. It would also allow for a comparison between them and the determination of whether some groups are considered to a lesser extent or are more challenging than others.

The theoretical framework presented herein could be ‘tested’/informed by more case-studies. Although this framework is based on international HIA literature and empirical evidence gathered from HIA practitioners, the application of this framework to different contexts is further needed. As such, the use of this tool outside of the Ontario context could help further refine the tool by providing further details, additional relevant sub-factors or a different possible understanding of the relationships between them. Additionally, much like in other disciplines, there might be a need for different theoretical and heuristic frameworks according to different contexts or foci. In particular, examples from the private sector as well as low and middle income countries would be interesting since they represent drastically different contexts from those included in this thesis. Nonetheless, this framework provides a starting point from which further modifications or developments can be undertaken.

Additionally, specific detailed guidance on the ways to navigate each factor in order to optimize the HIA process according to different contexts could be developed.

Research focusing on migrants could involve more specific guidance on ways to overcome or work with the facilitators and barriers described herein. This could be achieved through detailed guidance documents and toolkits containing tools to deal with each factor. An evaluation of whether the consideration of factors affecting migrants do in fact aid in the better inclusion of migrants in HEIA would be useful and could provide with further fine-tuning of these considerations. In Ontario, it would be beneficial to evaluate whether the consideration of these factors impact the programs and projects implemented which affect migrant health given the large number of migrants in the
province. Lastly, collaboration with research institutions and funders is needed to create greater evidence on the determinants affecting migrant health and the state of migrants with respect to these determinants in Canada and Ontario.

**Knowledge translation, dissemination, and impact**

It is my intention that the findings from this thesis be disseminated and utilised as much as possible. Each article was and will be disseminated according to the best suited audience and the way in which the findings from each article can be utilised. Below is a description of knowledge translation efforts that have already been undertaken or are currently being planned along with the rationale behind each.

Scoping review:

1. I presented the preliminary findings from the review at the International HIA conference in Geneva, Switzerland on October 2013. The feedback obtained from attendants informed some revisions in the analysis and interpretation of the findings.

2. I published most of the findings, as found relevant by peer reviewers, in Environmental Impact Assessment review journal in an open access format. This journal was chosen for its international reach within the HIA community to draw attention to the gaps in including specific minority groups in HIAs, migrants being one of them. The publication was shared with HIA colleagues part of the Society of Practitioners of HIA and other HIA practitioners in Canada and globally.

3. The methods developed for this scoping review inspired additional exploration of the inclusion of other specific minority groups in HIA, notably older adult, led by a team at the

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6 It is important to note that these endeavours will be updated one last time prior to final submission of the thesis to the FGPS.
WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity.

4. The findings from this review served as background work for further work on the development of a guidance tool for the inclusion of migrants in HEIA. This included an international meeting held by the WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity in February 2014 and different grant applications to further the inclusion of migrants in HIA and on which I am collaborating.

Theoretical framework:

1. I shared the framework with the National Collaborating Centre for Healthy Public Policy and drew attention to the complementarity with their briefing note on essential requirements for the HIA process. I will further explore ways in which the framework can be highlighted by the National Collaborating Centre.

2. I have shared the heuristic framework with the Science Integration and Social Determinants of Health at the Public Health Agency of Canada who are interested in exploring ways to utilize these findings at the national level.

Environmental scan:

1. I shared the findings of the environmental scan with Public Health Ontario and the participants from all 31 PHUs via email. Some units have expressed that they will consider these findings in their future HIA endeavours.

2. I will submit the scan to the Canadian Journal of Public Health to draw attention to the developments in HIA accomplished in Ontario and provide a way to engage a discussion on the challenges of using HIA in a Canadian context.
3. The scan will serve to inform current state of HIA implementation, gaps and views by PHUs in Ontario for a project led by Public Health Ontario on the uptake and application of health equity through the use of the HEIA tool and on which I am a collaborator.

