

Documentation of Exercise and Health Technology Use: Implementation Fidelity & Lessons Learned

University of Nevada, Reno
School of Medicine



Jillian MacDonald, PT, DPT, NCS^{1,2}; Stephen Lencioni, BS^{1,3}; Sydney Achler, MPH¹; Kevin Smaller, BS¹; Monica Hendrickson, PT, DPT¹; Bridget Fowler King, PT, DPT¹; Miriam Rafferty, PT, DPT, PhD^{1,4}

¹Shirley Ryan AbilityLab, Chicago, IL, ²Barrow Neurologic Institute, Phoenix, AZ,

³University of Nevada Reno School of Medicine, Reno, NV, ⁴Northwestern University

Background

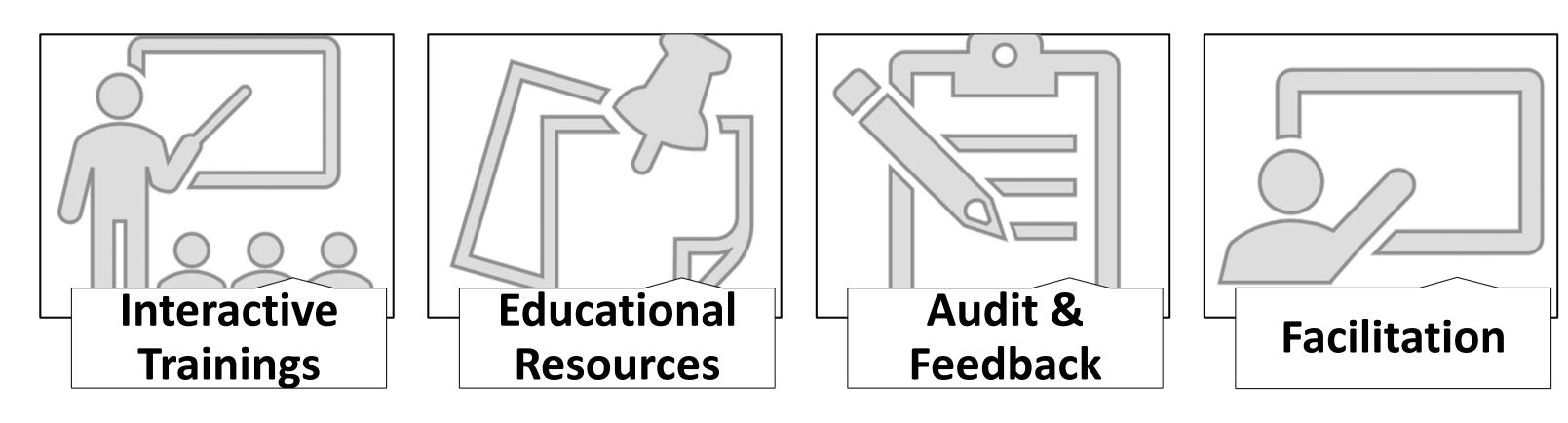
- Long-term exercise participation is beneficial for people with Parkinson's disease (PwP), but it can be hard for PwP to start and remain engaged.
- Purpose: To explore how physical therapists (PTs) can use digital health technology (DHT) and behavior change approaches to help PwP meet exercise goals.

Implementation Context

Outpatient rehabilitation clinics (1 urban, 2 suburban)

• 8 PTs with average 5.6 years experience working with PwP had PTs had 100% adherence to documenting self-reported baseline exercise for PwP prior to implementation.

