How do patients respond when confronted with telephone access barriers to care?

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Abstract

Objective To gain an in-depth understanding of patient barriers to accessing telephone care, subsequent responses to telephone access issues and recommendations for system improvement within a large integrated health-care system.

Study Design Cross-sectional qualitative focus group study.

Methods One focus group was conducted at each of 17 Veterans Affairs facilities with a total of 123 Veteran users of VA health care. All facilities followed a focus group discussion guide, and purposively sampled patients receiving care at their VA facility in primary and/or specialty care. Focus groups' recordings were sent to the authors' independent evaluation centre, transcribed *verbatim* and analysed using qualitative content analysis methodology.

Results Participants described many issues with the phone system that resulted in delays to care needs being addressed, including difficulty getting someone to answer the phone, out-dated phone directories, frequent disconnections and incorrect transfers. Participants most frequently responded to access issues by doing nothing or waiting to contact at a later time, or seeking unscheduled in-person care in the emergency department or primary care clinic. Participants offered recommendations for improving telephone care, including access to direct extensions, and upgrades to the telephone system.

Conclusions Telephone access issues could result in increased patient harm and/or increased wait times for in-person primary care or emergency services. Periodic evaluation of telephone systems is necessary to ensure telephone systems adequately meet patient needs while using resources efficiently to optimize the delivery of high quality, safe health care.

Introduction

Telephone care and consultation systems, which allow patients to obtain medical advice and receive answers to questions without the need for in-person visits,[1,2] are frequently utilized in health-care systems throughout the world.[3] As an example, in the United Kingdom, many National Health Service clinics offer out-of-hours telephone care and consultation.[4] These systems can increase access to care by reducing the need for in-person appointments,[1] and may also reduce the need for use of other services, such as emergency department visits. Telephone care systems may also align with patient preferences for certain needs, enhancing the delivery of patient-centred care.[5] Research in the Veteran population shows that Veterans prefer telephone care to in-person or internet/portal-delivered care for nearly two-thirds of their primary health-care needs.[6] Additionally, telephone care systems are viewed as a convenient communication method for both patients and providers, and have the potential to save time and reduce costs.[7] Health-care systems providing efficient telephone services generally have greater continuity in care;[8] however, this benefit can only be realized if patients are able to consistently access telephone care when needed.

Telephone care systems are frequently staffed by nurses, who answer patients' questions or direct calls based on the callers' issues.[2,9] Some systems have also examined use of other health-care professionals,[1] such as physicians.[10,11] However, depending on staff availability, some systems may be staffed by clerks or other non-health-care professionals.[1,12] As a result, concerns with safety of telephone care systems remain. Calls answered by nurses or physicians do not appear to lead to many adverse outcomes,[11,13–15] although Giesen *et al.*[16] found that outcomes were significantly better when triage nurses had received training in telephone triage guidelines. On the other hand, telephone systems staffed by non-health-care professionals may be more likely to result in patient harm, because they may fail to refer patients to necessary services. Consequently, this may lead to a need for increased services later, including emergency department visits, alterations to medications, or more frequent office visits. Hildebrandt *et al.*[17] examined after-hours calls that were not forwarded to the on-call physician. At their practice, the individual answering the phone in this system, who was not a health-care professional, was instructed to only forward calls if the patient said it was an emergency. Calls were examined for degree of harm and necessary medical interventions due to treatment delay. Over half of these patients made an appointment in the 2 weeks following their call, 4% went to the ER, and 2% were admitted to the hospital. Over a quarter experienced continuing discomfort due to treatment delay, and 8% of patients required additional services, such as transport to the emergency department or change in medication.

Although past studies have examined general outcomes among patients receiving telephone care, what is less understood is how patients respond when they are unable to access telephone care. Some studies suggest that visiting the emergency department, or going to the physician's office, as a walk-in or by making an appointment, are frequent responses.[18,19] Information on causes of access issues and patients' perceived options when experiencing access issues have not been well-studied. To gain an in-depth understanding of patient experiences with barriers to accessing telephone care, focus groups were conducted nationally across Veterans Affairs (VA) medical facilities to elicit information on access experiences as described by patients, their subsequent responses to telephone access issues and their recommendations for system improvement.

Methods

Design

One focus group was conducted with Veteran users of VA health care at each of 17 VA facilities. All facilities were provided with the same

focus group discussion guide, developed by the research team in collaboration with the Office of Systems Redesign. Focus groups were facilitated by an experienced focus group moderator; regional and local leaders facilitated the identification of the moderators. Moderators were trained on recruitment and use of the discussion guided by the study team via conference calls and written materials. Focus groups lasted approximately 1 h and were audio-recorded; facilities sent recordings back to the study team for transcription. As part of the verbal consent process, prior to beginning each focus group, participants were informed of the purpose of the research and about audio-recording; they were told that they could refuse to answer any questions or stop participating at any time. Recorded focus groups were collected by health services researchers at the authors' VA facility and transcribed *verbatim* by research assistants; and data were compiled into common themes using content analysis methodology.