Process and Impact Evaluation:

1. I will share the article with the Ontario PHUs who have partaken in the study as well as Public Health Ontario, the Ontario Ministry of Health and Long-Term Care, and the rest of PHUs, once the findings are finalised.

2. I will submit the findings to an international journal focusing on findings from impact assessment studies with the purpose of disseminating among HIA practitioners the way in which a particular disadvantaged group is included as HIA is implemented. I will first aim for the Impact Assessment and Project Appraisal, which is the journal of the International Association for Impact Assessment and therefore has a wide readership of HIA practitioners.

3. The findings will serve as a starting point for the development of detailed guidelines to including migrants in Ontario HEIAs led by members of the WHO Collaborating Centre for Knowledge Translation and Health Technology Assessment in Health Equity in collaboration with the Ontario Ministry of Health and Long-Term Care, the Centre for Addiction and Mental Health, and other international experts on the subject and on which I am collaborating.
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Appendix A: Scoping Review

Literature Search Strategy

OVID (Medline) and EMBASE

1. health impact assessment.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
2. HIA.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
3. health equity impact assessment.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
4. HEIA.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
5. Equity-Focused Impact Assessment.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
6. EFHIA.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
7. Health Impact Assessment eval*.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
8. Health Impact Assessment monitoring.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
9. Impact of Health Impact Assessment.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
10. Assessment of health impact assessment.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
11. Migrants.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
12. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
13. Immigrants.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
14. Refugees.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
15. Travelers.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
16. Temporary workers.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
17. temporary foreign workers.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
18. Newcomers.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
19. 16 or 17
20. 11 and 13 and 14 and 15 and 18 and 19
21. Ethnicity.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
22. Ethnic background.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
23. Ethnic minorit*.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
24. Ethnic*.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
25. Race.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
26. Racial groups.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
27. Racialised.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
28. Rac*.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
29. Racial minority.mp. [mp=ti, ab, ot, nm, hw, kf, ps, rs, ui, an, sh, tn, dm, mf, dv, kw]
30. 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29
31. 12 and 20
32. 12 and 30
33. 31 or 32
### SCOPUS

1. TITLE-ABS-KEY("health impact assessment")
2. (efhia) OR (equity-focused impact assessment) OR (heia) OR (health impact assessment)
3. (immigrants) OR (newcomers) OR (temporary workers) OR (temporary foreign workers) OR (travelers) OR (refugees) OR (migrants)
4. (rac*) OR (racial) OR (racialised) OR (race/ethnicity) OR (race) OR (ethnic*) OR (ethnic minority) OR (ethnic background) OR (ethnicity)
5. ((TITLE-ABS-KEY("health impact assessment")) AND (efhia) OR (equity-focused impact assessment) OR (heia) OR (health impact assessment)) AND ((immigrants) OR (newcomers) OR (temporary workers) OR (temporary foreign workers) OR (travelers) OR (refugees) OR (migrants))
6. ((TITLE-ABS-KEY("health impact assessment")) AND (efhia) OR (equity-focused impact assessment) OR (heia) OR (health impact assessment)) AND ((rac*) OR (racial) OR (racialised) OR (race/ethnicity) OR (race) OR (ethnic*) OR (ethnic minority) OR (ethnic background) OR (ethnicity))
7. (((TITLE-ABS-KEY("health impact assessment")) AND (efhia) OR (equity-focused impact assessment) OR (heia) OR (health impact assessment)) AND ((immigrants) OR (newcomers) OR (temporary workers) OR (temporary foreign workers) OR (travelers) OR (refugees) OR (migrants))) OR (((TITLE-ABS-KEY("health impact assessment")) AND (efhia) OR (equity-focused impact assessment) OR (heia) OR (health impact assessment)) AND ((rac*) OR (racial) OR (racialised) OR (race/ethnicity) OR (race) OR (ethnic*) OR (ethnic minority) OR (ethnic background) OR (ethnicity))))

### ProQUEST

1. ("health impact assessment") AND (*migrant OR refugee OR newcomer OR "temporary foreign worker" OR "temporary worker" OR traveler)
2. ("health impact assessment") AND (ethnic* OR race OR 'race/ethnicity" OR racial*)

