

Telemedicine at the Charlottesville Free Clinic: Patient and Provider Perspectives

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Background

The logo for the Charlottesville Free Clinic is a teal-colored rectangle with a white border. The text "Charlottesville Free Clinic" is written in white, sans-serif font, with "Charlottesville" on the top line and "Free Clinic" on the bottom line. The rectangle has a small triangular cut-off at the bottom right corner.

Charlottesville
Free Clinic

- Charlottesville Free Clinic (CFC): 1992 - Present
 - Provides primary and specialty care to underserved patients in the local Charlottesville area
 - Run by volunteer providers, nurses, students, and other staff members
- March 2020
 - Switch to **telemedicine as the primary care delivery model** with both video calls (Doxy.me) and phone calls
 - Occasional in-person visits with an NP offered when necessary
 - **342 telemedicine visits** conducted between March 16th and May 1st, 2020

Study Objectives

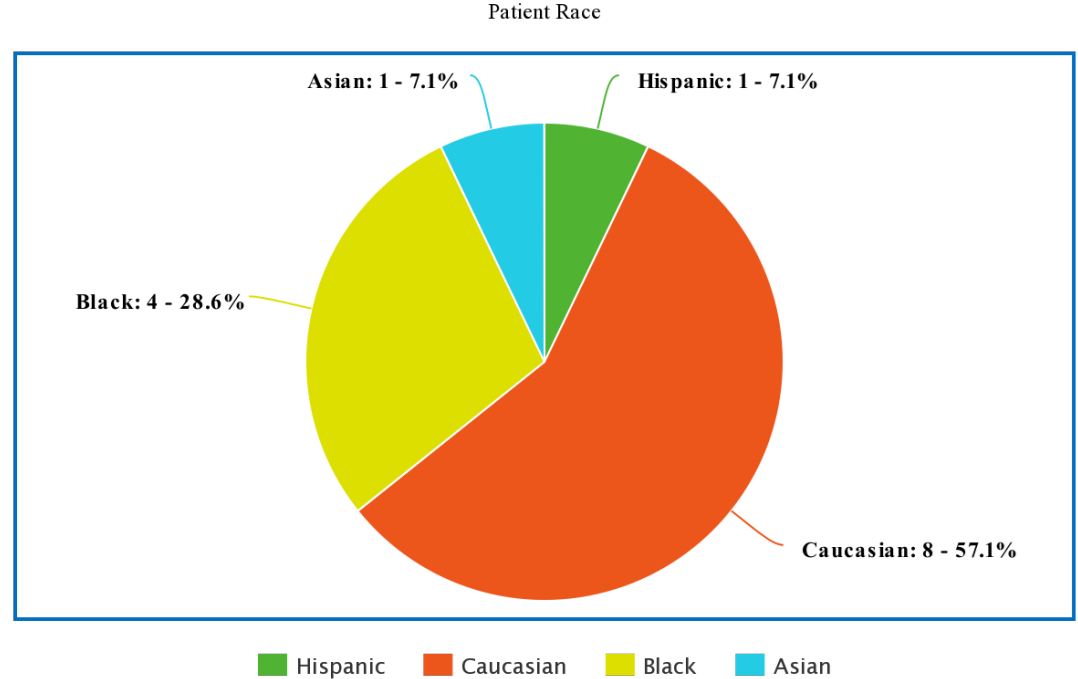
- Explore the **perspectives of CFC patients and providers** regarding their telemedicine experience
- **Discover the benefits** of telemedicine in the care of a free clinic population
- Understand the **challenges and barriers** encountered during CFC's telemedicine initiative
- Identify possible areas for **future improvement**
- Determine how telemedicine can best fit into **the future of CFC**

Methods

- Qualitative study conducted via semi-structured interviews with patients and providers
- Study recruitment conducted in a purposive manner via phone calls to CFC patient base
 - aim for diversity in basic patient characteristics (gender, age, race, income, visit type)
- Interviews conducted August - October 2020 via phone or video call
 - 15 - 45 minutes in length
 - 14 patients and 3 providers interviewed

