Roundtable Series: Virtual Rehabilitation Research
Advancing the Strategic Plan of the Department of Physical Therapy, University of Toronto

Why Did We Conduct this Roundtable Series?
The COVID-19 pandemic has made an impact on the lives of people worldwide. The stay-at-home orders and physical distancing restrictions affected the research enterprise of the Department of Physical Therapy, Temerty Faculty of Medicine, at the University of Toronto. Many researchers, research staff, and trainees had to pivot to using online approaches to conducting research and develop new expertise.

This motivated our Roundtable Series, hosted by the Department of Physical Therapy Research Committee, co-chaired by Dr. Kelly O’Brien and Dr. Nancy Salbach.

What were the Objectives of the Series?
1. To profile and exchange knowledge within the Department of Physical Therapy on innovations and lessons learned using virtual approaches in rehabilitation research; and
2. Highlight key considerations for engaging in virtual rehabilitation research.

The roundtable aligned with priorities of the Department of Physical Therapy strategic plan:
1. To cultivate leaders and change agents; and
2. Expand innovative learning.

The Roundtable series involved two sessions:

**Session A: Methodological considerations conducting virtual rehabilitation research**
Wednesday March 3, 2021, 12-1:30 pm, EST

**Session B: Considerations developing and implementing rehabilitation interventions using virtual platforms**
Monday March 22, 2021, 12-1:30 pm, EST

Who Attended?
We invited faculty, students, and staff from the office of research ethics to participate in a panel discussion, followed by a question and answer period about conducting research virtually. Approximately 60 individuals attended the sessions. From the discussions, we generated a summary of tips for conducting virtual rehabilitation research.

How Can You Use These Tips?
Consider sharing these tips with students, researchers, and study coordinators conducting virtual rehabilitation research.
Tips on Conducting Virtual Rehabilitation Research

General tips
- Be flexible!
- Think creatively about what is made possible by virtual research, not just what is lost
- Recognize that participants still experience barriers to participating in research
  - Although some people are experiencing less barriers to research, we are not able to reach everyone (for example, people without smart devices or internet connections)
- Avoid making assumptions about participants’ preferences for virtual research; not everyone prefers to participate in research from home
- Be compassionate to yourselves and your participants – everyone is under different types and amounts of stress!

Planning your study
- Consider impact of virtual format when developing your Research Ethics Board (REB) protocol:
  - If conducting survey research online, verify IP addresses of participants and do not reimburse participants if they complete more than one survey
  - Add additional ways to contact participants or to collect data in case of technical issues
  - Ensure you have addressed privacy and confidentiality in this new virtual format and understand that neither are assured
  - Run changes to your protocol by your family, friends, and other researchers to identify any problems prior to submitting to REB
- Use the resources available to you:
  - Contact the REB, Environmental Health and Safety Office, support staff in your institution, and other researchers if you have questions
  - Check with your institution to see if there are resources that would be useful to you
- Choose the right technology and equipment:
  - Consider additional methods to contact participants or to collect data in case of technical issues
  - Pick a platform that is flexible and allows for different types of devices to be used
  - Consider the lag time of the platform and how it may affect your data collection
  - Think about if equipment will need to be delivered to and collected from participants, including budget and cleaning considerations
- Ensure you have a safety protocol planned out:
  - This could include having a family member present during the study and ensuring they have access to a cell phone in case of emergencies
- Consider confidentiality and privacy as it relates to your study:
• For example, participants may not have as much privacy at home if participating in an interview
• Platforms may have different confidentiality implications

• Ensure you have orientation or piloting sessions with participants and other people involved in the study (for example, interviewers or instructors):
  • Consider sending videos or instructions ahead of this session
  • Keep instructions simple and clear
  • Understand that everyone has different levels of skill and comfort with technology; adapt your approach as needed

• Consider if you can collect the intended data within virtual formats:
  • Tests may need to be adapted (for example, walking or balance assessments)
  • Determine if some aspects of data collection can happen independent of you (for example, participants may be able to complete a demographics questionnaire prior to the interview)
  • Consider whether having someone else collect the data may be helpful (for example, having a peer with lived experience conduct the interview)

• Give yourself plenty of time for recruitment:
  • Certain participant populations may be more difficult to recruit during the pandemic (for example, healthcare workers who have been redeployed)

• Set appropriate deadlines for yourself to ensure projects stay on track
• Recruit a strong research team for pivoting to a new format
• Take your time to adapt studies appropriately for the virtual format to avoid sacrificing rigour

Conducting your study
• Use recruitment as an opportunity to build rapport with potential participants
• Send several reminders to your participants:
  • Day before, day of
• Identify in advance the specific models and makes of the phones or devices that participants have so you are prepared to help troubleshoot if needed with the right manuals
• Keep track of any problems you encounter so you can address them for the remainder of the study or future studies
• Maintain regular meetings with the research team, particularly with multi-site work, so that you can problem solve in a timely fashion
• Considerations specifically for interviews:
  • Ensure you have a clear interview guide and ways to redirect participants since you may not have body language to go on
  • Actively listen to the participant to ensure they have finished their statements so the conversation flows freely
  • Send interview questions ahead of time if appropriate
  • Think about whether sharing your screen may be helpful for interview questions
- Take field notes after the interview to ensure you don’t miss any important interactions and can build rapport with the participant
- Consider the impact of people participant in interviews from home, particularly for privacy

• Considerations for intervention or physical assessment studies:
  - Have a second study partner present during the assessment so that they can provide technical support and provide general assistance (for example, positioning the webcam)
  - Be respectful of participants’ time – contact them exactly when you say you will and do not take more of their time than initially proposed

Wrapping up your study
• Check the IP addresses when conducting survey research online to ensure participants are not completing more than one survey