"Bringing it home in a real way": A mixed-methods evaluation of a community outreach clinic aiming to provide "hands-on" residency training in social accountability and increase access to primary health care for marginalized patients.

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THESIS ABSTRACT

Objective

This study aims to evaluate whether a newly-implemented community outreach clinic meets the needs and expectations of the target population in obtaining access to primary health care, and whether it fulfills the learning objectives for medical students and family medicine residents as a "social action lab" for developing clinical knowledge and skills in the practice of social accountability. We will also assess what aspects of the outreach clinic were considered particularly helpful by the participants, community groups and health care trainees and supervisors, to develop recommendations for further improvement.

Methods

The community outreach clinic was created by a multidisciplinary team in response to previous community-based research studies which identified specific barriers that certain segments of the Cote-des-Neiges population faced in accessing primary health care. A mixed methods study was conducted to evaluate the outreach clinic as it was being rolled out for the first time. This included semi-structured in-depth interviews and focus groups with each of the key groups involved, namely the patients, the family medicine residents, the student volunteer navigators (i.e. CHAP course health leads), the community organization personnel and community outreach supervisors. A brief satisfaction survey was also sent to all of the above groups to obtain their feedback.

Results

The community outreach clinic was considered useful to patients and valuable for resident learning. Most study participants (87.5%), considered that the outreach clinic should continue with some modifications. The residents and medical students felt it was an "eye-opening" experience for them, and patients were very satisfied with the follow-up provided. Suggestions for improvement include logistical issues such as patient recruitment, targeting those with greatest need, clinic scheduling, IT challenges and anticipating and working around missed appointments.

Conclusion

Our evaluation demonstrates the complexity of designing initiatives for supporting marginalized populations in a way that balances the needs and mandates of the primary health care clinic and

the community organizations involved, who all join together for a common purpose of promoting health equity and quality of care. Community outreach clinics need to be flexible and responsive to the local realities and have a deep contextual understanding of the different partners working in the community to build bridges between the formal and informal health systems as a means of ensuring social accountability and better serving those with greatest need. Strong commitment and partnership from leadership in the clinic and the community is the important foundation that makes these initiatives possible.

RÉSUMÉ

Objectifs

Cette étude vise à déterminer si un nouveau modèle de clinique de proximité répond aux besoins et aux attentes de la population ciblée en matière d'accès aux soins de santé de première ligne, et si ce modèle répond aux objectifs d'apprentissage des étudiants en médecine et des résidents en médecine familiale en tant qu'activité pour le développement de compétentes en engagement social et communautaire. Nous évaluerons également quels aspects de la clinique de proximité ont été jugés particulièrement utiles par les participants, les groupes communautaires, les stagiaires en soins de santé et les superviseurs, et ensuite de formuler des recommandations pour l'amélioration du concept.

Méthodes

La clinique de proximité a été créée par une équipe multidisciplinaire et s'appuie sur des études antérieures qui décrivaient les obstacles spécifiques rencontrés par certains segments de la population de la Côte-des-Neiges pour accéder aux soins de santé de première ligne. Une étude utilisant des méthodes mixtes a été menée pour évaluer la clinique de proximité lors de son déploiement pour la première fois. Cela comprenait des entretiens approfondis semi-structurés et des groupes de discussion avec chaque groupe d'acteurs participant au projet, à savoir les patients, les résidents en médecine familiale, les navigateurs volontaires (des étudiants en médecine), le personnel des organisations communautaires et les superviseurs cliniques de la sensibilisation communautaire. Une brève enquête de satisfaction a été envoyée à tous les groupes ci-dessus pour obtenir leurs commentaires.

Résultats

La clinique de proximité a été jugée utile pour les patients et utile pour l'apprentissage des résidents. La plupart des participants à l'étude (87,5%) ont estimé que la clinique de proximité devrait continuer avec quelques modifications. Les résidents et les étudiants en médecine ont estimé qu'il s'agissait d'une expérience « révélatrice » pour eux et les patients étaient très satisfaits du suivi fourni. Les améliorations suggérées incluent des problèmes logistiques tels que le

recrutement des patients, le ciblage de ceux qui en ont le plus besoin, la planification des cliniques, les défis informatiques et l'anticipation et le traitement des rendez-vous manqués.

Conclusion

Notre évaluation montre la complexité de la conception d'initiatives visant à soutenir les populations marginalisées de manière à concilier les besoins et les mandats de la clinique de soins de santé primaires et des organisations communautaires concernées, qui s'unissent dans un objectif commun de promotion de l'équité en santé et de la qualité des soins. Les cliniques de proximité doivent être flexibles et adaptées aux réalités locales et avoir une compréhension contextuelle approfondie des différents partenaires travaillant au sein de la communauté pour créer des ponts entre les systèmes de santé formels et informels, afin de mieux servir les personnes les plus marginalisées. L'engagement important et le partenariat des dirigeants de la clinique et de la communauté constituent la base importante qui rend ces initiatives possibles.

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NOTES ON MANUSCRIPT-BASED THESES

The following paragraphs are quoted from the Faculty of Graduate and Postdoctoral Studies at McGill University Manuscript-Based (Article-Based) Theses (updated 2019-05-30).

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For manuscript-based thesis, each individual chapter/manuscript should be identical to the published/submitted version of the paper, including the reference list. The only change is with respect to the font/size which should be the same as the one used for the rest of the thesis for consistency and homogeneity reasons. So each chapter represents a full manuscript and has its

own reference list. Then at the end of the thesis, you have a master reference list which includes all the other references cited throughout the other sections of the thesis, mostly within the general introduction but also from the general discussion

In the case of multiple-authored articles, the student must be the first author. Multiple-authored articles cannot be used in more than one thesis. In the case of students who have worked collaboratively on projects, it may be preferable for both students to write a traditional format thesis, identifying individual contributions. Consult <u>this page</u> for information on intellectual property and required permissions/waivers."

I have followed the McGill requirements for this thesis preparation.

CONTRIBUTION OF AUTHORS

The community outreach clinic project was developed prior to my involvement by a multidisciplinary team, with partners from different organizations (community groups, residents, nurses, physicians, etc.). As a Msc candidate, I was asked prior to the launch of the initiative to develop and conduct an evaluation of the community outreach clinic.

The overall evaluation plan was developed with my supervisor Dr. Anne Andermann and the input of my thesis committee consisting of Dr. Sandra Morris and Bernard Besancenot. As MSc candidate, I was responsible for the writing of the research protocol, conducting the data collection and analysis, as well as the interpretation of data. I was also solely responsible for the outline and thesis first draft, and subsequently incorporated the suggestions for improvement made by the thesis committee. All authors have approved the final version of the thesis and article.

ABBREVIATIONS

- CFPC College of Family Physicians of Canada
- CLSC Centre local de services communautaires
- CLEAR Community Links Evidence to Action Research
- CMA Canadian Medical Association
- COPC Community Oriented Primary Care
- P(C)MH Patient (Centered) Medical Homes
- SAWG Social Accountability Working Group
- WHO World Health Organization

1. CONTEXT

1.1 INTRODUCTION

Canada's universal medicare is a source of collective pride,(1) and the idea that health care access should not be limited by ability to pay has been elevated to the rank of "national value".(2) Over the last generation since the universal medicare's started in the 1960s and 1970s, and was enshrined in the Canada Health Act in 1984, there has indeed been overall improvement in health for Canadians, but some populations have had fewer health gains than others.(3)

For instance, indigenous populations in Canada still have health indicators similar to that of lowand middle-income countries when it comes to certain conditions such as HIV and tuberculosis.(4) Chronic diseases, such as diabetes and obesity, are most prevalent among Canadians with the lowest socioeconomic status.(5, 6) Higher rates of some cancers and infectious diseases have also been reported in socially marginalized populations.(7) These worrisome health disparities are increasing, according to recent findings of the Canadian Institute for Health Information and the National Population Health Survey For example, the chronic obstructive pulmonary disease (COPD) hospitalization rate is three times as high in lower income Canadian populations as compared to higher income population groups. Although hospitalizations for motor vehicle accidents have significantly declined in high income populations, it has stayed the same in the lower-income groups. In all health indicators surveyed which do not show inequality gaps being widened, said gaps do not decrease either. Obesity is a growing concern amongst all income groups in Canada, but the 1.5 times higher rate of occurrence of those in poor socioeconomic standing is unchanged. (8, 9)

Social health disparities are not unique to Canada, but are rather a worldwide public health concern.(10) There is a growing movement to take action of the social determinants through action at different levels from changes in policy, to intersectoral action, and within the health sector, physician training and designing outreach programs for marginalized patients.(11)

This thesis seeks to contribute to the growing body of evidence about ways of addressing health inequities in Canada by evaluating a novel community outreach clinic project in Montreal aimed at promoting access to primary health care for marginalized populations.

1.2 BACKGROUND

1.2.1 Orientations of the College of Family Physicians of Canada (CFPC)

In the last decade, the College of Family Physicians of Canada (CFPC) has been emphasizing more and more the importance of addressing social determinants of health in family medicine. A "Best Advice" report was published in 2015 to help physicians address these health determinants in their practice.(12) Advocacy on behalf of marginalized populations featured as one of the main objectives in both the 2013-2017 and the 2017-2022 Strategic Plans of the CFPC.(13, 14) Likewise, the CFPC's commitment to this issue is also reflected in their vision of the "gold standard" of family medicine practices, the patient-centered medical homes,(15) as well as in their stated four principles of family medicine. In the latter, the CFPC asks family physicians to "advocate for public policy", "consider the needs of both the individual and community" and to organize their populational practice such that "patient's health is maintained whether or not they visit their office". (16) Finally, the Red Book of residency program accreditation clearly states that family medicine residency programs must prepare residents to "engage and work effectively with diverse people and populations, including those who experience barriers to care". (17)

1.2.2 Social Accountability Working Group (SAWG) of the CFPC

The CFPC's Social Accountability Working group aims to explore the challenges related to social accountability in family medicine practice, and to advise the CFPC on how to address social health determinants.(18) This has led to a series of articles focused on helping physicians determine actions they can take in their own practices to further social justice.(19) The SAWG have also developed the Social Justice Lens tool, which helps committees, workgroups and departments frame the evaluation of their policies and activities through the lenses of social justice and accountability. (20)

1.2.3 CLEAR Collaboration

In 2010, in line with the College's recommendations, an international group of researchers formed the CLEAR Collaboration (Community Links Evidence to Action Research Collaboration), whose major objectives were to clarify how health providers can help take action on social determinants of health, both by building an evidence base and developing tools and programs to apply this evidence. Notably, they developed a toolkit to train health workers to address the social causes of poor health in their practices,(21) and are continuing to build an evidence base on how health workers can act on social determinants in health care.(22)

1.2.4 The population we serve: Cote des Neiges

This thesis concerns the evaluation of a community outreach clinic launched in 2017 in the Cote-des-Neiges neighborhood in Montreal. The evaluated clinic aims to facilitate accessibility to primary health care for socially disadvantaged persons, as well as to familiarize family medicine residents to the realities of local marginalized populations, and to demonstrate how they can address social determinants of health in their future practices.

