

BMJ Open

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<http://bmjopen.bmj.com>).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open

“It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a mobile health clinic

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-066674
Article Type:	Original research
Date Submitted by the Author:	15-Jul-2022
Complete List of Authors:	Nussey, Lisa; McMaster University, Midwifery Research Centre Lamarche, Larkin; York University, School of Kinesiology & Health Science O'Shea, Tim; McMaster University, Department of Family Medicine
Keywords:	Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, PRIMARY CARE, QUALITATIVE RESEARCH

SCHOLARONE™
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1
2
3 “It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a
4 mobile health clinic
5

6 Lisa Nussey¹, Larkin Lamarche^{2*}, Tim O’Shea³
7

8
9 ¹Midwifery Research Centre, McMaster University, Hamilton, Canada

10 ²School of Kinesiology and Health Science, York University, Toronto, Canada

11 ³Department of Family Medicine, McMaster University, Hamilton, Canada
12

13 *Corresponding author

14 Larkin Lamarche

15 School of Kinesiology and Health Science

16 York University

17 4700 Keele Street Toronto, ON Canada M3J 1P3

18 lamarche@yorku.ca

19 416-736-2100 x77056
20
21

22
23 **Keywords:** mobile health care clinics, qualitative research, under-served, homeless
24

25 **Word Count:** 6242
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Objective: Our study explored the experiences of clients of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile health service, in the context of their experiences of the overall healthcare system. **Design:** We conducted a reflexive thematic analysis. **Setting:** HAMSMaRT is a mobile health service in Hamilton, Ontario Canada. **Participants:** Fourteen clients of HAMSMaRT were interviewed. **Results:** Our findings represented five themes. Three themes served to be mechanisms through which HAMSMaRT was associated with better outcomes. These “mechanisms” included *people deserve care, from the margins to the centre*, and *improved and different access to the system*. **Conclusions:** With these three concepts enacted, the model of care works, represented by the theme *it works!*. The way in which participants compared their experiences of HAMSMaRT to the mainstream healthcare system insinuated how simple it is, represented by the theme *it's so simple*. Our findings offer guidance to the broader healthcare system for walking from the rhetoric to practice of person-centred care.

Keywords: mobile health care clinics, qualitative research, under-served, homeless

Strengths and limitation of this study

- Represents and centres the client perspectives of a mobile health service
- Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach
- Group of participants who were involved with one type of mobile health clinic interviewed
- Constitution and size of sample preclude an intersectionality approach

INTRODUCTION

Mobile health clinics have been shown to be effective in meeting the health needs of (health) equity-deserving populations by providing services directly in patients' own environment, with the flexibility to adapt services to the needs of the patients these clinics serve.¹ Some of the advantages that mobile health services have been shown to provide include geographic/logistic convenience for patients who face barriers to accessing mainstream health care services, the ability to foster trusting patient-provider relationships, and the ability to better address the social determinants of patient health and connect patients to wider community resources.¹ Mobile health services have also been shown to decrease health care costs, by helping to avoid unnecessary emergency department visits and hospital admissions.^{1,2}

Even in the setting of *universal* health care in Canada, provider-centred health services create physical and logistic barriers to access.³ It has also been well documented that barriers to health care for patients who are deprived of housing and/or who use drugs are exacerbated by stigma, structural violence, and a lack of cultural safety in the healthcare setting, leading to poor health outcomes including inadequate withdrawal management, inadequate treatment of pain, early discharges, and avoidance of medical care altogether.⁴⁻⁶ It has been suggested that mobile health services offer a particularly crucial supplement to other sources of health care for patients who are deprived of housing and who are not well served by the status quo model of medical care delivery.^{3,7}

A review of published literature on the scope and impact of mobile health clinics in the United States,¹ and grey literature,^{8,9} demonstrates that mounting evidence of the effectiveness of mobile health clinics is largely quantitative. Some scholars¹ have called for future research to explore the strengths of mobile health clinics versus traditional care models from the client perspective. In addition, research of mobile health clinics is scarce for people who are deprived of housing. One qualitative study in Toronto showed that mobile health programs can provide convenient, non-judgmental care for homeless patients who are underserved by the mainstream medical system.³ Thus, the aim of this study is to explore client experiences of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile, physician-led service, in the context of their access to and quality of care within the overall healthcare system. Our research question was, what is the patient experience of HAMSMaRT as part of their overall experience within the healthcare system?

STUDY SETTING

The study reported here is part of a larger study which aimed to create an evaluation tool for mobile outreach clinics, via a clinician-centred Delphi consensus process and patient-generated quality of care indicators. Results of the larger study will be reported elsewhere.

Broader local context

Our study took place in Hamilton Ontario, an urban setting with an overall population of 776,000 people. At the time of the data collection, a number of health care services in Hamilton (e.g., Shelter Health Network, Refuge Centre for Newcomer Health, North Hamilton and Urban Core Community Health Centres, etc.) were mandated to serve equity-deserving populations. These services, however, are almost exclusively provided in a fixed, office environment where patients must travel to the provider, at specified appointment or drop-in times, for necessary medical

care, while some clinics are co-located with existing social services (e.g., shelters, drop-ins). There are a handful of clinical outreach services which provide nursing or midwifery care, but few offer primary/physician care. The landscape has shifted marginally since and during COVID, but by and large, primary care for our study population is provided in a clinic setting.

Description of HAMSMaRT⁺

The Hamilton Social Medicine Response Team was founded in 2016 by two internal medicine physicians as a simple, ethical, intervention to support their patients in accessing much needed, but often not received, health care. The HAMSMaRT model was born of genuine listening and responding to patient concerns and desires about, and for, their own health and healthcare. HAMSMaRT is a mobile, interdisciplinary service that strives to provide care to individuals who otherwise have difficulty accessing care in the mainstream system, at a location where they are most comfortable. Patients, broadly speaking, are either unhoused/precariously housed, or unable to leave their homes primarily due to mobility difficulties. At the time of data collection, HAMSMaRT had a patient base of 200 individuals. HAMSMaRT works toward bridging the gap between the community and hospital services, establishing close relationships and formal partnerships with clinical programs and community organizations serving equity-deserving people in Hamilton.

METHODS

We used a qualitative interpretive study design. We chose a qualitative study so that we could explore perspectives of the people who use HAMSMaRT and capture the nuances of the patient experience with HAMSMaRT. One-on-one semi-structured interviews were conducted. The interviews took place between April of 2018 to May of 2019.

Patient and Public Involvement

No patient or public involved in methodology development.

Participants

All participants were patients of HAMSMaRT, which meant they lived in Hamilton, Ontario and struggled to access care through conventional modes. Participants for this study also had to be at least 16 years of age and understand English enough to engage with the interviewer.

Research team

The research team consisted of 3 people. The team was a mix of clinicians and researchers involved with HAMSMaRT and working within addiction medicine. All authors endorsed a harm reduction approach to addiction and clinical care more broadly. At the time of the study, the third author was an infectious disease specialist with expertise in addiction medicine and low-barrier care for people who use drugs. He was a co-founder of HAMSMaRT. He was involved with the conception of the study, recruitment, and report writing. He also participated in data analysis (thematic refinement). The first author was a registered midwife completing her masters in Health Research Methods. She was involved with the conception of the study,

⁺ Since the time of data collection in 2018-19, fuelled by the COVID pandemic, HAMSMaRT has undergone significant expansion and formalization of its programming. It continues to operate from its founding ethic of providing the care that people need where they need it. For more on HAMSMaRT's current programming, interdisciplinary model and organizational principles, please see hamsmart.ca.

1
2
3 conducted most of the interviews, and was involved in data analysis at all stages and report
4 writing. People accessing HAMSMaRT can have a distrust with healthcare providers and the
5 healthcare system; however, she had experience working with people who used HAMSMaRT,
6 thus had the knowledge and rapport to conduct the interviews. Also, her training in interviewing
7 and qualitative methods has been grounded in sensitive topics. Since the time of the study, she
8 has taken on a larger leadership role in HAMSMaRT. The second author was a research
9 associate with over 15 years of research experience and seven years of research experience in
10 primary care. They were brought onto the team during data analysis to guide the process. They
11 also were involved in report writing. Two medical students were also involved in the project.
12 Their role was to assist with data collection. They were not involved in analysis or report write-
13 up. The first author was responsible for consistency between interviewers in terms of following
14 the interview guide.
15
16
17

18 **Interview guide**

19 The interview questions and probes centred on the concept of quality of care, that is, what
20 qualities of HAMSMaRT were characteristic of good health care. To contextualize HAMSMaRT
21 within the broader (and mainstream) healthcare system, we also included questions about the
22 quality of care in the mainstream healthcare system. To understand ways to improve
23 HAMSMaRT, we included questions to explore any negative experiences and probed for ways to
24 improve the service. The third author and a medical resident developed the interview guide. No
25 substantial changes were made after the first interview, or at other times during data collection.
26 See Table 1 for the interview guide.
27
28
29

30 **Table 1. Interview guide**

31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1. How would you describe your experiences with HAMSMaRT so far?
 - a. How did you first encounter the program?
 - b. How do you think HamSMART's services could be improved?
 - i. Was there a specific time when HamSMART didn't meet your needs?
 - c. What is it about HamSMART that you feel would be good to apply in other similar programs?
2. Can you tell me about any experiences when you felt like you got good quality care?
 - a. What changes would you like to see in the healthcare system to better serve your needs?
 - b. How do you know when you've received good quality care? Some people say it's a feeling they get or it's their physical health that's improved – what is it for you?
3. Based on your experiences, what was a time when you received poor quality health care?
 - a. How do you know when you've received poor quality care? Is it a feeling, a change in your physical health, or something else?
 - b. Have there been times when you weren't treated well? If so, what happened that made you feel that way?
 - c. Have you ever experienced stigma while getting care? If so, how did it affect the care you received?
 - d. Why do you think you received poor care?
4. What barriers have you experienced in accessing health care?
 - a. What was the effect of those barriers on your ability to get care?
 - b. How could your access to health care have been improved?
5. In general, what qualities do you hope for in a doctor?
 - a. How do you like to make decisions with your doctor?
 - b. What are the most important things to you to have a good relationship with your doctor?
 - c. What kind of relationship do you like to have with your doctor?
 - d. What training do you think docs/HC providers are missing to provide better care?

Procedure

Upon university research ethics board approval (Hamilton-integrated Research Ethics Board Project #4500), participants were recruited using purposive sampling so as to gather in-depth information related to our research question.^{10,11} The third author recruited potential participants by inviting them (face-to-face) to share their experience with HAMSMaRT so that the team could understand what was and was not working. Participants were clearly informed that deciding not to participate in the study would not impact their care from HAMSMaRT. Interviews were conducted in person, one-on-one, in the setting of the participant's choice including in hospital, in the participant's home or shelter or a coffee shop. The interviews were audio recorded. Interviews were conducted and it was deemed by this first author when the richness of the information was sufficient to answer the research question¹² thus ending recruitment. Participants were compensated for their time with a \$50 gift card upon completion of the interview.

Data analysis

Audio recordings were intelligently and professionally transcribed. Pseudonyms were given to each participant and transcripts were de-identified. A reflexive thematic data analysis was employed.^{13,14} We followed the six steps of thematic analysis. Specifically, we read and re-read the transcripts as well as re-listened to the audio-recordings to familiarize ourselves with the data. The first author generated initial codes through inductive coding grounded in the data and grouped codes together to make initial themes. During team meetings (between the first and second authors) we reviewed potential themes by checking them against the data. We did this for each candidate theme and also across themes so as to review the potential viability of the entire story in the data. In team meetings we also defined and named themes. This phase involved staying true to the data while engaging with concepts from practice and research in this population. It was during this discussion that one allusive theme (*it's so simple*) crystallized. Finally, we produced a report that included a final thematic map. The thematic map was refined throughout the process. For example, team discussion took place to reflect on if and how the themes related to one another within the data. This discussion led to *how* the final thematic looks and therefore represents the data and overall story. Data collection and analysis was concurrent.

The analysis was grounded in a pragmatic framework¹⁵ thus, rigour is driven by the research question. Since we wanted to explore participants' experiences with HAMSMaRT within the context of their experiences with the mainstream healthcare system, we used an interpretive approach to analysis. Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach.^{16, 17} We display direct quotations from participants in the results (authenticity). Participants who were served directly by HAMSMaRT comprised the sample so as to gather information about experiences of this model of care. Also, participants had experiences with the mainstream healthcare system (e.g., emergency departments, hospitals, primary and specialist care) which meant they were able to articulate perceived differences and similarities between both models of care. Being able to speak about both models of care was important to the research question (credibility). We also use thick descriptions to contextualize our sample and local setting (credibility). Finally, the initial theme development was discussed and challenged (trustworthiness) among the authors whereby the team's different clinical, community and research perspectives strengthened analysis¹⁸ and led to the final thematic map.

RESULTS

A total of 14 people participated. There were no dropouts or refusals to participate. Interviews lasted between 45 and 90 minutes. Sixty-four percent of participants were female, and the average age was 48 years at time of interview (range 25-69). Primary medical diagnoses included HIV, Hepatitis C, chronic obstructive pulmonary disease, congestive heart failure, diabetes, opioid use disorder and alcohol use disorder. Sixty-four percent reported active substance use. Most of these conditions were complicated and compounded by the patients' living conditions, broadly speaking, either of being housebound (35%) or unhoused/precariously housed (65%).

Participants drew on their experiences with HAMSMaRT and a broad range of experiences within the mainstream healthcare system. It was through a juxtaposition of HAMSMaRT experiences to experiences with the mainstream healthcare system that a total of five themes

1
2
3 were developed. These themes included: *people deserve care, from the margins to the centre,*
4 *improved and different access to the system, it works!* and *it's so simple.*
5
6

7 **Thematic map overview**

8 As shown in Figure 1, three themes described mechanisms through which HAMSMaRT was
9 associated with higher patient satisfaction, engagement and ultimately better outcomes. These
10 “mechanisms” included *people deserve care, from the margins to the centre,* and *improved and*
11 *different access to the system.* How these mechanisms operate are important - *people deserve*
12 *care* and *from the margins to the centre* are tethered to one another. They are foundational to
13 HAMSMaRT; without them, the model of care falls down. Important here too is that the third
14 mechanism (*improved and different access to the system*) cannot work in a vacuum; access can
15 only be realized with the theme *people deserve care* tethered to the theme *from the margins to*
16 *the centre.* When these three things work, it is associated with better patient-described outcomes
17 (*it works!*). These mechanisms were crystallized when HAMSMaRT experiences were
18 juxtaposed to experiences of the mainstream healthcare system. In many cases these mechanisms
19 were absent in the mainstream healthcare system leading to poorer patient described outcomes,
20 and ultimately something that does not work. A fifth theme, *it's so simple,* operates as the
21 thematic map frame, containing the mechanisms that lead to better outcomes. The note to the
22 thematic map represents how simple this model is (and can be). The final thematic map was also
23 hand-drawn to symbolize the theme, *it's so simple.*
24
25
26

27 **People deserve care**

28 This theme represents the basic notion that patients of the healthcare system are human and
29 deserving of dignity and respect by virtue of that fact alone. The theme *people deserve care*
30 signals a recognition on the part of its patients of this founding ethic of HAMSMaRT.
31
32

33 *People deserve care* came to life in contradistinction to participant's experiences of the
34 mainstream healthcare system that left them feeling they “did this to themselves” and thus did
35 not deserve help and that care providers had more important people to serve. These interactions
36 were lathered with judgment, blame, and insensitivity. One participant:
37
38

39 The things that [the healthcare provider] had said to me, he said that I had done this to
40 myself because of the choices that I've made [crying] in my life, that I was a horrible
41 person, and then [my partner] just told him that he could basically go to hell, and she took
42 me out and we left [crying] (Gail)
43

44 Participants repeatedly, reliably, and in great detail described dehumanizing and harmful
45 exchanges that deterred them from seeking healthcare. Because of their treatment at the hands of
46 the healthcare system, patients we interviewed both recognized and struggled to remember that
47 they were ‘more than a junkie’ and not ‘a child’ or a number:
48
49

50 Because it does make me feel worthless to have to go somewhere where I know I'm not
51 going to be welcome for one, treated properly for another, and even care if I live or die
52 sometimes I feel. You know? Sometimes I feel that there are some people in healthcare
53 that think a dead junkie is a better junkie. You know? I really feel that there are people
54 that feel that way. And that's sad. We are all human beings and we all have value.
55
56
57
58
59
60

(Gabriel)

Another participant talked about prioritization by social status in mainstream healthcare provision, insinuating that some people are more important than others:

But I find in the general healthcare system, they classify people. First off, and they really classify you if you have more than one or two strikes that are different, i.e. if you are on ODSP [Ontario Disability Support Program], addicted to opiates, a bit of an alcoholic, things like that, they are saying oh well, [...]let's get to the important people first and then we will get to him. (Demarcus)

Conversely, interactions between HAMSMaRT and participants were characterized by feelings of being treated as a human being with (equal) value. They described being engaged with respect, dignity, honesty, and genuine care. One participant described their experience with HAMSMaRT:

There's not another doctor that I've ever met that will go to the lengths that HAMSMaRT does to try to save the people at the bottom of the rungs in society. And there are some people in the bottom of the rungs that have real value, that have real things to offer society. And that's what most people don't realize. We're not all pieces of crap. We're not all looking to hurt people and take from society. We ended up there through one situation or another, you know? We all have our own stories to tell about how we ended up there. But I have met so many addicts in my experience that have bigger hearts than anybody I've ever met. And have more to offer society than a lot of people. If only someone showed them that they had value. If only someone cared for them, because they're dying out there. People who, if they really felt that somebody cared, that somebody was there for them, you know, it would make such a difference. And I think that's where HAMSMaRT comes in. (Gabriel)

Patients repeatedly described that working with providers who saw them as deserving affirmed or unearthed a belief in themselves that provided them with the will to keep going and to try to heal:

I finally started advocating for myself. I was tired. I lost everything. And then I didn't see anybody offer me a way out. So I just thought more of the status quo. And so when you have people, like those doctors, [the HAMSMaRT doctor], I came out of the hospital the last time feeling like I have a plan with hope again. (Greta)

This humanizing approach to care, explicitly driven by the ethic that *people deserve care* was described as a way in which the patient was taken from the margins to the centre of their own care.

