

# TeleRehab Revolution: Does Remote Rehabilitation Solve the Healthcare Access Conundrum?

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# PRESENTER DISCLOSURE

**Jennifer O'Neil PT, PhD**

**I have no relationships with commercial interests or private industry**

**My current research is being funded by**

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**I have received a speaker Honoria for this talk which will support future projects**

# MITIGATING POTENTIAL BIAS

- **I have no conflicts to declare**

# LEARNING OBJECTIVES

By the end of this debate, participants will be able to :

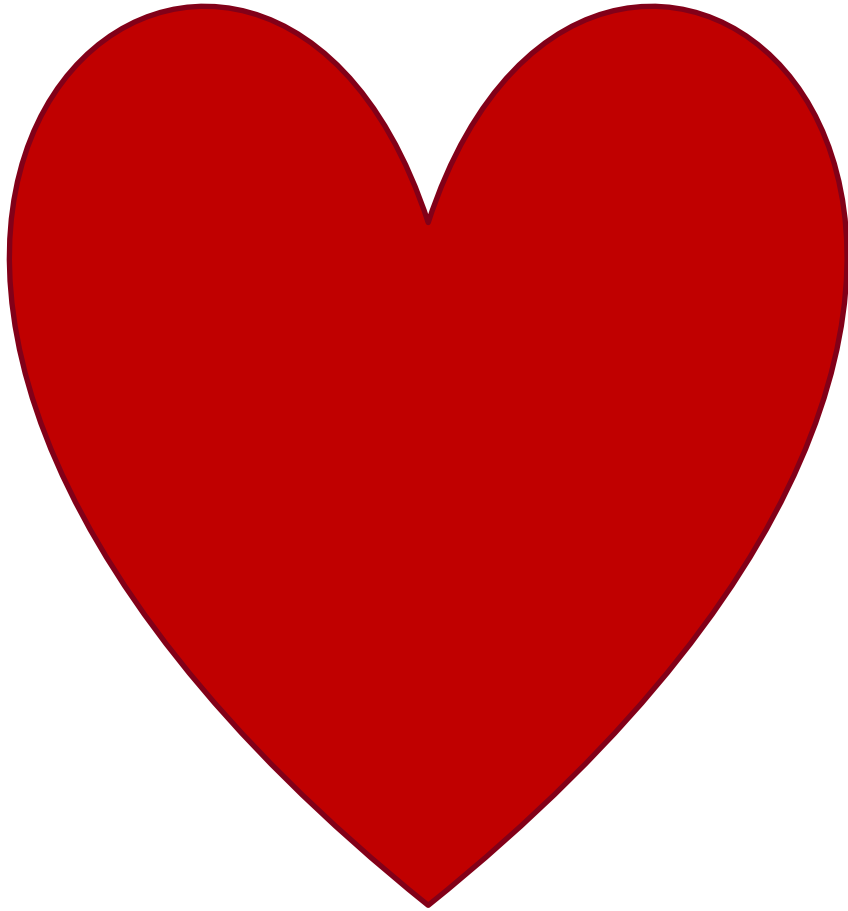
- ✓ Identify the benefits and barriers of providing Telerehabilitation to support better access and,
- ✓ Analyse why versus why not to provide Telerehabilitation



Does Remote  
Rehabilitation Solve  
the Healthcare  
Access Conundrum?

Telerehabilitation  
is a solution

# Telerehab support better access and is a solution because... People love it!



## Individuals who have experienced a stroke and caregivers are **satisfied**.

A recent qualitative study explored the experiences of adults within 18 months post stroke who completed the TRAIL telerehabilitation exercise program in Canada and shows that both MEN and WOMEN were satisfied with the program<sup>1</sup>. Satisfaction was also excellent among people who have experienced a stroke in Ghana, stating that limited internet connectivity did not impact the level of satisfaction<sup>2</sup>.

Results from a systematic review (n=209) also demonstrate that people post stroke accept and are satisfied with telerehabilitation<sup>3</sup>.

# Telerehab support better access and is a solution because... It saves money and its safe!



## Individuals who have experienced a stroke and clinicians find telerehabilitation **acceptable**.

People reported in a study on the use of telerehabilitation post inpatient phase that they like to stay home because it saves energy for rehabilitation, money and time linked to travel<sup>4</sup>. Similar results were found in a systematic review by Laver et al. (2020), reporting that telerehabilitation was less expensive<sup>5</sup>.

## **No additional adverse events linked to telerehabilitation are reported in the literature**

Findings from the APTA Telerehabilitation Clinical Practice Guidelines reported that adverse events are related to interventions and not the mode of delivery<sup>6</sup>. Adverse events may be prevented by numerous strategies such as choice of exercises, settings, suitability, tailoring of intervention<sup>7</sup>.

# Telerehab support better access and is a solution because... It improves health outcomes !

## Caregiver are feeling **less stressed and more confident**

A systematic review and meta-analysis focusing on caregivers (n=992) of people who experienced a stroke showed that telerehabilitation can improve competence and relieve stress<sup>8</sup>.



## Individuals who have experienced a stroke are **improving**

A systematic review (n=594) reveals improvement in balance, and mobility following telerehabilitation versus in-person<sup>9</sup>. Another systematic review (n=1937) showed that telerehabilitation was comparable to in-person for activity of daily living<sup>5</sup>. Results from a RCT (n=124), indicated that telerehabilitation was not inferior to in-clinic for improving motor recovery in the upper-extremity<sup>10</sup>.



# Telerehab support better access and is a solution because... it provides an effective option for emergencies!

Telerehabilitation offered an effective solution for individuals post stroke to received rehabilitation services without compromising further health complications due to COVID-19 Pandemic<sup>12</sup>. Telerehabilitation should always be considered as an option in the delivery of rehabilitation services<sup>6,13</sup>.



In zones of conflict, telerehabilitation can sometimes be the only safe option to provide rehabilitation<sup>14</sup>. Results from a systematic review (24 studies) on the use of telemedicine interventions in six conflict-affected countries demonstrated that telemedicine is feasible and necessary in conflict zones<sup>15</sup>.

Telerehab support better access and is a solution because...  
It is considered best practice!

*“Virtual care modalities should be integrated into stroke care planning and service delivery **across the continuum** (i.e., from acute stroke care to stroke prevention, stroke rehabilitation, home-based therapy, and ambulatory care) to support optimal recovery of people with stroke, provide support for families, and ensure equitable access to care throughout Canada (strong recommendation; moderate quality of evidence).”<sup>11</sup>(Canadian Stroke Best Practice Recommendations, Virtual Stroke Rehabilitation Interim Consensus Statement 2022)*



The question is  
NOT about if  
telerehabilitation is  
a solution but  
**ABOUT**  
opportunities for  
implementation!

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