WHAT IS THE IMPACT OF REFUGEE COMMUNITY HEALTH CENTERS IN CANADA?

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TABLE OF CONTENT

LIST OF ACRONYMS:

RCHC	Refugee Community Health Clinic
CHC	Community Health Clinic
LHINs	Local Health Integration Networks
GARs	Government Assisted refugees
BVOR	Blended Visa Office-Referred
PSR	Privately Sponsored Refugee
IFHP	Interim Federal Health Program
IME	Immigration Medical Exam
NCDs	Non-communicable Diseases
SDH	Social Determinants of Health

EXECUTIVE SUMMARY

Canada is home to a significant number of refugees and undocumented immigrants. These populations face unique health barriers to accessing healthcare services which challenges principles of health equity and social justice of the Canadian Health System.

Refugee Community Health Centers (RCHCs) have been used globally as one option to deal with health access challenges that these vulnerable populations suffer from. Although there are not enough Canadian studies on this model of care, many studies from OECD have confirmed its effectiveness. The objective of this capstone project was to study the **impact of RCHCs** in Canada through a r**apid review of literature**.

After counting for the limitations that rapid literature reviews have as a method, we concluded that RCHCs have a multi-level impact on individual health of vulnerable groups in Canada, their future integration, and the Canadian healthcare system. We found that RCHCs have the potential to improve healthcare access to refugees and undocumented individuals, prevent overloading of other components of the Canadian healthcare system, offer cost effective benefits, and create job opportunities and investments in surrounding communities.

BACKGROUND

Who is a refugee?

Over the past decade, the global population of forcibly displaced people grew substantially from 43.3 million in 2009 to 70.8 million in 2018, reaching a record high (1). Of the 70.8 million displaced there are 25.9 million refugees, 41.3 million internally displaced people and 3.5 million asylum seekers (1). Majority of refugees flee to neighboring developing countries while only some refugees get resettled in higher income countries like Canada (1).

There is always a confusion around terms such as refugees, asylum seekers, immigrants, and undocumented immigrants, therefore it is important to establish a proper understanding of the difference between these migration statuses (Table 1). A person's migration status is closely related to his/her wellbeing and access to health services which will be discussed in more detail later on. The term "immigrants" refers to a person who chooses to settle permanently in another country for various reasons (find work or education, to reunite with their family, etc.), but not necessarily because of a direct threat of persecution or death that drives refugees and asylum seekers to flee their homes (2). This means immigrants have a very different migration journey thus have different health needs and face different health access barriers. Unfortunately, mixing up different migration categories without taking into consideration the specificity of each one of them is a common mistake in health research which could lead to making unwarranted conclusions and recommendations.

The forced nature of refugees' and asylum seekers' relocation and hostile pre-migration experiences leave many at risk of mental health problems, malnutrition, poor dental health, communicable and noncommunicable diseases, and many other health issues which are not as frequently seen in non-refugee populations (3). Such risks put health care systems in resettlement countries such as Canada in front of a serious responsibility to respond to these health needs in a rapid, effective, and culturally appropriate manner without leaving anyone behind. A delay or a failure in response within the first years of arrival could potentially result in worsening health status thus leaving health care system to deal with more complex issues at a higher cost.

Table 1: Definitions of key terms

Term:	Definition:
Refugee	A refugee is a person who has been forced to flee their home country due to persecution because of their race, religion, nationality, political opinion or membership in a particular social group (e.g., members of the LGBTQ community). The persecution a refugee experiences may include harassment, threats, abduction or torture. A refugee is often afforded some sort of legal protection, either by their host country's government, the United Nations High Commissioner for Refugees (UNHCR) or both (2).
Asylum seeker	An asylum seeker is a person who has fled persecution in their home country and is seeking safe haven in a different country, but has not yet received any legal recognition or status (2).
Undocumented immigrant	Any person residing in any given country without legal documentation nor legal status (4)
Uninsured persons	Any person living in a country (this case is Canada) without any form of health coverage (5)

Refugees health in Canada:

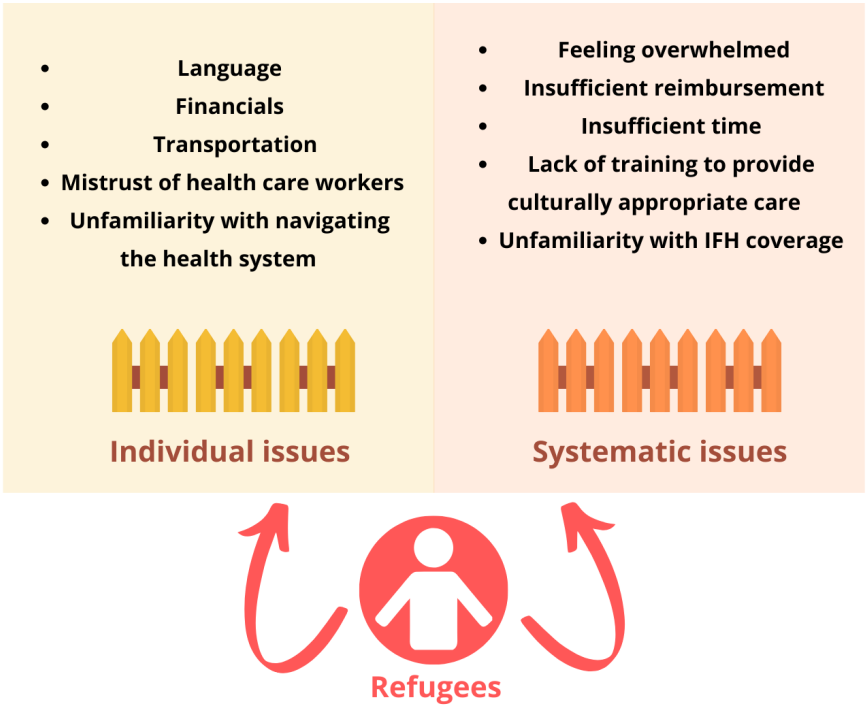
Canada, through its Refugee and Humanitarian Resettlement Program, resettles many refugees from different nationalities every year. Some refugees arrive in Canada under the sponsorship of the Canadian government as Government Assisted Refugees (GARs), others arrive under the sponsorship of private sponsors or sponsorship agreements holders (PSR), and other groups arrive under Blended Visa Office-Referred (BVOR) program[1] (6). In 2018, Canada took in 28,100 refugees of the 92,400 refugees who were resettled across 25 countries that year (1). Although this number is just a tiny fraction of the total number of refugees worldwide, it still challenges the Canadian government to successfully support and integrate a very vulnerable population in Canada.

[1] With the BVOR program, The Government of Canada will generally provide up to six months of income support through the Resettlement Assistance Program, while private sponsors will provide another six months of financial support and up to a year of social and emotional support (4).

One of the key aspects to insure a successful integration of refugees is providing timely and culturally appropriate health care access. Under the current regulations, refugees are eligible for basic provincial health care coverage upon arrival in addition to one year of extended coverage through the Interim Federal Health Program (IFHP) (7). IFHP provides coverage for basic health-care services (such as doctor visits, hospital care, lab tests), supplemental services (such as limited vision care, urgent dental care), prescription drug coverage (medications and products), and in some cases, one Immigration Medical Exam (IME) (8). IFHP does not cover services or products that an eligible person can claim (even in part) under other insurance plans, such as provincial or territorial health care, or private insurance plans (8). Asylum seekers are also eligible for IFH coverage until a decision about their cases is made (8). This coverage can be cancelled without notice if the individual's immigration status changes.

