Rehabilitation Advances in Developing Health Systems
ISSN: (Online) 3005-9437, (Print) 3105-4307

Task shifting and task sharing for rehabilitation in primary care – A scoping review

Authors:
Brittany Fell[1]
Conran Joseph[1]
Tracey Smythe[1,2]

Affiliations:
[1]Department of Health and Rehabilitation Sciences, Faculty of Medicine and Health Sciences, Stellenbosch University, Stellenbosch, South Africa

[2]Department of Population Health, London School of Hygiene and Tropical Medicine, London, United Kingdom

Corresponding author:
Brittany Fell,
brittany@sun.ac.za

Dates:
Received: 14 May 2025
Accepted: 19 Aug. 2025
Published: 08 Oct. 2025

How to cite this article:
Fell, B., Joseph, C. & Smythe, T., 2025, 'Task shifting and task sharing for rehabilitation in primary care – A scoping review', *Rehabilitation Advances in Developing Health Systems* 2(1), a32. https://doi.org/10.4102/radhs.v2i1.32

Background: Primary care is essential to achieving universal healthcare coverage. Task shifting and task sharing are strategies to consider for enhancing access to rehabilitation in primary care.

Aim: This study synthesises evidence on task shifting and task sharing rehabilitation strategies in primary care.

Setting: The study involves primary care settings worldwide.

Method: Peer-reviewed intervention and observational studies on task shifting and task sharing in primary care rehabilitation were searched across five databases. Guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) and Arksey and O'Malley framework, data were extracted and synthesised on training characteristics, health outcomes, and implementation factors to inform future research, policy, and practice.

Results: Eleven studies across five countries were included. Community health workers were trained to deliver rehabilitation across various pathologies in primary care. Training of community health workers varied, yet all studies reported positive outcomes. Themes included training methods and the potential for digital tools to enhance delivery and access to rehabilitation.

Conclusion: Task shifting and task sharing are promising for strengthening rehabilitation access in primary care. Despite variations in training and delivery, outcomes suggest feasibility in low- and middle-income countries (LMICs). Future research should prioritise standardising a framework for community health worker training.

Contribution: This review highlights how task shifting and task sharing can enhance access to rehabilitation in primary care, especially in resource-limited settings. It identifies key implementation factors offering valuable insights for policymakers, practitioners and researchers aiming to strengthen rehabilitation services through workforce innovation and community-based strategies.

Keywords: task shifting; task sharing; primary care; rehabilitation; health workforce.

Introduction

Globally, primary care is essential to achieving universal healthcare coverage as part of the 2030 Agenda for sustainable development goals (Conradie, Berner & Louw 2022). Primary care acknowledges the right to the highest attainable quality of health for every individual. According to the World Health Organization (WHO & United Nations Children's Fund [UNICEF] 2020), primary care is:

> [*T*]he provision of integrated, accessible healthcare services by clinicians who are responsible for addressing a large majority of personal healthcare needs, developing a sustained partnership with patients, and practicing in the context of family and community. (n.p.)

Primary care serves as the initial point of entry for individuals seeking healthcare and plays a crucial role in healthcare provision. It offers continuity of care through early diagnosis, integrated referrals throughout the different levels of care and effective management of diverse healthcare needs (World Health Organization & United Nations Childrens' Fund 2020). Additionally, by providing healthcare near patients' homes and ensuring timely treatment, primary care is the frontline healthcare strategy for disease prevention and management. Within this healthcare framework, rehabilitation emerges as a key component of primary care (WHO 2017).

The WHO 2030 initiative calls for the integration of rehabilitation across all levels of healthcare, recognising it as essential to achieving universal health coverage and addressing the long-term needs of individuals across the health continuum. Globally, it is estimated that one in three people is living with conditions that would benefit from rehabilitation. Rehabilitation plays an important role in optimising function, reducing disability, enhancing quality of life and reducing long-term care and hospital readmissions (Louw et al. 2021; WHO 2017). Despite its importance, access to rehabilitation remains severely constrained. The WHO estimates that more than half of those in low- and middle-income countries (LMICs) who need rehabilitation services do not receive them. Globally, the demand for rehabilitation is climbing, driven by population ageing, rising prevalence of non-communicable diseases (NCDs) and improvements in acute and emergency medical care that prolong life (Cieza et al. 2021). South Africa, like many other LMICs, experiences a persistent workforce shortage, particularly in professions such physiotherapy; occupational therapy and speech, language and hearing therapy. These shortages are further compounded by the maldistribution of healthcare workers. The public healthcare system serves 84% of the population; the rural and peri-urban areas lack enough infrastructure and training, staffing and service integrations are not adequately funded. Rehabilitation is still underprioritised in policy and resource allocation – particularly at a primary healthcare (PHC) level (Conradie et al. 2022).

In South Africa, the system faces significant challenges of substandard quality and accessibility to care (Leong et al. 2021; Ned et al. 2020). Prolonged waiting times, inadequate infrastructure, financial constraints and inadequate workforce capacity further challenge the public healthcare system (Conradie et al. 2022). Despite post-apartheid government initiatives such as health policies and legislation aimed at ensuring the right of all citizens to access quality healthcare, the quality of care continues to decline, falling short of patient expectations and basic standards of care (Burger & Christian 2020; Maphumulo & Bhengu 2019). In response to these systemic limitations, alternative service delivery strategies have gained traction to optimise existing human resources and extend access to care (Callaghan, Ford & Schneider 2010; WHO 2008).

