

# A Survey of Patient Satisfaction with Telemedicine During the COVID-19 Pandemic at a Student-Run Free Clinic

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**Background:** The UC San Diego Student-Run Free Clinic Project (SRFCP) is a free health clinic that serves the local uninsured and low-income population throughout San Diego. Its four physical clinic sites were moved to an entirely virtual telemedicine format with the risks posed by the COVID-19 pandemic. The purpose of this study was to investigate the patient satisfaction given an abrupt shift to telemedicine.

**Methods:** Patients were surveyed remotely over a seven-week period. The survey inquired about the patients' experiences with telemedicine including technical ease, comfort using remote services as well as their perception of kindness and empathy from the medical team. The survey also included an open response section in which patients could provide further feedback.

**Results:** 97.6% of patients reported high satisfaction rates regarding their telemedicine experience, with 87.2% expressing a desire to continue with telemedicine in the future. Although some patients expressed a preference for in-person visits, many also expressed safety from the COVID-19 virus as well as convenience as benefits to telemedicine.

**Conclusion:** Overall, this survey provided insight into how telemedicine has been serving the SRFCP's patient population. High levels of satisfaction as well as many comments about safety and convenience suggest a successful implementation of telemedicine for a low-income, under-resourced population. We hope that positive aspects regarding telemedicine continue to be used to better patient care moving forward.

The UC San Diego Student-Run Free Clinic Project (SRFCP) has been serving local, uninsured patients since 1997.<sup>1</sup> The clinic now operates at four different locations, with each site operating one to two half days a week. Each clinic provides primary medical care as well as specialty care ranging from psychiatry to dermatology and nephrology. The clinics involve an interdisciplinary care team involving medical, pharmacy and undergraduate students as well as social workers and *promotoras*. The SRFCP has become a valuable resource in providing healthcare, social support, as well as dental and legal services to a vulnerable and underserved community.

With COVID-19 becoming an imminent public health threat, the SRFCP adopted new strategies to continue serving its patients. A previous study on student-run free clinics nationally reported that the most common diseases treated among free clinic populations include diabetes and

hypertension, known risk factors for increased COVID-19 mortality.<sup>2,3</sup> Due to the majority of the SRFCP's patients being low-income and having multiple chronic comorbidities, they were especially vulnerable in terms of susceptibility to COVID-19. Therefore, ensuring their safety while still providing quality medical care was a goal that needed to be achieved quickly.

On March 16, 2020, the SRFCP began to conduct patient visits via telephone or Zoom video. A new workflow was adopted in which medical students would initially "see" patients with an interpreter to obtain pertinent medical history. Once complete, the student would present to an assigned attending, who then joins the student on the remote call to wrap up with the patient.

Medications and food deliveries were then made to the patients' homes by volunteering medical students. Labs, scheduling, and other

logistical aspects of the visit were discussed in a secure chat function through our electronic health records system, consisting of everyone participating in the clinic for that specific day. A telemedicine task force was established to help patients set up necessary programs for virtual visits and to troubleshoot technical issues as they arose.

A patient satisfaction survey is administered each summer to identify possible areas for improvement. Prior studies done at other free clinics have addressed the importance of measuring patient satisfaction.<sup>4</sup> With the abrupt need to shift all in-person operations to a remote format, this year’s survey was focused primarily on telemedicine.

The purpose of this survey was to evaluate the patient perspective towards clinical telemedicine. In this study, we aimed to assess patient satisfaction with telemedicine and affected aspects of clinical care. To this end, we hope that this information helps guide discussions about how to better care for this patient population during the COVID-19 pandemic and beyond.

**Methods**

*Survey Participants:* Study participants included 86 patients (31.6% of the total telemedicine visits) from July 15, 2020 to September 2, 2020 at UC San Diego’s SRFCP. Patients interviewed were from SRCFP’s three busiest clinic sites.

*Survey Design and Administration:* The survey was administered as part of the clinic’s annual patient satisfaction overview, with IRB approval. Since this year required an abrupt shift to all virtual visits, we wanted to gauge how telemedicine has impacted patients. Each participant was informed about the purpose of the survey to gauge patient satisfaction as well as the anonymity of their responses.

