


Telemedicine 101:

Best Practices for Residency and Beyond

April 27, 2020

Emmeline Ha and Kristen Zwicky

Learning Objectives

1. Understand the definition of telemedicine
 2. Understand the importance of telemedicine in patient care
 3. Learn how to effectively conduct a telemedicine visit through workplace and technology set-up
 4. Implement best practices for effective patient communication during a telemedicine visit
 5. Be able to perform a virtual physical exam
 6. Understand the documentation and coding requirements for telemedicine visits
 7. Know the different methods of staffing with attending physicians during telemedicine visits
- 

What is telemedicine?



Synchronous, real-time, audio-video communication that connects physicians and patients in different locations.

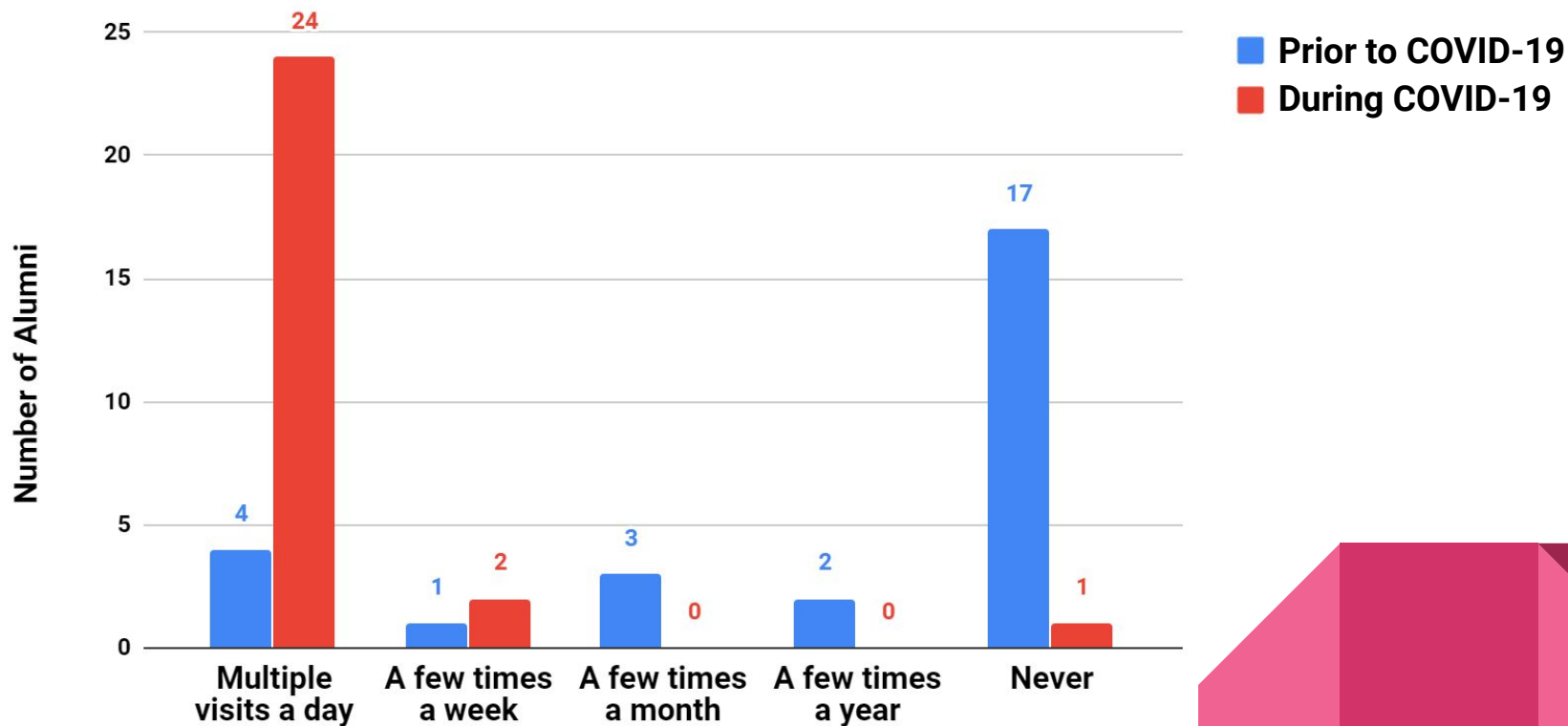
Importance of Telemedicine

- Growing model of care delivery
 - Helps increase patient access and overcome physician shortages
 - \$40 billion industry in 2019, ~19% growth each year
 - Previously limited by reimbursement/compensation
- During the COVID-19 pandemic, helps avoid unnecessary visits to health care settings.
 - Reduces exposure and impact on health resources
 - Triage patients and continue chronic disease management while sheltering-in-place
 - Current widespread use has implications for continuing telemedicine after pandemic resolves



