



Care in the Community: Opportunities to improve cancer screening uptake for people living with low income

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ABSTRACT

Despite organized provincial cancer screening programs, people living with low income consistently have lower rates of screening in Ontario, Canada than their more socioeconomically advantaged peers. We previously published results of a two-phase, exploratory qualitative study involving both interviews and focus groups whose objective was to integrate knowledge of people living with low income on how to improve primary care strategies aimed at increasing cancer screening uptake. In the current paper, we report previously unpublished findings from that study that identify how taking a community outreach approach in primary care may lead to increased cancer screening uptake among people living with low income. Participants told us that they saw value in a community outreach approach to cancer screening. They recommended specific actionable approaches, in particular, mobile community-based screening and community information sessions, and recommended taking an ethno-specific lens depending on the communities being targeted. Participants expressed a desire for primary care providers to go out into the community to learn more about the whole patient, such as could be achieved with home visits, but they simultaneously believed that this may be challenging in urban settings and in the context of perceived physician shortages. Models of primary care that provide support to an entire local community and provide some of their services directly in that community may have a meaningful impact on cancer screening for socially marginalized groups.

1. Introduction

Approximately 20 years ago, the Ministry of Health in Ontario, Canada started to introduce several new primary care models, in addition to the traditional fee-for-service model (Glazier et al., 2019). These new models generally included formal rostering of patients, evening and weekend hours for urgent care, and payment schemes that blended capitation, fee-for-service and incentives for preventive services including cancer screening (Glazier et al., 2019; Marchildon and Hutchison, 2016). These models were designed to increase access to care and to provide high-quality care for Ontarians (Glazier et al., 2019; Aggarwal and Williams, 2019). In the case of the Family Health Team (FHT) model, care provided by interprofessional teams working together and a population health approach were core dimensions (Aggarwal and

Williams, 2019).

However, despite the extensive reform that has taken place over the past two decades, primary care in Ontario is still generally structured such that primary care providers provide health services for a panel of patients, most of whom are formally enrolled with them or other providers in their practices. In general, health services provided by a primary care practice are not explicitly defined by a geographic community (although this tends to happen by default in rural settings), not offered or available to individuals who are not attached to that practice, and only offered within the practice's physical confines. A notable exception to this overarching approach is community health centres (CHCs), which are non-profit community-led organizations that have been in existence in Ontario since the 1970 s. In CHCs, primary care services and health promotion programs are provided for residents in a local geographic

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community, with a focus on “underserved” populations (Aggarwal and Williams, 2019; Community Health Centres). Approximately 4% of Ontarians receive their primary care at a CHC (Aggarwal and Williams, 2019). In more recent years, the Ministry of Health has also encouraged FHTs to provide services to people in their geographic communities who are not enrolled patients, although this is not systematic or consistent across FHTs.

Screening for breast, cervical and colorectal cancers is recommended by the province’s cancer agency as an evidence-based tool of preventive care that can lead to significant reductions in morbidity and mortality (Ontario Cancer Statistics, 2018). The province also has organized population-based screening programs for each of these cancer types that includes evidence-based recommendations, centralized correspondence (invitation, reminder and recall letters), and quality control and monitoring (CancerCareOntario). However, despite organized screening and a universal healthcare system that provides clinical services including cancer screening at no cost to all citizens and permanent residents, people living with low income consistently have lower rates of cancer screening in Ontario than their more socioeconomically advantaged peers (Lofters et al., 2019; Lofters et al., 2018; Decker et al., 2016; Lofters et al., 2014; Lofters and Ng, 2015; Honein-AbouHaidar et al., 2013). For example, the gap in screening rates in Ontario between the lowest and highest neighbourhood income quintiles have been reported as 12.4% for cervical screening and 14.8% for colorectal cancer screening (Income and Health, 2016). Immigrants to Ontario have also consistently been found to have lower screening uptake; immigrants also are more likely to live in low-income neighbourhoods (Lofters et al., 2018; Kiran et al., 2017; Lofters et al., 2020; Vahabi et al., 2017; Vahabi et al., 2016; Lofters et al., 2010; Shen et al., 2018). Barriers to cancer screening include competing life priorities, fear, lack of awareness, lack of provider recommendation, and limited access to primary care providers (Lofters et al., 2020; Gesink et al., 2016; Wang et al., 2019). In Ontario, the primary care provider is the first point of contact with the healthcare system, and is typically responsible for conducting cervical cancer screening, ordering colorectal cancer screening, and encouraging breast cancer screening.

