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Perceptions of Older Adults on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY)

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Research Article

Title: Perceptions of Older Adults on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY)

Running Title: Perceptions of Older Adults of Health TAPESTRY

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ABSTRACT

Objectives: The aim of the study was to explore the perceptions of older adults on the implementation and impact of Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY), a multi-component primary care program that seeks to improve care coordination for individuals through health-related goal-setting supported by trained lay volunteers who are an extension of an interprofessional team, and the use of technology to support communication among the team.

Design: This study used a qualitative descriptive design.

Setting: The setting for this study was two primary care practice sites located in a large urban area in Ontario, Canada.

Participants: The sample consisted of community-dwelling older adults aged 70 years and older. Participants were recruited from a convenience sample obtained from 360 clients who participated in the 12-month Health TAPESTRY randomized controlled trial.

Methods: Semi-structured interviews were conducted with 32 older adults either face-to-face or by telephone. Interviews were transcribed verbatim. Data were analysed using a constant comparative approach to develop themes.

Results: Older adults' perceptions about the Health TAPESTRY program included: (a) the lack of a clear purpose and understanding of how information was shared among providers, (b) mixed positive and negative perceptions of goal-setting and provider follow-up after in-home visits by volunteers, (c) positive impacts such as satisfaction with the primary care team, and (d) the potential for the program to be sustained and scaled up to other communities and groups.

Conclusions: Older adults living in the community may benefit from greater primary care supports provided through enhanced team-based approaches. Programs such as Health

TAPESTRY facilitate opportunities for older adults to work with primary care providers to meet their self-identified needs. By exploring perceptions of clients, primary care programs can be further refined and expanded for various populations.

ARTICLE SUMMARY

Strengths and limitations of this study

- The study included community-dwelling older adults with a variety of health conditions.
- A rigorous analytic method was used involving multiple researchers with expertise in primary care, qualitative, and aging research as well as program evaluation.
- Study limitations were that most of the participants self-identified as Caucasian and only English-speaking older adults were interviewed.
- Only two practice sites from a Family Health Team in one area of Ontario, Canada were included in this study.

INTRODUCTION

Since the early 2000's, the province of Ontario in Canada has implemented reforms to improve access to primary care services and chronic disease management, target health promotion and disease prevention, implement interdisciplinary teams, and increase coordination between primary care and other services.[1] Previous studies have explored the impact of interprofessional primary care teams for older adults with complex needs.[2 3] However, few studies describe the experiences and perspectives of clients in relation to innovative primary care models that use this approach.[4]

Efforts to improve the quality of healthcare have increasingly focused on the 'triple aim' of improving individual experience of care, improving population health, and reducing costs.[5] Focusing on clients' experiences provides clear guidance for quality improvement of programs, enhances client safety, improves compliance with treatment plans, and promotes the use of preventative care services.[6 7] It can also provide insight into what is lacking in community programs and how to efficiently use healthcare system resources to better meet clients' needs.[7] Client engagement in program planning and improvement ensures that programs are directly applicable to clients and can maximize the transferability of innovations into clinical practice.[8 9]

There is a positive association between stronger primary care systems and better population health and longevity.[10-13] The core primary care attributes underpinning this effect include first contact care, person-centred- care, continuity, comprehensiveness, and coordination.[14] This evidence is congruent with endeavours to place client-centred, coordinated care at the forefront of efforts to improve primary care.[15] Person-centred care ensures that healthcare consumers are being acknowledged as capable human beings and that their preferences, needs, and values are respected.[16] This paper reports on the experiences of older

adults who participated in a new multi-component program designed to improve person-centred, team-based primary care.

Health TAPESTRY

Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY) is an innovative primary care program improving care coordination for clients, centred on their health goals and needs, while optimizing aging.[15] Person-centred approaches address common issues affecting older adults' health. Multiple components are involved including in-home visits with trained volunteers, technology-based applications (e.g., TAP-App and an electronic personal health record (PHR)), increased accessibility and involvement of interprofessional primary care teams, and integration of community resources.[15]

In-home visits were conducted by pairs of volunteers, typically an older individual and a younger university student. They collected information for the primary care teams using the 'TAP-App' on tablet computers. Information collected about the client's health risks, needs, and goals was summarized in an electronic report which was transferred to their primary care electronic medical record.[17] The interdisciplinary team reviewed the report and developed a plan of care to address identified health risks and goals. Clients were also provided with access to their PHR so that they could track their own medical information within health modules (e.g. medication tracker and immunization record) and have increased access to their primary care team through secure messaging.[17] Common gaps in care were identified from the aggregate information collected during volunteer home visits. These gaps were addressed for clients during group education visits known as the Healthy Aging Series offered to clients and their friends and family.[18] Topics covered included an overview of healthy aging, nutrition, physical activity, and advance care planning.

The aim of the current study was to explore the perceptions of older adults who received the Health TAPESTRY program in relation to its implementation, impact, and sustainability and scalability. The research question was: What are the perceptions of older adults who received the Health TAPESTRY program in relation to: (a) program goals, (b) experiences in the program, (c) impact, and (d) its sustainability and scalability potential?

METHODS

Study design

We report on qualitative findings obtained from older adults who were recruited for a large, mixed-methods, randomized controlled trial (RCT) that evaluated Health TAPESTRY.[15] We used a qualitative description approach.[19 20] This approach was suitable in providing an in-depth description of patient experiences in the program.[19 20]

Sample

The sample included older adults who were: (a) patients from the McMaster Family Health Team, (b) aged 70 years or older, (c) living in the community in Southern Ontario, Canada, and (d) allocated to the Health TAPESTRY program. Convenience sampling was used to seek clients who participated in the Health TAPESTRY program. Clients were excluded if they: (a) were living in long-term care facilities, (b) expected to be out of Canada for more than 50% of the study duration, (c) were palliative or receiving end-of-life care, or (d) did not speak English.

Setting

The study was conducted in two primary care clinic sites of the Family Health Team located in a large urban area within Southern Ontario, Canada. These sites provide services to over 36,000 patients within the region who are followed-up by 37 family physicians. The teams

are composed of family physicians, medical residents, nurses, nurse practitioners, pharmacists, and various allied health professionals.

Recruitment

Initially, research team members purposively called all clients who completed the Health TAPESTRY program to invite them to take part in an interview. Some research team members had prior contact with participants from the evaluation of the Health TAPESTRY program. This recruitment strategy was later modified to ensure we obtained a more diverse sample of older adults based on gender, age [70 years and greater], and number of "alerts" [five or more "alerts"] generated from the Health TAPESTRY program in-home assessment such as: inadequate physical activity, risk for poor nutrition, and urinary incontinence.

Data collection

Semi-structured individual interviews were conducted face-to-face at the university or by telephone from September 2015 to March 2016 at six-months post-enrolment in the RCT. The interview guide was developed through a literature review of primary care interventions and older adults with feedback from research team members and was pilot tested with three clients (See Table 1). Interviews were conducted by five research team members (MB, LC, NF, JG, FP) and took 40 minutes to complete. No interviews were repeated. Interviews continued until data saturation was reached (i.e. no new themes emerged).

Table 1. Interview guide for older adults participating in Health TAPESTRY

Overall Understanding of Health TAPESTRY 1) How would you describe the Health TAPESTRY program to others? What is its main purpose? 2) What do you think are the benefits of Health TAPESTRY?
Implementation of Health TAPESTRY

1) Can you tell me about your experiences of:
   a) getting signed up for Health TAPESTRY?
   b) the process of scheduling your first volunteer visit?
   c) receiving your first in-home volunteer visit?
   d) completing various health-related surveys with volunteers?
   e) setting up goals?
   f) being introduced to the electronic personal health record by volunteers?
   g) receiving follow-up from a family physician or the interprofessional team (e.g. dietitian, pharmacist, occupational therapist, etc.) at the clinic based on the report sent to them by the volunteers?
2) How has the Health TAPESTRY program affected your experiences communicating and working with members of your healthcare team?
3) As a result of Health TAPESTRY, were you linked or referred to any community programs or services such as home support or community groups? If so, tell me about your experiences with these programs or services.
4) How would you describe how your care was coordinated over the last six months?
5) How did Health TAPESTRY help you to meet your life and health goals?
6) What risks or challenges might exist from participating in Health TAPESTRY for you or other participants?

Sustainability and Scalability

1) Based on your experiences, do you think Health TAPESTRY could be a regular program?
2) How do you see Health TAPESTRY being delivered or offered to older adults or other populations in Ontario or Canada?
3) Do you think Health TAPESTRY is ready to be spread elsewhere? Why or why not and what is needed to get there.

