SP Telecommunication at the Time of COVID-19

April 6th, 2020  ASPE Webinar
Presenters

Aaron Geekie-Sousa, BAH, CHSE
Standardized Patient Trainer
Michael G. DeGroote School of Medicine
McMaster University
Kitchener, ON, Canada
sousaa@mcmaster.ca

Rachel Older, BSE
Simulation/Clinical Skills Center Manager
Central Michigan University
Mt. Pleasant, MI, USA
older1ra@cmich.edu

Laurie S. Callen, MA
Medical Educator, Simulated Patient Educator
New York Institute of Technology
College of Osteopathic Medicine
New York, NY, USA
laurie.callen@nyit.edu

Margaret Liu, Ph.D., MBA
SPI Program Director
School of Dentistry
University of Michigan
Ann Arbor, MI, USA
margliu@umich.edu
Disclaimer

The presenters have no potential conflicts of interest or financial disclosure associated with this presentation.
Agenda

- Different telecommunication formats
- Pros and cons of 4 telecommunication modalities
- Applications of telecommunication (including SP training, debriefing) and lessons learned
- Approaching formative and summative assessments with telehealth
- Challenges in telecommunication practices
- Q+A / Where and how to begin?
Data Capture

- Recordings (Yes/No)
  - Interview or Feedback
- Assessment
- Training
  - SPs
  - Faculty
Telecommunication Formats

- Phone
- BlueJeans
- Google Meet
- Facetime
- Google Form
- Qualtrics
- ExamSoft

- Adobe Connect
- WebEx
- Zoom
- SIMULATIONiQ
Where to Start with Remote Sessions?

Schedule Meeting

• Setting is important

Send Links to participants

• Email
• Via secure classroom website

Virtual Meeting

• Host - start the meeting
• Participants click onto the send link to join

Recording

• Record on cloud or local computer of the host
• Local computer - to designated storage
Meeting Recording and Assessment

Recording

Meeting recording may be stored in:

- Cloud
- Local computer
  - Recording can be transferred to more permanent location- BOX, Dropbox or Enterprise Simulation System

Assessment

- Google Form
- Qualtrics
- ExamSoft

- Set up questions
- Send SP survey assessment links
Low Tech - High Concept

Inter-professional & inter-institutional telepharmacy counselling:

• Polypharmacy cases involving BScN students interviewing SP (in-person) and seeking advice from PharmD students via telephone

• First run in January 2020
The Original “Tele” Medicine

Is face to face communication a requirement of my session?

Is it required to meet our learning objectives?

Potential Pros & Cons:
- PRO: Less “tech-y” modality, cost
- CON: Less ability to control, fidelity
The Quick-And-Dirty

• SP encounters in a third year PharmD advanced patient self-care course.

• Summative activity involving peer, instructor, and SP feedback.

• Moved virtual encounters in less than a week due to COVID-19
The Quick-And-Dirty

- Used what was “easily” accessible and available - Adobe Connect. Speed (in moving to a virtual environment) was most important factor.

- Students had a scheduled time to login to a “room”. SP, instructor, and TA/tech support were in the room for the full session.

- Used tech dry-runs the day before for students and SPs
Adobe Connect

• Pros:
  • Easily share and access files in the room.
  • Recoding function.

• Cons:
  • High technological requirements.
  • Students had to be set as “presenters”.

• Lesson learned: use the right tool for the right job
**We pay for and utilize these companies, but are not being compensated and are in no way advocating for their use.
Thinking Outside of the Box with a Small Staff

Rachel Older  
Simulation/Clinical Skills Center Manager

Sophie Watters  
Simulation/Standardized Patient Program Coordinator

Jocelyn Steffke  
Standardized Patient Training Coordinator
M3 Psychiatry Telemedicine Sessions

1. Remote session delivered utilizing WebEx, Bline, and LCMS+:
   a. 3rd year medical students in their psychiatry rotation
   b. Running since July 2019
   c. Our SPs report to our simulation center
M3 Psychiatry Telemedicine Sessions

- Session directions for students, logistics, and WebEx training link (see handout)
- Door Note, Bline, and LCMS+
- Formative assessment
M3 Psychiatry Telemedicine Sessions

- Pros: Flexibility, security, and telehealth experience

- Cons: Technical issues, using 3 systems: WebEx, Bline, and LCMS+ to achieve our objectives

- Cost: Difficult to determine
Remote Summative Assessment for a Clinical Skills Exam

- 1st year medical student physical exam
- WebEx with its recording feature.
- No SPs
Remote Summative Assessment for a Clinical Skills Exam