The Cote-des-Neiges area in Montreal figures in the top ten of the CLSC neighborhoods in Quebec with the most people living below the poverty line. People in the community struggle with a range of issues including unemployment, food insecurity, social isolation and poor housing conditions. It is one of the most culturally and linguistically diverse communities in Canada with representatives from over 75 different ethnic groups.(23, 24)

1.2.5 The community partners

One aspect which made Cote-des-Neiges particularly suitable for the implementation of the community outreach clinic was the involvement, participation and leadership of some of the local community support groups (i.e. non-governmental organizations providing a range of services to local citizens from poverty alleviation to housing support). These groups are already pillars of support of the community and go even further by being involved in programs such as this one.

The main partner of the community outreach clinic was Multicaf, a community cafeteria and food bank which offers social services and assists in finding resources in the neighborhood, in addition to providing food aid to more than 750 families each month.(25) Another group which help with the community clinic was The Baobab Familial community group, which aims to help and empower marginalized families in Cote-des-Neiges throughout multiples services such as dropoff daycare, homework programs and home respite care.(26) Also involved was the *Femmes du Monde* group, which helps women of the community through listening services, childcare activities and social services.(27)

1.2.6 The family medicine clinic

Cote-des-Neiges is also home to the St-Mary's Family Medicine Teaching Center, a McGill University affiliated teaching site, which trains more than twenty-five family medicine physicians each year.

This teaching center has already been involved in social accountability education for over a decade, as a Community Oriented Primary Care (COPC) program was established in an effort to strengthen community partnerships and foster social accountability in medical education and clinical practice. Over the years, COPC planned an orientation day to local resources to all new residents. They also encouraged residents research on marginalized patients. A recent study by residents identified barriers to access to health care in the local populations (28), which led to the community outreach clinic being launched as a joint initiative between an academic Family Medicine Centre and academic teaching unit and local community organizations. This thesis consequently builds on previous local research and a larger body of national and global research to build the evidence base on how healthcare workers can advocate for and create systemic change to better serve marginalized populations in the communities they serve.

1.2.7 The community outreach clinic

The community outreach clinic was created by multidisciplinary team consisting of doctors, researchers, nurses, social workers and community group leaders from Cote-des-Neiges. The first objective of the community outreach clinic is to improve health outcomes and increase access to care for local community members who face various health and social challenges, but do not have a family doctor, and want to access comprehensive primary health care services on an

ongoing basis. It's second objective is to sensitize residents in Family Medicine to the unique challenges the marginalized community close to the clinic faces, and to teach them advocacy and skills unique to caring for this population.

In Quebec, there is a national waiting list to be registered to a family physician. Although there are some walk-in clinics that accept patients not registered to a physician, they are often overbooked and do not provide continuity of care. It is possible to register to the waiting list to it via phone or via the internet, provided you have a valid provincial health card (RAMQ card), a phone number where you can be reached and a home address. It was noticed that some patients were not able to accede to the waiting list due to missing one of these prerequisites, or because of poor knowledge of the workings of the health system.

Patients were referred to the community outreach clinic via the community group partners. The clinic was meant to be best suited to patients who did not have access already to a family doctor, live close to the clinic, are looking for a "one-stop" location for all their health needs, and who wanted to stay with the same team of health providers for many years. Community groups were asked to refer patients needing long-term primary care rather than emergent care, as well as those who were facing difficulties in accessing family doctors via the national waiting list.

Patients were first matched to a volunteer second year medical student navigator. They were tasked with helping the patient navigate the first obstacles of the health system: obtaining an insurance (RAMQ) card and a hospital card, localizing the clinic, figuring out transportation options and booking appointments. After the patient's first meeting with their doctor, they could also help the patient get blood tests and book appointments with specialists as needed.

Patients were also assigned a first-year family medicine resident, who would be following them longitudinally in their practice. The first meeting between the resident and the patient occurred at the site of the partner community group Multicaf, a well-known community group and "safe" location for the majority of the patients. Residents were supervised by community-oriented supervisors and received specific training about the social determinants of health, social history-taking and trauma-informed care prior to meeting their patients. The second meeting between the patients and residents were planned for a few weeks later at the St-Mary's Family Medicine

Teaching Unit, and patients were then incorporated in the mainstream care of the clinic and referred to other health care workers of the clinic (social workers, nurses) as needed.

1.3 LITERATURE REVIEW

1.3.1 Social Health Disparities

Health disparities and health inequalities are both terms which can be used to designate the avoidable differences in health that occur amongst population groups with definite characteristics.(29) It is widely understood that health inequalities occurring because of low socioeconomic status, race, gender or geographic location are unjust and do not reflect our society's value system.(9) Certainly, Canada's Health Act promises reasonable access to medically necessary health services to *everyone*.(30)

While persons coming from disadvantaged socioeconomic backgrounds are very diverse, they face an increased risk of multiple chronic conditions (31), a poorer quality of life, as well as a shorter life expectancies compared to their richer counterparts. (32, 33) This worrisome trend has been reported worldwide(34-38), and the World Health Organization reports an almost 40 years difference in life expectancy between the most and least developed countries. (39)

Comparisons of different socioeconomics groups both within and between countries have shown that both material and psychosocial factors contribute to lower health status in economically disadvantaged populations (40). Childhood environment (41-43), decreased physical activity (44), higher rates of smoking and drinking (45), relative deprivation (house, food) (46) and harsher working conditions (47) were are all cited as material causes of health disadvantage. Psychosocial contributors such as parental education(43), social support(48) and emotional adjustment in adolescence (41) have also been shown to have an impact of health over the adult lives of the patients. The sum of these influences over an individual's health are often referred to as *the social determinants of health*. (49, 50)

Finally, health itself contributes to socioeconomic status. The Black Report, a leading British publication of 1983, posited the "drift hypothesis" (51), which influenced a number of later frameworks showcasing socioeconomics and health status as parallel gradients, linked by bidirectional causality. (52) The drift hypothesis states that social mobility is affected by health

status, as unhealthy and physically disadvantaged individuals tend to have lower incomes and thus move down the social hierarchy, whereas healthy individuals have higher chances of accessing better incomes. (53)

1.3.2 Primary health care and social health disparities

Primary health care systems in OECD countries are usually associated with multiple indicators of improved populational health outcomes, such as life expectancy, mortality rates, healthcare satisfaction and rates of hospitalization for illnesses treatable is an outpatient setting. (54-57) In numbers, it has been reported that the addition of one primary health care physician per 10,000 persons is associated with reduced incidence of infant mortality (2.5% reduction), reduced low birth weight (3.2% reduction) and 1.44 deaths avoided overall.(57-60) Notably, there is evidence that primary health care's populational benefits may alleviate inequities of health linked to social determinants. (61-64)

1.3.2.1 The role of family physicians as advocates for disadvantaged populations

As a profession needs a well-defined identity and a clearly delineated area of expertise for it to thrive,(65) recent drastic changes of health systems (increasing specialization, technological advances, health care reforms, etc.) have forced a clarification of the definition of the role of Family Medicine.(66) The CFPC in Canada lists four guiding principles of family medicine, one of which is the family physician as a resource to its population, which include "responsibility to advocate", "stewardship of resources" and considering the needs of "both the individual and the community". (16)

Doctors, and particularly family physicians, are exceptionally well placed to help and advocate on behalf of socially marginalized populations. They are trained to understand the impact of environment on the health of their patients. Their unique positions in the community enable them to observe the links between the social determinants of health and health outcomes. Privileged social standing gives them access to many potential collaborators for advocacy undertakings (policy-makers, community groups, other health professionals...) and the leverage to call for change, be it in the political or health system sphere.

1.3.2.2 Patient-centered medical homes

One way in which family medicine as a profession is expected to help marginalized populations in Canada is through the Patient Medical Homes. PMHs are the vision that the CFPC wishes family practices to move towards and were conceived to be the place where patients feel most at ease to discuss their health concerns. A Canadian Patient Medical Home would be a central hub of services in which many health professionals (social workers, nurses, physician assistants, family doctors) work together with the patients to create a strong primary health care, and to enable the best possible health outcomes for the local patients and communities. (15)

The CFPC's document expands on the specific goals that practices need to attain to be considered PMHs. The fifth goal states that a medical home will "provide each of its patients with a comprehensive scope of family practice services that also meets population and public health needs". This goal included the recommendation that participating family practices should should «address the health needs of both the individuals and populations they serve, incorporating the effects that social determinants such as poverty, job loss, culture, gender, and homelessness have on health." (15)

In doing so, the CFPC strives to diminish the health inequity engendered by these determinants. Indeed, the Commonwealth Fund 2006 Health Care Survey in the U.S. showed that patientcentered medical homes can greatly reduce or even eliminate differences in chronic conditions management and preventive care given to minority and low-income patients.(67) A review of literature by Starfield et al. reports that international studies also show a correlation between patient medical homes and reduction in health disparities between socially marginalized patients and those more socially advantaged. (68)

	TABLE 1: CFPC'S PATIENT MEDICAL HOME GOALS (15)	
GOAL 1	A Patient's Medical Home will be patient centered.	
GOAL 2	A Patient's Medical Home will ensure that every patient has a personal family	
	physician who will be the most responsible provider (MRP) of his or her medical care.	
GOAL 3	A Patient's Medical Home will offer its patients a broad scope of services carried out	
	by teams or networks of providers, including each patient's personal family physician	
	working together with peer physicians, nurses, and others.	
GOAL 4	A Patient's Medical Home will ensure i) timely access to appointments in the practice	
	and ii) advocacy for and coordination of timely appointments with other health and	
	medical services needed outside the practice.	
GOAL 5	A Patient's Medical Home will provide each of its patients with a comprehensive scope	
	of family practice services that also meets population and public health needs	
GOAL 6	A Patient's Medical Home will provide continuity of care, relationships, and	
	information for its patients.	
GOAL 7	A Patient's Medical Home will maintain electronic medical records (EMRs) for its	
	patients.	
GOAL 8	Patients' Medical Homes will serve as ideal sites for training medical students, family	
	medicine residents, and those in other health professions, as well as for carrying out	
	family practice and primary care research.	
GOAL 9	A Patient's Medical Home will carry out ongoing evaluation of the effectiveness of its	
	services as part of its commitment to continuous quality improvement (CQI).	
GOAL 10	Patients' Medical Homes will be strongly supported i) internally, through governance	
	and management structures defined by each practice and ii) externally by all	
	stakeholders, including governments, the public, and other Goal medical and health	
	professions and their organizations across Canada.	