From the margins to the centre

This theme represents the participants' transformative experience of moving from the mainstream system's heretofore unrealized tenet of patient-centred care into a concrete practice of being the focus of their own care. This theme represents qualities of patient-centred and patient-focused care that are baked into HAMSMaRT, and tethered to the previous theme (*people deserve care*).

1
2
3
4 While patient-centred care was recognized by participants as a rhetorical hallmark of the Ontario
5 and Canadian mainstream healthcare systems writ large, it rarely characterized their experiences
6 when accessing care. Over and over, participants described a throughline of their experiences as
7 being judged, ignored, disregarded, discounted, excluded and silenced, in both hospital- and
8 office-based care settings. Rowan summarized their experience:
9

10
11 They just think that you can't do things. But the thing is that I can do a lot. I can't do
12 everything. But I was in control of my own life and then other people were treating me
13 like a child. And that's the way I felt at the doctors. I was being treated like a child.
14 (Rowan)
15

16
17 Participants, often quite generously, attributed this decentering and patronizing behaviour on the
18 part of providers to several organizational issues in the healthcare system, including heavy
19 patient loads and provider fatigue. They primarily experienced it however, as a powerplay that
20 elevated the physician at their own expense. Greta said:
21

22 And I lost all trust in doctors. I lost all hope that I had. Not because they couldn't be good
23 doctors, but it's...I'm the hero in this story too. You know what I mean? But they played
24 God. (Greta)
25

26
27 Participants repeatedly asserted that healthcare providers didn't have a monopoly on health
28 knowledge:
29

30 Just because we don't have a medical license, doesn't mean we don't know what's going
31 on with our own bodies. We're the first person who knows what's going on with us.
32 (Freya)
33

34 Centering the patient meant dissolving the well ingrained provider-patient (knowledge)
35 hierarchy; recognizing and acting on the intelligence and experiential expertise that the patient
36 brought to the table when making decisions about care. When this expertise is listened to,
37 appreciated and worked with, shared decision making is realized. True to power-sharing is the
38 notion that the provider and patient are equal in the relationship:
39
40

41 [The HAMSMaRT doctor] doesn't act like he's saving me, and that's a huge difference,
42 because I get to be a person and I get to be an expert on my own care. And so we can
43 work together. And to me that is what I lost with everybody else. (Greta)
44
45

46 This kind of power sharing depends on provider affirmation of patient autonomy. Genuine
47 respect for patient autonomy was experienced by patients as being listened to and believed.
48 Believing and centering patients as experts in their own health experiences led to a bi-directional
49 cycle of truth and trust previously unenjoyed. This power sharing enhanced the provider's ability
50 to help and the patient's ability to heal. Greta continued:
51

52 If I didn't have this...because as I said, I had lost all hope, all belief. I thought there
53 wasn't any hope. So when I finally had people working for me, then it felt
54 like...somebody is working with me and I will work with them. Yeah! We have hope
55 now that I can get out of this mess. And I can have a future. (Greta)
56
57
58
59
60

1
2
3 These mutually reinforcing orientations to patient care of deserving and centering allowed for as
4 new and different access to care systems to which patients were at best, reticent about and at
5 worst, deliberately avoiding.
6

8 **Improved and different access to the system**

9 This theme describes the well-known ways in which mobile, flexible, on call, health services are
10 necessary to increase access to care. Importantly, however, the theme also elucidates how the
11 HAMSMaRT model provides *improved and different* access to the wider healthcare system.
12

13 For all of the participants, logistical barriers to accessing care in the mainstream system were a
14 major roadblock to improving their health. Patients described inaccessible offices, inflexible
15 hours, difficulties navigating the system and complex and competing priorities in a provider-
16 centred system that refused to recognize or address all of the barriers it erected:
17

18
19 And I tried explaining it to them over the phone. I said ‘I can’t get out. I’m housebound.’
20 ‘Oh well, you have to come down and get these.’ And I said, ‘you want me to come all
21 the way down just to pick up papers? It’s not to see a doctor?’ And she said ‘yeah.’
22 (Rowan)
23

24
25 Unsurprisingly, participants were extremely appreciative of HAMSMaRT’s outreach model,
26 which included ready access to physician support by phone, home/out of office visits and
27 flexible scheduling. These “above and beyond” measures were viewed as a tangible enactment of
28 the two previous themes:
29

30
31 It helps because like I already said, it makes you feel important. It makes you feel special
32 for one. So right away, you feel part of and willing to go and do whatever is required to
33 go that extra mile to help these people, because they are coming all the way to my house.
34 I’ll certainly do what I can to help. If they’re going to help me like this, then I’ll help
35 them help me. (Charlie)
36

37
38 Improved and different access, sometimes translated into less unnecessary use of health systems.
39 Patients described the ways in which access to HAMSMaRT services meant they could stay out
40 of the resource intensive emergency room, where previously (though they didn’t want to) they
41 had no choice but to go for care:
42

43
44 It’s incredible to have a doctor care for you and you can just text him and he’s like OK,
45 he calls the pharmacy. Or OK, I’ve got this going for you. Like [what happens when you
46 start to develop an infection] Friday at 5 o’clock? Like go to the ER. And then you go
47 through the whole process all over again. But if you have a doctor on hand like [the
48 HAMSMaRT doctor], there’s so many times when I’ve just called him and he’s like, OK,
49 I’m putting in something, a [prescription] or something like that. He’s saved me so many
50 times from having to go to the ER. (Nola)
51

52
53 Just as patients were moved by HAMSMaRT providers’ decisions not to leverage their power
54 against them, they were compelled by the way HAMSMaRT providers wielded their power *for*
55 them; and sometimes miffed that it worked! In several instances, participants described scenarios
56
57
58
59

1
2
3 that took the HAMSMaRT doctor's power as physician to communicate the patient's expertise,
4 which led to care access:
5

6
7 And all I called was [the HAMSMaRT doctor] and he called the [emergency room]
8 doctor and boom I was in. It was...in a way it was frustrating, but in a way I was so
9 relieved, you know? It was like a double-edged sword. It was like you fucking bastards.
10 Pardon my language. But really that's what I thought. You bastards. Like this is my third
11 visit in a week and all it took was one call from [the HAMSMaRT doctor]. OK, this
12 patient has this, this, this, which I told them I had, which I told them I thought I had. And
13 he repeated every single thing I said, probably to the tee and they listened to him and not
14 to me. You know what I mean? That's not fair, you know? And I even said to him, what
15 did you say to them? And he said, 'pretty much what you said.' He's like, 'yeah I know,
16 it's OK. One problem at a time Freya', that's what he said, 'one problem at a time.'
17 (Freya)
18
19

20 Importantly, this improved and different access also meant that patients who had previously
21 struggled to stay in the hospital (for the maltreatment they had become so accustomed to) now
22 could. This participant shared how their involvement with HAMSMaRT changed their access to
23 the mainstream healthcare system:
24

25
26 In hospitals, I've always been treated differently than other patients because I have an
27 addiction. And I don't think it's fair that I should be left to suffer in pain. I have pain
28 issues and significant pain issues that are well documented and all verified through
29 imaging and things like that. And since I've been dealing with HAMSMaRT [...], when
30 I'm in the hospital, I feel like I'm treated differently now, right? Because [the
31 HAMSMaRT doctor] always has some involvement in my care [...]. So when it comes to
32 my pain issues and things like that, they try their best to deal with it. And I've never felt
33 like any healthcare institution has ever tried their best on my behalf. And I feel that now.
34 And I truly believe it's because of the involvement of HAMSMaRT. (Gabriel)
35
36

37 Finally, some participants described a renewed trust in possibilities of healthcare, stemming from
38 the advocacy efforts of the HAMSMaRT:
39

40
41 Well working with [the HAMSMaRT doctor] made me come to terms of learning to trust
42 doctors more than what I did, because I never really had any doctors that I wanted to see.
43 If I was sick I dealt with it. And then something like this happens. So for that year that I
44 had the infection, it was like I'm going to conquer this, I'm going to kill it. No two ways
45 about it. Nobody is taking my leg or whatever. And then it so happens that the inevitable
46 happens. Maybe I should listen to doctors a lot more. For me that's my learning
47 experience. Now I kind of have to trust doctors and nurses more. If they say well maybe
48 you should do this, then that's what I'm going to do. (Marlow)
49
50

51 These tangible and behind the scenes strategies alike were described by participants as helping
52 them access care, leading to improvement in health, i.e. it worked!
53

54 **It works!**
55
56
57
58
59
60

1
2
3 For many centred in the healthcare system, the answer to the question of “how do you know you
4 got good care?” takes for granted that, to the extent possible, the healthcare improved the
5 person’s health. Participant responses to this question were simple, humble and profound. Their
6 responses spoke to how, when the three themes are brought to life, the model of care (i.e.,
7 HAMSMaRT) works. Startlingly, participants described having health improvements as the way
8 they knew they were getting good care:
9

10
11 Just seeing results, seeing the results of me getting better is proof in itself that I know that
12 what they are doing is working. (Isla)
13

14
15 Freya also felt “better” since being involved with HAMSMaRT. Demarcus told us:

16
17 “There is no doubt. 100%. Because it was constant care. Difference in between waiting
18 until I got sick and then going, then acting or reacting to that. As opposed to acting and
19 the outcome being instead gratifying. Yeah. I felt much more at ease knowing that I could
20 talk to him and be pointed in the right direction.” (Demarcus)
21

22
23 Again, participants drew conclusions about their success with HAMSMaRT by drawing on, and
24 comparing to, their experiences with the provider-centred health care system:
25

26
27 And you know, I had lost 100lbs since [major life event]. Since I’ve actually been getting
28 what I think is quality healthcare, I’ve gained 45 of that back. Even though I was still
29 using, I’ve had people say wow you look better than you’ve looked since [that major life
30 event]. And I even feel it. I feel better. I look better. I’m more engaged in life. I care more
31 about my life now. So those are the things that I think prove to me that my healthcare is
32 better now than it was before. (Gabriel)
33

34
35 Participants spoke about hope and engagement in life as outcomes of their involvement with
36 HAMSMaRT. Rowan described the profound impact of the simplicity of the HAMSMaRT
37 approach:
38

39
40 And [the HAMSMaRT doctor] came down and talked to me about stuff, and I [...] actually
41 had given up on living. And he sat and talked to me, and said don’t give up. Let’s try
42 this, we’ll do this, we’ll work on this. And he was giving me all these other ideas where
43 when my family doctor dropped me and my liver doctor wasn’t doing her job properly,
44 I had just given up. I just wanted to curl up and die. And he got me back into wanting
45 to fight to live. So that’s why I’m still here. (Rowan)
46

47
48 Some participants expressed optimism that HAMSMaRT could lead to change in the system
49 through replication and scaling up:
50

51
52 It’s amazing. You guys are doing something...I don’t know what the word is for it. Like
53 um...ground changing, or groundbreaking. Really. If more people can have this, it’s
54 going to change the way they feel about doctors and medicine. You guys really helped
55 me. (Freya)
56
57
58
59
60

1
2
3 There was even a glimpse of restored faith in the possibility of healthcare that heals - “I actually
4 believe now in care [...] and I just love not being sick anymore.” (Isla)
5
6

7 In an increasingly technocratic, regimented and strained healthcare system it's impossible to miss
8 the simplicity of what patients have here described as setting their experiences apart from those
9 of the larger healthcare system.
10

11 **It's so simple**

12 There was a tone to the interviews that speaks to the simplicity of what participants viewed as
13 requisite to a healing process. One keen and insightful participant summed it up very succinctly:
14
15

16 It really is [that simple] and I don't see why it seems so hard sometimes in the hospitals.
17 Just treat a person as a person. That's the biggest thing that could be adopted from
18 HAMSMaRT to the healthcare system overall. (Gabriel)
19

20 Isla brought this theme of simplicity into stark relief describing her perception of a shift in her
21 care since working with HAMSMaRT. She said that it was the likelihood that she wouldn't be
22 treated “like shit” that enabled her to seek the care she needed. It doesn't get much simpler than
23 that.
24
25

26 For our team, many of the strategies participants described are things we already know improve
27 access and quality of care. One participant with extensive experience as an inpatient described a
28 small interaction that stood out from all her time spent in hospital:
29
30

31 I moved to the B wing after the E wing, and the nurse came in and I expected something.
32 So I was like, oh, did you need me to sign something or did you need something? She
33 goes, no I'm just coming to say hi and tell you that I'm your nurse and my name is so-
34 and-so. And she left. And I was like holy crap. That was like...that made me feel so good
35 and it was 2 seconds...I think that's what makes it so frustrating, is that there is not much
36 to it. (Nola)
37
38

39 Here a two second interaction made the difference. Simple.
40

41 **DISCUSSION**

42 Our study explored the experiences of people involved in HAMSMaRT in the context of their
43 access to and quality of care within the overall healthcare system. Our findings provide evidence
44 that HAMSMaRT brings to life three simple mechanisms: beginning with the principles that
45 people deserve care and should be at the centre of it, leading to improved and different access to
46 the system. When these three things are enacted, the model of care (HAMSMaRT) works. The
47 profundity and simplicity of what patients described as quality care as realized through
48 HAMSMaRT, and how elusive it was in the mainstream healthcare system, should give us all
49 pause as health providers.
50
51

52 Our findings corroborate those of Wen and colleagues¹⁹ exploration of the dehumanization of
53 people experiencing homelessness by the healthcare system. Wen and colleagues frame patient
54
55
56
57
58
59
60

1
2
3 experiences as welcoming versus unwelcoming, noting that the latter's stigmatizing ethic, like in
4 our findings of patient experiences in the mainstream health system, leads to system aversion.
5

6
7 Our findings also contribute to the growing evidence that mobile health clinics are effective in
8 improving health outcomes of equity deserving people.^{1,8,9} They further contribute to the small
9 body of qualitative evidence for the effectiveness of mobile health clinics that serve people who
10 are deprived of housing.³ While Whelan and colleagues³ explore why people use a mobile health
11 clinic (accessing basic necessities, convenience, friendly atmosphere), our findings probe *what* it
12 is about the model that works. Our findings describe the nuances of quality care and help to
13 elucidate the what and the how behind the quantitative evidence of the effectiveness of mobile
14 health clinics. In essence, our findings flesh out and affirm Wen et al.'s¹⁹ suggestion that "the
15 provision of effective care may be tied to the ability to create a welcoming environment."
16
17

18 Research about care of equity deserving populations primarily directs its gaze at either the
19 patients of, or providers to, the population in question. The sizable body of work around patient
20 barriers to and experiences of health care is congruent with our findings that stigma and
21 discrimination are major deterrents to care and barriers to improved health outcomes.²⁰⁻²² There
22 is a smaller body of work on the experiences of providers caring for equity deserving populations
23 which enumerates the difficulties of providing welcoming, high-quality care within the confines
24 of the provider-centred health system; these difficulties include providing humanized service in a
25 stigmatizing health care milieu.²³⁻²⁶ There are some efforts described in the literature to develop
26 methods for combating the deterring stigmatizing nature of health systems²⁷⁻²⁹; however, there is
27 little work done to excavate what undergirds such stigmatizing care delivery. Our findings and
28 the existing literature demonstrate that there is a disjoint between the widely adopted rhetoric of
29 patient-centred care and the actual practice by a critical mass of providers. Exploring this,
30 perhaps through the perceptions and experiences of providers in the mainstream healthcare
31 system, is an area of study rife with transformational potential.
32
33
34

35 A few caveats should be acknowledged. Our findings come from a group of participants who
36 were involved with one type of mobile health clinic. Although the goal of qualitative research is
37 not to generalize and we provide enough rich description to contextualize both the sample and
38 HAMS MaRT for transferability of our findings to similar contexts, we cannot ignore that there
39 may be contextual factors that make transferability difficult. These factors may include
40 population-level characteristics (e.g., racial or ethnic background, language) or system-wide
41 policies of funding structures. Additionally, the constitution and size of our sample precluded us
42 taking intersectional approach to understanding the layered stigma (and multi-stigma),
43 discrimination and racism meted out by the health system. Also missing is the healthcare
44 provider perspective; why might this model work for patients from the viewpoint of the
45 provider?
46
47
48

49 We share these findings, lauding the HAMS MaRT model, with humility and in deference to the
50 brilliance of the patients with whom we work. While we hope that the insights shared by
51 participants will be taken up by others striving to provide better care, we also commit to
52 implementing these findings in our own growing and changing organization. Since the time of
53 data collection in 2018 we continue to bridge the gap between the community and hospital care.
54 We have secured semi-stable funding, expanded and consolidated our services through a formal
55
56
57
58
59
60