Data analysis

Interviews were audio-taped, transcribed verbatim and then transcripts were coded independently by RV, LC, NF, FP, and JG. NVivo Version 10 was used to organize data.[21] Initially, a coding framework was created by LC and RV and was refined by transforming codes into themes. The refined framework was shared with the larger research team for review and feedback. Monthly research team meetings were held during data analysis to clarify themes. Data were analysed using the constant comparative approach.[22] To identify differences in perceptions

by clients across the two practice sites (Site A and Site B), we conducted matrix queries in NVivo 10.[21]

Rigour and Trustworthiness

Consolidated criteria for reporting qualitative research (COREQ) were used to report findings.[23] To increase the rigour and trustworthiness of findings, we used Lincoln and Guba's (1985) validation criteria (credibility, transferability, dependability, and confirmability).[24] To establish credibility, we used investigator triangulation by including researchers who brought different perspectives and experiences to data analysis, including gerontology, qualitative research, and primary care. To increase the transferability of findings, rich, thick descriptions were used to describe the study sample and setting.[25] Dependability and confirmability were considered by clearly documenting the research process and maintaining an audit trail.[24]

Ethical considerations

Ethics approval was obtained from the Hamilton Integrated Research Ethics Board (Project #14-726). Each participant provided written informed consent prior to being interviewed. Participants received a $25 CAD gift card as a token of appreciation.

RESULTS

Demographic characteristics

A total of 32 older adults participated in this study with a mean age of 78.7 years (SD=6.1) (See Table 2). Half of the participants were female (50%) and most were married or had common law partners (68%). Most participants were Caucasian (96%) and had completed post-secondary or higher education (58%). Most participants had two or more chronic conditions (67%).

Table 2. Demographic characteristics of participants (N=32)

Characteristics	n (%)
Gender	
Female	16 (50.0%)
Male	16 (50.0%)
Age (years), mean (SD)	78.7 (6.1)
Age range	
70-79	19 (59.0%)
80 and above	13 (41.0%)
Highest level of education, n=31	
High school	11 (35.5%)
University (undergraduate)	5 (16.1%)
College diploma	4 (12.9%)
Professional degree (nursing, teachers' college)	4 (12.9%)
Master's	3 (9.7%)
Elementary	2 (6.5%)
PhD	2 (6.5%)
Country of birth:	
Canada	19 (59.4%)
UK	6 (18.8%)
Europe	5 (15.6%)
Asia	2 (6.3%)
Caucasian/White Ethnicity, n=24	23 (95.8%)
Language Spoken: English	32 (100%)
Marital status, n=31	
Married or Common law	21 (67.7%)
Widowed/divorced/separated/single/never married	10 (32.3%)
Total number of chronic conditions ++, n=27	
1 chronic condition	9 (33.3%)
2 or more chronic conditions	18 (66.6%)
Chronic conditions/diseases n (%)[2]	
Diabetes, n=26	9 (34.6%)
Heart disease+, n=27	9 (33.3%)
Cancer, n=26	7 (26.9%)
Osteoarthritis, n=26	6 (23.1%)
Hypertension, n=25	7 (21.9%)
COPD/Lung disease, n=25	5 (20.0%)
Stroke/Cerebrovascular disease, n=26	4 (15.4%)
Implementation site	
Site A	20 (62.5%)
Site B	12 (37.5%)

Note. SD = Standard Deviation, COPD = Chronic Obstructive Pulmonary Disorder
N = total sample, n = number of participants who provided data
+ arteriosclerosis, angina pectoris, and heart failure
++ based on conditions listed above

Categories

Themes describing older adults' perceptions of the Health TAPESTRY program are organized under four overarching categories including: (a) program goals, (b) experiences, (c) perceived impact, and (d) program sustainability and scalability. Each theme is described below. Differences in perceptions by clients in site A and B are noted only where they exist. Tables 3 to 5 provide an overview of the categories, related themes, and participant quotations to support them.

1. Program Goals

Most participants were unsure about Health TAPESTRY's goals and the process for sharing information with providers. The themes indicate that participants perceived that the main goals of the program were to: (a) obtain a comprehensive assessment of clients, (b) support older adults to live at home, and (c) improve care processes for healthy aging.

Lack of clarity about the program's purpose and sharing of information

Most participants (more from Site B than Site A) were unclear about the purpose of Health TAPESTRY and how their information was made available to providers. They perceived that researchers were simply collecting research data without clinical follow-up to provide concrete recommendations to improve their health. Participants reported that the collection of their data and the benefit of this activity was unknown to them. They felt unsure about the process that was used to collect their health information and pass on information to physicians. A few participants felt that the program may have been more helpful for the researchers than for older adults.

Obtain a comprehensive assessment of clients

Participants perceived that one of the goals of Health TAPESTRY was for providers to

collect information about their current health status, medical and social history, and lifestyle. Some participants felt that obtaining a comprehensive health assessment of older adults and providing their health information to providers ensured that continuity of care occurred. This resulted in saved time for practitioners. The program was also perceived as helping clinicians gain a broader understanding of the challenges that older adults face as they age.

Support older adults to live at home

Some participants perceived that another of Health TAPESTRY's goals was to ensure that older adults had their health and social care needs met so they could continue to live at home. They felt the program aimed to help them understand how to access health and social care services. Participants remarked that Health TAPESTRY aimed to develop strategies to improve how older adults live at home by first understanding their current health status and lifestyle.

Improve care processes for healthy aging

Some participants indicated that a goal of Health TAPESTRY was to improve general health and well-being through the application of holistic principles in caring for older adults. Participants felt that the program encouraged providers to explore where the gaps in health screening lie and come up with approaches to improve them. The program was perceived to explore various issues that impact the health of older adults at multiple levels (e.g., emotionally, physically, and intellectually) to be able to develop better plans of care.

Table 3. Themes and sample participant quotes for program goals

Category	Themes
Program goals	**Lack of clarity about the program's purpose and sharing of information** *I was always waiting for a purpose…the reason why you are doing this research, and really I never get the answer… And research, in my mind, it's when you are taking data, data, data, data and then you will come back to certain suggestions or a certain way or recommendation what I should do or what I will do…but it never came to that* (R-106).

	Well, my understanding it's for some kind of a program or a record…that maybe you want to compare with other people…I don't know how specific it is to me, or is it a group thing or a widespread thing…And it may have been more help to your end than my end, to be honest (R-29). *Well, I don't really know [how information from the home visit is shared.] I just figure you put it in the computer and I really don't know.* (R-30) **Obtain a comprehensive assessment of clients** *… there will be a central data bank for me that will allow practitioners and professionals to access that file, which could save them hours and hours of doing the same research over and over again […] they have available to them all of the information on me, my whole DNA, if I can call it that…* (R-36). *…an attempt to acquire as much information as possible about senior citizens, their lifestyles, their diet, health and everything that one encounters as you approach old age* (R-48). **Support older adults to live at home** *…the purpose of TAPESTRY, to make sure that people that are at home are being looked after properly and getting the proper care and know where they can get the proper care* (R-270). *…the goal is to keep people healthy, keep them out of the hospital, nursing homes…but that's a big job* (R-03). **Improve care processes for healthy aging** *…to try and fill in holes or see if it's working and where they can improve to help to take care of seniors that we, perhaps, made me feel I was important* (R-145). *...you're going to come to certain conclusions; with the ultimate goal of being able to identify all the various issues that an aging person experiences and then being able to sort of put the theory into practice in your treatment of the elderly* (R-114).

2. Experiences with Health TAPESTRY

Five themes were identified that describe the category client experiences with Health TAPESTRY: (a) variable personal benefit from goal-setting, (b) open and caring in-home visits by trained volunteers, (c) mixed experiences with provider follow-up after volunteer visits, (d) satisfaction with the Healthy Aging Series and (e) challenges with PHR technology.

Variable personal benefit from goal-setting

About half of the participants felt that they benefitted from Health TAPESTRY's goal-setting and that it encouraged them to plan ahead. Participants were encouraged to take initiative in planning their own health and take better care of themselves by setting achievable goals, which were often related to improving diet and exercise habits. The other half of the participants reported few benefits from goal setting. Some felt that goals were irrelevant at their age and health conditions impacted their ability and need to set goals. Some participants reported frequently changing their goals, often due to their changing health status, therefore leading to unmet goals.

Open and caring in-home visits by trained volunteers

Many participants, mostly from site A, enjoyed receiving Health TAPESTRY home visits, stating they were convenient, relaxing, stimulating, and encouraged social interaction. Volunteers listened and were personable, caring and empathetic. Participants felt comfortable disclosing personal information to volunteers within their home environment and felt privileged to receive one-on-one attention and enough time to discuss their health in detail. They felt that scheduling of visits was flexible to meet their needs.

Mixed experiences with provider follow-up after volunteer visits

Participants reported mixed experiences with primary care provider follow-up after volunteer visits for Health TAPESTRY. About half of the participants felt that receiving follow-up with clinicians related to issues identified during home visits worked well. Clients perceived that appointments were quickly booked and healthcare providers took initiative in following-up on reported issues of clients. The process of collection and reviewing health information, from volunteer to healthcare team to specialist referral, made them feel that their well-being was

important.

About half of the participants perceived that there was limited or inadequate provider follow-up of issues identified during in-home visits with volunteers. Some participants explained that they expected to be contacted by primary care providers after home visits or referred for tests or other services, but this did not happen. A few participants were not interested in receiving following-up and felt confident in managing their own health independently.

Satisfaction with the Healthy Aging Series

Participants were very satisfied with the Healthy Aging Series. The series was seen as interactive, educational, and addressed a range of topics (e.g., falls, exercise, nutrition, advanced care planning). Participants enjoyed learning from other older adults who shared their life experiences.

