

Physical therapist perspectives on walking treatments for patients with multiple sclerosis

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- How do PTs make treatment decisions to address walking/mobility in patients who have MS?
- How do PTs assess whether a treatment is “working”?



Learning Objectives

1. Describe the need for improved understanding of treatment decision making for patients with MS and impaired gait
2. Reflect on your own strategies for goal setting and selecting outcome measures
3. Identify commonly used outcome measures for assessing a patient's walking
4. Recognize the disconnect between therapists' priorities and current practice

The NEED for understanding therapist decision making

- Literature that defines “clinically meaningful improvement” in walking-related outcomes for people with MS is sparse
- Current definitions lack patient-centeredness
- Understanding clinical decision making will inform future clinical research and patient-centered practice

Our research goals

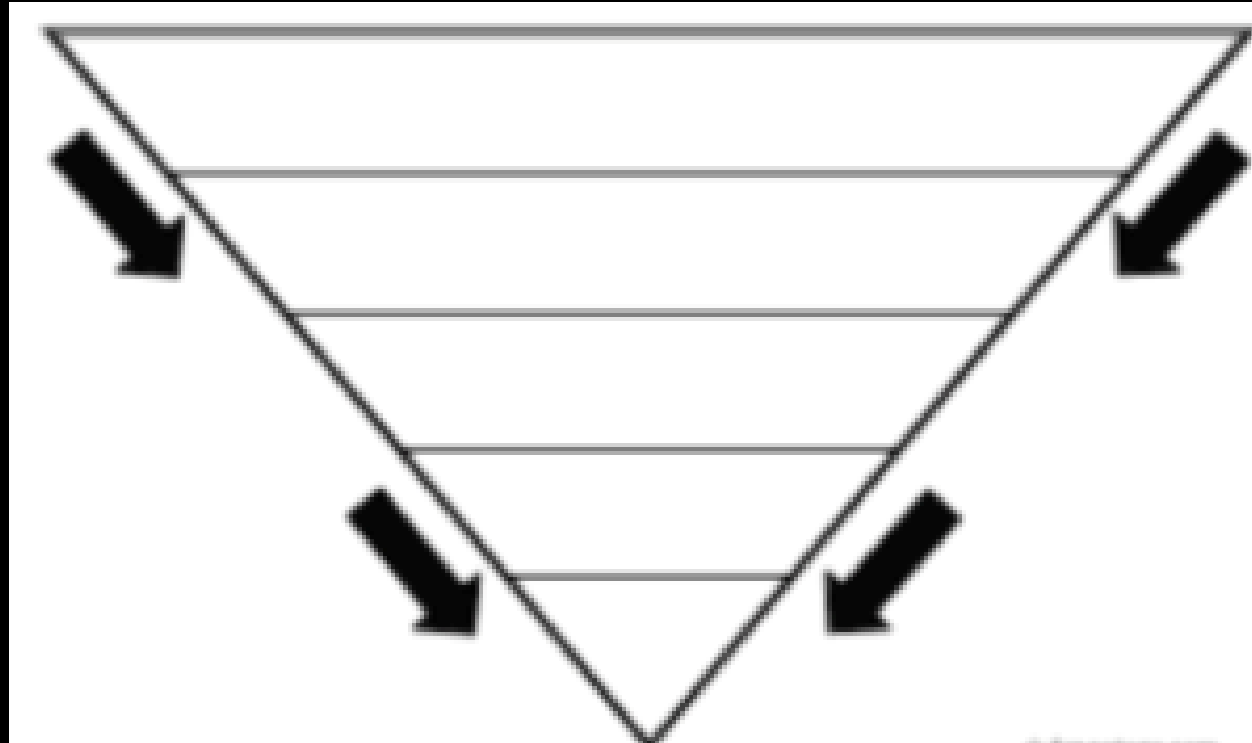
1. Identify meaningful treatment outcome measures
2. Understand PTs' clinical decision making about treatments for walking difficulties

Data collection and participants

- 1 Focus group (n=6)
 - PTs with experience with MS
 - < 1yr – 7 yrs clinical experience
 - Acute, inpatient rehab, outpatient
- 1-on-1 phone interview (n=1)
 - Completed neuro residency
- Surveys (ongoing)



