Question & Answers from RCA webinar:
Tele-rehab: a sharing of approaches and processes (May 13 2020)

The questions within this document are those that were submitted during the RCA's webinar on tele-rehab on May 13 2020. The presentation and recording of the webinar are available here. The answers have been provided by the following speakers from this webinar. Note: for brevity, only their initials have been used in the answer section.


**Jeanne Bonnell**
Director,
Home & Community Care
Champlain Local Health Integration Network (LHIN)

**Brenda Colella**
Psychological Associate
Clinical Neuropsychology
Clinical Research Manager
Telerehab Centre for ABI
Toronto Rehabilitation Institute, UHN

**Theresa Grant**
Community Stroke Rehabilitation Program, Clinical Manager
Champlain Local Health Integration Network (LHIN)

**Dr. Meiqi Guo**
MSc, MD, FRCPC, CSCN Diplomate(EMG)
Physiatrist and Brain Rehab Program Medical Director
University Health Network – Toronto Rehab

**Edith Ng**
Advanced Practice Lead
Toronto Rehabilitation Institute Brain Program

**Jennifer O'Neil**
PT, PhD Candidate
University of Ottawa
Bruyère Research Institute

**Manny Paiva**
Coordinator, Inpatient Stroke/Neuro Comprehensive Outpatient Rehabilitation Program
Parkwood Institute, St. Joseph's Health Care, London

**Denise Taylor**
Manager Northwest Regional Rehabilitative Care Program and Physiotherapy Professional Practice Leader,
St. Joseph's Care Group Thunder Bay


The questions that follow are organized according to the following topics:

A. Conducting Virtual Assessments
B. Virtual System Set-Up
C. Consent/Privacy/Security
D. Patient Outcome Reporting
E. Reporting
F. Virtual Rehab for the Paediatric Population
G. Tools & Resources
H. Research/Evidence

## A. Conducting Virtual Assessments:

**1. Did Edith Ng include patients and caregivers in the planning process other than developing info handouts and instruction tools?**

> **EN:** We did not include patients & caregivers during our development phase due to our short timeline. We are involving them in the evaluation phase to help us improve!

**2. Does Denise Taylor link with inpatient therapists prior to starting your involvement - using their BERG or other assessments?**

> **DT:** Yes, we are lucky in the Northwest that all the hospitals share an electronic medical record so I can just use their Berg score from their most recent IP or OP stay; if it has been >1 month, we redo it. We always link with a local therapist as a contact. Our referrals mostly come from our OP Neuro Day team so we ensure they are aware when the client will be joining the class. We only offer MOST 3 times a year: Sept, Jan and April.

**3. How do you do virtual physical assessments?**

> **DT:** For physical assessments: we would "screen" to see how they did in OP and then could do parts of the Berg Balance or a self-administered 6 minute walk test or 30 sec sit to stand test. If it is risky re: safety, we may have a local telehealth assistant help or a family member as long as we can ensure they also have the capacity to assist safely.
>
> **JON:** I agree. As long as the in-person (family or caregiver) assistant has the capacity to help safely, we can modify a lot of physical assessment to complete them remotely. Modifying the Berg Balance Scale, the Community Balance & Mobility Scale, and the Tinetti Balance Scale is feasible. Completing the Five Time Sit to Stand is easy and relying on patient reported measures can also support the physical assessment.
>
> **MG:** This is more for physicians, but try this paper on the virtual neurological exam: https://www.cambridge.org/core/services/aop-cambridge-core/content/view/B442CAD84C1A92163B906989313B7E05/S0317167120000967a.pdf/div-class-title-the-virtual-neurologic-exam-instructional-videos-and-guidance-for-the-covid-19-era-div.pdf

4. **How do you do the assessment virtually for physical therapy especially for strength, pain etc.?**

**DT:** Self report, functional tasks. It won't be a goniometer or strength sphygmomanometer number!

**JON:** You can also distinguish Manual Muscle Testing (MMT) from movements against gravity or without gravity. A few Apps are available to assess mobility 6MWT, 2MWT, and TUG.

5. **Do you have a video pool that is effective for common physio treatments?**

**DT:** We use physio tools as our home exercise program and it has video options that can be emailed to the client (with consent, we email to ourselves and then forward to the client from our hospital account). We also have some example videos (total joint replacement- crutch walking, stairs, in and out of car and transfer training videos) on our www.rjac.ca and www.rrcp.sjcg.net websites we can refer clients and families to.

**JON:** Various tele-rehabilitation platforms have embedded video and exercise program features (e.g. https://www.embodiaacademy.com/).