Challenges with PHR technology

Approximately half of the participants experienced challenges when attempting to access their PHR. Some older adults reported having issues with their computers and were therefore not able to access their PHR. Some participants preferred not to create a PHR account as they favoured having hard copies of their information instead.

Table 4. Themes and sample participant quotes for experiences with Health TAPESTRY

Category	Themes
Experiences with Health TAPESTRY	**Variable personal benefit from goal-setting** *…the goals were good because they jogged me to think…when you know you have got a finite piece of life left, it's probably a good idea to plan what you are going to do with it as well* (R-118). *…I think I'm too old to get those goals; because it was about exercising, right, and about walking. Well, I still don't walk that much because my back is so sore…Then I had an operation on my foot…So, you know, I do as good as I can* (R-148). *Well, I just, for me it just wasn't relevant. I mean, I joked and said, 'well my goal*

	is to be able to get up in the morning and function'; but I was, you know, being a bit facetious because at the time I wasn't feeling very well and it was sometimes very hard to just get out of bed (R-15) **Open and caring in-home visits by trained volunteers** *…they [volunteers] explained everything and they interacted a lot; there was a lot of social interaction, so it was very good* (R-118). *They were all very personable and attentive, caring, and listening with good listening skills* (R-105). **Mixed experiences with provider follow-up after volunteer visits** *…TAPESTRY sends in volunteers to assist the patient or the client; and depending on what their needs might be, they send in a specialist that might be of assistance…Myself I had an appointment with the doctor and the pharmacist to go over my drugs and that was very helpful* (R-105). *I found it very helpful in that as a result of the personal interview I got some feedback from my doctor, I don't know, I won't say immediately, but almost; …and she requested me to go into the office for a visit as a result of the TAPESTRY program* (R-146). *They [clinicians] certainly don't contact me and say, well we received this from the TAPESTRY program or whatever and we're wondering if you could come in and talk to us...But none of that has happened; so I feel there's a disconnect…between the clinic and this program* (R-15). **Satisfaction with the Healthy Aging Series** *Very well done…one of the best sort of seminars I've been to in a long, long time…They didn't talk down to you, they asked you questions* (R-99). *The information was fabulous. I was just blown away with the clients that came, they were so knowledgeable and so articulate and very attuned to the whole health issues* (R-100). **Challenges with PHR technology** *My computer has been down for about a month…and I think there's also a problem with my technology, it's probably pretty old. So I never was able to really access that [PHR]* (R-105).

3. Perceived impact of Health TAPESTRY

Three themes denote clients' perceived impact of Health TAPESTRY. Half of the participants felt that Health TAPESTRY resulted in small or no difference in their lives. Positive

impacts perceived by some participants were: (a) satisfaction and confidence with the primary care team and healthcare system and (b) change in health behaviours or ways of thinking.

Small or no difference in the lives of clients

More participants from site B then from site A felt that the program resulted in little to no change in their lives. These participants explained that Health TAPESTRY did not result in lifestyle changes but in some cases, increased their awareness of healthy living. Some felt that they were already aware of available community services.

Satisfaction and confidence with the primary care team and healthcare system

Some participants, relatively more from Site B, described satisfaction and confidence with the primary care team and healthcare system as a result of the program. Participants in general attributed faster follow-up of health-related issues to Health TAPESTRY versus usual care and indicated that the program ensured that they received test results. Participants felt that the program increased collaborative care between older adults and providers and ensured they had an active role in managing their own health. The program also increased client satisfaction by connecting them to community programs such as exercise classes and providing suggestions to improve their daily functioning.

Health TAPESTRY was perceived as filling existing gaps in primary healthcare by complementing the practice of physicians and offering informative health-related seminars. Family physicians were perceived by participants as having to fulfil many responsibilities in usual care. Health TAPESTRY was therefore seen as an efficient approach for physicians to understand how clients live at home and their care needs through lay volunteers' reports.

Change in health behaviours or ways of thinking

About one third of participants felt that Health TAPESTRY resulted in a positive change

in health behaviours such as improved diet and increased physical activity. Clients felt better prepared to discuss their health with providers. Some participants felt they had a more positive attitude towards their health and were optimistic about improving it. Having meaningful interactions with volunteers made participants more aware of emerging health issues associated with aging.

4. Sustainability and scalability of Health TAPESTRY

Participants provided insight into the category sustainability and scalability of Health TAPESTRY. Themes that emerged were: (a) the program is viewed as sustainable**,** (b) the program may be relevant for different communities and populations**,** and (c) barriers to program sustainability exist.

The program is viewed as sustainable

Health TAPESTRY was perceived by some participants to be sustainable and could be part of a regular program offered through family practices. Participants perceived that the program could be helpful for the prevention of disease and poor outcomes frequently encountered by older adults.

The program may be relevant for different communities and populations

Most participants felt that Health TAPESTRY could be scaled to various communities and populations throughout Canada. Participants explained that particular communities and populations had the potential to benefit from the program such as clients living in rural and isolated communities, younger clients, clients confined to their homes, and Indigenous communities.

Barriers to program sustainability exist

About half of the participants reported barriers to sustainability of Health TAPESTRY.

They perceived that the availability of staff and salary costs of providers to maintain the program could negatively impact sustainability. Participants identified public perceptions that the healthcare system is focused on cost-efficiency and that essential programs may not necessarily be funded due to high costs. They also reported that it may be challenging to increase awareness of the program to new users.

Table 5. Themes and sample participant quotes for impact, sustainability, and scalability

Category	Themes
Perceived impact	**Small or no difference in the lives of clients** *I guess [Health TAPESTRY] just makes me more and more aware, I think, of what I am doing. I didn't make any particular or specific changes to the way I live or eat or do anything* (R-172). *I don't think there's anything that TAPESTRY said or did that made any changes that I can see, no* (R-30). **Satisfaction and confidence with the primary care team and healthcare system** *…I am happy that I did join with TAPESTRY, because it really speeded up my [care]– and hopefully this second problem what I have here with that hand, if that can be speeded up somehow to get the results, then I am happy with the practice of TAPESTRY* (R-106). *Well, I'm pretty sure that whatever connection you had with the clinic did promote a few points in my favour. And even my pharmacist, he even got word from the clinic that things were changing for my prescriptions. So, they were acting on the advice that you gave them* (R-250). *…I would also find that there are areas that the doctor can't possibly cover and TAPESTRY is certainly making an attempt to cover all facets of the healthcare system, particularly through the Healthy Aging Series* (R-146). **Change in health behaviours or ways of thinking** *…I wasn't walking before that. I wouldn't walk farther than my nose. But now I've started walking, and even as I say, some days when I don't feel it, now I say, go do it* (R-129). *…the TAPESTRY program improved my knowledge of what my own health was about and it helped me to be more prepared…going into a doctor's appointment or whoever I am talking with…to be able to discuss and understand what I have to do to improve* (R-75).

Sustainability and scalability	**The program is viewed as sustainable** *It should be [Health TAPESTRY should be a regular program]…because they always say an ounce of prevention in healthcare, and you know what, if you can catch things before they become too serious, or identify possible health outcomes through your interviews and through regular monitoring, then that would be really desirable, especially for the elderly* (R-114). **The program may be relevant for different communities and populations** *…it should be a program that's offered to a much wider scope of people… or even healthy people that are healthy at the moment* (R-146). *I think that [Health TAPESTRY] could apply to people much younger who are confined to their homes* (R-95). **Barriers to program sustainability exist** *I don't know how much publicity you have been able to use, but I think if everybody involved are aware of your services and there are things that you could bring to the table, I'm sure they wouldn't resist that. But my feeling is that…Maybe not enough people know about it* (R-29). *…I think systematically it's [Health TAPESTRY] not sustainable because that's not how the system works…every time there's this big initiative to push toward prevention, it's with an eye on saving money, but then that cost usually does mean that some other program that's really needed is just not going to get funded…if you can't measure the dollars, you lose a lot of the buy-in* (R-1) *Barriers would probably be people to work in the program. For example, the number of doctors and nurses, to have enough staff to continue the program* (R-75).

DISCUSSION

Key Findings

This study revealed that the Health TAPESTRY program was perceived by older adults as having many positive attributes (e.g. home visits, comprehensive assessments, and satisfaction with the team). However, most clients were not clear about the purpose of the program. Some clients were unaware of how the program was meant to benefit them and thought that they were primarily helping the researchers by providing them with data. There were mixed findings related to the value of goal setting, with some clients finding it helpful for behaviour change and

others finding it irrelevant or difficult. Participants also had mixed experiences with follow-up by the primary care team after volunteer visits. Some clients felt that there was a disconnect between the Health TAPESTRY program and the primary care clinic as they felt their information was either not given to or acted on by the primary care team. Other clients felt that Health TAPESTRY had actually sped up actions taken by the team as they were able to book earlier appointments with providers to discuss their health issue. Using PHR technology was found to create numerous challenges and some clients preferred not to use the technology. Participants felt the program was sustainable and scalable but identified potential barriers to sustainability and scalability such as funding, staffing, and publicity.

