# VIRTUAL CARE DURING COVID-19 AND IMPLICATIONS FOR FUTURE CARE DELIVERY

**AUGUST 2020** 



Grand Bend Area Community Health Centre

#### BACKGROUND

Virtual care is defined as "any interaction between patients and/or members of their circle of care, occurring remotely, using any form of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care", and was provided under special circumstances before March 2020. However, with the recent challenges posed by the COVID-19 pandemic, community health centres and clinics have had to resort to providing virtual care with exceptions of face-to-face appointments for those requiring physical exams and interventions. In such unprecedented times, it is pertinent to ensure that patients are able to continue managing their health and that services and resources are available to support their healthcare needs. Furthermore, it is also important to ensure that staff and administration feel confident enough to provide the best possible patient care and that resources and support are in place to help them fulfill their roles and duties.

The purpose of this study is to explore strengths and challenges from both the staff and clients' perspectives within this new model of virtual care adopted by community health centres, specifically within the Grand Bend Area Community Health Centre (GBACHC). Patients provide an unique perspective as literature suggests that patient partnership is an integral component of quality improvement initiatives in healthcare delivery (Virtual care: Recommendations for scaling up virtual medical services, 2020). Patients are positioned extremely well to evaluate the care and services they receive, their quality and whether they met their needs. Similarly, staff are also well-equipped to identify the things that are working and that can be refined to further improve the organization and care delivery. Thus, having a better understanding of patient and staff perspectives will help identify areas for improvement and ensure that the GBACHC is able to provide the highest quality of care for patients.

#### **METHOD**

A mixed methods approach was used to capture staff members' and clients' perceptions about the implementation of virtual care and the implications for both staff and clients. Semi-structured interviews with staff were conducted as we seek to understand virtual care implementation at the GBACHC. Surveys were administered through 'Survey Monkey' to clients who received virtual care between March 15 - July 15 2020. The quantitative questions administered through the survey allow the researchers to quantify the opinions of patients and the qualitative questions allow us to gain a variety of perceptions and an in-depth understanding of the patients' views on the care they received. Additionally, voluntary semi-structured interviews were conducted with patients who received virtual care at GBACHC during the COVID-19. The target samples include clients who received virtual care at GBACHC during the COVID-19 response time frame (between March 15 - July 15 2020) and GBACHC staff members who were employed as a primary health care team member, including all primary care providers and allied health professionals.

Due to COVID-19 restrictions, the interviews were carried out virtually using the interviewer's phones. Interviews were conducted through telephone and recorded on a separate device for transcription. Recordings were transcribed promptly within 48 hours of the interview and deleted thereafter. If names or identifiers were used during the interviews, they were taken out during transcription to protect the confidentiality of all staff and patients. All recordings and transcriptions were stored on an encrypted USB device throughout the research process.

Thematic analysis was used where two independent researchers conducted, transcribed (verbatim) and analysed client and staff interviews. Interviewer one conducted, transcribed and analyzed all 14 staff interviews. Interviewer two conducted, transcribed and analyzed all 10 client interviews. Themes were colour coded and analysis was an iterative process where the interviewers went back and forth to modify and merge themes that were appearing until there were no new themes. Saturation of the data was achieved with the number of interviews conducted. This is important to ensure that strengths, challenges and recommendations that emerge from this study take into account as many perspectives as possible.

*Note:* The terms client and patient as well as staff and provider will be used interchangeably throughout this report.

