

The Impact of Payer Source on Occupational Therapy Functional Outcomes in Stroke Patients: A Scoping Review

Isabele Magbanua, OTD, OTR/L, Kellie Sawyer, OTD, OTR/L, George Washington University, School of Medicine & Health Sciences

Introduction

Current literature:

- Uninsured stroke patients had a higher risk of death than those with private insurance.
- The uninsured are 30% more likely to die in-hospital than the privately insured, while the likelihood of death increases to about 1.5% for uninsured patients ages 65 and older.

The gap:

- The effect of insurance status on occupational therapy functional outcomes in acute care remains unexplored and requires additional research.

Aim:

- To assess the impact of payer source on OT outcomes in acute stroke rehabilitation.
- To develop and deliver more accessible health care by requiring payer sources to fund rehabilitation services post-stroke to improve well-being and community participation.

Research Question:

- In acute care settings, are patient functional outcomes following a stroke impacted by payer source?

Methods

Frame of reference:

- Arksey and O'Malley methodological framework
- 5 stages

Inclusion and exclusion criteria:

- **Inclusion:** published within the previous 20-25 years; conducted within an acute care setting; based within the United States; and examined stroke patients
- **Exclusion:** articles not available in English; articles without a functional outcome measure; and articles without full text

Outcome measures:

- Modified Rankin Scale (mRS)
- Barthel Index (BI)

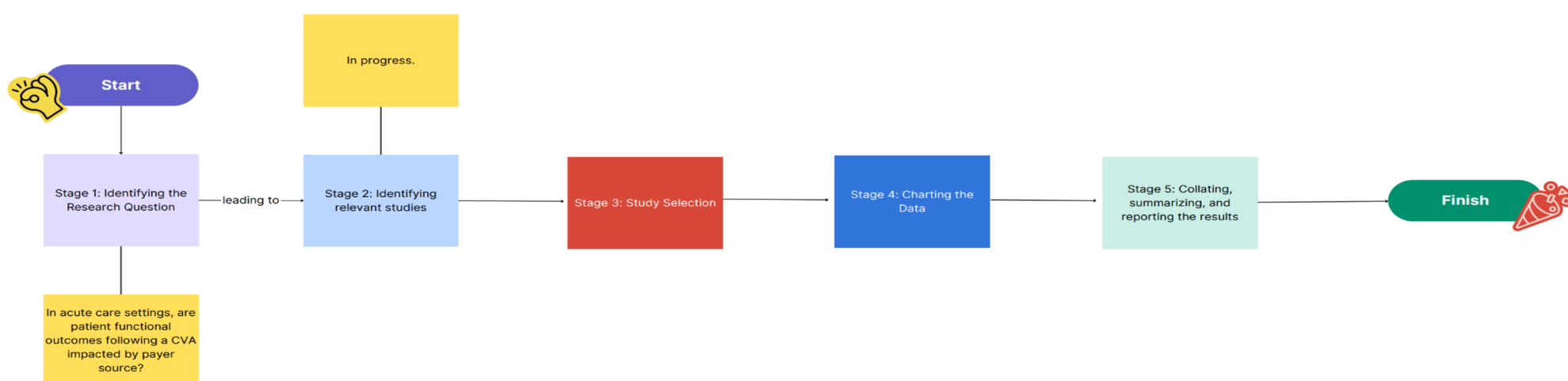
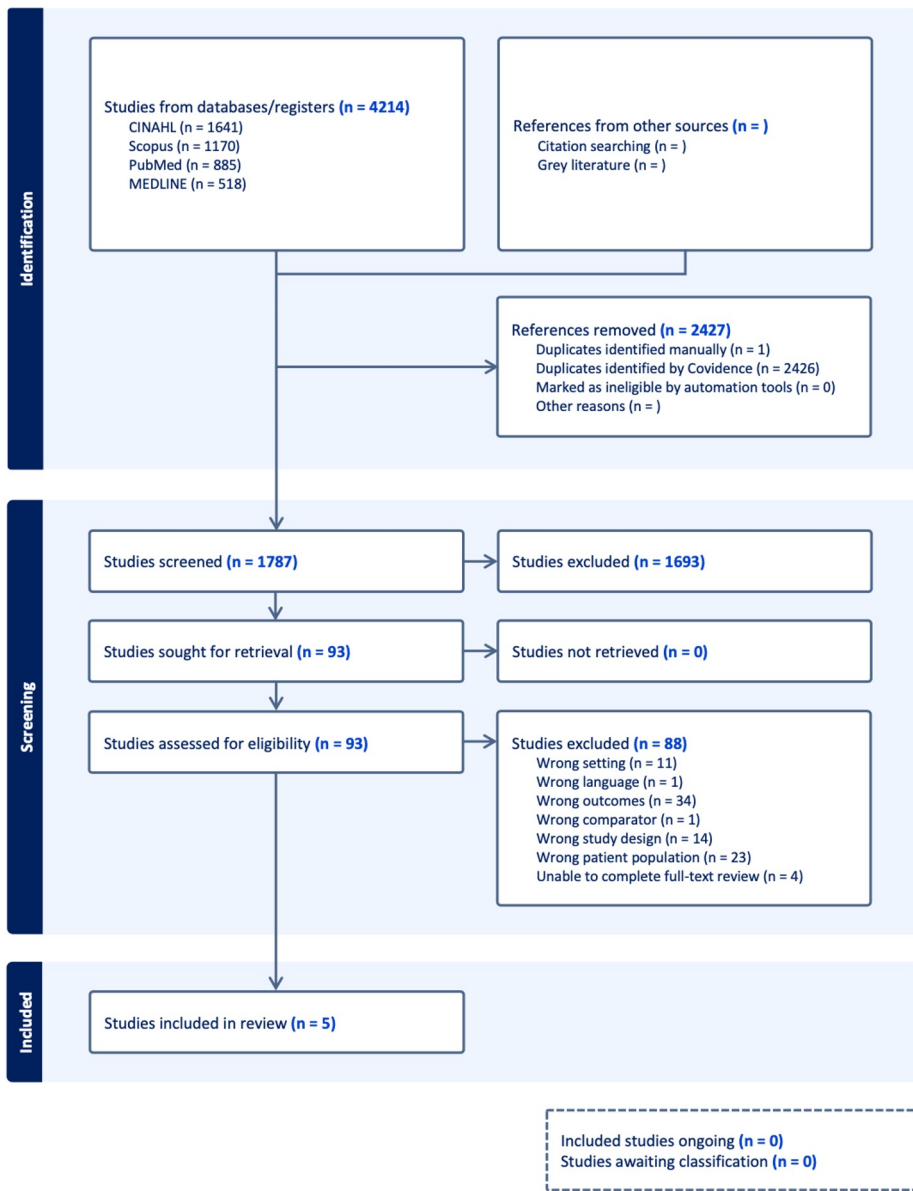