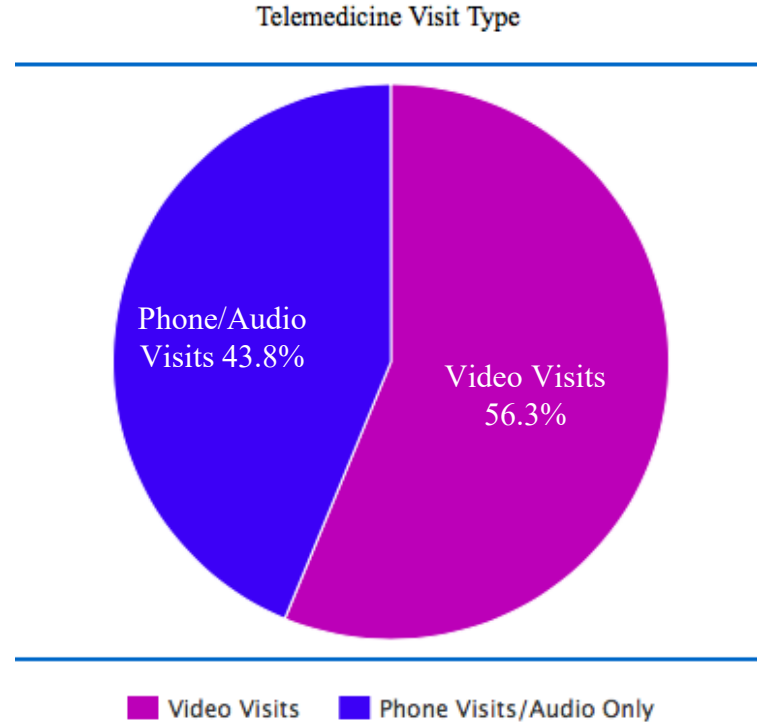
Participant Characteristics

- Patient characteristics:
 - 8 males, 6 females
 - Ages 25-62 yo
 - 8/14 Caucasian patients, 1/14 Hispanic, 4/14 Black, 1/14 Asian
 - Annual incomes ranging from \$5,000 - \$46,000
- Provider characteristics:
 - 3/3 Caucasian male physicians



Telemedicine Visit Characteristics

- Telemedicine Visits:
 - 13/14 established patients, 1/14 new patient
 - 13/14 IM visits, 1/14 Dermatology
 - 2 patients also seen by CFC mental health counselors
 - 7 phone/audio only visits, 9 video visits



Methods

- Interview transcripts coded and analyzed for emerging themes (Dedoose)
 - Code tags attached to relevant excerpts
 - Ongoing development of code tree
- Data analyzed to identify central ideas/themes and predominant patterns
- Data saturation



Results: Communication

Patient Perspectives

- Key element identified to be **adversely affected** by telemedicine visits
 - Lacked the extra layer of facial expressions and body language
 - Harder to convey information and be fully open with the provider
 - Decreased personal connection with provider
 - Overall decreased comfort level
 - Phone visits were more affected than video visits

*“I think that a doctor can **read your body language better** if you’re there in person ... I think there’s **a whole psychological dynamic** that happens”.*

*“If you’re not face to face in the room with someone, **it’s much easier to leave things out.**”*

*“I prefer the in-person just because I like to do a true life face-to-face and kind of explain actually what’s going on...**I just feel a lot more comfortable.**”*

Results: Communication

Provider Perspectives

- Some felt communication was largely unaffected aside from occasional connectivity issues or background noises
- Other felt their personal connection with patients was affected
- Lacked extra layers of non-verbal communication (body language, drawings)
- Visits with new patients, visits via phone call, and visits conducted in Spanish were more difficult

*“Part of being a physician is that **contact with the patient**, sort of just laying on your hands - and I think that sort of **forms a bond between the physician and patient.**”*

*“The losses in terms of physical contact, **being able to see the whole person** fidgeting, or scratching or doing the things that people do, those are a real loss in communicating with the patient.”*

“I don’t think there’s a lot of difference between in video and in person so long as they can see me.”

Results: Benefits of Telemedicine

Patient Perspectives

- Decreased time requirement
 - Most patients saved at least some time with telemedicine, ranging from 30 minutes - 3 hours
 - “It was *definitely a relief* not to have part of my evening or morning having to be blocked out just for a doctor’s appointment that takes all of seven minutes.”
- Flexible appointment locations
 - Ability to attend appointments from home or work
 - No need to find childcare, ability to attend appointments during a busy work day
- No need for transportation
 - For patients who cannot drive or without access to reliable transportation

Results: Benefits of Telemedicine

Provider Perspectives

- Opportunity to see the patient in their personal/home environment
- Improved reliable medication information
 - Exact names and dosages readily available
- Improved accessibility of care
 - *“If you think of **some people working multiple jobs because of the population we serve,** being able to keep working and take 20 minutes to talk to me and then go back to work is beautiful.”*
 - *“I think for follow up it’s probably going to improve medical care just because **you can see more people, more frequently.**”*
- Ability to accomplish other tasks in between visits