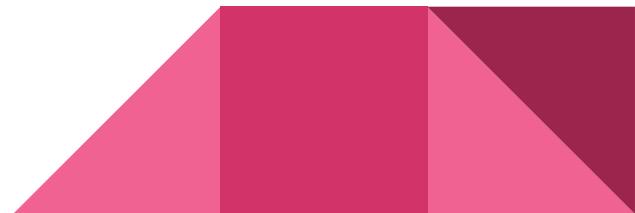
Telemedicine: Our Alumni

Frequency of Telemedicine Use by OCH FMR Alumni (N=27)



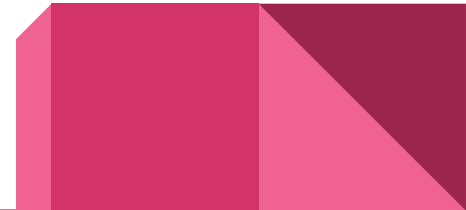
Telemedicine: Our Alumni

The majority of surveyed alumni reported that receiving **formal training** in telemedicine **during residency** would have made them **feel more prepared** to practice telemedicine now.



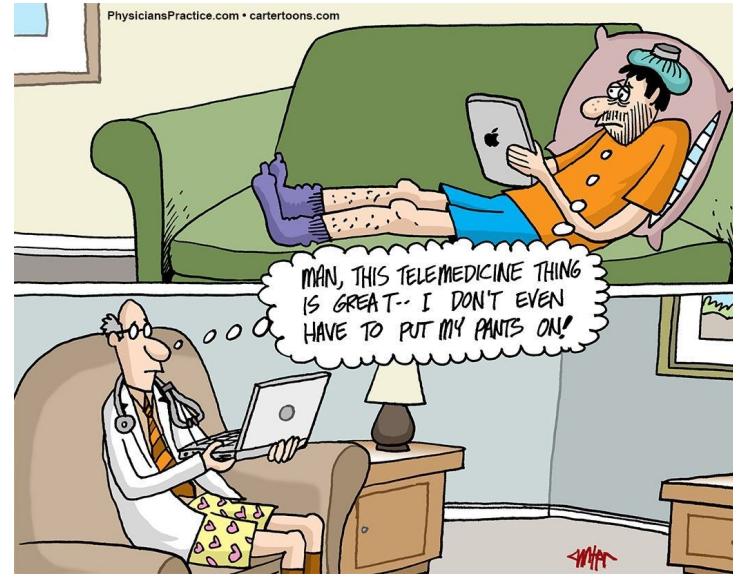
Benefits of Telemedicine for Patients

- Remove transportation barriers
- Makes seeing doctor easier and more convenient
- Increases access to communication with care team
- Help manage conditions from the comfort of the home
- Reduce risk of spreading or contracting contagious diseases



Benefits of Telemedicine for Doctors

- Improve continuity of care
- Keeps patients within their medical home
 - Less tempting to go to urgent care when convenient access to PCP is available
- Better serve patients with otherwise limited access to care
- Formalize extended or frequent patient communications and provides compensation for these services
- Reduce burnout through efficiency and diversifying practice
- Reduce no-shows or cancellations



Appropriate Telemedicine

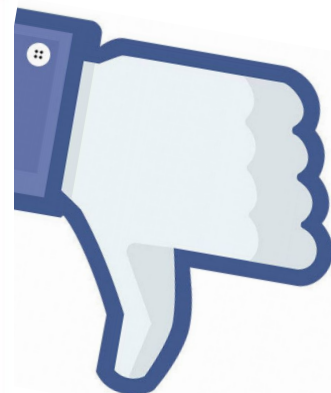


COMMON USE CASES FOR TELEHEALTH

- ☐ Appointments with existing patients
- ☐ Prenatal visits
- ☐ ADHD, Anxiety, Depression, toddler behavioral, and sleep (follow-up and medication management)
- ☐ Asthma follow-up and medication management (not when having acute symptoms or wheezing)
Children on high-dose inhaled steroids may need to be seen in the office to monitor growth
- ☐ Allergy evaluation/medication management
- ☐ Eczema, acne evaluation, and medication management and follow-up
- ☐ Any other medication management not requiring a physical exam
- ☐ Simple conjunctivitis (pink eye) without fever
- ☐ Minor trauma screening (lacerations, abrasions, animal bites)
- ☐ Follow-up for dietary guidance
- ☐ Review of lab, X-ray, and consultation reports
- ☐ Surgery follow-up
- ☐ Foreign travel (may require a vaccination visit)
- ☐ Foreign adoption (review of records prior to adoption)
- ☐ Lactation

TELEHEALTH IS NOT APPROPRIATE FOR

- ☐ First-time appointments
- ☐ Anytime a physical exam is needed
- ☐ When patient is experiencing a symptom outside the bounds of your clinical protocols for telehealth visits (e.g., fever, difficulty breathing, vomiting, confusion, agitation, or other abnormal mental states, etc.)