#### RESULTS

#### Staff Interviews

#### Virtual Care Platforms

Primary care providers and allied health professionals at the GBACHC are currently spending 10-80% of their time providing virtual care for patients. Virtual platforms used by staff include telephone, email, PS suite, Ontario Telemedicine Network (OTN), Microsoft Teams, Zoom, Skype, Facetime, Facebook Live and Youtube. OTN was preferred by many staff members because it is PHIPA compliant and has secure privacy features. Staff explained that a large demographic of patients at the GBACHC are older adults and are used to talking on the telephone. Staff believe this level of comfort with telephone communication aided the use of this platform for virtual care. Another benefit of using the telephone for appointments is that care providers can access patient's electronic medical records (EMR) and resources used for the appointment at the same time as they are talking to the patient. Staff feel as though this helps cut back appointment times. Seven of the staff members interviewed mentioned that they think phone appointments can be quicker and/or more efficient: "patients seem to be more conscious of my time on the phone than when they're in the office. Sometimes they like to come in and sit and chat and I find there's less of the actual chat and more focused discussion virtually". Additionally, technical problems are not a concern when it comes to using the telephone compared to other virtual platforms.

#### Privacy, Security, and Patient Safety

When asked about concerns around privacy, security, and patient safety, six out of 14 of the staff members expressed that they had some level of concern around privacy, security, and/or patient safety using virtual platforms to provide care. One staff member stated: "privacy was a concern in that photos were sent to a common email address (an MOA email) and photos were opened up in what we call a fishbowl where I could be walking down the hall and I could see photos on the computer". Another staff member expressed their concern saying "they're also emailing you know through their personal emails to our email address which is secure within, but they're emailing from their personal emails to there's potential for confidentiality breach that way with the nature of emailing". Other concerns around patient safety are due to the inability to do a thorough physical exam with virtual platforms: "I'm getting the patient to measure on their own, if they have the device at home, so I do worry about the accuracy sometimes of that. Also I get patients to do their own, a portion of their own physical exam" and "I do have [safety] concerns because when we're doing virtual [...just a telephone visit...], we're not able to lay eyes on the patient. To get a sense of if they're well or unwell, we have to rely on what they're telling us" were comments made by GBACHC staff members.

#### **Client** Communication

Although some patients have opted out of participating in virtual care, for those who have received virtual care, the consensus from staff is that patients have been very accepting of it. Additionally, staff feel as though many patients have had more open communication and been more forth-coming with personal information regarding their health while using virtual platforms such as the telephone. Some of the comments made by staff include the following: "they've [patients] felt

more comfortable with disclosing personal, highly personal and sensitive information to me over the phone"; "patients have told me that sometimes they feel better talking on the phone, they feel like they can open up more, they have a sense of... it's less intimidating for them than being in the clinic face-to-face"; "I think that actually I have some more clients who are more forth-coming with information because they have that anonymity of not being seen during the appointment".

Four staff members said that the number of missed or cancelled appointments they had before COVID -19 has drastically decreased, suggesting that the convenience of attending appointments virtually may increase attendance of scheduled appointments. Ten staff members agreed that the needs and concerns of patients have changed during COVID-19. Staff have currently noticed that more patients are presenting with mental health concerns. Staff members stated that many patients are experiencing stress and worry around the virus, lack of social interaction, concerns about the economy and job losses, concerns about accessing food and the availability of food in grocery stores. Patients are also worried about having to go to the emergency room at the hospital because they are worried they will contract COVID-19.

## Communication among Staff

Primary care providers feel they are still able to communicate with other staff members effectively and use the EMR to communicate. Allied health staff members seem to have a harder time communicating and staying connected with co-workers; however, Microsoft Teams and other platforms have been helpful tools to facilitate communication among staff: "What really helped me was when we started doing the 'at-home' meetings so I could connect with people who I wasn't seeing at the office".

## Facilitators and Barriers

Staff feel the rapid shift to virtual care was facilitated by collaboration among team members, perseverance, support from directors or bosses, support from the admin team, the joint health and safety committee, IT support, and the use of virtual platforms. Staff feel the rapid shift to virtual care was hindered due the disruption of workflow, connection or internet issues and technological glitches, lack of training on virtual platforms, problems with firewall, and CHC costs associated with getting all the virtual care set-up and running.