1
2
3 partnership with a user-led harm reduction group in the city, established a multi-site safer supply
4 program for people using opioids, incorporated psychiatry and primary care into our clinical
5 model and expanded our organizational team. We strive to extrapolate the lessons learned from
6 these descriptions of the one-on-one patient interactions to our own HAMS MaRT “health
7 system”; we take our lead as a healthcare organization from our patients and the community to
8 which we all belong. All of our work begins from the principle that people deserve care that
9 centres them, which allows us to provide improved and different access to healthcare - it works
10 and it is that simple.
11
12

13 **CONTRIBUTORSHIP STATEMENT**

14 First and third authors were responsible for research idea conception and recruitment. First
15 author was responsible data collection oversight. First and second authors were responsible for
16 data analysis. All authors contributed to report writing and knowledge translation.
17
18

19 **ACKNOWLEDGEMENTS**

20 The authors wish to thank and acknowledge, first and foremost the HAMS MaRT patients and
21 participants who have shared their lives and experiences with us as providers and researchers.
22 We hope that this paper does your ideas and insights justice. We would also like to thank Dr.
23 Sheiry Dhillon for her input into the early phases of the overall project to develop an evaluation
24 tool for mobile outreach clinics. Thank you to Jane Tooley and Jesse Bauman for conducting
25 some of the interviews in this project. Thank you also to Dr. Nicole Buchanan for her
26 contributions to the background research for the project.
27
28

29 **COMPETING INTERESTS**

30 We have no competing interests or conflicts of interests to declare.
31
32

33 **FUNDING STATEMENT**

34 This work was not funded.
35
36

37 **DATA SHARING STATEMENT**

38 Deidentified data will be shared upon responsible request by contacting the corresponding
39 author.
40

41 **ETHICS APPROVAL**

42 Ethics approval for this project was received through the Hamilton-integrated Research Ethics
43 Board (Project #4500).
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

REFERENCES

- 1 Yu SW, Hill C, Ricks ML, Bennet J, Oriol NE. The scope and impact of mobile health clinics in the United States: a literature review. *Int J for Equity Health* 2017;16(1):1-12.
<https://doi.org/10.1186/s12939-017-0671-2>
- 2 Oriol NE, Cote PJ, Vavasis AP, Bennet J, DeLorenzo D, Blanc P, Kohane I. Calculating the return on investment of mobile healthcare. *BMC Med* 2009;7(1):1-6.
- 3 Whelan C, Chambers C, Chan M, Thomas S, Ramos G, Hwang SW. Why do homeless people use a mobile health unit in a country with universal health care?. *J Prim Care Community Health* 2010;1(2):78-82. <https://doi.org/10.1177/2150131910372233>
- 4 Giesbrecht M, Stajduhar KI, Mollison A, Pauly B, Reimer-Kirkham S, McNeil R, Wallace B, Dosani N, Rose C. Hospitals, clinics, and palliative care units: Place-based experiences of formal healthcare settings by people experiencing structural vulnerability at the end-of-life. *Health Place* 2018;53:43-51. <https://doi.org/10.1016/j.healthplace.2018.06.005>
- 5 Harris M. Normalised pain and severe health care delay among people who inject drugs in London: Adapting cultural safety principles to promote care. *Soc Sci Med* 2020;260:113183.
<https://doi.org/10.1016/j.socscimed.2020.113183>
- 6 McNeil R, Small W, Wood E, Kerr T. Hospitals as a 'risk environment': an ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Soc Sci Med* 2014;105:59-66.
<https://doi.org/10.1016/j.socscimed.2014.01.010>
- 7 Shortt SE, Hwang S, Stuart H, Bedore M, Zurba N, Darling M. Delivering primary care to homeless persons: a policy analysis approach to evaluating the options. *Healthc Policy* 2008;4(1):108.
- 8 Egwu, E. Mobile health clinic as a medium for reducing health disparities in underserved populations. Dissertation Georgia State University 2019.
https://scholarworks.gsu.edu/nursing_dnp/projects/15
- 9 Jimenez A. The use of mobile healthcare clinics to expand access to underserved populations: a rapid review. Undergraduate honors thesis Central Washington University 2019
https://digitalcommons.cwu.edu/undergrad_hontheses/14
- 10 Liamputtong, P. *Qualitative Research Methods*, 4th Ed. Melbourne: Oxford University Press 2013.
- 11 Patton MQ. *Qualitative Research and Evaluation Methods*, 3rd Ed. Thousand Oaks, CA: Sage 2002.

- 1
2
3 12 Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful
4 concept for thematic analysis and sample-size rationales. *Qual Res Sport Exer Health* 2019;
5 13:1-16.
6
7
8 13 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psych* 2006;3: 77-101.
9 <https://doi.org/10.1191/1478088706qp063oa>
10
11 14 Braun, V, Clarke, V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exer Health*
12 2019;11(4): 589-597.
13
14
15 15 Morgan DL. Pragmatism as a paradigm for social research. *Qual Inq* 2014;20:1045-1053.
16 <https://doi.org/10.1177/1077800413513733>
17
18 16 Lincoln YS, Guba EG. But is it rigorous? Trustworthiness and authenticity in naturalistic
19 evaluation. *New Dir Eval* 1989; 30:73-84.
20
21
22 17 Tracy SJ. Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qual*
23 *Inq* 2010;16(10): 837-851. <https://doi.org/10.1177/1077800410383121>
24
25 18 Patton MQ. Enhancing the quality and credibility of qualitative analysis. *Health Serv Res*
26 1999;34:1189-1208.
27
28
29 19 Wen CK, Hudak, PL, and Hwang SW. Homeless people’s perceptions of welcomeness and
30 unwelcomeness in healthcare encounters. *J Gen Intern Med* 2007;22:1011-1017.
31
32 20 Kalich A, Heinemann L, Ghahari SA. Scoping review of immigrant experience of health care
33 access barriers in Canada. *J Immigr Minor Health* 2016;18:697-709.
34 <https://doi.org/10.1007/s10903-015-0237-6>
35
36 21 Ramsay N, Hossain R, Moore M, Milo M, Brown A. Health care while homeless: barriers,
37 facilitators, and the lived experiences of homeless individuals accessing health care in a
38 Canadian regional municipality. *Qual Health Res* 2019;29(13):1839-1849.
39 <https://doi.org/10.1177/1049732319829434>
40
41
42 22 Monchalín, R, Smylie J, Nowgesic E. “I Guess I Shouldn’t Come Back Here”: racism and
43 discrimination as a barrier to accessing health and social services for urban Métis women in
44 Toronto, Canada. *J Racial Ethn Health Disparities* 2019;7(2)251-261.
45 <https://doi.org/10.1007/s40615-019-00653-1>
46
47
48 23 McKeary M, Newbold, B. Barriers to care: the challenges for Canadian refugees and their
49 health care providers. *J Refug Stud* 2010;23(4):523-545. <https://doi.org/10.1093/jrs/feq038>
50
51 24 Loignon C, Hudon C, Goulet É, Boyer S, De Laat M, Fournier N, Grabovschi C, Bush P.
52 Perceived barriers to healthcare for persons living in poverty in Quebec, Canada: the
53 EQUIhealthY project. *Int J Equity Health* 2015;14(1):1-11. [https://doi.org/10.1186/s12939-015-](https://doi.org/10.1186/s12939-015-0135-5)
54 [0135-5](https://doi.org/10.1186/s12939-015-0135-5)
55
56
57
58
59
60

1
2
3
4 25 Campbell DJ, O'Neill BG, Gibson K, Thurston WE. Primary healthcare needs and barriers to
5 care among Calgary's homeless populations. *BMC Fam Pract* 2015;16:1-10.

6 <https://doi.org/10.1186/s12875-015-0361-3>

7
8
9 26 Darling EK, MacDonald T, Nussey L, Murray-Davis B, Vanstone M. Making midwifery
10 services accessible to people of low SES: a qualitative descriptive study of the barriers faced by
11 midwives in Ontario. *Can J Midwif Res Pr* 2020;19(2): 1-13.

12
13 27 Stuart H, Chen SP, Christie R, Dobson K, Kirsh B, Knaak S, Koller M, Krupa T, Lauria-
14 Horner B, Luong D, Modgill G. Opening minds in Canada: targeting change. *Can J Psychiatry*
15 2014;59(suppl):13-18. <https://doi.org/10.1177/070674371405901S05>

16
17
18 28 Stuart H. Managing the stigma of opioid use. *Healthcare Management Forum* 2019;32(2):78-
19 83. <https://doi.org/10.1177/0840470418798658>

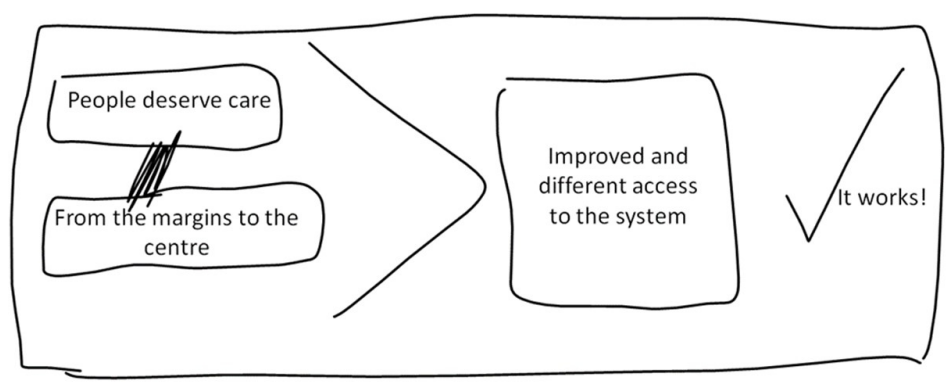
20
21 29 Ungar T, Knaak S, Szeto AC. Theoretical and practical considerations for combating mental
22 illness stigma in health care. *Community Ment Health J* 2016;52(3):262-71.

23 <https://doi.org/10.1007/s10597-015-9910-4>

24 25 26 **FIGURE LEGEND**

27 Thematic map
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



Note. It's so simple

Thematic map

338x190mm (96 x 96 DPI)

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

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	5
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	5
3. Occupation	What was their occupation at the time of the study?	5
4. Gender	Was the researcher male or female?	5
5. Experience and training	What experience or training did the researcher have?	5
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	5-6
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	6
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	5
Domain 2: study design		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	7
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	6
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	6
12. Sample size	How many participants were in the study?	7
13. Non-participation	How many people refused to participate or dropped out? Reasons?	7
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	6

16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	7-8
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	5
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	No, no follow-up was deemed necessary
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	6
20. Field notes	Were field notes made during and/or after the interview or focus group?	No, we did not use this strategy to foster rigor, but used others
21. Duration	What was the duration of the inter views or focus group?	7
22. Data saturation	Was data saturation discussed?	6-7
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, we did not use this strategy to foster rigor, but used others.
Domain 3: analysis and findings		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	7
25. Description of the coding tree	Did authors provide a description of the coding tree?	8
26. Derivation of themes	Were themes identified in advance or derived from the data?	7
27. Software	What software, if applicable, was used to manage the data?	Not applicable
28. Participant checking	Did participants provide feedback on the findings?	No, we did not use this strategy to foster rigor, but used others.
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	9-16
30. Data and findings consistent	Was there consistency between the data presented and the findings?	9-16
31. Clarity of major themes	Were major themes clearly presented in the findings?	9-16
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Not applicable; did not emerge in our analysis

BMJ Open

“It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a mobile health clinic in Hamilton, Ontario, Canada

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-066674.R1
Article Type:	Original research
Date Submitted by the Author:	25-Nov-2022
Complete List of Authors:	Nussey, Lisa; McMaster University, Midwifery Research Centre Lamarche, Larkin; York University, School of Kinesiology & Health Science O'Shea, Tim; McMaster University, Department of Medicine
Primary Subject Heading:	Patient-centred medicine
Secondary Subject Heading:	Qualitative research
Keywords:	Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, PRIMARY CARE, QUALITATIVE RESEARCH

SCHOLARONE™
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1
2
3 “It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a
4 mobile health clinic in Hamilton, Ontario, Canada
5

6
7 Lisa Nussey¹, Larkin Lamarche^{2*}, Tim O’Shea³
8

9 ¹Midwifery Research Centre, McMaster University, Hamilton, Canada

10 ²School of Kinesiology and Health Science, York University, Toronto, Canada

11 ³Department of Medicine, McMaster University, Hamilton, Canada
12

13 *Corresponding author

14 Larkin Lamarche

15 School of Kinesiology and Health Science

16 York University

17 4700 Keele Street Toronto, ON Canada M3J 1P3

18 lamarche@yorku.ca

19 416-736-2100 x77056
20
21

22
23 **Keywords:** mobile health care clinics, qualitative research, under-served, homeless, people
24 deprived of housing, patient-centred care
25

26 **Word Count:** 6100
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Objective: Our study explored the experiences of clients of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile health service, in the context of their experiences of the overall healthcare system. **Design:** We conducted a qualitative study with reflexive thematic analysis. **Setting:** HAMSMaRT is a mobile health service in Hamilton, Ontario Canada 'providing primary care, internal medicine and infectious diseases services. **Participants:** Eligible participants were clients of HAMSMaRT who could understand English to do the interview and at least 16 years of age. Fourteen clients of HAMSMaRT were interviewed. **Results:** Our findings represented five themes. When the themes of *people deserve care, from the margins to the centre*, and *improved and different access to the system* are enacted, the model of care works, represented by the theme *it works!*. The way in which participants compared their experiences of HAMSMaRT to the mainstream healthcare system insinuated how simple it is, represented by the theme *it's so simple*. **Conclusions:** Our findings offer guidance to the broader healthcare system for walking from the rhetoric to practice of person-centred care.

Keywords: mobile health care clinics, qualitative research, under-served, homeless, people deprived of housing, patient-centred care

Strengths and limitation of this study

- Adds to the small body of existing health service literature that represents and centres the client perspectives of a mobile health service
- Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach
- Group of participants who were involved with one type of mobile health clinic interviewed
- Constitution and size of sample preclude an intersectionality approach

INTRODUCTION

Despite a model of *universal* health care in Canada, provider-centred health services create physical and logistic barriers to access.¹ It has also been well documented that barriers to health care for patients who are deprived of housing and/or who use drugs are exacerbated by stigma, structural violence, and a lack of cultural safety in the healthcare setting, leading to poor health outcomes including inadequate withdrawal management, inadequate treatment of pain, premature discharges, and avoidance of medical care altogether.²⁻⁴

Mobile health services offer a particularly crucial supplement to other sources of health care for patients who are deprived of housing and who are not well served by the status quo model of medical care delivery.^{1,5} They have been shown to be effective in meeting the health needs of (health) equity-deserving populations by providing services directly in patients' own environment, decreasing geographic/logistic barriers to accessing mainstream health care services. Additionally, mobile services have been shown to foster trusting patient-provider relationships, and the ability to better address the social determinants of health through connecting patients to wider community resources.⁶ Mobile health services have also been shown to decrease health care costs, by helping to avoid unnecessary emergency department visits and hospital admissions.^{6,7}

A review of published literature on the scope and impact of mobile health clinics in the United States,⁶ and grey literature,^{8,9} demonstrates that mounting evidence of the effectiveness of mobile health clinics is largely quantitative. Some scholars⁶ have called for future research to explore the strengths of mobile health clinics versus traditional care models from the client perspective. In addition, research of mobile health clinics is scarce for people who are deprived of housing. One qualitative study in Toronto showed that mobile health programs can provide convenient, non-judgmental care for homeless patients who are poorly served by the mainstream medical system.¹ Thus, the aim of this study is to explore client experiences of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile, physician-led service, in the context of their access to and quality of care within the overall healthcare system. Our research question was, what is the patient experience of HAMSMaRT as part of their overall experience within the healthcare system?

STUDY SETTING

The study reported here is part of a larger study which aimed to create an evaluation tool for mobile outreach clinics, via a clinician-centred Delphi consensus process and patient-generated quality of care indicators. Results of the larger study will be reported elsewhere.

Broader local context

Our study took place in Hamilton Ontario, an urban setting with an overall population of 776,000 people. At the time of the data collection, a number of health care services in Hamilton (e.g., Shelter Health Network, Refuge Centre for Newcomer Health, North Hamilton and Urban Core Community Health Centres, etc.) were mandated to serve equity-deserving populations. These services, however, are almost exclusively provided in a fixed, office environment where patients must travel to the provider, at specified appointment or drop-in times, for necessary medical care, while some clinics are co-located with existing social services (e.g., shelters, drop-ins). There are a handful of clinical outreach services which provide nursing or midwifery care, but

few offer primary/physician care. The landscape has shifted marginally since and during COVID, but by and large, primary care for our study population is provided in a clinic setting.

Description of HAMSMaRT⁺

The Hamilton Social Medicine Response Team was founded in 2016 by two internal medicine physicians as a simple, ethical, intervention to support their patients in accessing much needed, but often not received, health care. The HAMSMaRT model was born of genuine listening and responding to patient concerns and desires about, and for, their own health and healthcare. HAMSMaRT is a mobile, interdisciplinary service that strives to provide care to individuals who otherwise have difficulty accessing care in the mainstream system, at a location where they are most comfortable. Patients, broadly speaking, are deprived of housing and are either unhoused/precariously housed, or unable to leave their homes primarily due to mobility difficulties. At the time of data collection, HAMSMaRT had a patient base of 200 individuals. HAMSMaRT works toward bridging the gap between the community and hospital services, establishing close relationships and formal partnerships with clinical programs and community organizations serving equity-deserving people in Hamilton.

