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Telemedicine after the COVID-19 Pandemic: A Quality Improvement Project

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TELEMEDICINE AFTER THE
COVID-19 PANDEMIC:
A QUALITY IMPROVEMENT
PROJECT

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Hinesburg Family Medicine

May-June 2021

Mentor: Dr. Michelle Cangiano

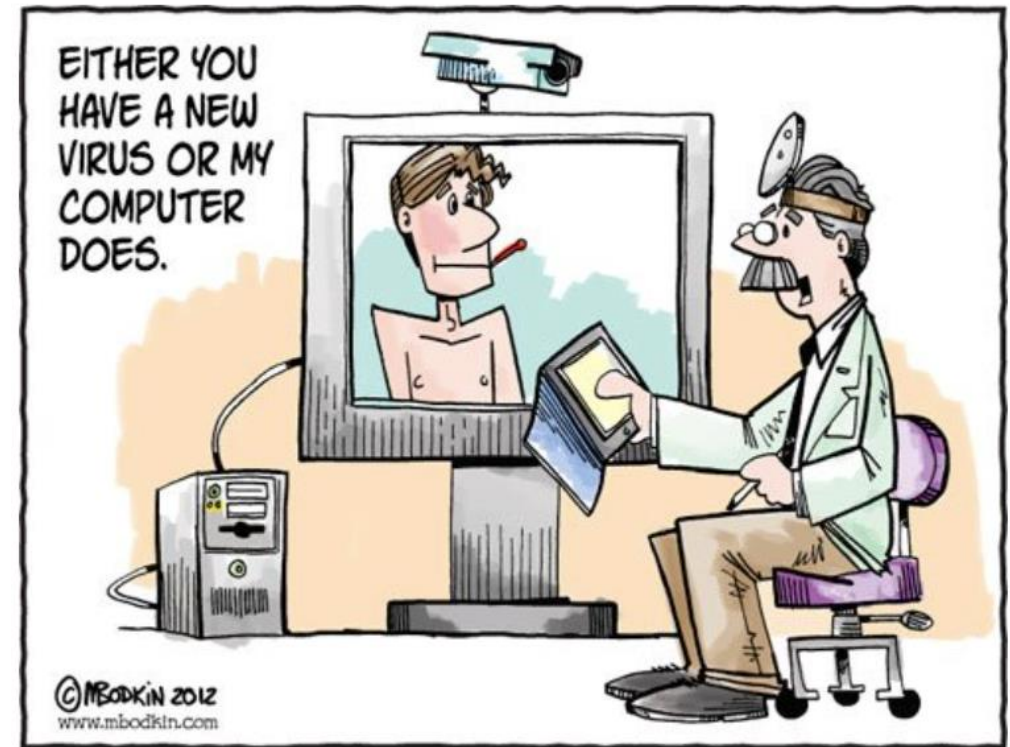
PROBLEM IDENTIFICATION

- As healthcare adapted to the COVID-19 pandemic, there was a wave of innovation and utilization of telemedicine, including technology accessibility and insurance coverage. ^{1,2}
- In May-June 2021 we are seeing national vaccination rates rise and, as a result, loosening COVID-19 restrictions including more events moving back in-person. ³
- As healthcare also transitions back to in-person, what does this mean for the future of telehealth? Is it here to stay or was it simply a solution to persevere through the pandemic?



PUBLIC HEALTH COST

- Telemedicine visits expand access to healthcare for patients who previously experienced transportation as a barrier to receiving care. ⁴
- However, telemedicine offers its own barriers to access, especially for the elderly and those with low socioeconomic status, including internet access, access to technological devices, and knowledge of how to use technology. ⁵
- Missed primary care appointments lead to increased trips to the emergency room and hospitalizations. According to a 2019 study by the UnitedHealth Group, approximately 2/3 of hospital ED visits annually in the US are avoidable and could be treated in a primary care setting. This study estimates savings to approximate up to \$32 billion per year. ^{6,7}
- By increasing access to primary care, whether via in-person or telemedicine, by delivering care in a way that works around each patient's unique barriers to access, we can decrease healthcare costs.



COMMUNITY PERSPECTIVE

Dr. James Ulager

“What is your perspective on telehealth as we begin to emerge from COVID-19 and begin to move back to in-person?”

It would have taken us a really long time to do all the innovations with telehealth that we were able to do with COVID in a very short time. It's certainly nice to see more patients in person and I certainly miss doing that, but we shouldn't miss the things we gained for both patient and provider convenience as we go back to seeing patients more in person. We can't lose the innovation we've made!

“Do you find that certain types of visits or appointments tend to be a better use of telehealth?”

Pediatric ADHD: When you have a busy 7 year old who a) you don't want to take them out of school and b) they've been in school all day and their medicine is wearing off and they're sitting in our waiting room and then you're running behind because it's the end of the day and they're waiting forever to see you – that's so much better at home. Then if you're trying to have a conversation with the grown-up after you see the kid, they can go and do whatever it is they were doing at home.