## Populations that would Benefit from Virtual Care

Staff members believe populations that virtual care would benefit include seniors and older adults, caregivers who have loved ones at home, patients with mobility issues, patients who are unable to leave their homes, patients who do not have a vehicle or do not drive, busy working adults, and adults with children at home. Some of the limitations of virtual care for patients include the lack of social interactions that in-person appointments provide, lack of equipment to do aspects of physical exams from home, as well the inability to access technology such as phones, computers, and internet. "I think virtual care benefits people who have access to a phone or a computer and internet. If they don't have these things, I think we need to offer an alternative or we are just creating a bigger divide in health equity". One staff member also mentioned that it is important to keep the community in mind during this time: "It is important people understand that care goes beyond services for the individual, it also includes groups and being a part of advocacy and

community committees". Three of the staff members interviewed conduct group programs each week. Since the shift to virtual platforms, the number of group sessions and the participants in each session has decreased.

## Virtual Care Moving Forward

All staff members interviewed agreed that virtual care would be a beneficial aspect of providing care moving forward during and after COVID-19. "To provide client-centred care, if virtual is an option and it works for that person in that circumstance then I think it needs to be on the table". All of the staff members interviewed said they believe a combination of in-person and virtual visits will be best to suit the needs of a variety of patients. Aspects of care that staff members feel could be virtual moving forward include education sessions (virtual group education sessions have had great feedback so far), routine follow-up visits, patients with chronic conditions, blood pressures, diabetes care, some pregnancy follow-ups, and mental health follow-ups. Three of the staff members interviewed mentioned that they feel it is important to develop a rapport in-person for the initial visit prior to continuing care virtually: "I think that rapport before is so crucial. I find that the hardest part is building that rapport and it does come with time over the phone, but I find the first visit [virtually] is very difficult". Moving forward, healthcare professionals may wish to see patients in-person for their initial visit, then virtually for follow-up visits in order to build a professional relationship with patients.

## **Client Interviews**

## Experience with virtual care

In total, 10 clients were interviewed and all 10 clients liked the idea of receiving their care virtually. It is important to highlight that the views represented here may not be the same as the views of clients who declined to receive virtual care. More information is needed to identify some of the reasons why individuals may have declined virtual care. All participants were clients at the centre for anywhere between two to 35 years. Eight out of 10 clients had phone appointments and two out of 10 clients had video appointments or phone appointments accompanied by email images. Three out of 10 of the clients expressed that under the COVID-19 circumstances, they were very thankful that their providers were able to still see them as they feared their appointments would simply get cancelled. When asked whether they were given enough information about their virtual appointments, five out of 10 expressed they were given information, three said they were given some information and two said that they were not given any information regarding their appointments. After prompting for the type of information clients were expecting, it was revealed that clients would have liked information on how the virtual appointment would run, what would happen if the physician or allied health professional were running late and if there were any specific time limits for the appointment. None of the 10 clients expressed any concerns regarding privacy, safety or security. In fact, four out of the 10 clients added that they actually felt more secure in their virtual appointment and it was easier to share personal information because of the anonymity associated with a phone call as opposed to a face-to-face meeting. One client expressed concerns surrounding the quality of care she would receive over the phone but said "I was pleasantly surprised after my appointment because the provider was able to address all my issues and concerns. I also did not feel like they were rushing me at all so that was really good". Finally, the last question asked under this category was regarding technical difficulties, and none of the clients reported any problems accessing their appointment.