METHODS

We used a qualitative study design. We chose a qualitative study so that we could explore perspectives of the people who use HAMSMaRT and capture the nuances of the patient experience with HAMSMaRT. One-on-one semi-structured interviews were conducted. The interviews took place between April of 2018 to May of 2019.

Patient and Public Involvement

No patient or public involved in methodology development.

Participants

All participants were patients of HAMSMaRT, which meant they lived in Hamilton, Ontario and struggled to access care through conventional modes. Participants for this study also had to be at least 16 years of age and understand English enough to engage with the interviewer. Participants were purposefully sampled^{10,11} by the third author from his patient roster.

Research team

The research team consisted of 3 people. The team was a mix of clinicians and researchers involved with HAMSMaRT and working within addiction medicine. All authors endorsed a harm reduction approach to addiction and clinical care more broadly. At the time of the study, the third author was an infectious disease specialist with expertise in addiction medicine and low-barrier care for people who use drugs. He was a co-founder of HAMSMaRT. The first author was a registered midwife completing her masters in Health Research Methods. People accessing HAMSMaRT can have a distrust with healthcare providers and the healthcare system; however, she had experience working with people who used HAMSMaRT, thus had the knowledge and rapport to conduct the interviews. Also, her training in interviewing and

⁺ Since the time of data collection in 2018-19, fuelled by the COVID pandemic, HAMSMaRT has undergone significant expansion and formalization of its programming. It continues to operate from its founding ethic of providing the care that people need where they need it. For more on HAMSMaRT's current programming, interdisciplinary model and organizational principles, please see hamsmart.ca.

1
2
3 qualitative methods has been grounded in sensitive topics. Since the time of the study, she has
4 taken on a larger leadership role in HAMSMaRT. The second author was a research associate
5 with over 15 years of research experience and seven years of research experience in primary
6 care. Two medical students were also involved in the project. Their role was to assist with data
7 collection. They were not involved in analysis or report write-up. The first author was
8 responsible for consistency between interviewers in terms of following the interview guide.
9

10 11 **Interview guide**

12 The interview questions and probes centred on the concept of quality of care, that is, what
13 qualities of HAMSMaRT were characteristic of good health care. To contextualize HAMSMaRT
14 within the broader (and mainstream) healthcare system, we also included questions about the
15 quality of care in the mainstream healthcare system. To understand ways to improve
16 HAMSMaRT, we included questions to explore any negative experiences and probed for ways to
17 improve the service. The third author and a medical resident developed the interview guide. No
18 substantial changes were made after the first interview, or at other times during data collection.
19 See the Supplementary file for the interview guide.
20
21

22 23 **Procedure**

24 Upon university research ethics board approval (Hamilton-integrated Research Ethics Board
25 Project #4500), participants were recruited. The third author recruited potential participants by
26 inviting them (face-to-face). Participants were clearly informed that deciding not to participate in
27 the study would not impact their care from HAMSMaRT. Interviews were conducted mostly by
28 the first author in person, one-on-one, in the setting of the participant's choice including in
29 hospital, in the participant's home or shelter or a coffee shop. The interviews were audio
30 recorded. Data collection was stopped when it was deemed by this first author that the richness
31 of the information was sufficient to answer the research question¹². Participants were
32 compensated for their time with a \$50 gift card upon completion of the interview.
33
34

35 36 **Data analysis**

37 Audio recordings were intelligently and professionally transcribed. Pseudonyms were given to
38 each participant and transcripts were de-identified. A reflexive thematic data analysis was
39 employed.^{13,14} We followed the six steps of thematic analysis. Specifically, we read and re-read
40 the transcripts as well as re-listened to the audio-recordings to familiarize ourselves with the
41 data. The first author generated initial codes through inductive coding grounded in the data. She
42 then grouped codes together to make initial themes. The first and second authors reviewed
43 potential themes by checking them against the data. We did this for each candidate theme and
44 also across themes so as to review the potential viability of the entire story in the data. In team
45 meetings we also defined and named themes. This phase involved staying true to the data while
46 engaging with concepts from practice and research in this population. It was during this
47 discussion that one allusive theme (*it's so simple*) crystallized. Finally, we produced a report that
48 included a final thematic map. The thematic map was refined throughout the process. For
49 example, team discussion took place to reflect on if, and how, the themes related to one another
50 within the data. We reflected with our diverse experiences and historical knowledge developed
51 working with people deprived of housing. This discussion led to *how* the final thematic looks and
52 therefore represents the data and overall story. Data collection and analysis was concurrent.
53
54
55
56
57
58
59

The analysis was grounded in a pragmatic framework¹⁵ thus, rigour is driven by the research question. Since we wanted to explore participants' experiences with HAMSMaRT within the context of their experiences with the mainstream healthcare system, we used an interpretive approach to analysis. Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach.^{16, 17} We display direct quotations from participants in the results (authenticity). Participants who were served directly by HAMSMaRT comprised the sample so as to gather information about experiences of this model of care. Also, participants had experiences with the mainstream healthcare system (e.g., emergency departments, hospitals, primary and specialist care) which meant they were able to articulate perceived differences and similarities between both models of care. Being able to speak about both models of care was important to the research question (credibility). We also use thick descriptions to contextualize our sample and local setting (credibility). Finally, the initial theme development was discussed and challenged (trustworthiness) among the authors whereby the team's different clinical, community and research perspectives strengthened analysis¹⁸ and led to the final thematic map.

RESULTS

A total of 14 people participated. There were no dropouts or refusals to participate. Interviews lasted between 45 and 90 minutes. Sixty-four percent of participants were female, and the average age was 48 years at time of interview (range 25-69). Primary medical diagnoses included HIV, Hepatitis C, chronic obstructive pulmonary disease, congestive heart failure, diabetes, opioid use disorder and alcohol use disorder. Sixty-four percent reported active substance use. Most of these conditions were complicated and compounded by the patients' living conditions, broadly speaking, either of being housebound (35%) or unhoused/precariously housed (65%).

Participants drew on their experiences with HAMSMaRT and a broad range of experiences within the mainstream healthcare system. It was through a juxtaposition of HAMSMaRT experiences to experiences with the mainstream healthcare system that a total of five themes were developed. These themes included: *people deserve care, from the margins to the centre, improved and different access to the system, it works!* and *it's so simple*.

Thematic map overview

As shown in Figure 1, the first two themes, *People deserve care* and *from the margins to the centre* are tethered to one another. The third theme (*improved and different access to the system*) can only be realized when the theme *people deserve care* and *from the margins to the centre* are enacted. These three themes *people deserve care, from the margins to the centre, and improved and different access to the system* describe how HAMSMaRT was associated with higher patient satisfaction, engagement and ultimately better outcomes (*it works!*). The fifth theme is represented by the thematic map frame, containing the ethic (*people deserve care, from the margins to the centre*) the mechanism, (*improved and different access to the system*) and the improved outcomes (*it works!*) described by participants. The final thematic map was also hand-drawn to symbolize the fifth theme, *it's so simple*.

People deserve care

1
2
3 This theme represents the basic notion that patients of the healthcare system are human and
4 deserving of dignity and respect by virtue of that fact alone. The theme *people deserve care*
5 signals a recognition on the part of its patients of this founding ethic of HAMSMaRT.
6

7
8 *People deserve care* came to life in contradistinction to participant's experiences of the
9 mainstream healthcare system that left them feeling they "did this to themselves" and thus did
10 not deserve help and that care providers had more important people to serve. These interactions
11 were lathered with judgment, blame, and insensitivity. One participant:
12

13
14 The things that [the healthcare provider] had said to me, he said that I had done this to
15 myself because of the choices that I've made [crying] in my life, that I was a horrible
16 person, and then [my partner] just told him that he could basically go to hell, and she took
17 me out and we left [crying] (Gail)
18

19
20 Participants repeatedly, reliably, and in great detail described dehumanizing and harmful
21 exchanges that deterred them from seeking healthcare. Because of their treatment at the hands of
22 the healthcare system, patients we interviewed both recognized and struggled to remember that
23 they were 'more than a junkie' and not 'a child' or 'a number':
24

25
26 Because it does make me feel worthless to have to go somewhere where I know I'm not
27 going to be welcome for one, treated properly for another, and even care if I live or die
28 sometimes I feel. You know? Sometimes I feel that there are some people in healthcare
29 that think a dead junkie is a better junkie. You know? I really feel that there are people
30 that feel that way. And that's sad. We are all human beings and we all have value.
31 (Gabriel)
32

33
34 Another participant talked about prioritization by social status in mainstream healthcare
35 provision, insinuating that some people are more important than others:

36
37 But I find in the general healthcare system, they classify people. First off, and they really
38 classify you if you have more than one or two strikes that are different, i.e. if you are on
39 ODSP [Ontario Disability Support Program], addicted to opiates, a bit of an alcoholic,
40 things like that, they are saying oh well, [...]let's get to the important people first and then
41 we will get to him. (Demarcus)
42

43
44 Conversely, interactions between HAMSMaRT and participants were characterized by feelings
45 of being treated as a human being with (equal) value. They described being engaged with
46 respect, dignity, honesty, and genuine care. One participant described their experience with
47 HAMSMaRT:
48

49
50 There's not another doctor that I've ever met that will go to the lengths that HAMSMaRT
51 does to try to save the people at the bottom of the rungs in society. And there are some
52 people in the bottom of the rungs that have real value, that have real things to offer
53 society. And that's what most people don't realize. We're not all pieces of crap. We're
54 not all looking to hurt people and take from society. We ended up there through one
55 situation or another, you know? We all have our own stories to tell about how we ended
56 up there. But I have met so many addicts in my experience that have bigger hearts than
57
58
59
60

1
2
3 anybody I've ever met. And have more to offer society than a lot of people. If only
4 someone showed them that they had value. If only someone cared for them, because
5 they're dying out there. People who, if they really felt that somebody cared, that
6 somebody was there for them, you know, it would make such a difference. And I think
7 that's where HAMSMaRT comes in. (Gabriel)
8
9

10 Patients repeatedly described that working with providers who saw them as deserving affirmed
11 or unearthed a belief in themselves that provided them with the will to keep going and to try to
12 heal:
13

14 I finally started advocating for myself. I was tired. I lost everything. And then I didn't see
15 anybody offer me a way out. So I just thought more of the status quo. And so when you
16 have people, like those doctors, [the HAMSMaRT doctor], I came out of the hospital the
17 last time feeling like I have a plan with hope again. (Greta)
18
19

20 This humanizing approach to care, explicitly driven by the ethic that *people deserve care* was
21 described as a way in which the patient was taken from the margins to the centre of their own
22 care.
23

24 **From the margins to the centre**

25 This theme represents the participants' transformative experience of moving from the mainstream
26 system's heretofore unrealized tenet of patient-centred care into a concrete practice of being the
27 focus of their own care. This theme represents qualities of patient-centred and patient-focused
28 care that are baked into HAMSMaRT and tethered to the previous theme (*people deserve care*).
29
30

31 While patient-centred care was recognized by participants as a rhetorical hallmark of the Ontario
32 and Canadian mainstream healthcare systems writ large, it rarely characterized their experiences
33 when accessing care. Over and over, participants described a throughline of their experiences as
34 being judged, ignored, disregarded, discounted, excluded and silenced, in both hospital- and
35 office-based care settings. Rowan summarized their experience:
36
37

38 They just think that you can't do things. But the thing is that I can do a lot. I can't do
39 everything. But I was in control of my own life and then other people were treating me
40 like a child. And that's the way I felt at the doctors. I was being treated like a child.
41 (Rowan)
42
43

44 Participants, often quite generously, attributed this decentering and patronizing behaviour on the
45 part of providers to several organizational issues in the healthcare system, including heavy
46 patient loads and provider fatigue. They primarily experienced it however, as a powerplay that
47 elevated the physician at their own expense. Greta said:
48

49 And I lost all trust in doctors. I lost all hope that I had. Not because they couldn't be good
50 doctors, but it's...I'm the hero in this story too. You know what I mean? But they played
51 God. (Greta)
52
53

54 Participants repeatedly asserted that healthcare providers didn't have a monopoly on health
55 knowledge:
56
57
58
59
60

1
2
3 Just because we don't have a medical license, doesn't mean we don't know what's going
4 on with our own bodies. We're the first person who knows what's going on with us.
5 (Freya)
6
7

8 Centering the patient meant dissolving the well ingrained provider-patient (knowledge)
9 hierarchy; recognizing and acting on the intelligence and experiential expertise that the patient
10 brought to the table when making decisions about care. When this expertise is listened to,
11 appreciated and worked with, shared decision making is realized. True to power-sharing is the
12 notion that the provider and patient were equal in the relationship:
13

14 [The HAMSMaRT doctor] doesn't act like he's saving me, and that's a huge difference,
15 because I get to be a person and I get to be an expert on my own care. And so we can
16 work together. And to me that is what I lost with everybody else. (Greta)
17
18

19 This kind of power sharing depends on provider affirmation of patient autonomy. Genuine
20 respect for patient autonomy was experienced by patients as being listened to and believed.
21 Believing and centering patients as experts in their own health experiences led to a bi-directional
22 cycle of truth and trust previously unenjoyed. This power sharing enhanced the provider's ability
23 to help and the patient's ability to heal. Greta continued:
24
25

26 If I didn't have this...because as I said, I had lost all hope, all belief. I thought there
27 wasn't any hope. So when I finally had people working for me, then it felt
28 like...somebody is working with me and I will work with them. Yeah! We have hope
29 now that I can get out of this mess. And I can have a future. (Greta)
30

31 These mutually reinforcing orientations to patient care of deserving and centering allowed for
32 new and different access to care systems to which patients were at best, reticent about and at
33 worst, deliberately avoiding.
34
35

36 **Improved and different access to the system**

37 This theme describes the well-known ways in which mobile, flexible, on call, health services are
38 necessary to increase access to care. Importantly, however, the theme also elucidates how the
39 HAMSMaRT model provides *improved and different* access to the wider healthcare system.
40

41 For all of the participants, logistical barriers to accessing care in the mainstream system were a
42 major roadblock to improving their health. Patients described inaccessible offices, inflexible
43 hours, difficulties navigating the system and complex and competing priorities in a provider-
44 centred system that refused to recognize or address all of the barriers it erected:
45
46

47 And I tried explaining it to them over the phone. I said 'I can't get out. I'm housebound.'
48 'Oh well, you have to come down and get these.' And I said, 'you want me to come all
49 the way down just to pick up papers? It's not to see a doctor?' And she said 'yeah.'
50 (Rowan)
51
52

53 Unsurprisingly, participants were extremely appreciative of HAMSMaRT's outreach model,
54 which included ready access to physician support by phone, home/out of office visits and
55
56
57
58
59
60

flexible scheduling. These “above and beyond” measures were viewed as a tangible enactment of the two previous themes:

It helps because like I already said, it makes you feel important. It makes you feel special for one. So right away, you feel part of and willing to go and do whatever is required to go that extra mile to help these people, because they are coming all the way to my house. I’ll certainly do what I can to help. If they’re going to help me like this, then I’ll help them help me. (Charlie)

Improved and different access, sometimes translated into less unnecessary use of health systems. Patients described the ways in which access to HAMSMaRT services meant they could stay out of the resource intensive emergency room, where previously (though they didn’t want to) they had no choice but to go for care:

It’s incredible to have a doctor care for you and you can just text him and he’s like OK, he calls the pharmacy. Or OK, I’ve got this going for you. Like [what happens when you start to develop an infection] Friday at 5 o’clock? Like go to the ER. And then you go through the whole process all over again. But if you have a doctor on hand like [the HAMSMaRT doctor], there’s so many times when I’ve just called him and he’s like, OK, I’m putting in something, a [prescription] or something like that. He’s saved me so many times from having to go to the ER. (Nola)

Just as patients were moved by HAMSMaRT providers’ decisions not to leverage their power against them, they were compelled by the way HAMSMaRT providers wielded their power *for* them; and sometimes miffed that it worked! In several instances, participants described scenarios that took the HAMSMaRT doctor’s power as physician to communicate the patient’s expertise, which led to care access:

And all I called was [the HAMSMaRT doctor] and he called the [emergency room] doctor and boom I was in. It was...in a way it was frustrating, but in a way I was so relieved, you know? It was like a double-edged sword. It was like you fucking bastards. Pardon my language. But really that’s what I thought. You bastards. Like this is my third visit in a week and all it took was one call from [the HAMSMaRT doctor]. OK, this patient has this, this, this, which I told them I had, which I told them I thought I had. And he repeated every single thing I said, probably to the tee and they listened to him and not to me. You know what I mean? That’s not fair, you know? And I even said to him, what did you say to them? And he said, ‘pretty much what you said.’ He’s like, ‘yeah I know, it’s OK. One problem at a time Freya’, that’s what he said, ‘one problem at a time.’ (Freya)

Importantly, this improved and different access also meant that patients who had previously struggled to stay in the hospital (for the maltreatment they had become so accustomed to) now could. This participant shared how their involvement with HAMSMaRT changed their access to the mainstream healthcare system:

In hospitals, I’ve always been treated differently than other patients because I have an addiction. And I don’t think it’s fair that I should be left to suffer in pain. I have pain

1
2
3 issues and significant pain issues that are well documented and all verified through
4 imaging and things like that. And since I've been dealing with HAMSMaRT [...], when
5 I'm in the hospital, I feel like I'm treated differently now, right? Because [the
6 HAMSMaRT doctor] always has some involvement in my care [...]. So when it comes to
7 my pain issues and things like that, they try their best to deal with it. And I've never felt
8 like any healthcare institution has ever tried their best on my behalf. And I feel that now.
9 And I truly believe it's because of the involvement of HAMSMaRT. (Gabriel)

10
11
12 Finally, some participants described a renewed trust in possibilities of healthcare, stemming from
13 the advocacy efforts of HAMSMaRT:

14
15
16 Well working with [the HAMSMaRT doctor] made me come to terms of learning to trust
17 doctors more than what I did, because I never really had any doctors that I wanted to see.
18 If I was sick I dealt with it. And then something like this happens. So for that year that I
19 had the infection, it was like I'm going to conquer this, I'm going to kill it. No two ways
20 about it. Nobody is taking my leg or whatever. And then it so happens that the inevitable
21 happens. Maybe I should listen to doctors a lot more. For me that's my learning
22 experience. Now I kind of have to trust doctors and nurses more. If they say well maybe
23 you should do this, then that's what I'm going to do. (Marlow)

24
25
26 These tangible and behind the scenes strategies alike were described by participants as helping
27 them access care, leading to improvement in health, i.e. it worked!

