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Determining Access of In-Person vs Virtual Clinic Visits in Orthopedic Medicine

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INTRODUCTION: Virtual visits in orthopedics provide added benefits compared to in-person visits. We hypothesize that virtual visits will offer patients greater same day and future access to orthopedic physicians.

METHODS: Two previously established methodologies were used to measure orthopedic surgeon: same-day and third-next-available. Same-day access is analyzed using a ratio of unfilled to filled virtual return and in-person return appointments for every clinic day of each physician. Third-next-available is measured as the number of total non-clinic days and clinic days until each physician's third next-available-virtual and in-person appointments.

RESULTS: For same-day access, the ratio of unfilled virtual to filled virtual appointments was 1.04 on average, while the ratio of unfilled in-person to filled return in-person visits was 0.38 on average ($p=0.00323$). For third-next-available appointments the in-person opening was 5.81 days out on average compared to the virtual visit being 8.31 days out on average ($p=0.01525$). Additionally, the in-person appointment was 2.5 clinic-days out on average and the virtual appointment was 3.95 clinic-days out on average ($p<0.001$). As virtual visits are a fraction of total visits, we divided the third-next-available data by the rate each physician books virtual appointments. This resulted in a significantly increased standardized third-next-available measure of access for virtual appointments using both total days ($p<0.001$) and clinic days ($p<0.001$).

DISCUSSION/CONCLUSION: Virtual return visits offer greater same-day access for patients compared to analogous in-person return visits. However, in-person appointment availability offers better access for patients in terms of scheduling a future visit, which may be due to the increased number of in-person visits offered compared to virtual visits offered at this time. When standardizing the third-next-available data for how often each visit modality is offered, virtual visits displayed greater levels of patient access. Thus, an increased volume of virtual visit appointments may offer patients greater access for scheduling purposes in the future.