**Edith Ng:** Some of our therapists have taken videos of themselves to email / share with patients / caregivers. We have shared folders where clinicians have saved resources including exercise videos that they would share & use.

6. **Why did Denise Taylor need to know about a food bank? How did that help with tele-rehab?**

**DT:** Moving on After Stroke is a self-management and community integration program - not just physiotherapy. We talk about prepping food, getting grocery delivery and for some of our clients, food security is an issue, so we also talk about the food bank. The point is that you need to know the LOCAL resources that are available for your clients.

**B. <u>Virtual System Set-Up</u>:**

**7. Can Jennifer O'Neil's patients connect to a smart TV for your tele-rehab session?**

> **JON:** Absolutely! If you are able to connect to a larger screen this is ideal to help with vision impairments and attention deficits. However, if you plan on assessing mobility and you need the patient to walk around the house or do exercises that require a lot of movements, using a portable device such as a tablet or a computer is better, unless the TV is on wheels!

**8. What different cultural views on technology and rehab was Jennifer O'Neil able to distinguish?**

> **JON:** This point was brought up to stimulate self-reflection around health equity and technology. Levels of education, socio-economic status, culture and ethnicity are all factors we must consider when co-designing a rehabilitation intervention. This is also true for the use of technology and telerehabilitation.

**9. What system do you use for clients to send in videos?**

> **TG:** We have asked our IT department to investigate ways for this to be done securely. However, they haven't come up with an affordable solution that our organization can use. This practice is more widely used in the USA and Alberta - otherwise known as store and transfer technologies or asynchronous tele-rehab.
>
> An alternative to sending video is for family to take video and then screen share during the video therapy session so that it can be seen by the therapist but not sent un-securely.

**10. Can anyone comment on therapists doing tele-rehab from home? (i.e., therapist working from home?) Successes, barriers & tips?**

**DT**: Remember, you need to be in a private location too... not your kids running in and out of the area etc.

**BC:** During the pandemic, all of our staff (clinicians, admin, and IT coordinator) have all been working from home. We have remained fully operational with a few delays early on. It has required a great deal of coordination between staff as we transitioned all Centre operations to remote work (we had to revamp SOPS and Emergency policies and clinical and technical backup). VPN access to our UHN server has been critical. We have also had to adjust each staff member's tech setup at home so that it was equivalent in quality to what we would deliver at the hospital (i.e., there were some things specific to our videoconferencing platform that required us to deliver therapy on a specific videoconferencing unit at the hospital). We also had to review with all staff members, tips for ensuring confidentiality of and privacy during all clinical contact.

**11. What is the cost for WebEx? Is it secure to share PHI? How many participants would you have at once for group program?**

**DT:** I do not know if there is a cost. Meets PHIPA and PIPEDA. This is the only one with OTN that our hospital IT will support. Unlimited number of people. Our chronic pain group is up to 30; if you are doing exercise and need to monitor or have group discussions, my suggestion would be 10-12 max.

**12. What platform do you use?**

**DT:** WebEx and OTN

**MP:** WebEx and OTN

**JON:** OTN, Embodia

**13. Can you tell us more about the OTN - compatible Group Therapy?**

**DT:** WebEx seems easier.

**BC:** At the time of the webinar presentation, OTN was the only approved option for virtual clinical care at UHN, but it can't accommodate group therapy in the way we need it to. As such, we use the UHN Research Information Systems communication bridge, an internal existing phone infrastructure with conferencing facility secured to UHN. We use Cisco Jabber to connect to this telecommunications bridge. It is fully encrypted and PHIPA compliant. It is standards based conferencing and content, allowing it to be compatible with provincial telemedicine systems (i.e., if an individual can't participate in group therapy from home, they may go to an OTN site that can be configured to connect to the bridge). As of June 1, UHN has approved MS Teams as an alternative to OTN for the delivery of virtual care. We are very excited about this development and have already transitioned to MS Teams for 3 new groups we started this week. This platform is very user friendly, reliable and allows us to scale up our operations significantly.**MP:** We haven't had much success with running groups using OTN. We use WebEx for running our groups.

**14. What are the platforms that the speakers have you used (e.g., OTN, WebEx etc.) Are there other platforms aside from these that are recommended? What about Zoom, Google apps? WhatsApp?**

**DT:** Our hospital will only approve WebEx and OTN due to privacy and security risks; college of PT says needs to be PHIPA and PIPEDA approved. Zoom health is, but our zoom for ECHO platforms is only zoom business, not health; What's APP I am sure it is not recommended.

