



**Institute
of Clinical
Epidemiology**
UNIVERSITY OF THE PHILIPPINES, MANILA

Philippine Clinical Practice Guidelines on Function-based Rehabilitation

February 2026

Disclaimer

This clinical practice guideline (CPG) is intended to be used by specialists and general practitioners who are primary care providers. Although adherence to this guideline is encouraged by the Department of Health (DOH), it should not restrict clinicians in using their clinical judgment and considering patient values, needs, and preferences while handling individual cases. Clinicians and relevant stakeholders must always exercise sound clinical decision-making as the individual patient's history, current physical status, and their responses to treatment may vary.

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Funding Statement

This CPG was funded by the DOH. The views of the funding body did not influence the content of the guideline, nor did have a role in the selection and appraisal of evidence, development of recommendations, or drafting of the guideline.

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Send us an email at pennybundocmd@yahoo.com for any questions or clarifications on the outputs and process of this CPG.

Acknowledgments

This clinical practice guideline on function-based rehabilitation in the primary care setting was developed with technical assistance from the University of the Philippines Manila - National Institutes of Health–Institute of Clinical Epidemiology (UPM-NIH-ICE) and made possible through the initiative and financial support of the Department of Health (DOH).

The Guideline Development Group gratefully acknowledges the contributions of the Technical Working Group and the Guideline Panel Members. The Technical Working Group provided essential methodological support, including evidence identification and appraisal, evidence synthesis, preparation of evidence-to-decision frameworks, and drafting of technical documents, ensuring the rigor and transparency of the guideline. The Guideline Panel Members contributed their clinical, programmatic, and policy expertise through critical appraisal of the evidence, deliberation of benefits and harms, consideration of contextual factors, and formulation of recommendations through structured consensus processes.

How to cite:

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List of Abbreviations

6MWT	6-meter walk test in terms of distance
10MWT	10-meter walk test in terms of speed
ADL	Activities of Daily Living
AMPS	Assessment of Motor and Process Skills
AO	Administrative Order
AOTA	American Occupational Therapy Association
APTA	American Physical Therapy Association
ATPUT	Assistive Technology Provision, Updating, and Tune-Up
AUC	Area Under the Curve
CASP	Child and Adolescent Scale of Participation
CATOM	Caregiver Assistive Technology Outcomes Measure
CBI	Caregiver Burden Inventory
CBR	Community-based rehabilitation
CFCS	Communication Function Classification System
CI	Confidence Interval
CIMT	Constraint-induced movement therapy
CINAHL	Cumulated Index in Nursing and Allied Health Literature
COI	Conflict of Interest
COPM	Canadian Occupational Performance Measure
CPG	Clinical Practice Guideline
CSQ-8	Client Satisfaction Questionnaire-8
CSRT	Community Stroke Rehabilitation Teams
DASS	Depression Anxiety Stress Scale
DOH	Department of Health
EtD	Evidence-to-Decision
EULAR	European Alliance of Associations for Rheumatology
EuroQoL	European Quality of Life
FIF	First Injurious Fall
FOCUS	Focus on Outcomes of Communication Under Six
GALS	Gait, Arms, Legs, and Spine
GDG	Guideline Development Group
GMFCS	Gross Motor Function Classification System
GMFM	Gross Motor Function Measure
GPSS	Geriatric Postal Screening Survey
GRADE	Grading Of Recommendations, Assessment, Development and Evaluation
HERDIN	Health Research and Development Information Network
HR	Hazard ratio
HRQoL	Health-Related Quality of Life
IADL	Instrumental activities of daily living
I-HOPE	In-Home Occupational Performance Evaluation
INESSS-ONF	Institut national d'excellence en santé et en services sociaux-Ontario Neurotrauma Foundation
ISAR-PC	Identification of Seniors at Risk - Primary Care
ISCOPE	Integrated Systemic Care for Older People

LGU	Local government unit
LMIC	Low- and middle-income countries
MCID	Minimal Clinically Important Difference
mRS	Modified Rankin Scale
NEADL	Nottingham Extended Activities of Daily Living
NICE	National Institute for Health and Care Excellence
NMES	Neuromuscular electric stimulation
NPRS	Numeric Pain Rating Scale
OR	Odds ratio
PARM	Philippine Academy of Rehabilitation Medicine
PCS	Pain Catastrophizing Scale
PDQ	Parkinson's Disease Questionnaire
PEDI	Pediatric Evaluation of Disability Inventory
PICO	Population, Intervention, Comparison, Outcomes
PM	Physical modality
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RCT	Randomized controlled trial
RMDQ	Roland and Morris Disability Questionnaire
RMS	Rehabilitation Motivation Scale
RNLI	Reintegration to Normal Living Index
RoB	Risk of Bias
ROM	Range of motion
RR	Relative Risk
SC	Steering Committee
SD	Standard Deviation
SIPSO	Subjective Index of Physical and Social Outcome
SIS-ADL	Stroke Impact Scale–ADL
SMAF	Functional Autonomy Measurement System
SMD	Standardized Mean Difference
TE	Therapeutic exercise
TENS	Transcutaneous electrical nerve stimulation
TOT	Task-oriented training
TSK	Tampa Scale of Kinesiophobia
TUG	Timed Up and Go
TWG	Technical Working Group
UHC	Universal Health Care
VA/DOD	Department of Veterans Affairs/Department of Defense
VAS	Visual analog scale
VESD	Very early supported discharge
VSS	Viking Speech Scale
WHO	World Health Organization
YLD	Years lived with disability