Comparison with existing literature

Previous studies have similarly found that providing in-home visits by volunteers and peer mentors positively impacted the health and general well-being of older adults.[26 27] A home-based program targeting physical activity, nutrition, and social support conducted by trained nonprofessional volunteers has been found to improve the nutritional status of community-dwelling pre-frail and frail older adults and decrease the prevalence of frailty.[27] Peer volunteers who provide client support to learn self-management skills can increase physical activity among older adults living in the community.[26] Community-dwelling older adults have been found to have improved health outcomes with social support alone,[27] revealing that many older adults are impacted by social isolation.[28] Health TAPESTRY clients felt that in-home visits by volunteers encouraged social interaction and created awareness about their health. Volunteer support and PHR technology has been known to have positive effects in improving health[26 27] and create active client engagement in care.[29] In the current study however when combined, they provide a

link between clients living in their homes and communities and the primary care practices where they receive healthcare.

Goal-setting has been shown to encourage shared decision-making between clients and physicians[30] and improve outcomes associated with clinical interventions aimed at disease prevention and maintaining function.[31] The current study revealed that there were mixed experiences related to health goal-setting and receiving follow-up by providers. Although typically found in mixed methods research, conflicting findings can also be found among complex issues in social research.[32] Integrating differing views from participants can help provide a complete description through a complementary approach.[32] Goal-setting in this current study was seen as having varied benefits in improving health for older adults. This finding may be related to differences in available social support systems. Saajanaho et al. (2016) found that older adults with poor social resources were at a greater risk for having no health goals in their lives compared to older adults with greater social support.[33] Goals focusing on maintaining health were often made by older adults with good health resources while older adults with poor resources typically made goals related to health recovery.[33]

Findings from the current study support previous evidence that interdisciplinary team-based primary care enhances quality of care for individuals, increase confidence and satisfaction with the healthcare system, and enhance client-centred practice.[34] Using this approach also helps older adults better connect with community support services (e.g. meal, transportation, and volunteer-visit services).[35] Many participants in the present study had multiple chronic conditions and findings provide support for an interprofessional primary care clinic model for community-dwelling older adults to provide ample time for clients to discuss their health needs and meet their needs through a single visit.[3] Health TAPESTRY was perceived as providing

multiple opportunities to consult with various healthcare providers and provided in-home visits with volunteers who were interested in hearing clients' perspectives on health.

Some challenges revealed in the current study were related to the limited uptake of technology and not seeing the added benefits of using PHR technology. The uptake of technology has been found to be influenced by multiple factors such as interest, competency, and usefulness. Older adults adopt technology when they feel that there is a need to do so and technology is perceived as user-friendly.[36] Older adults require more support in using technology to locate high quality evidence on the internet, access their health information, and explore the risks of privacy breaches online.[37]

Participants in the current study identified barriers that need to be addressed to support sustainability and scalability of Health TAPESTRY. These included funding, human resources, and public awareness of the program to support recruitment. Similar barriers have been found in a review of public health interventions including intervention costs, inadequate human resources, staff recruitment and turnover, and inflexible funding structures unsupportive of scale-up.[38] A study that explored the perspectives of the Health TAPESTRY team on sustainability and scaling-up found that staffing resources (i.e. volunteers and providers) and funding capacities as well as attempting to gain the interest of stakeholders in the program were barriers to sustaining the program.[39] To overcome sustainability challenges, strategies such as embedding sustainability assessments as part of an implementation plan are needed to better anticipate and address barriers.

Strengths and Limitations

This study included participants with different health conditions and included a rigorous analytic method involving numerous experts in primary care, aging, evaluation, and qualitative

research. It explored multiple facets of the program (e.g. goals, experiences, perceived impact, and sustainability and scalability). Other studies do not provide a comprehensive evaluation of primary care programs by exploring clients' perspectives.[27 40 41] They are often focused on quantitative outcome measures to determine effectiveness rather than perceived usefulness of programs by clients. Some limitations of the current study were a lack of cultural diversity among participants and the exclusion of non-English-speaking clients. Two practice sites within one area of Ontario representing one model of primary care, the family health team, limits transferability of results.

CONCLUSIONS

Health TAPESTRY was perceived by older clients as ensuring that their needs were met through an interprofessional primary care model. Although the program was generally perceived as valuable as it incorporated comprehensive assessments, seminars, and an interdisciplinary approach, the purpose of Health TAPESTRY and how information was shared was unclear to most clients. Clients were unsure about the kind of benefits they could expect. The study revealed the need to explore client experiences to help modify and adapt primary care programs. Future research should include older adults as partners in shaping primary care programs. The purpose of research and programs need to be clear for clients and their understanding of the aims of primary care programs should be discussed at the start of an intervention. Researchers interested in testing interventions in primary care should also consider implementing strategies for scaling-up programs in the early phases of research, with active engagement of patients and other partners.

Consent for publication

Not applicable.

Availability of data

The data for this research consists of interview transcripts. We are unable to make raw data publicly available in order to respect the confidentiality of participants.

Competing interests

The authors declare no conflicts of interest with respect to the authorship and/or publication of this article.

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Authors' contributions

RV conceptualized and led the study. MB, LC, NF, FP, and JG collected the data. RV and LC conducted the initial analysis, and subsequent analysis with FP and JG. JP and MY wrote the initial drafts of the paper. GA, DM, DO, CR, JG, LD, and MK contributed to validating the analysis, reviewing, and contributing to drafts. All authors read and approved the final manuscript.

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Manuscript: Perceptions of Older Adults on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY)

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Developed from:
Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19(6):349-357.

Topic	Item No.	Guide Questions/Descriptions	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/Facilitator	1	Which authors conducted the interview or focus group?	P. 8
Credentials	2	What were the researchers' credentials? (e.g. PhD, MD, MSc)	P. 1
Occupation	3	What were the researchers' occupation at the time of the study?	P. 1
Gender	4	Were the researchers male or female?	P. 1
Experience and training	5	What experience or training did the researchers have?	P. 10
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	P. 8
Participant knowledge of the interviewers	7	What did the participants know about the researchers? (e.g. personal goals, reasons for doing the research)	P. 10
Interviewer characteristics	8	What characteristics were reported about the interviewers? (e.g. Bias, assumptions, reasons and interests in the research topic)	N/A
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? (e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis)	P. 7
Participant selection			

Sampling	10	How were participants selected? (e.g. purposive, convenience, consecutive, snowball)	P. 7
Method of approach	11	How were participants approached? (e.g. face-to-face, telephone, mail, email)	P. 8
Sample size	12	How many participants were in the study?	P. 10
Non-participation	13	How many people refused to participate or dropped out? Reasons?	N/A
Setting			
Setting of data collection	14	Where was the data collected? (e.g. home, clinic, workplace)	P. 8
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	P. 8
Description of sample	16	What are the important characteristics of the sample? (e.g. demographic data, date)	P. 10-11
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	P. 8-9
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	P. 8
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	P. 9
Field notes	20	Were field notes made during and/or after the interview or focus group?	N/A
Duration	21	What was the duration of the interviews or focus group?	P. 8
Data saturation	22	Was data saturation discussed?	P. 8
Transcripts returned	23	Were transcripts returned to participants for comment and/or correction?	N/A
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	P. 9
Description of the coding tree	25	Did authors provide a description of the coding tree?	N/A
Derivation of themes	26	Were themes identified in advance or derived from the data?	P. 9
Software	27	What software, if applicable, was used to manage the data?	P. 9

Participant checking	28	Did participants provide feedback on the findings?	N/A
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? (e.g. participant number)	P. 12-21
Data and findings consistent	30	Was there consistency between the data presented and the findings?	P. 12-21
Clarity of major themes	31	Were major themes clearly presented in the findings?	P. 12-21
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	P. 12-21

BMJ Open

Perceptions of Older Adults in Ontario, Canada on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY): A Descriptive Qualitative Study

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Research Article

Title: Perceptions of Older Adults in Ontario, Canada on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY): A Descriptive Qualitative Study

Running Title: Perceptions of Older Adults of Health TAPESTRY

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ABSTRACT

Objectives: The aim of the study was to explore the perceptions of older adults on the implementation and impact of Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY), a multi-component primary care program that seeks to improve care coordination for individuals through health-related goal-setting supported by trained lay volunteers who are an extension of an interprofessional team, and the use of technology to support communication among the team.

Design: This study used a qualitative descriptive design.

Setting: The setting for this study was two primary care practice sites located in a large urban area in Ontario, Canada.

Participants: The sample consisted of community-dwelling older adults aged 70 years and older. Participants were recruited from a convenience sample obtained from 360 clients who participated in the 12-month Health TAPESTRY randomized controlled trial.

Methods: Semi-structured interviews were conducted with 32 older adults either face-to-face or by telephone. Interviews were transcribed verbatim. Data were analysed using a constant comparative approach to develop themes.

Results: Older adults' perceptions about the Health TAPESTRY program included: (a) the lack of a clear purpose and understanding of how information was shared among providers, (b) mixed positive and negative perceptions of goal-setting and provider follow-up after in-home visits by volunteers, (c) positive impacts such as satisfaction with the primary care team, and (d) the potential for the program to become a regular program and applied to other communities and groups.

Conclusions: Older adults living in the community may benefit from greater primary care supports provided through enhanced team-based approaches. Programs such as Health TAPESTRY facilitate opportunities for older adults to work with primary care providers to meet their self-identified needs. By exploring perceptions of clients, primary care programs can be further refined and expanded for various populations.