The survey was administered from July 15, 2020 to September 2, 2020. The survey included four demographic questions which included gender, age, housing status, and ethnicity. The survey also included a question about which

forms of telehealth the patient was able to participate in, from phone visits to video call visits.

The satisfaction part of the survey included 8 statements patients could rate on a Likert scale, ranging from poor, fair, and good. In addition, the survey also included 9 statements for patients to rate about their telehealth experience, ranging from technical issues to establishing a physician-patient relationship remotely. The patients were to choose from, disagree, agree, or neutral to describe their attitudes.

Each participant was administered the survey at the end of their telemedicine visit. The original survey was translated to Spanish, which interpreters used to verbally administer the survey to the patients. Each answer was then recorded on an online survey form by the medical student caring for the patient. No protected or identifying patient information was entered into the online form. The survey closed out with a free response section in which patients could provide any additional comments.

**Results**

A total of 86 patients completed the survey, with over 67% identifying as female. Additional demographics of the survey responders are outlined in **Table 1**.

**Table 1.** Characteristics Among UC San Diego SRFCP Survey Participants.

Characteristic	Overall Sample (n=86)
<b>Gender</b>	
Male	28
Female	58
<b>Age (y)</b>	
19-25	1
36-64	68
>64	17
<b>Ethnicity</b>	
Hispanic/Latino	85
Decline to answer	1
<b>Current Housing Status</b>	
House/apartment	79
Temporary/unstable housing	7

51% patients were able to participate in a phone health visit, whereas 24.4% reported using video only and another 24.4% reporting using both phone and video calls (**Table 2**).

**Table 2.** Usage of Video Call and/or Telephone for Telemedicine Among UC San Diego SRFCP Survey Participants.

Telemedicine Modality	No. (%)
Video call	21 (24.4)
Phone call	44 (51.2)
Both video and phone call	21 (24.4)

Many patients reported positive sentiment and attitudes towards the free clinic operating on a telemedicine platform, as outlined in [Table 3](#). 83 participants (96.5%) reported satisfaction with their care in terms of the amount of time the attending provider spent with them. All 86 respondents surveyed felt as though their patient privacy was protected and rated their overall telehealth experience as “good.” Furthermore, all 86 patients also felt that the medical team displayed kindness, courtesy, and respect over telemedicine.

**Table 3.** Reported Levels of Satisfaction with Telemedicine Among UC San Diego SRFCP Survey Participants.

	Overall Sample (n=86)			
<b>How satisfied were you with the following?</b>	Good	Fair	Poor	N/A
Voice quality of the visit	79	7	0	0
Video quality of the visit	41	2	0	43
Amount of time spent talking to the provider	83	2	1	0
Explanation of conditions and treatments	85	0	1	0
Courtesy, respect and kindness of provider and staff	86	0	0	0
Security and protection of patient privacy	86	0	0	0
Personal comfort with Telehealth	82	4	0	0
Your overall experience with Telehealth	86	0	0	0

Overall, most patients reported feeling satisfied with their telehealth experience (97.6%). However, only 64 patients (74.4%) felt that their telemedicine visits were as good as in-person clinic appointments. Despite this, 75 patients (87.2%) stated that they would like to continue with telemedicine visits in the future. The majority

of patients reported convenience with telemedicine visits, with 76% of patients reporting that remote clinic visits made it possible for them to attend an appointment they would not otherwise have been able to. A summary of the survey responses is outlined in [Table 4](#).

**Table 4.** Reported Attitudes with Telemedicine Experience Among UC San Diego SRFCP Survey Participants.

	Overall Sample (n=86)		
<b>Please rate each statement.</b>	Agree	Neutral	Disagree
It was easy to talk about my concerns/problems	84	2	0
The switch to Telehealth did not affect my health negatively	80	3	3
It was convenient for me to see a doctor over Telehealth	84	1	1
It was easy to use the phone appointment line to schedule an appointment	77	5	3
I did not experience significant technical issues during my visits	75	3	8
My Telehealth visits were as good as in-person visits	64	11	11
Telehealth made it possible for me to attend visits I wouldn't have been able to if it were in person	73	7	6
I would like to continue with Telehealth in the future	75	5	6
Overall, I am satisfied with my Telehealth experience	84	2	0