At first glance, refugees' health coverage might seem ideal, but there are a number of issues related to the current coverage. Figure 1 gives some examples of individual-level barriers that refugees face in accessing a variety of health services and systematic barriers at the provider level and institutional level. One review of emergency files at three major pediatric hospitals in Montreal showed that refugee and undocumented children without provincial health care coverage face numerous problems related to health care access which include delays in emergency care, difficulties in accessing specialized care, unavailability of rehabilitation services and under-reporting of abuse (9).

Figure 1: Examples of barriers preventing refugees to access health care services



The adverse physical and mental health outcomes, increase experiences of health care access inequities, and health disparities that result from health access barriers will be discussed further. Any future efforts aiming to achieve better health for refugees should target both individual and systemic barriers.

People with precarious status (uninsured and undocumented persons):

There is a common misconception that undocumented immigrants are simply irregular border crossers awaiting a legal status. While this is partially true, there are many more faces of undocumented immigrants. Knowing that refugee claimants usually face 65% rejection rate (10), an undocumented immigrant could be a rejected refugee claimant who still resides in Canada. In 2010, there were 5060 refugee claimant children younger than 15 years of age living in Canada eligible for temporary health care coverage for emergency and essential health services only under the Interim Federal Health Program (IFHP) (9) Also, an undocumented immigrant could be a student or a worker whose education or work permits have expired (10).

Undocumented immigrants are not the only category that have no or limited health coverage in Canada; other categories include refugees and immigrants waiting for their health insurance coverage or their provincial health care eligibility. Such waiting times vary from one province to another; for instance, Ontario, Quebec, and British Columbia are reported to be the 3 provinces that mandate a 3-month wait for health insurance for Canada's landed immigrants (10).

Although difficult to ascertain, the number of undocumented workers is growing, and estimates run between 100,000 and 300,000 (9). In fact, one case study examining two community-based and volunteer-run health clinics in Scarborough, Canada reported that the clinics have received more than 20,000 visits from uninsured patients in 12 years (10). Canada, among many other countries, struggles with providing health care services to medically uninsured immigrants and refugees who reside across the country which is causing many national health care workers and community organizations to raise concerns about the high levels of morbidity resulting from delayed seeking care among uninsured patients with precarious status (5). Seemingly, a person's health insurance status and also migratory status are associated with unique care-seeking and service delivery patterns and, thus, has implications for optimal health service provision (9).

Community health centers as a model of care:

Community Health Centers (CHCs) are defined as "non-profit organizations that meet the primary-care needs of individuals and families living in low-income communities, including insured and uninsured, in areas traditionally underserved by physicians" (11). There are two unique characters of CHCs which differentiate them from other health clinics. First, CHCs have a mandate to serve populations that have traditionally faced barriers in accessing health services, including the homeless, uninsured patients, seniors, refugees, new immigrants and low-income individuals (12). Secondly, CHCs provide services at no charge to people without a health card (12).

Since many patients utilizing services at CHCs are uninsured and services are provided at no charge (13), most CHCs face financial challenges. Some CHCs are heavily dependent on grants and donations to subsidize care to the uninsured and some receive government funding. CHCs in Ontario receive funding from the Ministry of Health and Long-Term Care, through Ontario's 14 Local Health Integration Networks (LHINs) (12). The amount of funding is not based on the number of clients that each CHC serves, but mainly based on the previous funding levels each CHC received in the past (12).

CHCs recognise that health is influenced by a wide range of factors and is very sensitive to social environment, therefore they provide a variety of social services and health promotion programs beyond physical health services and screening. CHCs also bring care providers including family physicians, nurses, dietitians, therapists and others out of isolation to work in collaborative teams (14). As a result of this comprehensive approach, numerous Canadian research studies have found that CHCs provide effective and cost-effective care, achieving better overall outcomes than other traditional medical models like fee-for-service model (14). However, these comprehensive packages of services vary from one center to another and without a unified basket of services that all centers provide. In Ontario, for instance, neither the Ministry of Health nor the LHINs have required a core minimum of services to be provided at each CHC in Ontario (12). Many CHCs have physiotherapists, dietitians and social workers on staff while other CHCs have gone further to include settlement workers, interpreters, and RNs in their staff.

The first CHC in Canada was established in Winnipeg, in 1926, and ever since, CHCs have been leaders in interprofessional primary healthcare (14). CHCs also advocate for, and provide programs and services to individuals who otherwise face barriers to health-care services created by poverty, geographic isolation, language, culture and different abilities. This makes them a promising model to address many of the issues that the refugee health sector is facing in Canada. With this in mind, the purpose of this capstone project is to examine Refugee Community Health Centers (RCHCs) closely and understand their impact in Canada. Questions regarding the impact were left open to allow for room to observe all sorts of impacts that could emerge.

SIGNIFICANCE FOR PUBLIC HEALTH:

Health equity has become a root principle of public health practice and a worldwide public health objective (15). Health equity means that all people can reach their full health potential and should not be disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstance (16). Although health inequalities are systematic, they are; also; very avoidable through collective action by individuals, agencies, businesses, communities, and every level of government (17).

