Navigating Ottawa Resources To improve Health: a virtual student-clinic pilot to strengthen social medicine education *Navigating Ottawa Resources To Improve Health*: un projet pilote virtuel étudiant-clinique pour renforcer l'enseignement de la médecine sociale

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Implication Statement

The practice of social medicine, which requires skills in interprofessional collaboration and navigating community resources, is crucial for training students to provide holistic care. We developed a social needs-based virtual student-run clinic called Navigating Ottawa Resources To improve Health (NORTH) to assist newcomers and underserved families with navigating community resources in Ottawa, Ontario. We found that pre-clerkship medical students improved their knowledge and comfort-level with addressing social needs while clients found the service helpful for accessing community support. NORTH is an effective learning opportunity for pre-clerkship medical students to practice social medicine and serve vulnerable communities that can be organized and operated in other communities.

Introduction

Social medicine addresses health inequities by examining how socioeconomic factors influence health outcomes and provide non-clinical interventions to support patients and their families.¹ Social determinants of health (SDOH) account for 80-90% of health outcomes.² Yet, medical students in Canada lack standardized training to effectively address social factors, which are commonly considered outside the scope of standard medical care.^{2,3} Navigating Ottawa Resources To improve Health (NORTH) was initiated as a student-run, social needs pediatric clinic project within University of Ottawa's undergraduate

Énoncé des implications de la recherche

La pratique de la médecine sociale par le biais de la collaboration interprofessionnelle et de la navigation dans les ressources communautaires est essentielle pour former les étudiants à fournir des soins holistiques. Nous avons développé une clinique virtuelle gérée par des étudiants et basée sur les besoins sociaux, appelée Navigating Ottawa Resources To Improve Health (NORTH), afin d'aider les nouveaux arrivants et d'autres familles mal desservies à s'orienter dans les ressources communautaires d'Ottawa, Ontario. Nous avons constaté que les étudiants ont amélioré leurs connaissances et leur aisance à répondre aux besoins sociaux, tandis que les clients ont trouvé le service utile pour obtenir le soutien de la communauté. Premier du genre au Canada, NORTH est une occasion d'apprentissage efficace pour les étudiants en préclinique de pratiquer la médecine sociale et de servir les communautés.

medical program, supported by social workers and medical faculty. We sought to connect socially complex clients living in vulnerable contexts to community-based resources in Ottawa and offer learning experiences for preclerkship medical students to embrace social accountability. We evaluated NORTH's impact on students' learning and perception of social medicine, as well as its impact on clients.

Innovation

NORTH was modeled after the Health Leads Navigator Program developed by Boston Medical Center. 5 Partnering with the Vanier Social Pediatrics Hub (VSPH) in Ottawa, NORTH piloted its social navigation services with families living in a vulnerable inner-city neighbourhood and facing complex psychosocial stressors (e.g., low income, housing, food insecurity, and/or unemployment).6 NORTH included four teams, each with a first-year medical student, a social work student, and a social worker supervisor. Students completed a 4-hour orientation on social medicine (in the context of children/families) case studies, and three 1-hour small-group sessions on trauma-informed care, social prescription, and federal health programs. NORTH saw four clients between January and April 2023, meeting via Zoom (by laptop or phone) for virtual accessibility and COVID precautions. Clinic flow is illustrated in Figure 1.

The student survey and client interview guide were developed by the NORTH administrative team using the University of Ottawa's social accountability learning objectives. Three clients were interviewed by phone (~10 minutes) to gather their feedback, and seven out of eight students evaluated their experiences via the survey. The University of Ottawa Research Ethics Board exempted this study from full ethical review.

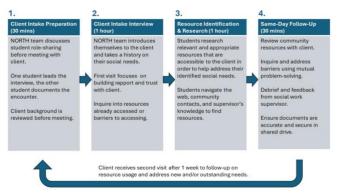


Figure 1. Clinic flow and student roles.

