Informing ASPIRE and a future student-run clinic: healthcare needs assessment of London, Ontario

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ABSTRACT
A needs assessment was conducted by the Alliance of Students Providing Interprofessional Resources and Education (ASPIRE) to identify gaps in healthcare delivery and health promotion within London, Ontario that can be addressed by a student-run clinic. Investigations into the social determinants of health revealed a low employment rate with notable housing and food insecurities. From a physical health perspective, cardiovascular and respiratory diseases were identified as the leading causes of hospitalization and mortality. Additionally, a high burden of mental illness and rising incidence of human immunodeficiency virus (HIV) were identified as major health challenges. Upon examination of primary care resources, various patient and practitioner-reported barriers to care were noted. Patients cited long wait times, inaccessible office hours, and inconvenient locations of practice as barriers. Primary care practitioners reported lack of resources to adequately meet the needs of complex populations, particularly those of low socioeconomic status backgrounds. To conclude, a discussion of the role and operation of a student-run clinic in addressing these findings is presented; an additional interdisciplinary healthcare resource that offers extended hours of operation, clinical outreach, and healthcare-related workshops can improve the accessibility to timely healthcare for underserved populations in London.

INTRODUCTION
The Alliance of Students Providing Interprofessional Resources and Education (ASPIRE) is an interdisciplinary student organization involving students from Western University, Fanshawe College, and the University of Waterloo whose ultimate goal is to develop a student-run clinic (SRC) in London, Ontario. In establishing such a clinic, ASPIRE aims to improve healthcare provision for underserved and marginalized populations, increase awareness of the need for access to healthcare, and actively involve students in meeting the needs of society.

To ensure that an SRC would address the specific healthcare needs of the population it would serve, the ASPIRE research committee performed a needs assessment of the London community. Our methodology included review of data sources on the demographic populations in London and their respective health needs and barriers to healthcare access. In particular, the Middlesex-London Health Unit and Statistics Canada Census data provided valuable information, which was supplemented by available data on more recent changes to the healthcare landscape in London. Herein, a summary of the findings is presented, with a focus on social determinants of health and access to primary care. This is followed with a discussion surrounding the potential translation of these findings to the operation of the SRC.

POPULATION CHARACTERISTICS
The City of London is the largest urban settlement in Southwestern Ontario, and, together with Middlesex County, forms an area of the South West Local Health Integration Network (LHIN) that is home to 455,526 people. London is both steadily growing and becoming increasingly diverse. Between 2011 and 2016, the city’s population increased by 4.8%, and about 1 in 5 Londoners are now foreign born. The top 5 largest minority groups are Arab, South Asian, Black, Chinese, and Latin American. London is also home to a substantial Indigenous population that makes up 2.5% of its inhabitants.

SOCIAL DETERMINANTS OF HEALTH
According to 2016 Census data, the London region has the lowest employment rate (59.2%; defined as the number of employed people as a percentage of the population aged 15 and older) of any of the Census Metropolitan Areas in the country. London also has notable housing and food insecurities: over 10,000 people accessed emergency shelters in London between 2011 and 2016, of whom 60% are estimated to be chronically homeless (ie without a steady place to stay for more than 6 months). Additionally, about 1 in 8 Middlesex-London households are unable to afford access to a sufficient and nutritious diet on a regular basis.

Within London, individuals with the lowest socioeconomic status (SES) had higher rates of hospitalization, various health concerns, and detrimental health-related behaviors when compared to those with the highest SES status (2011). Specifically, hospitalization related to anxiety disorders, chronic obstructive pulmonary disease (COPD), substance-related disorders, and diabetes are more than three times as common among individuals with lower SES. Geographically, the highest socioeconomic distress appears to be localized in the southeastern section of the city.

HEALTH STATUS AND PROMINENT MEDICAL ISSUES
Cardiovascular and respiratory diseases are the leading causes of hospitalization and mortality in the Middlesex-London area, placing a significant burden on healthcare resources. However, these and other related chronic diseases are associated with many lifestyle risk factors. In a recent community health survey (2016), less than 40% of Londoners reported that they consume enough fruits and vegetables to meet the Canadian Food Guide recommendations, almost half reported being inactive during their leisure time, and about one in five of the adult population were current smokers.

Furthermore, London has a high prevalence of mental illness; 21.6% of the population has a documented mental health condition.
Additionally, 29.5% of respondents reported knowing what to expect during treatments (10.9%), feeling judged (10.1%), and not being able to speak honestly to a PCP (9.7%), while recent immigrants specifically noted experiencing significant language barriers when attempting to access primary care. It is noteworthy that among survey respondents, 17.1% were over 65 years of age, 9% identified with a vulnerable ethno-cultural group (with only 2.9% identifying as Indigenous), 4.4% reported English was not their first language, and no respondents self-identified as a non-binary gender. Additionally, 29.5% of respondents reported living in rural regions of the Middlesex-London sub-LHIN, 7.8% identified as members of single parent households, 18.1% reported either no formal education or high school as their highest education level, and 17.3% reported an income below the South West LHIN average, with 11% reporting annual incomes under $29,999. Considering geographic, financial, language, and cultural barriers were the predominant barriers reported by respondents, and that the minority of respondents in recent surveys are those disproportionately impacted by these barriers, further investigation into the unique experiences of these individuals is warranted.