Getting Set Up for Telemedicine Visits

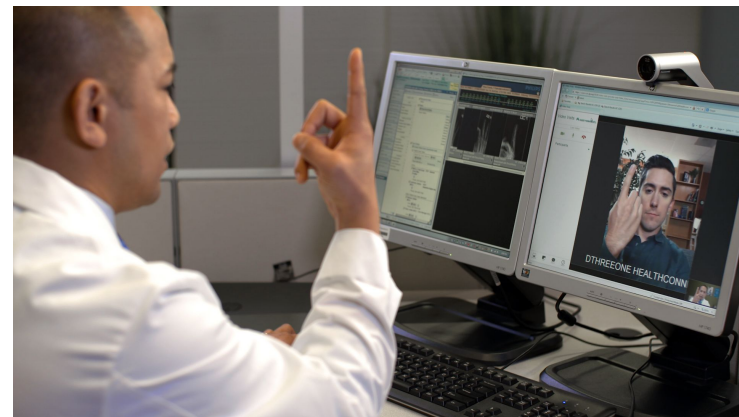
Setting up your Workspace

- Ensure room is secure for HIPPA
 - Quiet, interruption-free private space
 - Close open windows
 - Wear headphones
 - Angle screen so no one can walk by and see it
- Wear same level of professional attire as in-person care
- Adequate lighting
- Avoid visual distractions
 - Busy patterned shirts
 - Messy desks & Food/drinks
 - Photos/posters on the background wall
 - Virtual Background may be a good option



Setting up your Technology

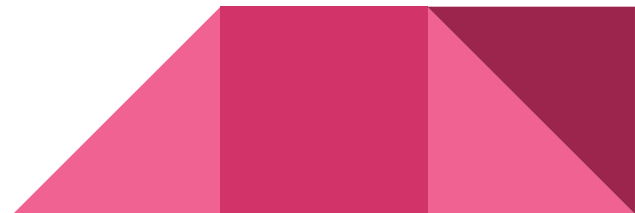
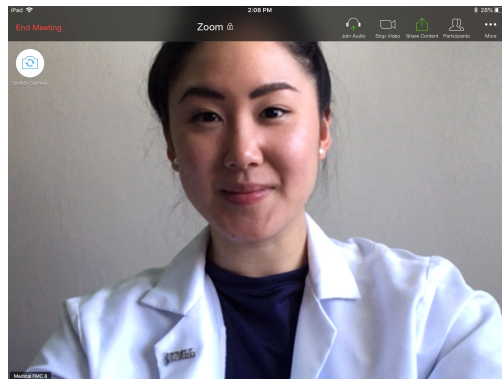
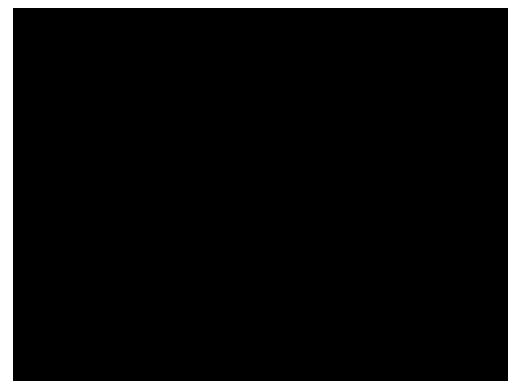
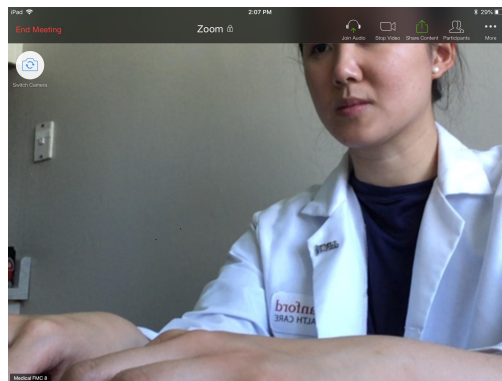
- High-speed internet connection
- Consider using dual-monitors
- Position webcam at eye level
- Test your speakers and mic before starting every visit
- Turn off other web applications and notifications
 - “Do not disturb” mode
 - Try not to check your email or read incoming texts
 - Patients can tell when you are distracted!
- Do not record visits!