The survey concluded with a free response section where patients were welcome to provide any additional feedback. Out of the 86 survey responders, 42 respondents (41.9%) utilized the free response section, summarized in [Table 5](#). Over half of these comments expressed positive feelings towards the free clinic, mostly centered around gratitude and patient satisfaction. One patient commented, “I think this is a very beautiful group of people and thank you for all your attention and care.” In addition, 8 respondents explicitly described convenience with telemedicine visits. One patient explained, “Telehealth has made it easier for me to attend clinic visits when I am in pain.” Another patient said, “I have grandchildren so I would not have been able to

attend all the in-person visits.” Three patients also outwardly expressed gratitude for remote visits due to safety concerns about COVID-19. Constructive comments mostly focused on a preference for in-person clinics.

**Table 5.** Characterization of Free Response Comments Among UC San Diego SRFCP Survey Participants.

Free Response Characterization	Overall Comments (n=36) No. (%)
Positive Comments	
Safety	3 (8.3)
Gratitude/Contentment	13 (36.1)
Convenience	7 (19.4)
Preference for telemedicine	3 (8.3)
Constructive Comments	
Technical difficulties	1 (2.8)
Preference for in-person visits	7 (19.4)
Unsatisfied with care	1 (2.8)

**Discussion**

This survey revealed that the vast majority of the SRFCP’s patients are satisfied with their medical care even given the abrupt switch to telemedicine. Given the vulnerable population the SRFCP serves, it was important to gauge how their medical care was impacted by COVID-19. The clinic prioritized finding ways to adapt and to continue care for its patients as many have chronic conditions that require regular visits. This survey provided an opportunity to assess how well the telemedicine program adopted by the clinic was being received by its patients.

It is important to note that building a trusting physician-patient relationship did not seem to be impacted with remote medicine. Patients still felt respected and cared for even without a face-to-face, in-person interaction. There are limitations to how empathy and compassion can be conveyed remotely. Therefore, patients reporting that they felt kindness from the medical team suggests that rapport can still be built over telemedicine. Despite the majority of the free clinic patients being monolingual Spanish speakers, a majority reported comfort navigating telehealth visits. This could be due to the establishment of a telemedicine task force, in which patients were individually supported in setting up applications and trouble-shooting technical issues, with one-

on-on help from students, interpreters and community health promoters. This suggests an important requirement with accessibility and technical literacy in making sure patients had success with telemedicine.

A significant finding involves the number of patients that reported telemedicine making it possible to attend visits that they would not have otherwise been able to attend if it were conducted in-person. Given that not all our clinic sites are directly located in neighborhoods most populated by our patients, telemedicine may be a potentially convenient modality that can be continued in the future. Furthermore, the free response section parallels this sentiment directly, with patients expressing satisfaction with decreased travel and waiting times.

At in-person clinics, filling prescriptions could result in patients waiting for hours. However, with the adoption of telemedicine, the free clinic now offers food and medication deliveries to its patients. This has offset a lot of transportation burden for the patients. With many survey respondents expressing a desire to continue with telemedicine in the future, this holds a possibility of a hybrid model, in which remote visits can increase efficiency and convenience.

There are limitations to this study. Given the need for interpreters to be present for survey administration, not all clinic patients were able to be surveyed. Furthermore, not all clinic patients were able to transition to telemedicine. Therefore, we are missing input from an especially vital group of patients, individuals who have received no medical care since the start of COVID-19 due to the inaccessibility of technology. Another possible confounder is the possibility that patients reported high levels of satisfaction in part due to not perceiving missing components of their care (e.g., vital sign measurements). Furthermore, given the vulnerable population we serve, patients may be less willing to share negative sentiment and criticism. This is important to consider given the power dynamics within a patient-doctor relationship. Conducting the survey right after their medical visit could mean that patients did not feel that their anonymity was secured.

## Conclusion

This study assessed how UC San Diego SRFCP patients felt about the switch to telemedicine and attempted to identify areas for improvement. Although the majority of patients reported satisfaction with the care received remotely, many patients also expressed a desire to return to in-person clinics. This sentiment balanced with comments about increased convenience for the patients advocates for a hybrid model can work to best serve our free clinic population.

## References

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