### European Centre for Minority Issues

1. Health impact assessment AND (*migrant* OR ethnic* OR race OR racial*)

### Canadian Public Policy Collection

1. all:health impact assessment AND all:*migrant*

### Institute for Scientific and Technical Information (INIST)

1. "health impact assessment" AND (*migrant* OR refugee OR ethnic* OR race OR racial*)
### Hand-Searched Organisations

| International                      | • International Association for Impact Assessment  
|                                    | • Society of Practitioners for Health Impact Assessment  
|                                    | • International Impact Assessment Consortium  
|                                    | • WHO Collection of HIAs  
|                                    | • World Bank  
|                                    | • HIA Blog  
| Canada                             | • Centre for Health Services and Policy Research  
|                                    | • National Collaborating Centre for Healthy Public Policy  
|                                    | • National Collaborating Centre for Social Determinants Health  
|                                    | • National Collaborating Centre for Tools and Methods  
|                                    | • Habitat Health Impact Consulting  
| United States                      | • UCLA Health Impact Assessment Clearinghouse  
|                                    | • Oregon State HIA Database  
|                                    | • San Francisco Planning Department  
|                                    | • Human Impact Partners  
| Europe                             | • HIA Gateway  
|                                    | • Wales HIA support Unit  
|                                    | • London Health Commission  
|                                    | • Institute of Public Health in Ireland  
|                                    | • Finland –STAKES (National Institute for Health and Welfare)  
|                                    | • Swedish National Institute for Public Health  
|                                    | • Swiss HIA Platform (Plateforme de l’Association Suisse sur l’EIS)  
|                                    | • The Netherlands Health Impact Assessment Database  
|                                    | • Centro de Recursos de Evaluación de Impacto en Salud (Spain)  
|                                    | • Health Impact Project  
| Australia                          | • Australia HIA Connect (New South Wales University)  
|                                    | • Centre for Health Equity Training Research and Evaluation (CHETRE)  
| New Zealand                        | • New Zealand Ministry of Health  
| South East Asia                    | • HIA in ASEAN (mainly Thailand)  

