



Launching Virtual Care in a Benign Breast Surgery Clinic

Louisa Antonelli¹, BS, Hassan Nasser², MD, Jessica Bensenhaver², MD, Lindsay Petersen³, MD

¹ Wayne State University School of Medicine, Detroit, MI

² Department of Surgery, Henry Ford Hospital, Detroit, MI

³ Department of Surgery, Henry Ford Hospital, Detroit, MI; email: lpeters3@hfhs.org



Introduction

- Telemedicine describes the utilization of technology in the clinical practice which includes virtual doctor visits, computer messaging between patients and doctors, and evaluation of wounds through images sent by patients to the clinic.
- Benefits of virtual care include decreased travel time, ease of access, decreased exposure to contagions in the clinic, less time off work, and less time spent waiting in clinics and hospitals.
- The aim of this study is to assess the success of implementation of a telemedicine clinic in a benign breast surgery practice, and to explore some barriers to its use.

Methods

- Women seen as new patients in the benign breast surgery clinic and scheduled for surgery in an urban hospital were identified.
- They were asked if they were interested in having their post-operative visit performed virtually versus a traditional in-office visit.
 - Demographic information was collected.
 - If women declined the virtual post-operative visit, they were questioned why.
 - Data was collected when the virtual visits were completed.
- The differences in age and distance from the hospital between the group of women who declined telemedicine versus the group of women who expressed interest in telemedicine were analyzed using a one-tailed, unpaired T-test.

Results

- 12 women were identified that were seen as new patients and scheduled for surgery.
 - 7 interested in telemedicine visits
 - 2 completed the postoperative virtual visit
 - Neither required an in-person visit
 - Both were satisfied with their virtual visits
 - 5 declined a telemedicine visit, reasons included:
 - Not active on the patient portal
 - Not comfortable using the computer
 - No computer access
- Mean age was 55.3 years (range 24-77)
- Mean distance from the hospital was 10.0 miles (range 4.3-14.3)
- Table 1 represents the age and distance from the hospital comparison between patients interested and uninterested in completing a telemedicine visit.

Table 1. Age and distance from the hospital comparison between patients interested and uninterested in a telemedicine visit

| | Interested in telemedicine (N = 7) | Uninterested in telemedicine (N = 5) | p-value |
|-----------------------------------|------------------------------------|--------------------------------------|--------------|
| Age, years | 49.1 ± 12.9 | 64.0 ± 13.5 | 0.04* |
| Distance from the hospital, miles | 10.8 ± 1.7 | 8.9 ± 4.2 | 0.14 |

Variables represented as mean ± standard deviation
* Indicates statistical significance (p<0.05)

Conclusions

- There is an opportunity for use of telemedicine in the benign breast clinic for routine post-operative visits.
- The major limitation seemed to be comfort with or access to computer technology.
- Patients interested in telemedicine were younger compared to patients who were uninterested.

NOTE: This study was conducted prior to the outbreak of COVID-19 in the United States during the spring of 2020 and offers a unique window into the feelings of patients regarding telemedicine prior to rapid increase in use of tele-health as a forced consequence of the pandemic when fears of infection may not have been quite so widespread.

References

1. Buvik, A, et al. Cost-Effectiveness of Telemedicine in Remote Orthopedic Consultations: Randomized Controlled Trial. *Journal of Medical Internet Research* 2019;21(2):e11330. doi: 10.2196/11330.
2. Finkelstein, JB, et al. The Use of Telemedicine for the Postoperative Urologic Care of Children: Results of a Pilot Program. *The Journal of Urology* 2019;202(1): 159-163. doi: 10.1097/JU.000000000000109.
3. Kildea, J, et al. Design and Development of a Person-Centered Patient Portal Using Participatory Stakeholder Co-Design. *Journal of Medical Internet Research* 2019;21(2):e11371. doi: 10.2196/11371.
4. Lee, H, et al. Patient Satisfaction with Mobile Health (MHealth) Application for Exercise Intervention in Breast Cancer Survivors. *Journal of Medical Systems* 2018;42(12):254. doi: 10.1007/s10916-018-1096-1.
5. Young, K, et al. Impact of Telemedicine in Pediatric Postoperative Care. *Telemedicine Journal and E-health* 2019;25(11):1083-1089. doi: 10.1089/tmj.2018.0246.