1.3.3 Access Gap: Socially marginalized populations and barriers to health care

Knowing the benefits that primary health care has on health as well as the correlation between poorer health and social vulnerability, the fact that marginalized populations are the most likely to face barriers when attempting to access care can contribute to widening inqualities.(69) When the most well-off have the greatest access to care while those most in need cannot access care has been labelled the "inverse care law".(70) An international survey published last year revealed that this paradigm is ongoing in multiple OECD countries, including Canada. (71) Similar findings having been so enduring in the last decades, that most countries' health reports now accounts for health services consumption by socioeconomic status.(72)

Access in the medical world is often defined as the use of health services, determined by the need for care. (73) This definition leads to a popular conceptualization in which access becomes the "interface between users and health care resources"(74), which implies that it is not only the health system characteristics that impacts access, but also the characteristics of the populations seeking care. (75) Improving access might thus entail more than only looking at improving the system's side ("accessibility") and might require us to understand what makes marginalized populations disadvantaged in regard to health care access.

Levesque et all published an important theoretical framework about health care access. In it, they discuss two "sides" of access: the supply-side (health system) and the demand side (population). Each of these sides has five corresponding dimensions of access. On the user's side, they list five characteristics of patients which influence their health care access: the ability to perceive a health need, the ability to seek help, the ability to reach the services, the ability to pay for services, and the ability to engage with the system. (74) Some particularities of socially marginalized populations make access to care difficult, such as financial insecurity, low health literacy, language and cultural barriers.

1.3.3.1 Barriers to health care access for marginalized populations

Although less a problem in Canada because of the universal health care, studies from other developed countries such as Australia found that affordability of health care was an important barrier to healthcare access for disadvantaged populations.(76) However, lack of work flexibility,

and the pay loss if a patient takes time off to see his doctor may still play a part in the access for financially marginalized Canadians.

Lyles and Sarkar (2015) discuss the important role low health literacy plays in increasing the health gap between marginalized groups with the rest of the community.(77) Available research also indicates that low literacy levels delay or make people forego healthcare, as well as fail to locate a healthcare service provider.(78)

Another factor influencing access of marginalized group is language and culture. In a recent study, Luo (2017) found out that English proficiency, length of residence of immigrant minorities, and health beliefs influenced older people's willingness to utilize health services.(79) Further, low English proficiency for immigrants was found to be a barrier to health access in many other developed countries.(79, 80) Current literature also reports that unfamiliarity with the healthcare system and procedures hinder patients access to healthcare.(73) This suggests that the different cultural setting of more recent immigrants limits their ability to comprehend the healthcare system, and thus lowers their ability to access care.

1.3.4 Quality of care gap

While equitable access to health care is an important feature of the fight against social health inequities, another glaring problem needs to be addressed. When socially marginalized populations manage to access primary health care, the care they receive should be of the highest quality, which involves addressing the patient's specific problems, *including those stemming from social causes*.

A survey study by Iezzoni et al. (81) on patient perceptions about integrating mainstream health care services with community-based services with a view to address social determinants established that over 40% of patients indicated that their family doctor lacked awareness about their struggles such as obtaining adequate food, arranging transport for clinic visits and paying for medicine. In Canada where over 160 000 and 170 000 women suffer from violence annually according to self-reported data or police-reported data (82) respectively, it was reported that only 14% of women had been asked by primary health care providers whether violence was a possible cause despite presenting with bruises and/or broken bones (83). A tentative explanation for these

statistics is that many family doctors report feeling ill-equipped to deal with socially marginalized patients and avoid asking about social issues for fear of opening a "Pandora's box" of problems which they would not know how to address. (84)

Furthermore, the current limited research regarding health care worker's attitudes towards socially marginalized patients indicate that their misconceptions about these patients' situations contribute to their stigmatization and lead to negative attitudes towards these patients.(85, 86)

To ensure proper care of marginalized populations, and to promote positive physician-patient relationships, health care workers need to be aware of specific challenges when dealing with people who are isolated or of poor socioeconomic standing. Examples of these specific challenges include providing care without need for medications or supplies not covered by health care, the use of interpreters in the office, as well as knowledge of existing community resources available for their patients.(87)

1.3.4.1 The unfulfilled role of medical schools and residency programs

There have been many calls for medical schools to be held accountable for their advocacy teaching to residents.(88) Advocacy has been recognized as a critical teaching point during residency and medical school. "Health Advocate" is one of the seven core CanMeds role that the Royal College of Physicians and Surgeons of Canada ask that all residency programs evaluate.(89) The United States' New Accreditation System Milestone also includes health advocacy activities. (90) Despite this, it seems social determinants of health are infrequently emphasized in medical curriculums, which leads to medical residents often lacking knowledge in these areas. (91)

One of the barriers to effective advocacy teaching may be lack of a clear definition of the term. A recent study by Hubinette et al. in British Columbia tried to understand what advocacy meant to teachers in medical education. Their results showed three different understanding of health advocacy amongst medical preceptors which closely parallels the micro-, meso-, macro- levels of advocacy described in the CFPC's series of articles(92-94). Hubinette's levels of understanding were: clinical advocacy (addressing needs of the individual patient in the health system), paraclinical advocacy (addressing needs of the individual patient outside of the main health system) and supraclinical advocacy (addressing health needs of a community through practice-

level and system-level changes). Notably, having one of the understandings of advocacy precluded preceptors of having another of those understandings, even after the researchers provided the respondents with updated advocacy definitions. (95) Preceptors having such differing views of the meaning of advocacy have many implications, as an apprenticeship model such as medical residency implies that the preceptor's understandings significantly affects the developing of the professional identity of the trainee.(66, 96, 97)

The gold-standard of medical care for socially marginalized populations passes by having physicians be sensitive to social determinants of health, and who have been taught skills to properly treat theses populations. Although medical schools have been asked to teach theses competencies(89, 90) -lumped in the umbrella term "advocacy"- the unclear definition of what is meant by this term by accreditation bodies makes advocacy hard to teach, role-model and evaluate. (88)

It seems the current dominant model of access to care may not serve the socially marginalized populations in an acceptable way. If they do access care, these populations are often further cheated by not having their social needs and issues addressed by their physicians, which compromises the quality of care provided. It is thus not surprising that many have tried to find new models to remediate the situation.

1.3.5 Models to address access gap

1.3.5.1 Outreach

Community outreach involves the interactions between members of the community and organizational representatives within the target community. The outreach programs are commonly used to engage community members in social service or public health, as well as mental health initiatives. The aim of outreach activities is to increase awareness, recruit individuals who can be involved in community activities, such as research projects and health promotion interventions, and promote access to services. As noted by Lane et al. (46), there is also evidence to support the role of outreach programs in non-traditional sectors, where they aim to encourage community engagement.

Although outreach programs in primary health care have a role to play in reaching marginalized

populations, their main limitation is sustainability in time, as they are often dependent on availability of financial and material resources as well as the objectives for their establishment. For programs with an objective of offering continuous primary health care, this may leave patients with no follow-up care if a program is abolished.

1.3.5.2 Proximity and mobile clinics

The interplay between the locations of health care providers and patients is one potential barrier in access to care that has been studied.(75) Children from low-income families living closer to pediatricians are more up-to-date with vaccinations,(98) and asthmatics patients had better longitudinal asthma management if they lived closer to their providers.(99) This has led to multiple initiatives aiming to reduce geographical distance between providers and marginalized patients, such as mobile clinics(100, 101) or nurse-led clinics within shelters(102). However, there have also been reports that simply reducing distance to care does not improve other outcomes, such as human papillomavirus (HPV) vaccination. (100) Finally, there is little evidence that clinical care given in delocalized clinics are overall as performant as care in the mainstream health system.

A scoping survey by Khassanov et. all showed that integration in mainstream care could reduce hospitalizations, emergency room visits and unmet care needs in marginalized populations.(103) Patient medical homes, such as those aimed for by the CFPC, have also been shown to reduce inequities in health.(15, 67) If we accept the premise that socially marginalized populations should also benefit from the advantages of the patient medical homes, other ways of overcoming the barriers to access and include the patients in mainstream care must be considered, such as patient navigation.

1.3.5.3 Patient navigation

Patient navigation is a strategy, similar to case management, implemented in the 1990s in New York to help patients cope with cancer. Over the next decades, many patient navigation programs have been implemented for cancer patients.(104, 105) The trend followed in other areas, and lately there have been reports of navigation programs for elderly populations(106), socially marginalized families in pediatrics (107, 108), patient with mental health conditions (109-112) or in other disease-specific contexts, such as HIV(113) and other chronic diseases. (114, 115) Lately, studies of patient navigation in primary health care are also surfacing, as described in Valaitis' scoping review of patient navigation in that particular settings.(116)

Although definitions of patient navigation can differ greatly in the literature, it is most often defined as the process of empowering patients to navigate a fragmented health care system "effectively and efficiently". (117) Patient navigation is a person-centered approach,(118) which reacts to problems by seeking specific solutions with the patients. (119) It can be used across the health care continuum, for prevention and screening, for navigating diagnostics and treatments, for chronic diseases management, or for rehabilitation after life-altering diseases. (120, 121)

Reviews have reported many ways of navigating patients with both using lay-persons or trained health professionals, for educational and knowledge purposes, to promote screening and as providing moral support and/or navigating the health appointments and tests. (116, 122)

Although most studies regarding the outcomes of patient navigation were descriptive, results in this field were promising; studies showed more access to care/screening, especially in socially or culturally marginalized populations.(104-106, 123) Ferrer et al. (124) performed a cohort study in the United States of America [San Antonio, Texas] involving more than 1000 disadvantaged patients who enrolled for a community-oriented primary care. The study used health promoters to culturally broke between patients and physicians, to map out as well as mobilize and link patients with resources at community level and established a reduction in hospital admissions of 24% representing more than US\$250 000 annual cost savings.

1.3.6 Models to address quality of care gap

1.3.6.1 Social questioning, diagnosis and prescribing

More recent clinical guidance advocate for increased awareness among physicians about clinical flags as well as patient cues by use of "selective enquiry based on clinical considerations" using social history questions about the patient encounter more seamlessly (125). It is believed that those physicians who tactfully probe their patients about social challenges tend to be more helpful in assisting their patients working through their social challenges (126). As emphasized by Goodrich and Cornwell (127), using a caring approach that shows compassion and empathy

while making inquiry into such issues is important since it "makes patients more forthcoming about their symptoms and concerns, yielding more accurate diagnoses and better care ... and leads to therapeutic interactions that directly affect patient recovery." Integrating information about social challenges with medical records also helps to ensure that the entire care team plans patient care in light of these considerations. It is worth noting that all patients may face social challenges such as discrimination, social isolation and violence, and therefore need support in different spheres or life stages regardless of their socioeconomic status(128).