Community-based approaches to cancer screening and control, such as community workers and mobile outreach, have been used in other jurisdictions to improve cancer screening uptake for socially marginalized groups or in low resource settings (Feltner et al., 2012; Basu et al., 2019; Sung et al., 1997; Greenwald et al., 2017; Roland et al., 2017), and have recently been used in Ontario to increase COVID-19 vaccination uptake for neighbourhoods with high marginalization and low vaccination uptake (CBC, 2021). Similar approaches may be useful to improve cancer screening uptake in Ontario. We previously published results of a qualitative study whose objective was to integrate knowledge of people living with low income on how to improve primary care strategies aimed at increasing cancer screening uptake (Lofters et al., 2020). We then implemented the solutions suggested (group screening education sessions, telephone reminder calls) in our practice (Lofters et al., 2020). In the current paper, we describe previously unpublished themes that emerged (which we were not able to implement) that focused on how a more community-based approach to health promotion may influence cancer screening for people living with low income.

2. Methods

Methods for this two-phase exploratory, qualitative study are described in detail elsewhere (Lofters et al., 2020). This study took place at the St. Michael’s Academic Family Health Team (SMHAFHT), an interprofessional team-based primary care organization in downtown Toronto that has six clinic sites and serves almost 50 000 patients whose residences are geographically dispersed across the Greater Toronto Area. In phase 1, we conducted individual interviews with participants (both women and men) who were patients of the SMHAFHT to explore their experiences, views, and suggestions on cancer screening.

Participants were either overdue or had recently been overdue for at least one type of cancer screening and were identified by their family physician as living with low income. We asked patient participants about: their personal experience with cancer screening; barriers and facilitators to screening; and possible strategies and solutions to improve the experience of cancer screening; and how the SMHAFHT could better reach out to groups of people who are less likely to get screened. In phase 2, we conducted focus groups consisting of both phase 1 participants and new participants to try to better understand the emerging results from phase 1 and to further develop strategies for action to improve screening uptake. Once individual interviews were completed, three focus groups took place with 3–7 participants in each focus group (one with only females, one with only males and one with both genders). In focus groups, we asked patients about possible solutions to improve their experience with cancer screening and how the SMHAFHT can reach out to groups of people who are less likely to get screened.

The interview guide and focus group guide were developed by the research team, informed by the desire to focus on solutions, and face and content validity were assessed via pilot testing. All interviews and focus groups were recorded and then transcribed verbatim. All transcripts were read multiple times and key data bytes were labelled with descriptive codes. We coded and analyzed transcripts using content descriptive analysis (Sandelowski, 2000), drawing on best practices in grounded theory methodology (Strauss and Corbin, 1998). We kept field notes which helped to provide context and which documented the researchers’ impressions. Transcript analysis was analyzed from both a “bottom up” and “top down” perspective, using grounded theory and a solution-oriented lens. Through comparison and analysis of codes and their contents across and within the data collected, themes were discerned and developed. We used QSR International’s NVivo software (version 11) for data management and analysis.

In the current paper, we describe previously unpublished themes that emerged from both interviews and focus groups that focused on how a more community-based approach to health promotion may influence cancer screening for people living with low income. The Unity Health Toronto (St. Michael’s Hospital) Research Ethics Board provided ethics approval for this study.

3. Results

As described in detail elsewhere (Lofters et al., 2020), 25 patient participants were recruited for individual interviews and 14 patient participants were recruited for focus groups (11 of whom had previously participated in an individual interview). Thirteen of the 25 participants identified as women, 14 were born in Canada, and 20 participants self-reported difficulties making ends meet at the end of the month.

Three key themes on community-based methods to improve cancer screening uptake for people living with low income are described below:

3.1. Interest in mobile screening

In interviews participants expressed interest in mobile screening coming into the community:

“...it could be sort of a mobile thing where you do go around and reach out to people...I think the personal approach is the best way...I think a lot of people they want to sit and talk...” (P13)

“Bring the clinic to the people okay, if you are talking about lower income folks who can’t get around...you know, refreshments will be served that let’s you know that it’s casual right?” (P19)

“...if you had a mobile unit people that wouldn’t normally go somewhere like to the hospital they would be more likely to go to something like that.” (P3)

This interest was also expressed in focus groups:

