

Primary care utilization trajectories for immigrants and refugees in Ontario compared with long-term residents

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Wellesley Institute works in research and policy to improve health and health equity in the GTA through action on the social determinants of health.

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Report

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Statement on Acknowledgement of Traditional Land

We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

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Introduction

The majority of recent immigrants and refugees to Canada settle in Ontario. In 2017 over 100,000 immigrants arrived in Ontario.¹ Immigrants and refugees are not homogenous and include individuals and families from diverse countries, ethnic and cultural backgrounds, migration histories and socioeconomic histories.^{2,3} Immigrants to Canada tend to arrive healthier than people who are Canadian-born, but over time as their years in Canada increases their health deteriorates; this has been termed the “healthy immigrant effect.”^{4,5} Understanding the health care trajectories of immigrants and refugees and how this changes over time can broaden our understanding of their health care needs.

The migration process itself can have significant implications for the health of different newcomer populations. Immigrants and refugees arrive in Canada through distinct immigration pathways with either temporary or permanent status. Immigrants and refugees who resettle in Canada are granted permanent residency status. Permanent resident categories in Canada include economic class immigrants, family class immigrants, government assisted refugees, privately sponsored refugees, refugees who landed in Canada and other refugees and protected person categories.¹ Immigrants and refugees settling in Canada from these different immigration categories have unique pre-migration experiences that can impact their health care needs and health care utilization. For example, refugees who land in Canada may wait years before having their claim accepted and officially gaining permanent residency status. This paper focuses on immigrants and refugees who have obtained permanent residency status.

Health Service Utilization in immigrants and refugees

The social determinants of health including migration, immigration status, housing, employment, access to health care and social isolation all influence the health of immigrant and refugee populations.^{6,7} In terms of migration the health of immigrant and refugee populations are impacted by when, where and how they migrated to Canada. Ensuring immigrants and refugees have regular access to quality health care can support health promotion, disease prevention and early intervention. Research has found immigrants and refugees have poor access to health care including facing greater barriers to primary care access compared to the Canadian-born population.^{8,9,10} Studies examining health service utilization have reported newcomers from East Asian and Pacific regions have lower mental health care use and immigrant women have lower cervical cancer screening rates compared to Canadian women.^{11, 12} Additionally, another Ontario-based study found South Asian women have lower breast cancer screening rates compared to the general population.¹³ There

i The permanent residency program categories have been referred to as immigrant class, admission class, or immigrant category. In this paper I use the term admission class to refer to the different categories.

is a rich body of literature examining health service use of immigrant populations in Canada that indicates immigrants may have poorer access to primary care, preventative care and mental health care.

Fewer studies examine the heterogeneity of experiences between diverse immigrant and refugee populations. In a study of ethnic differences in mental health utilization Chiu et al. found South Asian, Chinese and Black populations in Ontario that reported poor or fair mental health were less likely to seek professional mental health help compared to White populations.¹⁴ Previously, Durbin and colleagues examined mental health care service utilization by admission class compared to long-term residents who were matched on sex and age. They found economic and family class newcomers were less likely than long-term residents to use primary mental health care.¹⁵ They also found immigrants in all admission classes were less likely to use psychiatric services and hospital services for mental health care although they could not account for need.¹⁶ Research has also shown immigrant populations are more likely to seek mental health care in primary care so primary care providers can play a particularly important role in serving this population.^{17, 11}

There is limited research about how health care utilization differs among different immigrant admission classes and how service utilization changes over time following settlement. Each admission class has its own eligibility requirements and process for obtaining permanent residency. This influences both which populations make up the group and their access to publicly funded health services in Ontario. The major immigrant admission categories and corresponding health care eligibility are described in Table 1.¹⁸ In 2017 alone 53315 economic class immigrants and 36750 family class immigrants settled in Ontario.¹⁹ Within admission classes (economic, family class, government-assisted refugees, privately-sponsored refugees and landed in Canada refugees) there are significant demographic and socioeconomic differences that can influence health care access and outcomes. Economic class immigrants, for example, are more likely to be highly educated, refugees arrive at younger ages and are less likely to speak English or French compared to other immigrants, and family class immigrants are more likely to be women. Refugees arriving directly from refugee camps may be exposed to different health risks and illnesses.²⁰