"Social prescribing" describes linkage of patients with support resources like local support groups, housing advocacy agencies and employment agencies in and outside the health system. Beyond referral, health care providers may advocate for each patients through written letters to accommodation and learning institutions as well as to courts(129). Moreover, the health workforce may ensure that their patients enjoy other available benefits such as tax credits and low-cost day care or programs such as home visitation and parenting classes (130).

In United Kingdom (UK), Grant et al. (131) performed an RCT on 161 patients with psychosocial problems attending primary care and reported that case referral to support groups at community level reduced patient anxiety as well as improved overall health perception more than usual general care by practitioner. Similarly, 35 of the 131 initial referral patients in a pilot study were still using support services a month after implementation (132). In Boston, Massachusetts, Garg, Toy et al.(133) performed a more recent cluster RCT involving eight community health care, and reported that systematic screening of children for locally essential basic needs such as child care and food security to household heat and housing to parent education plus employment, and providing physicians with a one-page local community resources list resulted in more provider referrals, enrollment of families in support services, employment of mothers, increased numbers of children to care access, and reduction in using homeless shelters during one year follow-up than those attending standard clinical care which involved opportunistic screening and use of essential social work services . According to Garg, Boynton-Jarrett et al. (134), it is evident that making inquiry about social challenges, patient referral to local support resources, and utilizing patient strengths and/or resilience are critical.

1.3.6.2 Training future professionals

In order to promote social questioning, diagnosing and prescribing, as wells as to ensure delivery of more equitable health care services to the target population, health providers and other associated health workers need to be adequately taught how to address health-related social determinants.(135) A Canadian-wide qualitative study by the CFPC in 2015 found that physicians thought their medical training did not prepare them adequately to take complex social histories nor to help patients with complex social situations. (12) It is important that health professional schools become more socially accountable by ensuring that the needs of the target population are met.(22)

A recent review of the literature summarized U.S-based programs targeted at teaching health disparities to residents. The reported components of these programs included longitudinal training, internet-based modules, resident-led research projects and community-based clinical training. The conclusions of the authors included that such programs should be mindful to explicitly link their training elements to the core competencies outlined by the accreditation bodies, that evaluation methods for these programs varied widely, and that there is a need for further reports on established programs in order for an evidenced-based national health disparities curriculum to be established. (136) Some of the reported programs showed great promise: after even a single day of immersive learning with community groups, residents have shown an increased awareness for social vulnerability, and a greater utilization of available resources.(137)

1.3.6.2 Development of tools

In view of the unease some physicians report with addressing the social determinants of health in their practice, it is reassuring to know that various tools have been developed to help them with this specific issue. There are now a wide variety of clinical screening tools to assess these determinants of health. (138-140) Some, like Poverty Toolkit(141) or the Brcic et al. screening tool(142) developed questions physicians can ask to screen patients for social vulnerabilities. Others have found technological ways of addressing the issue. For example, a New-Zealand study used a questionnaire delivered via a touch-screen computer in the waiting room to screen patients. The patient's answers were linked to his or her medical file and helped initiate physician-patient discussions about sensitive subjects.(143) Even more recently, the CLEAR Collaboration piloted a toolkit helping primary care physicians to not only screen, but also to take action regarding multiple vulnerabilities by a step-by-step approach. (21) Although these tools are a very important aspect of addressing social determinants of health and empowering physicians to address them, we must ensure that physicians are sensitized to their role as physicians in reducing social health disparities in order for them to use these tools in their practice.

1.4 SUMMARY OF LITERATURE REVIEW & STUDY RATIONAL

We have outlined two of the very critical gaps in which family medicine does not fulfill its social accountability mandate to address social health disparities. First, there are many barriers to accessing the system for some marginalized populations that need to be addressed. Secondly, even when in the system, some family physicians may not have the skills and knowledge necessary to provide optimal care in view of the specific challenges these populations face. We have also presented various methods reported in the literature to address both of these gaps.

In order to address these problems, we must (1) reach the marginalized populations (2) train our professionals and future physicians, and (3) develop easy models to implement in different settings. The evaluated community outreach clinic is quite novel as it not only combines different proven approaches to address barriers in access, it also reaches for sustainability and continuous care for the enrolled patients by integrating them in patient medical homes. It also seeks to correct a deficiency in medical training, so that future family physicians do not feel ill-equipped to deal with marginalized populations in their future practices, and to encourage their advocacy skills. As with all projects involving many stakeholders who commit time and energy to undertake, a rigorous evaluation is needed to ensure proper allocation of these valuable resources.

1.5 OBJECTIVES AND RESEARCH QUESTIONS

1.5.1 Objectives

The objectives of this study are divided in three sections:

Impacts on patient experiences

- To assess whether the patients consider the community outreach clinic is addressing their health care needs and reducing barriers to accessing care.
- To determine patient satisfaction as well as expected and unexpected impacts of the community outreach clinic on the patient's wellbeing.

Impact on medical student and resident's education and practice

• To assess whether the community outreach clinic is considered useful and an instructive learning experience by family medicine residents and medical students.

Areas of possible improvement

• To identify areas of possible improvement regarding both patient experience and ease of implementation.

1.5.2 Research Questions

- Does the community outreach clinic in Cote-des-Neiges successfully meet the needs of the patients?
- How does the Cote-des-Neiges community outreach clinic impact the development of health advocacy and social accountability competencies among medical students and family medicine residents at McGill?
- What do the various stakeholder groups consider could be improved for the future to make this clinical innovation even stronger?

2. MANUSCRIPT

2.1 Preface to the manuscript

This article will be submitted for publication in the Journal of Health Care for the Poor and Underserved, a peer-reviewed journal with a focus on health care solutions for marginalized populations. The objective of this article is to present the evaluation process and results concerning the Community Outreach Clinic that was inaugurated in 2017 in Cote-des-Neiges.

2.2 Title page

A social accountability laboratory to better support the community: A mixed-methods Evaluation of a Community Outreach Clinic in Cotedes-Neiges, Montreal

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2.3 Manuscript abstract

This study is an evaluation of a community outreach clinic which was developed to help marginalized patients access longitudinal primary health care, as well as to function as a "social action lab" for residents in family medicine to develop clinical knowledge and skills in advocacy and social accountability. A mixed-methods approach included a brief satisfaction survey, as well as semi-structured interviews and focus groups with every key group involved in the project, including patients. Patients were very satisfied with the follow-up provided, and the community outreach clinic was deemed a valuable and "eye-opening" learning experience for residents. The majority of participants (87.5%) felt the clinic should be continued. Suggestions for improvements include logistical issues in patient recruitment and anticipating and working around missed appointments. This evaluation demonstrates the necessary fine balancing of needs from involved groups in building a community outreach clinic to support marginalized population.

2.4 Introduction

Social determinants of health remain a major concern worldwide due to their impact on marginalized populations. It is now well-recognized that socially marginalized populations experience more health-related problems and die earlier compared to richer or more educated populations across the globe.(50) These disparities also exist in wealthy countries like Canada,(144) and can be challenging to address, as they are often described as complex and intertwined (7). There is increasing recognition among Canadian health care leaders that addressing the social determinants of health is critical in reducing health disparities and responding to the needs of marginalized communities.(14, 16)

Outreach clinics are a way to bring health care to those who have difficulty accessing it and have shown great results in screening and prevention of specific diseases, especially in rural populations.(145) However, regarding long-term primary health care, there is very little evidence that the care provided in outreach clinics matches the standards of standard primary health care clinics, especially given the patient medical homes which are now being organized and which provide patients with comprehensible, accessible, comprehensive and continuous care.(15) We know that integrating socially marginalized patients into mainstream care can lead to reduced hospitalization rates, reduced emergency room visit, and reduced unmet care needs.(103)

Another key aspect about social health disparities that must not be overlooked is that some family physicians often feel they were not taught the skills and resources that would allow them to address social vulnerabilities with their patients (12), even if it is known that social diagnosis and prescribing can lead to better health outcomes. (134) Although advocacy is a main competency to acquire during residency,(89) there are relatively few guidelines on how to best teach advocacy, and few residency programs have dedicated strategies for teaching advocacy. There is however evidence that even short-term immersion in community settings can have a lasting impact on resident's practices. (137)

This study aims to evaluate the accessibility and feasibility of a community outreach clinic implemented in Cote-des-Neiges, one of the most linguistically and ethnically diverse communities in Canada. This clinical innovation was designed based on a series of research studies

with the local population and a range of stakeholders who care for marginalized groups in the area.(146) A recent study in this Montreal neighborhood showed a high rate of hidden homelessness and vulnerably-housed persons(147). A second qualitative study in Cote-des-Neiges identified multiple barriers faced by local marginalized populations in accessing health care such as lack of a primary health care provider, limited opening hours of clinics, poor follow-up by providers, lack of health system literacy and stigma.(146) Following these results, a multidisciplinary team stemming from diverse organizations in the neighborhood joined to create a new model of primary health care clinic.

This community outreach clinic integrates multiple strategies such as patient navigation, resident teaching and eventual incorporation into mainstream care at a patient medical home. An objective of the evaluation is to understand if this community outreach initiative is addressing some of the patient's health care barriers, and to capture broader expected and unexpected impacts of the project on patients, residents and other stakeholders. Finally, we aim to stipulate probable enhancements for the community outreach clinic. The results from this preliminary evaluation can inform and shape future endeavors aiming at reducing social health inequities.

2.4.1 Study setting

The study was conducted during a community outreach clinic which was launched in 2017 in the Cote-des-Neiges urban neighborhood of Montreal, Canada. This community outreach clinic developed by a local multidisciplinary team including doctors, nurses, community group personnel and clinician-researchers whom were all concerned about finding new ways to reduce social health inequities, and to provided easier access to primary care for the marginalized populations in Cotedes-Neiges.

Community organizations were involved from the start as experts and a link to these populations. Three different organizations took part in the project. Multicaf, a community cafeteria and food bank which also offers social services was a main partner, as the first patient visits were held within their premises, which were familiar to most of the recruited patients. The Baobad familial, which helps and empowers marginalized families in the neighborhood, as well as Femmes du Monde which works with women in the community, were also involved in reaching and patients for the community outreach clinic. Community group representatives were instrumental in identifying and contacting patients out of reach of the health system to register for the clinic from within the populations they serve.

The St-Mary's Family Medicine teaching clinic was another key player in the project. Each year, this McGill-affiliated site trains more than twenty-five family medicine residents and is a patient medical home for the local population. The St-Mary's clinic has been involved in developing new ways to promote social accountability of physicians through projects such as the Community Oriented Primary Care program which was established to strengthen community partnership.

The targeted patient population for the community outreach clinic was those who were having difficulties accessing family medicine care through the usual provincial waiting lists. Examples of barriers to entering the waiting list were: not knowing about how the health system works, no access to phones/internet to apply to the list, or lack of one of the components needed to get on the list, such as a stable home address, a phone number or a provincial health card.