ARTICLE SUMMARY

Strengths and limitations of this study

- The study included community-dwelling older adults with a variety of health conditions.
- A rigorous analytic method was used involving multiple researchers with expertise in primary care, qualitative, and aging research as well as program evaluation.
- Study limitations were that most of the participants self-identified as Caucasian and only English-speaking older adults were interviewed.
- Only two practice sites from a Family Health Team in one area of Ontario, Canada were included in this study.

INTRODUCTION

Since the early 2000's, the province of Ontario in Canada has implemented reforms to improve access to primary care services and chronic disease management, target health promotion and disease prevention, implement interdisciplinary teams, and increase coordination between primary care and other services.[1] Previous studies have explored the impact of interprofessional primary care teams for older adults with complex needs.[2 3] However, few studies describe the experiences and perspectives of clients in relation to innovative primary care models that use this approach.[4]

Efforts to improve the quality of healthcare have increasingly focused on the 'triple aim' of improving individual experience of care, improving population health, and reducing costs.[5] Focusing on clients' experiences provides clear guidance for quality improvement of programs, enhances client safety, improves compliance with treatment plans, and promotes the use of preventative care services.[6 7] It can also provide insight into what is lacking in community programs and how to efficiently use healthcare system resources to better meet clients' needs.[7] Client engagement in program planning and improvement ensures that programs are directly applicable to clients and can maximize the transferability of innovations into clinical practice.[8 9]

There is a positive association between stronger primary care systems and better population health and longevity.[10-13] The core primary care attributes underpinning this effect include first contact care, person-centred- care, continuity, comprehensiveness, and coordination.[14] This evidence is congruent with endeavours to place client-centred, coordinated care at the forefront of efforts to improve primary care.[15] Person-centred care ensures that healthcare consumers are being acknowledged as capable human beings and that their preferences, needs, and values are respected.[16] This paper reports on the experiences of older

adults who participated in a new multi-component program designed to improve person-centred, team-based primary care.

Health TAPESTRY

Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY) is an innovative primary care program improving care coordination for clients, centred on their health goals and needs, while optimizing aging.[15] Person-centred approaches address common issues affecting older adults' health. Multiple components are involved including in-home visits with trained volunteers, technology-based applications (e.g., TAP-App and an electronic personal health record (PHR)), increased accessibility and involvement of interprofessional primary care teams, and integration of community resources.[15]

In-home visits were conducted by pairs of volunteers, typically an older individual and a younger university student. They received training on how to engage with older adults with complex health needs and helped them to set their personal health and life goals. A feasibility sub-study of the goal-setting process in the Health TAPESTRY program found it to be feasible and supported interprofessional teams to help improve care management of older adults.[17] They collected information for the primary care teams using the 'TAP-App' on tablet computers. Information collected about the client's health risks, needs, and goals was summarized in an electronic report which was transferred to their primary care electronic medical record.[18] The interdisciplinary team reviewed the report and followed-up on goals by developing a plan of care to address identified health risks and goals. Clients were also provided with access to their PHR so that they could track their own medical information within health modules (e.g. medication tracker and immunization record) and have increased access to their primary care team through secure messaging.[17] Common gaps in care were identified from the aggregate information

collected during volunteer home visits. These gaps were addressed for clients during group education visits known as the Healthy Aging Series offered to clients and their friends and family.[19] Topics covered included an overview of healthy aging, nutrition, physical activity, and advance care planning.

We report on qualitative findings obtained from older adults who were recruited for a large, mixed-methods, randomized controlled trial (RCT) that examined the effectiveness of the Health TAPESTRY intervention.[15] Results of the RCT are forthcoming in a paper focused on patient outcomes. Findings from the RCT for clients who received Health TAPESTRY compared to the control group were the following: (a) no significant difference in goal attainment scaling, (b) an increase in the number of primary care visits (mean 4.9 versus 3.5; p<0.0001), and (c) reduced odds of experiencing one or more hospitalizations during the 6 month intervention period (odds ratio [OR] 0.44 (965% CI 0.2 , 0.95). The triple aim for health care system improvement includes a focus on 'patient experience'.[5] To further understand the patient experience and perceived outcomes, this paper aims to explore the perceptions of older adults who received the Health TAPESTRY program. The research question was: What are the perceptions of older adults who received the Health TAPESTRY program in relation to: (a) program goals, (b) experiences in the program, (c) impact, and (d) its sustainability and scalability potential?

METHODS

Study design

We used a qualitative description approach. [20 21] This approach was suitable in providing an in-depth description of patient experiences in the program. [20 21]

Sample

The sample included older adults who were: (a) patients from the McMaster Family Health Team, (b) aged 70 years or older, (c) living in the community in Southern Ontario, Canada, and (d) allocated to the Health TAPESTRY program. Convenience sampling was used to seek clients who participated in the Health TAPESTRY program. Clients were excluded if they: (a) were living in long-term care facilities, (b) expected to be out of Canada for more than 50% of the study duration, (c) were palliative or receiving end-of-life care, or (d) did not speak English.

Setting

The study was conducted in two primary care clinic sites of the Family Health Team located in a large urban area within Southern Ontario, Canada. These sites provide services to over 36,000 patients within the region who are followed-up by 37 family physicians. The teams are composed of family physicians, medical residents, nurses, nurse practitioners, pharmacists, and various allied health professionals.

Recruitment

Research team members purposively sampled two groups of clients who completed the Health TAPESTRY program and invited them to take part in an interview. One group consisted of clients who were the first to be recruited in the RCT. The second group consisted of clients who were recruited near the end of the RCT. This approach captured diverse perspectives and minimized the influence that confidence levels of team members had over the clients' perspectives as they gained experience in delivering the intervention. In total, 129 clients were approached, 83 agreed to participate and 32 were recruited. Some research team members had prior contact with participants from the evaluation of the Health TAPESTRY program. This recruitment strategy was later modified to ensure we obtained a more diverse sample of older

adults based on gender, age [70 years and greater], and number of "alerts" [five or more "alerts"] generated from the Health TAPESTRY program in-home assessment such as: inadequate physical activity, risk for poor nutrition, and urinary incontinence.

Data collection

Semi-structured individual interviews were conducted face-to-face at the university or by telephone from September 2015 to March 2016 at six-months post-enrolment in the RCT. The interview guide was developed through a literature review of primary care interventions and older adults with feedback from research team members and was pilot tested with three clients (See Table 1). Interviews were conducted by five research team members (MB, LC, NF, JG, FP) and took 40 minutes to complete. No interviews were repeated. Interviews continued until data saturation was reached (i.e. no new themes emerged).

Table 1. Interview guide for older adults participating in Health TAPESTRY

Overall Understanding of Health TAPESTRY 1) How would you describe the Health TAPESTRY program to others? What is its main purpose? 2) What do you think are the benefits of Health TAPESTRY?
Implementation of Health TAPESTRY 1) Can you tell me about your experiences of: a) getting signed up for Health TAPESTRY? b) the process of scheduling your first volunteer visit? c) receiving your first in-home volunteer visit? d) completing various health-related surveys with volunteers? e) setting up goals? f) being introduced to the electronic personal health record by volunteers? g) receiving follow-up from a family physician or the interprofessional team (e.g. dietitian, pharmacist, occupational therapist, etc.) at the clinic based on the report sent to them by the volunteers? 2) How has the Health TAPESTRY program affected your experiences communicating and working with members of your healthcare team? 3) As a result of Health TAPESTRY, were you linked or referred to any community programs or services such as home support or community groups? If so, tell me about

your experiences with these programs or services. 4) How would you describe how your care was coordinated over the last six months? 5) How did Health TAPESTRY help you to meet your life and health goals? 6) What risks or challenges might exist from participating in Health TAPESTRY for you or other participants?
Sustainability and Scalability 1) Based on your experiences, do you think Health TAPESTRY could be a regular program? 2) How do you see Health TAPESTRY being delivered or offered to older adults or other populations in Ontario or Canada? 3) Do you think Health TAPESTRY is ready to be spread elsewhere? Why or why not and what is needed to get there.

Data analysis

Interviews were audio-taped, transcribed verbatim and then transcripts were coded independently by RV, LC, NF, FP, and JG. NVivo Version 10 was used to organize data.[22] Initially, a coding framework was created by LC and RV and was refined by transforming codes into themes. The refined framework was shared with the larger research team for review and feedback. Monthly research team meetings were held during data analysis to clarify themes. Data were analysed using the constant comparative approach.[23] To identify differences in perceptions by clients across the two practice sites (Site A and Site B), we conducted matrix queries in NVivo 10.[22] Themes were identified by staying true to the words of the participants and developing themes by describing participants' responses. Verbal counting was conducted to reveal how many participants brought up a theme.[24] When the terms *most* or *many* are used this means that 75% or more of participants discussed a theme, "half" means about 50% of participants discussed a theme, and "some" or "few" means that 20% or less discussed a theme.