Access to publicly funded health care differs between the different admission classes (see Table 1). While economic and family class immigrants have a 3-month waiting period before having access to publicly funded health care through OHIP, accepted refugees receive health care coverage through the federal Interim Federal Health Program (IFHP) immediately until they qualify for OHIP.²¹ IFHP provides basic health care coverage as well as supplemental and prescription drug coverage at a rate similar to social assistance recipients.²² The supplemental coverage provided to resettled refugees through IFHP remains for the duration they receive income support from the government.²³ Refugees often wait 6 months to 1 year before they are processed for and receive OHIP.²⁴ Facing barriers to accessing health care can lead to poor health outcomes.²⁵

A better understanding of differences in health care usage between different admission classes can help to identify which groups may need more targeted supports to facilitate their use of the health care system. This is increasingly important as Canada increases immigration targets and expands refugee sponsorship programs such as GARs and PSRs. This study aims to describe primary care utilization trajectories by admission classes within a ten-year period to identify disparities in access to primary care and primary mental health care. This research will help to better understand primary care utilization among diverse immigrants and refugee groups to help researchers and policymakers identify gaps to equitable access to care.

Table 1 - Immigration Admission Category and Health Care Eligibility

Immigrant Admission Category	Immigration Process	Health Care Eligibility
Economic Class	Immigrate to Canada based on their skills and work experience ²⁶	3-month wait for OHIP eligibility
Family Class	Sponsored by a Canadian citizen or permanent resident living in Canada and can include spouses, parents and other family members ²⁷	3-month wait for OHIP eligibility
Government Assisted Refugee	Refugees that are selected abroad to resettle in Canada and receive resettlement assistance by the federal government. ²⁸	Basic coverage through Interim Federal Health Program (IFHP) and eligible for OHIP on arrival
Privately Sponsored Refugee	Refugees that are selected abroad for resettlement in Canada and are sponsored by organizations, groups or individuals and receive no government assistance ²⁹	Basic coverage through IFHP and eligible for OHIP on arrival
Landed in Canada Refugee	Upon arrival to Canada make a refugee claim. If claim is accepted are granted permanent resident status	Basic coverage through IFHP is provided for 90 days from the date the asylum claim is accepted or until qualify for OHIP

Methods

Study Design

This study used a retrospective matched cohort design and included immigrants and refugees who landed in Canada between April 1, 2001 to March 31, 2006 under the following admission classes: economic class, family class, government assisted refugee, privately sponsored refugee, landed in Canada refugees and other immigrants or refugees. The cohort was followed for a ten-year period up until March 31, 2011 to March 31, 2016. The immigrant and refugee cohort were matched to long-term residents (i.e. Canadian born individuals in Ontario or individuals who immigrated before 1985.) The cohort was matched to long-term residents based on age, sex, and forward sortation area. Cases were matched on age at Year 1.

Matching the cohort by forward sortation area can account for differences in neighbourhood income level and other factors that influence health care access like access to amenities and transit access. A total of 268,026 immigrants or refugees were matched to long term residents and included in the cohort with a match found for 99% of eligible cases.

Data Sources and Inclusion Criteria

The study cohort was created using administrative health records from the Institute of Clinical and Evaluative Sciences (ICES). Physician billings and health service utilization records were linked with Immigrant, Refugee and Citizenship Canada (IRCC) data. We worked with a research team at ICES with expertise in administrative health databases. The team at ICES advised on establishing the cohort, determining eligibility for the cohort, and refining the analysis for outcomes of interest. We worked with an analyst at ICES to create the cohort and perform the analysis.