IMPLEMENTATION STRATEGIES:

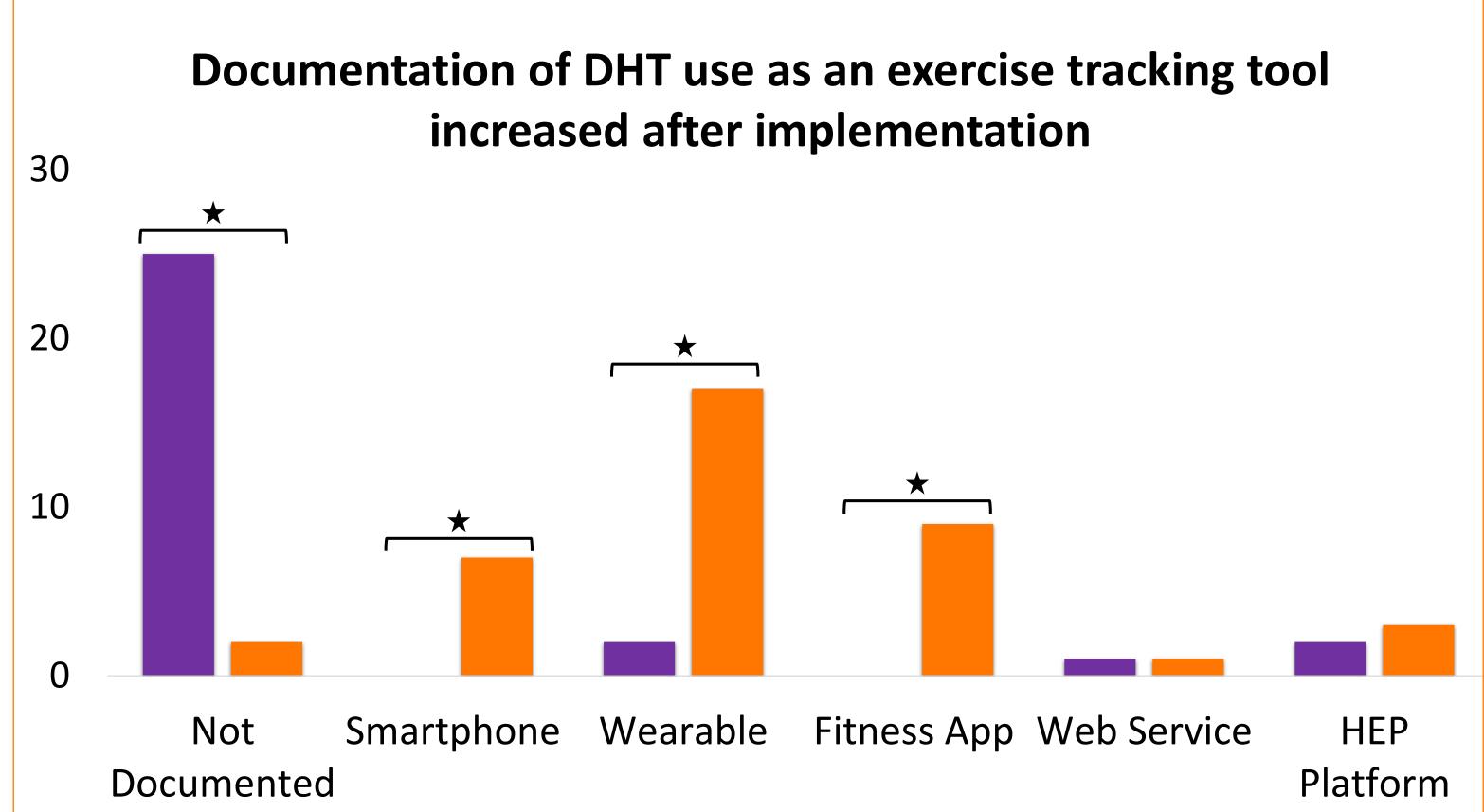


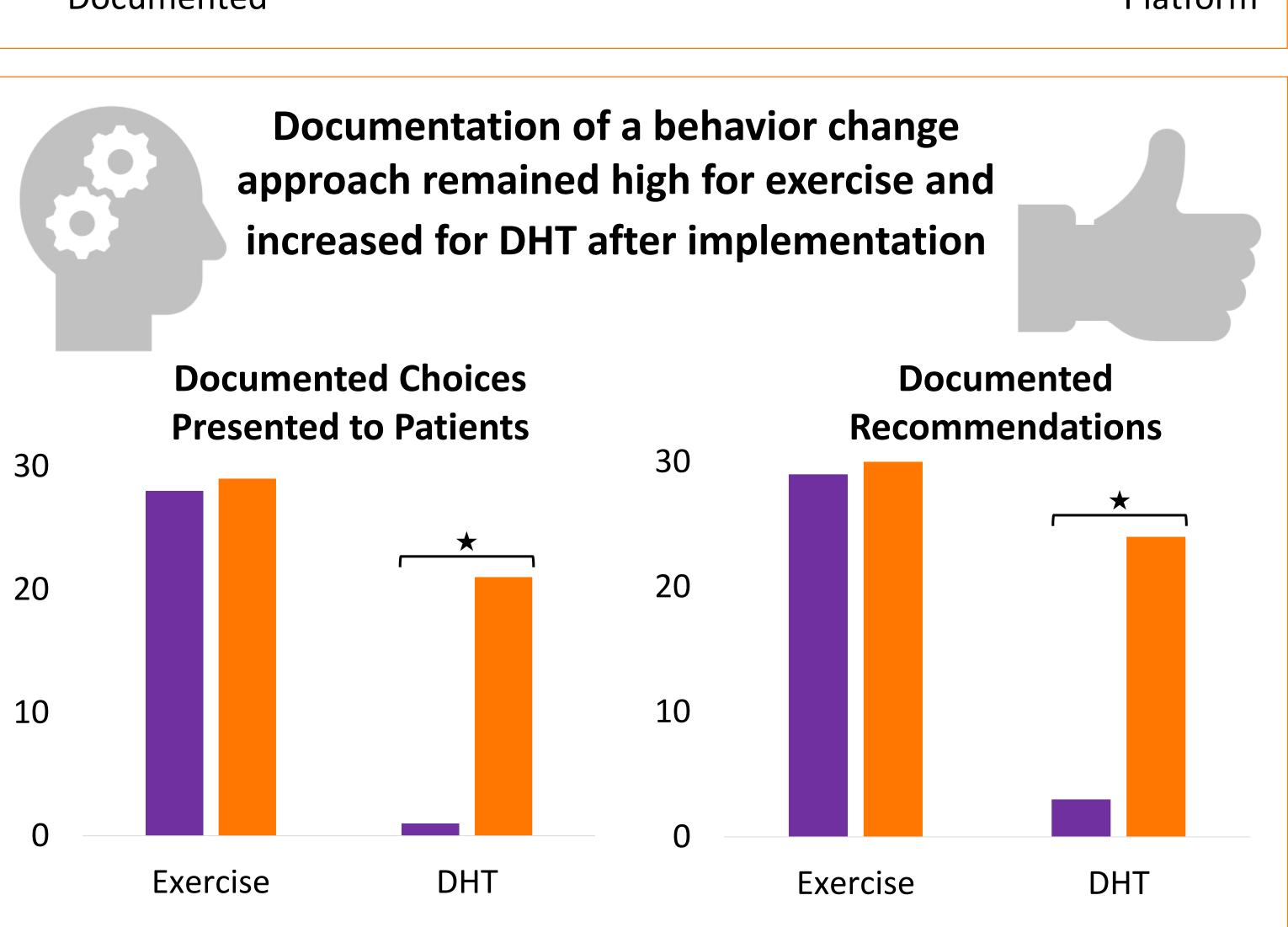
• Implementation aimed to promote the use of DHT and behavior change approaches for exercise adherence in a group of PwP.