The strategies utilised at the primary care level to address some of the limitations and challenges are task sharing and task shifting. These strategies involve redistributing healthcare responsibilities among healthcare workers with varying discipline knowledge and expertise and level of training. Task sharing involves collaborative task completion, while task shifting entails delegating tasks from highly trained professionals to someone less qualified, namely from a medical doctor to a professional nurse (Kechichian et al. 2022; Martinez-Gonzalez et al. 2015). A systematic review by Joshi et al. (2014) found task sharing with non-physician healthcare workers for NCDs management in LMICs to be both effective and affordable, leading to improved health outcomes (Joshi et al. 2014). Additionally, a systematic review by Callaghan et al. (2010) found task shifting to be effective in human immunodeficiency virus (HIV) care and applicable to NCDs such as diabetes and hypertension (Callaghan et al. 2010). Furthermore, a study by Mdege, Chindove and Ali (2013) concluded that task shifting in mental health and NCD management was generally cost effective (Mdege et al. 2013). Despite these benefits, a study by Kemp et al. (2019) suggests that variability in training and supervision may impact the quality of care provided. Additionally, challenges to the sustainability of this approach, such as training of staff, lack of supervision and absence of regulatory frameworks, have also been suggested (Crowley & Mayers 2015; Maier & Aiken 2016).

Existing literature demonstrates persistent challenges in primary care service delivery and access, as well as in rehabilitation, despite ongoing policy changes. While there is substantial evidence supporting the use of task shifting or task sharing among medical practitioners, there is a notable gap in understanding the application, particularly for rehabilitation within primary care settings. The emerging body of literature advocating for task shifting or task sharing presents opportunities for innovative strategies to address unmet healthcare service needs and overcome resource and access limitations.

Despite certain challenges and limitations, there is evidence to suggest that task shifting and task sharing remain valuable strategies for addressing workforce shortage, and there is a critical need to systematically identify and synthesise evidence regarding the integration of rehabilitation strategies or services within task shifting or task sharing models in primary care settings. Thus, the aim of this scoping review will be to determine the extent and diversity of published literature reporting the use of task shifting or task sharing approaches in rehabilitation between healthcare workers in the primary care setting, in order to support South African rehabilitation policy and practice.

Methods

This scoping review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping reviews (PRISMA-ScR) guidelines. To extract and synthesise the data, this scoping review followed the five-step methodological framework provided by Arksey and O'Malley. Based on the aim of this study to explore the existing literature and key characteristics of task shifting and task sharing approaches used in rehabilitation within primary care, a scoping review was the most appropriate method for the study (Peters et al. 2020).

The five steps of the framework are (1) identifying the research objective, (2) identifying relevant studies, (3) study selection, (4) data charting and (5) collating, summarising and reporting the results.

Identifying the research objective

The main aim of this scoping review was to scope primary research (intervention and case studies) to:

- Identify the definition, rationale and key characteristics (professionals involved, training elements and resources utilised) of the task shifting and task sharing approaches that have been implemented for rehabilitation in primary care settings.
- Identify the outcomes and describe the subsequent impact of task shifting and task sharing in relevant experimental studies.
- Report barriers and facilitators of process, application and uptake by stakeholders.
- Summarise the key findings and recommendations for future research, policy and practice related to tasking shifting and sharing models for rehabilitation in primary care.
- Identify and summarise key shortcomings or knowledge gaps.

Identifying relevant studies

A broad and comprehensive search strategy was developed in consultation with the librarian at Stellenbosch University. Using various combinations of Medical Subject Heading (MeSH) terms and key search terms including 'task sharing', 'task shifting' and 'health care' in PubMed, a preliminary search was conducted (Appendix 1). Following this, a comprehensive electronic search of Cumulative Index to Nursing and Allied Health Literature (CINAHL), EBSCOhost (Africa Wide Information and MEDLINE), Cochrane, Scopus, ScienceDirect and Web of Science was completed. Furthermore, the reference lists of included studies were searched. The search included title, abstract and keyword fields. The search was limited to articles including humans and published since 2013. The search for grey literature was conducted through online search engines such as Google Scholar, using the terms 'task shifting', 'task sharing' and 'health care'. The first 50 results of the search were included in the screening by title and abstract. Furthermore, experts in the field of task shifting and task sharing were contacted for recommendations of known studies. By not limiting our search strategy to include specific terms related to rehabilitation, we aimed to comprehensively capture diverse applications of task shifting and task sharing across various primary healthcare domains. This broad approach ensured that we identified a wide range of relevant studies that may later be selected based on their relevance to rehabilitation within primary care contexts.

Definition of main concepts

For the purpose of this scoping review, definitions for the main concepts were adopted as follows: *Primary care* was defined as 'the first level of contact for individuals seeking healthcare' (Dookie & Singh 2012).

Studies included in this review will focus on approaches where tasks or responsibilities are completed collaboratively among healthcare professionals of varying training and expertise or where tasks are delegated from more highly trained professionals to health workers with shorter training and fewer qualifications, such as nurses, community health workers or lay workers.

Type of studies

- Primary qualitative, quantitative and mixed methods studies that evaluate or describe different aspects of task shifting and task sharing approaches to rehabilitation in primary care.
- Intervention studies including randomised controlled trials, cluster randomised trials and quasi-randomised trials and pragmatic trials.
- Observational studies.

Studies that did not meet the inclusion criteria were excluded, and reasons for exclusion are reported in Figure 1.

Type of populations

As we sought to understand the different task shifting and task sharing approaches used in rehabilitation within primary care, any health condition that requires rehabilitation was included.