Participants and setting

This study was conducted as an adjunct to a national quality improvement telephone transformation initiative in Veterans Health Administration (VHA) to enhance functionality and accessibility to telephone care.[20] Leadership from the VA Office of Systems Redesign requested participation from seven Veteran Integrated Service Networks (VISN) and facilities from within each VISN volunteered to participate. Twenty-one facilities responded to the request, and of those, 17 (81%) completed focus groups. The participating VA medical facilities were nationally dispersed (Northeast $n = 3$, Midwest $n = 2$, West $n = 8$, South $n = 4$). Purposive sampling was used to recruit patients receiving primary and/or specialty care from both rural and urban, nationally dispersed VA facilities. Each facility was responsible for scheduling an appropriate space to conduct the focus group and recruiting a group of Veterans who had reported using the telephone system, and was provided guidance on how to ensure the group was diverse in terms

of age, gender, past telephone experiences (positive as well as negative) and department from which they most frequently seek care (e.g., primary vs. specialty clinics). A total of 123 patients participated across 17 independent focus groups.

Analysis

Results were analysed using qualitative content analysis, to identify codes and categories, and pattern coding methods, to examine relationships between codes and identify overarching themes.[21] Two qualitative research experts from the research team independently read three transcripts to generate a preliminary codebook to classify relevant quotes and concepts. They then met to discuss results, resolve discrepancies and generate a final codebook. This codebook was then used to code remaining transcripts; initial agreement between coders was high (90%). Coders met frequently to discuss coded results, resolve any discrepancies and discuss potential changes to the codebook. Previously coded transcripts were reanalysed using the updated codebook until saturation was reached.[22] After coding was complete, the research team met to discuss results and identify major themes.

Results

Participant demographics and utilization characteristics

Veteran participants ($n = 123$) were predominantly male, ($n = 105$, 85%) and 55 years of age or older ($n = 80$, 65%). Nearly half of Veterans ($n = 60$, 49%) were recruited through their primary care clinic; 47 were recruited through a variety of specialty clinics, including mental health ($n = 10$, 8%), women's health ($n = 9$, 7%), urology ($n = 5$, 4%), rehabilitation ($n = 4$, 3%), dental ($n = 3$, 2%), spinal cord injury ($n = 3$, 2%) and ophthalmology ($n = 3$, 2%). Finally, 16 were recruited through other offices, including the office for Veterans of recent conflicts (Operation Enduring Freedom, Operation Iraqi Freedom, and Operation

New Dawn), the Agent Orange registry, pharmacy and the homelessness programme. Of the 104 patients who provided information on where they receive their care (VA only or both VA and non-VA), 58 (56%) received care only from VA. Additionally, 103 patients reported how long they had been receiving VA care, with estimates ranging from 6 months to 48 years (M = 17 years, SD = 12.7 years).

Themes identified from analysis included descriptions of access issues, responses to access barriers and participant recommendations for improvements to the telephone system. See Table 1 for representative quotes for themes and subthemes.

Description of access issues

Participants described many phone system issues that resulted in delays to their care needs being addressed. At some facilities, participants experienced difficulties with even getting an individual to answer the phone. Participants discussed that office closures were not well-communicated, which resulted in wasted time attempting to reach someone on the phone. Some participants discussed issues with outdated phone directories or changing extensions that prevented them from reaching their providers. Although some VA medical facilities share phone directories with patients, these quickly become out-of-date. Participants also experienced frequent disconnections, which often occurred after a long hold, transfers or utilizing menu options. Though most participants inferred that disconnections were the result of problems with the phone system, a small number of participants speculated that the disconnections were purposeful, as a way to cut down on the number of calls:

> I'm on hold again, and then disconnected… I know it's not an accidental disconnect, I know they're too busy and they're just dropping lines on purpose so they can get a little air… And I don't blame them.

Incorrect transfers are also a cause of access issues, as participants experienced difficulties reaching their desired party. Participants from many facilities stated that multiple incorrect transfers were common issues.

Responses to access issues

Participants were asked to share how they have responded or would respond when experiencing difficulty accessing telephone care. The most frequent response was waiting to contact at a later time or doing nothing. Many participants referred to this as 'giving up' as a result of frustration. For less severe concerns, this was frequently the only option considered, as participants felt it was 'wasteful' to use emergency services or a walk-in appointment for a non-urgent issue.