**Individuals Contacted for Additional Documents**

1. Fiona Haigh (Centre for Health Equity Training Research and Evaluation), Australia – Contacted: May 1st, 2013
2. Liz Green (Wales HIA Support Unit), UK – Contacted: May 1st, 2013
3. Eva Ellitott (Wales HIA Support Unit), UK – Contacted: May 1st, 2013
5. Jonathan Heller (Human Impact Partners), USA – Contacted: May, 2013
<table>
<thead>
<tr>
<th>HIA Category “Specifically identified and analysed”</th>
<th>1. What is the type of evidence and depth of HIA (HIA, HEIA, or HIA evaluation and rapid, intermediate, or comprehensive)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. In which country was it undertaken?</td>
</tr>
<tr>
<td></td>
<td>3. Which type of HIA (meet regulatory requirement, aid policy or program decision-making, for advocacy, or community-led)?</td>
</tr>
<tr>
<td></td>
<td>4. What is it assessing (policy, program, project)?</td>
</tr>
<tr>
<td></td>
<td>5. Which framework was used for analysis?</td>
</tr>
<tr>
<td></td>
<td>6. What methods were used to include migrants in analysis?</td>
</tr>
<tr>
<td></td>
<td>7. What types of migrants were considered?</td>
</tr>
<tr>
<td></td>
<td>8. Rationale of including or excluding migrants</td>
</tr>
<tr>
<td></td>
<td>9. Were migrants included as stakeholders?</td>
</tr>
<tr>
<td></td>
<td>10. What methods were used to include them as stakeholders?</td>
</tr>
<tr>
<td></td>
<td>11. Was intersectionality considered? How?</td>
</tr>
<tr>
<td></td>
<td>12. Did recommendations consider migrants separately?</td>
</tr>
<tr>
<td></td>
<td>13. Was there a rationale for the inclusion of migrants in recommendations?</td>
</tr>
<tr>
<td></td>
<td>14. Were any recommendations for other vulnerable groups relevant to migrants as well?</td>
</tr>
<tr>
<td></td>
<td>15. Were there any findings about the process of including migrants?</td>
</tr>
<tr>
<td></td>
<td>16. For evaluations of HIAs: How was inclusion of migrants perceived by those in HIA process?</td>
</tr>
<tr>
<td>Methodological quality</td>
<td>1. Identify sponsor, team and all involved in HIA</td>
</tr>
<tr>
<td></td>
<td>2. Describe level of stakeholder input</td>
</tr>
<tr>
<td></td>
<td>3. Describe rationale for conducting HIA</td>
</tr>
<tr>
<td></td>
<td>4. Describe impacts to vulnerable groups</td>
</tr>
<tr>
<td></td>
<td>5. Describe methods of the HIA</td>
</tr>
<tr>
<td></td>
<td>6. Includes logic model proposal to health determinants and outcomes</td>
</tr>
<tr>
<td></td>
<td>7. Describes evidence sources used throughout HIA</td>
</tr>
<tr>
<td></td>
<td>8. Profiles existing conditions</td>
</tr>
<tr>
<td></td>
<td>9. Assessment includes discussion of both health determinants and outcomes</td>
</tr>
<tr>
<td></td>
<td>10. Assessment: for each specific health issue analysed, details the analytic results</td>
</tr>
<tr>
<td></td>
<td>11. Includes recommendations clearly connected analysis &amp; proposal</td>
</tr>
<tr>
<td></td>
<td>12. Recommendations are prominently written</td>
</tr>
<tr>
<td></td>
<td>13. Report includes executive summary or similar</td>
</tr>
<tr>
<td></td>
<td>14. Report well written (grammar, spelling, etc.)</td>
</tr>
<tr>
<td></td>
<td>15. Report organization logical</td>
</tr>
<tr>
<td></td>
<td>16. Discussion of possible future evaluation/monitoring</td>
</tr>
<tr>
<td>Other HIA Categories</td>
<td>1. What is the type of evidence and depth of HIA?</td>
</tr>
<tr>
<td></td>
<td>2. What is it assessing (policy, program, project)?</td>
</tr>
</tbody>
</table>
3. In which country was it undertaken?

4. Context and rationale for mentioning migrants?

Appendix B: Theoretical Framework and Environmental Scan

Interview Guide

Environmental Scan Interview Guide

Administrative information
Date and time of interview:
Name of interviewee:
Name of employer (specific PHU):
Position of interviewee within organization:

Schedule

“Thank you for taking the time to do this interview” – then, introduce myself and ask whether clarifications regarding letter of information is required.
Go through Consent Script (see appended).

*****

1. First I would like to ask about a few characteristics of this PHU

   a. Size of staff of PHU
   b. Population size serviced (confirm)
   c. Geographical area serviced (confirm)
   d. Annual budget -
   e. SDH team size
   f. Cultural diversity of population serviced (low, intermediate, high)

2. Have you used the Ministry’s HEIA tool?

If YES
3. For how long has your PHU used the tool?

4. What role have you played in use of tool?

5. How many programs or policies has the PHU assessed using this tool?
   a. If fewer than 3 – Could you tell which were these programs?
   b. If more than 3 - Could you give me examples of the programs you have used?

6. Of the population groups outlined in the tool, which ones were considered and/or assessed?
   a. Specifically regarding ethno-racial communities – did you distinguish between immigrants as separate from established or Canadian-born ethnic minorities?

7. Did you have any challenges in assessing certain specific groups?

8. Did any variables facilitate the use of tool? (example nature of the tool, support from higher management, support from other agencies, resources available)

9. Did you include any community members or community organizations in the process?
   a. If yes – Which ones? And how did you choose them?
   b. At which stage of the HEIA were they included/approached?

10. Did you involve any other governmental organizations (either municipal/regional/provincial) during the HEIA process or at the implementation of mitigation measures phase?