Design

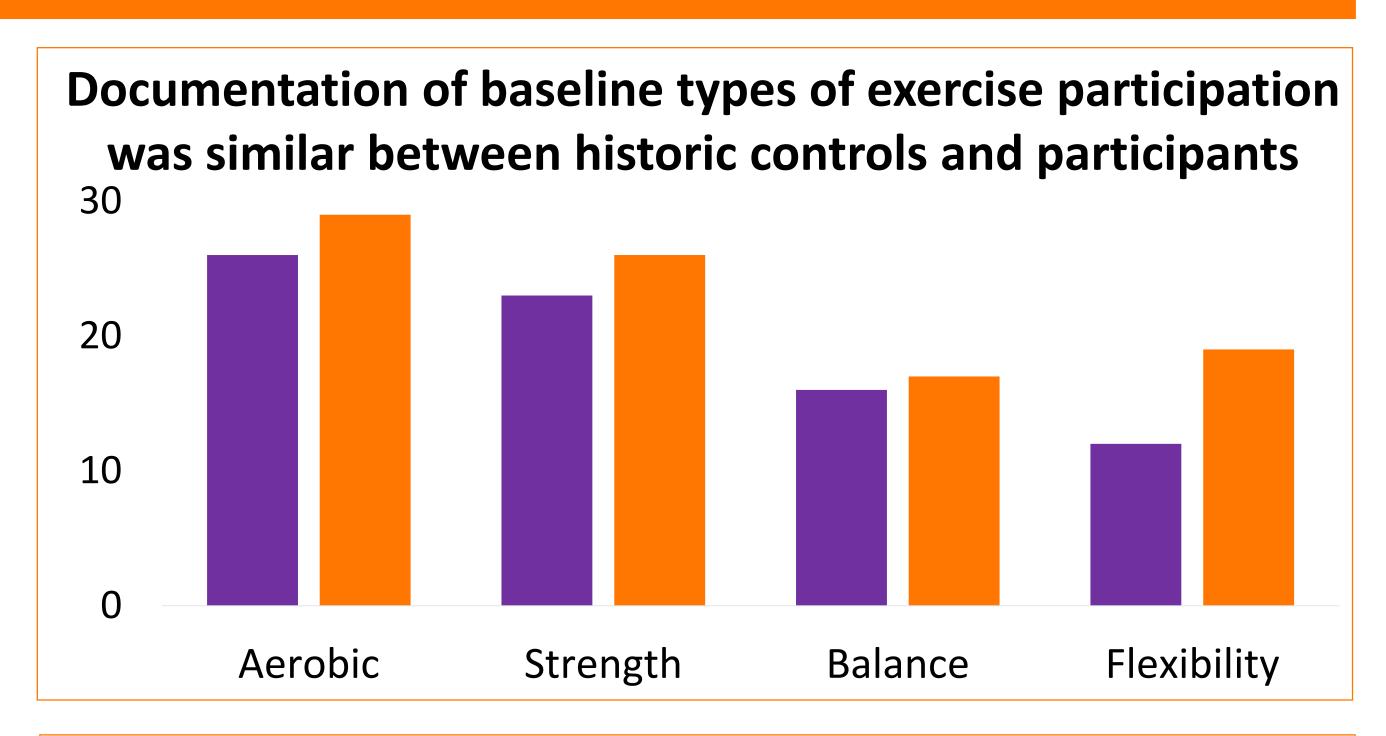
- After implementation, PTs provided care to 30 PwP
- Manual chart review:
- Historical control documentation (n=30)
- Participant documentation (n=30)
- Age & sex matched. Average age: 64.4 & 64.2 years
- DHT Fidelity Outcomes:
 - Patient-reported exercise (e.g. frequency, intensity, time, type)
- Behavior Change Fidelity Outcomes:
- Documented reference to DHT (e.g. type of technology, step count, and heart rate-based intensity)
- Documentation of choices for exercise and DHT
- Documentation of recommendation for exercise and DHT

