

Telemedicine Visits for New Contact Lens Wearers During the COVID-19 Pandemic

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PURPOSE

- To describe the use of telemedicine follow-up visits after contact lens application & removal (A&R) training, and identify potential gaps and areas of improvement in patient education

METHODS

Study Design

- IRB approved retrospective chart review
- Identified patients who completed telehealth follow up visit with the Contact Lens Service of the Illinois Eye and Ear Infirmary or Millennium Park Eye Center between September 2020 and August 2021

Data Collected

- Demographics
- Indication for lens use
- Length of time from in office A&R training
- Duration of telemedicine visit
- Technical difficulties
- Questions answered by the provider during visits

Statistical analysis

- Descriptive statistics reported

RESULTS

Demographics

10 patients (16 eyes)

Mean age: 54.5 ± 18.9
(range 20-72 years)

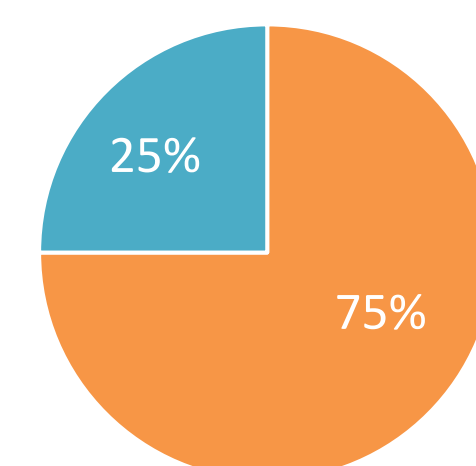
5 Males (50%)
5 Females (50%)

Indications for Lens Wear

Ocular Surface Disease

(# of patient/# of eyes)

- Graft vs. Host Disease (2/4)
- Sjogren's Syndrome (2/4)
- Neurotrophic Keratitis (1/1)
- Exposure Keratitis (1/1)
- Systemic Lupus Erythematosus (1/2)



■ Ocular Surface Disease

Corneal Irregularity

(# of patient/# of eyes)

- Keratoconus (2/3)
- Corneal transplant (1/1)

Contact Lens Type

- Most patients (n=9) were using scleral lenses
- 1 patient was a corneal gas permeable lens wearer

Telemedicine Visits

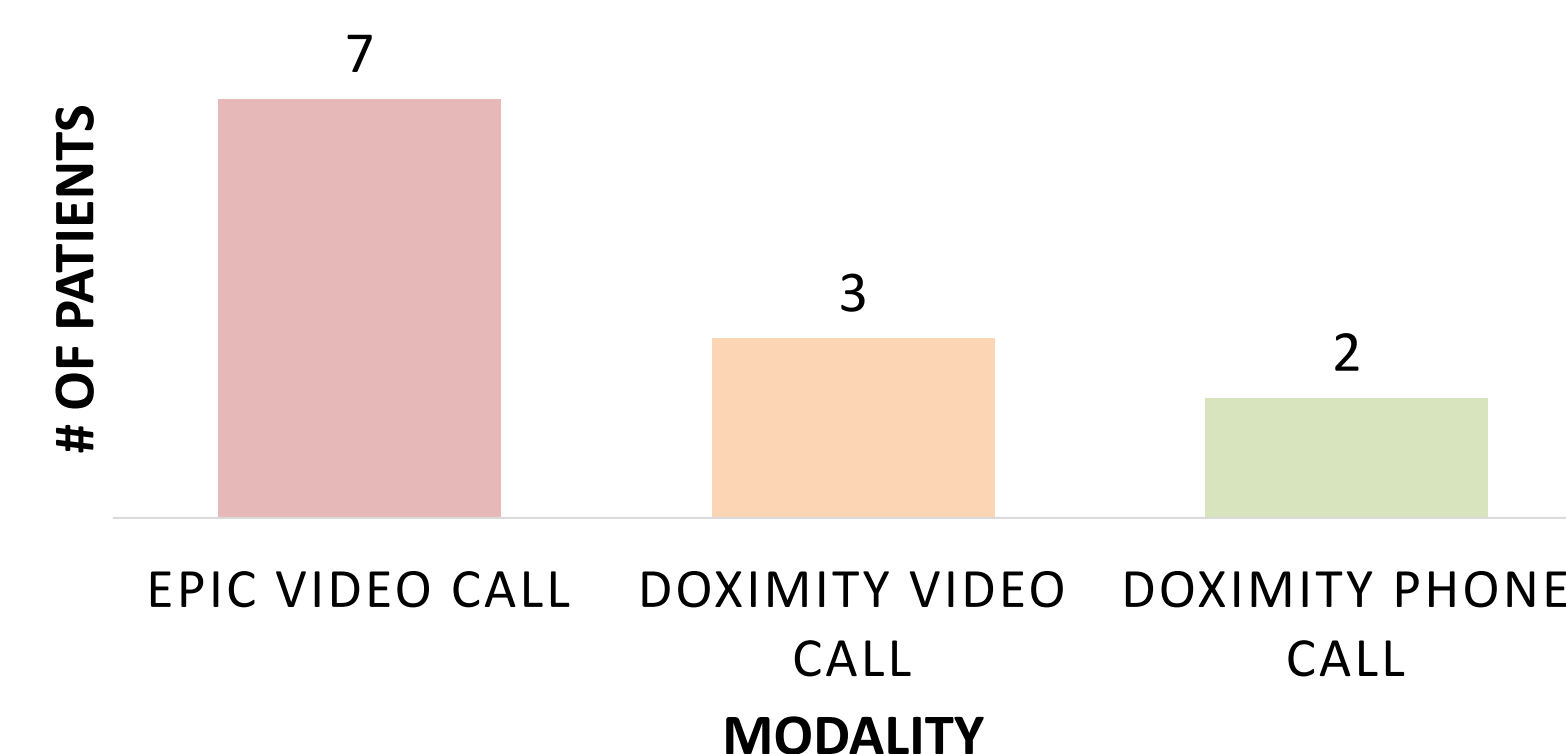
Number of days between in-office A&R training and telemedicine visit

Mean: 19.9 ± 14.1 days

*1 patient was removed as an outlier (197 days)

Duration of Telemedicine Visits

Mean: 23.0 ± 6.0 minutes



***Technical Difficulties:** 2 visits required transition from EPIC video call to Doximity phone call due to poor internet connection

EXAMPLES OF QUESTIONS ASKED

- Solutions/lens storage (4 patients)
 - Do I have to replace ClearCare solution every night?
 - How long can my lenses be stored in ClearCare?
 - If I don't use my lenses for an extended period, how should I store them?
- Vision/symptoms related (4 patients)
 - What should I use for reading?
 - I can feel the edges of the lens
 - My vision becomes blurry after I wear them for 2 hours
- Recommended lens wear time (1 patient)
 - How many hours should I wear my lenses before the next visit?
- Application and removal (1 patient)
 - How can I remove the lens more easily?

CONCLUSIONS

- The ongoing COVID-19 pandemic has expanded the definition of telemedicine, creating new opportunities for patients to seek care without the risk of exposure to disease.
- Telemedicine follow up visits for new contact lens wearers provide opportunities to reinforce instructions regarding safe contact lens hygiene and improve compliance.