Telemedicine Etiquette

- All of your actions become magnified on camera!
 - Patients are super-focused on your face during the visit
 - Sit fully upright
 - Don't fidget, scratch, take a drink, play with your hair, or touch your face
- Look directly at the webcam
 - Patient will perceive you as making eye contact
 - Position video window with patient's image at top of screen just below the webcam
- Explain and narrate your actions
 - "If you see me glancing off screen it is because I am looking at your chart."
 - "I want to make sure I record your information accurately, so I'll be typing as we talk."







Communicating with the Patient

Greeting the Patient

- Introduce yourself and your role
- Confirm that the patient can hear and see you
- Acknowledge use of new technology
 - “I realize this visit style is new, thank you for giving it a try.”
 - “It’s so nice to see your face. Sorry this couldn’t be in person but I’m glad we can chat safely.”
 - “Thank you for inviting me into your home today.”



Acknowledge the Elephant in the Living Room

- Ask how the patient is coping with the COVID-19 pandemic
 - “This is a really tough time. How are you doing?”
- Offer education and appropriate reassurance
 - CDC website
 - SCC public health dept website
- Reassure the patient that you are here for them
 - Clinic is still open.
 - Encourage them to call at any time with questions or concerns



Setting the Visit Agenda

- Let the patient know how much time is allotted for the visit
 - “We have about 15 minutes for our visit today”
 - Make sure to account for time needed for staffing with attending
- Engage the patient in agenda setting
 - Prioritize and negotiate what you’ll address in the visit
- Offer a reminder when the visit is almost over
 - “We only have a few minutes left, what questions do you still have?”



Having a good Webside Manner



Ability to communicate clearly and express empathy through carefully chosen words and tone of voice

Expressing Empathy

- Nonverbal cues are harder to pick up on in virtual visits
- Need to be purposeful in conveying these sentiments with your voice
 - Smile often
 - Use a warm tone of voice
- Increase the frequency of empathetic statements to show you are listening
 - “I hear concern in your voice. Tell me more about this.”
 - “Gosh, this sounds really tough.”



Communicate Clearly

- Speak slowly and clearly
 - Avoid medical jargon
- Pause longer between statements to allow for transmission delay
 - “Everyone starts talking at once” effect
- Check in frequently to elicit reactions and confirm understanding
 - “What do you think about that?”
- Break up your education into shorter chunks
- Share screen for lab or X-ray results



Be Clear About the Plan

- Write down instructions for the patient.
 - Type into the chat window
 - Send message to patient through EMR portal
- Clearly define next steps.
 - “I will call you when I receive your lab results”
 - “My MA will call you shortly to schedule your next f/u visit”



The Virtual Physical Exam



“Listen to your patient, he is telling you the diagnosis.”

- Sir William Osler

The virtual physical exam **is** a physical exam.

- Use the power of observation
 - Acuity
 - Environment
 - Cognition
- Partner with your patient
 - Vitals with home BP monitor and thermometer
 - Engage a family member to perform maneuvers
- Use technology as a benefit
 - Photo or video share for rashes or lesions that are difficult to see



Virtual Physical Exam: Systems

EYES

- Appearance of conjunctiva and lids (lid droop, crusting/exudate, conjunctival injection)
- Appearance of pupils (equal, round, extraocular eye movements)
- Assessment of vision (seeing double)



EARS, NOSE, MOUTH, AND THROAT

- External appearance of the ears and nose (scars, lesions, masses)
- Assessment of hearing (able to hear, asks to repeat questions)
- Inspection of lips, mouth, teeth and gums (color, condition of mucosa)
- Gross inspection of throat (tonsillar enlargement, exudate)
- Appearance of face (symmetric, appropriate movement of mouth, no drooling or labial flattening, ability to raise eyebrow, frown/smile, close eyes, show upper lower teeth, puff out cheeks)
- Pain or tenderness when patient palpates sinuses or ears



NECK

- External appearance of the neck (overall appearance, symmetry, tracheal position, gross evidence of lymphadenopathy, jugular venous distention)
- Gross movement (degrees of flexion anterior, posterior and laterally)



RESPIRATORY

- Assessment of respiratory effort (intercostal retractions, use of accessory muscles, diaphragmatic movement, pursed lip breathing, speaking in full sentences or limited due to shortness of breath)
- Audible wheezing
- Presence and nature of cough (frequent, occasional, wet, dry, coarse)



CARDIOVASCULAR

- Presence and nature of edema in extremities (pitting, weeping)
- Capillary refill
- Temperature of extremities per patient/other measure