**MG:** Until recently, only OTN is approved at University Health Network. However, as of June 1, 2020, MS Teams is an approved platform for conducting Virtual Care visits

**MP:** Only WebEx and OTN are used at our organization.

**15. How do you do groups on OTN?**

**DT:** You will be either gathering people in a location using room-based OR if they are all joining from home, you use PCVC (personal computer videoconference) and "Guestlink."This will generate an appointment link (like zoom etc.) that you can send to your clients. They will need to download Vidyo first and you will need to be registered with OTN to offer this service.

**16. How are you dealing with OTN issues? Our ability to use it during regular business hours is limited.**

**DT:** This hasn't been an issue in the past; I am sure it is COVID related. We do book group sessions 1 month in advance so we can get the same day/time/location blocks. And we check in advance at the other sites as you need to not only book OTN but also the room. Many of the rooms that can accommodate groups also are used for meetings and group education.

**17. Can you provide some tips for participant & therapists on viewability i.e. viewing angles, height/tilt of camera, distance from camera, etc.?**

**BC:** Our Centre has a dedicated IT coordinator that supports the setup of all of our clients on their devices to ensure ideal viewability for the client. This has been invaluable. It is important that clients and clinicians participate in a well-lit room. Specifics of camera height, angle etc. is really dependent on what you are doing with the client (i.e., type of therapy - e.g., PT vs. SLP; 1:1 vs. Group; Assessment vs. Treatment)

## C. Consent / Privacy / Security Issues:

**18. Does Manny Paiva have any concerns with the use of WebEx from a privacy stand point?**

**MP:** Our organization (ITS department) worked with privacy/risk and WebEx to make modifications to our WebEx platform that allowed us to meet our privacy requirements and the use of WebEx for Virtual Care Visits. I don't know that this is the case for all organizations, but we made it work for our needs.

**19. How are you managing group dynamics (e.g., patient requests to share emails amongst themselves?) We are not comfortable as clinicians facilitating this.**

**DT:** We ensure we have consent. If everyone in the group is willing, we will compile a list with everyone's contact info and email it to the group. We ensure that this consent isn't just verbally obtained within the group as some may not feel confident in speaking up during this conversation; everyone needs to indicate consent over email/chat to the instructors otherwise they are not included. They may also share their info during the session verbally but are reminded that they are saying that info to everyone in the group and DOCUMENT!

**20. When the patients email documents to the therapist are they encrypted?**

**DT:** Our hospital email system is encrypted when it is within the system (i.e., me to another team member) BUT once it leaves our system to go to another hospital or to a client, there is potential for security risks. We have a consent for email that we use (available on http://rehabcarealliance.ca/webinars) but are working on making this consent more generic for "electronic" documentation

**TG:** A tip for sending applications to ADP in a secure way is to embed the PDF into a WORD document and then encrypt the Word doc. This is more helpful for therapists if they have to send a patient filled form to a third party.

**MG**: No. But patients are informed before using email about the limitations of privacy for email communications.

**EN:** No. Emails sent by patients to clinicians are not encrypted. We do obtain consent for email communication.

**MP:** Same as above. We use an email consent form that needs to be signed by patients or SDMs.

**21. What are the best practices involved in obtaining consent over a video chat or a phone call (consent to complete an assessment or a treatment)? I heard a tip to check the client's ID over video chat, but are there other tips or suggestions? For example, separate consent regarding consent to phone 911 in case of an emergency, or any other scenarios specific to telehealth experiences etc.?**

**DT:** This is on our consent for electronic documentation draft and in our policy and procedure. This all needs to be reviewed in advance. Include mental health emergencies too... not just falls and physical issues.

**TG:** Work with your privacy officer!

**BC:** It is necessary to obtain consent for assessment and treatment that is provided over telephone or videoconference as we would for in-person contact. Over the telephone, we ask clients to provide their full name and DOB. If further information is required to confirm patient's identity we ask for OHIP# or name of primary care doctor, or date of last visit to the hospital or clinic. Over videoconferencing, they are able to provide their picture ID for identification and this is our preferred method for confirming ID. Regarding emergency policies for our centre (including: medical emergencies, suicide risk) as well as limits to confidentiality, these are covered with clients before they start the intake assessment, as well as before they start any group intervention.

**MG:** University Health Network developed a consent process that can be done virtually and over the telephone for virtual treatments. It does not include checking ID over OTN.