## Quality of care

When participants were asked about the similarities and differences between previous appointments and virtual ones, the most obvious one was that there was no face-to-face interaction and facial cues and body language could not be seen. One client said "well, of course, the biggest difference was that it was over the phone so there was no way to see how the other person was reacting, what they were thinking, and I think I would have liked to see more of that. I use others' expression and body language as feedback for communication, so I felt that I missed out on that a bit". Nine out of 10 clients said that their appointments were about the same length and one client expressed that the appointment was actually shorter than in-person appointment, but there were no feelings of being rushed. When asked about how clients have been managing their health under the current circumstances, five out 10 clients said they are able to continue the same way as pre-COVID, three out of 10 felt that they are hyper-aware of their medical conditions and they pay more attention to symptoms and two out of 10 felt that they pay attention to their symptoms to understand whether they are severe enough to warrant appointments. One client said "I'm much more aware of my health concerns and feeling like access to healthcare isn't as readily available. So, I would say I am hyper-aware of anything that comes up". Whereas another said that "I know it's been difficult for all the front-line workers to accommodate everyone and they've been busy, so I try to see if my symptoms are severe enough to call them and make an appointment. Before I would just call for everything but now, I'm selective about what requires medical attention." Overall, all clients said they were able to manage their health the same way as before COVID-19 although the frequency of some of their programs (i.e. exercise) has decreased from 3 times a week to 2 times a week. All 10 clients felt that their relationship with the provider remained the same as before the pandemic.

## Access to appointments/services

When clients were asked about their access to appointments and services, eight out of 10 reported no changes in their ability to interact with their provider and also did not report any wait times for their desired appointments. However, two out of 10 clients said that wait times were actually longer for appointments. In this category, it was also important to pose questions about the usage and access to community programs offered by the centre including exercise classes, chronic pain workshops, better breathing workshops, physiotherapy and counselling services. Out of 10 clients, seven were using community programs prior to COVID-19. Out of these individuals, two said they were satisfied with the way the programs were running and the remaining five individuals said they would like for some of the programs such as exercise classes to be more frequent. Additionally, one client mentioned that "Online exercise classes don't really get me going. I miss interacting with people and the classes don't have much of a social aspect to them".

## Continuation of virtual care

Nine out of 10 participants said that they would be willing to continue receiving virtual care while one client said that they would prefer in-person appointments. When further prompted about the aspects of care the clients would like to receive virtually, one client said "I would want to receive

virtual care for minor concerns or for routine things like getting prescriptions or getting favourable test results. I can also see counselling services being helpful virtually". Another client said that "virtual care is good for small things but if it's for severe diagnoses, I would like to be there with the doctor so they can support and comfort me." All clients said that they enjoyed the flexibility presented by virtual care delivery as they did not have to worry about parking, transportation, or arranging childcare services. "I can just be doing what I'm doing and running my errands and still pick up the call during my appointment, so I like that I don't have to change my schedule that much". When probed about things that they did not like about virtual care, clients stated that "it would be good to get an email from them after the appointment to summarize what we talked about so that I have it documented and so I know what the next steps are. It's hard to sometimes write things down while you're talking". Another client suggested that for individuals who are not comfortable with technology, it might be helpful to provide them with detailed instructions to access platforms such as MS teams. Finally, the last question asked clients about any last comments and questions, and all 10 clients said they were very appreciative of all that the centre was doing to provide them with the best possible care.

#### DISCUSSION

With active COVID-19 cases and pandemic protocols still in place for the foreseeable future, it is imperative to evaluate virtual care at the GBACHC in order to improve patient care moving forward. The approach to gather perspectives from primary care providers, allied health professionals, and clients of the GBACHC was an effective way to identify the strengths and challenges of providing care virtually during the COVID-19 pandemic. According to staff, some patients like the anonymity of receiving virtual care. This was further confirmed by patient and client interviews where several individuals mentioned that anonymity provided them with an opportunity to be more open and vulnerable, unlike what they would be willing to share in a faceto-face setting. Giving patients the option of virtual care in the future may help those patients feel more comfortable expressing concerns or disclosing personal information to their healthcare provider (Mehrotra, 2020). Additionally, care providers have indicated that there seems to be less small talk with virtual appointments such as phone appointments. While this might be beneficial for front line workers and productivity of care, there may be concerns about the lack of rapport being developed between patient and provider (Parish, Fazio, Chan, & Yellowlees, 2017). Nonetheless, when patients were asked about this, they also agreed their care delivery is productive, and they never felt rushed to speak about their concerns.