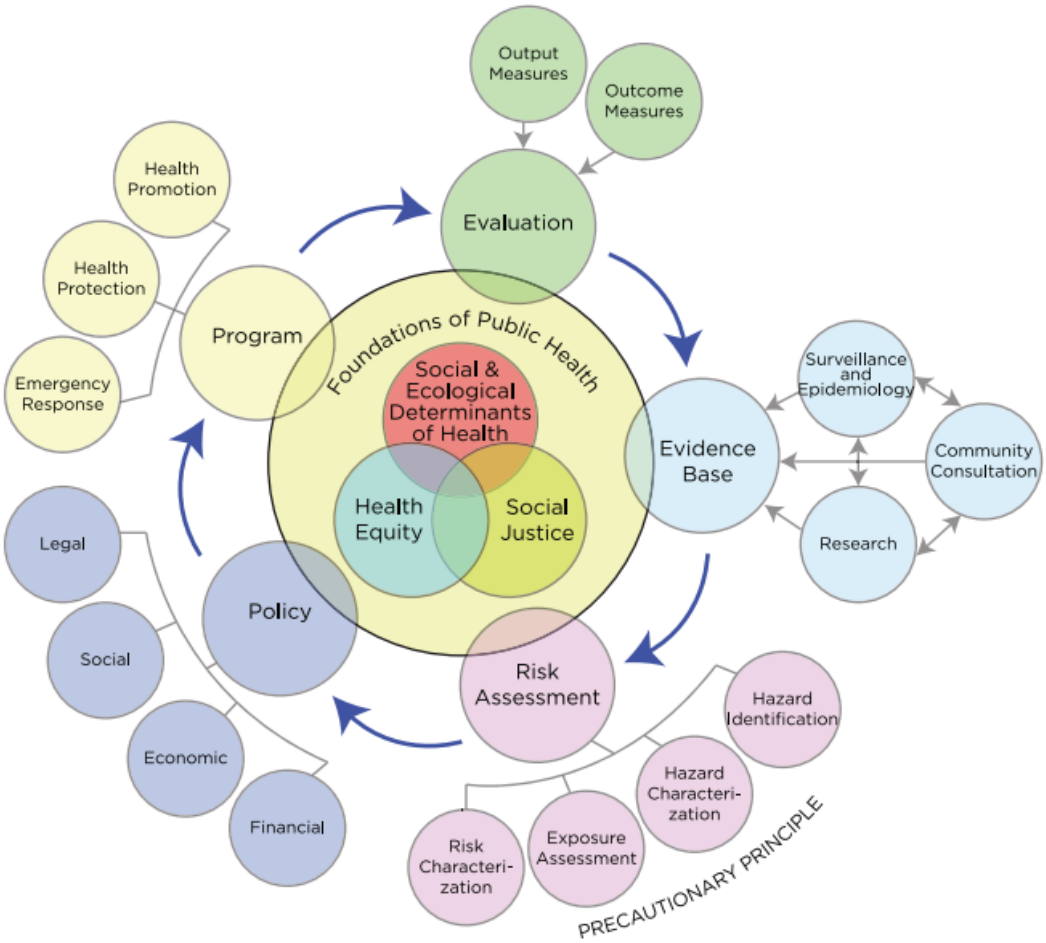
Refugee health, like other health matters, is influenced not only by biological factors, individual behaviours, and access to health services but also by many other overlapping and intersecting social determinants of health (SDH). However, in refugee health it is important to understand that the processes of migration and displacement are also social determinants of health and can pose significant risks and increased vulnerability for poor health outcomes (18). Not only do many refugees and migrants originate from countries affected by poverty and conflict, poor or disrupted health systems and high burdens of disease, but the conditions associated with their migration may exacerbate health inequalities and expose them to greater health risks (18). This might continue in resettlement countries, like Canada, if their needs with regard to health and well-being are not met and their pre-migration experiences continue to be misunderstood.

The question that this report seeks to answer is rooted heavily in the principles of health equity which is one of the basic foundations of public health practice according to the conceptual framework of the Canadian Public Health Association (Figure 3). Health equity, along with social-

ecological determinants of health and social justice, influences and informs other building blocks around it (evidence base, risk assessment, policy, program and evaluation) which interconnect to form public health practice (17).

Since refugees and marginalized groups such as undocumented immigrants and uninsured persons are experiencing much difficulty accessing health care in Canada, then health equity which is one of the foundations of public health practice is being challenged. In an effort to bridge this gap, some individuals, agencies and government units have started to mobilize resources and find solutions such as the creation of Refugee Community Health Centers (RCHCs). which have started to spread widely in many countries hosting refugees and uninsured patients. However, refugee advocacy groups in Canada know very little about this model and whether there is evidence that RCHCs are truly making an impact. This is where the need for this report came from: to provide refugee advocacy groups with the required evidence to move forward with their advocacy efforts in an informed way.

Figure 2: The Canadian Public Health Association framework



METHODOLOGY AND METHODS:

Methods:

The ultimate purpose of this report is to produce evidence to support advocacy efforts. Rapid literature review is a method that has been developed in response to the need for more accelerated evidence synthesis to meet the need of decision-making bodies; (19) and in an effort to produce evidence of good quality within the capstone project time frame, rapid literature review was the ideal method for this project.

To ensure that the method chosen is being applied correctly, the report followed the Rapid Review Guidebook which offers a seven-step process of evidence-informed decision making promoted by the National Collaborating Centre for Methods and Tools (20). Because the guidebook is tailored to clinical literature reviews, some alterations were made and some alternative tools were adapted to best answer the question of concern. Also, a detailed critical appraisal process was implemented to examine the quality of the literature found.

The terms immigrants, economic immigrants, and family reunion immigrants were excluded from the search process due to the differences they have compared to refugees and undocumented immigrants. Some papers identified by the search results discussed CHCs serving both refugee and immigrant populations, and in these cases, material relevant to immigrants was retained. The terms "undocumented" and "uninsured" were not included in key search terms, but they came up in the identified literature because these populations are considered to be typical consumers of RCHCs services.

Search strategy:

The search included three databases CINAHL, Ovid: Medline, and the Canadian Business and Current Affairs (CBCA) index. Including the CBCA database was suggested after multiple consultations with a public health librarian to expand the search since very little is documented on RCHCs. News articles found through the CBCA search were used primarily to identify in-house studies done by some RCHCs and then find the names and contact information for these RCHCs (Appendix 2). Such information about RCHCs, was collected to help refugee advocacy groups in their future efforts to build connections and share knowledge.

A comprehensive search of literature in Canada and OCED countries, excluding non-English literature, was completed using a wide range of search terms including: “refugee” and “asylum seekers” with all their synonyms “asylee”, “displaced person” and “displaced people”. The initial search terms also included “health”, “center”, “centre”, “primary care” and “impact”. A very manageable number of results was generated by the search, therefore there was no need to limit publication date parameters. More information on exact search input and terms included for Canadian cities and OCED countries search can be found in Appendix 3.

The initial literature search yielded 300 articles; after removing duplicates, the number was reduced to 116, which were examined by title and abstract to judge relevance. Fifteen articles were retained for full-text review. Ten of the 15 papers were deemed relevant to the question and were critically appraised and assessed for quality based on the METAQAT tool. To document the search process, an adapted PRISMA tool was used (Appendix 4).

In addition to the database search, websites for several RCHCs were searched to locate useful reports to be included as grey literature. Grey literature search yielded two relevant reports which were critically appraised for quality using proper tools.

Critical appraisal:

Critical appraisal of all identified articles was conducted to understand the strengths and weaknesses of evidence, and thus make the best use of it. METAQAT was the tool used to critically appraise literature in this project (Appendix 5). METAQAT is a critical appraisal tool designed specifically for public health evidence to increase the rigour and transparency of literature used (21).

Another tool designed by Ontario Agency for Health Protection and Promotion was used to critically appraise grey literature. Both critical appraisal tables are found in Appendix 6.

Not all studies were judged to be strong; some were preliminary in nature and some had slightly ambiguous results. However, all were cautiously included in the analysis process because very little research has been done in this area.

CURRENT KNOWLEDGE:

After finishing the search and the critical appraisal processes, it was time to understand what the literature is telling us. In order to do so, a sample data extraction table was created (Appendix 7) where information about title, author(s), year of publication, main results, main recommendations, and conclusion related to the issue of concern were identified from each of the included articles.

Certain themes emerged from the literature around RCHCs. In total, there were five themes that were deemed to be related to the issue of concern and can potentially answer the question. There were some minor themes that only came up in a few articles and other major ones that were mentioned more frequently. The themes are:

1- Structure of refugee health clinics:

By examining the literature it became apparent that there are certain typical requirements to build a successful RCHC model that fulfills the needs of prospective patients. In addition to the basic services and structure that any community health center should have, refugee community health centers are recommended to have:

- **Interpretation services:**

Interpretation is a basic component of any RCHC since much of the population served at these clinics do not yet have the language skills needed to communicate in the settlement country's native language. A descriptive analysis of patients visiting a refugee health clinic in the UK showed that 59% of the patients required telephone interpreters due to difficulty in consulting in English (22). It is expected that this percentage gets higher with new refugee influx. Another cross-sectional retrospective study using electronic extraction of medical data of refugees attending 3 CHCs in Ottawa found that availability of interpreters has been associated with increased satisfaction of patients and providers, and with improved diagnostic assessments (23). Availability of interpretation services is not only associated with increased satisfaction but also with increased utilization of health services by refugees (24).