Mental health: I had a very severely depressed person that I saw every other week (via telehealth), and it would have been hard for her to get herself in here. I don't think she would have shown and actually in the past had a pattern of not showing. I was able to see her every other week and see, for example, what is her house look like, is she sitting in the dark by herself, etc.

“Are there any situations where you find it is actually beneficial now to be able to have more visits in-person?”

Oh yeah – certain physical exam things are just a lot easier in person, musculoskeletal for example. Skin things – video is not very good for dermatology, but photos are actually a lot better than videos for dermatology. And procedures, of course.

COMMUNITY PERSPECTIVE

Dr. Michelle Cangiano

“What is your perspective on telehealth as we begin to emerge from COVID-19 and begin to move back to in-person?”

I don't see it going anywhere, it's definitely a useful tool. I was using it before the pandemic started for visits like depression and HTN follow-ups. I can definitely see it increasing access to care for some people who don't have transportation. I'll probably still use it for those types of visits, but the pandemic has shown me that I can do sports medicine and other things that I didn't think were possible pre-pandemic.

“Do you find that certain types of visits or appointments tend to be a better use of telehealth?”

Those depression and anxiety follow-ups are probably the biggest one that I use it for. ADHD follow-ups too. As of right now I can practice across state lines with telemedicine, so for my college students I can see them on video visits which has been really nice. However, this might change as the rules tighten up a bit post-pandemic.

“Are there any situations where you find it is actually beneficial now to be able to have more visits in-person?”

I definitely can do musculoskeletal visits via video but they are much better in-person. Rashes are also much better in-person. Those are the two big ones where you really do need to lay hands on people tend to be better in-person.

INTERVENTION + METHODOLOGY

5 question survey given via paper or verbally at the end of in-office and telehealth visits, respectively, collected by Alexis Miller

Telemedicine Visit Survey

1. What type of appointment was your visit today?
 - Annual check-up or physical
 - New patient visit
 - Acute problem
 - Follow-up appointment
 - Medication management
 - Mental health or psychiatric care
 - Need specialist referral
 - Paperwork or forms
2. How would you rate your overall satisfaction with today's visit?
 - Not satisfied
 - Somewhat satisfied
 - Very satisfied
3. Did you experience any internet or technology issues with today's visit?
 - Yes -- if yes, please explain: _____
 - No
4. Would you have preferred for today's visit to be in-person instead of telemedicine?
 - Yes, I would have preferred in-person.
 - No, I would not have preferred in-person.
5. Are you more likely to request telehealth or in-person visits in the future?
 - Telemedicine
 - In-person
 - No preference
 - Depends on type of visit or appointment

In-Office Visit Survey

1. What type of appointment was your visit today?
 - Annual check-up or physical
 - New patient visit
 - Acute problem
 - Follow-up appointment
 - Medication management
 - Mental health or psychiatric care
 - Need specialist referral
 - Paperwork or forms
2. How would you rate your overall satisfaction with today's visit?
 - Not satisfied
 - Somewhat satisfied
 - Very satisfied
3. Did you experience any difficulties with getting to the office for today's visit, such as transportation issues?
 - Yes -- If yes, please explain: _____
 - No
4. Would you have preferred for today's visit to be telemedicine instead of in-person?
 - Yes, I would have preferred telemedicine
 - No, I would not have preferred telemedicine
5. Are you more likely to request telehealth or in-person visits in the future?
 - Telemedicine
 - In-person
 - No preference
 - Depends on type of visit or appointment

RESULTS

- 12 survey participants: 10 in-office, 2 telemedicine

Telemedicine Patients

- 50% would have preferred in-person
- 0% experienced internet or technology barriers
- 50% preferred in-person, other 50% preference depends on type of visit

In-Office Patients

- 0% would have preferred telehealth
- 0% experienced transportation issues
- 70% preferred in-person, other 30% preference depended on type of visit

EFFECTIVENESS + LIMITATIONS

Effectiveness

- This project was effective at gaining insight into patient preferences regarding telehealth versus in-person visits as we begin to emerge from the COVID-19 pandemic and associated surge in telemedicine use in primary care.

Limitations include:

- Small sample size
- Sampling bias
- Patients that did not show up for their appointment are more likely to have experienced a barrier to accessing care.
- Given the smaller sample size it is more difficult to draw conclusions that are representative of the general population

FUTURE PROJECT RECOMMENDATIONS

- Since this project is taking place as COVID-19 restrictions loosen up and more events move back to in-person, it would be interesting to re-evaluate patient preferences again as we continue to emerge from the COVID-19 pandemic. For example, insurance coverage of telemedicine may change as we progress to more in-person availability.
- The project took place over a small amount of time, yielding a smaller sample size. It would be greatly beneficial for the project to be continued over a longer length of time to get a larger sample size
- It would be insightful to ask patients more detailed questions about their preferences of primary care delivery. For example, questions could address telehealth delivery via phone call or video.

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INTERVIEW CONSENT FORM

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview, and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Consented:

Dr. James Ulager, 6/21/2021

Dr. Michelle Cangiano, 6/24/2021