- Facilitators to give student directions (in lieu of a door note) and share screen images
  
  i. Cardiac Exam
  
  ii. Pulmonary Exam
  
  iii. ENT
  
  iv. Facilitators to flag students in need of remediation

- This was originally a 3 station OSCE
  
  i. In the fall, the students will complete a didactic portion
Remote Summative Assessment for a Clinical Skills Exam
Remote Summative Assessment for a Clinical Skills Exam

- Pros: Technique correction, security, and student engagement
- Cons: rescheduling physical demonstration
- Cost: saving on SPs
ICC Team Effort

SP Educators: Lisa Cullen, MS & Jamie Colvell, MPH

NEW YORK INSTITUTE OF TECHNOLOGY
Utilizing Zoom for Distant Learning

- February 2016 Telemedicine OSCE
  - 6 participants [2 cases]
  - Physical exam results delivered in email
  - History, Communication, English Language skills, SOAP assessed
  - Summative exam scored Pass/Fail
  - SimIQ used for SP assessments, pre/post encounter exercises
Utilizing Zoom for **Socially** Distant Learning

3/9/2020 Simulated patient programs were shut down and we have been working to deliver 100% virtual alternatives with for:

- **OMS1, OMS2 OSCEs**
  - 629 participants [2 Zoom + 1 online case],

- **OMS3 OSCE / 2PE Board Prep**
  - 84 participants [6 cases w/feedback],

- **PA Program**
  - 50 participants [1-2 cases]

- **Doctor Patient Continuum**
  - (small group learning) labs,

- **Doctor Patient Relationship**
  - (faculty led groups) labs,

- **BLS skills**
  - (ultimately used 3rd party provider)
How to start?

- Accept the “new normal” - how you did things in the lab may simply not work in a virtual environment

- **Re-examine your objectives** and look for creative ways to complement simulation

- Find out what telecommunication services are institution-supported.

- Plan carefully and practice. Lesson learned: **Run betas at all stages, every discovery is meaningful.**
Where to Start with Zoom

- Create a profile at zoom.us FREE for 40 minute basic call
- Play with basic functions - make calls, join calls
- Look at settings for options and ideas
- Access tutorials to learn more

- Practice, practice, practice, and more practice
Scheduling in Zoom

Schedule a Meeting

Topic: Webinar Planning Meeting-4-6-2020

Description (Optional): Finalize presentation details

When: 04/06/2020 8:30 AM

Duration: 1 hr 0 min

Time Zone: (GMT-4:00) Eastern Time (US and Canada)

Registration: Required

Meeting ID: Generate Automatically

Meeting Password: Require meeting password 437082
Scheduling in Zoom

<table>
<thead>
<tr>
<th>Setting</th>
<th>Host</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video</td>
<td>on</td>
<td>on</td>
</tr>
<tr>
<td>Audio</td>
<td>Both</td>
<td></td>
</tr>
</tbody>
</table>

**Meeting Options**

- Enable join before host
- Mute participants upon entry
- Enable waiting room
- Only authenticated users can join
- Breakout Room pre-assign
- Record the meeting automatically on the local computer

**Alternative Hosts**

- Example: mary@company.com, peter@school.edu
Sending Zoom Link to Participants

Click onto the date of the meeting

Enter password
Preparing the SP for Virtual Encounters w/Zoom

1. Identified SPs comfort level/experience with technology through Google Form survey (handout) - sent to 44 SPs

NB: self-reporting was not entirely accurate!
Preparing the SP for Virtual Encounters w/Zoom

2. Supported with technology / loaner laptops from campus
Preparing the SP for Virtual Encounters w/Zoom

3. Provided **paid basic training** to 37 SPs

- Resources already available:
  - Institutional videos created for Zoom
  - Zoom’s own tutorials
  - Telehealth etiquette videos (YouTube)
  - AMAZING Academic Technologies Group (ATG)
Preparing the SP for Virtual Encounters w/ Zoom

- Live “work-through” meetings (in groups of 6 & 1-on-1)
- Online learning module with video examples of full encounters start to finish
## Zoom Skills - a new SP core competency in a pandemic