- **Mental health support:**

Many refugees, asylum seekers, uninsured and undocumented individuals have been through atrocities which makes mental health support a priority in any RCHC. Although mental health problems might not be clear upon initial assessment, they are expected to emerge after several months once refugees are resettled (23). A retrospective audit of files of people who attended three Melbourne asylum-seeker health clinics found that the third most common reason of encounter was psychological problems (25).

Access to mental health support by refugees and uninsured individuals is an issue of concern in public health literature which came up frequently in this rapid literature review. One cross-sectional study of a cohort of youth who presented to an emergency department in Ontario for a mental health concern showed that immigrants, refugees and newcomers may not have the same access to or use of mental health care as non immigrants which suggests that interventions to improve access to the mental health system on an outpatient basis among immigrant youth and refugees are either insufficient or should consider the needs of this specific populations (26). When providing mental health services to this vulnerable population, it is important to understand that it is an area of care requiring particular sensitivity to differences in language and culture; the initial mental health support should be based on empathic and understanding care to avoid triggering mental distress (23,27).

- **Staff and employees:**

Different bodies of literature emphasize the importance of providing specific training to medical and nonmedical staff in RCHCs to meet the needs of patients. For instance, medical staff at the Calgary Refugee Health Clinic (CRHC) are trained in immigrant medicine and cultural competency, provision of initial health assessments, immunization, preventative screening and health teaching, as well as assisting refugees in accessing health services by linking them with interpretation services (24). It seems that most staff and health care providers that refugees and uninsured individuals see on a regular basis in hospitals and other health care facilities are lacking such training and expertise. In a study of clinical interactions involving unauthorized Mexican immigrants to the United States, Holmes describes how clinicians systematically miss the key social determinants of the suffering of uninsured patients, inadvertently blaming the patients themselves (28). Also, a study that included three major paediatric hospitals in Montreal and Toronto, showed a surprising difference in the detection and recording of social problems across immigrant, refugee, and undocumented children (28).

One hospital had many cases of under-reporting of social problems among uninsured immigrant and refugee children, such as socioeconomic precarity and insufficient diet, which indicates the need to sensitize health care professionals to the social problems unique to these vulnerable population groups (28). Such training is the first step to build a trust-worthy health care system that at-risk individuals can go to, which then results in overall health improvements. For undocumented migrants, in particular, the literature emphasizes the importance of the community-oriented health care services and trust-building processes that need to occur in order for this population to feel safe to connect with health services (29).

Through this literature review, diverse categories of RCHC staff were used. One clinic had bilingual community health workers, social workers, bilingual clinical psychologists, and family physicians (27). Another clinic had four part-time GPs, two case workers, and a nurse (22).

- **Holistic approach:**

In any RCHC, it is important to provide accessible and comprehensive primary health care while attending to the social, cultural and settlement issues that affect patients. In a cross sectional retrospective study of refugee triage clinics in Ottawa, problems with the social-cultural system was the second most common diagnostic assessment (23). These problems included many that most refugees experience, such as language difficulties, post-immigration stress, and problems with adjustment to a new country or culture (23). Therefore, it is crucial for each RCHC to have a holistic approach that targets these social and cultural issues in order to achieve their overall goal of successful integration. One example of a holistic program is the North Hamilton Community Health Center (NHCHC) which provides health-focused ESL class and a parental drop-in centre through its Immigrant/Refugee Health Program or what is currently called the Multicultural Health Services program (27).

- **Geographical location:**

Location of RCHCs is a topic that came up in the literature several times. Some papers concluded that RCHCs should be geographically located where settlement services are provided (24), while others recommended selecting a central location accessible through the public transportation system (i.e. downtown) (30).

2- Health profile of patients:

While there is some evidence to suggest that a "Healthy Immigrant Effect" exists, when refugees are analyzed separately, they have higher age-standardized mortality rates than other immigrants (31). Therefore, when exploring refugee community health clinics as a potential solution to the various health problems specific to refugee and uninsured populations, it is important to take one step back and understand the health profile of this vulnerable population, to better prepare a clinic to meet their health needs. The main health issues that came up from literature search were:

- **Chronic conditions:**

Hypertension and cardiovascular diseases among Syrian refugees outside of Canada are the most prevalent chronic conditions among adults; these issues continued in Canada where hypertension and child development disorders were among the top diagnostic assessments requiring multiple visits from Syrian refugees as one study indicates (23). Syrian refugees are only one fraction of the diverse population of refugees in Canada, other studies seem to agree that chronic diseases or non-communicable diseases (NCDs) are very common in all refugee populations. One study using data from a retrospective medical record review of a refugee health program in the US showed that half of the adult refugees in this sample had at least one chronic NCD (51.1%), and 9.5% had three or more NCDs (32).

- **Acute upper respiratory infection (URI):**

URI, pharyngitis, and cough were 3 of the top 5 diagnostic assessments among 338 newly arrived Syrian refugees in 3 primary triage clinics (23). There are some limitations around these results which are related to the season in which this data was collected and the location in which participants where hosted. Data was collected from refugee health clinics during winter months, and patients were housed in hotels in close quarters, where URIs can spread easily. The important conclusion to draw from this is that RCHCs should be prepared for seasonal infections with every influx of refugees.

- **Infectious diseases:**

Several studies have shown that refugees have a high incidence of infectious diseases such as tuberculosis, syphilis, hepatitis B and gastro-intestinal parasites upon arrival (33). Another study examining health services utilization of refugees in Calgary also found that refugees were more likely to have had infectious and parasitic diseases than non-refugees (24).

- **Mental health:**

Through this review, it was clear that the magnitude of mental health issues among refugees and uninsured people is very significant. One refugee health clinic in London, UK reported that 72% of its patients had a history of rape and/or torture, that had taken place in the country from which they were fleeing (22). Half of these patients exhibited significant symptoms of depression, with just under 25% displaying symptoms consistent with post-traumatic stress disorder (PTSD), resulting from their experience of torture and war (22). A proper response should be in place to respond to this urgent and yet invisible need.

3- Impact of Refugee Community Health Clinics:

A big part of the role that RCHCs play comes from the vulnerability of the population they serve. As explained earlier, patients seeking care at these clinics include not just refugees who have very harsh migration experiences, but also undocumented and uninsured people who usually have very low socio-economic status and no health coverage. For instance, 81% of patients visiting a refugee clinic in the UK were either homeless, living in churches, mosques, or graveyards, or sofa surfing and moving regularly from one accommodation to another (22). The same refugee health clinic in UK measured the vulnerability of its patients using a vulnerability scale that consists of the following elements: minor <18 years, pregnancy, significant mental health issue, homelessness, victim of torture and or rape, or non-English speaker. Based on this vulnerability scale, 73% of the clinic's patients had three or more vulnerability factors, while 18% had five or more (22).