After obtaining patient consent to participate in the community outreach clinic, each patient was paired to a second-year medical student, called navigators, who helped the patients obtain hospital cards and navigate the health system. The patients were also assigned to a first-year family medicine resident based at St Mary's Family Medicine Center, which they met for the first time in the community group locals, which were well-known and familiar to the patients. After the first meeting, the integration of patients at the local St-Mary's family medicine clinic for mainstream medical care, with the help of their navigators or residents as needed, was prioritized. During the first visits, residents were supervised by clinical supervisors knowledgeable on social vulnerabilities patients face, and there was a special emphasis during teaching about the social context and social difficulties of the patients, and how this affects their health.

2.5 Methods

A mixed method convergent study design (148) was used, comprising an exploratory thematic analysis of focus groups and interviews with participants in the community outreach clinic, as well as a satisfaction survey completed by all those involved with the community outreach clinic (including patients, family medicine residents, clinical staff supervisors, community organization partners, medical student navigators). The qualitative and quantitative phases were conducted concurrently, and the point of interface between both occurred during the analysis and interpretation of results. The data collection took place six months after the launch of the community outreach clinic.

The use of a convergent mixed-methods design is advantageous in the evaluation of a small clinic whereby outcomes are needed in a short period of time to make improvements for the next iteration, in spite of limited data points available due to small sample size. (149) The results of a questionnaire can be used to present an estimated usefulness value of the clinic to stakeholders and decision-makers, and the qualitative focus groups enabled us to probe participant's experiences to guide future improvements to the community outreach clinic.(150) The interpretation of integrated results of both phases allowed the linking of both our quantitative and qualitative datasets.

2.5.1 Qualitative methods

2.5.1.1 Design

The qualitative study was conducted after the first six months of the community outreach clinic, and included semi-structured interviews with patients, clinic leaders and supervisors and community group personnel. We also conducted three focus groups, two with the family medicine residents and one with the medical students having participated in the community outreach clinic.

The in-depth patient interview involved an initial recruitment of a target group by purposive maximum variety sampling method by age, gender, ethnic group, family structure variables and extent of participation in the community outreach clinic (withdrew from clinic or patients who adhered to follow-up). Collection of data entailed an interview with open-ended questions such as "which aspect of the community outreach clinic did you find most appealing?".

2.5.1.2 Analysis

Interviews and focus groups were transcribed verbatim and were cross-checked by the research coordinator by listening to sections of the audio recordings. The transcripts were imported in the NVivo software, and analyzed by thematic analysis following the approach described in Green & Thorogood' "Qualitative Methods for Health Research".(151) During content analysis, a deductive-inductive approach was used for data analysis of the transcriptions of the interviews and

of the focus groups, as well as the written short answers from the questionnaires. A deductive coding frame was developed to group the data according to different parts of the community outreach clinic, such as navigator involvement, first medical appointments, follow-up visits, etc.. Grouped data was then used to develop inductive codes to extract recurrent themes. These codes were periodically updated as new themes and ideas emerge. The first few interviews were coded by two members of the research team and analyzed for agreement. The researchers compared their coding, resolved disagreements and then coded all remaining transcripts of interviews, focus groups and key informant interviews.

2.5.2 Quantitative methods

A satisfaction survey aimed to detect common strengths and challenges of the community outreach clinic was co-created by the researchers and presented to key stakeholders to assess comprehension and pertinence of the questions. It entailed both open-ended and close-ended questions, and all patients, residents and navigators were asked to complete it either in person or on an electronic platform. Satisfaction survey is an invaluable source of information to assess the overall quality of a project within an organization and identify opportunities to improve project deliverables.(152) In addition, it helps the organization to get insights on the project management issues, especially whether the project has achieved the intended goals or not.

The short satisfaction survey was internally developed and reviewed with resident trainees not participating in the community outreach clinic for clarity of wording. It contained a few demographics multiple choice questions, five Likert-type scale questions (1-Strongly disagree, 5-Strongly Agree) aiming to broadly assess the community outreach clinic, as well as a yes/no question about whether the participant would recommend the clinic to a friend. Finally, the survey had three open-ended questions and a comment box in order to allow issues not otherwise addressed in the survey to emerge.

2.5.2.1 Analysis

After data collection, the questionnaires were coded then data entered into the computer for analysis. The Microsoft Office Excel was used to process and analyze data, which were presented using descriptive analysis. The number of answers for each Likert item (strongly disagree, disagree, neutral, agree and strongly agree) were recorded. Then, the results were represented in graphs (Figure 1 to 8). Responses to short answer questions were coded, and general themes extracted following the axial coding method, taking once again into account participants' role. (see Figure 6 to 8).

2.5.3 Integration

The quantitative and qualitative phases were integrated during analysis, as results were examined for congruences and incongruences, as well as how some results of the qualitative phase might explain the results of the quantitative survey.

2.5.4 Ethics

Ethics approval was provided by the St-Mary's Research Center Review Board. Participants to the study were extensively briefed on the aims of the study, their choice to agree or refuse to consent to the study, their right to withdraw at any time with no loss of benefits from the community outreach clinic, and their anonymity in the study. They had access to the research coordinator via email or phone at any time if they have questions or concerns about the study.

2.6 Results

2.6.1 Participant characteristics

During the qualitative phase, thirty-seven persons participated either in one-on-one interviews or in focus groups. Eight patients (4 male) were interviewed. Of these, 2 had not shown up at their follow-up medical visit, and one reintegrated the community outreach clinic after his interview. Of these patients, 1 considered himself homeless, all were unemployed and 2 were single-mothers. The ages varied between 24 and 78, and at least one patient referred from each participating community group was interviewed. One clinician-supervisor, one clinic administrator and 2 community group personnel were also interviewed. Finally, 22 residents participated in 2 focus groups, and 3 navigators (medical students) comprised the last focus group.

The questionnaires were completed by 32 of the 49 participants invited for a total response rate of 65%. The participants included 12 family medicine residents, 6 navigators and 14 patients. Amongst them, 53% were female.

	Patients	Clinical supervisors/ administrators	Community group personnel	Residents	Navigators	Total participants
Qualitative phase						
Semi- structured interviews	8 (4 M, 4F)	2 (2 F)	2 (2 F)	-	-	12
Focus groups	-	-	-	22 (6 M, 16 F)	3 (1 F, 2M)	25
Quantitative phase						
Satisfaction survey	14 (7 M, 7F)	-	-	12 (3 M, 9F)	6 (4M, 1F, 1U)	32

Table 2 : Study participants by role in the community outreach clinic

Figures represent number of participants M male, F female, U unspecified

2.6.2 Patients perspectives

All surveyed patients agreed (36 %) or strongly agreed (64 %) that the community outreach filled an important need. During our qualitative interviews, they described multiple barriers they had met while trying to access primary health care in the past, as well as their expectations of the community outreach clinic. Difficulty obtaining childcare, homelessness, language barriers, illiteracy, difficulty navigating the system or knowing where to get help, no phone access as well as trouble remembering appointments were all reasons for which the interviewed patients were not able to access primary health care prior to the community outreach clinic.

"It's like me for example, I did not know how to have access to a doctor. When I have had problems sometimes I would not get health care" (Patient, translation from French)

Patients stated three main reasons for registering to the community outreach clinic: many had a specific health issue they wanted investigated, some needed access to regular medication, and most reported non-ideal or no ways of accessing care in the past.

"Well it's because of my asthma problems. I have difficulties breathing at night, but I couldn't see a doctor for my inhalers. I could have gone to the emergency room, but it's

too long because I can't leave my kids alone, and it's too long to bring them." (Patient, translated from French)

Some resented feeling not listened to or adequately followed in quick-paced outpatients' clinics, and others objected, or were unable, to wait long hours in the emergency room for non-urgent care.

"They so busy and sometimes if you are busy and you have a patient and the patient ask you some questions, you don't like those kind of questions. I know that, but for me, it's important, if you are my doctor, I have questions. She didn't take too seriously and behave like not good. I'm stopped to going over there" (Patient)

All surveyed patients agreed (21%) or strongly agreed (79%) that the community clinic should be continued next year, and all but one agreed that they would recommend the clinic to a friend. One patient answered she did not know if she could recommend the community outreach clinic. This was explored with her during her interview, and she explained that as she did not have any friends or know or interact with anyone outside of her husband, so she could not say she would recommend the community outreach clinic.

During qualitative interviews, all patients agreed that the clinic met their expectations regarding access to care, and many expressed feeling relieved to know where to get access to care in the future.

"I was reassured, I am eager to get the results. But at least, I have a doctor if something happens" (Patient, translated from French)

The only interviewed patient who had been lost to follow up also mentioned he was satisfied, and that the reason he did not come back to the clinic was because he did not remember how to reach it, call it, or who his doctor was.

The community outreach clinic also exceeded expectations of the patients in some areas. Many reported that they greatly enjoyed meeting their navigators and their residents, and that they were

impressed with the kindness shown to them. These results were also reflected in the survey, as the three most common answers from patients to the open-ended survey question "what do you liked the most about the community outreach clinic" were "access to care", "good contact with the team" and "learning about local resources".

Regarding the first medical visit occurring within the community, opinions from patients were divided. Some patients felt it was important that the system reach out to them, whereas some felt it was easier and less intimidating for them to come to a place they already knew and frequented. Finally, some felt it did not change their experience much, as they felt they would have been able and willing to go to the main clinic on their own if needed. No patient reported feeling slighted or uncomfortable with the locals for the first visit.

The challenges patient reported within the community outreach clinic were difficulty remembering physician's name, and incertitude as to how to reach clinic either physically or how to make an appointment after the navigator's involvement ceased, either by lack of personal phone or unknown number to reach. The majority of interviewed patients did not recommend any improvements to the community outreach clinic during either the interviews or survey. One patient mentioned that a map would have been useful. Although not an improvement, some interviewed patients recommended specifically to continue hosting the clinics in the mornings, as they would not have been able to attend in the afternoon, when they have to pick up children from school.