11. Did you involve any other health service providers (hospitals, CHC, Community Care Access Centres, physicians, family health teams, etc.).

If NO

1. Are there any specific challenges that have prevented you from using the tool?
2. Are there other tools for HIA or similar process (prioritisation/needs assessment) that you are using?
   
a. Reasons for choosing this

List of Participating Public Health Units

1. Algoma Public Health
2. Brant County Health Unit
3. Chatham-Kent Public Health Unit
4. Durham Region Health Department
5. Eastern Ontario Health Unit
6. Elgin St. Thomas Public Health
7. Grey Bruce Health Unit
8. Haliburton, Kawartha, Pine Ridge District Health Unit
9. Halton Region Health Department
10. City of Hamilton Public Health Services
11. Hastings and Prince Edward Counties Health Unit
12. Huron County Health Unit Health & Library Complex
14. Leeds, Greenville and Lanark District Health Unit
15. Middlesex-London Health Unit
16. Niagara Region Public Health
17. North Bay Parry Sound District Health Unit
18. Northwestern Health Unit
19. Ottawa Public Health
20. Oxford County Public Health
21. Peel Public Health
22. Peterborough County-City Health Unit
23. Porcupine Health Unit
24. Renfrew County & District Health Unit
25. Simcoe Muskoka District Health Unit
26. Sudbury & District Health Unit
27. Thunder Bay District Health Unit
28. Timiskaming Health Unit
29. Toronto Public Health
30. Windsor-Essex County Health Unit
31. York Region Public Health
Analytical steps diagram

- **Interviews**
  - **Deductive codes** (based on orienting framework)
  - **Inductive codes**
  - **Combined codes**

- **Documents**
  - **Deductive codes** (based on orienting framework)
  - **Inductive codes**
  - **Combined codes**

**Triangulation**

- **Categories** to inform conclusions and orienting framework

**Revised framework**
Questions to lead inductive coding from additional documents

1. Altered version of Ontario HEIA tool
   a. Are there alterations in formatting?
   b. Are there alterations in content?
   c. Is there additional guidance to that provided in original HEIA workbook?

2. Alternate tool
   a. Is there difference needed in resources (time/human)?
   b. Is there difference in depth of analysis and data needed?
   c. Is there a difference in the goal of the tool (and purpose)?
   d. Does it have an explicit ability to act on results from the use of the tool?
   e. Is there reference to the history of development of the tool?

3. Ontario Public Health introductory/training slides
   a. How does it answer resources needed?
   b. How does it answer scope?
   c. How does it answer implementation approaches?
   d. Other
**HEIA Template**

The numbered steps in this template correspond with sections in the HEIA Workbook. The workbook with step-by-step instructions is available at www.ontario.ca/healthequity.

### Step 1: SCOPING

<table>
<thead>
<tr>
<th>a) Populations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using evidence, identify which populations may experience significant unintended health impacts (positive or negative) as a result of the planned policy, program or initiative.</td>
</tr>
<tr>
<td>Aboriginal peoples (e.g. First Nations, Inuit, Metis, etc.)</td>
</tr>
<tr>
<td>Age-related groups (e.g. children, youth, seniors, etc.)</td>
</tr>
<tr>
<td>Disability (e.g. physical, Deaf, deafened or hard of hearing, visual, intellectual/developmental, learning, mental illness, addictions/substance use, etc.)</td>
</tr>
<tr>
<td>Ethno-racial communities (e.g. racialized or cultural minorities, immigrants and refugees, etc.)</td>
</tr>
<tr>
<td>Francophones (including new immigrant francophones, deaf communities using LSG/LSF, etc.)</td>
</tr>
<tr>
<td>Homeless (including marginally or under-housed, etc.)</td>
</tr>
<tr>
<td>Linguistic communities (e.g. uncomfortable using English or French, literacy affects communication, etc.)</td>
</tr>
<tr>
<td>Low income (e.g. unemployed, underemployed, etc.)</td>
</tr>
<tr>
<td>Religious/Faith communities</td>
</tr>
<tr>
<td>Rural/remote or inner-urban populations (e.g. geographic/social isolation, underserved areas, etc.)</td>
</tr>
<tr>
<td>Sex (e.g. male, female, women, men, trans, transgender, two-spirit, etc.)</td>
</tr>
<tr>
<td>Sexual orientation (e.g. lesbian, gay, bisexual, etc.)</td>
</tr>
<tr>
<td>Other: please describe the population here.</td>
</tr>
</tbody>
</table>