However, the vulnerability of patients that RCHCs serve is not the only argument that researchers are making in literature in terms of impact. RCHCs have other significant impacts that were shown in 4 categories:

- **Prevent overloading of other components of the Canadian health care system:**

RCHCs are delivering care to a significant number of people with complex needs which is something noted in a retrospective audit study at three clinics in Melbourne, Australia over the period 2005-06 (25). The same study also noted that the rate of visits by asylum seekers is substantially higher compared to patients seen by general practitioners in Australia (25).

This large volume of care provided by RCHCs is preventing overloading other components of the health care system by providing services that either would have had to be provided elsewhere or would not have been provided at all (23). In the absence of RCHCs, expensive and unnecessary utilization of other components of the health care system may be the easiest gateway to access health care for this group; an issue that was highlighted in one study examining pediatric emergency department visits by uninsured immigrant and refugee children. This study included file review of emergency visits in 3 hospitals in Toronto and Montreal. In 2 of the 3, refugee claimant children had emergency ratings at triage indicating a lower level of urgency than the general hospital population whereas in hospital number 1, the findings were the opposite (28). The authors concluded that the reason for the lower number of unnecessary emergency room visits in the third hospital was the availability of a refugee/recently-arrived migrant outpatient clinic (28).

- **Improve health care access to very vulnerable groups in the community:**

The fear that undocumented immigrants have from immigration authorities complicates their access to health care services. In fact, several participants in semi-structured interviews conducted with health care professionals and individuals working in community organizations in Montreal noted that health services may not always be safe for this population, and that there have been incidents when some institutions have reported undocumented patients to immigration authorities, leading to distrust and subsequent delays in care-seeking (29).

The number of people who do not have such basic health access cannot be underestimated. A retrospective audit study of 3 Melbourne asylum-seeker health clinics found that 88% of patients visits involved people with no medical access, owing to their visa status (25). For a population with no work rights, no access to health coverage, and no source of income, the only option for getting adequate health care is through community-based organizations and community health clinics that provide free services (25). More importantly, from a human rights perspective, denying access to such vulnerable group is at odds with the Equality Rights set out by the Canadian Charter of Rights and Freedoms (29). This ,in addition to the holistic and culturally appropriate services that these centers offer, makes them an ideal place for refugees and undocumented immigrants to access health care services.

- **RCHCs are cost effective:**

The literature search showed no formal Canadian health economic evaluation work done to evaluate the cost-effectiveness of RCHCs. However, there has been some economic evaluation work on the cost-effectiveness of CHCs in the US. Since RCHCs and CHCs are very similar models, with the exception of the population served, economic evaluation studies on CHCs were included to investigate the potential cost effectiveness of the RCHC model.

CHCs are meant to be a medical "homes" for their patients which will potentially reduce avoidable hospitalizations, help to manage chronic conditions, and lead to fewer serious episodes of illness. In the US, a study comparing Medicaid patients treated elsewhere with Medicaid patients in CHCs found out that CHCs patients are 11% to 22% less likely to be hospitalized for avoidable conditions and 19 % less likely to use the emergency room for avoidable conditions (30). Another study released in August 2007 by the National Association of Community Health Centers (NACHC), in collaboration with the Robert Graham Center and Capital Link, found that medical expenses for health center patients are 41 % lower ($1,810 per person annually) compared to patients seen elsewhere (34). As a result, they save the American health-care system between $9.9 and $17.6 billion a year (34). There is a need for similar studies in Canada.

- **Provide job and investments opportunities in surrounding communities:**

RCHCs are bodies created from the community for the community which means that they can play a vital role in generating income and investments within their local hosting neighborhoods. These hosting neighborhoods are usually some of the country's most economically deprived places. One NACHC study found that in 2005, CHCs directly generated over $7 billion of revenue and employed 90,000 people nationally in the US (34).

4- Scarcity of data and research:

Given Canada's commitment to resettlement of refugees and the number of refugees arriving every year, there is a surprising lack of data and research around refugee health. This is a common concern expressed in many of the literature reviewed for this project. One study highlighted the lack of national longitudinal Canadian data on health of refugees (33). Another study indicated the lack of systematic documentation of migratory status in medical records which made it difficult, and often impossible, to identify the precise immigration status of individuals within uninsured groups (28).

This lack of data and research make tracking undocumented and uninsured individuals even more difficult. A descriptive analysis study of 112 patients visiting a refugee health clinic in London indicates that very little is known about undocumented individuals or "those who regularly sleep rough or sofa surf", as they are a difficult group to reach, not least because of their fears of detainment and deportation (22).

5- Gaps and barriers in refugee health sector in Canada:

There is substantial evidence in the literature that indicates there are multiple barriers and gaps in the Canadian health care system that prevent refugees and uninsured or undocumented immigrants from accessing or receiving quality health care. These barriers and gaps include a complex array of political, social and health system-related rules and requirements, as well as factors relating to the culture of the patient, the family and the health care provider.

- **Health system-related:**

The over use of emergency departments as a first point of contact by certain groups is one indication of poor access to timely non-emergency outpatient health care services. This was reflected in one population-based cohort study among youth aged 10-24 years old of various immigrant statuses (refugee, non-refugee immigrant and non-immigrant). This study found that refugee youth are more likely to present with a first mental health crisis to the emergency department than non-immigrants which reflects lack of sufficient access to outpatient mental health care (26).

There is also supporting evidence that our population of interest is being turned away by mainstream physicians. A Canadian study aiming at assessing prenatal care access of eligible refugee claimants women found out that there was a statistically significantly lower rate of offering prenatal care (34%) to refugee claimants by prenatal care providers in Toronto compared with non- refugees (95%) (35). In addition to this, one refugee health clinic in the UK found that 54% of its patients had been turned away, often more than once, by mainstream general practice surgeries in the UK (22).

- **Health care provider-related:**

Disparities in health care access between our population of interest and the general Canadian population is due partially to health care providers' lack of knowledge about current IFHP policy criteria, frustration with cumbersome administrative paperwork, and slow reimbursement processes (35).
In Canada, asylum seekers and refugees are entitled to primary care; however, this is not always understood by providers because patients are frequently being asked to provide passports, (often retained by the Home Office), utility bills, and proof of address, and were repeatedly turned away if these were not produced (22).

Current models do not seem to be working for many members of these vulnerable groups especially the uninsured who are a major source of concern. The majority of healthcare professionals and individuals working in community organizations in Montreal felt increasingly burdened by the number of and the extent of care needed by uninsured patients (29). Access to health care for uninsured children is of particular concern because of the long-lasting consequences of inadequate care on child development and later success, and because of the duty of the state to protect those most vulnerable (28). Also, underutilization of preventive health care has been associated with poorer health outcomes among undocumented children such as longer stays in hospitals, more acute health crises and higher mortality rates (28).

SYNTHESIS OF FINDINGS AND RECOMMENDATIONS

Returning to the question that this report is trying to answer, currently known information from the literature review will be used in this section to answer the question and make some recommendations.