**EN**: Our process involves clinicians asking for 2 types of identifications during each session - that can be full name and date of birth as in BC's comment. The use of photo ID is an option for video-conferencing, but we did not make this mandatory. Consent for 911 or for us to reach out during an emergency would be part of the discussion before treatment begins, and we ask our clinicians to re-confirm / verify information in the beginning of each session (e.g., location of the video-conference or the call, phone number they can be reached, etc.).

**22. How did you deal with the privacy issues with virtual group rehab? And is there financial help for those without appropriate devices?**

**DT:** This is in our consent. They will be participating in a group - anything shared in that group is available to others... think of name they enter as on the platform etc. Really, this is the same as in person groups.

**DT:** Devices – I'm not aware of financial resources. We considered an iPad library loan system but quickly realized if they don't have a phone or an iPad, they didn't have internet service either! During research projects, ethically we had to provide this unless we indicated it as an exclusion criteria. Right now for telehealth speech etc., we set them up with the local family health team or nursing station and they access virtual services there. With COVID, there have been restrictions for this if it was not deemed urgent (until now).

**BC:** Clients provide consent to participate in group therapy. They are also informed individually and at the start of each group intervention that while the clinician is legally bound to protect their privacy, other members of the group are not under the same obligation. Nevertheless, we review "group rules" and explain the importance of privacy for all ("what happens in the group, stays in the group"). In addition, all group members meet with a clinician before the start of the group to go over ways to ensure privacy and confidentiality of the group are respected (e.g., participating in a private space, using headphones, family members are not to enter the room even to assist with technology issues, not discussing group content outside group, not taking pictures of the screen even if it's just the content slides, etc.)

**BC:** Devices – Our Centre has a supply of tablets that are shipped to individuals who do not have a device available to them. We ship them out to those who need a device but have internet. Because our communication bridge is fully compatible with OTN for those who have no device and no internet, we try to accommodate them at an OTN site close to their home. Sometimes the issue is that they have poor connectivity where they live.

**23. A question regarding physical rehabilitation remotely. I work with a client with COPD and a lot of monitoring usually takes place. Without using oximeters, how can you monitor clients during physical rehabilitation in group formats and what are some emergency procedures that you have in place?**

**DT:** Consider "wearables" that can remotely monitor, the Borg Rating of Perceived Exertion (RPE) scale and just symptom reporting too. There are good correlations there. We have 2 facilitators, one monitoring the room and one the TV sites. It is important to keep checking in, have done your physical risk screen and have someone local to call or family there or a plan that it is OK for you to call 911 on client behalf if needed.

**D. Patient Outcome Reporting:**

**24. What online outcome measures tool did you use?**

**BC:** Our goal is to look at the feasibility of our model/program and the efficacy of treatment using tele-rehab. We have chosen outcome measures that are specific to each therapy module (i.e., Cognitive Behavioural Therapy (CBT), Goal Management Training, Relaxation and Mindfulness Skills). For example, for CBT, we collect the DASS21, CIQ, Brief Cope, and Quality of Life Enjoyment and Satisfaction Questionnaire (QLESQ). We have chosen self-report measures that have been validated for use with the populations we serve and that are in the public domain so that we can put them online. In addition, we have developed feedback questionnaires that are specific to our program content and the technology we use. Currently, participants login to our website with a unique ID and password and complete the measures pre- and post-intervention.

**JON:** We were able to use Satisfaction with Life Scale, System Usability Scale and the Fall-Efficacy International Scale remotely. A lot of research as yet to be done in validating the use of various outcome measures as well as patient-reporting outcomes remotely.

**E. Reporting:**

**25. For MIS purposes by the MOH, are these considered Face to Face visits?**

**ALL:** As per the Ontario Healthcare Reporting Standards, a visit is recorded when a uniquely identified service recipient is present to receive service from an organization's employee as face-to-face or by videoconferencing on an individual basis. This includes service to the service recipient and/or significant other(s) in attendance on behalf of the service recipient. The service provided must be longer than five minutes.

**F. Virtual Rehab for the Paediatric Population:**

**26. Is there anyone that can comment on how this will work with a pediatric population?**

**DT:** There are some companies that are serving remote Indigenous communities – Jordan's Principle programs (peds) – using a hybrid model where a person is seen monthly or every 3 months with videoconferencing in between. It depends on the situation, community, children, parents etc. They are doing virtual care right now in Alberta Children's Hospital due to COVID.

**TG:** The First Words Program is operating using tele-rehab at the moment. They are using special software that allows them to video child and parent and then review during the same session. Anecdotal feedback is that parents are appreciative and engaged.