Rigour and trustworthiness

Consolidated criteria for reporting qualitative research (COREQ) were used to report findings.[25] To increase the rigour and trustworthiness of findings, we used Lincoln and Guba's (1985) validation criteria (credibility, transferability, dependability, and confirmability).[26] To establish credibility, we used investigator triangulation by including researchers who brought different perspectives and experiences to data analysis, including gerontology, qualitative research, and primary care. To increase the transferability of findings, rich, thick descriptions were used to describe the study sample and setting.[27] Dependability and confirmability were considered by clearly documenting the research process and maintaining an audit trail.[26]

Patient and public involvement

Health TAPESTRY was designed by key stakeholders including patients, caregivers, providers, volunteers, and community service agency staff.[28] The program was designed by stakeholders using small group sessions that included discussing and analysing 13 persona-scenario exercises. The persona-scenario exercise consists of a structured approach where group members create a fictitious character and find solutions to address a problem.[28] The research questions and outcome measures were determined by the stakeholders' priorities, preferences, and experiences. The patients were not involved in the recruitment to and conduct of the study. The results of the study will be shared with participants by providing them with a lay language version description of the study and results following the publication of the trial. The burden of the intervention was assessed by patients themselves as they helped to design the program.

Ethical considerations

Ethics approval was obtained from the Hamilton Integrated Research Ethics Board (Project #14-726). Each participant provided written informed consent prior to being interviewed. Participants received a $25 CAD gift card as a token of appreciation.

RESULTS

Demographic characteristics

A total of 32 older adults participated in this study with a mean age of 78.7 years (SD=6.1) (See Table 2). Half of the participants were female (50%) and most were married or had common law partners (68%). Most participants were Caucasian (96%) and had completed post-secondary or higher education (58%). Most participants had two or more chronic conditions (67%).

Table 2. Demographic characteristics of participants (N=32)

Characteristics	n (%)
Gender	
Female	16 (50.0%)
Male	16 (50.0%)
Age (years), mean (SD)	78.7 (6.1)
Age range	
70-79	19 (59.0%)
80 and above	13 (41.0%)
Highest level of education, n=31	
High school	11 (35.5%)
University (undergraduate)	5 (16.1%)
College diploma	4 (12.9%)
Professional degree (nursing, teachers' college)	4 (12.9%)
Master's	3 (9.7%)
Elementary	2 (6.5%)
PhD	2 (6.5%)
Country of birth:	
Canada	19 (59.4%)
UK	6 (18.8%)
Europe	5 (15.6%)
Asia	2 (6.3%)
Caucasian/White Ethnicity, n=24	23 (95.8%)
Language Spoken: English	32 (100%)
Marital status, n=31	
Married or Common law	21 (67.7%)
Widowed/divorced/separated/single/never married	10 (32.3%)
Total number of chronic conditions ++, n=27	
1 chronic condition	9 (33.3%)
2 or more chronic conditions	18 (66.6%)

Chronic conditions/diseases n (%)[2]	
Diabetes, n=26	9 (34.6%)
Heart disease+, n=27	9 (33.3%)
Cancer, n=26	7 (26.9%)
Osteoarthritis, n=26	6 (23.1%)
Hypertension, n=25	7 (21.9%)
COPD/Lung disease, n=25	5 (20.0%)
Stroke/Cerebrovascular disease, n=26	4 (15.4%)
Implementation site	
Site A	20 (62.5%)
Site B	12 (37.5%)

Note. SD = Standard Deviation, COPD = Chronic Obstructive Pulmonary Disorder
N = total sample, n = number of participants who provided data
+ arteriosclerosis, angina pectoris, and heart failure
++ based on conditions listed above

Categories

Themes describing older adults' perceptions of the Health TAPESTRY program are organized under four overarching categories including: (a) program goals, (b) experiences, (c) perceived impact, and (d) program sustainability and scalability. Each theme is described below. Differences in perceptions by clients in site A and B are noted only where they exist. Tables 3 to 5 provide an overview of the categories, related themes, and participant quotations to support them.

1. Program Goals

One theme that emerged was a lack of clarity about the program's purpose and sharing of information as most participants were unsure about Health TAPESTRY's goals and the process for sharing information with providers. Other themes indicate that participants perceived that the main goals of the program were to: (a) obtain a comprehensive assessment of clients, (b) support older adults to live at home, and (c) improve care processes for healthy aging (See Table 3).

Lack of clarity about the program's purpose and sharing of information: "I don't really know"

Most participants (more from Site B than Site A) were unclear about the purpose of

Health TAPESTRY and how their information was made available to providers. They perceived that researchers were simply collecting research data without clinical follow-up to provide concrete recommendations to improve their health. Participants reported that the collection of their data and the benefit of this activity was unknown to them. They felt unsure about the process that was used to collect their health information and pass on information to physicians. A few participants felt that the program may have been more helpful for the researchers than for older adults.

Obtain a comprehensive assessment of clients: "acquire as much information as possible"

Participants perceived that one of the goals of Health TAPESTRY was for providers to collect information about their current health status, medical and social history, and lifestyle. Some participants felt that obtaining a comprehensive health assessment of older adults and providing their health information to providers ensured that their information can be shared with multiple providers. This resulted in saved time for practitioners. The program was also perceived as helping clinicians gain a broader understanding of the challenges that older adults face as they age.

Support older adults to live at home: "keep people healthy"

Some participants perceived that another of Health TAPESTRY's goals was to ensure that older adults had their health and social care needs met so they could continue to live at home. They felt the program aimed to help them understand how to access health and social care services. Participants remarked that Health TAPESTRY aimed to develop strategies to improve how older adults live at home by first understanding their current health status and lifestyle.

Improve care processes for healthy aging: "see if it's working and where they can improve"

Some participants indicated that a goal of Health TAPESTRY was to improve general

health and well-being by understanding the everyday life of older adults. Participants felt that the program encouraged providers to explore where the gaps in health screening lie and come up with approaches to improve them. The program was perceived to explore various issues that impact the health of older adults at multiple levels (e.g., emotionally, physically, and intellectually) to be able to develop better plans of care.

Table 3. Themes and sample participant quotes for program goals

Category	Themes
Program goals	**Lack of clarity about the program's purpose and sharing of information: "*I don't really know*"** *I was always waiting for a purpose…the reason why you are doing this research, and really I never get the answer… And research, in my mind, it's when you are taking data, data, data, data and then you will come back to certain suggestions or a certain way or recommendation what I should do or what I will do…but it never came to that* (R-106). *Well, my understanding it's for some kind of a program or a record…that maybe you want to compare with other people…I don't know how specific it is to me, or is it a group thing or a widespread thing…And it may have been more help to your end than my end, to be honest* (R-29). *Well, I don't really know [how information from the home visit is shared.] I just figure you put it in the computer and I really don't know.* (R-30) **Obtain a comprehensive assessment of clients: *"acquire as much information as possible"*** *… there will be a central data bank for me that will allow practitioners and professionals to access that file, which could save them hours and hours of doing the same research over and over again […] they have available to them all of the information on me, my whole DNA, if I can call it that…* (R-36). *…an attempt to acquire as much information as possible about senior citizens, their lifestyles, their diet, health and everything that one encounters as you approach old age* (R-48). **Support older adults to live at home: *"keep people healthy"*** *…the purpose of TAPESTRY, to make sure that people that are at home are being looked after properly and getting the proper care and know where they can get the*

	proper care (R-270). *…the goal is to keep people healthy, keep them out of the hospital, nursing homes…but that's a big job* (R-03). **Improve care processes for healthy aging**: ***"see if it's working and where they can improve"*** *…to try and fill in holes or see if it's working and where they can improve to help to take care of seniors that we, perhaps, made me feel I was important* (R-145). *...you're going to come to certain conclusions; with the ultimate goal of being able to identify all the various issues that an aging person experiences and then being able to sort of put the theory into practice in your treatment of the elderly* (R-114). *...I guess it [Health TAPESTRY] really was sort of encompassing the life of a senior or somebody coping with difficulties, but managing (R-118).*

2. Experiences with Health TAPESTRY

Five themes were identified that describe the category client experiences with Health TAPESTRY: (a) variable personal benefit from goal-setting, (b) open and caring in-home visits by trained volunteers, (c) mixed experiences with provider follow-up after volunteer visits, (d) satisfaction with the Healthy Aging Series and (e) challenges with PHR technology (See Table 4)

Variable personal benefit from goal-setting

About half of the participants felt that they benefitted from Health TAPESTRY's goal-setting and that it encouraged them to plan ahead. Participants were encouraged to take initiative in planning their own health and take better care of themselves by setting achievable goals, which were often related to improving diet and exercise habits. The other half of the participants reported few benefits from goal setting. Some felt that goals were irrelevant at their age and health conditions impacted their ability and need to set goals. Some participants reported frequently changing their goals, often due to their changing health status, therefore leading to unmet goals.

Open and caring in-home visits by trained volunteers

Many participants, mostly from site A, enjoyed receiving Health TAPESTRY home visits, stating they were convenient, relaxing, stimulating, and encouraged social interaction. Volunteers listened and were personable, caring and empathetic. Participants felt comfortable disclosing personal information to volunteers within their home environment and felt privileged to receive one-on-one attention and enough time to discuss their health in detail. They felt that scheduling of visits was flexible to meet their needs and they did not need to worry about transportation. None of the participants stated that they would have rather received home visits by healthcare professionals. Some participants felt that volunteers had different levels of knowledge and confidence in discussing health issues.

