The practicalities of virtual assessment and rehabilitation for people with spasticity

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Key learning:

- Tele-consultation
  - Methods to maximise impact
- Assessment & Measurement
  - Direct spasticity management
- Rehabilitation
  - Opportunity to add further to the pathway

Platforms

- **Telephone***
- Zoom
- MS Teams
- **Attend Anywhere***

Assessments

- Current difficulties in:
  - Providing face-to-face (F2F) appointments
    - Need to minimise F2F – Number of contacts
    - Need to minimise F2F – Time with each contact
- Solutions

1. Pre-assessment questionnaire.
   (e.g. Take ‘ACTION’ with ArmA or LegA)
1. Telephone screening & assessment
2. Virtual assessment (GAS Goal setting)
3. F2F for injection (or other significant need)

Management of spasticity: time for ACTION

Inclusion of 'indicators for action' in a pre-clinical screening questionnaire

for patients to complete with assistance from an HCP (if necessary) prior to follow-up appointment

Telephone triage services

allowing community HCPs to seek advice from specialist spasticity services regarding patients

Improve access to spasticity expertise

by enabling specialist spasticity practitioners to carry out community visits

Using existing online training resources

to improve knowledge of spasticity among HCPs in the community

Improving the management of post-stroke spasticity: time for ACTION'

Journal of Rehabilitation Medicine – Clinical Communications.

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A set of indicators for “specific review and possible treatment”

ACTION acronym

A	C	T	I	O	N
Activities limited	**Care tasks difficult**	**Tight muscles**	**Integrity of skin**	**Ongoing pain**	**Nails digging in**
DOES SPASTICITY (MUSCLE TIGHTNESS/MUSCLE STIFFNESS):					
Limit functional activities that you were able to do previously?	Limit your or others' ability to carry out your personal care tasks?	Reduce your ability to stretch or position your joints?	Lead to pressure sores on your skin?	Cause you pain or discomfort?	Cause your nails to dig into the palm of your hand?

ArmA

Arm Activity Measure

In each column, please CIRCLE the amount of difficulty that you or your carer have experienced in doing the activity, over the last 7 days.

Activities (affected arm)	Difficulty 0 = no difficulty 1 = mild 2 = moderate 3 = severe difficulty 4 = Unable to do activity
Section A Caring for your affected arm (not using it in tasks or activities)	
1. Cleaning the palm of the hand	**0 1 2 3 4**
2. Cutting finger nails	**0 1 2 3 4**
3. Cleaning the armpit	**0 1 2 3 4**
4. Cleaning the elbow crease	**0 1 2 3 4**
5. Positioning arm on a cushion or support in sitting (If never done circle 0)	**0 1 2 3 4**
6. Putting arm through a garment sleeve	**0 1 2 3 4**
7. Putting on a glove (If never done circle 0)	**0 1 2 3 4**
8. Putting on a splint (If never done circle 0)	**0 1 2 3 4**
Section B Independently completing tasks or activities using your affected arm	
1. Difficulty with balance when walking due to your arm	**0 1 2 3 4**
2. Hold an object still while using unaffected hand	**0 1 2 3 4**
3. Open (affected hand) a previously opened jar	**0 1 2 3 4**
4. Pick up a glass, bottle, or can	**0 1 2 3 4**
5. Drink from a cup or mug	**0 1 2 3 4**
6. Brush your teeth	**0 1 2 3 4**
7. Tuck in your shirt	**0 1 2 3 4**
8. Write on paper	**0 1 2 3 4**
9. Eat with a knife and fork	**0 1 2 3 4**
10. Dial a number on home phone	**0 1 2 3 4**
11. Do up buttons on clothing	**0 1 2 3 4**
12. Comb or brush your hair	**0 1 2 3 4**
13. Use a key to unlock the door	**0 1 2 3 4**
Total Score	Section A ☐ ☐ Section B ☐ ☐

Ashford et al(2013). Conceptualisation and development of the Arm Activity measure (ArmA) Dis. & Rehab. Early Online: 1–6 DOI: 10.3109/09638288.2012.743602.

Patient Identifier:

Date of completion...../...../.....