28 29 **It works!**

30 For many people accessing a publicly funded healthcare system, the answer to the question of
31 "how do you know you got good care?" takes for granted that, to the extent possible, the
32 healthcare improved the person's health. Participant responses to this question were simple,
33 humble and profound. Their responses spoke to how, when the three themes are brought to life,
34 the model of care (i.e., HAMSMaRT) works. Startlingly, participants described having health
35 improvements as the way they knew they were getting good care:

36
37
38 Just seeing results, seeing the results of me getting better is proof in itself that I know that
39 what they are doing is working. (Isla)

40
41
42 Freya also felt "better" since being involved with HAMSMaRT. Demarcus told us:

43
44
45 There is no doubt. 100%. Because it was constant care. Difference in between waiting
46 until I got sick and then going, then acting or reacting to that. As opposed to acting and
47 the outcome being instead gratifying. Yeah. I felt much more at ease knowing that I could
48 talk to him and be pointed in the right direction. (Demarcus)

49
50
51 Again, participants drew conclusions about their success with HAMSMaRT by drawing on, and
52 comparing to, their experiences with the provider-centred health care system:

53
54
55 And you know, I had lost 100lbs since [major life event]. Since I've actually been getting
56 what I think is quality healthcare, I've gained 45 of that back. Even though I was still
57 using, I've had people say wow you look better than you've looked since [that major life
58
59
60

1
2
3 event]. And I even feel it. I feel better. I look better. I'm more engaged in life. I care more
4 about my life now. So those are the things that I think prove to me that my healthcare is
5 better now than it was before. (Gabriel)
6

7
8 Participants spoke about hope and engagement in life as outcomes of their involvement with
9 HAMSMaRT. Rowan described the profound impact of the simplicity of the HAMSMaRT
10 approach:
11

12 And [the HAMSMaRT doctor] came down and talked to me about stuff, and I [...]
13 actually had given up on living. And he sat and talked to me, and said don't give up.
14 Let's try this, we'll do this, we'll work on this. And he was giving me all these other
15 ideas where when my family doctor dropped me and my liver doctor wasn't doing her job
16 properly, I had just given up. I just wanted to curl up and die. And he got me back into
17 wanting to fight to live. So that's why I'm still here. (Rowan)
18
19

20 Some participants expressed optimism that HAMSMaRT could lead to change in the system
21 through replication and scaling up:
22

23
24 It's amazing. You guys are doing something...I don't know what the word is for it. Like
25 um...ground changing, or groundbreaking. Really. If more people can have this, it's
26 going to change the way they feel about doctors and medicine. You guys really helped
27 me. (Freya)
28

29
30 There was even a glimpse of restored faith in the possibility of healthcare that heals - "I actually
31 believe now in care [...] and I just love not being sick anymore." (Isla)
32

33 In an increasingly technocratic, regimented and strained healthcare system it's impossible to miss
34 the simplicity of what patients have here described as setting their experiences apart from those
35 of the larger healthcare system.
36

37 **It's so simple**

38
39 There was a tone to the interviews that speaks to the simplicity of what participants viewed as
40 requisite to a healing process. One keen and insightful participant summed it up very succinctly:
41

42 It really is [that simple] and I don't see why it seems so hard sometimes in the hospitals.
43 Just treat a person as a person. That's the biggest thing that could be adopted from
44 HAMSMaRT to the healthcare system overall. (Gabriel)
45
46

47 Isla brought this theme of simplicity into stark reveal describing her perception of a shift in her
48 care since working with HAMSMaRT. She said that it was the likelihood that she wouldn't be
49 treated "like shit" that enabled her to seek the care she needed. It doesn't get much simpler than
50 that.
51

52
53 For our team, many of the strategies participants described are things we already know improve
54 access and quality of care. One participant with extensive experience as an inpatient described a
55 small interaction that stood out from all her time spent in hospital:
56
57
58
59
60

1
2
3
4 I moved to the B wing after the E wing, and the nurse came in and I expected something.
5 So I was like, oh, did you need me to sign something or did you need something? She
6 goes, no I'm just coming to say hi and tell you that I'm your nurse and my name is so-
7 and-so. And she left. And I was like holy crap. That was like...that made me feel so good
8 and it was 2 seconds...I think that's what makes it so frustrating, is that there is not much
9 to it. (Nola)
10
11

12 Here a two second interaction made the difference. Simple.
13
14

15 DISCUSSION

16 Our study explored the experiences of people involved in HAMSMaRT in the context of their
17 access to and quality of care within the overall healthcare system. Our findings provide evidence
18 that HAMSMaRT brings to life the principles that people deserve care and should be at the
19 centre of it, leading to improved and different access to the system. When these three things are
20 enacted, the model of care (HAMSMaRT) works. The profundity and simplicity of what patients
21 described as quality care as realized through HAMSMaRT, and how elusive it was in the
22 mainstream healthcare system, should give us all pause as health providers.
23
24

25 Our findings corroborate those of Wen and colleagues¹⁹ exploration of the dehumanization of
26 people experiencing homelessness by the healthcare system. They frame patient experiences as
27 welcoming versus unwelcoming, noting that the latter's stigmatizing ethic, like in our findings of
28 patient experiences in the mainstream health system, leads to system aversion. Our findings also
29 parallel those of Bouchelle et al.'s²⁰ exploration of the experiences of medically vulnerable
30 people accessing a mobile health van in Boston. Bouchelle et al. found that in addition to
31 accessible communication styles, a diverse and knowledgeable workforce, and conveniently
32 located services, a culture of respect and dignity aboard the outreach clinic was central in
33 facilitating access to service.
34
35

36 Our findings also contribute to the growing evidence that mobile health clinics are effective in
37 improving health outcomes of equity deserving people.^{6,8,9} They further contribute to the small
38 body of qualitative evidence for the effectiveness of mobile health clinics that serve people who
39 are deprived of housing.³ While recent qualitative work^{1,19,20} explored why people use a mobile
40 health clinic (accessing basic necessities, convenience, friendly atmosphere), our findings probe
41 *what* it is about the model that works. Our findings describe the nuances of quality care and help
42 to elucidate the *what* and the *how* behind the quantitative evidence of the effectiveness of mobile
43 health clinics. In essence, our findings flesh out and affirm Wen et al.'s¹⁹ suggestion that "the
44 provision of effective care may be tied to the ability to create a welcoming environment."
45
46
47

48 Research about care of equity deserving populations primarily directs its gaze at either the
49 patients of, or providers to, the population in question. The sizable body of work around patient
50 barriers to and experiences of health care is congruent with our findings that stigma and
51 discrimination are major deterrents to care and barriers to improved health outcomes.²¹⁻²³ There
52 is a smaller body of work on the experiences of providers caring for equity deserving populations
53 which enumerates the difficulties of providing welcoming, high-quality care within the confines
54 of the provider-centred health system; these difficulties include providing humanized service in a
55
56
57
58
59
60

1
2
3 stigmatizing health care milieu.²⁴⁻²⁷ There are some efforts described in the literature to develop
4 methods for combating the deterring stigmatizing nature of health systems²⁸⁻³⁰; however, there is
5 little work done to excavate what undergirds such stigmatizing care delivery. Our findings and
6 the existing literature demonstrate that there is a disjoint between the widely adopted rhetoric of
7 patient-centred care and the actual practice by a critical mass of providers. Exploring this,
8 perhaps through the perceptions and experiences of providers in the mainstream healthcare
9 system, is an area of study rife with transformational potential.
10
11

12 A few caveats should be acknowledged. Our findings come from a group of participants who
13 were involved with one type of mobile health clinic. Although the goal of qualitative research is
14 not to generalize, we provide enough rich description to contextualize both the sample and
15 HAMSMaRT for transferability of our findings to similar contexts. There may be contextual
16 factors like population-level characteristics (e.g., racial or ethnic background, language) or
17 system-wide policies or funding structures that make transferability difficult. Additionally, the
18 constitution and size of our sample precluded us taking intersectional approach to understanding
19 the layered stigma (and multi-stigma), discrimination and racism meted out by the health system.
20 Also missing is the healthcare provider perspective; why might this model work for patients from
21 the viewpoint of the provider?
22
23
24

25 We share these findings, lauding the HAMSMaRT model, with humility and in deference to the
26 brilliance of the patients with whom we work. While we hope that the insights shared by
27 participants will be taken up by others striving to provide better care, we also commit to
28 implementing these findings in our own growing and changing organization. Since the time of
29 data collection in 2018 we continue to bridge the gap between the community and hospital care.
30 We have secured semi-stable funding, expanded and consolidated our services through a formal
31 partnership with a user-led harm reduction group in the city, established a multi-site safer supply
32 program for people using opioids, incorporated psychiatry and primary care into our clinical
33 model and expanded our organizational team. We strive to extrapolate the lessons learned from
34 these descriptions of the one-on-one patient interactions to our own HAMSMaRT “health
35 system”; we take our lead as a healthcare organization from our patients and the community to
36 which we all belong. All of our work begins from the principle that people deserve care that
37 centres them, which allows us to provide improved and different access to healthcare - it works
38 and it is that simple.
39
40
41

42 **CONTRIBUTORSHIP STATEMENT**

43 LN and TO were responsible for research idea conception, methodology planning and participant
44 recruitment. LN was responsible data collection oversight and coding. LN and LL were
45 responsible for data analysis. LN, LL and TO all contributed to data interpretation and were
46 engaged in the reflexive practice in data analysis. LN, LL and TO contributed to report writing
47 and knowledge translation activities.
48
49

50 **ACKNOWLEDGEMENTS**

51 The authors wish to thank and acknowledge, first and foremost the HAMSMaRT patients and
52 participants who have shared their lives and experiences with us as providers and researchers.
53 We hope that this paper does your ideas and insights justice. We would also like to thank Dr.
54 Sheiry Dhillon for her input into the early phases of the overall project to develop an evaluation
55
56
57
58
59
60

1
2
3 tool for mobile outreach clinics. Thank you to Jane Tooley and Jesse Bauman for conducting
4 some of the interviews in this project. Thank you also to Dr. Nicole Buchanan for her
5 contributions to the background research for the project.
6

7 **COMPETEING INTERESTS**

8 We have no competing interests or conflicts of interests to declare.
9

10 **FUNDING STATEMENT**

11 This work was not funded.
12

13 **DATA SHARING STATEMENT**

14 Deidentified data will be shared upon responsible request by contacting the corresponding
15 author.
16
17

18 **ETHICS APPROVAL**

19 Ethics approval for this project was received through the Hamilton-integrated Research Ethics
20 Board (Project #4500).
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

REFERENCES

- 1 Whelan C, Chambers C, Chan M, Thomas S, Ramos G, Hwang SW. Why do homeless people use a mobile health unit in a country with universal health care?. *J Prim Care Community Health* 2010;1(2):78-82. <https://doi.org/10.1177/2150131910372233>
- 2 Giesbrecht M, Stajduhar KI, Mollison A, Pauly B, Reimer-Kirkham S, McNeil R, Wallace B, Dosani N, Rose C. Hospitals, clinics, and palliative care units: Place-based experiences of formal healthcare settings by people experiencing structural vulnerability at the end-of-life. *Health Place* 2018;53:43-51. <https://doi.org/10.1016/j.healthplace.2018.06.005>
- 3 Harris M. Normalised pain and severe health care delay among people who inject drugs in London: Adapting cultural safety principles to promote care. *Soc Sci Med* 2020;260:113183. <https://doi.org/10.1016/j.socscimed.2020.113183>
- 4 McNeil R, Small W, Wood E, Kerr T. Hospitals as a 'risk environment': an ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Soc Sci Med* 2014;105:59-66. <https://doi.org/10.1016/j.socscimed.2014.01.010>
- 5 Shortt SE, Hwang S, Stuart H, Bedore M, Zurba N, Darling M. Delivering primary care to homeless persons: a policy analysis approach to evaluating the options. *Healthc Policy* 2008;4(1):108.
- 6 Yu SW, Hill C, Ricks ML, Bennet J, Oriol NE. The scope and impact of mobile health clinics in the United States: a literature review. *Int J for Equity Health* 2017;16(1):1-12. <https://doi.org/10.1186/s12939-017-0671-2>
- 7 Oriol NE, Cote PJ, Vavasis AP, Bennet J, DeLorenzo D, Blanc P, Kohane I. Calculating the return on investment of mobile healthcare. *BMC Med* 2009;7(1):1-6.
- 8 Egwu, E. Mobile health clinic as a medium for reducing health disparities in underserved populations. Dissertation Georgia State University 2019. https://scholarworks.gsu.edu/nursing_dnp/projects/15
- 9 Jimenez A. The use of mobile healthcare clinics to expand access to underserved populations: a rapid review. Undergraduate honors thesis Central Washington University 2019 https://digitalcommons.cwu.edu/undergrad_hontheses/14
- 10 Liamputtong, P. *Qualitative Research Methods*, 4th Ed. Melbourne: Oxford University Press 2013.
- 11 Patton MQ. *Qualitative Research and Evaluation Methods*, 3rd Ed. Thousand Oaks, CA: Sage 2002.

- 1
2
3 12 Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful
4 concept for thematic analysis and sample-size rationales. *Qual Res Sport Exer Health* 2019;
5 13:1-16.
6
7
8 13 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psych* 2006;3: 77-101.
9 <https://doi.org/10.1191/1478088706qp063oa>
10
11 14 Braun, V, Clarke, V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exer Health*
12 2019;11(4): 589-597.
13
14 15 Morgan DL. Pragmatism as a paradigm for social research. *Qual Inq* 2014;20:1045-1053.
15 <https://doi.org/10.1177/1077800413513733>
16
17 16 Lincoln YS, Guba EG. But is it rigorous? Trustworthiness and authenticity in naturalistic
18 evaluation. *New Dir Eval* 1989; 30:73-84.
19
20 21 Tracy SJ. Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qual*
22 *Inq* 2010;16(10): 837-851. <https://doi.org/10.1177/1077800410383121>
23
24 25 18 Patton MQ. Enhancing the quality and credibility of qualitative analysis. *Health Serv Res*
26 1999;34:1189-1208.
27
28 29 19 Wen CK, Hudak, PL, Hwang SW. Homeless people’s perceptions of welcomeness and
30 unwelcomeness in healthcare encounters. *J Gen Intern Med* 2007;22:1011-1017.
31
32 33 20 Bouchelle Z, Rawlins Y, Hill C, Bennet J, Perez LX, Oriol N. Preventative health, diversity,
34 and inclusion: a qualitative study of client experience aboard a mobile health clinic in Boston,
35 Massachusetts. *Int J Equity Health* 2007;16:191. <https://doi.org/10.1186/s12939-017-0688-6>
36
37 38 21 Kalich A, Heinemann L, Ghahari SA. Scoping review of immigrant experience of health care
39 access barriers in Canada. *J Immigr Minor Health* 2016;18:697-709.
40 <https://doi.org/10.1007/s10903-015-0237-6>
41
42 43 22 Ramsay N, Hossain R, Moore M, Milo M, Brown A. Health care while homeless: barriers,
44 facilitators, and the lived experiences of homeless individuals accessing health care in a
45 Canadian regional municipality. *Qual Health Res* 2019;29(13):1839-1849.
46 <https://doi.org/10.1177/1049732319829434>
47
48 49 23 Monchalín, R, Smylie J, Nowgesic E. “I Guess I Shouldn’t Come Back Here”: racism and
50 discrimination as a barrier to accessing health and social services for urban Métis women in
51 Toronto, Canada. *J Racial Ethn Health Disparities* 2019;7(2)251-261.
52 <https://doi.org/10.1007/s40615-019-00653-1>
53
54 55 24 McKeary M, Newbold, B. Barriers to care: the challenges for Canadian refugees and their
56 health care providers. *J Refug Stud* 2010;23(4):523-545. <https://doi.org/10.1093/jrs/feq038>
57
58
59
60

25 Loignon C, Hudon C, Goulet É, Boyer S, De Laat M, Fournier N, Grabovschi C, Bush P. Perceived barriers to healthcare for persons living in poverty in Quebec, Canada: the EQUIhealThY project. *Int J Equity Health* 2015;14(1):1-11. <https://doi.org/10.1186/s12939-015-0135-5>

26 Campbell DJ, O'Neill BG, Gibson K, Thurston WE. Primary healthcare needs and barriers to care among Calgary's homeless populations. *BMC Fam Pract* 2015;16:1-10. <https://doi.org/10.1186/s12875-015-0361-3>

27 Darling EK, MacDonald T, Nussey L, Murray-Davis B, Vanstone M. Making midwifery services accessible to people of low SES: a qualitative descriptive study of the barriers faced by midwives in Ontario. *Can J Midwif Res Pr* 2020;19(2):1-13.