Experiences of PCPs

In a survey of 100 South West LHIN PCPs, 29 respondents from Middlesex-London frequently mentioned challenges in providing care for patients with mental illness and/or addictions, in addition to providing care believed to be culturally safe. A PCP engagement session with 38 FPs and 11 nurse practitioners was also recently held in the Middlesex-London area where voiced concerns included a lack of resources to meet the needs of complex and special populations, particularly patients with low SES. When asked for general suggestions to improve access to primary care for vulnerable populations, PCP respondents suggested including more community outreach, more team-based care, and additional support for addressing social determinants of health.

Translation of Findings

Given our needs assessment and the summaries provided above, the challenge now lies in using these findings to inform the practice of a future SRC. As a first step, ASPIRE might consider how to address the social determinants influencing the health and livelihood of its clients as well as how to identify previously undocumented barriers impacting vulnerable populations. Implementation of screening questions designed to elicit this information, in addition to the integration of social work students and mentors within the team, is one potential strategy. The Student Wellness Initiative Towards Community Health (SWITCH) - the student group behind a successful SRC in Saskatoon, Saskatchewan - already utilizes this approach, where each clinic shift includes an advisor from a social work background. In the case of the London population, providing connections through a social work lens to available community resources, especially in the context of employment, housing, and food insecurities, could make a significant impact. This would be of special importance with regards to Indigenous populations.

In addition, when it comes to modifiable risk factors for cardiovascular and respiratory diseases, multidisciplinary student teams at an SRC are well-suited to provide counseling

ACCESS TO HEALTHCARE

Primary Care Landscape

Primary care providers (PCPs) are defined here as family physicians (FPs), general practitioners, and nurse practitioners who have their own patients in a family medicine practice. The provision of primary care in the London community includes two Family Health Teams, one Community Health Centre, twenty walk-in clinics, one Nurse Practitioner-Led Clinic, one Urgent Care Centre, and two sites operated by the Aboriginal Health Access Centre. As of 2015, 86% (530 of 617) of PCPs within the South West LHIN reside in the City of London. However, only 33% of these PCPs are affiliated with team-based care (ie London’s Community Health Centre, Family Health Teams, or Nurse Practitioner-Led Clinics). London has 1.7 interdisciplinary health professionals (IHPs; such as social or mental health workers) per 10,000 persons, compared to an average of 2.6 IHPs per 10,000 persons across the South West LHIN.

FPs in London carry an average roster of 1,256 patients. Although 90.1% of the Middlesex-London population report access to a FP, the proportion without a consistent PCP (17.5%) is the highest in the South West LHIN. It is noteworthy that since 2015 over 2400 Syrian refugees requiring access to primary care have settled in the Middlesex-London area.

Experiences of the Population

In a recent South West LHIN population survey assessing people’s lived experiences in accessing primary care, timing of appointments was the most commonly reported barrier among 261 Middlesex-London respondents. Waiting too long for appointments was reported by 29.1% of respondents, while inaccessible office hours and inadequate time to discuss all concerns with their PCP were reported by 23.5% and 16.6% of respondents, respectively. Geographic and financial accessibility were also prominent barriers to primary care utilization in the London area: 23.9% of respondents stated that the location of their PCP is an inconvenient distance from home or work, and 28.3% identified not being able to afford taking time off work for their appointments. Other concerns included not knowing what to expect during treatments (10.9%), feeling judged (10.1%), and not being able to speak honestly to a PCP (9.7%), while recent immigrants specifically noted experiencing significant language barriers when attempting to access primary care. It is noteworthy that among survey respondents, 17.1% were over 65 years of age, 9% identified with a vulnerable ethno-cultural group (with only 2.9% identifying as Indigenous), 4.4% reported English was not their first language, and no respondents self-identified as a non-binary gender. Additionally, 29.5% of respondents reported living in rural regions of the Middlesex-London sub-LHIN, 7.8% identified as members of single parent households, 18.1% reported either no formal education or high school as their highest education level, and 17.3% reported an income below the South West LHIN average, with 11% reporting annual incomes under $29,999. Considering geographic, financial, language, and cultural barriers were the predominant barriers reported by respondents, and that the minority of respondents in recent surveys are those disproportionately impacted by these barriers, further investigation into the unique experiences of these individuals is warranted.
around lifestyle modifications. This can include discussions and recommendations about nutrition and exercise, smoking cessation, and management of diabetes and dyslipidemia. Indeed, ASPIRE has already been engaged in health promotion in the London community, having given presentations on opioid addiction and overdose prevention, diabetic foot care, and smoking cessation.

To improve access to healthcare, Londoners would especially benefit from evening and weekend hours of operation as well as clinical outreach events. Moreover, ASPIRE could hold workshops to help newly arrived immigrants and refugees navigate the Canadian healthcare system, which may include information regarding health coverage and available primary care providers in the community. Lastly, it is advisable that all students participating in the ASPIRE clinic receive training in cultural sensitivity and provision of care to complex populations, namely those with mental illness and/or addiction issues.

CONCLUSION
Evaluation of the current healthcare landscape within the London community has been an important initial step for ASPIRE. The needs assessment will serve to guide the design and implementation of an SRC in London. ASPIRE aims to integrate the findings of the needs assessment with the direct contributions of PCPs and community members to develop an SRC based on a robust understanding of London's healthcare needs. The interdisciplinary nature of SRCs will enable this organization to address these needs with team-based care focused on relieving the pressure on PCPs, implementation of social workers to address social determinants of health, and by improving access to care with extended hours of operation, clinical outreach, and the continuation of health-care related workshops.

REFERENCES
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