The inclusion criteria for the immigrants and refugees in the cohort was as follows: (1) over the age of 18 and under 105 years old (2) intended to reside in Ontario, (3) had at least one health care contact within first 5 years and one in last 5 years and (4) become OHIP eligible within first 12 months following most recent landing date. To identify individuals who are eligible for health care and living in Ontario, health care system contact was used by only including cases if they made at least one health care contact in first five years and one in last 5 years. Although using health care contact can screen out younger and healthier populations the same exclusion criteria was applied to both cases and controls. Additionally, the majority of health care contacts are concentrated in individuals when they are older.

Finally, immigrants and refugees who were eligible for the cohort became OHIP eligible within 12 months following their most recent landing data from IRCC records. This would typically indicate the landing date associated with permanent resident status. Cases were excluded if there were missing data.

Admission Class

The cohort was categorized into the following immigrant admission classes: economic class immigrants, family class immigrants, Government Assisted Refugees (GAR), privately sponsored refugees (PSR), landed in Canada refugees (LCR) and other immigrants or refugees. The other immigrant or refugee category includes caregivers, refugee dependents, humanitarian & compassionate immigrants, protected persons refugees and temporary resident permit holders. Caregivers were included in the other category because their pathway to residency in 2001 to 2006 and demographic characteristics are distinct from other economic class streams.³⁰

Years since OHIP Eligible

For this study primary care utilization was stratified by year over a ten-year period following permanent residency in Ontario. The index event was OHIP eligibility and was used to determine year 1 for the cohort. Health care utilization records in ICES use OHIP billing data so prior to OHIP eligibility there are no records for a case.

Time from arrival to OHIP eligibility varies between different admission classes and depending on when permanent residency is obtained. To account for this, we included immigrants and refugees who received OHIP eligibility within 12 months after their arrival and used the most recent landing date for cases where more than one landing date was recorded.

Outcomes

The primary outcomes of interest are primary care utilization and primary care mental health utilization. Using the Ontario Health Insurance Plan (OHIP) database from ICES the percentage of total primary care visits for each year for each admission class was obtained. The percentage of primary care visits for mental health was also calculated. Primary mental health visits were determined through a validated algorithm used at ICES that uses physician billing codes to identify visits related to mental health. The use of administrative health data for identifying primary mental health visits has been found to have high specificity (ranging from 97.0% to 99.5%) and adequate sensitivity (ranging from 22.3% to 80.7%).³¹

Descriptive Analysis

Sex-specific utilization rates for total primary care visits and total primary care mental health visits by year for a ten-year period were retrieved from ICES for the cohort. The aim was to identify variations between primary care and primary mental health care utilization between the different admission classes as compared to long-term residents. We calculated rate ratios and 95% confidence intervals for total primary care visits and total primary care mental health visits for each year.

Results

Sociodemographic Characteristics

The sociodemographic characteristics of the immigrant and refugee cohort compared with matched long-term resident controls are summarized in Table 2. For all admission classes the majority of the population were aged 18-34. Family class immigrants were more

likely to be female (64.64%). Most economic class and family class immigrants were from South Asia or East Asia. For GARs and PSRs the majority were from South Asia (32.5%, 44.2% respectively), Middle East and North Africa (20%, 26.3%) or Sub-Saharan Africa (25.1%, 18.5%). The majority of landed in Canada refugees were from South Asia (24.4%) or Eastern Europe (21.3%). All admission classes had lower incomes compared to long-term residents with the majority of GARs (68.1%) and PSRs (56.4%) being in the lowest income quintile. Economic class immigrants were more highly educated compared to other admission classes (69.9% with a university degree or higher) and the majority of GARs (75%) and PSRs (70.5%) had only secondary school or less. 71.5% of GARs and 72.5% of PSRs reported no knowledge of English or French. Table 3 describes the top 10 countries of origin for the cohort by admission class. The majority of economic and family class immigrants were from India and China where as GARs and PSRs were from Afghanistan and Iraq and LCRs from Sri Lanka and China.

