

Ability and willingness of vascular surgery patients to use telemedicine

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Background/Objectives: This study aims to assess the ability and willingness of vascular surgery patients to use telemedicine (TM), as well as identifying some barriers restricting its use.

Methods: An observational, cross-sectional study was conducted among vascular surgery patients in 2022 who visited the clinic from 9/2019 to 12/2019. A telephone survey was used to assess patients' perceptions and barriers to TM along with mobility. Distance and time traveled to the clinic were evaluated.

Results: A total of 107 patients were surveyed. General willingness to use TM for vascular surgery appointments was 3.35 (Likert scale 1-5). 33.6% of patients preferred TM over in-person appointments, 50.5% of patients believed their medical needs could be met using TM, and 57.9% of patients feel comfortable using TM. Positive correlations were found between technology access and willingness to use TM (web camera (M=+1.5, $p<0.001$), ability operating web camera (M=+1.2, $p<0.001$), stable internet (M=+0.7, $p=0.026$)), work hours impact scheduling appointments (M=1.0, $p=0.007$), and believing medical needs could be met using TM (M=+1.7, $p<0.001$). Negative correlations were found between age and technology access (web camera (M= -7.0, $p=0.004$) and ability operating web camera (M=-9.4, $p<0.001$)), preferring TM (M=-7.2, $p<0.001$), believing medical needs could be met using TM (M =-6.3, $p=0.002$), and feeling comfortable using TM (M=-6.4, $p=0.002$). Younger patients have work hours that impact appointment scheduling (M=-10.9, $p<0.001$). Patients were less willing to use TM for initial appointments than follow-ups and long-term surveillance (M=-0.85, M=-0.90, $p<0.001$).

Conclusion and potential impact: The COVID-19 pandemic caused many vascular surgery clinics to rapidly turn to telemedicine. The results from this study suggest that there is an ability and interest in TM for vascular surgery appointments, but limitations exist in older populations. This study serves to better understand the patient perceptions and limitations to use TM for vascular surgery appointments.