2.6.3 Trainees perspective

As seen in Figure 1 and 2, although the majority of the trainee's answers in the satisfaction survey

were positive, a few of them disagreed that the clinic filled an important need or that it should be continued. During the focus groups, there was a recurring concern from some residents that the patient's participants were not vulnerable enough, and that as such the clinic was not filling its mandate. Indeed, one of them gave examples of patients well established in the medical system, well-educated and already followed by multiple specialists. However, there was also a concern from medical supervisors that the residents may not have recognized the importance of social vulnerabilities on patient's health, or their role as family physicians to address these issues with their patients:

"She's not like a marginalized patient per se. She just had a difficult living situation, financial problems, three young kids, no family here. Her husband works nights and days so she doesn't have any support, baby sitters." (First-Year Family Medicine Resident)

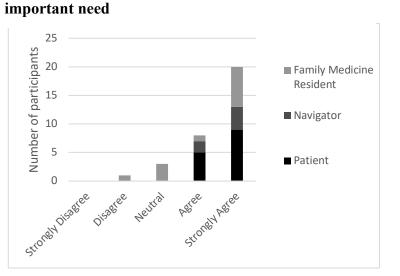
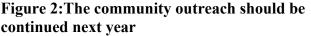
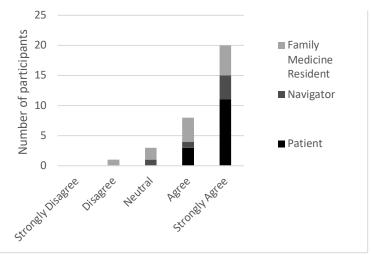


Figure 1: The community outreach clinic filled an





In the survey, similar to the patients, the most liked aspect of the community outreach clinic by the trainees was the good contact with their patients and other professional involved in the clinic. (Figure 3). They also reported having learned a lot from the initiative. (Figure 4).

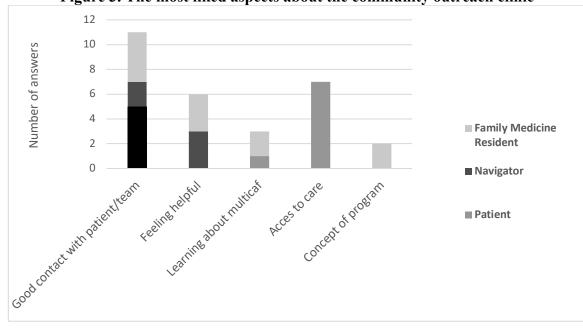


Figure 3. The most liked aspects about the community outreach clinic

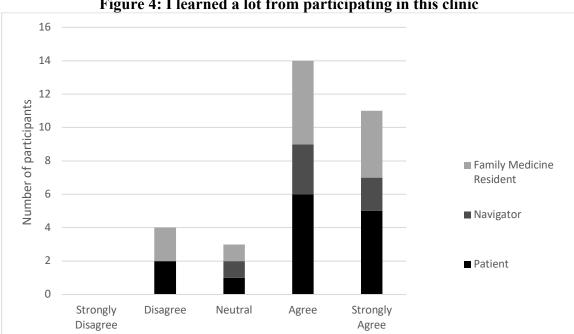


Figure 4: I learned a lot from participating in this clinic

During the focus groups, the navigators, which were second year medical students, described learning a lot about how the health care system works, and gained a better emotional understanding of the challenges marginalized populations face.

"I definitely got a very visceral feel for some of the barriers to accessing healthcare. I mean like of course I could list things off before, but when you're talking to someone who's experiencing that, it brings it home in a very real way. " (Navigator)

The residents commented that the immersion in the community groups was "eye-opening" and made teaching about social determinants of health much more meaningful to them. Some commented that the location even made them want to learn more, and that they would've welcomed more explanations about how the community group worked, and a more in-depth teaching and visit of the community group prior to seeing their patient that day.

"But if I was in Multicaf that day to see a patient, which is very intimate experience, it's very concrete. If that day, someone would have sat down with me for 10 more minutes to say, "this is what majority of these people are here for and this is how long they usually spend here and this is the type of people that come here and this is what this person does." I would have maybe understood more how my patient got there." (First-Year Family Medicine Resident)

They also enjoyed having extra time at the first visit to get to know the patient and practice their social questioning. Some report that they would apply these new skills to their practice.

" It was just the setting for it but actually it was good practice to ask those questions to more of my patients and I actually have asked more of those questions since then." (First-Year Family Medicine Resident)

In the open-ended questions of the survey, both navigators and residents reported learning about social questioning, the needs of the local community and local resources, as shown in Figure 5.

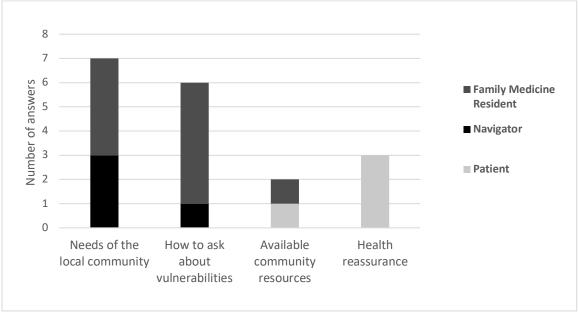


Figure 5: The most important thing learned from participating in the community outreach clinic

A challenge reported by the residents both within the focus group and the survey was the lack of space for a proper physical examination of the patients during the first visit at the community group local. Some residents also reported difficulties with reaching their patients after the end of the navigator's involvement, leading to loss to follow-up. Finally, both medical students (navigators) and residents named logistics as the main challenge during their participation within the community clinic, chiefly scheduling and balancing their responsibilities within the clinic with the rest of their medical education demands. These results were mirrored in the survey.

The recommendations from students and residents for improvements for the community outreach program were closely related to these challenges: improving schedules and logistics such as postponing physical exams to the second visit as needed and increasing the amount of teaching while at the community group. The grand majority of them felt the community outreach clinic should be continued next year.

2.6.4 Other stakeholders perspective

Clinical supervisors, administrators and community groups welcomed the new outreach clinic. Clinical supervisors felt it enabled them to discuss issues pertaining to care that they did not previously could with their residents. « I mean, just getting on the list is difficult, and without a computer and internet access it's difficult, and that was a teaching opportunity that I don't had I think, at least I didn't use as a much as we could have before. Like, "Why is this person not hooked up already? What is there about our systems that makes this so hard?" and then, "What can we do about this?" " (Family Physician and Clinician Supervisor)

As with the trainees, interdisciplinary work was also noted and appreciated during the interviews.

" I felt there was a good example of interdisciplinary work. That's always something that we struggle to role model to the resident. How to work as a team. I think this was a great model of having the nurse, the community organization, the med student, the navigator, the resident, the staff, all coming together, talking about cases. I felt this was really a great model. " (Family Physician and Clinician Supervisor)

A few challenges emerged during the first few months. First, community groups experienced a strain on their resources, such as having to liberate a room for the clinic. Some also reported disliking the feeling that they were the "gatekeepers" to the community outreach clinic for patients who they felt should have been able to use the provincial waiting list for family doctors. The community outreach clinic could be seen as a way to bypass the provincial waiting list for a family physician, whereas its goal was to target the patients and families that were not able to access this waiting list. Some community group workers felt it might not be their role to say no to some of their patients:

« We understand the reasons, but at the same time, we were wondering if we were analyzing whether the family was vulnerable of not. And that isn't really our role. We take the family like it is, and we respond to its needs." (Community group worker, translated from French)

Another task through the implementation of the community outreach clinic was to ensure resident safety. On one occasion, a patient had a physical altercation with a community group worker during the community outreach clinic. It was emphasized that trainee safety had to stay an important concern in the next iterations of the community outreach clinic.

"There was one incident, and then we had heard about another site years ago, who had problems. I don't feel this was an actual big issue, but at the same time, resident safety has to be really, really primordial. I think that's something important that we'll keep an eye on, just to make sure, in the future." (Family Physician and Clinician Supervisor)

2.7 Discussion

The community outreach clinic community outreach clinic was ambitious and involved many stakeholders and used multiple strategies to address unmet care needs of the socially marginalized. This evaluation aimed to appraise its effect on patient access to primary health care, the feasibility and challenges of the community outreach clinic, and its impact on resident education.

The study highlighted the many complex barriers that socially marginalized populations face in accessing good primary health care. The community outreach clinic clearly increased the access to care as most participants are now well integrated into the mainstream care at the clinic. The patients reported feeling reassured about health problems and with the fact that they now have easier access to care should they need it in the future. Our findings point to a subgroup of these patients that may still be challenged by some barriers, such as difficulty making appointments in an autonomous manner. This shows again the importance of having a critical look on new projects: the health access barriers are complex, intertwined and can vary immensely in time, in intensity as well as with individual factors.

Over and above the fact that the community outreach clinic answered a need of the local population, the community outreach clinic was deemed "eye-opening" by trainees. They had an opportunity to practice social questioning, and some reported implementing these new skills in their everyday practice. This is in line with current evidence which reports that even one positive advocacy experience can have lasting impacts on advocacy skills and empathy. (137)

Our findings suggest that even more teaching opportunities could be used within the community outreach clinic, and that residents would likely welcome this additional information. For example, they recommended a more in-depth visit of the community group site. They noted that the immersion, by which they meant being physically on the site of the community group, makes didactic teaching during the outreach clinic be more powerful than the same teaching within a

classroom. There are also subjects which could be clarified with residents, such as the role of family doctors in addressing social determinants, over and above simply referring to social workers.

Although the overwhelming majority of our respondents felt the community outreach clinic answered a need and should be continued, there were some adjustments suggested. In a project with so many actors involved, it is understandable that a period of adjustment is needed, which is why it is not surprising that many of the areas needing improvement in the community outreach clinic were organizational in nature. Suggestions that were made include earlier knowledge of patient's needs and preferences, such as preferred physician gender or language, and their specific needs regarding navigation, so that the community outreach clinic may adjust what services depending on individual needs.

There was space in this evaluation for capturing unanticipated impacts of the community outreach clinic. What came through was a greater appreciation of the relationships created between all the family medicine clinic and the local community groups. A strong local multidisciplinary network can only enhance and facilitate future projects aimed at addressing social disparities in the neighborhood.

2.8 Strengths and limitations of the study

As an evaluation of a small community outreach clinic, our quantitative phase could not be expected to reach statistical significance on our evaluated outcomes. However, using mixedmethods enabled us to triangulate our findings between both phases of the study. As the community outreach clinic continues to run in the following years, further data can be collected.

Another limitation in our study is a possible desirability bias, whereas patients, and other stakeholders, might seek to answer favorably for the community outreach clinic because of the high stakes (increased access to family doctors for a population with a lot of unmet needs). Once again, repeated evaluations of such a project will eventually enable us to palliate this possible bias. Some members of our research team responsible for devising the evaluation protocol were also involved in the implementation of the clinic, which could have influenced the design of our evaluation. Due care has been taken so that data collection and analysis was made by persons

outside the team which devised and implemented the clinic, and the use of two research methods might have mitigated this possible biais.

A strength of this evaluation, the designed mixed methods enabled us to use findings from both datasets, and the incongruences between both datasets permitted broader reflections, pointing us to future potential inquiries.