Many participants viewed the emergency department as their next contact if unable to reach their providers on the telephone, particularly for more urgent concerns. Participants also discussed travelling to the VA clinic to speak to their providers in person if unable to get through by telephone. Few discussed attempting to make an appointment, and some stated that getting an appointment on short notice was very difficult; instead, they generally discussed coming to the clinic as a walk-in.

Some participants discussed the use of alternative contacts. For instance, if they were unable to reach one provider, they often responded by contacting a different provider. Similarly, participants may contact another employee within the VA, such as the patient advocate. Some participants use another mode of communication, such as email, to reach their providers. Finally, participants discussed utilizing non-VA care as a potential response to access issues. Some participants who discussed this option called it their last choice, if other responses were not available or optimal.

Participants' recommendations for improvement

Participants offered recommendations for how the phone system could be improved to meet their health-care needs. The most frequent recommendation is for VA facilities to share direct extensions to different clinics/

Table 1 Themes and subthemes with representative quotes

Description of access issues	
Difficulty getting an individual to answer	The only glitch is sometimes it's hard getting them on the phone. Sometimes... you can't even get through at all.
Lack of communication about office closures	Yesterday... I was trying to get a hold of the VA... and I finally get through to the VA, I must have started in the morning, and made 10 or 15 calls... it wasn't until I [reached] emergency [that I] finally heard, the VA is closed today for [a holiday]... I wasted a whole morning just playing with the phone.
Changing extensions	It happened to me today before we came in [to the focus group]. The doctor wasn't at [his usual] extension. If I didn't go and try to find him... I would never have known he had a new extension, [and] new office.
Out-dated phone directories	You get the phone listing one time at enrollment and eligibility, and it's outdated within four months.
Frequent disconnections	Sometimes you'll push a number and you'll get hung up on. And it's like, 'Wait a minute, I pushed the right number.' Now I got to call back... and then you hit the number again and maybe get through.
	I [try to] bypass the option carousel if I just hit zero... Every time I've tried that, I got disconnected.
Incorrect transfers	They transfer you. That's the worst thing, when they transfer you.
	I never get transferred to the right [place]... you ask for clinic six, and it's not clinic six, it's in the labs.
Responses to access issues	
Do nothing	Just give up, basically. Hopefully whatever the problem is isn't going to kill me.
Wait	I usually leave him a message and [wait]... You don't want to just run to the emergency room.
Visit emergency department	If I'm in a real need and cannot get it resolved over the phone... I'm in the emergency room next.

Table 1 Continued

	Sometimes the only way I get in here is going to the emergency room.
Travel to facility and speak with provider in-person	I haven't got a half an hour to waste to hang on the phone... I'm not going to call, I mean, I can walk to [the clinic] before I get through on the phone.
Use an alternate contact	Usually I don't call [my primary care] team... These others, like the psychiatrist and the occupational therapist, that's [who] I'm in contact with.
	I had a, a problem with the doctor, and I ended up having to come to [the] patient advocate and get switched to a [different] team.
Use another form of communication	Find another avenue to go through. ... If you can't make it in person, you know, try to find another way. Email [for example].
Seek non-VA care	You go to another hospital... If it's a real health-care problem... Then worry about it [later].
Participants' recommendations for improvement	
Share directory and keep up-to-date	Give us a directory... quit changing all the numbers in other words.
	The numbers that are given for different departments or whatever, they need to go to that department, and that department needs to pick it up... What would improve it is if I'm given a number and I call that number, it goes to team A, and team A picks up. And that doesn't happen.
Create telephone triage line (for facilities that do not have one)	I would love something if a department would take a nurse or a series of nurses and put them on the phone. Have them sit down for two hours a day, an hour a day, whatever, and their responsibility is to answer those calls, whatever calls come in, for that day. I think that whole problem could be resolved. The problem is no one is around to answer the phone.
Increase staff for telephone triage line (for facilities that already have one in place)	The waiting period to get a hold of a triage nurse is terrible. You know, you could actually die before the nurse gets on the phone. It's too long a period, something has to be done about that.
Increased monitoring by operators	When they see a certain department is overloaded with ... people holding on, they should divert those calls to an open [line]... instead of just 80 people just sitting on the line.

