

Evaluating Implementation Strategies and Outcomes in Postacute Stroke Rehabilitation: A Scoping Review

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BACKGROUND: Every year, millions of people worldwide experience a stroke. Stroke survivors expect occupational therapy practitioners to utilize evidence-based practice to provide the highest quality, cost-efficient services. The benefits of OT in stroke rehabilitation have been well-established for decades. However, practitioners can experience complex barriers when implementing EBP. Moreover, while identifying these barriers is a necessary precursor to optimizing implementation, it remains unclear what strategies have been used to promote effective implementation in the real-world context. This scoping review aimed to answer the following two research questions: What implementation strategies have occupational therapy researchers used to support the uptake of evidence-based interventions and assessments in stroke rehabilitation? And what outcomes have been measured to determine the effectiveness of implementation strategies in stroke rehabilitation? Addressing these questions will point OT practitioners and researchers towards strategies that may support evidence implementation in stroke rehabilitation.

DESIGN: The scoping review methodology was guided by Arksey and O'Malley's scoping review framework and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review reporting recommendation. Studies were eligible for inclusion in the review if they were published between Jan 2000–Jan 2020, examined the implementation of interventions or assessments, had a target population of adult (19 years and older) stroke survivors, included occupational therapy practitioners, and were relevant to physical rehabilitation.

METHOD: Four electronic databases and two peer-reviewed implementation science journals were searched to identify studies meeting inclusion criteria. Two reviewers applied the inclusion parameters and consulted with a third reviewer, as needed, to achieve consensus. The Expert Recommendations for Implementing Change project and the Implementation Outcomes Framework guided synthesis of review findings.

RESULTS: The initial search yielded 1219 studies, and 26 were included in the final review. A total of 48 out of 73 discrete implementation strategies were deployed in the included studies. The most used implementation strategies were “distribute educational materials,” “assess for readiness and identify barriers and facilitators,” and “conduct educational outreach visits.” “Adoption” was the most frequently measured implementation outcome, while “cost” was not measured in any included studies. Eleven studies reported findings to support the effectiveness of their implementation strategy or strategies; eleven studies reported inconclusive findings, and four studies found that their strategies did not lead to improved implementation outcomes.

CONCLUSIONS: With the growth of the stroke survivor population, the occupational therapy profession must identify effective strategies that promote the uptake of evidence-based practices into routine stroke care. Occupational therapy researchers and practitioners are encouraged to collaborate to develop and deploy implementation strategies responsive to known implementation barriers and facilitators in the stroke rehabilitation setting.

IMPACT STATEMENT: This review highlights implementation strategies and outcomes that have been examined in the stroke rehabilitation literature. Moreover, it facilitates the need to explore effective implementation strategies to enhance the adoption, implementation, and sustainability of evidence-based practices and improving outcomes. This research is pertinent as it remains unclear which implementation strategies are most effective and implementation theories or frameworks guide limited research.

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