From the rapid review of literature, it became evident that RCHCs have multi-level impact on different social determinants of health (SDHs) in the target population. To describe the multi-level impact of RCHCs, a concentric-circled model was made (Figure 3). In this multi-level impact model, the circle closest to the center shows the direct and immediate impact of RCHCs and the further you go from the center the more the impact is indirect. As mentioned earlier, RCHCs have a direct impact on improving health care access and providing timely social support to vulnerable groups by providing a holistic and culturally competent care in a central location. The more patients are provided with health care access and the more social and settlement support given to them, the more they will have the chance to do better on upstream social determinants of health. Although the causal pathways of SDHs are very complex, the influence of social factors on health has been established (36). This indicates that better health outcomes of RCHCs patients will eventually reflect on their employment levels, education competition, childhood development, and their social inclusion.

Figure 3: Multi-level impact of RCHCs

Now that we know that RCHCs have a multi-level impact on social determinants of health, it is time to get a better understanding of the population impact of RCHCs and the amount of individual efforts needed to maximise the impact. The Health Impact Pyramid, which is a 5-tier conceptual framework that describes various public health interventions and which level of the pyramid they impact, was used to study the population impact of RCHCs (Figure 4). At the base of the pyramid, indicating interventions with the greatest potential impact, are efforts to address social determinants of health. In ascending order are interventions that change the context to make individuals' default

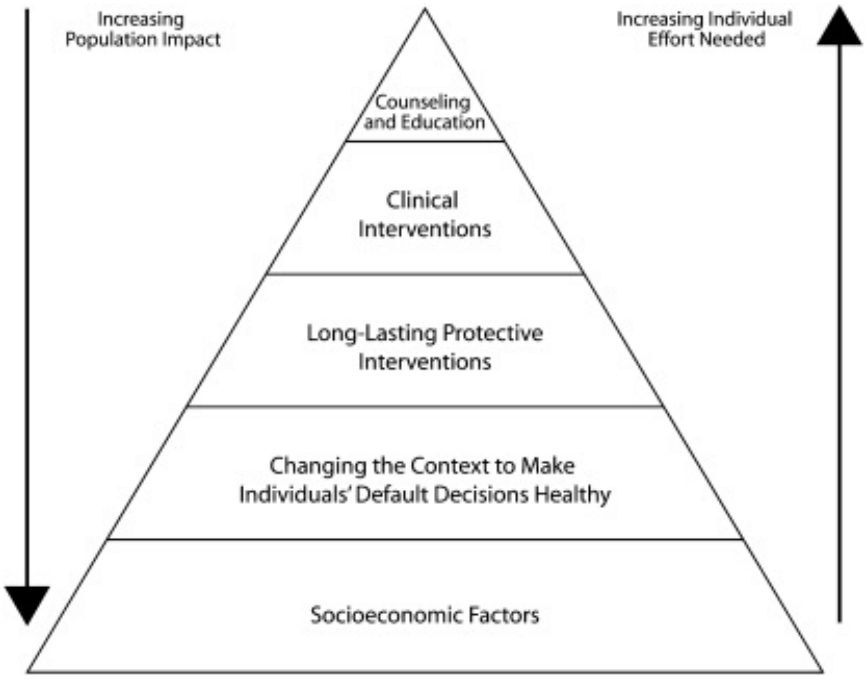
decisions healthy, clinical interventions that require limited contact but confer long-term protection, ongoing direct clinical care, and health education and counseling. Interventions focusing on lower levels of the pyramid tend to be more effective because they reach broader segments of society and require less individual effort (37).

The clinical nature of RCHCs and the various clinical services they provide qualify them to be one form of clinical interventions which falls at the fourth level (tier 4) of the Health Impact Pyramid. As a clinical intervention, RCHCs can offer clinical care to number of groups in the Canadian population that face many barriers to accessing health services thus improving quality of physical and mental health for these groups. Although the population impact of clinical interventions such as RCHCs ,according to the health impact pyramid framework, is less than other tiers at the bottom, they often require the least political commitment.

Beside clinical services, RCHCs provide some social and settlement services that ease the integration of refugees and undocumented immigrants into the Canadian community. The social integration role RCHCs play through their social and settlement services have the potential to make changes at the bottom tier of the health impact pyramid which represents changes in socioeconomic factors (e.g. improved education, improved employment ..etc.). However, to make this assumption, more research is needed.

Regardless of the tier at which RCHCs fall under, implementing interventions at each of the tiers is required to achieve the maximum possible sustained public health benefit.

Figure 4: Health Impact Pyramid



Other than impact, the rapid literature review showed that ,although there is a reasonably developed literature on community health centers, there is not enough research and economic evaluations on refugee community health centers, specifically. Most of the conclusions in this report were drawn from research around the impact of CHCs that is closely analogous to the RCHC model and, as such, offers insights into how RCHCs could impact the health of the population of interest and the Canadian health system. This is a big knowledge gap that needs to be filled in order to produce better evidence and, of course, better policy decisions.

In the light of current knowledge and literature around the research question and based on the synthesis of findings, this report concludes with the following recommendations to be taken into consideration by refugee health advocacy groups:

APPLICABILITY AND TRANSFERABILITY OF RECOMMENDATIONS:

The adoption process of the recommendations might be faced with many obstacles and not all recommendations may be implementable giving the current political, economical, and social atmosphere; with that, this report adapted a tool for assessing applicability and transferability of recommendations and evidence. The tool consists of a set of assessment questions that are meant to be discussed with a group of stakeholders who will give scores to the questions and decide on the applicability of the intervention or recommendations for their local community (38). For the sake of this report, questions were adapted and used to guide discussion around applicability and transferability of the report's recommendations. It is recommended that refugee health advocacy groups use this tool again with stakeholders to further discuss the applicability of recommendations from their point of view.

In terms of applicability, refugee health advocacy groups do not have influence over political acceptability but they have the needed skills to identify and engage constructively with individual, provincial or federal policy makers who are potentially supportive of their cause. They also have the skills to collaborate with other advocacy groups having similar objectives. While governments around the world are trying to cope with the fast-paced changes of the COVID-19 pandemic, which is the time when this report was written, refugee and uninsured health might get overlooked. However, such pandemic could further widen and deepen existing health inequities in Canada which is a conversation that need to be made as soon as possible to mitigate any negative outcomes the pandemic could have on marginalized populations. Refugee health advocacy groups play an important role in these times to build system connections, voice concerns, and use evidence -such the one this report is offering- to make a change.

Recommendations will have the potential to benefit not only the population of interest, but also the local and federal governments, as well as the broader Canadian community, by introducing cost savings, preventing overloading of other components of the healthcare system, and supporting the integration of refugees into their new communities. Typical RCHCs patients either have limited or no access to health care services, therefore the recommendations proposed are expected to have be acceptable to vulnerable groups themselves and to the wider community that cares for the health and wellbeing of new Canadians and all people residing on Canadian lands.

As previously discussed, funding of RCHCs varies from one center to another and from one country to another, therefore the essential human and financial resources required to start a RCHC varies. Government funding is encouraged but not essential to start a RCHC. Some RCHCs are operating fundamentally on donor funds (i.e. The Canadian Centre for Refugee and Immigrant HealthCare in Ontario) which means that the focus of advocacy efforts should not be limited to government level only but should further expand to community level.

Human resources, on the other hand, mainly include medical staff and service providers (front desk receptionists, settlement workers, cultural brokers, interpreters, etc.) which are generally within the reach of advocacy groups if not already members of these groups. Applicability also needs to be discussed in monetary terms which involves needs assessments and developing funding scenarios. To facilitate discussions and seek some expertise around budgets and resources, this report provides contact information of various Canadian RCHCs that came up in the review.