Current literature indicates that e-therapy seems to be at least equivalent to face-to-face therapy in terms of therapeutic alliance (Barsom, Feenstra, Bemelman, Bonjer, & Schijven, 2020; Sucala et al., 2012). This may different based on the type of virtual care used (video vs. phone vs. simply email). Although the results do not allow firm conclusions, they indicate that e-therapy seems to be at least equivalent to face-to-face therapy in terms of therapeutic alliance, and that there is a relationship between the therapeutic alliance and e-therapy outcomes. Overall, the current literature on the role of therapeutic relationship in e-therapy is scant, and much more research is needed to understand the therapeutic relationship in online environments (Sucala et al., 2012). Furthermore, training was identified as a barrier to implementing virtual care. Training with telemedicine technology has been identified as essential to facilitate rapport, maximize engagement, and conduct an accurate virtual exam (Sirintrapun & Lopez, 2018).

Another theme that was prevalent within the client interviews dealt with virtual care for nonsignificant diagnoses. Some patients still wanted to be able to have the option of seeing their providers in-person if their medical condition warranted it. Some patients also felt that virtual care may not be the best form of care when delivering any type of bad news or negative diagnoses as it decreases the potential of the patient-provider therapeutic relationship. For example, a virtual care appointment where bad news is delivered, the patient may not experience as much empathy and rapport between the patient and provider as an in-person appointment. Literature also suggests that in the event where bad news had to be delivered, it is important that the provider is one the patient has interacted with before and that every effort is made to have an appointment that resembles a face-to-face appointment through video calls (Monden, Gentry, & Cox, 2016). Finally, more research with both providers' and patients' perspectives is needed to understand the therapeutic relationship in online environments (Cipolletta, 2017).

Currently, the GBACHC is missing some people who have opted-out of receiving virtual care or who do not participate in group sessions such as exercise, cooking and other group sessions through virtual platforms. People may experience many barriers to getting connected virtually -consider the sevens A's: awareness, accessibility, affordability, appropriateness, adequacy, acceptability and availability (Truglio-Londrigan & Gallagher, 2003). It is important to identify why some of these individuals chose not to partake in virtual care sessions and delve deeper into these reasons. Future research needs to include interviewing the patients who have not accessed virtual care or participated in virtual group sessions to understand what GBACHC can do moving forward to increase participation and reach these members of the community.

A systematic review revealed the use of e-health and m-health tools to be the most common facilitator of community and patient engagement among older adults (Kampmeijer, Pavlova, Tambor, Golinowska, & Groot, 2016). This was largely highlighted in the patient interviews where several individuals mentioned that without concrete instructions and video tutorials on how to access virtual care platforms, it was difficult for some clients to obtain care. On the other hand, many clients appreciated phone calls as there were no technical requirements for these appointments. However, for video calls on platforms such as Microsoft Suite Teams for example, clients expressed the need to create some tutorials to assist with access. For clients who may not be familiar or comfortable with using virtual platforms besides the telephone, a video tutorial and/or telephone support on how to use virtual platforms may help support and encourage them to participate in this form of care (Jefferson, 2019). There may also be an opportunity to hold group sessions in-person at the GBACHC in accordance with GBACHC's COVID-19 policies and procedures for both staff and patients alike to go over how to access virtual care platforms. Finally, it is important to ensure that any instructional material provided should have the capacity to be disseminated in the form of multiple media (i.e. in-person sessions, video tutorials, and written instructions) to facilitate broader access. Finally, clients expressed that at times expectations were different about virtual care. Literature suggests that it is imperative to introduce the concept of virtual care to all patients through some form of educational materials, so they are better equipped to not only access their care resources but also feel more empowered to obtain care through multiple avenues (Wosik et al., 2020).