Type of activity

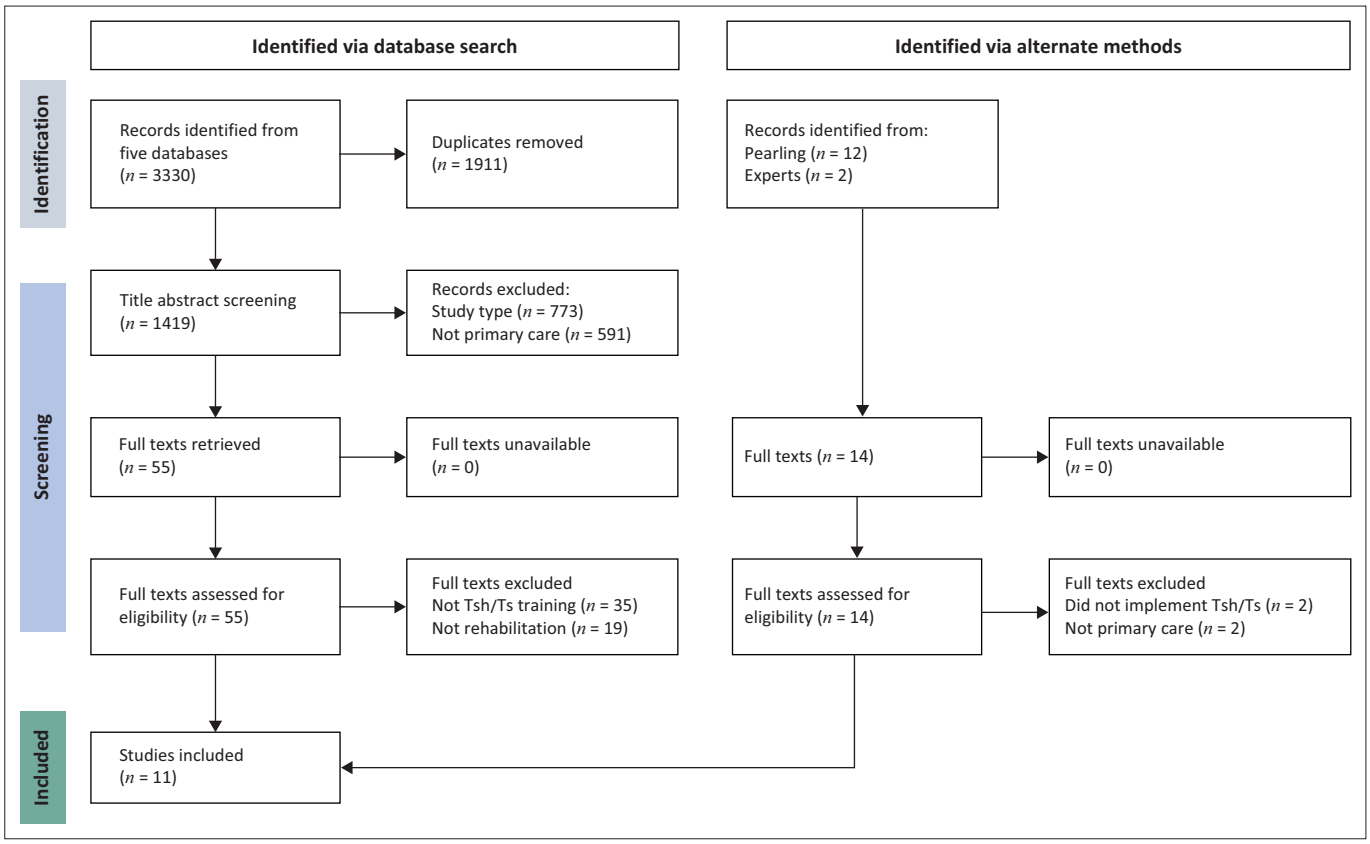
As we sought to explore various task shifting and task sharing approaches utilised in rehabilitation within primary care settings, any study that implemented such an approach to screening, assessment or treatment was included.

Study selection

Study selection was conducted using Zotero software. Following deduplication, titles and abstracts were screened for eligibility by two reviewers independently. Titles and abstracts that met the predetermined eligibility criteria were moved to a full-text review. By scanning the reference lists of eligible studies, a secondary search was conducted to identify studies that may have been missed during the initial database searches. Any conflicts between reviewers during this process were resolved by discussion and consensus. A third reviewer were consulted if consensus could not be reached.

Charting the data

The primary investigator developed a data extraction form. Five eligible studies were selected at random for the piloting of the form, and revisions were made as necessary. The primary investigator extracted the relevant data, while verification was conducted by a second reviewer. Data extraction included (1) author and year of publication, (2) aims and objectives, (3) study design, (4) country of origin,



Tsh/Ts, task shifting or task sharing.

FIGURE 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram of study selection process.

(5) population (health condition and sample size), (6) primary care setting, (7) methodology (stakeholders or healthcare workers, approach used and tasks that were shared or shifted) and (8) outcomes (feasibility, acceptability and cost effectiveness) and key findings (challenges and recommendations).

Type of outcomes

Data related to the following outcomes of interest such as characteristics of the approach (types of tasks, healthcare providers involved, training and qualification of health care providers and patient population), health and cost-effectiveness outcomes and any evidence of feasibility or acceptability of the utilised approaches were extracted.

Quality assessment

Methodological quality and risk of bias appraisal were not conducted as per the guidance on scoping review methodology (Peters et al. 2020).

Review findings

The database search generated 3330 results, of which 1911 duplicates were removed. In total, 1419 records were title and abstract screened, of which 1364 records were excluded based on eligibility criteria. Finally, 55 records were eligible for full-text screening. In addition to this, 14 records were included via PEARLing and discussion with experts in the field of rehabilitation. Following full-text screening, 58 studies were excluded, and 11 records remained for analysis (see Figure 1).

Table 1 presents a summary of the key characteristics of the reviewed studies. Included studies were published between 2013 and 2024. Four studies (36%) were published in 2017, two studies (18%) in the years 2020 and 2022, while one study (9%) was published in 2013, 2023 and 2024, respectively. The reviewed studies were conducted in five different countries. Three studies (27%) were conducted in South Africa and Thailand, two studies were conducted each (18%) in India and the United States, while only one study (9%) was conducted in Bangladesh. Nine studies (82%) were conducted in the low- and middle-income economies, while only two studies (18%) were conducted in a high-income economy. The reviewed studies conducted their studies in the following conditions: children with cerebral palsy (CP) (n = 1), HIV$^+$ and living with disability (n = 1), a form of hearing impairment (n = 5) and stroke (n = 4).