Mixed experiences with provider follow-up after volunteer visits

Participants reported mixed experiences with primary care provider follow-up after volunteer visits for Health TAPESTRY. About half of the participants felt that receiving follow-up with clinicians related to issues identified during home visits worked well. Clients perceived that appointments were quickly booked and healthcare providers took initiative in following-up on reported issues of clients. The process of collection and reviewing health information, from volunteer to healthcare team to specialist referral, made them feel that their well-being was important.

About half of the participants perceived that there was limited or inadequate provider follow-up of issues identified during in-home visits with volunteers. Some participants explained that they expected to be contacted by primary care providers after home visits or referred for tests or other services, but this did not happen. A few participants were not interested in receiving following-up and felt confident in managing their own health independently.

Satisfaction with the Healthy Aging Series

Participants were very satisfied with the Healthy Aging Series. The series was seen as interactive, educational, and addressed a range of topics (e.g., falls, exercise, nutrition, advanced care planning). Participants enjoyed learning from other older adults who shared their life experiences.

Challenges with PHR technology

Approximately half of the participants experienced challenges when attempting to access their PHR. Some older adults reported having issues with their computers and were therefore not able to access their PHR. Some participants preferred not to create a PHR account as they favoured having hard copies of their information instead.

Table 4. Themes and sample participant quotes for experiences with Health TAPESTRY

Category	Themes
Experiences with Health TAPESTRY	**Variable personal benefit from goal-setting** *…the goals were good because they jogged me to think…when you know you have got a finite piece of life left, it's probably a good idea to plan what you are going to do with it as well* (R-118). *…I think I'm too old to get those goals; because it was about exercising, right, and about walking. Well, I still don't walk that much because my back is so sore…Then I had an operation on my foot…So, you know, I do as good as I can* (R-148). *Well, I just, for me it just wasn't relevant. I mean, I joked and said, 'well my goal is to be able to get up in the morning and function'; but I was, you know, being a bit facetious because at the time I wasn't feeling very well and it was sometimes very hard to just get out of bed* (R-15) **Open and caring in-home visits by trained volunteers** *…they [volunteers] explained everything and they interacted a lot; there was a lot of social interaction, so it was very good* (R-118). *They were all very personable and attentive, caring, and listening with good listening skills* (R-105).

	Mixed experiences with provider follow-up after volunteer visits *…TAPESTRY sends in volunteers to assist the patient or the client; and depending on what their needs might be, they send in a specialist that might be of assistance…Myself I had an appointment with the doctor and the pharmacist to go over my drugs and that was very helpful* (R-105). *I found it very helpful in that as a result of the personal interview I got some feedback from my doctor, I don't know, I won't say immediately, but almost; …and she requested me to go into the office for a visit as a result of the TAPESTRY program* (R-146). *They [clinicians] certainly don't contact me and say, well we received this from the TAPESTRY program or whatever and we're wondering if you could come in and talk to us...But none of that has happened; so I feel there's a disconnect…between the clinic and this program* (R-15). **Satisfaction with the Healthy Aging Series** *Very well done…one of the best sort of seminars I've been to in a long, long time…They didn't talk down to you, they asked you questions* (R-99). *The information was fabulous. I was just blown away with the clients that came, they were so knowledgeable and so articulate and very attuned to the whole health issues* (R-100). **Challenges with PHR technology** *My computer has been down for about a month…and I think there's also a problem with my technology, it's probably pretty old. So I never was able to really access that [PHR]* (R-105).

3. Perceived impact of Health TAPESTRY

Three themes denote clients' perceived impact of Health TAPESTRY. Half of the participants felt that Health TAPESTRY resulted in small or no difference in their lives. Positive impacts perceived by some participants were: (a) satisfaction with the primary care team and healthcare system and (b) change in health behaviours or ways of thinking (See Table 5).

Small or no difference in the lives of clients

More participants from site B then from site A felt that the program resulted in little to no change in their lives. These participants explained that Health TAPESTRY did not result in lifestyle changes but in some cases, made them aware of healthy lifestyle choices. Some felt that they were already aware of available community services.

Satisfaction with the primary care team and healthcare system

Some participants, relatively more from Site B, described satisfaction and confidence with the primary care team and healthcare system as a result of the program. Participants in general attributed faster follow-up of health-related issues to Health TAPESTRY versus usual care and indicated that the program ensured that they received test results. Participants felt that the program increased collaboration between older adults and providers and ensured they participated in managing their own health. The program also increased client satisfaction by connecting them to community programs such as exercise classes and providing suggestions to improve their daily functioning.

Health TAPESTRY was perceived as filling existing gaps in primary healthcare by complementing the practice of physicians and offering informative health-related seminars. Family physicians were perceived by participants as having to fulfil many responsibilities in usual care. Health TAPESTRY was therefore seen as an efficient approach for physicians to understand how clients live at home and their care needs through lay volunteers' reports.

Change in health behaviours or ways of thinking

About one third of participants felt that Health TAPESTRY resulted in a positive change in health behaviours such as improved diet and increased physical activity. Clients felt better prepared to discuss their health with providers. Some participants felt they had a more positive attitude towards their health and were optimistic about improving it. Having meaningful

interactions with volunteers made participants more aware of potential health issues associated with aging.

4. Sustainability and scalability of Health TAPESTRY

Participants provided insight into the category sustainability and scalability of Health TAPESTRY. Themes that emerged were: (a) the program "could and should be a regular program", (b) the program may be relevant for different communities and populations, and (c) barriers to program sustainability exist.

The program "could and should be a regular program"

Health TAPESTRY was perceived by some participants to be sustainable and could be part of a regular program offered through family practices. Participants perceived that the program could be helpful for the prevention of disease and poor outcomes frequently encountered by older adults.

The program may be relevant for different communities and populations

Most participants felt that Health TAPESTRY could be helpful for various communities and populations throughout Canada. Participants explained that particular communities and populations had the potential to benefit from the program such as clients living in rural and isolated communities, younger clients, clients confined to their homes, and Indigenous communities.

Barriers to maintaining the program exist

About half of the participants reported barriers to sustainability of Health TAPESTRY. They perceived that the availability of staff and salary costs of providers to maintain the program could negatively impact sustainability. Participants identified public perceptions that the healthcare system is focused on cost-efficiency and that essential programs may not necessarily

be funded due to high costs. They also reported that it may be challenging to increase awareness of the program to new users.

Table 5. Themes and sample participant quotes for impact, sustainability, and scalability

Category	Themes
Perceived impact	**Small or no difference in the lives of clients** *I guess [Health TAPESTRY] just makes me more and more aware, I think, of what I am doing. I didn't make any particular or specific changes to the way I live or eat or do anything* (R-172). *I don't think there's anything that TAPESTRY said or did that made any changes that I can see, no* (R-30). **Satisfaction with the primary care team and healthcare system** *…I am happy that I did join with TAPESTRY, because it really speeded up my [care]– and hopefully this second problem what I have here with that hand, if that can be speeded up somehow to get the results, then I am happy with the practice of TAPESTRY* (R-106). *Well, I'm pretty sure that whatever connection you had with the clinic did promote a few points in my favour. And even my pharmacist, he even got word from the clinic that things were changing for my prescriptions. So, they were acting on the advice that you gave them* (R-250). *…I would also find that there are areas that the doctor can't possibly cover and TAPESTRY is certainly making an attempt to cover all facets of the healthcare system, particularly through the Healthy Aging Series* (R-146). **Change in health behaviours or ways of thinking** *…I wasn't walking before that. I wouldn't walk farther than my nose. But now I've started walking, and even as I say, some days when I don't feel it, now I say, go do it* (R-129). *…the TAPESTRY program improved my knowledge of what my own health was about and it helped me to be more prepared…going into a doctor's appointment or whoever I am talking with…to be able to discuss and understand what I have to do to improve* (R-75).
Sustainability and scalability	**The program *"could and should be a regular program"*** *It should be [Health TAPESTRY should be a regular program]…because they*

	always say an ounce of prevention in healthcare, and you know what, if you can catch things before they become too serious, or identify possible health outcomes through your interviews and through regular monitoring, then that would be really desirable, especially for the elderly (R-114). *Well, you've got a good location here because, first of all, you've got the doctors with all the information and you've got places to hold these [Healthy Aging] seminars* (R-99 [MFP]). **The program may be relevant for different communities and populations** *…it should be a program that's offered to a much wider scope of people… or even healthy people that are healthy at the moment* (R-146). *I think that [Health TAPESTRY] could apply to people much younger who are confined to their homes* (R-95). **Barriers to maintaining the program exist** *I don't know how much publicity you have been able to use, but I think if everybody involved are aware of your services and there are things that you could bring to the table, I'm sure they wouldn't resist that. But my feeling is that…Maybe not enough people know about it* (R-29). *…I think systematically it's [Health TAPESTRY] not sustainable because that's not how the system works…every time there's this big initiative to push toward prevention, it's with an eye on saving money, but then that cost usually does mean that some other program that's really needed is just not going to get funded…if you can't measure the dollars, you lose a lot of the buy-in* (R-1) *Barriers would probably be people to work in the program. For example, the number of doctors and nurses, to have enough staff to continue the program* (R-75).