Table 2 - Proportion of Cohort by Immigrant Admission Category for top 10 countries

	Economic	Family	GAR	PSR	LCR
1	India (20.4%)	India (22.0%)	Afghanistan (31.9%)	Afghanistan (40.1%)	Sri Lanka (11.3%)
2	China (18.9%)	China (13.8%)	Iran (12.8%)	Iraq (22.1%)	China (10.3%)
3	Pakistan (9.2%)	Pakistan (7.1%)	Sudan (10.6%)	Ethiopia (7.8%)	Pakistan (7.8%)
4	Phillipines (6.4%)	Sri Lanka (5.2%)	Yugoslavia (9.1%)	Sierra Leone (4.7%)	Colombia (7.3%)
5	Iran (4.8%)	Phillipines (4.9%)	Colombia (7.0%)	Colombia (4.6%)	Turkey (4.7%)
6	Romania (3.2%)	Vietnam (3.2%)	Iraq (6.0%)	Iran (3.6%)	Russia (3.0%)
7	Russia (3.0%)	Jamaica (3.2%)	Somalia (5.1%)	Yugoslavia (2.0%)	Somalia (2.7%)
8	South Korea (2.9%)	Guyana (2.7%)	Ethiopia (2.0%)	Sri Lanka (2.2%)	Guyana (2.6%)
9	Bangladesh (2.6%)	Iran (2.3%)	Liberia (1.8%)	Eritrea (1.8%)	Iran (2.4%)
10	Ukraine (2.5%)	USA (2.1%)	Bosnia-Herzegovina (1.8%)	India (1.4%)	Afghanistan (1.9%)

Primary Care Utilization

Primary care utilization differs between men and women with males having lower rates of utilization compared to females. Figure 1 and 2 illustrate the primary care visits for female and male immigrants and refugees from year 1 to year 10.

Primary care utilization ranged from 79.3% to 90.1% for females across admission classes and 83.3% to 87.2% for female long-term residents (see Table 4). For female immigrants and refugees primary care utilization generally follows a parabolic trend peaking at year 5 (Figure 1). Female economic class immigrants had significantly lower primary care utilization compared to long-term residents across all ten years. Female GARs had no significant difference in primary care utilization compared to long-term residents across all ten years. Female PSRs had utilization rates similar to long-term residents from year 1 to 3 and significantly higher from years 4 to 10.

Primary care utilization ranged from 66.1% to 79.1% for males across admission classes and 71% to 73.4% for male long-term residents across all ten years (see Table 5). Males who arrived as family class or PSRs had significantly higher primary care utilization across all ten years compared to long-term residents. Both male and female LCRs had slightly lower rates of primary care utilization compared to long-term residents across all ten years.

Figure 1 – Total Any Primary Care Visits for Female Immigrants and Refugees Arriving Between April 1, 2001-March 31, 2006 by Immigrant Class