Table 2 provides an overview of the training methods implemented by the reviewed studies. Ten studies reported on the instructors involved in training the various healthcare professionals. Trainers included rehabilitation professionals (Occupational therapists, Physiotherapists and Speech, Language and Hearing Therapists) either in isolation or as part of a team. While one study reports academic partners as the trainers. All studies reported on the trainees included in

TABLE 1: Study demographics.

Author (year)	Title	Country	Study design	Diagnosis
Bhattacharjya, Lenker and Ghosh (2023)	Assessing the usefulness of an mHealth strategy to support the implementation of multi-faceted adaptive feeding interventions by community-based rehabilitation workers	India	Mixed methods control trial	Children with cerebral palsy
Borg, Ekman and Östergren (2017)	Is centre-based provision of hearing aids better than community-based provision? A cluster-randomised trial among adolescents in Bangladesh	Bangladesh	Prospective cluster-RCT	Hearing impairment
Chinchai and Khamwong (2017)	The effects of rehabilitation education for village health volunteers on walking speed and upper extremity function in stroke survivors in Thailand	Thailand	Single group pre–post tests	Stroke
Chinchai, Sirisatayawong and Jindakum (2020)	Community integration and quality of life: Stroke survivors as recipients of rehabilitation by village health volunteers (VHVs) in Thailand	Thailand	Single group pre–post tests	Stroke
Chinchai et al. (2024)	Community rehabilitation by the trained VHVs on activities of daily living and quality of life in stroke survivors	Thailand	Quasi-experimental	Stroke
Cobbing, Hanass-Hancock and Myezwa (2017)	A home-based rehabilitation intervention for adults living with HIV: A randomised controlled trial	South Africa	Randomised control trial	HIV+ living with disability
Emerson, Job and Abraham (2013)	Pilot study to evaluate hearing aid service delivery model and measure benefit using self-report outcome measures using community hearing workers in a developing country	India	Pilot	Moderate bilateral hearing loss
Frisby et al. (2022)	Community-based adult hearing care provided by community healthcare workers using mHealth technologies	South Africa	Cohort	Hearing impairment
Harris et al. (2017)	Interventional audiology to address hearing healthcare disparities: Oyendo Bien pilot study	United States	Community-based participatory	Hearing impairment
Sánchez et al. (2020)	The potential in preparing community health workers to address hearing loss	United States	Cohort	Hearing impairment
Scheffler and Mash (2023)	Evaluation of a stroke rehabilitation training programme for community-based primary healthcare	South Africa	Mixed methods	Stroke

VHVs, village health volunteers; HIV, human immunodeficiency virus; RCT, randomised control trial.

TABLE 2: Training methods.

Author (year)	Instructor	*n*	Trainees	Work experience	Previous training	Training			Resources
						Period	Mode	Content	
Bhattacharjya, Lenker and Ghosh (2023)	Paediatric OT	24	CBRW	25 Years	NR	1 h	Theory	Basic ICT	Smartphone videos
Borg, Ekman and Östergren (2017)	Audiometric technician	142	CHW	NR	3 months	3 days	Theory	NR	NR
Chinchai and Khamwong (2017)	OT PT	27	VHV	Y	22 days	7 h for 1 day	Theory Practical	Basic	Manuals
Chinchai, Sirisatayawong and Jindakum (2020)	OT PT	76	VHV	Y	5 days	NR	Theory Practical	Basic	Manuals
Chinchai et al. (2024)	PT OT	28	VHV	NR	1–2 weeks	2 days	Theory Practical	Basic	Exercise equipment
Cobbing, Hanass-Hancock and Myezwa (2017)	PT	4	CHW	†	-	> 1 month	Theory Practical	Basic	NR
Emerson, Job and Abraham (2013)	NR	NR	CHeW	NR	NR	6 weeks	Theory Practical	Basic	NR
Frisby et al. (2022)	Audiologist	3	CHeW	Y	Y	3 days	Theory Practical	Basic ICT	Smartphone with video otoscopy and AI
Harris et al. (2017)	Audiology staff	NR	CHW	Y	Y	NR	Theory	Basic	NR
Sánchez et al. (2020)	Academic partners	3	CHW	15 years	Y	24 h for 6 weeks	Theory Practical	Basic	NR
Scheffler and Mash (2023)	MDT	61-72	CHWS	-	Y	3 h for 10 weeks	Theory Practical	Basic	Trainer manuals Exercise equipment

n, number of people trained; OT, occupational therapist; PT, physiotherapist; CHWs, community healthcare workers; CBRW, community-based rehabilitation workers; VHW, village health volunteers; CHeW, community hearing workers; NR, not reported; Y, yes; ICT, information and communication technology; AI, artificial intelligence; VHVs, village health volunteers; MDT, multidisciplinary team; NR, not reported.