Figure 1: Flow Chart of Conceptual Model.

Results

Capstone - Payer Source and Functional Outcomes



	mRS	BI
Insured	score 0-1=33.8 score 2-5=62.5 score 6=3.7	
Uninsured	score 0-1=24.8 score 2-5=68.0 score 6=7.2 score 2 =IQR(1-4)	
Medicare	score 3 =IQR(1-4)	
Medicaid	score 0-2= 13,964 (55.87%) score 3 =IQR(1-4)	
Medicaid Expansion	score 0-2= 14,224 (54.69%)	
Private	score 2 =IQR(1-4)	
Medicaid/ uninsured		OR=0.85
Medicare/ private		OR=0.99
UH	score 4-6= 3.73	
CH	Reference	

Figure 2: PRISMA diagram

Table 1: Summary of functional outcome measures relative to payer source

Authors (Year)	Title	Region	Aim of Study	Total Participants	Outcome Measures	Study Design
Dhamoon et al. (2009)	Long-term functional recovery after first ischemic stroke: the Northern Manhattan Study.	United States of America	To determine the long-term progression and factors influencing the functional status of participants who experienced their first ischemic stroke.	525	BI	Cohort Study
Gezmu et al. (2014)	Disparities in acute stroke severity, outcomes, and care relative to health insurance status.	United States of America	To investigate differences in acute stroke severity, outcomes, and care based on health insurance status, with a particular focus on identifying factors contributing to longer lengths of stay (LOS) among the uninsured population.	19,255	mRS	Cohort Study
McGee et al. (2021)	Associations of Medicaid Expansion With Access to Care, Severity, and Outcomes for Acute Ischemic Stroke.	United States of America	To examine differences in uninsured and Medicaid-covered ischemic stroke hospitalizations between Medicaid expansion and non-expansion states, and to assess how Medicaid expansion influenced stroke severity at admission, timely access to emergency services, and access to institutional rehabilitation.	95,086	mRS	Cohort Study
Medford-Davis et al. (2016)	Impact of Insurance Status on Outcomes and Use of Rehabilitation Services in Acute Ischemic Stroke: Findings From Get With The Guidelines-Stroke.	United States of America	To assess whether patients lacking insurance or covered by government-sponsored programs experienced lower quality of care or poorer in-hospital outcomes following acute ischemic stroke.	589,320	mRS	Cohort Study
Strickland et al. (2020)	Discrepancy in Neurologic Outcomes Following Aneurysmal Subarachnoid Hemorrhage as a Function of Socioeconomic Class.	United States of America	To evaluate the outcomes of patients with ruptured cerebral aneurysms who underwent surgical treatment at the institution's university hospital (UH) and safety-net county hospital (CH) to identify 1.) whether healthcare disparities exist and 2.) influence of socioeconomic factors on patient outcomes.	131	mRS	Cohort Study

Table 2: Summary of research articles

Discussion

Modifications to the project plan:

- **Search strategy:** the search returned an overwhelming number of articles due to overly broad parameters and keywords.
- **Article population:** limiting the scope to US-based studies ensured consistent comparisons within a uniform health policy context.
- **Timeline:** the completion date was extended to refine the search strategy, consult further with the librarian, and resolve screening conflicts.

Outcomes:

- Payer source significantly impacts functional outcomes following a stroke in acute care setting.
- Patients with private insurance or Medicare generally demonstrated better functional recovery.
- Patients with Medicaid or no insurance consistently experienced higher levels of disability at discharge and over time.

Conclusion

Evaluation of the Entire Occupational Therapy Process:

- **Successes:** revealing the impact of the current health insurance model on functional outcomes and receiving a greater personal understanding of payer source.
- **Challenges:** difficulty isolating results directly applicable to acute care and navigating the Covidence platform.

Limitations:

- Small sample size
- Not applicable outside the US.

Recommendations for practice, policy and/or education

- **Practice:** proactively identify patients at risk of limited care due to insurance status.
- **Policy:** timely, intensive occupational therapy for all post-stroke patients.
- **Education:** health policy, insurance, and social determinants to prepare future therapists for both quality care and advocacy.

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