### Step 2: POTENTIAL IMPACTS

<table>
<thead>
<tr>
<th>Step 2: POTENTIAL IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Determinants of Health</td>
</tr>
<tr>
<td>Identify determinants and health inequities to be considered alongside the populations you identify.</td>
</tr>
<tr>
<td>Unintended Positive Impacts</td>
</tr>
<tr>
<td>Unintended Negative Impacts</td>
</tr>
<tr>
<td>More Information Needed</td>
</tr>
</tbody>
</table>

### Step 3: MITIGATION

<table>
<thead>
<tr>
<th>Step 3: MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify ways to reduce potential negative impacts and amplify the positive impacts.</td>
</tr>
</tbody>
</table>

### Step 4: MONITORING

<table>
<thead>
<tr>
<th>Step 4: MONITORING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify ways to measure success for each mitigation strategy identified.</td>
</tr>
</tbody>
</table>

### Step 5: DISSEMINATION

<table>
<thead>
<tr>
<th>Step 5: DISSEMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify ways to share results and recommendations to address equity.</td>
</tr>
</tbody>
</table>

*Note: The terminology listed here may or may not be preferred by members of the communities in question and there may be other populations you wish to add. Also consider intersecting populations (i.e., Aboriginal women).*
Appendix C: Process and Impact Evaluation

Questionnaire

6. To what degree were migrants included?
   ○ HEIA focused solely on migrants
   ○ Migrants were considered amongst all the groups listed in the tool but no specific recommendations were made only for them
   ○ Migrants were considered as a specific group and some of the recommendations targeted them
   ○ Other: ____________________________

7. Did recommendations from HEIA lead to actual changes in the programs or projects assessed? (yes/no)

8. Are there 1 or 2 main reasons that influenced the decision to follow or reject recommendations made? (yes/no; if yes, which (briefly))
   ○ ____________________________
   ○ ____________________________

9. Were there other impacts as part of the HEIA? (example: working with other parts of governments, raising profile of previously less known health need, creating links with immigrant groups within community)
   ____________________________
   ____________________________
   ____________________________

10. What are the 1 or 2 main reasons (rationale or barriers) to not having included migrants?
    ○ ____________________________
    ○ ____________________________

Again, thank you. Your interest in participating in this research study is greatly appreciated.

Regards,

Maria Benkhatli Jandu, MSc, PhD(e)
Population Health
University of Ottawa
Interview Guide

Impact and Process Evaluation Interview Guide

Administrative information
Date and time of interview:
Name of interviewee:
Phone number:
Name of employer (specific PHU or PHO):
Position of interviewee within organization:

Schedule
“Thank you for taking the time to do this interview” – then, introduce myself and ask whether clarifications regarding letter of information is required.

Go through Consent Script (see appended).

*****

1. What was the nature of the project/program assessed?
2. To what extent did you find that the HEIA tool itself was conducive to including immigrants within the analysis?
3. Can you tell me about the resources were available and those that were used (financial, human, etc.)?
4. Can you think of any additional resources that may have been beneficial to conducting the HEIA that you did not have?
5. If any, which specific aims regarding immigrant groups were met?
6. What evidence was used? – Is there any specific evidence for immigrants?
   a. Community involvement?
7. What factors contributed to decisions about recommendations regarding immigrants?
8. Were there any specific components of the political environment, the process of decision-making within the organization, or the team involved that influenced this?
9. What other impacts were there as part of the HEIA? Example: promotion of intersectoral action, raising profile of previously less known health need. (specific to immigrants)
10. How were the recommendations prioritized and how were priorities of immigrants distinguished from those of native-born population?
11. In your opinion, how did you find the HEIA process as it relates to the inclusion of immigrants?