LegA

LegA

Leg Activity
Participation
Symptoms

Leg Activity Measure

Difficulty for each item is scored over the preceding 7 days as follows:

= no difficulty
= mild
= moderate
= severe difficulty
= Unable to do activity

Section A

1. Cleaning and washing the area between your legs
2. Putting on a splint (If never done circle 0)
3. Positioning legs in a wheelchair (If never done circle 0)
4. Putting your leg(s) through a trouser leg(s) (If never done circle 0)
5. Transfer using a hoist, including positioning sling (If never done circle 0)
6. Putting on underwear or continence pads
7. Positioning your leg(s) in bed using a positioning aid or pillow (If never done circle 0)
8. Cleaning behind your knee (knees)
9. Putting on your footwear

Section B

1. Turning in bed
2. Moving from lying to sitting
3. Being able to sit (including balance)
4. Transferring from bed to chair or wheelchair
5. Transferring from wheelchair to car
6. Moving from sitting to standing (including balance)
7. Standing (including balance)
8. Walking indoors (including balance)
9. Turning around (including balance)
10. Walking up stairs
11. Walking around obstacles or objects (including balance)
12. Walking over carpet
13. Walking outdoors
14. Walking over rough or uneven ground outdoors
15. Walking for half a mile or more

Ashford S. Jackson D. Mahaffey P. Vanderstay R. Turner-Stokes L. (2016) Conceptualisation and development of the Leg Activity Measure (LegA) for patient and carer reported assessment of activity (function) in the paretic leg in people with acquired brain injury, Physiotherapy Research International.

Rehabilitation: Direct-Rehab

Assessment pathway

Treatment planning and provision

Baseline Problem identification

1. Clinical assessment
2. LegA/ArmA*

Treatment planning

1. Goal setting (GAS)
2. Treatment planning

Self management programme

Treatment using physical interventions

Treatment using pharmacological interventions

Improved functional outcomes following rehabilitation

Items in blue are for development in Direct-Rehab

ArmA: Arm Activity measure*, LegA: Leg Activity measure*, GAS: Goal Attainment Scaling *Validated measures

Ashford S, Siegert RJ, Williams H, Nair A, Orridge S, Turner-Stokes L. (2019) Categorisation of goals set using Goal Attainment Scaling for treatment of leg spasticity: a multicentre analysis. Disability and Rehabilitation 2019-07-31. DOI: 10.1080/09638288.2018.1451927

Key interventions
In conjunction with spasticity management

- Self exercise (task practice)
- Supported practice (task practice with carers)
- Positioning, splinting and cast application (passive function)
- Orthotics and seating (passive and active function)

Delivery

- Linking with the wider MDT
  - Already supporting
  - Teaching
    - Patients, partners, supporters
  - Development/ delivery of online resources
    - E.g. ‘Direct-Rehab’ or ‘Bridges’

Useful Resources

Graham F, Boland P et al (2019) Telehealth delivery of remote assessment of wheelchair and seating needs for adults and children: a scoping review, Disability and Rehabilitation, DOI: 10.1080/09638288.2019.1595180

Parmanto B, Nelson A et al (2016) Development of the telehealth usability questionnaire (TUQ): International Journal of Telerehabilitation, Vol. 8, No. 1, 10.5195/ijt.2016.6196.

Lacey C, Huria T et al (2011) The Hui process: A framework to enhance the doctor-patient relationship with Maori. The New Zealand Medical Journal. 124 (1347): 72-78.

Graham F (2020) Telehealth Rehabilitation (response to COVID-19)

https://www.youtube.com/playlist?list=PLoYgkS35H0IxzRmnTq_j6b_CfrLsMw8nC

British Society of Rehabilitation medicine: https://www.bsrm.org.uk/publications/latest-news/post/39-covid-19-bsrm-position-on-rehabilitation

Chartered Society of Physiotherapy guidance on remote consultations: https://www.csp.org.uk/news/coronavirus/remote-service-delivery-options

Chartered Society of Physiotherapy guidance on rehabilitation: https://www.csp.org.uk/news/coronavirus/clinical-guidance/rehabilitation-coronavirus

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Royal College of Physicians, British Society of Rehabilitation Medicine, The Chartered Society of Physiotherapy, Association of Chartered Physiotherapists Interested in Neurology and the Royal College of Occupational Therapists. Spasticity in adults: management using botulinum toxin. National guidelines. London: RCP, 2018. S Ashford (editor) ; L Turner-Stokes; R Allison, L Duke; P Moore; G Bavikatte; S Kirker, A Ward, D Bilton

Ashford et al (2013). Conceptualisation and development of the Arm Activity measure (ArmA) Dis. & Rehab. Early Online: 1–6 DOI: 10.3109/09638288.2012.743602.

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Setting up and running successful video consultations Prof. Trish Greenhalgh
https://q.health.org.uk/event/video-consultations-how-to-set-them-up-well-fast/