“...it’s a safe space, I think safety is a key component um, [Um hmm] so, if you were going to use like say a, a medical bus as an example you would take like send letters around to people in the neighbourhood that would be

able to get easy access to this bus and say we are giving such and such tests on such and such a date and between this, this hour and that hour and you know, you, you can bring this letter and come in and we will take care of you, type of thing.” (P4:FG1)

3.2. Interest in Community-based information sessions

Participants also spoke of the potential usefulness of screening information sessions occurring in the community:

“...just start with some of the Toronto Housing buildings and have a, information sessions...have an actual person explaining it...” (P11)

“I would prefer to be in my own community because there is the own language, our own language it is...” (P17)

“I think like going into local community into like local community and like have people talk about these issues you know how to motivate people like community outreach?

You send you know send somebody out from the hospital into different communities, it could be like community clinics, community something and talk about these things you know?” (P23)

Of note, this feeling was not unanimous as exemplified by the following quote: “I mean the lobby thing is fine too but I don’t know if I like that...it’s like the Red Cross showing up or the nurse’s aide showing up and or the tax people showing up?” (P15).

In focus groups, this idea was further enhanced to include the concept of taking ethno-specific approaches and using community workers:

“...so they have their community for example the Arabian community, the Indian community, Somalian community, community every country has their own community...and, and if you go to talk to this people, for example in the neighbourhood...” (P:FG2)

“Okay, but they actually have the people that come into these facilities... they are all over so they are out there, I mean for people to, to answer questions and I think most of them probably have, they have enough knowledge to, to explain what a colonoscopy is, so yeah.” (P2:FG2)

“...there is a lot of centres for to gathering these people they don’t know about their health, they didn’t know about their, the information about the cancer or something...” (P:FG2)

3.3. Primary care providers in the community

Some participants noted that the community approach to health was missing in primary care in general, however, it was seen as important to them. Some participants spoke about past experiences where a primary care provider conducted visits in the community and thus got to know family and community members more personally:

“...he knew the whole family [yeah] he could stop by and come down and you know, like check up on us like that’s the way I was also brought up.” (P2:FG1)

“...those were the country doctors and I had a, we had one in our family...and she knew the whole community, and people would come into her kitchen, sit down and have tea with her and they would talk about what was going on with them...” (P4:FG1)

However, some felt this approach was not practical in today’s society and particularly in an urban setting:

“...the frightening fact that I think a lot of people have to face is right now they did a study and each doctor out of our population there’s about a thousand patients for each doctor...So, if you are looking for a personal touch you better move back to the rural because you are not going to get it in Toronto...” (P3:FG1)

4. Discussion

In this two-phase, exploratory, qualitative study involving both interviews and focus groups with patients living with low income, we aimed to understand strategies that could be undertaken to improve screening uptake. Participants told us that they saw value in a

community outreach approach to cancer screening. They recommended specific actionable approaches, in particular mobile community-based screening and community information sessions. For all these approaches, they recommended taking an ethno-specific lens depending on the communities being targeted and using community workers. Participants also expressed a desire for primary care providers to go out into the community to learn more about the patient as a whole person, such as could be achieved with home visits, but they simultaneously believed that this may be challenging in urban settings and in the context of perceived physician shortages.

Our participants’ recommendations are echoed in the literature. The CARES study in Toronto, Ontario was designed for women living with low income and/or who were foreign-born, both of whom are at higher risk of underscreening for cancers (Dunn et al., 2017). This multi-faceted study consisted of community-based language-specific education sessions on cancer screening facilitated by peer leaders, mobile cervical screening, and follow-up phone calls from peer leaders (Dunn et al., 2017). Participants in CARES had 5.1 higher odds of receiving Pap testing and 4.2 higher odds of receiving mammography within 8 months of education sessions than controls matched for age, geography, and pre-education screening status (Dunn et al., 2017). Community health workers have been used with success in various international settings to increase cancer screening knowledge and uptake for marginalized groups, including through conducting home visits (Taha et al., 2014; Feltner et al., 2012; Basu et al., 2019; Sung et al., 1997). In their systematic review, Roland et al. found that community health workers were effective at improving cancer screening uptake among underserved communities (Roland et al., 2017). The authors noted that facilitators of success included partnering with churches, incorporating a community advisory panel into program activities, and ensuring a common language between workers and clients (Roland et al., 2017). In a systematic review of the use of mobile screening, Greenwald et al. concluded that mobile screening can increase access for under-screened groups and address structural barriers to care (Greenwald et al., 2017). Taking an ethnoculturally specific approach to cancer screening interventions is also supported by evidence, and has been used in the US to increase cervical and breast cancer screening among Latinas (Jandorf et al., 2008), to increase colorectal cancer screening among an ethnically diverse population at a US health centre (Percac-Lima et al., 2009), and to increase colorectal cancer screening among Chinese patients (Tu et al., 2006).