12. Do you think other members of the team might have different opinions about this?
Appendix D: Ethics Approval

Letter of Information

November, 2013

Letter of Information

Study: Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessment

Maria Benkhalti Jandu, MSc, PhD(c)

Peter Tugwell, MD, MSc

Population Health

University of Ottawa

Ivy Bourgeault, PhD

Population Health

University of Ottawa

Ottawa, Ontario
This research is being conducted by Maria Benkhalti Jandu under the supervision of Dr. Peter Tugwell and Dr. Ivy Bourgeault in Population Health at the University of Ottawa.

**What is this study about?** The purpose of this project is the assessment of the degree of inclusion of immigrants within the Health Equity Impact Assessments undertaken by Ontario Public Health Units and the factors which have facilitated or rendered difficult this inclusion and the implementation of programmatic changes affecting immigrants following the assessment. This research is taking place because Health Equity Impact Assessment can help slow down the decrease in immigrant health and Public Health Units are well placed to act on the reasons for the decrease in immigrant health. The study will require the completion of a short (15 minutes) questionnaire and a follow up telephone interview (20-30 minutes). There are no known physical, psychological, economic, or social risks associated with this study.

**Is my participation voluntary?** Yes. Although it be would be greatly appreciated if you would answer all material as frankly as possible, you should not feel obliged to answer any material that you find objectionable or that makes you feel uncomfortable; you can decline to answer any or all questions. You may also withdraw at any time. Any data collected at the time of withdrawal will be safely discarded.

**What will happen to my responses?** Your responses will be digitally recorded for accuracy. We will keep your responses confidential. Only I and my co-supervisors will have access to this information which will be stored securely on a password protected online storage site.
The data may also be published in professional journals or presented at scientific conferences, but any such presentations will be of general findings and will never breach individual confidentiality. A copy of preliminary findings will be shared with you for voluntary further thoughts and comments. A copy of the final findings will be distributed to you via email.

**Will I be compensated for my participation?** No, there is no monetary compensation for participating in the study. However, we believe that your Unit can benefit from the results of this study by obtaining a provincial snapshot of the current use of the HEIA Tool and how immigrant populations have been included.

**What if I have concerns?** Any questions about study participation may be directed to myself. Any ethical concerns about the study may be directed to the University of Ottawa Research Ethics Board at ethics@uottawa.ca or (613) 562-5387 or 550 Cumberland (Pavillon Tabaret Hall), sale/room 154, Ottawa, ON K1N 6N5 Canada.

*This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and The University of Ottawa policies.*

Again, thank you. Your interest in participating in this research study is greatly appreciated.

Regards,

Maria Benkhalti Jandu, MSc, PhD(c)
Verbal Consent Form

Nov, 2013

Verbal Consent Script

Study: Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessment

Hello Mr/Ms. [name of participant], my name is Maria Benkhalti Jandu from the University of Ottawa,

Thank you for accepting to take part in this part of my doctoral research project on the “Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessments”.

I will be asking a short series of yes or no questions for your consent to participate in this interview.

1. Have all your questions about what is written in the Letter of Information been adequately answered?  
   Yes ☐  No ☐

2. Do you understand that you have been invited to participate in the project on the “Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessment”, which has for purpose the assessment of the degree of inclusion of immigrants within the HEIAs undertaken by Ontario Public Health Units and the factors which have facilitated or rendered difficult this inclusion and the implementation of programmatic changes?  
   Yes ☐  No ☐
3. Do you agree that you have been informed that your involvement consists of answering the questionnaire distributed and the interview we will be having today? 

Yes  No

4. Do you agree for the interview to be digitally recorded as we speak? 

Yes  No

5. Do you understand that you can contact the University of Ottawa Research Ethics Board should you have any questions, concerns, or complaints? 

Yes  No

6. Do you understand that your participation is voluntary and that you are free to withdraw at any time without penalties? 