†, No previous background in rehabilitation.

the studies. These varied from community healthcare workers (CHWs), community-based rehabilitation workers (CBRWs), village health volunteers (VHVs) and community hearing workers (CHeWs). One study did not report on the number of workers they trained, while the number of workers ranged from 3 to 142 across the nine studies, with the last study reporting between 61 and 72 CHWs per session. Six studies reported that the CHWs had previous work experience, with one study reporting as much as 25 years of experience as CHWs. Four studies did not report on any previous working experience. When reviewing any previous training prior to involvement in the reviewed studies, eight studies reported that these workers had previous training ranging from as little as 1–3 weeks to 3 months. Two studies did not report on previous training. One study reported that none of the included CHWs had any previous experience

working or training within the health sector or as rehabilitation providers. Additionally, all reviewed studies reported on the training of the CHWs. Two studies did not report on the duration of training, while the training period ranged from a maximum of 30 h over a period of 10 weeks to a minimum of a 1-h training session. All studies reported on providing at least basic knowledge of the diagnosis or condition by means of 'lecture' or information sessions, with eight studies including practical sessions such as demonstrations or practice with patients. Six studies reported on specific resources utilised in the provision of training. Two studies reported using mHealth technologies to conduct the intervention. One study used a smartphone preloaded with educational videos, while the study by Frisby et al. used smartphone otoscopy enhanced with artificial intelligence (AI) to assist in patient hearing screening. Two studies made use of specific manuals; two studies reported the use of exercise equipment, while one study utilised a combination of the two. Five studies did not report on the use of additional resources. Where information communication and technology resources were utilised, specific training in the use of the technology was provided ($n = 2$).

Table 3 provides an overview of the intervention implemented and associated results. Ten studies implemented an intervention assessment. One study reported only the findings of the training programme itself. Of the 10 studies where an intervention was provided, all studies reported on the impact or effectiveness of training CHWs to provide a rehabilitation service. When reviewing the interventions, CHWs worked independently following training in eight of the studies. Two studies reported a combined delivery of the intervention where CHWs worked in conjunction with rehabilitation professionals and/or a medical doctor. Six studies reported a home-based intervention delivery, while four studies delivered interventions within the community rehabilitation or health centre. Six studies reported that

TABLE 3: Task description and results.

Author (year)	Target group	Task	Data collection	Results
Bhattacharjya, Lenker and Ghosh (2023)	Children with cerebral palsy	Home-based adaptive feeding techniques Mobile video modules by CHWs	Weekly calls during intervention, post-study questionnaire and focus groups	Intervention group: higher use, confidence and effectiveness; control group: less frequent, less confident use
Borg, Ekman and Östergren (2017)	Hearing impairment	Community (home-based) vs centre-based earing assessment and hearing aid provision Community-based service provided by CHWs	Questionnaire International outcome inventory for hearing aids	Control performed significantly better in reducing residual participation restrictions ($p = 0.007$) and impact on others ($p = 0.012$), although the effect sizes for differences were small Both approaches performed the same on five out of the seven outcome measures
Chinchai and Khamwong (2017)	Stroke	Home-based weekly upper extremity and walking programme by VHV	10-metre walk test Fugl-Meyer assessment	Walking speed increased significantly (32.18 ± 9.32) ($p < 0.05$)
Chinchai, Sirisatayawong and Jindakum (2020)	Stroke	Community rehabilitation centre-based assessment, patient-specific rehabilitation and community engagement activities independently provided by VHV	Community Integration Questionnaire World Health Organization's Quality of Life Brief Test (Thai version) collected through interview	Community integration and quality of life increased significantly ($p < 0.05$)
Chinchai et al. (2024)	Stroke	Centre-based rehabilitation independently provided by VHV	Activities of daily living (ADL) – Short Form-Thai version (WHO QOL-BREF-THAI)	Basic activities of daily living (except for sexual expression) increased significantly ($p < 0.05$) Instrumental activities of daily living and total ADL increased significantly ($p < 0.05$) QOL increased significantly ($p < 0.05$)
Cobbing, Hanass-Hancock and Myezwa (2017)	HIV⁺ living with disability	Home-based patient-specific rehabilitation provided by CHW vs Standard of care	WHO QOL – short version WHODAS 2.0 – short version Rivermead Mobility Index 6-min walk test	Greater improvements were recorded in the intervention group across all outcome measures Within-group difference was not statistically significant ($p > 0.05$)
Emerson, Job and Abraham (2013)	Moderate bilateral hearing loss	Home-based hearing assessment and hearing aid provision by CHW	APHAB pre- and post-HA fitting	CHWs are effective in detecting disabling hearing loss and in providing Has
Frisby et al. (2022)	Hearing impairment	Home-based hearing assessment and hearing aid fitting by CHWs	Baseline and post-fitting face-to-face and telephonic interviews IOI-HA questionnaire	CHWs successfully tested and fitted patients with hearing aids Positive hearing aid outcomes and minimal device handling challenges were reported and maintained at follow-up
Harris et al. (2017)	Hearing impairment	Centre-based audiologic rehabilitation programme developed and delivered in part by CHWs	Focus group discussion with participants since attending the programme	Improvement was identified across four themes: 1. communication strategies, 2. confidence, 3. group identity and social support and 4. healthcare utilisation
Sánchez et al. (2020)	Hearing impairment	Centre-based hearing loss awareness and support group in part by CHWs	Focus group discussion and post-training measures	CHWs increased their knowledge base and confidence in effective communication strategies, developed a successful community-engaged process and improved patient hearing service utilisation
Scheffler and Mash (2023)	Stroke	Interprofessional designed stroke training programme for CHW training to deliver home-based stroke rehabilitation	Direct observation of all training delivery sessions, feedback from trainers and CHWs after each session. Observation of CHWs working in households. Focus group interviews	The training programme achieved its objectives The programme was easy to deliver and promoted a holistic, uniform approach. Average training attendance = 93% per session The training programme defined the CHWs' roles clearly empowering them through the programme

VHVs, village health volunteers; CHW, community healthcare workers; HIV, human immunodeficiency virus; ADL, activities of daily living; QoL, quality of life; WHO QOL-BREF-THAI, World Health Organization Quality of Life Assessment, Short Form-Thai version; WHODAS, World Health Organization Disability Assessment Schedule; APHAB, abbreviated profile of hearing aid benefit; HA, hearing aid; IOI-HA, The International Outcome Inventory – Hearing Aids.