CONSTITUTIONAL

- Vital signs (heart rate and respiratory rate; if available, temperature, blood pressure, weight)
- General appearance (ill/well appearing, (un) comfortable, fatigued, attentive, distracted, disheveled/unkept)

CHEST

- Inspection of the breasts (symmetry, nipple discharge)
- Chest wall or costochondral tenderness with self-palpation



ABDOMEN

- Examination of the abdomen
- Tenderness on self-palpation



MUSCULOSKELETAL

- Examination of gait and station (stands with/without use of arms to push off chair; steady gait, broad/narrowed based)
- Inspection of digits and nails (capillary refill, clubbing, cyanosis, inflammatory conditions, petechiae, pallor)
- Extremity exam may include:
 - Alignment, symmetry, defects, tenderness on self-palpation
 - Range of motion, pain, contracture
 - Muscle strength and tone (flaccid, cogwheel, spastic), atrophy, abnormal movements
 - Presence and nature of edema, temperature



SKIN

- Rashes, lesions, ulcers, cracking, fissures, mottling, petechiae
- Cyanosis, diaphoresis



NEUROLOGIC

- Dermatomal distribution of numbness or pain
- Examination of sensation (by touch or pin)



PSYCHIATRIC

- Orientation to time, place, and person
- Recent and remote memory
- Mood and affect
- Pressured speech
- Mood lability (crying, laughing)



Suggested Citation:

Showalter, G. (2020, March 30). Telehealth Physical Exam. Loengard, A., Findley, J. (Eds.). <https://caravanhealth.com/>

Let's practice! What do you see?

- General
 - No apparent distress
 - Pleasant
 - Sitting upright in chair
- HEENT
 - NCAT
- Respiratory
 - Speaking in full sentences comfortably
- Neuro
 - Awake and alert
 - Answers questions appropriately
- Psych
 - Normal thought content and process
 - Normal rate and rhythm of speech



HEENT Exam



Low Back Pain



Shoulder Pain

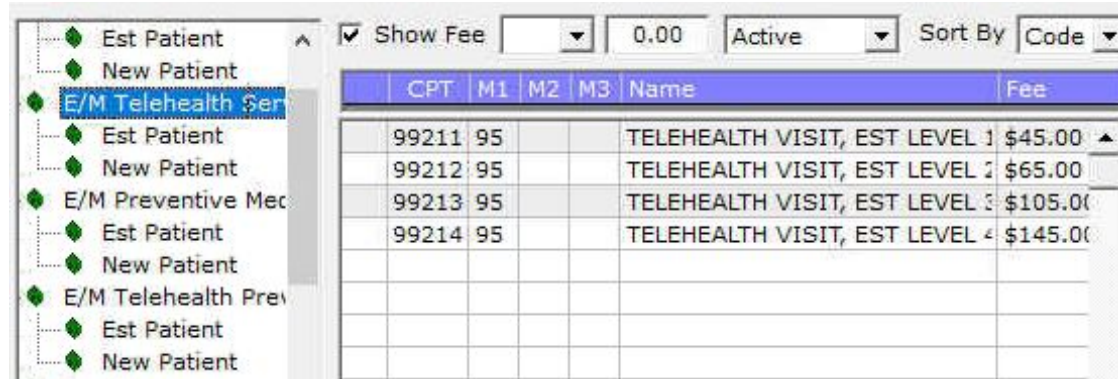


Documentation & Coding



Documentation & Coding

- Requirements vary by state and insurance
- Typical must-haves
 - Provider with state license
 - Consent (verbal or written)
 - Geographic location of provider and patient
 - Length of time spent with patient



The screenshot shows a medical coding software interface. On the left is a tree view of services, with 'E/M Telehealth Ser' selected. On the right is a table with columns for CPT, M1, M2, M3, Name, and Fee. The table contains four rows of data for telehealth visits at different levels. Above the table are controls for 'Show Fee' (checked), a fee value of '0.00', an 'Active' status dropdown, and a 'Sort By' dropdown set to 'Code'.

CPT	M1	M2	M3	Name	Fee
99211	95			TELEHEALTH VISIT, EST LEVEL 1	\$45.00
99212	95			TELEHEALTH VISIT, EST LEVEL 2	\$65.00
99213	95			TELEHEALTH VISIT, EST LEVEL 3	\$105.00
99214	95			TELEHEALTH VISIT, EST LEVEL 4	\$145.00

Staffing with an Attending



To staff over the phone:

- 1 Send the patient back to the virtual waiting room to protect their privacy.



- 2 Call the attending at their preferred number to discuss over the phone.



- 3 Bring the patient back to the zoom room to review the plan.