Question route

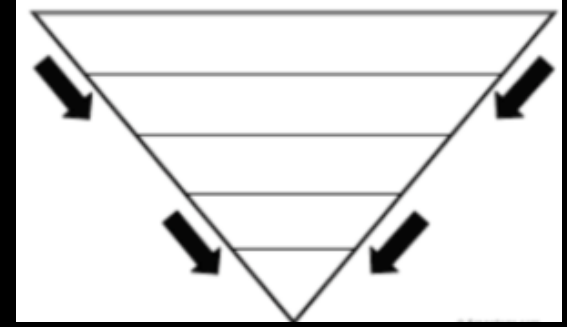


Opening

Transition

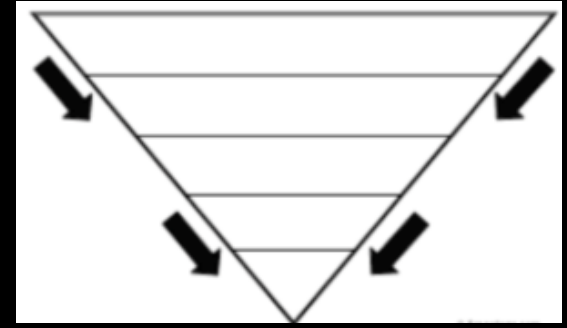
Key
questions

Question route examples



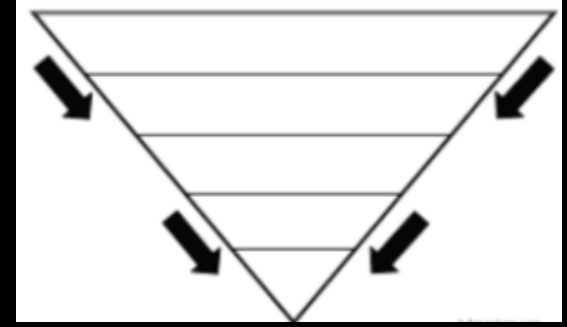
- **Opening:** Can you tell us about some of the experiences you have had working with patients who have MS?
- **Transition:** Think back to the last time you saw a patient with MS who came to PT because they had walking difficulties. What were their major problems related to walking?

Question route examples



- **Key Questions:** What were some of the tests and measures you used to document their difficulties and assess the impact of your treatment over time?
- How do you assess if your treatment has been effective? Can you put in words the decision-making process you go through?

Question route examples



- **Key Questions:** How do you determine if *the patient* has experienced a meaningful benefit from therapy?
- Is there a particular tool you use?
- What do you ask them?

Thematic analysis

- Professionally transcribed
- Transcripts independently reviewed by 2 assistants
- Coded to identify emerging themes, noting level of agreement
- Created matrix of identified key themes

Reflection

Think about the last or most memorable patient you worked with on walking/mobility who had MS (or a different neurological condition).

What was that experience like?



Themes: therapists' experiences with patients with MS

- Patient's effort and participation can vary greatly from session to session
 - *“Every day was completely different... she was going through medication changes... and experiencing different side effects.”*
- Patients appreciate knowing their therapists are knowledgeable about their condition
 - *“I have people that are so thrilled to have a therapist who... has a little bit more appreciation for what MS can be... and are often... desperate for advice on how to be moving better.”*
- Therapists can provide hope and sense of control to patients

Reflection

What were your patient's biggest difficulties with walking/mobility?



Themes: walking difficulties in patients with MS

- Foot drop, ataxia
- Mobility in community/work/domestic life
- Stair/curb negotiation
- Balance
- Falls
- Transfers
- Fatigue, weakness



Reflection

Do you remember what goals you and your patient set?



Themes: goals for walking/mobility

Safety

Reducing falls

- *“I think the first priority is to be able to walk safely.”*
- *“I typically ask in the last three months or in the last six months, how many falls that they've had.”*
- *“I use that too for goal setting, if someone's like, ‘I fall at least two times a week,’ then I might make it a goal that they won't fall at all in the span of a week.”*



Themes: goals for walking/mobility

- Walking further (endurance)
- Improving efficiency (less fatigue)
- Patients want to “walk better” (quality/appearance)
- Maintenance:
 - *“A lot of what we want to be doing with MS care is teaching people to be proactive and try to maintain their mobility and maintain an exercise program. Not just, you know come to therapy once everything's gone down the tubes.”*
- Maximizing independence
- Orthotic/device training

Reflection

Was gait speed a goal?

Was this important to the patient?



Themes: Is gait speed important?



It depends!

- *“It depends on that patient's job... their responsibilities as an adult.”*
- *“When most people come in... they may say, ‘I'm having a hard time with walking,’ or ‘I'm falling a lot,’ but I've never really heard someone say, ‘I can't walk quick enough.’”*

Themes: Is gait speed important?



Often used as a default outcome measure

- *“I do track gait speed... but it’s usually because I feel like I’m lacking in objective measures to say... how is their walking quality changing.”*
- *“Gait speed is... a measure that I take on almost every patient.”*

Reflection

What kinds of treatment activities did you choose to help your patient's walking?

What kinds of measures did you use?



Themes: treatment interventions

- Balance training
- FGA/DGI components
- Functional strengthening activities
- Dual-task training
- FES training (Bioness)
- Balance Master (Sensory Organization Testing)
- Treadmill (standard and BWSTT)
- Device/orthoses training
- Multimodal: *“we do a lot” “everything!”*

Variety!

Themes: tests and measures

Objective measures

What about safety??