Yes  No

7. Lastly, do you understand and agree with the fact that the information you provide will be kept confidential in as much as all data is stored confidentially with only myself and thesis supervisors with access to original data and that your name will never be revealed nor linked to any statement you are making? 

Yes  No

8. It is possible that the analysis will refer and/or cite your comments. However, you do not have to consent to your comments being identified. Please choose the way in which you would like your comments to be referred to. Please note that your name will never be mentioned.

(1) Not identified  
(2) Identified by my position in the organisation  
(3) Identified by my specific public health unit  
(4) Identified by both my position and the specific public health unit  

9. Should you have any concerns, any questions about study participation may be directed to myself. Any ethical concerns about the study may be directed to the University of Ottawa Research Ethics Board for which I can send you the contact.

Thank you for agreeing, once again.
Letter of Permission from the Ontario Ministry of Health and Long Term Care

Ministry of Health and Long-Term Care
Health System Strategy and PolicyDivision
Community and PopulationHealth Branch
6th Floor Hepburn Block
80 Grosvenor Street
Toronto ON M7A 1R3
Telephone: 416 212-6801
Facsimile: 416 327-1721

Ministère de la Santé et des Soins de longue durée
Division de la stratégie et des politiques du système de santé
Direction de la santé communautaire et de la santé de la population
Édifice Hepburn, 8e étage
80, rue Grosvenor
Toronto ON M7A 1R3
Téléphone : 416 212-6801
Télécopieur : 416 327-1721

Research Ethics Board
University of Ottawa
1 Stewart Street
Ottawa, ON
K1N 6N5

April 29, 2013

To the members of the University of Ottawa Research Ethics Board,

Please accept this letter of support confirming that Ontario's Ministry of Health and Long-Term Care, Health System Strategy and Policy Division recommends and supports Maria Benkhalti Jandu to undertake the proposed doctoral research project entitled, "Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessment" under the supervision of Dr. Ivy Bourgeault and Dr. Peter Tugwell.

I look forward to hearing about the launch of this meaningful research.

Sincerely,

Wendy Katherine
Manager, Women's and Family Health Unit
Approval Notice from the University of Ottawa Research Ethics Board

File Number: H05-13-04

Date (mm/dd/yyyy): 08/17/2013

Université d’Ottawa
University of Ottawa
Research Grants and Ethics Services

Ethics Approval Notice
Health Sciences and Science REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter</td>
<td>Tugwell</td>
<td>Medicine / Medicine</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Ivy</td>
<td>Bourgeault</td>
<td>Health Sciences / Others</td>
<td>Co-Supervisor</td>
</tr>
<tr>
<td>Maria</td>
<td>Benkhalil</td>
<td>Others / Others</td>
<td>Student Researcher</td>
</tr>
</tbody>
</table>

File Number: H05-13-04

Type of Project: PhD Thesis

Title: Inclusion of Immigrants in Ontario Public Health Units' Health Equity Impact Assessments

Approval Date (mm/dd/yyyy) 08/17/2013
Expiry Date (mm/dd/yyyy) 08/16/2014
Approval Type In

Special Conditions / Comments:
N/A
This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement and other applicable laws and regulations in Ontario, has examined and approved the application for ethical approval for the above named research project as of the Ethics Approval Date indicated for the period above and subject to the conditions listed the section above entitled “Special Conditions/Comments”.

During the course of the study the protocol may not be modified without prior written approval from the REB except when necessary to remove subjects from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the study (e.g. change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, information/consent documentation, and or recruitment documentation, should be submitted to this office for approval using the “Modification to research project” form available at: http://www.research.uottawa.ca/ethics/forms.html

Please submit an annual status report to the Protocol Officer 4 weeks before the above-referenced expiry date to either close the file or request a renewal of ethics approval. This document can be found at: http://www.research.uottawa.ca/ethics/forms.html

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: ethics@uOttawa.ca.

Germain Zongo
Protocol Officer for Ethics in Research
For Daniel Lagarec, Chair of the Sciences and Health Sciences REB