2.9 Conclusion

This study was the first evaluation of a newly implemented community outreach clinic with the ambitious aims of circumventing many barriers to health care that socially marginalized populations face, as well as to prepare the next generations of physicians to care for these disadvantaged populations. The community outreach clinic successfully facilitated the enrollment of patients in mainstream primary health care in a patient-centered medical home, and participating family medicine residents felt the experience was valuable for their learning. Possible improvements to the community outreach clinic were discussed and will be implemented in the next few years. Our evaluation clearly demonstrates the importance of strong partnerships and of deep contextual understanding of the needs of each partner working in the community to build flexible and responsive initiatives meant to bridge the formal and informal health systems to better serve marginalized populations.

3. THESIS DISCUSSION

3.1 Summary of the key results of the thesis

The main aim of this thesis was to assess the impacts of the new community outreach clinic in Cote-des-Neiges. We found that the great majority of our participants felt the community outreach clinic was a worthwhile endeavor. Patients felt it answered their need for primary health care and appreciated the positive contact they had with the navigators and residents throughout the community outreach clinic. Residents felt this was a learning opportunity that could even be expanded further. A few challenges were also discussed, such as the difficulties some patients had with finding the clinic or remembering their physician's names.

3.2 Discussion of the main findings of the thesis in line with current evidence

3.2.1 The outreach community clinic and the access gap

One of the main goals of the community outreach clinic was to facilitate access to primary care for marginalized patients in Cote-des-Neiges. The barriers to access that marginalized populations face have been well defined, enumerated and studied (69, 74, 77). Multiple projects and policies have been implemented to facilitate this access (12, 14, 15, 100-103, 153). However, these projects face many barriers of their own. The challenges to access care are numerous, and the variability both between and within vulnerable populations is quite high (154, 155), which makes it difficult for a single project to cover all needs at once.

3.2.1.1 Access barriers identified in the community vs literature

Most barriers to access that were mentioned by our participants are similar to those classically described in the literature, such as language barriers, difficulty to take time off work or finding childcare options, difficulty reaching the clinics, and not knowing how the system functions. Of note, if insurance status is a major problem for socially vulnerable populations in the United States (68, 156) and is a very commonly cited barrier in literature, the universal health coverage lessens the problem in Canada. However, even with universal health care some people might find some pathways of care to be hard to access. For example, some people eligible for

medicare do not have their medicare card, which necessitates bureaucratic steps to obtain and is a requirement for accessing most of the health system in Québec.

Interestingly, one barrier that was mentioned in our study was that of poor access to phones and the internet. The Quebec health system has been working on technological progress and is now asking patients to register to waiting lists online. (157) Appointments in the health system are largely given by phone. Physicians and patients will soon be expected to use new technologies to communicate, be it telemedicine or emails. The more society moves towards these technological advancements, the more those who can not afford these technologies will have difficulty accessing health care. One way to palliate, for example, could be to let the patient use and get phone messages or access emails at a local community group, or CLSC.

Although other barriers are mentioned in the literature, such as health literacy and cultural differences were not explicitly mentioned by participants, perhaps because of the small sample in this study. The objective of the study was not to explicitly explore barriers in Cote-des-Neiges, as this has already been done before. (146)

3.2.1.2 Strategies for addressing some of the barriers used within the community outreach clinic

Some of the interventions in the community clinic successfully addressed barriers to entry, as evidenced by the number of complex and marginalized patients now followed in the clinic. The patients were helped if needed through the first layers of bureaucracy to obtain a health insurance card. As much as possible, requests from the patients for female physicians or specific languages were met. This was made possible by communication between the teams involved in the community outreach clinic. The navigators were able to address some specific patient needs, such as arranging transport with the local services for a patient. The first physician-patient meeting in the community was appreciated by many patients, who found it easier and a less intimidating way to access a physician.

However, some barriers continue to be challenging within the community outreach clinic, as well as during the follow-up in mainstream care. Some patients were quite autonomous when the navigator's part in the community outreach clinic ended, but others found it difficult to reach the main clinic afterward. This points to the insidious and persistent nature of some of the barriers explored. A key feature of the community outreach clinic which makes it highly suitable to address barriers of access is the continuous evaluation process, which will enable the community outreach clinic to adapt to patient's needs.

Improvements to address some of these challenges were discussed in the manuscript, including handing out clear maps and phone numbers, involving clinic personnel in reaching out to patients and having clinics in the morning. However, there are certain situations that the community outreach clinic can not address. In the Levesque framework of evidence (74), there are many barriers to access that this clinic was not conceived to specifically address, including but not limited to health literacy and beliefs, poor adherence to follow-up and treatment, income loss from missing work for appointments. However, the complexity of the situation of socially vulnerable populations makes it quite difficult – even impossible- for a single project to address all the root causes of social health inequities. This is why a multilayered approach, including policy changes and structural changes, will be needed in the next few decades to reduce these inequities.

3.2.2 The community outreach clinic and the quality of treatment gap

3.2.2.1 The role of family physicians in addressing social determinants of health

A very important finding to address within this project is that some residents reported they did not feel particular patients were vulnerable despite multiple social challenges (isolation, single parenthood, financial difficulties, and food insecurity). Even more significant, was the fact that these residents did not feel their patients needed their physician to address these issues with them, and that a social worker referral was all that was needed from their part. This might stem from a crucial misunderstanding of the scope and the power of a primary health care physician's role.

Social workers have unique knowledge and skills that make them a key part of a multidisciplinary team and prove invaluable help for patients with social challenges. However, physicians also have a role to play in addressing social difficulties in individual patients. The privileged patient-provider

relationships developed in longitudinal primary health care is an incredibly powerful tool for sensitizing patients not only to potential causes of ill-health but also to potential solutions.

First, one of the main roles of physicians is to educate their patients about health-related issues, be it potential causes, possible approaches or resources the patient can use, and to help their patients balance concurring issues. For example, if two critical medications for different diseases have important interactions with each other, it is the physician's role to explain to the patient the possible consequences of taking both medications, or of foregoing one or the other. The patient is then able to make a choice, sometimes difficult, between all options, even if they are all less than ideal. Regarding the social determinants of health, this might mean discussing with a financially strained patient the consequences of not taking their medications regularly and exploring with them which pills this patient might want to prioritize if they can not afford all of them. It might also mean discussing with some patients the possible mental health consequences of their social isolation, and to provide an opportunity for the patient to voice his or her concerns.

Secondly, the social weight of a physician's recommendations or encouragements can be useful in empowering patients to make changes. For example, a Cochrane review showed an increased likelihood of smoking cessation if primary health care physicians addressed this issue, even briefly, with their patients (158). An RCT showed the likelihood increases even more if physicians have strategies to offer their patients during in-office visits. (159) Even if a lot of the root causes of inequities are out of the patient's reach to change, there are resources available if the patient has the knowledge, the time and the energy to reach for them. This could mean attending social worker's appointments, learning about and going to a food bank or applying to programs aimed at relieving social isolation in the elderly. A physician's encouragement to reach for these opportunities could have lasting impacts on a patient's health.

One of the reasons residents felt their role regarding social determinants was so minor might stem from them being aware of how they can address them in office. This would be similar to what has been reported by general physicians, who reported they did not screen for social determinants such as poverty because they would not know how to act on them (160). Luckily, many tools have been developed to help physicians properly address these issues, such as the CLEAR Collaboration Toolkit (21) or the Poverty screening tool in British Columbia. (141) Physicians should learn to screen for social issues, as some of may lead to important medical issues – such as conjugal violence or malnutrition which are issues a physician must address with his patient.

The many ways in which a physician can impact health issues linked to social determinants in his office makes properly teaching advocacy, including useful tools and local resources to residents of paramount importance.

3.2.2.2 Teaching and role modeling advocacy

A distinctive aspect of the advocacy teaching within the community outreach clinic project is that it touched on all three

levels of advocacy teaching in primary health care as described by Hubinette et al. (95)

At the supraclinical level, the community outreach clinic project enabled residents to see their supervisors involved in creating and testing an outreach project addressed at socially vulnerable populations. These supervisors modeled a way of acting within their clinic and local area to change the system, as well as reaching out for collective action and multidisciplinary teamwork. As role-models are an important part of medical education (161) and can influence later career choices(162), we can hope this community outreach clinic will have long-lasting effects in encouraging future physicians to take action on the social determinants of health.

At the paraclinical level, the community outreach clinic made it possible to explore the importance of the local community resources via a first visit within the community group's location. The involvement of the navigators enabled the residents to discuss with them and reflect on the barriers to health care access that their patients faced before setting foot in their office, and how this, in turn, affected their health.

Finally, at the clinical level, residents had protected time to practice their social screening and questioning with the enrolled patients. The present supervisors were able to explore social

diagnoses with residents and to address with them some health and access challenges stemming from social vulnerability.

Our navigators, which are also medical students, felt this was an eye-opening experience as well. If early immersion has been shown to be helpful for residents learning empathy and advocacy (137, 163), it follows that this might apply as well to medical students.

3.2.2.3 Moving forward

The community outreach clinic was shown to be a great opportunity to model and teach advocacy on many levels to family medicine residents and to medical students. With many medical associations asking for action against social health inequities, family medicine as a profession should ensure that its residents are empowered to advocate and act on social health inequities. Based on the results of the evaluations, we propose three recommendations to build even more on the teaching aspects of this community outreach clinic.

First, the didactive training the morning of the community outreach clinic should be expanded. Residents felt they learned more while on the site of the community clinic, as it made the material seem immediately relevant compared to classroom teachings. Second, the trainees would also enjoy a more in-depth visit of the community group in order to understand what resources their patients have access to. Finally, in view of the possible misconceptions about social vulnerabilities as well as the role of family doctors to address these vulnerabilities with their patients, more specific teachings on this subject is recommended. For example, there are many evidence-based tools that can be used in-office that should be promoted to the residents.

4. STRENGTHS AND LIMITATIONS OF STUDY

A limitation of this study is a possible socially desirable response bias from all our stakeholders. The patients who participated might have been principally grateful to obtain access to a family physician, in a context of long waiting lists throughout Quebec. The other stakeholders might have answered favorably about the community outreach clinic because they were invested in its implantation, and therefore its success. To minimize this, each participant was warned before

interviews or focus group that the aim was to improve the community outreach clinic, and confidentiality was assured for each of them. Many improvement suggestions came from both patients and other stakeholders which could indicate believe that if such a bias exists in this study, it has been minimized.

Two main limitations of this study were the sample size in our qualitative data, as well as the fact that our survey was not a validated tool. Because of the initial small size of the community outreach clinic, statistical significance could not be reached with the satisfaction survey. However, this survey was a key part of the study as it permitted to reach actors that were not available for interviews, as well as to present informative descriptive statistics. The integration of both the qualitative and the quantitative phase led us to new reflections that we would not have caught with only one of the phases.

The mixed-methods used in this study were its greatest strength. Both phases, along with their integration, provided a depth of understanding of this community outreach clinic that we would not have reached with only one arm of the study. The research evaluation plan was done before the community outreach clinic was launched and followed closely during its first year in order to provide useful data to the implementors of the community outreach clinic.