In terms of transferability, the basic elements of the RCHC model have been found applicable and relevant across diverse settings. The literature search has confirmed two facts regarding transferability. First, the number of people affected by poor access to mainstream health care services is substantial and they are considered a very vulnerable group within the Canadian population. Second, this literature review found evidence that RCHCs effectively reach the target population and address their concerns. The RCHC model is not complex; in fact the basic things needed for a RCHC to be established are not many, so applicability of this model in a Canadian setting should not be a big concern.

ETHICAL AND VALUE CONSIDERATION:

The underlying assumption of this report and its recommendations is that the broader Canadian society is supportive and empathetic with issues related to health inequities and health of marginalized groups (refugees, asylum seekers and undocumented immigrants). With this in mind, the report encourages refugee health advocacy groups to focus on gaining support on a community level and build more RCHCs, especially in cities lacking such a service and welcoming a high number of refugees and uninsured people. Although this assumption could be challenged, it needed to be made in order to move forward with the report. It is very difficult to judge the way the Canadian community views the issue of RCHCs and refugee/undocumented health within the scope of this report. Since many RCHCs already exist in Canada, many of which are entirely funded by community donations, an assumption that the general perceptions concerning refugee and undocumented people's health is empathetic was made.

The demand for healthcare comes from the desire of consumers to protect and improve their health. In scarce health resources, the use of personal health care services can mean fewer personal resources are available for other goods and services. In other words, the government funds allocated to build more RCHCs are just funds taken from one service and given to another. Although some evidence exists on the cost-effectiveness of CHCs versus a fee-for-service model, this report does not dive deep in the economic argument on whether RCHCs are the best option compared to conventional health care. This report could be the first step in building a formal health economic analysis around RCHCs (cost utility analysis or cost effectiveness analysis).

Health equity is the core of RCHC work, therefore there must be certain regulations and policies in place to guarantee equity is achieved within RCHCs. Actually, RCHCs welcome vulnerable patients from diverse backgrounds, with various health needs, and with different visa status which puts us in front of questions like: How can we ensure all patients are treated equally with no biases? How do we make sure that the safety of patients with precarious status is not being jeopardized? RCHCs must have strict regulations and policies to avoid any sort of unequal provision of services. One way to do so is by encouraging refugee health advocacy groups and RCHC staff to have a conversation with stakeholders and community members using the Health Equity Impact Assessment (HEIA) tool to identify and address together the potential unintended health impacts (negative or positive) of RCHCs on population utilizing services (39,40).

STRENGTHS AND LIMITATIONS:

The most important strength of this capstone project is that it was done in response to a need expressed by members of refugee communities themselves and advocacy groups serving these communities. The need for having RCHCs was one of the key messages that refugees have indicated through a refugee health engagement project which was led by the Refugee Health Coalition in Edmonton and entailed extensive conversations with more than 20 refugee groups. The engagement report (41) indicated that Edmonton is the only major city in Canada lacking a refugee health center and the advocacy effort to have one should be backed up with evidence. Results from this capstone project serve to inform about advocacy efforts and provide evidence of the impact RCHC have. Given this information, refugee health advocacy groups can move forward with the asks they gathered from the refugee health engagement project.

There are some limitations related to the methodology chosen for this capstone project. Rapid literature reviews are known to have some limitations related to search process, appraisal, and selection biases (42). Due to the limited published research available on refugee health in general and RCHCs, some studies were included in the analysis that may have ambiguous findings, appear to be preliminary in nature, or are old and offer limited insight. Therefore, care needs to be taken in interpreting the results of this rapid review.

In fact, much of the literature found does not specifically address the question of impact of refugee community health centers. Some of the studies covered access to health care by refugees and the uninsured, while others discussed refugee health clinics in general, and not necessarily the community health clinics model in particular. To fill this gap, studies on CHCs impact were examined, because of their marked similarities to the RCHC model.

There was other information needed concerning the ideal model of care that RCHCs could offer which could not be found through a rapid literature review, such as information on how RCHC patients are transitioning to family physicians and the best model for offering interpretation services (telephone, in person, cultural brokers). To answer these questions along with other questions mentioned earlier, more research in this area should be done.

Overall, this report examined one way to deal with many challenges the Canadian health system

has long been facing. Is it reasonable to argue that uninsured individuals do not deserve healthcare access when they become ill, based solely on an arbitrary status decision? Is it okay that new Canadians who take on most of the dirty, dangerous, and difficult injury-prone work often delay seeking care until their provincial insurance eligibility arrives, or until they become too ill to further avoid care? Is it okay that in the land of freedom and equality some of the most vulnerable groups are facing a hard time navigating and accessing health services? It is these questions that have been asked repeatedly by voiceless communities and still have no answer.

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APPENDIX 1: SELF REFLECTIONS ON MPH BODIES OF KNOWLEDGE

Body of Knowledge	To what extent do you think you demonstrate understanding and integration of this body of knowledge? (Good/Adequate/Inadequate)	How / Where did you demonstrate understanding and integration of this body of knowledge? [Example sections/pages]
Methods (e.g., Applied Biostatistics, Epidemiology, Qualitative, Evaluation)	Good	Capstone project was done using rapid literature review with proper critical appraisal tool to ensure the quality of literature included (pages 9-10).
Environmental & Occupational Health	Adequate	Current knowledge section discusses indirectly the effect of current health system built environment (i.e. staff) on refugee health (pages 12-13)
Health Policy & Management	Adequate	Background section includes a discussion around current policies and system in place to respond to refugees' health needs in Canada (pages 3-5).
Social & Behavioural Determinants of Health	Good	The discussion around the impact of RCHCs within different SDH in synthesis of findings section (pages 19-21).
Global Health (if applicable)	Good	Overview of the refugee crisis globally and its implications in background section (pages 2-3)
Specialization Competency 1 **(Describe health inequities within and between countries)**	Good	Discussion about refugee health and health equity in significance for public health section (pages 7-8).
Specialization Competency 2 **(Analyze broad strategies to reduce global health inequities)**	Good	Recommendations section analysed different strategies to reduce inequalities in refugee health i.e. building more RCHCs (pages 19-21).