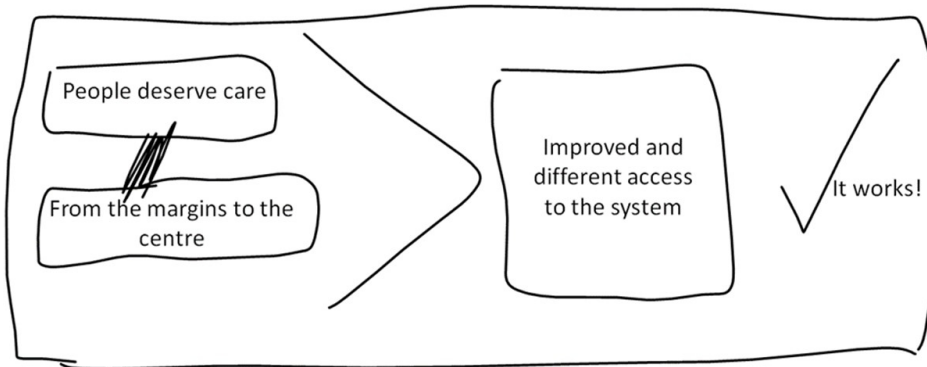
28 Stuart H, Chen SP, Christie R, Dobson K, Kirsh B, Knaak S, Koller M, Krupa T, Lauria-Horner B, Luong D, Modgill G. Opening minds in Canada: targeting change. *Can J Psychiatry* 2014;59(suppl):13-18. <https://doi.org/10.1177/070674371405901S05>

29 Stuart H. Managing the stigma of opioid use. *Healthcare Management Forum* 2019;32(2):78-83. <https://doi.org/10.1177/0840470418798658>

30 Ungar T, Knaak S, Szeto AC. Theoretical and practical considerations for combating mental illness stigma in health care. *Community Ment Health J* 2016;52(3):262-71. <https://doi.org/10.1007/s10597-015-9910-4>

FIGURE LEGEND

Thematic map



Note. It's so simple

Thematic map

338x190mm (96 x 96 DPI)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Supplementary File. Interview guide

1. How would you describe your experiences with HAMSMaRT so far?
 - a. How did you first encounter the program?
 - b. How do you think HAMSMaRT's services could be improved?
 - i. Was there a specific time when HAMSMaRT didn't meet your needs?
 - c. What is it about HAMSMaRT that you feel would be good to apply in other similar programs?
2. Can you tell me about any experiences when you felt like you got good quality care?
 - a. What changes would you like to see in the healthcare system to better serve your needs?
 - b. How do you know when you've received good quality care? Some people say it's a feeling they get or it's their physical health that's improved – what is it for you?
3. Based on your experiences, what was a time when you received poor quality health care?
 - a. How do you know when you've received poor quality care? Is it a feeling, a change in your physical health, or something else?
 - b. Have there been times when you weren't treated well? If so, what happened that made you feel that way?
 - c. Have you ever experienced stigma while getting care? If so, how did it affect the care you received?
 - d. Why do you think you received poor care?
4. What barriers have you experienced in accessing health care?
 - a. What was the effect of those barriers on your ability to get care?
 - b. How could your access to health care have been improved?
5. In general, what qualities do you hope for in a doctor?
 - a. How do you like to make decisions with your doctor?
 - b. What are the most important things to you to have a good relationship with your doctor?
 - c. What kind of relationship do you like to have with your doctor?
 - d. What training do you think docs/HC providers are missing to provide better care?

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

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	5
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	4-5
3. Occupation	What was their occupation at the time of the study?	4-5
4. Gender	Was the researcher male or female?	4-5
5. Experience and training	What experience or training did the researcher have?	4-5
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	5-6
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	6
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	4-5
Domain 2: study design		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	6
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	5
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	5
12. Sample size	How many participants were in the study?	6
13. Non-participation	How many people refused to participate or dropped out? Reasons?	6
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	5-6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	5

16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	6
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Supplemental file
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	No, no follow-up was deemed necessary
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	5
20. Field notes	Were field notes made during and/or after the interview or focus group?	No, we did not use this strategy to foster rigor, but used others
21. Duration	What was the duration of the inter views or focus group?	6
22. Data saturation	Was data saturation discussed?	5
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, we did not use this strategy to foster rigor, but used others.
Domain 3: analysis and findings		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	5-6
25. Description of the coding tree	Did authors provide a description of the coding tree?	6
26. Derivation of themes	Were themes identified in advance or derived from the data?	5
27. Software	What software, if applicable, was used to manage the data?	Not applicable
28. Participant checking	Did participants provide feedback on the findings?	No, we did not use this strategy to foster rigor, but used others.
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	6-13
30. Data and findings consistent	Was there consistency between the data presented and the findings?	6-13
31. Clarity of major themes	Were major themes clearly presented in the findings?	6-13
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Not applicable; did not emerge in our analysis

BMJ Open

“It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a mobile health clinic in Hamilton, Ontario, Canada

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-066674.R2
Article Type:	Original research
Date Submitted by the Author:	17-Feb-2023
Complete List of Authors:	Nussey, Lisa; McMaster University, Midwifery Research Centre Lamarche, Larkin; York University, School of Kinesiology & Health Science O'Shea, Tim; McMaster University, Department of Medicine
Primary Subject Heading:	Patient-centred medicine
Secondary Subject Heading:	Qualitative research
Keywords:	Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, PRIMARY CARE, QUALITATIVE RESEARCH

SCHOLARONE™
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1
2
3 “It’s so simple!” Lessons from the margins: A qualitative study of patient experiences of a
4 mobile health clinic in Hamilton, Ontario, Canada
5

6
7 Lisa Nussey¹, Larkin Lamarche^{2*}, Tim O’Shea³
8

9 ¹Midwifery Research Centre, McMaster University, Hamilton, Canada

10 ²School of Kinesiology and Health Science, York University, Toronto, Canada

11 ³Department of Medicine, McMaster University, Hamilton, Canada
12

13 *Corresponding author

14 Larkin Lamarche

15 School of Kinesiology and Health Science

16 York University

17 4700 Keele Street Toronto, ON Canada M3J 1P3

18 lamarche@yorku.ca

19 416-736-2100 x77056
20
21

22
23 **Keywords:** mobile health care clinics, qualitative research, under-served, homeless, people
24 deprived of housing, patient-centred care
25

26 **Word Count:** 6100
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Objective: Our study explored the experiences of clients of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile health service, in the context of their experiences of the overall healthcare system. **Design:** We conducted a qualitative study with reflexive thematic analysis. **Setting:** HAMSMaRT is a mobile health service in Hamilton, Ontario Canada 'providing primary care, internal medicine and infectious diseases services. **Participants:** Eligible participants were clients of HAMSMaRT who could understand English to do the interview and at least 16 years of age. Fourteen clients of HAMSMaRT were interviewed. **Results:** Our findings represented five themes. When the themes of *people deserve care, from the margins to the centre*, and *improved and different access to the system* are enacted, the model of care works, represented by the theme *it works!*. The way in which participants compared their experiences of HAMSMaRT to the mainstream healthcare system insinuated how simple it is, represented by the theme *it's so simple*. **Conclusions:** Our findings offer guidance to the broader healthcare system for walking from the rhetoric to practice of person-centred care.

Keywords: mobile health care clinics, qualitative research, under-served, homeless, people deprived of housing, patient-centred care

Strengths and limitation of this study

- Adds to the small body of existing health service literature that represents and centres the client perspectives of a mobile health service
- Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach
- Group of participants who were involved with one type of mobile health clinic interviewed
- Constitution and size of sample preclude an intersectionality approach

INTRODUCTION

Despite a model of *universal* health care in Canada, provider-centred health services create physical and logistic barriers to access.¹ It has also been well documented that barriers to health care for patients who are deprived of housing and/or who use drugs are exacerbated by stigma, structural violence, and a lack of cultural safety in the healthcare setting, leading to poor health outcomes including inadequate withdrawal management, inadequate treatment of pain, premature discharges, and avoidance of medical care altogether.²⁻⁴

Mobile health services offer a particularly crucial supplement to other sources of health care for patients who are deprived of housing and who are not well served by the status quo model of medical care delivery.^{1,5} They have been shown to be effective in meeting the health needs of (health) equity-deserving populations by providing services directly in patients' own environment, decreasing geographic/logistic barriers to accessing mainstream health care services. Additionally, mobile services have been shown to foster trusting patient-provider relationships, and the ability to better address the social determinants of health through connecting patients to wider community resources.⁶ Mobile health services have also been shown to decrease health care costs, by helping to avoid unnecessary emergency department visits and hospital admissions.^{6,7}

A review of published literature on the scope and impact of mobile health clinics in the United States,⁶ and grey literature,^{8,9} demonstrates that mounting evidence of the effectiveness of mobile health clinics is largely quantitative. Some scholars⁶ have called for future research to explore the strengths of mobile health clinics versus traditional care models from the client perspective. In addition, research of mobile health clinics is scarce for people who are deprived of housing. One qualitative study in Toronto showed that mobile health programs can provide convenient, non-judgmental care for homeless patients who are poorly served by the mainstream medical system.¹ Thus, the aim of this study is to explore client experiences of HAMSMaRT (Hamilton Social Medicine Response Team), a mobile, physician-led service, in the context of their access to and quality of care within the overall healthcare system. Our research question was, what is the patient experience of HAMSMaRT as part of their overall experience within the healthcare system?

STUDY SETTING

The study reported here is part of a larger study which aimed to create an evaluation tool for mobile outreach clinics, via a clinician-centred Delphi consensus process and patient-generated quality of care indicators. Results of the larger study will be reported elsewhere.

Broader local context

Our study took place in Hamilton Ontario, an urban setting with an overall population of 776,000 people. At the time of the data collection, a number of health care services in Hamilton (e.g., Shelter Health Network, Refuge Centre for Newcomer Health, North Hamilton and Urban Core Community Health Centres, etc.) were mandated to serve equity-deserving populations. These services, however, are almost exclusively provided in a fixed, office environment where patients must travel to the provider, at specified appointment or drop-in times, for necessary medical care, while some clinics are co-located with existing social services (e.g., shelters, drop-ins). There are a handful of clinical outreach services which provide nursing or midwifery care, but

1
2
3 few offer primary/physician care. The landscape has shifted marginally since and during
4 COVID, but by and large, primary care for our study population is provided in a clinic setting.
5

6 **Description of HAMSMaRT⁺**

7 The Hamilton Social Medicine Response Team was founded in 2016 by two internal medicine
8 physicians as a simple, ethical, intervention to support their patients in accessing much needed,
9 but often not received, health care. The HAMSMaRT model was born of genuine listening and
10 responding to patient concerns and desires about, and for, their own health and healthcare.
11 HAMSMaRT is a mobile, interdisciplinary service that strives to provide care to individuals who
12 otherwise have difficulty accessing care in the mainstream system, at a location where they are
13 most comfortable. Patients, broadly speaking, are deprived of housing and are either
14 unhoused/precariously housed, or unable to leave their homes primarily due to mobility
15 difficulties. HAMSMaRT aimed to provide care where patients were most comfortable receiving
16 it, for example in their homes, shelter spaces, coffee shops and park benches. At the time of data
17 collection, HAMSMaRT had a patient base of 200 individuals. HAMSMaRT works toward
18 bridging the gap between the community and hospital services, establishing close relationships
19 and formal partnerships with clinical programs and community organizations serving equity-
20 deserving people in Hamilton.
21
22
23
24

25 **METHODS**

26 We used a qualitative study design. We chose a qualitative study so that we could explore
27 perspectives of the people who use HAMSMaRT and capture the nuances of the patient
28 experience with HAMSMaRT. One-on-one semi-structured interviews were conducted. The
29 interviews took place between April of 2018 to May of 2019.
30

31 **Patient and Public Involvement**

32 No patient or public involved in methodology development.
33
34

35 **Participants**

36 All participants were patients of HAMSMaRT, which meant they lived in Hamilton, Ontario and
37 struggled to access care through conventional modes. Participants for this study also had to be at
38 least 16 years of age and understand English enough to engage with the interviewer. Participants
39 were purposefully sampled^{10,11} by the third author from his patient roster.
40
41

42 **Research team**

43 The research team consisted of 3 people. The team was a mix of clinicians and researchers
44 involved with HAMSMaRT and working within addiction medicine. All authors endorsed a
45 harm reduction approach to addiction and clinical care more broadly. At the time of the study,
46 the third author was an infectious disease specialist with expertise in addiction medicine and
47 low-barrier care for people who use drugs. He was a co-founder of HAMSMaRT. The first
48 author was a registered midwife completing her masters in Health Research Methods. People
49 accessing HAMSMaRT can have a distrust with healthcare providers and the healthcare system;
50
51
52

53 + Since the time of data collection in 2018-19, fuelled by the COVID pandemic, HAMSMaRT has undergone
54 significant expansion and formalization of its programming. It continues to operate from its founding ethic of
55 providing the care that people need where they need it. For more on HAMSMaRT's current programming,
56 interdisciplinary model and organizational principles, please see hamsmart.ca.
57
58
59
60

1
2
3 however, she had experience working with people who used HAMSMaRT, thus had the
4 knowledge and rapport to conduct the interviews. Also, her training in interviewing and
5 qualitative methods has been grounded in sensitive topics. Since the time of the study, she has
6 taken on a larger leadership role in HAMSMaRT. The second author was a research associate
7 with over 15 years of research experience and seven years of research experience in primary
8 care. Two medical students were also involved in the project. Their role was to assist with data
9 collection. They were not involved in analysis or report write-up. The first author was
10 responsible for consistency between interviewers in terms of following the interview guide.
11
12

13 **Interview guide**

14 The interview questions and probes centred on the concept of quality of care, that is, what
15 qualities of HAMSMaRT were characteristic of good health care. To contextualize HAMSMaRT
16 within the broader (and mainstream) healthcare system, we also included questions about the
17 quality of care in the mainstream healthcare system. To understand ways to improve
18 HAMSMaRT, we included questions to explore any negative experiences and probed for ways to
19 improve the service. The third author and a medical resident developed the interview guide. No
20 substantial changes were made after the first interview, or at other times during data collection.
21 See the Supplementary file for the interview guide.
22
23
24

25 **Procedure**

26 Upon university research ethics board approval (Hamilton-integrated Research Ethics Board
27 Project #4500), participants were recruited. The third author recruited potential participants by
28 inviting them (face-to-face). Participants were clearly informed that deciding not to participate in
29 the study would not impact their care from HAMSMaRT. Interviews were conducted mostly by
30 the first author in person, one-on-one, in the setting of the participant's choice including in
31 hospital, in the participant's home or shelter or a coffee shop. The interviews were audio
32 recorded. Data collection was stopped when it was deemed by this first author that the richness
33 of the information was sufficient to answer the research question¹². Participants were
34 compensated for their time with a \$50 gift card upon completion of the interview.
35
36
37

38 **Data analysis**

39 Audio recordings were intelligently and professionally transcribed. Pseudonyms were given to
40 each participant and transcripts were de-identified. A reflexive thematic data analysis was
41 employed.^{13,14} We followed the six steps of thematic analysis. Specifically, we read and re-read
42 the transcripts as well as re-listened to the audio-recordings to familiarize ourselves with the
43 data. The first author generated initial codes through inductive coding grounded in the data. She
44 then grouped codes together to make initial themes. The first and second authors reviewed
45 potential themes by checking them against the data. We did this for each candidate theme and
46 also across themes so as to review the potential viability of the entire story in the data. In team
47 meetings we also defined and named themes. This phase involved staying true to the data while
48 engaging with concepts from practice and research in this population. It was during this
49 discussion that one allusive theme (*it's so simple*) crystallized. Finally, we produced a report that
50 included a final thematic map. The thematic map was refined throughout the process. For
51 example, team discussion took place to reflect on if, and how, the themes related to one another
52 within the data. We reflected with our diverse experiences and historical knowledge developed
53
54
55
56
57
58
59
60

working with people deprived of housing. This discussion led to *how* the final thematic looks and therefore represents the data and overall story. Data collection and analysis was concurrent.

The analysis was grounded in a pragmatic framework¹⁵ thus, rigour is driven by the research question. Since we wanted to explore participants' experiences with HAMSMaRT within the context of their experiences with the mainstream healthcare system, we used an interpretive approach to analysis. Authenticity, credibility, and trustworthiness of the data were upheld to foster quality of our approach.^{16, 17} We display direct quotations from participants in the results (authenticity). Participants who were served directly by HAMSMaRT comprised the sample so as to gather information about experiences of this model of care. Also, participants had experiences with the mainstream healthcare system (e.g., emergency departments, hospitals, primary and specialist care) which meant they were able to articulate perceived differences and similarities between both models of care. Being able to speak about both models of care was important to the research question (credibility). We also use thick descriptions to contextualize our sample and local setting (credibility). Finally, the initial theme development was discussed and challenged (trustworthiness) among the authors whereby the team's different clinical, community and research perspectives strengthened analysis¹⁸ and led to the final thematic map.