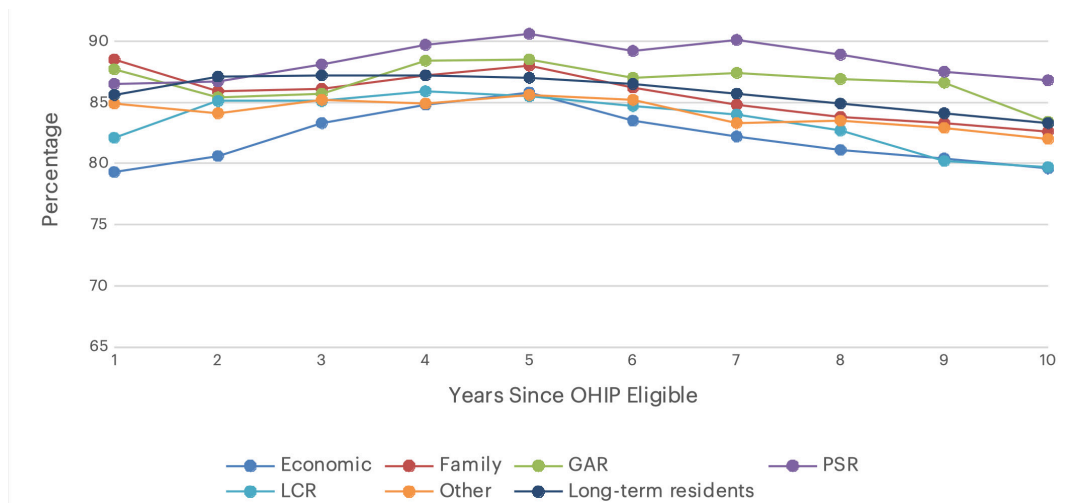


Figure 2 - Total Any Primary Care Visits for Male Immigrants and Refugees Arriving Between April 1, 2001-March 31, 2006 by Immigrant Class



Primary Care Mental Health Utilization

For primary care mental health utilization, the percentage of visits for female across admission classes ranged from 10.1% to 26.8% and 16.4% to 18.0% for female long-term residents (see Table 6). The percentage of primary care mental health visits for males across admission classes ranged from 6.8% to 18.2% and 11.2% to 12.2% for male long-term residents (see Table 7). Figure 3 and 4 illustrate primary care mental health utilization across all 10 years for females and males respectively.

Female economic class, family class and other immigrants had significantly lower primary care mental visits compared to long-term residents. Female GARs had significantly higher primary care mental health visits compared to long-term residents across all ten years. For female GARs primary care mental health visits increased from year 1 (RR 1.18 95% CI 1.02-1.36) to 2 (1.37 95% 1.21-1.56), declined in year 3 (RR 1.31 95% 1.14-1.49) and had a steady increase until year 5 (RR 1.51 95% 1.33-1.70). From year 5 to 6 (RR 1.25 95% 1.09-1.44) it declined, increased for year 7 (RR 1.48 95% 1.30-1.68) and declined for year 8 (RR 1.28 95% 1.05-1.41). LCRs had lower primary care mental health visits across all ten years. PSRs had significantly lower primary care mental health visits in year 1 and 2 and lower compared to long-term residents in year 3 to 10.

Economic class, family class, LCR and other immigrants and refugees for males had lower primary care mental health compared to long-term residents. Male GARs had significantly higher primary care mental health visits compared to long-term residents across all ten years. Male GARs primary care mental health visits peaked in year 4 (RR 1.51, 95% CI 1.29-1.77), declined in year 5 (RR 1.26 95% 1.06-1.51) and then increased again in year 7 (RR 1.41 95% CI 1.19-1.68) before declining until year 10. Male PSRs had primary care mental visits similar to long-term residents.

Figure 3 – Total Any Primary Care Mental Health Visits for Female Immigrants and Refugees Arriving Between April 1, 2001-March 31, 2006 by Immigrant Class