5. CONCLUSION

This mixed-method evaluation study scrutinized a novel community outreach clinic which had two goals. First, to reach out to a socially vulnerable population in Montreal and to offer them the gold standard of family medicine in Canada. Second, to prepare the next generation of physicians to care for this population, by using a variety of methods such as on-site visits of community groups, navigations by medical students and directed teaching. Although the community outreach clinic was a great success in its first version, as exemplified by the number of patients still followed at the clinic and the impressive 87.5% of participants believing the community outreach clinic should be continued, this evaluation enabled us to make several recommendations for improvement over the next few years. Even if reducing social health inequities is a rising concern across governmental agencies of Canada, strong evaluations of local programs are still few and far between. Even rarer in the literature are longitudinal evaluations of outreach or teaching programs, which could also assess the sustainability and long-term effects that these time and resource-intensive endeavors. The knowledge gathered in these studies will not only help improve this particular community outreach clinic but may also help other communities and multidisciplinary teams devise their own local solutions and inspire policymakers at all levels.

6. APPENDICES

Appendix 1 – Interview consent form

Research Consent Form

Study Title: Evaluation of the community outreach pilot project in Cote des Neiges

Brief Description of Project: The purpose of this research study is to assess whether the community outreach initiative is considered useful by patients and to make recommendations on what else can be done to further improve the patient experience.

Contact Details of Principal investigator (PI): Dr. Anne Andermann, St-Mary's Hospital, McGill University, Montreal, Canada, <u>anne.andermann@mail.mcgill.ca</u>

Contact Details of Research Coordinator: Ariane Courville-Le Bouyonnec, McGill University, Montreal, Canada, <u>ariane.courville-lebouyonnec@mail.mcgill.ca</u>

Participation in this research study involves completing a brief interview which should take approximately **15-30 minutes.** The questions will ask about your experiences in signing up with a family doctor and how to make this experience better. There will be no direct benefit to you from participating in this research, but the aim is to improve the experience for people in future.

There is no foreseeable physical injury risk in participating in this study. In the event of a research-related physical injury occurred during this interview, your medical needs would be covered under RAMQ or private insurance, and time off work related to this injury would not be compensated.

This study is entirely confidential. Neither your name nor information that could identify you personally will be used in the data analysis, publication or presentations of this study. Your identity will be kept confidential by the following method: You will be assigned a number and your name will not be recorded. All recording material, transcriptions of the interview and signed consent forms will be kept in a secure locker in St-Mary's research center for up to five years. Electronic data will be kept on a password-protected computer. All of these will be destroyed after the conservation period.

Your participation in this study is completely voluntary. You may refuse to participate or withdraw your consent or discontinue your participation in the study at any time without penalty or loss of benefits or rights to which you might otherwise be entitled. In case of a withdrawal, all data obtained from you will be destroyed at that time. In the unlikely event we

need to re-contact you regarding this research, you are as well entitled to refuse to participate or withdraw from the study.

If you have any questions about this study, or concerns about research-related injuries, you should feel free to ask them now or anytime throughout the study by contacting the research coordinator Ms. Ariane Courville-Le Bouyonnec (Email: ariane.courvillelebouyonnec@mail.mcgill.ca). If you believe that your rights have been violated in any way, please contact the research ethics committee. If you have any questions about research subject's rights, please contact St-Mary's patient representative at (514) 345-3511 # 5050. This study is seeking approval from the St Mary's Hospital Research Ethics Committee, Montreal, Canada.

By signing this consent form, you are indicating your consent to participate in the evaluation of the community outreach pilot project in Cote-des-Neiges study.

Signature of participant: _____ Date:

Signature of data collector: _____ Date:

Thank you in advance for your time which is greatly appreciated. A copy of this form will be provided to you.

Appendix 2 – Semi-structured interview guide

Contact Details of Principal investigator (PI):

Name: Dr. Anne Andermann

Email: anne.andermann@mail.mcgill.ca

Contact Details of Research Coordinator: Name: Ariane Courville-Le Bouyonnec

Email: ariane.courville-lebouyonnec@mail.mcgill.ca

Thank you for agreeing to participate in this interview. I will now begin the recording.

- Please answer these few questions about yourself
 - How old are you?
 - What is your occupation? What is your education level?
 - Before this project, where did you get medical help?
 - Have you ever had a family doctor? If yes, when was the last time you saw him/her?
 - Where do you live and with whom?
- Please describe your experience within the project.
 - o Probe:
 - How did you feel when you were first approached?
 - What were you expecting from the program? Were these expectations met?
 - Why did you choose to join the program?
 - How was your interaction with the navigators?
 - How did your first medical visit go? Did you know where to go? How did you feel prior to the meeting?
 - How did your second medical visit go?
 - How was your experience with the personnel at the clinic?
 - If you have needed blood tests or specialist care referral, how was your experience with getting these tests done?
 - How has the project impacted your life? The way you see your health?
 - Was the program helpful for you? If so, in what ways?
- What aspects of the programs could be improved?
 - o Probe
 - What were the principal difficulties you encountered during this project?
 - Did you feel stuck or unable to go through a step at any time during the project?
 - Do you have any suggestions of things which could be done differently?
 - What aspects of the programs do you feel should not be changed at all?

- Is there something we could add to the program to make it a better experience?
- If you were telling a friend or family member about the program, what would you say?
 o Probe:
 - Would you recommend the program?
 - What was the most helpful for you in this project?
- Do you see yourself going to the clinic again?
 - Probe:
 - Do you see yourself still being followed at the clinic a year from now? If not, why?
 - Do you feel comfortable booking and going to your medical appointments at the clinic?
 - How do you expect the next medical visits will go?
- Do you have any questions or comments you would like to ask or add?

Thank you for your time.

Appendix 3 – Focus group consent form

Research Consent Form

Study Title: Evaluation of the community outreach pilot project in Cote des Neiges

Brief Description of Project: The purpose of this research study is to assess whether the community outreach initiative is considered useful by patients and to make recommendations on what else can be done to further improve the patient experience.

Contact Details of Principal investigator (PI): Dr. Anne Andermann, St-Mary's Hospital, McGill University, Montreal, Canada, <u>anne.andermann@mail.mcgill.ca</u>

Contact Details of Research Coordinator: Ariane Courville-Le Bouyonnec, McGill University, Montreal, Canada, <u>ariane.courville-lebouyonnec@mail.mcgill.ca</u>

Participation in this research study involves completing a focus group meeting which should take approximately **30-40 minutes.** The questions will ask about your experiences in implementing the community outreach program in Cotes-des-Neiges, and how to improve patient's experience and the program's outcome. There will be no direct benefit to you from participating in this research, but the aim is to improve the experience for people in future.

There is no foreseeable physical injury risk in participating in this study. In the event of a research-related physical injury occurred during this interview, your medical needs would be covered under RAMQ or private insurance, and time off work related to this injury would not be compensated.

This study is entirely confidential. Neither your name nor information that could identify you personally will be used in the data analysis, publication or presentations of this study. Your identity will be kept confidential by the following method: You will be assigned a number and your name will not be recorded. All recording material, transcriptions of the interview and signed consent forms will be kept in a secure locker in St-Mary's research center for up to five years. Electronic data will be kept on a password-protected computer. All of this data will be destroyed after the conservation period.

Your participation in this study is completely voluntary. You may refuse to participate or withdraw your consent or discontinue your participation in the study at any time without penalty or loss of benefits or rights to which you might otherwise be entitled. In case of a withdrawal, all data obtained from you will be destroyed. In the unlikely event we need to recontact you regarding this research, you are as well entitled to refuse to participate or withdraw from the study.

If you have any questions about this study, or concerns about research-related injuries, you should feel free to ask them now or anytime throughout the study by contacting the research coordinator Ms. Ariane Courville-Le Bouyonnec (Email: ariane.courvillelebouyonnec@mail.mcgill.ca). If you believe that your rights have been violated in any way, please contact the research ethics committee. If you have any questions about research subject's rights, please contact St-Mary's patient representative at (514) 345-3511 # 5050. This study is seeking approval from the St Mary's Hospital Research Ethics Committee, Montreal, Canada.

By signing this consent form, you are indicating your consent to participate in the evaluation of the community outreach pilot project in Cote-des-Neiges study.

Signature of participant: _____ Date:

Signature of data collector: _____ Date:

Thank you in advance for your time which is greatly appreciated. A copy of this form will be provided to you.

Appendix 4 – Focus group interview guide

Contact Details of Principal investigator (PI): Name: Dr. Anne Andermann

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Contact Details of Research Coordinator: Name: Ariane Courville-Le Bouyonnec

Email: ariane.courville-lebouyonnec@mail.mcgill.ca

Thank you for agreeing to participate in this focus group. I will now begin the recording.

- What did you think of the pilot project?
 - Probe:
 - What went particularly well?
 - What were the difficulties you encountered? Your patients encountered? Do you have any suggestions to palliate these difficulties?
 - What areas could be improved? What could each of us do to make the program better?
 - Do you think the project could be exported to other teaching sites?
 - How do you feel more/less vulnerable patients would benefit from this program?
 - Do you feel the program will have a lasting impact on your patients?
 - Do you feel the different actors in the program benefited and learned from this outreach initiative?
- What do you think of the improvements suggested by the patients which you were presented with?
 - Probe:
 - Which suggestions are unlikely to be possible? Why? What would we need to make them work? Is there another way we could reach the expected result?
 - Which suggestions should be implemented? Who would be responsible for adding that aspect to their roles and responsibilities?
- Do you have any questions or comments you would like to add or ask?

Thank you for your time.

Appendix 5 – Satisfaction survey questions

- 1- Are you a
 - o Patient
 - \circ Navigator
 - o Family Medicine Resident
 - Clinical supervisor
 - Community group personnel
 - o Administrator
 - Other: ____

2- What gender are you?

- Female
- Male
- Unspecified
- 3- How old are you?
 - 18-29 years
 - 30-49 years
 - 50+ years

4- To what extent do you agree or disagree with the following statements? (strongly agree, agree, unsure, disagree, strongly disagree)

- a. The community outreach program filled an important need
- b. I learned a lot from having been part of this program
- c. I felt that my participation was valued and respected
- d. I had the opportunity to make an important contribution
- e. The community outreach program should be continued next year

Please explain : _____

- 5- What was the most important thing you learned while participating in this program? Answer : _____
- 6- What did you like the most about the program? Answer : _____
- 7- What did do you like least about the program? Answer : _____
- 8- What would be your suggestions for improving the program? Answer : _____
- 9- Would you recommend to one of your friends to participate in this project?
 - Yes
 - No

- I don't know
- 10- Do you have any additionnal comments or feedback about your experience? Answer : _____

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