CHWs conducted assessments and provided rehabilitation services, while four studies reported that CHWs only provided a rehabilitation service. In the study by Scheffler et al., the training provided was to equip CHWs with the ability to provide a home-based rehabilitation service only. Data were collected through both quantitative and qualitative methods. Studies used standardised outcome measures or questionnaires developed by means of physical assessment ($n = 1$), focus group discussion ($n = 1$), participant interviews ($n = 4$) or a combination of these methods ($n = 4$), while the study by Scheffler et al. utilised a direct observation approach for data collection. When reviewing the impact of the interventions provided, four studies reported effectiveness with a statistically significant ($p < 0.05$) change in the outcomes measured. The study by Borg et al. reported that the control group was significantly better in reducing measures for two of the seven domains; however, effect sizes were small. Moreover, the two groups performed similarly across the remaining five domains. Where data were qualitatively reviewed, the five studies reported a positive impact on respective outcome measures.

Table 4 provides a summary of the key findings. Five studies document considerations concerning the training of CHWs and subsequent intervention implementation. The availability of ongoing support, whether telephonically or in person, was reported as beneficial; however, the study by Bhattacharjya et al. reported that weekly phone calls to CHWs were a time-intensive exercise. Two studies reported that the time allocated to the training of CHWs was insufficient. Yet, the study by Chinchai 2017 et al. reported a statistically significant outcome of the intervention. The studies that used information and communication technology in their intervention attribute the success thereof to the use of said technologies.

TABLE 4: Key considerations.

Author (year)	Facilitators – limitations
Bhattacharjya, Lenker and Ghosh (2023)	On-demand video access improves practice, confidence and engagement intervention group; features of the videos include formatting and context, making the content relatable and time efficient; availability of ongoing support
	Weekly phone calls with every CHW were time intensive
Borg, Ekman and Östergren (2017)	NR
	NR
Chinchai and Khamwong (2017)	Training was provided by rehabilitation experts; training manuals provided; availability of ongoing support
	Allocation of time for training was insufficient; absence of a control group for comparison of the outcome variables
Chinchai, Sirisatayawong and Jindakum (2020)	Ongoing support for VHVs by rehabilitation professionals
	Allocation of time for training was insufficient
Chinchai et al. (2024)	NR
	NR
Cobbing, Hanass-Hancock and Myezwa (2017)	NR
	NR
Emerson, Job and Abraham (2013)	NR
	Questionnaire is too long
Frisby et al. (2022)	Information provided in the participants' home language; use of mHealth technologies
	NR
Harris et al. (2017)	NR
	NR
Sánchez et al. (2020)	NR
	NR
Scheffler and Mash (2023)	NR
	NR

NR, not reported; CHW, community healthcare workers; VHVs, village health volunteers.

Implications and recommendations

To the best of our knowledge, this is the first study to explore the extent of published literature reporting on the use of task shifting and task sharing approaches, specifically for rehabilitation, in the primary care setting. Eleven studies were identified and included in this review. Although the studies met the eligibility criteria, none of the included studies specifically defined the utilised approach as either task sharing or task shifting. However, the included studies utilised a collaborative or task-delegated approach to rehabilitation tasks in a primary care setting.

The included studies, published between 2013 and 2024, primarily focused on evaluating task shifting and task sharing in community-based rehabilitation and primary healthcare contexts, specifically in LMICs. Notably, nine of the included studies were conducted in developing countries. Community-based task shifting and task sharing approaches were most commonly employed to extend the reach of rehabilitation services, particularly where formal healthcare worker shortages and access to rehabilitation were barriers. The practice of using task shifting and task sharing as an approach to improving healthcare offerings in developing countries could be attributed to several factors endemic to healthcare systems in these settings. This includes workforce shortage, resource limitations and a high disease burden. While task shifting and task sharing approaches show potential for improving service delivery, the implementation thereof may be hindered by existing systemic challenges. The additional time, training and resource investment required to operationalise these strategies risk further straining an already overburdened system rather than strengthening it.

Training duration across the studies varied significantly, with some receiving extensive structured training of 3-h sessions for 10 weeks, while others receiving only a single 1-h training session. It can be argued that the training was tailored to the specific tasks, allowing the CHWs to effectively deliver a targeted service as observed in the results. The variation in approach to task sharing and task shifting, specifically in training duration, methods and worker background reflects a level of flexibility and adaptability in using such an approach. However, it also underscores the need for standardisation and quality assurance in training methods. None of the studies reported the utilisation of specific policy to develop or implement the process of task shifting or task sharing. Without clear governance, there is a risk for inconsistent implementation, compromised quality of care and potential legal and ethical issues. Moreover, unclear funding and sustainability plans could limit the long-term success of such an approach.

The inclusion of practical components in training and the use of technology suggest that task sharing models are becoming more sophisticated and resource responsive. Two studies incorporated mobile health technologies. These innovations enhance the delivery of care and provide additional support tools to the community health workers. To address persistent barriers such as geographical location and training logistics, digital methods including mobile phones and other ICT devices have been suggested as sustainable solutions for capacity building and upskilling of healthcare workers (Khan et al. 2020; Marwaa et al. 2020). Integrating ICT into task shifting and task sharing frameworks may promote shared decision-making, enable patient-centred care and reduce travel-related burdens, addressing the access to care barrier.

Despite the differences in training protocol, all studies reported positive outcomes. This in part may be attributed to the nature of the task that was delegated. Many of the tasks, such as home-based rehabilitation exercises, basic hearing screening and patient education, were structured, repetitive and well suited to standardisation. These types of tasks are lower in complexity and lend themselves well to this approach. The alignment between the nature of the task (screening, assessment, basic intervention, education) and the competencies of community health workers (previous training) likely contributed to the effectiveness of task sharing and task shifting. Therefore, while training is variable, it could be effective as CHWs are equipped with the skills needed for the specific task. Additionally, it could be suggested that, given the variability in the task being conducted, the training needs differed still producing positive results.