<table>
<thead>
<tr>
<th>Proficiency Level</th>
<th>Types of Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Zoom Skills for the SP</strong></td>
<td>- Programs requiring history, narrative physical, feedback</td>
</tr>
<tr>
<td>- join a call with video and microphone on</td>
<td>- Basic A/V problems with learner could be troubleshooting with text function</td>
</tr>
<tr>
<td>- toggle video/microphone on/off</td>
<td></td>
</tr>
<tr>
<td>- schedule a meeting</td>
<td></td>
</tr>
<tr>
<td>- use chat function to text</td>
<td></td>
</tr>
<tr>
<td><strong>Moderate Zoom Skills for the SP</strong></td>
<td>Programs requiring live, dynamic delivery of materials to learner (e.g. patient information, PE results - files, images, audio/video - post encounter exercise, etc), observers</td>
</tr>
<tr>
<td>- manage multiple windows</td>
<td></td>
</tr>
<tr>
<td>- screen share documents</td>
<td></td>
</tr>
<tr>
<td>- manage waiting room</td>
<td></td>
</tr>
<tr>
<td>- use chat function to file share **</td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Zoom Skills for the SP</strong></td>
<td>Could be employed as Virtual Encounter Leader (VEL) backup facilitator, Zoom skills trainer, observer</td>
</tr>
<tr>
<td>- move in and out of breakout rooms</td>
<td></td>
</tr>
<tr>
<td>- use chat function to file share **</td>
<td></td>
</tr>
<tr>
<td>- conduct a poll</td>
<td></td>
</tr>
</tbody>
</table>
Preparing the SP for Virtual Encounters w/ Zoom

4. Assessed proficiency → added skills → trained → reassessed

- asked SPs to complete simple digital tasks
  - e.g. log into NYIT Zoom account,
  - change screen name to SP name,
  - share their Personal ID

After 2.5 weeks:
20 moderate proficiency, 7 advanced proficiency
Overcoming Data Capturing Challenges

- **Recording** - NYIT ICC decision not to record **any** recordings of SP encounters from home

- **Checklists** - SimIQ for history, physical, PARS, English Language Proficiency checklists, SOAPs, pre/post encounter exercises (Paper checklists?)

- **Polls** - Available for surveys (single- or multiple-choice only)
Zoom Pros

- intuitive - easy to set up and use
- “waiting room” option available
- SP can show patient information prior to encounter start
- easy background options
- allows breakout rooms for multiple exams
- small or large group meetings are simple
Zoom Cons

Growing pains?
- they just removed the file transfer option (as of Friday!!)
- can’t record breakout rooms
- some confusion of joining a meeting / scheduling a meeting
- settings - some available in app, others on website

Zoom says it will fix security holes that video hackers have exploited

Timer function hard to read, can’t be reset

Can’t schedule concurrent meetings from one account -
(Workaround: Breakout rooms)
- cost of product
- cost to train
- resources to cover any additional data capture necessary
- HIPAA feature, but currently not recommended
Telecommunication Challenges

- Internet bandwidth, capacity - daytime vs. nighttime
- Deciding the setting (remote clinical encounter vs telehealth)
- Preparing SPs for technological proficiency
- Reviewing CS skills ratings - e.g. eye contact (how much leeway to give?)
- Authenticity of the encounters
- Reliability of assessments - Summative exams, Physical exams
Suggestions for Physical Exams

During COVID-19:
• Inability to reliably assess psychomotor skills.
• Demonstrating on themselves or others is not safe nor recommended.

Other Applications:
• Telehealth/Remote Clinical Encounters could include an in-person rater on whom exams could be done/assessed

So what about right now?
Suggestions for Physical Exams - 2

Rate the participant’s demonstration of knowledge of the exam. Do they...

- Know what test: ("Now I would do a(n) ______________.")
- Know what test and how: ("Now I would do a(n) ______by____.")
- Know what test and how and why:
  ("In order to check x, I would do a(n) ____
  by________________.")
Suggestions for Physical Exams - 3

Delivery of findings to participant could be:

- Written findings card (sent in email or in-meeting file)
- Image, audio, or video file of findings to synthesize, report
- Verbal findings from SP
  - “narrative style” from patient voice (e.g. “You would see my eyes are swollen and puffy and there is discharge from my right eye.”)
  - “report” style, with jargon
    - Cons: can break patient/participant roles & create awkward remainder of encounter
“The Future” is Now

- Future Applications
- Delivering clerkship specific formative experiences
- Transition to Residency programs
- Workshops
Best Practices for Telecommunication

Full transparency -
• Video recording consent from all participants
• Inform participants of any observers
• Confidentiality consent form
• Meeting expectations

Ensure tech competency of the participants - practices a few times before the event.

Pre-test the feasibility of the telecommunication among participants -
• Internet connection
• Hardwares (computers, iPads, phone, earphone etc.)
• Audio and video

Allow plenty time for practice and planning logistic.
Video Meeting Best Practices: Do’s and Don’ts to ensure meeting success.

- Send the best practice to participants a few days before meeting

Institutional compliance

Beware of the security - how data is stored and transferred

- DUO - two factor authentication
- Use VPN (Virtual Platform Network) for internet traffic connection
- Secure cloud base storage space - BOX, Local Enterprise system
- Meeting settings – randomize join meeting ID and password
Questions?
Thank you for attending this webinar!