RESULTS

A total of 14 people participated. There were no dropouts or refusals to participate. Interviews lasted between 45 and 90 minutes. Sixty-four percent of participants were female, and the average age was 48 years at time of interview (range 25-69). Primary medical diagnoses included HIV, Hepatitis C, chronic obstructive pulmonary disease, congestive heart failure, diabetes, opioid use disorder and alcohol use disorder. Sixty-four percent reported active substance use. Most of these conditions were complicated and compounded by the patients' living conditions, broadly speaking, either of being housebound (35%) or unhoused/precariously housed (65%).

Participants drew on their experiences with HAMSMaRT and a broad range of experiences within the mainstream healthcare system. It was through a juxtaposition of HAMSMaRT experiences to experiences with the mainstream healthcare system that a total of five themes were developed. These themes included: *people deserve care, from the margins to the centre, improved and different access to the system, it works!* and *it's so simple*.

Thematic map overview

As shown in Figure 1, the first two themes, *People deserve care* and *from the margins to the centre* are tethered to one another. The third theme (*improved and different access to the system*) can only be realized when the theme *people deserve care* and *from the margins to the centre* are enacted. These three themes *people deserve care, from the margins to the centre, and improved and different access to the system* describe how HAMSMaRT was associated with higher patient satisfaction, engagement and ultimately better outcomes (*it works!*). The fifth theme is represented by the thematic map frame, containing the ethic (people deserve care, from the margins to the centre) the mechanism, (improved and different access to the system) and the improved outcomes (*it works!*) described by participants. The final thematic map was also hand-drawn to symbolize the fifth theme, *it's so simple*.

People deserve care

This theme represents the basic notion that patients of the healthcare system are human and deserving of dignity and respect by virtue of that fact alone. The theme *people deserve care* signals a recognition on the part of its patients of this founding ethic of HAMSMaRT.

People deserve care came to life in contradistinction to participant's experiences of the mainstream healthcare system that left them feeling they "did this to themselves" and thus did not deserve help and that care providers had more important people to serve. These interactions were lathered with judgment, blame, and insensitivity. One participant:

The things that [the healthcare provider] had said to me, he said that I had done this to myself because of the choices that I've made [crying] in my life, that I was a horrible person, and then [my partner] just told him that he could basically go to hell, and she took me out and we left [crying] (Gail)

Participants repeatedly, reliably, and in great detail described dehumanizing and harmful exchanges that deterred them from seeking healthcare. Because of their treatment at the hands of the healthcare system, patients we interviewed both recognized and struggled to remember that they were 'more than a junkie' and not 'a child' or 'a number':

Because it does make me feel worthless to have to go somewhere where I know I'm not going to be welcome for one, treated properly for another, and even care if I live or die sometimes I feel. You know? Sometimes I feel that there are some people in healthcare that think a dead junkie is a better junkie. You know? I really feel that there are people that feel that way. And that's sad. We are all human beings and we all have value. (Gabriel)

Another participant talked about prioritization by social status in mainstream healthcare provision, insinuating that some people are more important than others:

But I find in the general healthcare system, they classify people. First off, and they really classify you if you have more than one or two strikes that are different, i.e. if you are on ODSP [Ontario Disability Support Program], addicted to opiates, a bit of an alcoholic, things like that, they are saying oh well, [...]let's get to the important people first and then we will get to him. (Demarcus)

Conversely, interactions between HAMSMaRT and participants were characterized by feelings of being treated as a human being with (equal) value. They described being engaged with respect, dignity, honesty, and genuine care. One participant described their experience with HAMSMaRT:

There's not another doctor that I've ever met that will go to the lengths that HAMSMaRT does to try to save the people at the bottom of the rungs in society. And there are some people in the bottom of the rungs that have real value, that have real things to offer society. And that's what most people don't realize. We're not all pieces of crap. We're not all looking to hurt people and take from society. We ended up there through one situation or another, you know? We all have our own stories to tell about how we ended

1
2
3 up there. But I have met so many addicts in my experience that have bigger hearts than
4 anybody I've ever met. And have more to offer society than a lot of people. If only
5 someone showed them that they had value. If only someone cared for them, because
6 they're dying out there. People who, if they really felt that somebody cared, that
7 somebody was there for them, you know, it would make such a difference. And I think
8 that's where HAMSMaRT comes in. (Gabriel)
9

10
11 Patients repeatedly described that working with providers who saw them as deserving affirmed
12 or unearthed a belief in themselves that provided them with the will to keep going and to try to
13 heal:
14

15 I finally started advocating for myself. I was tired. I lost everything. And then I didn't see
16 anybody offer me a way out. So I just thought more of the status quo. And so when you
17 have people, like those doctors, [the HAMSMaRT doctor], I came out of the hospital the
18 last time feeling like I have a plan with hope again. (Greta)
19
20

21 This humanizing approach to care, explicitly driven by the ethic that *people deserve care* was
22 described as a way in which the patient was taken from the margins to the centre of their own
23 care.
24

25 26 **From the margins to the centre**

27 This theme represents the participants' transformative experience of moving from the mainstream
28 system's heretofore unrealized tenet of patient-centred care into a concrete practice of being the
29 focus of their own care. This theme represents qualities of patient-centred and patient-focused
30 care that are baked into HAMSMaRT and tethered to the previous theme (*people deserve care*).
31

32
33 While patient-centred care was recognized by participants as a rhetorical hallmark of the Ontario
34 and Canadian mainstream healthcare systems writ large, it rarely characterized their experiences
35 when accessing care. Over and over, participants described a throughline of their experiences as
36 being judged, ignored, disregarded, discounted, excluded and silenced, in both hospital- and
37 office-based care settings. Rowan summarized their experience:
38

39 They just think that you can't do things. But the thing is that I can do a lot. I can't do
40 everything. But I was in control of my own life and then other people were treating me
41 like a child. And that's the way I felt at the doctors. I was being treated like a child.
42 (Rowan)
43
44

45 Participants, often quite generously, attributed this decentering and patronizing behaviour on the
46 part of providers to several organizational issues in the healthcare system, including heavy
47 patient loads and provider fatigue. They primarily experienced it however, as a powerplay that
48 elevated the physician at their own expense. Greta said:
49

50
51 And I lost all trust in doctors. I lost all hope that I had. Not because they couldn't be good
52 doctors, but it's...I'm the hero in this story too. You know what I mean? But they played
53 God. (Greta)
54
55
56
57
58
59
60

1
2
3 Participants repeatedly asserted that healthcare providers didn't have a monopoly on health
4 knowledge:
5

6 Just because we don't have a medical license, doesn't mean we don't know what's going
7 on with our own bodies. We're the first person who knows what's going on with us.
8 (Freya)
9

10
11 Centering the patient meant dissolving the well ingrained provider-patient (knowledge)
12 hierarchy; recognizing and acting on the intelligence and experiential expertise that the patient
13 brought to the table when making decisions about care. When this expertise is listened to,
14 appreciated and worked with, shared decision making is realized. True to power-sharing is the
15 notion that the provider and patient were equal in the relationship:
16

17 [The HAMSMaRT doctor] doesn't act like he's saving me, and that's a huge difference,
18 because I get to be a person and I get to be an expert on my own care. And so we can
19 work together. And to me that is what I lost with everybody else. (Greta)
20
21

22 This kind of power sharing depends on provider affirmation of patient autonomy. Genuine
23 respect for patient autonomy was experienced by patients as being listened to and believed.
24 Believing and centering patients as experts in their own health experiences led to a bi-directional
25 cycle of truth and trust previously unenjoyed. This power sharing enhanced the provider's ability
26 to help and the patient's ability to heal. Greta continued:
27
28

29 If I didn't have this...because as I said, I had lost all hope, all belief. I thought there
30 wasn't any hope. So when I finally had people working for me, then it felt
31 like...somebody is working with me and I will work with them. Yeah! We have hope
32 now that I can get out of this mess. And I can have a future. (Greta)
33

34 These mutually reinforcing orientations to patient care of deserving and centering allowed for
35 new and different access to care systems to which patients were at best, reticent about and at
36 worst, deliberately avoiding.
37
38

39 **Improved and different access to the system**

40 This theme describes the well-known ways in which mobile, flexible, on call, health services are
41 necessary to increase access to care. Importantly, however, the theme also elucidates how the
42 HAMSMaRT model provides *improved and different* access to the wider healthcare system.
43
44

45 For all of the participants, logistical barriers to accessing care in the mainstream system were a
46 major roadblock to improving their health. Patients described inaccessible offices, inflexible
47 hours, difficulties navigating the system and complex and competing priorities in a provider-
48 centred system that refused to recognize or address all of the barriers it erected:
49

50 And I tried explaining it to them over the phone. I said 'I can't get out. I'm housebound.'
51 'Oh well, you have to come down and get these.' And I said, 'you want me to come all
52 the way down just to pick up papers? It's not to see a doctor?' And she said 'yeah.'
53 (Rowan)
54
55
56
57
58
59
60

1
2
3 Unsurprisingly, participants were extremely appreciative of HAMSMaRT's outreach model,
4 which included ready access to physician support by phone, home/out of office visits and
5 flexible scheduling. These "above and beyond" measures were viewed as a tangible enactment of
6 the two previous themes:
7

8
9 It helps because like I already said, it makes you feel important. It makes you feel special
10 for one. So right away, you feel part of and willing to go and do whatever is required to
11 go that extra mile to help these people, because they are coming all the way to my house.
12 I'll certainly do what I can to help. If they're going to help me like this, then I'll help
13 them help me. (Charlie)
14

15 Improved and different access, sometimes translated into less unnecessary use of health systems.
16 Patients described the ways in which access to HAMSMaRT services meant they could stay out
17 of the resource intensive emergency room, where previously (though they didn't want to) they
18 had no choice but to go for care:
19

20
21 It's incredible to have a doctor care for you and you can just text him and he's like OK,
22 he calls the pharmacy. Or OK, I've got this going for you. Like [what happens when you
23 start to develop an infection] Friday at 5 o'clock? Like go to the ER. And then you go
24 through the whole process all over again. But if you have a doctor on hand like [the
25 HAMSMaRT doctor], there's so many times when I've just called him and he's like, OK,
26 I'm putting in something, a [prescription] or something like that. He's saved me so many
27 times from having to go to the ER. (Nola)
28
29

30
31 Just as patients were moved by HAMSMaRT providers' decisions not to leverage their power
32 against them, they were compelled by the way HAMSMaRT providers wielded their power *for*
33 them; and sometimes miffed that it worked! In several instances, participants described scenarios
34 that took the HAMSMaRT doctor's power as physician to communicate the patient's expertise,
35 which led to care access:
36

37
38 And all I called was [the HAMSMaRT doctor] and he called the [emergency room]
39 doctor and boom I was in. It was...in a way it was frustrating, but in a way I was so
40 relieved, you know? It was like a double-edged sword. It was like you fucking bastards.
41 Pardon my language. But really that's what I thought. You bastards. Like this is my third
42 visit in a week and all it took was one call from [the HAMSMaRT doctor]. OK, this
43 patient has this, this, this, which I told them I had, which I told them I thought I had. And
44 he repeated every single thing I said, probably to the tee and they listened to him and not
45 to me. You know what I mean? That's not fair, you know? And I even said to him, what
46 did you say to them? And he said, 'pretty much what you said.' He's like, 'yeah I know,
47 it's OK. One problem at a time Freya', that's what he said, 'one problem at a time.'
48 (Freya)
49

50
51 Importantly, this improved and different access also meant that patients who had previously
52 struggled to stay in the hospital (for the maltreatment they had become so accustomed to) now
53 could. This participant shared how their involvement with HAMSMaRT changed their access to
54 the mainstream healthcare system:
55
56
57
58
59
60

1
2
3 In hospitals, I've always been treated differently than other patients because I have an
4 addiction. And I don't think it's fair that I should be left to suffer in pain. I have pain
5 issues and significant pain issues that are well documented and all verified through
6 imaging and things like that. And since I've been dealing with HAMSMaRT [...], when
7 I'm in the hospital, I feel like I'm treated differently now, right? Because [the
8 HAMSMaRT doctor] always has some involvement in my care [...]. So when it comes to
9 my pain issues and things like that, they try their best to deal with it. And I've never felt
10 like any healthcare institution has ever tried their best on my behalf. And I feel that now.
11 And I truly believe it's because of the involvement of HAMSMaRT. (Gabriel)

12
13
14 Finally, some participants described a renewed trust in possibilities of healthcare, stemming from
15 the advocacy efforts of HAMSMaRT:

16
17
18 Well working with [the HAMSMaRT doctor] made me come to terms of learning to trust
19 doctors more than what I did, because I never really had any doctors that I wanted to see.
20 If I was sick I dealt with it. And then something like this happens. So for that year that I
21 had the infection, it was like I'm going to conquer this, I'm going to kill it. No two ways
22 about it. Nobody is taking my leg or whatever. And then it so happens that the inevitable
23 happens. Maybe I should listen to doctors a lot more. For me that's my learning
24 experience. Now I kind of have to trust doctors and nurses more. If they say well maybe
25 you should do this, then that's what I'm going to do. (Marlow)

26
27
28 These tangible and behind the scenes strategies alike were described by participants as helping
29 them access care, leading to improvement in health, i.e. it worked!

30 31 **It works!**

32 For many people accessing a publicly funded healthcare system, the answer to the question of
33 "how do you know you got good care?" takes for granted that, to the extent possible, the
34 healthcare improved the person's health. Participant responses to this question were simple,
35 humble and profound. Their responses spoke to how, when the three themes are brought to life,
36 the model of care (i.e., HAMSMaRT) works. Startlingly, participants described having health
37 improvements as the way they knew they were getting good care:

38
39
40 Just seeing results, seeing the results of me getting better is proof in itself that I know that
41 what they are doing is working. (Isla)

42
43
44 Freya also felt "better" since being involved with HAMSMaRT. Demarcus told us:

45
46
47 There is no doubt. 100%. Because it was constant care. Difference in between waiting
48 until I got sick and then going, then acting or reacting to that. As opposed to acting and
49 the outcome being instead gratifying. Yeah. I felt much more at ease knowing that I could
50 talk to him and be pointed in the right direction. (Demarcus)

51
52
53 Again, participants drew conclusions about their success with HAMSMaRT by drawing on, and
54 comparing to, their experiences with the provider-centred health care system:

1
2
3 And you know, I had lost 100lbs since [major life event]. Since I've actually been getting
4 what I think is quality healthcare, I've gained 45 of that back. Even though I was still
5 using, I've had people say wow you look better than you've looked since [that major life
6 event]. And I even feel it. I feel better. I look better. I'm more engaged in life. I care more
7 about my life now. So those are the things that I think prove to me that my healthcare is
8 better now than it was before. (Gabriel)
9

10
11 Participants spoke about hope and engagement in life as outcomes of their involvement with
12 HAMSMaRT. Rowan described the profound impact of the simplicity of the HAMSMaRT
13 approach:
14

15
16 And [the HAMSMaRT doctor] came down and talked to me about stuff, and I [...]
17 actually had given up on living. And he sat and talked to me, and said don't give up.
18 Let's try this, we'll do this, we'll work on this. And he was giving me all these other
19 ideas where when my family doctor dropped me and my liver doctor wasn't doing her job
20 properly, I had just given up. I just wanted to curl up and die. And he got me back into
21 wanting to fight to live. So that's why I'm still here. (Rowan)
22

23
24 Some participants expressed optimism that HAMSMaRT could lead to change in the system
25 through replication and scaling up:
26

27
28 It's amazing. You guys are doing something...I don't know what the word is for it. Like
29 um...ground changing, or groundbreaking. Really. If more people can have this, it's
30 going to change the way they feel about doctors and medicine. You guys really helped
31 me. (Freya)
32

33
34 There was even a glimpse of restored faith in the possibility of healthcare that heals - "I actually
35 believe now in care [...] and I just love not being sick anymore." (Isla)
36

37
38 In an increasingly technocratic, regimented and strained healthcare system it's impossible to miss
39 the simplicity of what patients have here described as setting their experiences apart from those
40 of the larger healthcare system.