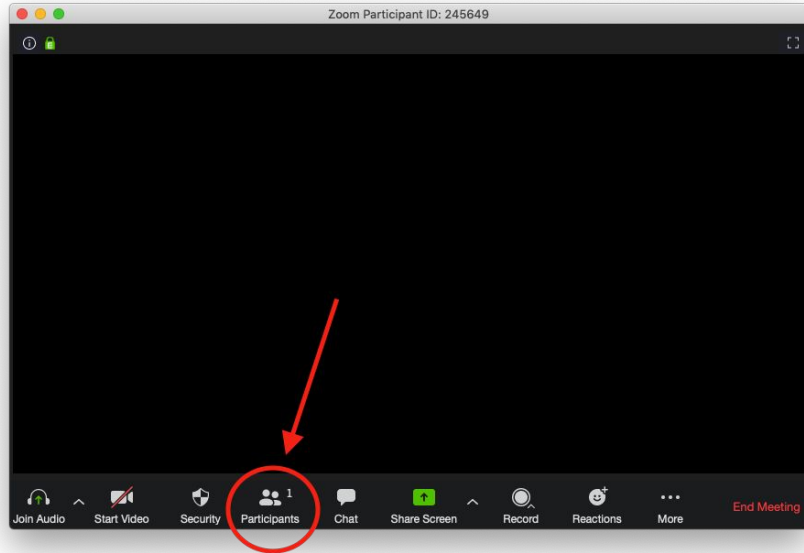
To staff in front of the patient:

- Required for all interns!
- Can staff on the phone first to discuss privately
- Invite the attending into your zoom room