Privacy, security, and patient safety was a topic of concern for almost half of the staff members interviewed. While privacy and security concerns were not expressed during the patient interviews, patients did want to have the opportunity of using some form of email communication to send images of their skin conditions and physical findings. This sentiment was also further substantiated in literature by Bokolo et al. (2020). Rather than emailing personal information and photographs to providers, a suggested alternative may be an online patient portal system. Patient portals are designed to give patients secure access to their health information and allows secure methods for communication and information sharing (Miller, Latulipe, Melius, Quandt, & Arcury, 2016). This would also allow patients to receive a summary of their appointment after it takes place. With the increase in virtual appointments, patient portals provide patients the opportunity to communicate with their health care providers in a secure and confidential way (Irizarry et al., 2017; Portz et al., 2019; Sakaguchi-Tang, Bosold, Choi, & Turner, 2017). There is a growing body of literature that states that having virtual care portals where the patient and provider can interact also helps with patient empowerment, which ultimately leads to early diagnoses as well as favourable treatment and outcomes of diseases (Woods et al., 2017).

Finally, primary care providers and allied health professionals have identified that there is an increase in patients presenting with mental health concerns. This is not surprising as evidence has identified a link between social isolation and mental health concerns (Leigh-Hunt et al., 2017; Loades et al., 2020). Also, pandemics are considered a form of adversity and prolonged exposure to adverse events can create a stress response and negatively affect people's overall health, including their mental health (California Department of Public Health, 2020). GBACHC has three social workers on staff whose workloads have drastically increased during the pandemic. Groups that are offered that may help to support people's mental health have had low attendance. Group sessions reduce the anonymity of the contact as well as use a virtual platform that may not be preferred by or accessible to the target audience (i.e. Microsoft Teams versus telephone). Nonetheless, it is evident that more needs to be done to address the increase in mental health concerns.

## Strengths & Limitations

There are several strengths and limitations of this study. Firstly, this study gathered first-hand accounts from patients and clients who had virtual appointments during the COVID-19 pandemic, which helped capture strengths and recommendations of virtual care from patients and clients themselves. Staff interviews were also conducted to understand implementation of virtual care and obtain a better sense of how the organization can support itself and patients, thereby improving quality and effectiveness of care. Another methodological strength of this study was that participants were contacted by two independent summer researchers and not directly by their providers. This approach allowed participants to be honest and open about their opinions.

Like any other study, this study is not devoid of some limitations. A mix of both convenience and random sampling was used to gather enough participants given the short timeframe of this project. This recruitment could introduce some form of reporting bias in the results obtained and preferably, only one method would be used to promote consistency. Since clients and staff were being asked to think back to their appointments and interactions, some of which were three to four months ago, it is possible there was some recall bias when asked about specific details. Finally, it is highly likely that selection bias was also at play in this study where participants and staff who were satisfied with their services or had positive experiences with virtual care were more willing to partake in the study, potentially overestimating the positive impacts of virtual care.

#### CONCLUSION

In summary, both staff and clients who participated in this study were pro virtual care and appreciated its benefits. Increase in efficiency, reduced accessibility barriers such as transportation problems, child-care services and increased flexibility and adaptability were some of the most salient points expressed by participants. However, it is important to note that virtual care, while has been around for a while, is still a new experience and concept for several individuals, both staff and patients alike. Thus, attitudes on virtual care may change over time and given the current circumstances surrounding COVID-19, it would be beneficial for health centres and practitioners to continuously check in with its staff and patients to obtain feedback, and further promote virtual care in a way that is beneficial for all parties involved.

## **CONSIDERATIONS**

Staff Summary

- 1. Provide video tutorials for patients who may not be comfortable using virtual platforms.
- 2. Identify and implement a secure online patient portal system to aid in confidential communication between patient and provider.
- **3**. Find out why some individuals choose to opt out of virtual care by conducting more interviews and gathering information from this specific subgroup.
- 4. Provide summary email of recommendations to patient

**Client Summary** 

- 1. Create a list of instructions for individuals to access online platforms.
- 2. Find a way to provide clients with a secure summary of their appointment in an email format.
- 3. Ensure, as best as possible, to provide clients appointments with providers they already have an established relationship with.

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