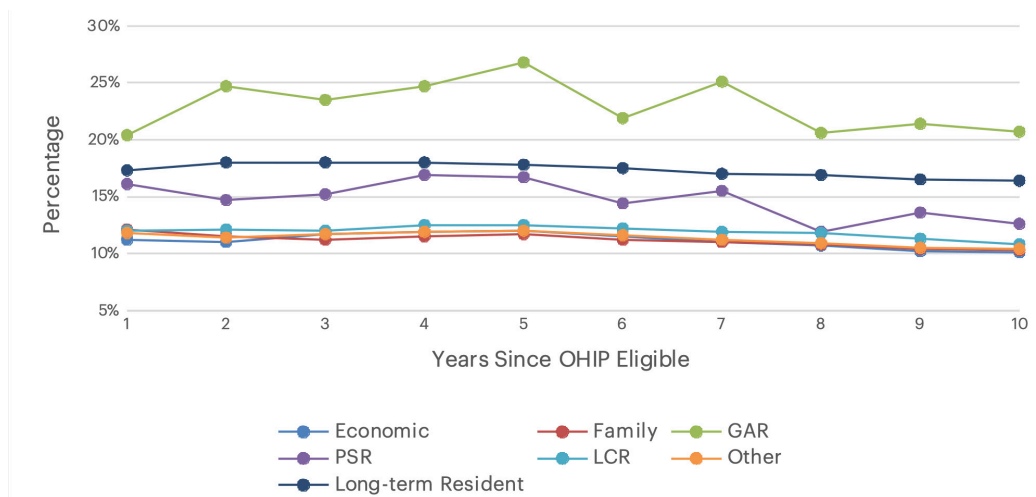
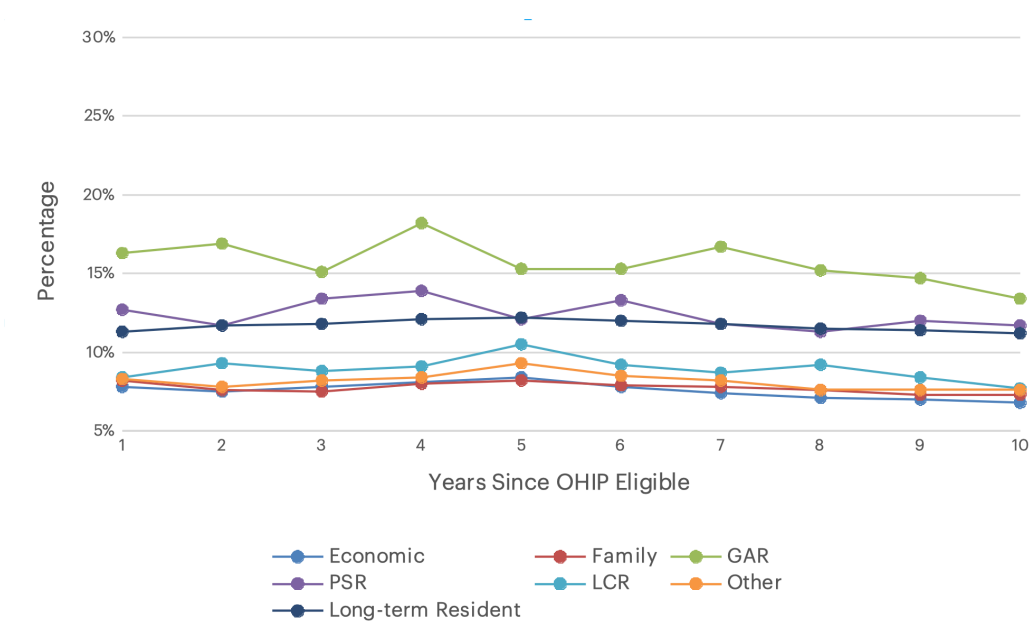


Figure 4 - Total Any Primary Care Mental Health Visits for Male Immigrants and Refugees Arriving Between April 1, 2001-March 31, 2006 by Immigrant Class



Discussion

Overall primary care utilization was high for immigrants and refugees from the different admission classes and comparable to long-term residents with males having lower service utilization compared to females. There was also considerable variability between the admission classes. This demonstrates that immigrants and refugees are in most cases accessing primary care as much as the general population with economic class immigrants and landed in Canada refugees having slightly lower annual primary care visits. On the other hand, primary care mental health utilization varies significantly between admission classes relative to the long-term resident group. Compared with long-term residents, primary mental health visits were low for economic class, family class and landed in Canada refugees for males and females. In contrast GARs and PSRs had higher primary care mental health visits comparable to long-term residents. Research has shown that immigrants tend to underutilize mental health services although they may have unmet needs related to mental health.^{32,33} GARs and PSRs have higher mental health use in primary care and coming as refugees may be more likely to be identified as having mental health concerns. However, refugees who landed in Canada are having less mental health related visits although they are accessing primary care in general at high levels.