Evaluation

Table 1 outlines key findings from the student survey. Appendix A outlines representative quotes from students and clients regarding their experiences with NORTH. Overall, although all students started with limited or no prior knowledge/training in social medicine Six of seven students indicated that NORTH improved their ability to navigate SDOH. Moreover, six of seven students had positive experiences collaborating with social workers to navigate community resources and address client needs. All students reported that they became more familiar with available resources in their community, thereby building

confidence in managing SDOH. Through open-ended responses, students appreciated the creativity required to identify community resources and the importance of empathy when serving socially complex clients. For improvement, students recommended "adding more sessions with more clients" and "translating [the] documentation form [in] to French for Francophones."

Table 1. Student feedback on NORTH's impact on their social medicine knowledge and interprofessional collaboration (n = 7)

medicine knowledge and interprofessional collaboration $(n = 7)$					
Survey Question	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
Participating in NORTH improved my knowledge of social medicine	0 (0%)	0 (0%)	1 (14%)	2 (29%)	4 (57%)
After participating, I feel better prepared to identify and address social determinants of health	0 (0%)	0 (0%)	1 (14%)	2 (29%)	4 (57%)
It was useful to work with team members from other health professions	0 (0%)	0 (0%)	1 (14%)	4 (57%)	2 (29%)
I felt well- prepared to work with my team members and clients during the clinic.	0 (0%)	0 (0%)	1 (14%)	4 (57%)	2 (29%)
I liked the structure of the clinic	0 (0%)	0 (0%)	1 (14%)	4 (57%)	2 (29%)
I felt I made an impact on the clients	0 (0%)	0 (0%)	2 (29%)	3 (43%)	2 (29%)
My experience with NORTH helped me develop professionally.	0 (0%)	0 (0%)	1 (14%)	5 (71%)	1 (14%)
This experience helped me learn about the resources available in my community for my future clients and patients	0 (0%)	0 (0%)	0 (0%)	4 (57%)	3 (43%)
I would participate in the NORTH clinic again and/or recommend others to join the NORTH clinic.	0 (0%)	0 (0%)	2 (29%)	3 (43%)	2 (29%)

All clients were satisfied with the recommended resources and appreciated their social needs being heard and deeply considered. Clients noted useful support with finding subsidies, childcare resources, recreational activities, and wheelchairs. One client suggested more reminders before a clinic session.

Next Steps

Student-run social needs clinics can provide excellent training for navigating community resources and practicing social medicine. These clinics are also valuable for vulnerable clients.7 Limitations of NORTH included only a few clients served due to significant time required for assessing complex social challenges and coordinating appointment schedules with the clients, social work and medicine teams. Study limitations include small sample size, lack of specific demographic information, limited interview time with clients, and limited qualitative analysis due to challenges connecting with vulnerable, hard-toreach families. Future steps include providing in-person services, extending services into social justice with the Faculty of Law, and developing a social medicine elective to enhance faculty support. Future evaluations should employ larger cohort studies with theory-informed data analysis and previously validated scales to empirically assess student learning.

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Appendix A. Representative quotes from student navigators and

	clients on their experience with	NODTH
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	Student Navigators	Clients
	"I learned that it can take the whole session to identify what the	"I think [NORTH met my needs], even if there are some [resources] I

most pressing need of a patient might be. During the first clinic, after having identified many needs, it was only in the last five minutes of the call that the client brought forth an important piece of information. I learnt about resources available in the community and also about potential limits to access."

"Sometimes there will be situations where the client needs help, but specific requirements/criteria of the resource will not cover them, and so these situations make it more challenging to find solutions. However, social workers use this as an opportunity to find creative solutions and find a different way to address the need of the client. This shows how adaptable one must be in client/patient-facing positions."

"[NORTH] has augmented my education on numerous axes, as it has provided opportunity to collaborate with other healthcare professionals, provide equity-based care, and consider SDOH in healthcare provision. It was a very meaningful experience!"

haven't contacted. What I have done is research the rental subsidy, health, playgroups. I found the exchange really interesting and enriching too."

"I found the structure well organized. The time between appointments was enough and gave me time to seek out the necessary resources."

"I liked how I was listened to and that the team really wanted to help me and my family, even when I was not available."