41 **It's so simple**

42
43 There was a tone to the interviews that speaks to the simplicity of what participants viewed as
44 requisite to a healing process. One keen and insightful participant summed it up very succinctly:
45

46
47 It really is [that simple] and I don't see why it seems so hard sometimes in the hospitals.
48 Just treat a person as a person. That's the biggest thing that could be adopted from
49 HAMSMaRT to the healthcare system overall. (Gabriel)
50

51
52 Isla brought this theme of simplicity into stark reveal describing her perception of a shift in her
53 care since working with HAMSMaRT. She said that it was the likelihood that she wouldn't be
54 treated "like shit" that enabled her to seek the care she needed. It doesn't get much simpler than
55 that.
56
57
58
59
60

1
2
3 For our team, many of the strategies participants described are things we already know improve
4 access and quality of care. One participant with extensive experience as an inpatient described a
5 small interaction that stood out from all her time spent in hospital:
6

7
8 I moved to the B wing after the E wing, and the nurse came in and I expected something.
9 So I was like, oh, did you need me to sign something or did you need something? She
10 goes, no I'm just coming to say hi and tell you that I'm your nurse and my name is so-
11 and-so. And she left. And I was like holy crap. That was like...that made me feel so good
12 and it was 2 seconds...I think that's what makes it so frustrating, is that there is not much
13 to it. (Nola)
14

15
16 Here a two second interaction made the difference. Simple.
17

18 DISCUSSION

19 Our study explored the experiences of people involved in HAMSMaRT in the context of their
20 access to and quality of care within the overall healthcare system. Our findings provide evidence
21 that HAMSMaRT brings to life the principles that people deserve care and should be at the
22 centre of it, leading to improved and different access to the system. When these three things are
23 enacted, the model of care (HAMSMaRT) works. The profundity and simplicity of what patients
24 described as quality care as realized through HAMSMaRT, and how elusive it was in the
25 mainstream healthcare system, should give us all pause as health providers.
26

27
28 Our findings corroborate those of Wen and colleagues¹⁹ exploration of the dehumanization of
29 people experiencing homelessness by the healthcare system. They frame patient experiences as
30 welcoming versus unwelcoming, noting that the latter's stigmatizing ethic, like in our findings of
31 patient experiences in the mainstream health system, leads to system aversion. Our findings also
32 parallel those of Bouchelle et al.'s²⁰ exploration of the experiences of medically vulnerable
33 people accessing a mobile health van in Boston. Bouchelle et al. found that in addition to
34 accessible communication styles, a diverse and knowledgeable workforce, and conveniently
35 located services, a culture of respect and dignity aboard the outreach clinic was central in
36 facilitating access to service.
37

38
39 Our findings also contribute to the growing evidence that mobile health clinics are effective in
40 improving health outcomes of equity deserving people.^{6,8,9} They further contribute to the small
41 body of qualitative evidence for the effectiveness of mobile health clinics that serve people who
42 are deprived of housing.³ While recent qualitative work^{1,19,20} explored why people use a mobile
43 health clinic (accessing basic necessities, convenience, friendly atmosphere), our findings probe
44 *what* it is about the model that works. Our findings describe the nuances of quality care and help
45 to elucidate the *what* and the *how* behind the quantitative evidence of the effectiveness of mobile
46 health clinics. In essence, our findings flesh out and affirm Wen et al.'s¹⁹ suggestion that "the
47 provision of effective care may be tied to the ability to create a welcoming environment."
48
49

50
51 Research about care of equity deserving populations primarily directs its gaze at either the
52 patients of, or providers to, the population in question. The sizable body of work around patient
53 barriers to and experiences of health care is congruent with our findings that stigma and
54 discrimination are major deterrents to care and barriers to improved health outcomes.²¹⁻²³ There
55
56
57
58
59

1
2
3 is a smaller body of work on the experiences of providers caring for equity deserving populations
4 which enumerates the difficulties of providing welcoming, high-quality care within the confines
5 of the provider-centred health system; these difficulties include providing humanized service in a
6 stigmatizing health care milieu.²⁴⁻²⁷ There are some efforts described in the literature to develop
7 methods for combating the deterring stigmatizing nature of health systems²⁸⁻³⁰; however, there is
8 little work done to excavate what undergirds such stigmatizing care delivery. Our findings and
9 the existing literature demonstrate that there is a disjoint between the widely adopted rhetoric of
10 patient-centred care and the actual practice by a critical mass of providers. Exploring this,
11 perhaps through the perceptions and experiences of providers in the mainstream healthcare
12 system, is an area of study rife with transformational potential.
13
14

15
16 A few caveats should be acknowledged. Our findings come from a group of participants who
17 were involved with one type of mobile health clinic. Although the goal of qualitative research is
18 not to generalize, we provide enough rich description to contextualize both the sample and
19 HAMSMaRT for transferability of our findings to similar contexts. There may be contextual
20 factors like population-level characteristics (e.g., racial or ethnic background, language) or
21 system-wide policies or funding structures that make transferability difficult. Additionally, the
22 constitution and size of our sample precluded us taking intersectional approach to understanding
23 the layered stigma (and multi-stigma), discrimination and racism meted out by the health system.
24 Also missing is the healthcare provider perspective; why might this model work for patients from
25 the viewpoint of the provider?
26
27

28
29 We share these findings, lauding the HAMSMaRT model, with humility and in deference to the
30 brilliance of the patients with whom we work. While we hope that the insights shared by
31 participants will be taken up by others striving to provide better care, we also commit to
32 implementing these findings in our own growing and changing organization. Since the time of
33 data collection in 2018 we continue to bridge the gap between the community and hospital care.
34 We have secured semi-stable funding, expanded and consolidated our services through a formal
35 partnership with a user-led harm reduction group in the city, established a multi-site safer supply
36 program for people using opioids, incorporated psychiatry and primary care into our clinical
37 model and expanded our organizational team. We strive to extrapolate the lessons learned from
38 these descriptions of the one-on-one patient interactions to our own HAMSMaRT “health
39 system”; we take our lead as a healthcare organization from our patients and the community to
40 which we all belong. All of our work begins from the principle that people deserve care that
41 centres them, which allows us to provide improved and different access to healthcare - it works
42 and it is that simple.
43
44

45 46 **CONTRIBUTORSHIP STATEMENT**

47 LN and TO were responsible for research idea conception, methodology planning and participant
48 recruitment. LN was responsible data collection oversight and coding. LN and LL were
49 responsible for data analysis. LN, LL and TO all contributed to data interpretation and were
50 engaged in the reflexive practice in data analysis. LN, LL and TO contributed to report writing
51 and knowledge translation activities.
52
53

54 55 **ACKNOWLEDGEMENTS**

56
57
58
59
60

1
2
3 The authors wish to thank and acknowledge, first and foremost the HAMSMaRT patients and
4 participants who have shared their lives and experiences with us as providers and researchers.
5 We hope that this paper does your ideas and insights justice. We would also like to thank Dr.
6 Sheiry Dhillon for her input into the early phases of the overall project to develop an evaluation
7 tool for mobile outreach clinics. Thank you to Jane Tooley and Jesse Bauman for conducting
8 some of the interviews in this project. Thank you also to Dr. Nicole Buchanan for her
9 contributions to the background research for the project.
10
11

12 **COMPETEING INTERESTS**

13 We have no competing interests or conflicts of interests to declare.
14
15

16 **FUNDING STATEMENT**

17 This work was not funded.
18

19 **DATA SHARING STATEMENT**

20 Deidentified data will be shared upon responsible request by contacting the corresponding
21 author.
22
23

24 **ETHICS APPROVAL**

25 Ethics approval for this project was received through the Hamilton-integrated Research Ethics
26 Board (Project #4500).
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

REFERENCES

- 1 Whelan C, Chambers C, Chan M, Thomas S, Ramos G, Hwang SW. Why do homeless people use a mobile health unit in a country with universal health care?. *J Prim Care Community Health* 2010;1(2):78-82. <https://doi.org/10.1177/2150131910372233>
- 2 Giesbrecht M, Stajduhar KI, Mollison A, Pauly B, Reimer-Kirkham S, McNeil R, Wallace B, Dosani N, Rose C. Hospitals, clinics, and palliative care units: Place-based experiences of formal healthcare settings by people experiencing structural vulnerability at the end-of-life. *Health Place* 2018;53:43-51. <https://doi.org/10.1016/j.healthplace.2018.06.005>
- 3 Harris M. Normalised pain and severe health care delay among people who inject drugs in London: Adapting cultural safety principles to promote care. *Soc Sci Med* 2020;260:113183. <https://doi.org/10.1016/j.socscimed.2020.113183>
- 4 McNeil R, Small W, Wood E, Kerr T. Hospitals as a 'risk environment': an ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Soc Sci Med* 2014;105:59-66. <https://doi.org/10.1016/j.socscimed.2014.01.010>
- 5 Shortt SE, Hwang S, Stuart H, Bedore M, Zurba N, Darling M. Delivering primary care to homeless persons: a policy analysis approach to evaluating the options. *Healthc Policy* 2008;4(1):108.
- 6 Yu SW, Hill C, Ricks ML, Bennet J, Oriol NE. The scope and impact of mobile health clinics in the United States: a literature review. *Int J for Equity Health* 2017;16(1):1-12. <https://doi.org/10.1186/s12939-017-0671-2>
- 7 Oriol NE, Cote PJ, Vavasis AP, Bennet J, DeLorenzo D, Blanc P, Kohane I. Calculating the return on investment of mobile healthcare. *BMC Med* 2009;7(1):1-6.
- 8 Egwu, E. Mobile health clinic as a medium for reducing health disparities in underserved populations. Dissertation Georgia State University 2019. https://scholarworks.gsu.edu/nursing_dnp/projects/15
- 9 Jimenez A. The use of mobile healthcare clinics to expand access to underserved populations: a rapid review. Undergraduate honors thesis Central Washington University 2019 https://digitalcommons.cwu.edu/undergrad_hontheses/14
- 10 Liamputtong, P. *Qualitative Research Methods*, 4th Ed. Melbourne: Oxford University Press 2013.
- 11 Patton MQ. *Qualitative Research and Evaluation Methods*, 3rd Ed. Thousand Oaks, CA: Sage 2002.

- 1
2
3 12 Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful
4 concept for thematic analysis and sample-size rationales. *Qual Res Sport Exer Health* 2019;
5 13:1-16.
6
7
8 13 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psych* 2006;3: 77-101.
9 <https://doi.org/10.1191/1478088706qp063oa>
10
11 14 Braun, V, Clarke, V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exer Health*
12 2019;11(4): 589-597.
13
14
15 15 Morgan DL. Pragmatism as a paradigm for social research. *Qual Inq* 2014;20:1045-1053.
16 <https://doi.org/10.1177/1077800413513733>
17
18 16 Lincoln YS, Guba EG. But is it rigorous? Trustworthiness and authenticity in naturalistic
19 evaluation. *New Dir Eval* 1989; 30:73-84.
20
21
22 17 Tracy SJ. Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qual*
23 *Inq* 2010;16(10): 837-851. <https://doi.org/10.1177/1077800410383121>
24
25 18 Patton MQ. Enhancing the quality and credibility of qualitative analysis. *Health Serv Res*
26 1999;34:1189-1208.
27
28
29 19 Wen CK, Hudak, PL, Hwang SW. Homeless people’s perceptions of welcomeness and
30 unwelcomeness in healthcare encounters. *J Gen Intern Med* 2007;22:1011-1017.
31
32 20 Bouchelle Z, Rawlins Y, Hill C, Bennet J, Perez LX, Oriol N. Preventative health, diversity,
33 and inclusion: a qualitative study of client experience aboard a mobile health clinic in Boston,
34 Massachusetts. *Int J Equity Health* 2007;16:191. <https://doi.org/10.1186/s12939-017-0688-6>
35
36 21 Kalich A, Heinemann L, Ghahari SA. Scoping review of immigrant experience of health care
37 access barriers in Canada. *J Immigr Minor Health* 2016;18:697-709.
38 <https://doi.org/10.1007/s10903-015-0237-6>
39
40
41 22 Ramsay N, Hossain R, Moore M, Milo M, Brown A. Health care while homeless: barriers,
42 facilitators, and the lived experiences of homeless individuals accessing health care in a
43 Canadian regional municipality. *Qual Health Res* 2019;29(13):1839-1849.
44 <https://doi.org/10.1177/1049732319829434>
45
46
47 23 Monchalín, R, Smylie J, Nowgesic E. “I Guess I Shouldn’t Come Back Here”: racism and
48 discrimination as a barrier to accessing health and social services for urban Métis women in
49 Toronto, Canada. *J Racial Ethn Health Disparities* 2019;7(2)251-261.
50 <https://doi.org/10.1007/s40615-019-00653-1>
51
52
53 24 McKeary M, Newbold, B. Barriers to care: the challenges for Canadian refugees and their
54 health care providers. *J Refug Stud* 2010;23(4):523-545. <https://doi.org/10.1093/jrs/feq038>
55
56
57
58
59
60

1
2
3 25 Loignon C, Hudon C, Goulet É, Boyer S, De Laat M, Fournier N, Grabovschi C, Bush P.
4 Perceived barriers to healthcare for persons living in poverty in Quebec, Canada: the
5 EQUIhealThY project. *Int J Equity Health* 2015;14(1):1-11. [https://doi.org/10.1186/s12939-015-](https://doi.org/10.1186/s12939-015-0135-5)
6 [0135-5](https://doi.org/10.1186/s12939-015-0135-5)
7

8
9 26 Campbell DJ, O'Neill BG, Gibson K, Thurston WE. Primary healthcare needs and barriers to
10 care among Calgary's homeless populations. *BMC Fam Pract* 2015;16:1-10.
11 <https://doi.org/10.1186/s12875-015-0361-3>
12

13 27 Darling EK, MacDonald T, Nussey L, Murray-Davis B, Vanstone M. Making midwifery
14 services accessible to people of low SES: a qualitative descriptive study of the barriers faced by
15 midwives in Ontario. *Can J Midwif Res Pr* 2020;19(2):1-13.
16
17

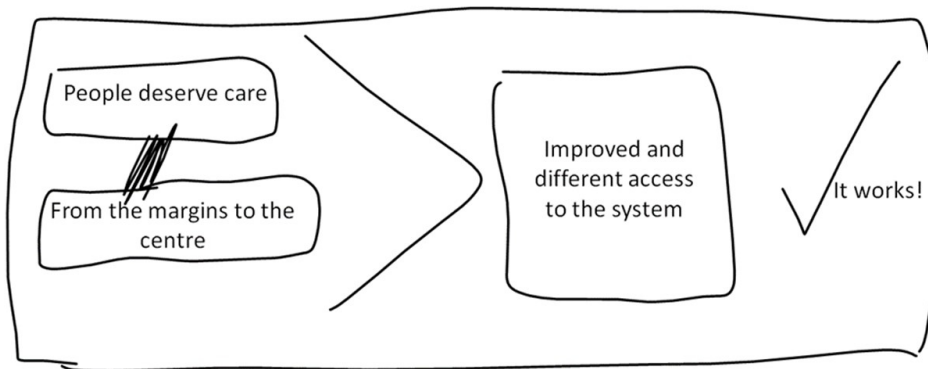
18 28 Stuart H, Chen SP, Christie R, Dobson K, Kirsh B, Knaak S, Koller M, Krupa T, Lauria-
19 Horner B, Luong D, Modgill G. Opening minds in Canada: targeting change. *Can J Psychiatry*
20 2014;59(suppl):13-18. <https://doi.org/10.1177/070674371405901S05>
21
22

23 29 Stuart H. Managing the stigma of opioid use. *Healthcare Management Forum* 2019;32(2):78-
24 83. <https://doi.org/10.1177/0840470418798658>
25

26 30 Ungar T, Knaak S, Szeto AC. Theoretical and practical considerations for combating mental
27 illness stigma in health care. *Community Ment Health J* 2016;52(3):262-71.
28 <https://doi.org/10.1007/s10597-015-9910-4>
29
30

31 **FIGURE LEGEND**

32 Thematic map
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



Note. It's so simple

Thematic map

338x190mm (96 x 96 DPI)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Supplementary File. Interview guide

1. How would you describe your experiences with HAMSMaRT so far?
 - a. How did you first encounter the program?
 - b. How do you think HAMSMaRT's services could be improved?
 - i. Was there a specific time when HAMSMaRT didn't meet your needs?
 - c. What is it about HAMSMaRT that you feel would be good to apply in other similar programs?
2. Can you tell me about any experiences when you felt like you got good quality care?
 - a. What changes would you like to see in the healthcare system to better serve your needs?
 - b. How do you know when you've received good quality care? Some people say it's a feeling they get or it's their physical health that's improved – what is it for you?
3. Based on your experiences, what was a time when you received poor quality health care?
 - a. How do you know when you've received poor quality care? Is it a feeling, a change in your physical health, or something else?
 - b. Have there been times when you weren't treated well? If so, what happened that made you feel that way?
 - c. Have you ever experienced stigma while getting care? If so, how did it affect the care you received?
 - d. Why do you think you received poor care?
4. What barriers have you experienced in accessing health care?
 - a. What was the effect of those barriers on your ability to get care?
 - b. How could your access to health care have been improved?
5. In general, what qualities do you hope for in a doctor?
 - a. How do you like to make decisions with your doctor?
 - b. What are the most important things to you to have a good relationship with your doctor?
 - c. What kind of relationship do you like to have with your doctor?
 - d. What training do you think docs/HC providers are missing to provide better care?

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

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	5
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	4-5
3. Occupation	What was their occupation at the time of the study?	4-5
4. Gender	Was the researcher male or female?	4-5
5. Experience and training	What experience or training did the researcher have?	4-5
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	5-6
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	6
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	4-5
Domain 2: study design		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	6
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	5
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	5
12. Sample size	How many participants were in the study?	6
13. Non-participation	How many people refused to participate or dropped out? Reasons?	6
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	5-6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	5

16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	6
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Supplemental file
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	No, no follow-up was deemed necessary
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	5
20. Field notes	Were field notes made during and/or after the interview or focus group?	No, we did not use this strategy to foster rigor, but used others
21. Duration	What was the duration of the inter views or focus group?	6
22. Data saturation	Was data saturation discussed?	5
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, we did not use this strategy to foster rigor, but used others.
Domain 3: analysis and findings		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	5-6
25. Description of the coding tree	Did authors provide a description of the coding tree?	6
26. Derivation of themes	Were themes identified in advance or derived from the data?	5
27. Software	What software, if applicable, was used to manage the data?	Not applicable
28. Participant checking	Did participants provide feedback on the findings?	No, we did not use this strategy to foster rigor, but used others.
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	6-13
30. Data and findings consistent	Was there consistency between the data presented and the findings?	6-13
31. Clarity of major themes	Were major themes clearly presented in the findings?	6-13
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Not applicable; did not emerge in our analysis