- Gait speed, 2/6MWT, T25FW
- FGA/DGI
- AMPAC, TUG, 5xSTS, Berg, Mini-BESTest



Subjective measures

- MS Walking Scale, Modified Fatigue Impact Scale (MFIS), ABC
 - *“I probably should [use subjective measures], but I don’t.”*

Themes: measuring safety



- Cut-off scores to identify risk of falling
- *“I guess, I only think... of falls when I think of safely walking, but maybe that's very narrow minded.”*
- *“Balance confidence is linked with balance ability.”*
- *“The ABC scale is what I've used... the subjective measure for balance confidence.”*
- *“I do a lot of questioning.... loss of balance and... regarding their insight. Like asking them how they felt that they did... were they able to navigate obstacles? Were they steady or unsteady?... Are they walking fast enough to get from point A to point B safely?”*

Reflection

- How did you know if your patient's walking difficulties were improving?
- How did the patient know?



Themes: therapists' perceived effectiveness

Objective improvement on task or measure

- *“Fortunately or unfortunately, it's very based on all these outcome measures that we just talked about.”*
- *“I'm looking for a more efficient gait pattern, more equal weight bearing... less loss of balance... that they're using the device that I taught them to use... with less direction.”*

Patient able to recall education/demo technique

- *“Later in the session or another session, asking them to either teach it back to me or to demonstrate what... they've learned.”*

Change greater than MCID/MDC

Subjective reporting by patient/caregiver

Themes: therapists' perceived effectiveness

Reduction of rate of decline (maintenance)

- *“A challenge for patients that have MS is... the progressive nature of the condition... some people progress much more rapidly than others. So, a lot of times you're looking to see if you've made improvements, whereas other times it's a victory to have maintained where they were.”*

Themes: how do patients perceive effectiveness of treatment?

- Self-report measures

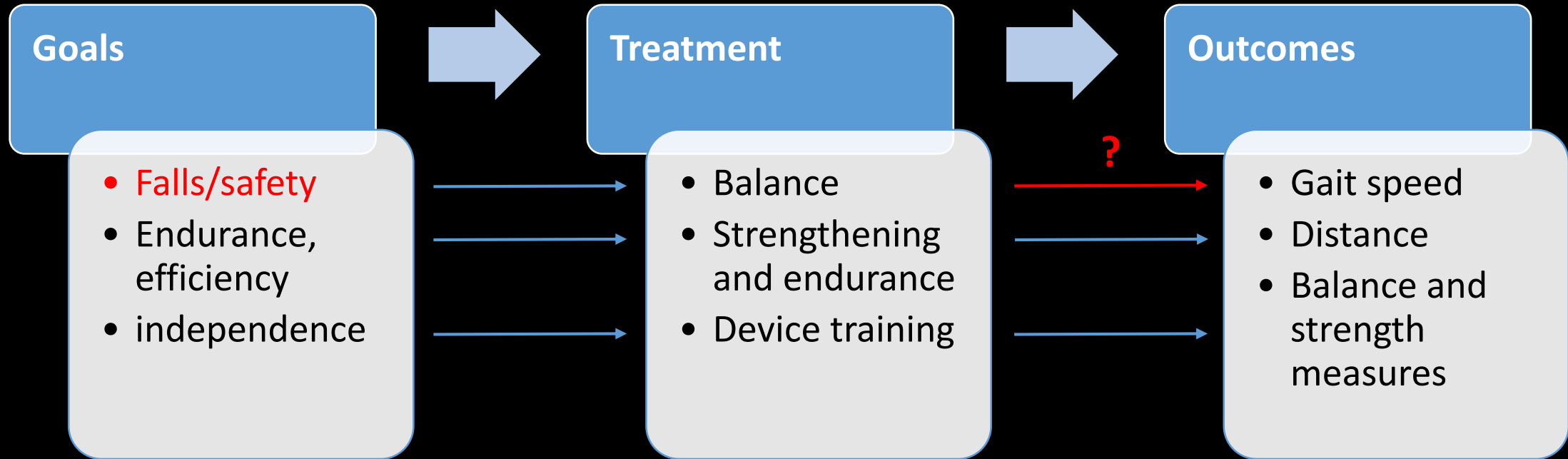
- *“I think using some of those self-report measures is a great way to do that. Besides just asking, ‘Hey, how are you feeling?’”*
- *“Those self-report measures can sometimes really depend on the day... and whether they know you're reassessing to discharge them.”*

- Creating patient-centered functional goals and ensuring those are met

- Conversation

- *“Whether or not they feel that they're making progress or not making progress... what is their comfort level with going home versus not going home, or using a certain device versus another device.”*

Connecting the dots



Are we accurately assessing safety with walking/mobility?

- Therapists indirectly assess safety: cut-offs scores for fall risk, loss of balance, level of assistance, reported confidence

New questions for practice

- Are there current outcome measures we could be using to more directly assess safety with walking?
- Is there a need for new safety measures?
- Do we need to change our expectations of meaningful change in patients with neurodegenerative disease?
- Are these gaps in practice pertinent to other patient populations?



Key take-aways (gems)

- Connect the dots from goal setting to outcomes and final discharge assessment to select meaningful and patient-centered treatments and measures
- Ask yourself, “what is gait speed being used for (if using) and how else might I capture this patient’s walking progress?”
- Explore subjective measures and patient-centered strategies to better capture the patient’s perspective of progress



Thank you!

- Take our survey to expand our understanding!
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