Previous research has found the health of immigrant populations declines over time following settlement in Canada and health service utilization increases. This study shows there is variation in primary care and primary care mental health use between admission classes and over a ten-year period. One study found less primary care mental health for economic and family class, consistent with our research.³⁴ However, GAR had particularly high primary care mental health use for both females and males. Further information on unmet needs for health and mental health by admission class would provide more context to who needs access and who is facing barriers to care.

This study demonstrates that newcomers from different admission classes have differing experiences with the health care system and trajectories for health service utilization. Apart from refugees, other admission classes do not use health services more than long-term residents and on the whole have a similar trajectory. In the ten-year period mental health use doesn't increase significantly. There is considerable variability in the utilization patterns to suggest health system planners and policymakers need to better understand the unique needs of immigrants and refugees to better plan for health services.

Often the distinct health care experiences of refugees who settle through different refugee settlement programs are underexplored. This research demonstrates that GARs, PSRs and refugees who landed in Canada each have distinct primary care and primary mental health utilization trajectories over a ten-year period. Each refugee subgroup is characterized by different experiences and migration histories for example PSRs are more likely to be sponsored by family members and thus have stronger social support. The refugees who

landed in Canada have lower primary care utilization and primary care mental health utilization compared to long-term residents and GARs and PSRs. However, given the migration experiences of refugees in their home countries one would expect a similar utilization rates to the other refugee subgroups. Refugees who landed in Canada may have had more resources to get to Canada themselves and come from different countries than GARs and PSRs but less is known about their health care needs and experiences accessing health care services.

Strengths and limitations

A key strength of this study is that it explores health care utilization among different admission classes and tracks differences over a ten-year period. Very few studies have examined differences by GARs, PSRs, LCRs and compared to long-term residents. This helps unpack the actual primary care utilization patterns of distinct immigrant and refugee subpopulations that are often treated as a homogenous group. Although the estimates are unadjusted, by matching the cohort to long-term residents on age, sex and postal code it provides a robust comparison with long-term residents as a baseline.

One of the limitations of this study is that data does not capture nurse practitioner visits. However, in the earlier years of the cohort it was more common to receive primary care from a family physician or general practitioner and the expanded role of nurse practitioners in primary care is more recent. Additionally, this study does not include health care coverage provided through community health centres for uninsured populations. Although some recent newcomers may be accessing health care services through community health centres, currently only 4% of Ontarians have access to community health centres which covers a small percentage of newly arrived immigrants and refugees.³⁵

Additionally, since we are following immigrants and refugees who arrived in 2001 to 2006 it is possible that this group is less representative of immigrants and refugees who have arrived in later years where different waves of immigration can impact the countries of origin and characteristics of populations. However, stratifying the analysis by each year provides a snapshot of changes over time within the same cohort. Finally, this study included immigrants and refugees who became OHIP eligible within 12 months following their landing date. Depending on their circumstances some refugee populations may wait longer to receive publicly funded health care and would be missing from this analysis. However, exploring the utilization for different admission classes who receive health coverage within a similar timeframe allows us to compare between the different class categories for differences in service utilization with similar health coverage.

Conclusion

Often immigrants and refugees are treated as a homogenous group when thinking about their health service utilization and its implications for health systems planning. There is a need for further research that explores distinct health care experiences and needs of immigrant and refugee groups over time. Current research exploring the trajectories of Syrian refugees who settled through the GAR and PSR programs will be important in understanding the strengths and gaps of the different refugee resettlement programs in meeting the health care needs of new refugees.³⁶

This study also shows the need to consider the diversity within immigrant and refugee populations and their different needs when planning for health services. For instance, there is limited research on health care utilization of landed of Canada in refugees in Ontario and this study highlights how different refugee groups are distinct populations that may have different access to the health care system despite their complex needs. A one-size-fits-all approach is inadequate to respond to this diversity of needs and experiences and innovative models for delivering care should be explored to improve access to health care for all immigrant and refugee populations.³⁷

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