Table 1 Continued

	If someone won't pick it up within a certain amount of time, the operator needs to get back to you and say, 'I'm sorry, there's no answer.' It's got to be monitored.
Voice recognition in menu	
	I would like to see… the automated [menu] with the voice recognition… instead of listening to all ten prompts, I just say 'pharmacy.'
Announce approximate hold time and 'place in line'	
	Knowing how long… I [have] to wait… If I've already waited 10 minutes, and I only got to wait two more, then I'm going to stay on the line… But if I [have] to wait 10 more minutes I'm hanging up.
	The system could be upgraded, to determine how many people in line, and how much time… you have to wait… [Such as,] 'You're number five in line, and you have 3 minutes to wait.'

departments, and keep the directory up-to-date. Participants also frequently discussed the need for one line devoted strictly to answering questions or handling health concerns, or with increasing number of staff members in facilities that already have a triage line.

Participants also recommended a variety of changes to improve the telephone system, such as efforts to reduce hold times, increased involvement of the operator in monitoring transfers and holds and implementation of voice recognition. Participants also requested additional information, such as approximate hold time and number in line, to assist in making informed decisions about whether to remain on the line.

Discussion

Many benefits of telephone care have been identified by patients and discussed in the literature. Patients can receive medical advice or information immediately, potentially improving patient outcomes.[8] Telephone care also reduces need for travel,[7,23] which is especially important for individuals living in rural areas or with limited access to in-person care due to transportation barriers. Two studies comparing face-to-face and telephone care found few differences between telephone and in-person consultations.[13,24] Further, despite the increased availability of technological communication options, such as email, research in the Veteran population suggests that patients still prefer telephone communication for many primary health-care needs.[6] However, in order for these benefits to be realized, patients must be able to access the telephone system and reach their desired parties to obtain answers to their questions and concerns.

Participants in the present study described a variety of challenges to accessing VA telephone care, including long hold times, frequent disconnections and out-dated telephone directories, that can result in unmet needs. When participants are unable to access telephone care, one of their most frequent responses is to seek 'unscheduled' in-person care, frequently through the emergency department. This suggests that patients who experience telephone access issues may be utilizing emergency services for routine care needs. Research has shown that this inappropriate use of emergency care is resource-intensive and costly to the health-care system[25] and often unsatisfactory to patients.[26] Though participants discussed some instances where emergency department use would be inappropriate, they described many cases in which they

were using emergency services for needs that could be handled by their primary care team. Other research supports this notion that poor accessibility and continuity of care are often responsible for inappropriate emergency department use.[26,27] A study of non-urgent emergency department cases found that only 22% had seen their primary care provider before seeking emergency care, and that 32% of those who had not seen their primary care provider prior to going to emergency had experienced access issues.[28] Increased emergency department use could also result in increased wait times and decreased resources to treat urgent cases,[29,30] potentially compromising quality and timeliness of patient care for 'true' emergent conditions. In addition, the health-care system experiences artificially high demand as patients call repeatedly and/or use face-to-face visits to address problems that could have been handled over the phone if the call was answered and call resolution was achieved.

Telephone systems have the potential to improve continuity of care among patients.[8] Conversely, access barriers could lead to more disruption in continuity of care, particularly if patients seek care outside of their health-care system or from a variety of providers[31] due to unresolved concerns via telephone. Even more concerning is the fact that participants' most frequent response was simply to do nothing or wait to contact at a later time. Depending on the severity of the health concern, this option may result in unnecessary harm and increased need for health-care services. Providing personalized, proactive, patient-driven health care safely to our nation's Veterans is the most important goal of the VHA.[32] These efforts are accomplished, in part, through national and facility-level organizational transformation efforts to identify and eliminate barriers within the health-care delivery process.[33]

Limitations

The focus of the present analysis was on responses to access barriers as experienced by Veteran users of a large integrated health-care system; the generalizability of these findings to all patient cohorts may be limited. Because of the nature of these qualitative data, these results cannot provide information on the prevalence of access barriers. However, these results can be used to understand how patients respond when they experience these barriers. Additionally, participants were asked to discuss past barriers, which may have resulted in response bias if participants had difficulty remembering previously experienced barriers.

Conclusion

According to the Institute of Medicine, to deliver care that is patient-centred, it is necessary to consider patient preferences for health-care delivery options and offer opportunities for services beyond in-person visits.[34] Our focus group findings identified a recurrent theme suggesting that when patients experience telephone access issues, they respond by doing nothing (e.g., taking no action to alleviate health concern) or by utilizing unplanned in-person primary care or emergency services to a greater extent than preferred. Both responses to patients' perceived inadequate telephone access may lead to harmful consequences to patients and to an inefficient health-care system. These findings highlight the need for standardization and periodic evaluation of telephone systems in health-care facilities to ensure that they are meeting patients' needs, as articulated through consumer feedback from actual VA health-care users, and for using health-care system resources efficiently to optimize the provision of high quality, safe health care.

Conflict of interest

No conflicts of interests have been declared.

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reflect the official position of the Department of Veterans Affairs.

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