**G. Tools & Resources:**

**27. Have any rehab departments in hospitals created a "Virtual Rehab Policy/Procedure"? If so, would you be willing to share? Asking from a small rural hospital with minimal human resources.**

**DT:** This is in progress. Once we have approved I am sure I can share. Should be approved by mid-June.

**BC:** UHN's Telehealth department developed a Virtual Care Toolkit that includes protocols and privacy and consent considerations. It's specific to OTN, but applicable to other platforms as well. I can inquire about the process for sharing all or some of these materials more widely.

**MG:** The Brain rehabilitation program at TRI is creating a virtual rehabilitation toolkit. Stay tuned for how to download!

Note: The RCA will share resources as they become available.

**28. Wondering if any of the speakers have created (or are aware of) any screening tools that help therapists identify and triage those individuals that are appropriate for tele-rehab versus those that would require face-to-face (particularly in light of the current directive where urgent care can only be provided face-to-face)?**

**BC:** This is an excellent question. Tele-rehab is not for everyone and appropriateness is very much related to the individual's cognitive and motor abilities and can also be significantly limited by behavioural and psychological difficulties. It is important that the referring clinicians understand what it is that you are providing, what is involved in participation, and any exclusion criteria. Although we don't have a "quick" tool for the determination of who is appropriate (i.e., in our centre, a clinician conducts an intake interview and brief cognitive assessment over the telephone, each case is discussed at case review meeting, clinical judgement is used to determine eligibility), we have learned that several things are required at least for participation in our *online group therapies*: good insight and awareness about their impairments, no active psychosis or current mania, sufficient memory capacity to learn some information session-to-session, basic computer literacy, no communication disorder that would preclude participation in group therapy.

## H. Research/Evidence:

**29. Do you have research reviews for other health conditions that can be treated with tele-rehab?**

References 1-9 provided by Dr. M. Guo. See Dr. Guo's presentation here.

Reference 10 provided by Jennifer O'Neil.

1. World Health Organization. "Rehabilitation considerations during the COVID-19 outbreak". Institutional Repository for Information Sharing. https://iris.paho.org/handle/10665.2/52035. Accessed May 10th, 2020

2. Chan C, Yamabayashi C, Syed N, Kirkham A, Camp PG. Exercise telemonitoring and telerehabilitation compared with traditional cardiac and pulmonary rehabilitation: A systematic review and meta-analysis. Physiotherapy Canada. Physiotherapie Canada. 2016;68:242-251.

3. Gandhi S, Chen S, Hong L, Sun K, Gong E, Li C, et al. Effect of mobile health interventions on the secondary prevention of cardiovascular disease: Systematic review and meta-analysis. The Canadian journal of cardiology. 2017;33:219-231

4. Ownsworth T, Arnautovska U, Beadle E, Shum DHK, Moyle W. Efficacy of telerehabilitation for adults with traumatic brain injury: A systematic review. The Journal of head trauma rehabilitation. 2018;33:E33-e46.

5. Laver KE, Adey-Wakeling Z, Crotty M, Lannin NA, George S, Sherrington C. Telerehabilitation services for stroke. The Cochrane database of systematic reviews. 2020;1:Cd010255.

6. Khan F, Amatya B, Kesselring J, Galea MP. Telerehabilitation for persons with multiple sclerosis. A cochrane review. Eur J Phys Rehabil Med. 2015;51:311-325.

7. Fjeldstad-Pardo C, Thiessen A, Pardo G. Telerehabilitation in Multiple Sclerosis: Results of a Randomized Feasibility and Efficacy Pilot Study. Int J Telerehabil. 2018;10(2):55-64.

8. Cheville AL, Moynihan T, Herrin J, Loprinzi C, Kroenke K. Effect of Collaborative Telerehabilitation on Functional Impairment and Pain Among Patients With Advanced-Stage Cancer: A Randomized Clinical Trial. JAMA Oncol. 2019;5(5):644-652.

9. Smith, E., Mountain, A., Hill, M., Wein, T., Blaquiere, D., Casaubon, L., Linkewich, E., Foley, N., Gubitz, G., Simard, A., Lindsay, P. (2020). Canadian Stroke Best Practice Guidance During the COVID19 Pandemic. Canadian Journal of Neurological Sciences / Journal Canadien Des Sciences Neurologiques, 1-11. doi:10.1017/cjn.2020.74.

10. O'Neil, J., van Ierssel, J., & Sveistrup, H. (2019). Remote supervision of rehabilitation interventions for survivors of moderate or severe traumatic brain injury: A scoping review. Journal of Telemedicine and Telecare. https://doi.org/10.1177/1357633X19845466