Despite our participants proposing several community-based interventions that are supported by evidence, the current structure of primary care in Ontario posed barriers to acting on these recommendations. Community-based education and screening at nearby geographic locations for marginalized communities would mean that many patients of the practice who live further away would not have access, and that many local community members would have to be turned away from these initiatives because of not being enrolled to our practice. Despite being a relatively highly resourced FHT, we also did not have funding to support and sustain such initiatives. Primary care practices that are not FHTs (the majority of practices in Ontario) would be even less likely to have resources for such an approach. Ontario has previously been described as having barriers to the implementation of community-based primary health care (i.e. service provision that is oriented to the population health needs and wants of individuals and communities) including siloed health and social care sectors and a focus on funding medical services (Tenbensen et al., 2017). In 2013, Hutchinson and Glazier called for appropriately resourced primary care organizations that could respond to community needs and work with other health and social services to improve population health (Hutchinson and Glazier, 2013); this call is still applicable today and is ultimately in line with what our patients were recommending.

However, system changes are starting to occur in Ontario. In 2015, the Price-Baker report was released, a report commissioned by Ontario’s Ministry of Health and Long-Term Care. It proposed a vision of an

integrated primary health care system, where Ontarians would be grouped to primary care practices based on geography, similar to the public school system, and where no person would be unattached (Price et al., 2015). Ontario is currently focusing on a new restructuring of the health care system, embodied in the creation of Ontario Health Teams, to strengthen local health services (Become an Ontario Health Team). Under Ontario Health Teams, primary care providers are meant to collaborate in teams with a broad range of health services, including community support services and health promotion and disease prevention services (Become an Ontario Health Team). These new teams may be a way to enact a meaningful community-based response to community needs, including the possibility of task shifting where non-physician health professionals or service providers could go into the community to provide services. Future research should gather perspectives from primary care providers and community organizations on these potential approaches, and ultimately test implementation of community-based strategies to improve screening uptake in the context of Ontario Health Teams and including both primary care and community-based organizations.

This study has several limitations (Lofters et al., 2020). All participants responded to a request to participate in a research study and were comfortable speaking in English. Thus, they may not represent the most marginalized among the patient population for whom suggestions to improve screening uptake might have differed. As well, all participants were patients of a large urban family practice; recommendations may also have been different for patients living in a rural or suburban setting or patients who were not attached to a family physician. For example, in some more rural areas of Ontario, a single primary care practice may serve the entire local jurisdiction and home visits may be more common. However, despite these limitations, our study also has strengths. Our two-phased approach allowed us to move beyond barriers to focus on strategies for change. We centred the voices of patients living with low income who had been overdue for cancer screening, and these patient participants aptly recommended several evidence-based strategies that have been shown to improve screening uptake.

5. Conclusion

In these previously unpublished findings from a qualitative primary care-based study, primary care patients living with low income and who were or had recently been overdue for cancer screening recommended taking a community outreach approach in order to reduce socioeconomic disparities in cancer screening uptake. These findings contribute to the literature on improving cancer screening among socially marginalized groups by highlighting a potential way forward that emerged from patients themselves: models of primary care that provide support to a local community and provide some of their services directly in the community, may have a meaningful impact on cancer screening and health care in general for socially marginalized groups.

CRedit authorship contribution statement

Aisha K. Lofters: Conceptualization, Methodology, Writing – review & editing. **Natalie Alex Baker:** Formal analysis, Methodology, Writing – review & editing. **Ann Marie Corrado:** Formal analysis, Writing – review & editing. **Andree Schuler:** Investigation, Project administration, Writing – review & editing. **Allison Rau:** Formal analysis, Validation, Writing – review & editing. **Nancy N. Baxter:** Methodology, Writing – review & editing. **Fok-Han Leung:** Conceptualization, Writing – review & editing. **Karen Weyman:** Conceptualization, Resources, Writing – review & editing. **Tara Kiran:** Conceptualization, Methodology, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

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