

美国边远地区的功能障碍者 Persons with Disability in Rural Areas in the US

Carmen Cooper-Oguz, PT, DPT, MBA, CWS, WCC
carmen.oguz@northsunflower.com

1

Access-to-Care Issues

- Geography/landscape of community
- Shortage or lack of licensed practitioners or facilities
- Caregiver inability to transport due to physical disability, lack of mode of transportation, etc.
- Patient physical disability/immobility
- Affordability/reimbursement issues
- Connectivity

2

What is TeleRehab?

- TeleRehab is a version of delivery of telehealth services with the use of an internet connection.
- Requires an audiovisual source on the patient's end (Origination Site)
- Requires an audiovisual source on the practitioner's end (Distant Site)
- Audiovisual source doesn't have to be fancy/expensive
- Audiovisual connection should be secure and reliable
- May consider using a web-based program for scheduling and for a secure audiovisual transmission
- Documentation methods vary; software is option.

3

Components of Rehabilitation (adapted from Relva.in)

Components of Rehabilitation		What is involved?	Is this possible via TeleRehab methods?	
A S S E S S M E N T S	History	Yes	Yes	
	Visual observations	Yes	Yes	
	Range of motion measurements	Yes	Yes	
	Functional strength assessments	Yes	Yes	
	Palpation/manual muscle tests	No	Yes - many are possible, especially functional tests that are retestable	
	Special tests	Yes	Yes	
	Goal setting for functional improvement	Yes	Yes	
	T R E A T M E N T S	Education	Yes, especially to involve caregivers	Yes, if patient has personal e-stim unit
		Electrotherapy	Caregiver can be educated on some aspects	Yes - caregiver can be involved for safety
		Manual therapy	Yes	Yes - self managed or caregiver involvement
Balance therapy		Caregiver can be educated on some aspects	Yes	
Exercise therapy		Yes	Yes	
Hot/cold therapy		Yes	Yes	
Others (taping, massage, etc.)		Yes	Yes	
Wellness and prevention		Yes	Yes	
Patient compliance/adherence		Yes	Yes	
Workplace assessment/recommendations		Yes	Yes	
Home assessment/recommendations	Yes	Yes		
Wound prevention and management (e.g., wear- can't detect wound odor)	Yes	Yes		

4

Benefits of TeleRehab

- Access to care for most everyone:
 - Client mobility issues
 - Caregiver limitations due to health/transportation
 - Geographic/landscape limitations
 - Patient compliance
 - Improved functional (and health) outcomes
 - Hospitalization prevention or re-admission
 - Cost of care reduction
 - Research-approved

5

Limitations of TeleRehab

- Only a few mentioned on the other slide
- Connectivity
- Caregiver assistance
- Reluctance to step outside of the box
- Regarding what clients need on an individual basis, you don't know until you try.

6

Who Endorses TeleRehab?

- The American Physical Therapy Association (APTA) states that telehealth is an appropriate model of service delivery for the profession of physical therapy. Each state in the United States establishes its own rules of practice.
- Canada published guidelines for TeleRehab in September 2017 and published a TeleRehab resource guide in April 2018
- ReLiva is a company in India that claims to be an early adopter of TeleRehab methods.

7

Evidence Shows That it Works!

- Canadian study for post-operative total knee replacement TeleRehab done at the University of Sherbrooke in Quebec. The study reported on clinical effectiveness and patient/therapist satisfaction with the TeleRehab model.
- Virtual Exercise Rehabilitation Assistant (VERA) developed by Reflexion Health (LE joint replacements)
- Duke University: Virtual Exercise Rehabilitation In-Home Therapy (VERITAS) focused on post-op total knee replacement care
- University of California in Irvine: post-CVA care
- University of Alabama in Birmingham: MS care

8

What Do We Do Next?

- Like Nike says, "Just do it!"
- Get regulatory cooperation on local, state, and national levels and update rules of practice accordingly; establish guidelines
- Ensure provider reimbursement
- Educate organizations, providers, and the public
- Select hardware and software
- Connect with the world

9

Connect the World

- One village
- One province
- One state
- One nation
- One world

10