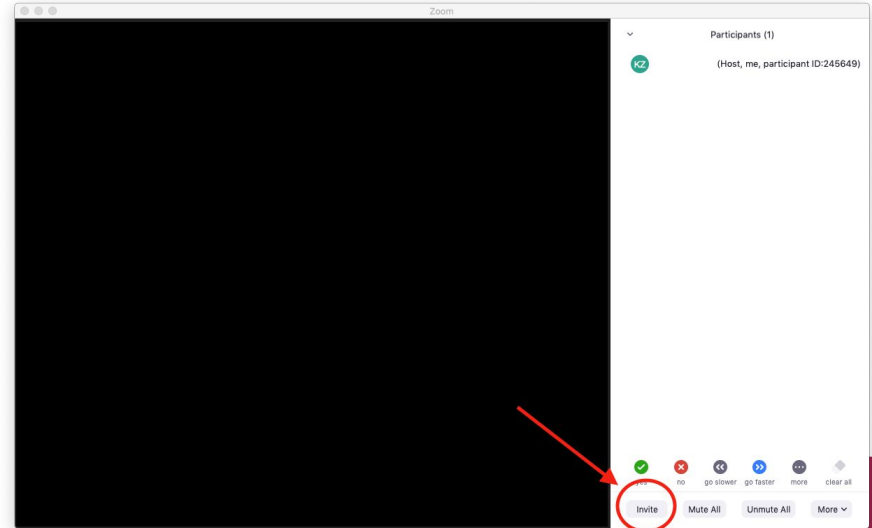


Inviting the attending into your zoom room

1. Click participants

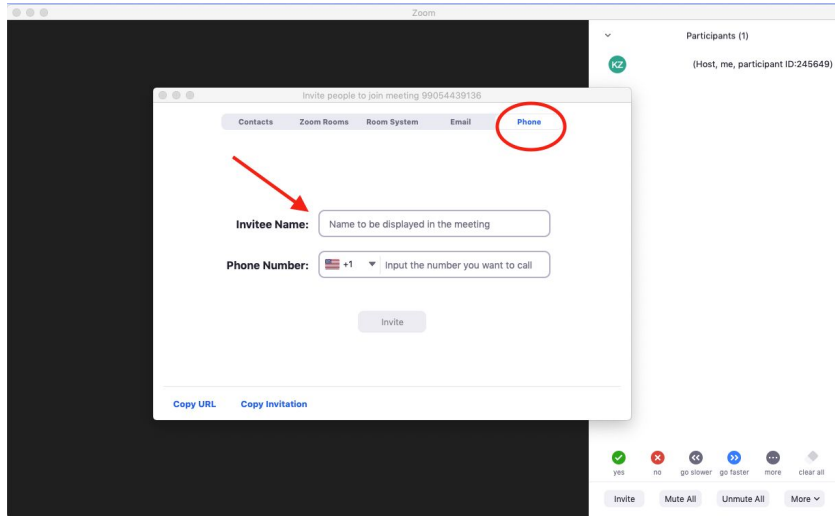


2. Click invite

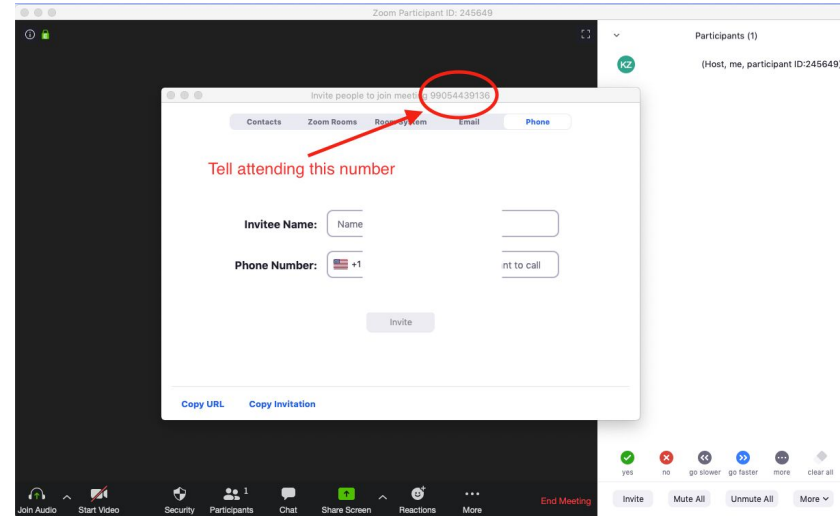


Inviting the attending into your zoom room

3. Send link to attending



OR



If you are doing a phone visit:

Option 1: Staff over the phone



1. Hang up with the patient
2. Call the attending
3. Call the patient back

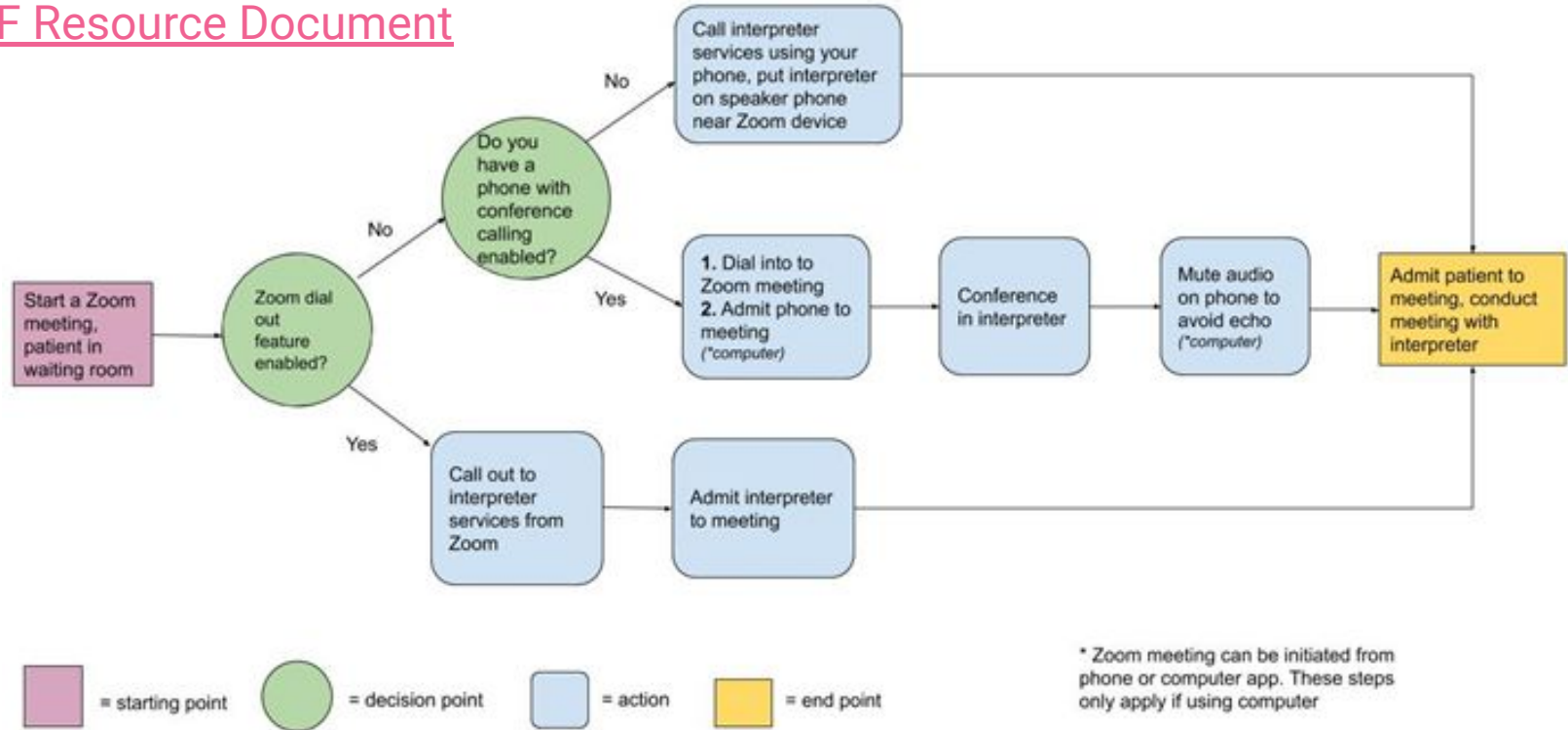
Option 2: Staff face-to-face



1. Put patient on hold
2. Open a zoom meeting
3. Invite attending to meeting
4. Call the patient back

Using an Interpreter

UCSF Resource Document



Future of Telemedicine



The majority of surveyed **alumni** reported that if telemedicine is available after COVID-19 resolves, they would **continue using** it to supplement their clinical practice.



70%

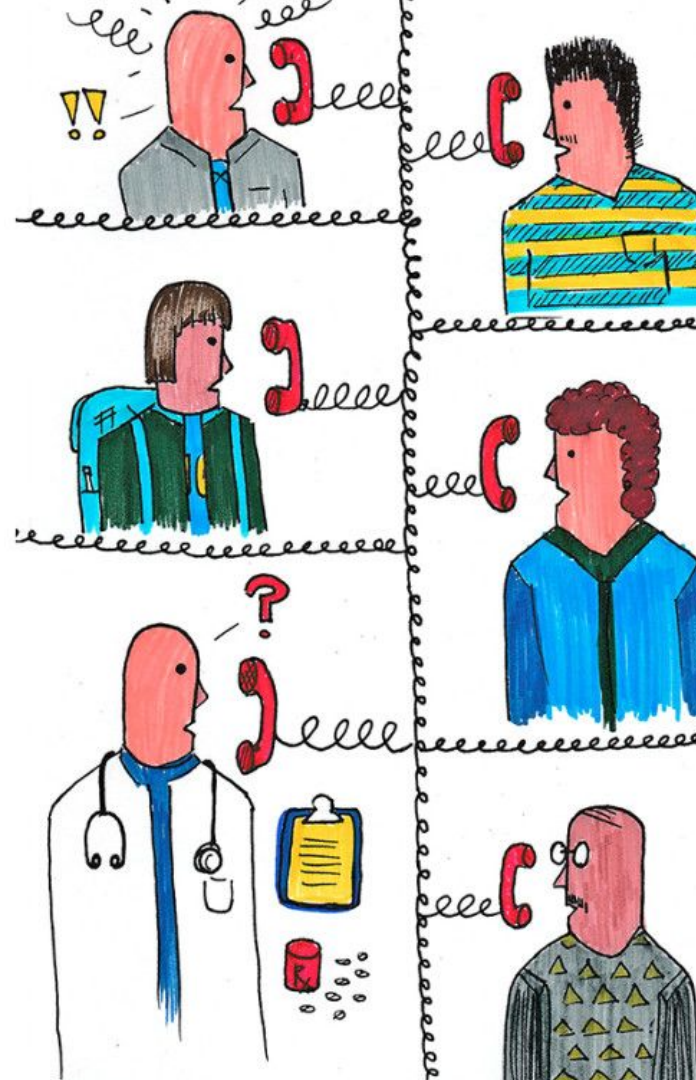
of surveyed **residents** reported
being interested in using telemedicine
after residency.



Questions?



Please scan and give us OSLER
teaching feedback.



Please take 2 minutes to
do our post-survey.



Check your email account for survey and
summary handout / didactic recording.

Sources

- <https://cvp.ucsf.edu/telehealth>
- <https://learntelehealth.org/telehealth-etiquette-series/>
- <http://medicine.stanford.edu/news/current-news/standard-news/virtual-physical-exam.html>
- <https://www.ama-assn.org/system/files/2020-04/ama-telehealth-playbook.pdf>
- https://caravanhealth.com/CaravanHealth/media/Resources-Page/Telehealth_PhysicalExam_NSR-008-20200330-APP.pdf
- <https://blog.evisit.com/5-easy-steps-to-get-the-best-web-side-manner>
- https://www.aafp.org/journals/fpm/blogs/inpractice/entry/telephone_visit_tips_2.html
- <http://www.telemedmag.com/article/telemedicine-physical-better-think/>
- <https://www.cchpca.org/resources/covid-19-telehealth-coverage-policies>
- <https://consultqd.clevelandclinic.org/improve-your-web-side-manner-tips-on-virtual-visits/>