Results

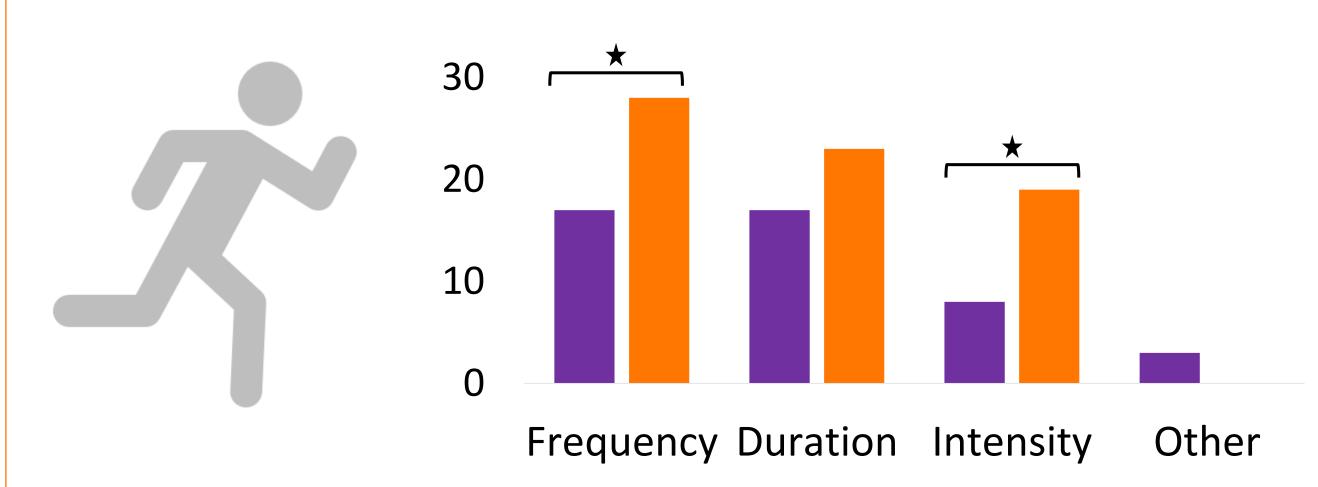




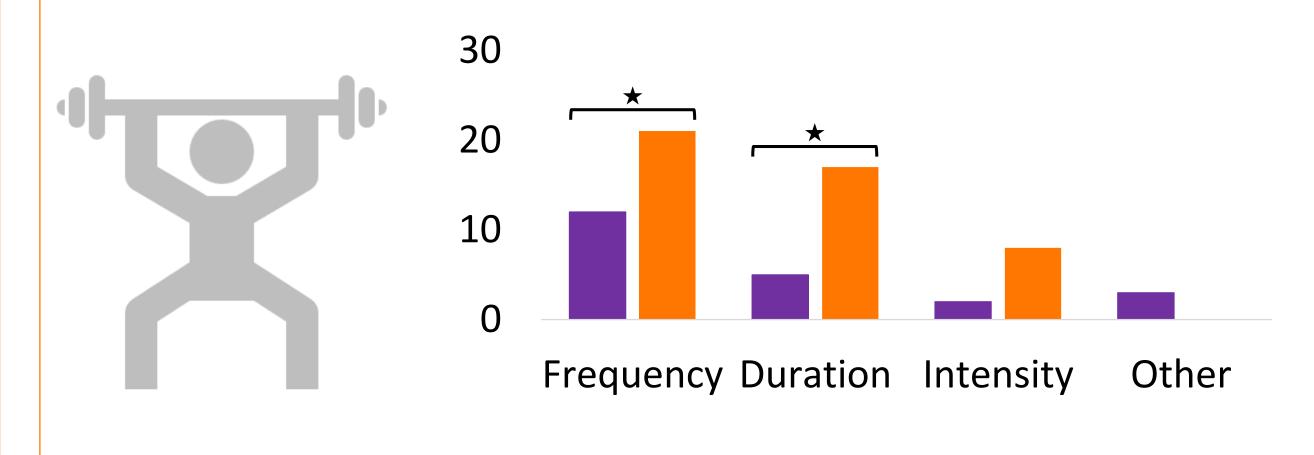








Detailed documentation of baseline <u>strengthening</u> exercise improved following implementation





Conclusion & Clinical Relevance

- Targeted implementation strategies resulted in improved documentation of exercise details and DHT use in a group of therapists already documenting information about exercise and shared decision making.
- Use of DHT is not standard practice and PTs benefited from specialized implementation training to better facilitate DHT use and improve detailed exercise prescription and monitoring in PwP.