Results: Drawbacks of Telemedicine

Patient Perspectives

- Lack of a **physical exam and vital signs**
 - Decreased trust in the provider/outcome of the visit
 - *“It makes me feel like somebody else is seeing what’s happening ... and **I’m not just depending on myself.**”*
 - *“It leaves you **very anxious as to whether you’re actually just self-diagnosing** or if the doctor’s actually able to tell what’s going on.”*
- Hindered communication and personal connection with provider
- More outside interruptions and distractions
- Privacy concerns (1 patient)

Results: Drawbacks of Telemedicine

Provider Perspectives

- Lack of a **physical exam and vital signs; lack of rapid diagnostic tests**
 - One provider stated **~25% of the time** they felt they needed to do an exam
 - Decreased provider comfort with assessment and plan
 - *“The issue is, what are you going to do next if you have an incomplete physical exam of the patient? Because **the options are limited and none of them are really good.**”*
- Hindered communication and personal connection
- Loss of interpersonal interactions with other providers and clinic staff
 - *“What suffers a lot ... is my social interactions as part of the clinic. I mean, **the free clinic is a tremendously social place... so that actually I really miss that**”.*
- Increased logistical responsibilities

Results: Technology

Patient Perspectives

- The majority of patients reported no logistical issues
 - 2/11 attempted video calls had connection issues
- Several patients expressed **a preference for phone call** over video call
 - Better connection, discomfort/unfamiliarity with video call, or lack of access to video technology
- 13/14 patients had a cell phone, 7/14 had a laptop or computer, 4/14 had a tablet and 11/14 had home internet access

Results: Technology

Provider Perspectives

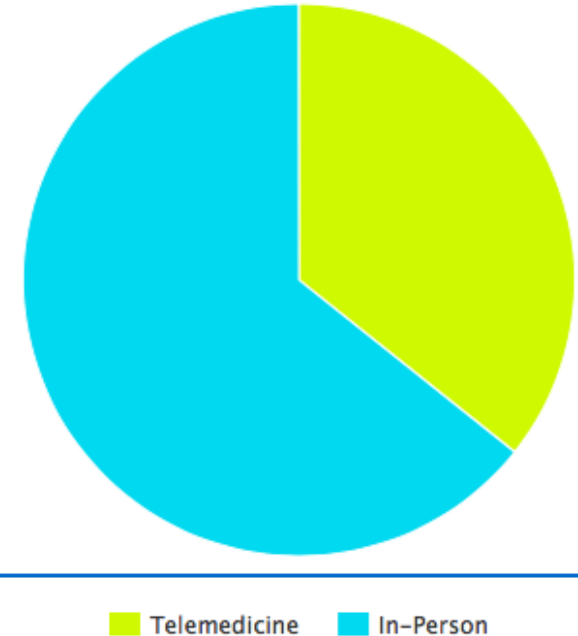
- All providers reported no logistical issues and were comfortable using the technology
- Some perceived discomfort with telemedicine technology (video call) from their patients
 - “I think **we have a very large group of people who are deeply uncomfortable using this,** which is the main reasons why people don’t want to video call even when they are working from a cell phone and they could do it.”
- 100% provider **preference for video calls** over phone calls
 - Improved patient-provider connection, communication, and diagnostic capabilities

Results: Future of Telemedicine

- Patient Perspectives

- 5/14 general preference for telemedicine visits
 - Due to increased convenience (time, transportation, no child care needed etc)
- 9/14 general preference for in-person visits
 - Lack of physical exam/vital signs, hindered communication, overall decreased comfort level
- 10/14 patients would like the option of telemedicine moving forward
 - Medication refills, quick follow up visits

Visit Type Preference



Results: Future of Telemedicine

- Provider Perspectives

- All providers felt **telemedicine would be beneficial to continue** for certain visit types:
 - Medication refills, chronic disease follow ups, imaging or lab results discussion
 - Chronic HTN visits if all patients had home blood pressure machines

Conclusions

- The implementation of telemedicine at CFC during the COVID-19 pandemic had both positive and negative impacts on patients and providers
- Lack of physical exam/vitals and rapid diagnostic tests, challenges of communication and personal connection identified as the main drawbacks
- Increased convenience emerged as the major benefit for CFC patients
 - Potential for telemedicine to **improve access and quality of care** in this unique population with notable socioeconomic challenges

Conclusions

- Future of telemedicine at CFC
 - Medication refills, follow up visits for chronic conditions
 - Continued option of telemedicine for patients with demanding home responsibilities, work schedules, or unreliable transportation
- Areas for potential improvement
 - Improved access and/or familiarity with video call technology
 - Increased utilization of home blood pressure machines
 - Increased continuity with the same provider

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