APPENDIX 2: NAMES AND CONTACT INFORMATION OF RCHCS

Refugee clinic:	Location:	Website (if available):
The North Hamilton Community Health Center (NHCHC)	Ontario, Canada	https://www.nhchc.ca/
Bridge Community Health Clinic	BC, Canada	http://www.bridgeclinic.org/
New Canadians Health clinics	Burnaby and Surrey, BC, Canada	NA
Davenport Perth Neighborhood Centre	Toronto, Canada	http://dpnchc.com/
Calgary Refugee Health Clinic (Mosaic Primary Care Network)	Calgary, AB, Canada	http://mosaicpcn.ca/services/Pages/Refugee-Health-Services.aspx
Brockton Neighborhood Health Center (BNHC)	Brockton, Massachusetts, U.S	http://www.bnhc.org/main.html

APPENDIX 3: SEARCH TERMS

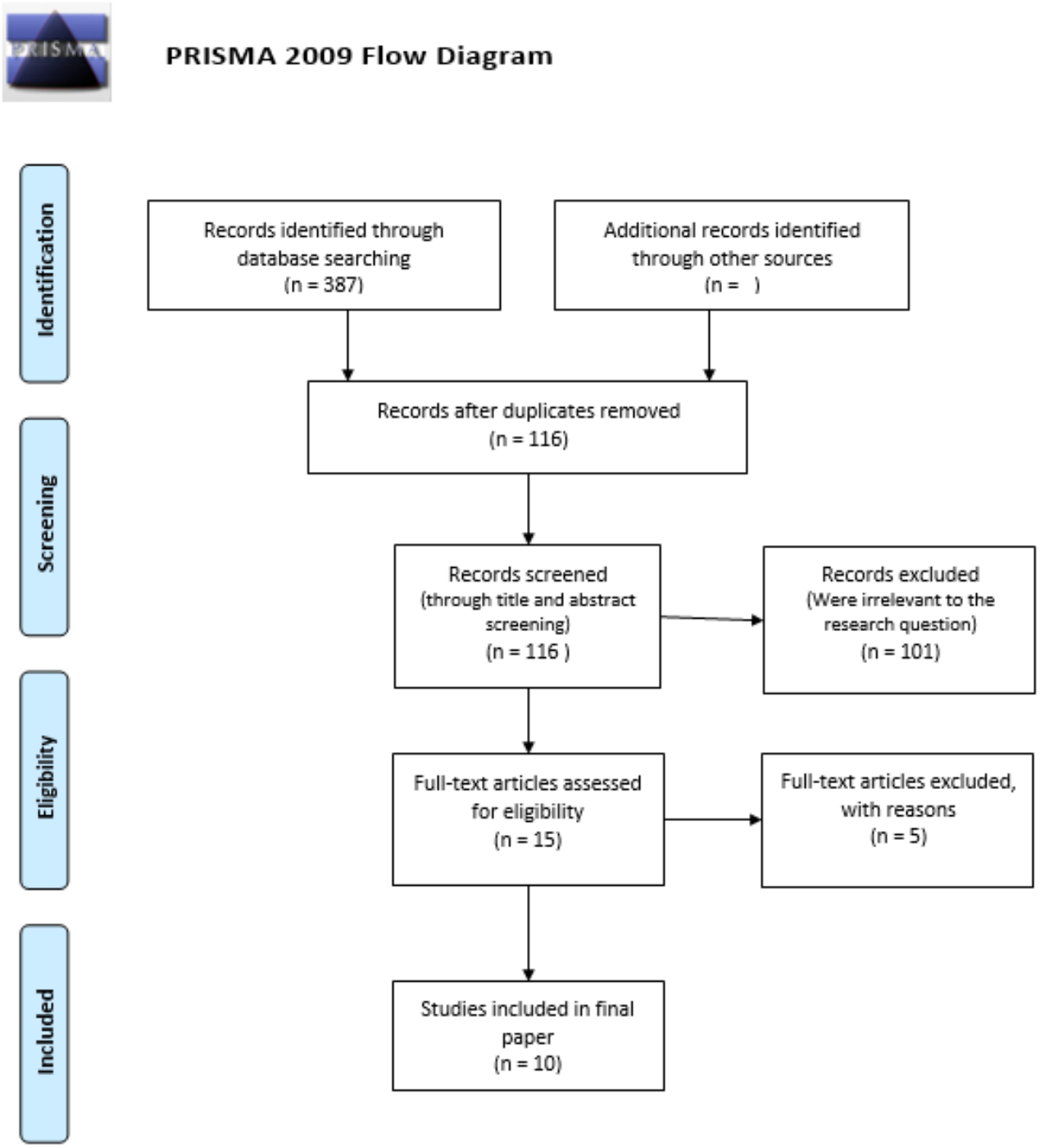
Search key terms:
(refugee* or asylee* or "asylum seeker*" or "displaced person*" or "displaced people") AND ("health centre*" or "health center*" or clinic or clinics or "primary care") AND OECD AND Canada

OECD:
exp canada/ or exp mexico/ or exp united states/ or chile/ or israel/ or turkey/ or exp japan/ or exp korea/ or austria/ or belgium/ or exp baltic states/ or estonia/ or latvia/ or lithuania/ or czech republic/ or hungary/ or poland/ or slovakia/ or slovenia/ or exp france/ or exp germany/ or united kingdom/ or exp england/ or northern ireland/ or exp scotland/ or wales/ or greece/ or exp ireland/ or exp italy/ or luxembourg/ or netherlands/ or portugal/ or exp "scandinavian and nordic countries"/ or exp denmark/ or finland/ or iceland/ or norway/ or sweden/ or spain/ or switzerland/ or exp australia/ or exp new zealand/ OR (Australia or Austria or Belgium or Canada or Chile or Czech Republic or Denmark or Estonia or Finland or France or Germany or Greece or Hungary or Iceland or Israel or Italy or Japan or Korea or Latvia or Lithuania or Luxembourg or Mexico or Netherlands or New Zealand or Norway or Poland or Portugal or Slovak Republic or Slovenia or Spain or Sweden or Switzerland or Turkey or United Kingdom or England or Ireland or Scotland or Wales or United States)

Canada:

(Abbotsford or Airdrie or Ajax or Aurora or Barrie or Belleville or Blainville or Brampton or Brantford or Brossard or Burlington or Burnaby or Caledon or Calgary or Cambridge or Cape Breton or Chatham Kent or Chilliwack or Clarington or Coquitlam or Drummondville or Edmonton or Fredericton or Gatineau or Granby or Grande Prairie or Sudbury or Guelph or Halton Hills or Iqaluit or Inuvik or Kamloops or Kawartha Lakes or Kelowna or Kingston or Kitchener or Langley or Laval or Lethbridge or Levis or Longueuil or Maple Ridge or Markham or Medicine Hat or Milton or Mirabel or Mississauga or Moncton or Montreal or Nanaimo or New Westminster or Newmarket or Niagara Falls or Norfolk County or North Bay or North Vancouver or North Vancouver or Oakville or Oshawa or Ottawa or Peterborough or Pickering or Port Coquitlam or Prince George or Quebec City or Red Deer or Regina or Repentigny or Richmond or Richmond Hill or Saanich or Saguenay or Saint John or Saint-Hyacinthe or Saint-Jean-sur-Richelieu or Saint-Jerome or Sarnia or Saskatoon or Sault Ste Marie or Sherbrooke or St Albert or St Catharines or St John's or Strathcona County or Surrey or Terrebonne or Thunder Bay or Toronto or Trois-Rivieres or Vancouver or Vaughan or ((Halifax or Hamilton or London or Victoria or Waterloo or Welland or Whitby or Windsor) not (UK or United Kingdom or England or Australia)) or Whitehorse or Winnipeg or Wood Buffalo or Yellowknife).ti,ab,kw.

APPENDIX 4: PRISMA DIAGRAM



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses*: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit www.prisma-statement.org.

APPENDIX 5: CRITICAL APPRAISAL (METAQAT)

Available in a separate Excel spreadsheet.

APPENDIX 6: CRITICAL APPRAISAL OF GREY LITERATURE

Available in a separate Word document.

APPENDIX 7: DATA EXTRACTION TABLE

Available in a separate Word document.