

THE ECOSYSTEM OF EVIDENCE

Lessons learned in the pandemic era and future challenges

10* International Conference for EBHC Teachers and Developers 10* Conference of the International Society for EBHC Taoming 25*- 28* October 2023

#EBHC2023

Guideline implementation using the knowledge to action model:

A mixed methods analysis of therapist performance triangulated with therapist and patient perspectives



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Collaborators & Funding





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Background

APTA

OPEN

CLINICAL PRACTICE GUIDELINES

Vestibular Rehabilitation for Peripheral Vestibular Hypofunction: An Evidence-Based Clinical Practice Guideline

FROM THE AMERICAN PHYSICAL THERAPY ASSOCIATION NEUROLOGY SECTION

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ABSTRACT

Background: Uncompensated vestibular hypofunction results in postural instability, visual blurring with head movement, and subjective complaints of dizziness and/or imbalance. We sought to answer the question, "Is vestibular exercise effective at enhancing recovery of function in people with peripheral (unilateral or bilateral) vestibular hypofunction?" Methods: A systematic review of the literature was performed in 5 databases published after 1985 and 5 additional sources for relevant publica-

Hall C et al. J Neurol Phys Ther. 2016;40(2):124-155.

Knowledge to Action Model



Graham ID et al., J Contin Educ Health Prof 2006



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Background

Consolidated Framework for Implementation Research (CFIR)



Capability, Opportunity, Motivation → Behavior (COM-B)



Damschroder, L.J *et al. Implementation Sci* **17**, 75 (2022)

Michie, S et al. Implementation Sci 6, 42 (2011)

Assess impact of implementation using Knowledge to Action Model to:

- > Improve physiotherapist clinical practice guideline adherence
- 5 Organizationally distinct practice settings across the US

Gain insight into what worked (and what didn't) and generate hypotheses about why.

Mixed Methods Analysis



Methods - Quantitative



Methods - Qualitative

- Semi-structured interviews and focus groups
 - 16 Therapists
 - 12 Patients
- Themes
 - Interpretation: CFIR, COM-B













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Results - Quantitative

- 1. Patient monitoring and documentation goals + + + +
- 2. Offering low tech exercise adherence resources to patients +++
- 3. Offering high tech exercise adherence resources to patients +

Overall Site Performance



- >75% new adherence on 1 or more goals
- >50% new adherence on 1 or more goals
- <50% adherence on all goals



Tilson JK et al. Health Serv Res. 2022

Results - Qualitative

Themes: *Therapists*



- 1. Monthly team meetings, built around the audit and feedback process, nurtured a sense of accountability.
- 2. A cohesive and inclusive team, focused on a common goal, created a sense of belonging and common purpose.
- 3. Complexity and adaptability of resources and tasks impacted implementation success.
- 4. Local leadership with dedicated time for implementation was viewed as important to sustainability.
- 5. Individual therapists described strong motivation and commitment to personal growth in order to benefit their patients.

Example Quotes



"I think we all had a part in deciding on the project, deciding how we wanted to carry out the project. So I think there was a lot of buy in from that perspective too." (Th 3)

"I think that just the drive to better myself as a therapist so that my patients will benefit more, I think that has a lot to do with it." (Th 15)

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Theme: Patients

Patients identified that adhering to their home exercise program was supported when therapists:

- inquired about the patient's home practice adherence,
- provided objective data about the patient's progress, and
- > provided personalized resources and reminders.

"She kept pushing me. She -- you know, -- she made it a point to ask how much I had been doing, and I probably overplayed how much I had been doing. But she paid attention to what kind of progress I was making." (P7)



Integrated Results

Puzzle pieces of successful Implementation...



Innovation characteristics:
✓ Common goal and purpose
✓ Clear plan
✓ Focus on high quality care
✓ Monthly team meetings
✓ Audit and feedback
✓ Low complexity
✓ High adaptability
✓ Educational for providers

Inner Setting:

- ✓ Local leadership
- Cohesive, inclusive teams
- ✓ Sense of team accountability
- ✓ Synchronous meeting times
- ✓ Adaptable workflows and EMR
- Collective eagerness to optimize patient care

Outer Setting: ✓ Patient Needs Implementation Process:
 ✓ Leadership support
 ✓ Shared decision making, codesign and problem solving
 ✓ Adaptable strategies and goals

Characteristics of Individuals:
✓ Sense of belonging
✓ Sense of accountability
✓ Motivated by patient benefit and personal growth



Links to Behavior Change

	Therapists	Patients
Capability	Knowledge and skills for guideline adherence	Knowledge about condition and prognosis



The case series nature of this study did not allow us to make quantitative inferences between sites.

Qualitative findings allow a deeper understanding of specific individuals' experiences but cannot be generalized.



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Conclusions

- Knowledge to Action model associated with improved therapist adherence to a single CPG in diverse settings
- Therapists valued:
 - Monthly audit and feedback in a collaborative setting
 - Sustained team-based efforts for improved care
 - Comradery, accountability, and personal growth
- Patients valued:

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Education about health condition from a collaborative therapist

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- Accountability to complete daily exercises
- **Objective measures to understand progress**











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Thank you!

Questions

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