Task shifting and task sharing have proven to be effective strategies for expanding access to rehabilitation in primary care, especially in developing countries. Despite variations in the training protocol, community health workers are able to carry out tasks in the community with positive results. This effectiveness stems from task-specific training and support from supervisory staff, which collectively enable CHWs to successfully perform essential healthcare roles. The task sharing and task shifting approaches using CHWs can empower healthcare systems to address the increased and varying rehabilitation needs at a primary care level in the absence of more specialised staff. However, the sustainability of task shifting and task sharing in rehabilitation is contingent upon the establishment of robust support frameworks, standardised training and effective supervision protocols. In the absence of one of these elements, these approaches may prove ineffective or unsustainable, potentially reinforcing rather than resolving human resource deficiencies. Furthermore, there is a need to identify the appropriate competency level required for knowledge, skills and behaviour linked to task sharing and task shifting.

Conclusion

Task shifting and task sharing are promising strategies to strengthen rehabilitation in primary care. Although training methods vary, the positive outcomes observed indicated that task shifting and task sharing approaches are both feasible and beneficial. Future research should prioritise the development of a standardised framework to guide the training and support for CHWs for consistent implementation across diverse settings.

Limitations

A notable limitation of this study is the difficulty in identifying relevant literature. Despite a clear definition for task sharing and task shifting approaches, the included studies did not formally designate the approaches used according to the existing terminology. This discrepancy posed challenges in locating relevant studies, potentially leading to the omission of some studies from our analysis.

Acknowledgements

Competing interests

The author, C.J., serves as an editorial board member of this journal. C.J. has no other competing interests to declare.

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

B.F. was responsible for the conceptualisation of the review and drafted the original article. T.S. contributed to the methodology. C.J. critically reviewed and revised the article, providing substantial intellectual input. All authors contributed to editing and approved the final version of the article.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. They do not necessarily reflect the official policy or position of any affiliated institution, funder, agency or publisher. The authors are responsible for this study's results, findings and content.

References

Bhattacharjya, S., Lenker, J. & Ghosh, R., 2023, 'Assessing the usefulness of an mHealth strategy to support implementation of multi-faceted adaptive feeding interventions by community-based rehabilitation workers', *Assistive Technology* 35(3), 228–234. https://doi.org/10.1080/10400435.2022.2028936

Borg, J., Ekman, B.O. & Östergren, P.O., 2017, 'Is centre-based provision of hearing aids better than community-based provision? A cluster-randomized trial among adolescents in Bangladesh', *Disability and Rehabilitation: Assistive Technology* 13(6), 497–503. https://doi.org/10.1080/17483107.2017.1332110

Burger, R. & Christian, C., 2020, 'Access to health care in post-apartheid South Africa: Availability, affordability, acceptability', *Health Economics Policy and Law* 15(1), 43–55. https://doi.org/10.1017/S1744133118000300

Callaghan, M., Ford, N. & Schneider, H., 2010, 'A systematic review of task-shifting for HIV treatment and care in Africa', *Human Resources for Health* 8, 9. https://doi.org/10.1186/1478-4491-8-8

Chinchai, P. & Khamwong, P., 2017, 'The effects of rehabilitation education for village health volunteers on walking speed and upper extremity function in stroke survivors in Thailand', *South African Journal of Occupational Therapy* 47(3), 32–38. https://doi.org/10.17159/2310-3833/2017/v47n3a6

Chinchai, P., Kongsawasdi, S., Sirisatayawong, P., Apichai, S., Chuatrakoon, B. & Thonglorm, N., 2024, 'Community rehabilitation by the trained village health volunteers on activities of daily living and quality of life in stroke survivors', *Journal of Associated Medical Sciences* 57(2), 157–165. https://doi.org/10.12982/JAMS.2024.038

Chinchai, P., Sirisatayawong, P. & Jindakum, N., 2020, 'Community integration and quality of life: Stroke survivors as recipients of rehabilitation by village health volunteers (VHVs) in Thailand', *Occupational Therapy in Health Care* 34(3), 277–290. https://doi.org/10.1080/07380577.2020.1773010

Cieza, A., Causey, K., Kamenov, K., Hanson, S.W., Chatterji, S. & Vos, T., 2021, 'Global estimates of the need for rehabilitation based on the global burden of disease study 2019: A systematic analysis for the global burden of disease study 2019', *Lancet* 396(10267), 2006–2017. https://doi.org/10.1016/S0140-6736(20)32340-0

Cobbing, S., Hanass-Hancock, J. & Myezwa, H., 2017, 'A home-based rehabilitation intervention for adults living with HIV: A randomized controlled trial', *Journal of the Association of Nurses in AIDS Care* 28(1), 105–117. https://doi.org/10.1016/j.jana.2016.08.008

Conradie, T., Berner, K. & Louw, Q., 2022, 'Describing the rehabilitation workforce capacity in the public sector of three rural provinces in South Africa: A cross-sectional study', *International Journal of Environmental Research and Public Health* 19(19), 12176. https://doi.org/10.3390/ijerph191912176

Crowley, T. & Mayers, P., 2015, 'Trends in task shifting in HIV treatment in Africa: Effectiveness, challenges and acceptability to the health professions', *African Journal of Primary Health Care and Family Medicine* 7(1), 9. https://doi.org/10.4102/phcfm.v7i1.807

Dookie, S. & Singh, S., 2012, 'Primary health services at district level in South Africa: A critique of the primary health care approach', *BMC Family Practice* 13, 67. https://doi.org/10.1186/1471-2296-13-67

Emerson, L.P., Job, A. & Abraham, V., 2013, 'Pilot study to evaluate hearing aid service delivery model and measure benefit using self-report outcome measures using community hearing workers in a developing country', *ISRN Otolaryngology* 2013, 1–6. https://doi.org/10.1155/2013/973401