DISCUSSION

Key Findings

This study revealed that the Health TAPESTRY program was perceived by older adults as having many positive attributes (e.g. home visits, comprehensive assessments, and satisfaction with the team). However, most clients were not clear about the purpose of the program. Some

clients were unaware of how the program was meant to benefit them and thought that they were primarily helping the researchers by providing them with data. There were mixed findings related to the value of goal setting, with some clients finding it helpful for behaviour change and others finding it irrelevant or difficult. Participants also had mixed experiences with follow-up by the primary care team after volunteer visits. Some clients felt that there was a disconnect between the Health TAPESTRY program and the primary care clinic as they felt their information was either not given to or acted on by the primary care team. Other clients felt that Health TAPESTRY had actually sped up actions taken by the team as they were able to book earlier appointments with providers to discuss their health issue.

Using PHR technology was found to create numerous challenges and some clients preferred not to use the technology. Participants felt the program was sustainable and scalable but identified potential barriers to sustainability and scalability such as funding, staffing, and publicity. Although there were minor differences between site A and B in patient perceptions in four areas (i.e., clarity about the purpose of the program, perceptions related to whether the program resulted in little or no change in their life, enjoyment of home visits, and satisfaction with the primary care team and health system as a result of the program), given the lack of a clear pattern in the results, it is difficult to explain the reasons for these differences.

Comparison with existing literature

Previous studies have similarly found that providing in-home visits by volunteers and peer mentors positively impacted the health and general well-being of older adults. [29 30] A home-based program targeting physical activity, nutrition, and social support conducted by trained nonprofessional volunteers has been found to improve the nutritional status of community-dwelling pre-frail and frail older adults and decrease the prevalence of frailty.[30] Peer volunteers

who provide client support to learn self-management skills can increase physical activity among older adults living in the community.[29] Community-dwelling older adults have been found to have improved health outcomes with social support alone,[30] revealing that many older adults are impacted by social isolation.[31] Health TAPESTRY clients felt that in-home visits by volunteers encouraged social interaction and created awareness about their health. Volunteer support and PHR technology has been known to have positive effects in improving health[29 30] and create active client engagement in care.[32] In the current study however when combined, they provide a link between clients living in their homes and communities and the primary care practices where they receive healthcare.

Goal-setting has been shown to encourage shared decision-making between clients and physicians[33] and improve outcomes associated with clinical interventions aimed at disease prevention and maintaining function.[34] The current study revealed that there were mixed experiences related to health goal-setting and receiving follow-up by providers. Although typically found in mixed methods research, conflicting findings can also be found among complex issues in social research.[35] Integrating differing views from participants can help provide a complete description through a complementary approach.[35] Goal-setting in this current study was seen as having varied benefits in improving health for older adults. This finding may be related to differences in available social support systems. Saajanaho et al. (2016) found that older adults with poor social resources were at a greater risk for having no health goals in their lives compared to older adults with greater social support.[36] Goals focusing on maintaining health were often made by older adults with good health resources while older adults with poor resources typically made goals related to health recovery.[36]

Findings from the current study support previous evidence that interdisciplinary team-based primary care enhances quality of care for individuals, increase confidence and satisfaction with the healthcare system, and enhance client-centred practice.[37] Using this approach also helps older adults better connect with community support services (e.g. meal, transportation, and volunteer-visit services).[38] Many participants in the present study had multiple chronic conditions and findings provide support for an interprofessional team approach for community-dwelling older adults to provide ample time for clients to discuss their health needs and meet their needs through a single visit.[3] Health TAPESTRY was perceived as providing multiple opportunities to consult with various healthcare providers and provided in-home visits with volunteers who were interested in hearing clients' perspectives on health.

Some challenges revealed in the current study were related to the limited uptake of technology and not seeing the added benefits of using PHR technology. The uptake of technology has been found to be influenced by multiple factors such as interest, competency, and usefulness. Older adults adopt technology when they feel that there is a need to do so and technology is perceived as user-friendly.[39] Older adults require more support in using technology to locate high quality evidence on the internet, access their health information, and explore the risks of privacy breaches online.[40]

Participants in the current study identified barriers that need to be addressed to support sustainability and scalability of Health TAPESTRY. These included funding, human resources, and public awareness of the program to support recruitment. Similar barriers have been found in a review of public health interventions including intervention costs, inadequate human resources, staff recruitment and turnover, and inflexible funding structures unsupportive of scale-up.[41] A study that explored the perspectives of the Health TAPESTRY team on sustainability and

scaling-up found that staffing resources (i.e. volunteers and providers) and funding capacities as well as attempting to gain the interest of stakeholders in the program were barriers to sustaining the program.[42] To overcome sustainability challenges, strategies such as embedding sustainability assessments as part of an implementation plan are needed to better anticipate and address barriers.

Strengths and Limitations

This study included participants with different health conditions and included a rigorous analytic method involving numerous experts in primary care, aging, evaluation, and qualitative research. It explored multiple facets of the program (e.g. goals, experiences, perceived impact, and sustainability and scalability). Other studies do not provide a comprehensive evaluation of primary care programs by exploring clients' perspectives.[30 43 44] They are often focused on quantitative outcome measures to determine effectiveness rather than perceived usefulness of programs by clients. Some limitations of the current study were a lack of cultural diversity among participants and the exclusion of non-English-speaking clients. Two practice sites within one area of Ontario representing one model of primary care, the family health team, limits transferability of results.

CONCLUSIONS

. Although the program was generally perceived as valuable as it incorporated comprehensive assessments, seminars, and an interdisciplinary approach, the purpose of Health TAPESTRY and how information was shared was unclear to most clients. Clients were unsure about the kind of benefits they could expect. The study revealed the need to explore client experiences to help modify and adapt primary care programs. Future research should include older adults as partners in shaping primary care programs. The purpose of research and programs

need to be clear for clients and their understanding of the aims of primary care programs should be discussed at the start of an intervention. Researchers interested in testing interventions in primary care should also consider implementing strategies for scaling-up programs in the early phases of research, with active engagement of patients and other partners.

Consent for publication

Not applicable.

Availability of data

The data for this research consists of interview transcripts. We are unable to make raw data publicly available in order to respect the confidentiality of participants.

Competing interests

The authors declare no conflicts of interest with respect to the authorship and/or publication of this article.

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Authors' contributions

RV conceptualized and led the study. LC, FP, and JG collected the data. RV and LC conducted the initial analysis, and subsequent analysis with FP and JG. JP and MY wrote the initial drafts of the paper. GA, DM, DO, CR, JG, LD, and MK contributed to validating the analysis, reviewing, and contributing to drafts. All authors read and approved the final manuscript.

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Manuscript: Perceptions of Older Adults on the Implementation and Impact of a Primary Care Program, Health Teams Advancing Patient Experience: Strengthening Quality (Health TAPESTRY): A Descriptive Qualitative Study

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Developed from:
Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19(6):349-357.

Topic	Item No.	Guide Questions/Descriptions	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/Facilitator	1	Which authors conducted the interview or focus group?	P. 9
Credentials	2	What were the researchers' credentials? (e.g. PhD, MD, MSc)	P. 1
Occupation	3	What were the researchers' occupation at the time of the study?	P. 1
Gender	4	Were the researchers male or female?	P. 1
Experience and training	5	What experience or training did the researchers have?	P. 11
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	P. 8
Participant knowledge of the interviewers	7	What did the participants know about the researchers? (e.g. personal goals, reasons for doing the research)	P. 8-11
Interviewer characteristics	8	What characteristics were reported about the interviewers? (e.g. Bias, assumptions, reasons and interests in the research topic)	N/A
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? (e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis)	P. 7
Participant selection			

Sampling	10	How were participants selected? (e.g. purposive, convenience, consecutive, snowball)	P. 8-9
Method of approach	11	How were participants approached? (e.g. face-to-face, telephone, mail, email)	P. 8-9
Sample size	12	How many participants were in the study?	P. 12
Non-participation	13	How many people refused to participate or dropped out? Reasons?	P. 8 and 12
Setting			
Setting of data collection	14	Where was the data collected? (e.g. home, clinic, workplace)	P. 8
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	P. 8
Description of sample	16	What are the important characteristics of the sample? (e.g. demographic data, date)	P. 12-13
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	P. 9-10
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	P. 9
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	P. 10
Field notes	20	Were field notes made during and/or after the interview or focus group?	N/A
Duration	21	What was the duration of the interviews or focus group?	P. 9
Data saturation	22	Was data saturation discussed?	P. 9
Transcripts returned	23	Were transcripts returned to participants for comment and/or correction?	N/A
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	P. 10
Description of the coding tree	25	Did authors provide a description of the coding tree?	N/A
Derivation of themes	26	Were themes identified in advance or derived from the data?	P. 10

Software	27	What software, if applicable, was used to manage the data?	P. 10
Participant checking	28	Did participants provide feedback on the findings?	N/A
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? (e.g. participant number)	P. 13-23
Data and findings consistent	30	Was there consistency between the data presented and the findings?	P. 13-23
Clarity of major themes	31	Were major themes clearly presented in the findings?	P. 13-23
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	P. 13-23