Frisby, C., Eikelboom, R.H., Mahomed-Asmail, F., Kuper, H., De Kock, T., Manchaiah, V. et al., 2022, 'Community-based adult hearing care provided by community healthcare workers using mHealth technologies', *Global Health Action* 15(1), 1–14. https://doi.org/10.1080/16549716.2022.2095784

Harris, F., Adamovich, S., Sanchez, A., Jacob, D., Somoza, M., Ingram, M. et al., 2017, 'Interventional audiology to address hearing health care disparities: Oyendo Bien pilot study', *Seminars in Hearing* 38(2), 198–211. https://doi.org/10.1055/s-0037-1601575

Joshi, R., Alim, M., Kengne, A.P., Jan, S., Maulik, P.K., Peiris, D. et al., 2014, 'Task shifting for non-communicable disease management in low and middle income countries – A systematic review', *PLoS One* 9(8), e103754. https://doi.org/10.1371/journal.pone.0103754

Kechichian, A., Desmeules, F., Girard, P. & Pinsault, N., 2022, 'Acceptability of a task sharing and shifting model between family physicians and physiotherapists in French multidisciplinary primary healthcare centres: A cross-sectional survey', *Family Medicine and Community Health* 10(2), 150–159. https://doi.org/10.1136/fmch-2022-001644

Kemp, C., Peterson, I., Bhana, A. & Rao, D., 2019, 'Supervision of task-shared mental health care in low-resource settings: A commentary on programmatic experience', *Global Health: Science and Practice* 7(2), 150–159. https://doi.org/10.9745/GHSP-D-18-00337

Khan, A., Shrivastava, R., Tugnawat, D., Singh, A., Dimidjian, S., Patel, V. et al., 2020, 'Design and development of a digital program for training non-specialist health workers to deliver an evidence-based psychological treatment for depression in primary care in India', *Journal of Technology in Behavioral Science* 5(4), 402–415. https://doi.org/10.1007/s41347-020-00154-7

Leong, S.L., Teoh, S.L., Fun, W.H. & Lee, S.W.H., 2021, 'Task shifting in primary care to tackle healthcare worker shortages: An umbrella review', *European Journal of General Practice* 27(1), 198–210. https://doi.org/10.1080/13814788.2021.1954616

Louw, Q., Grimmer, K., Berner, K., Conradie, T., Bedada, D.T. & Jesus, T.S., 2021, 'Towards a needs-based design of the physical rehabilitation workforce in South Africa: Trend analysis [1990–2017] and a 5-year forecasting for the most impactful health conditions based on global burden of disease estimates', *BMC Public Health* 21, 913. https://doi.org/10.1186/s12889-021-10962-y

Maier, C.B. & Aiken, L.H., 2016, 'Task shifting from physicians to nurses in primary care in 39 countries: A cross-country comparative study', *European Journal of Public Health* 26, 927–934. https://doi.org/10.1093/eurpub/ckw098

Maphumulo, W.T. & Bhengu, B.R., 2019, 'Challenges of quality improvement in the healthcare of South Africa post-apartheid: A critical review', *Curationis* 42(1), e1–e9. https://doi.org/10.4102/curationis.v42i1.1901

Martinez-Gonzalez, N.A., Tandjung, R., Djalali, S. & Rosemann, T., 2015, 'The impact of physician-nurse task shifting in primary care on the course of disease: A systematic review', *Human Resources for Health* 13, 55. https://doi.org/10.1186/s12960-015-0049-8

Marwaa, M.N., Kristensen, H.K., Guidetti, S. & Ytterberg, C., 2020, 'Physiotherapists' and occupational therapists' perspectives on information and communication technology in stroke rehabilitation', *PLoS One* 15(8), e0236831. https://doi.org/10.1371/journal.pone.0236831

Mdege, N.D., Chindove, S. & Ali, S., 2013, 'The effectiveness and cost implications of task-shifting in the delivery of antiretroviral therapy to HIV-infected patients: A systematic review', *Health Policy and Planning* 28(3), 223–236. https://doi.org/10.1093/heapol/czs058

Ned, L., Tiwari, R., Buchanan, H., Van Niekerk, L., Sherry, K. & Chikte, U., 2020, 'Changing demographic trends among South African occupational therapists: 2002 to 2018', *Human Resources for Health* 18, 22. https://doi.org/10.1186/s12960-020-0464-3

Peters, M.D.J., Marnie, C., Tricco, A.C., Pollock, D., Munn, Z., Alexander, L. et al., 2020, 'Updated methodological guidance for the conduct of scoping reviews', *JBI Evidence Synthesis* 18, 2119–2126. https://doi.org/10.11124/JBIES-20-00167

Sánchez, D., Adamovich, S., Ingram, M., Harris, F.P., De Zapien, J., Sánchez, A. et al., 2020, 'The potential in preparing community health workers to address hearing loss', *Journal of the American Academy of Audiology* 28, 562–574. https://doi.org/10.3766/jaaa.16045

Scheffler, E. & Mash, R., 2023, 'Evaluation of a stroke rehabilitation training programme for community-based primary healthcare', *African Journal of Disability* 12, a1137. https://doi.org/10.4102/ajod.v12i0.1137

World Health Organization, 2008, *Task shifting: Global recommendations and guidelines*, World Health Organization, Geneva.

World Health Organization, 2017, *Rehabilitation in health systems*, World Health Organization, Geneva.

World Health Organization & United Nations Children's Fund (UNICEF), 2020, *Operational framework for primary health care: Transforming vision into action*, WHO and UNICEF, Geneva.

Appendix 1 starts on the next page →

Appendix 1: PubMed Search String

((healthcare[Title/Abstract]) OR (health care[Title/Abstract])) AND ((task shift*[Title/Abstract]) OR (task shar*[Title/Abstract]))