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Operational Definition of Terms

Apparent disability ¹	Refers to the disability where impairment (physical, mobility or function as totally blind or missing limb, limping and the like) that leads to the inability to perform activity and/or restriction in community participation, is physically identified or visually observed by frontliners Criteria¹ (p39): • Limb loss and deficiency (i.e. amputation, leg length discrepancy) • Gait deviation despite use of assistive device • Inability to stand and sit without support • Contractures secondary to burns
Physical disability ¹	Refers to a restriction from any physical impairment, such as significant affectation of strength, endurance, stamina, and flexibility, to perform functional tasks, activities of daily living, and participation in their community. Causes may be congenital or acquired from trauma, infection, surgical or medical condition and include the following disorders, namely: connective tissue, musculoskeletal or orthopedic disorders, neurological or neuromuscular disorders, cardiopulmonary disorders, pediatric and congenital disorders, and immunologic, endocrine and metabolic disorders
Mild disability ²	Independent with assistive device to standby assistance +/- verbal cueing in performing activity correctly and safely
Moderate disability ²	Assisted in preparing initiating or completing activity correctly and safely
Severe disability ²	Unable to perform activity and totally dependent on caregiver

Executive Summary

This clinical practice guideline is a systematic synthesis of evidence to address clinical questions on function-based rehabilitation in the primary care setting. It provides thirteen (13) weak recommendations and one (1) strong recommendation on ten (10) prioritized questions, based on very low to moderate evidence.

Recommendations are based on the appraisal of the best available evidence on each of the identified clinical questions. This CPG is intended to be used by medical professionals (general practitioners, pediatricians, family medicine specialists, and rehabilitation medicine specialists), allied health workers (nurse, physical therapist, occupational therapist, and speech language therapist), and community workers (disability affairs officer, barangay health worker, and special education teachers).

The guideline development process followed the Philippine Department of Health Technical Manual on Clinical Practice Guideline Development and the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) Approach including GRADE Adolopment, a systematic process of adapting evidence summaries, and the GRADE Evidence to Decision (EtD) framework. It included: (1) identification of critical questions and critical outcomes, (2) retrieval of current evidence, (3) assessment and synthesis of the evidence base for the critical questions, (4) formulation of draft recommendations, (5) convening of a multi-sectoral stakeholder panel to discuss values and preferences and assess the strength of the recommendations, and (6) planning for dissemination, implementation, impact evaluation and updating.

The recommendations in this CPG shall hold and will be updated after five years or when new evidence arises.

Summary of Recommendations

Recommendation	Certainty of Evidence	Strength of recommendation
Question 1. Should function-based screening in the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?		
1. Among persons at risk of disability in the primary care setting, we suggest the performance of function-based screening in the community or home setting.	Very Low	Weak
Question 2. Should provision of functional use of assistive technology with caregiver re/training versus functional use of assistive technology alone be done among persons with apparent mild to moderate physical disability in the primary care setting?		
2. Among persons with apparent mild to moderate physical disability, we suggest the provision of functional use of assistive technology with caregiver re/training rather than provision of assistive technology alone.	Low	Weak
Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?		
3. Among persons with apparent mild to moderate physical disability, we suggest the provision of task-oriented rehabilitation in the community or home setting.	Very Low	Weak
Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?		
4.1 Among adults with apparent mild to moderate physical disability, we suggest the provision of group-based therapeutic exercises in the primary care setting.	Low	Weak
4.2 Among children with apparent mild physical disability, we suggest the provision of group-based therapeutic exercises in the primary care setting.	Low	Weak
4.3 Among children with apparent moderate physical disability, we suggest against the use group-based therapeutic exercises in the primary care setting.	Low	Weak
Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?		
5. Among persons with apparent moderate physical disability, we suggest against the use of physical modalities in the community or home setting.	Very Low	Weak
Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?		

6. Among persons with apparent mild to moderate physical disability, we suggest the provision of activities of daily living re/training with environmental modifications in the community or home setting.	Moderate	Weak
Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?		
7.1 Among adults with apparent mild to moderate physical disability, we suggest the provision of community-based or home-based mobility training with caregiver training in the primary care setting.	Very Low	Weak
7.2 Among children with apparent mild to moderate physical disability, we recommend the provision of community-based or home-based mobility training with caregiver training in the primary care setting.	Moderate	Strong
Question 8. Should caregiver-led versus therapist-led habilitation intervention be done among persons born with apparent physical disability in the primary care setting?		
8. Among persons born with apparent physical disability, we suggest against the use of caregiver-led habilitation interventions in the primary care setting.	Very Low	Weak
Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?		
9. Among persons with apparent mild to moderate physical disability, we suggest follow-up and monitoring in the primary care setting.	Low	Weak
Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?		
10.1 Among adults with severe physical disability, we suggest the provision of referral and specialist care management in the primary care setting.	Low	Weak
10.2 Among children with severe physical disability, we suggest the provision of referral and specialist care management in the primary care setting.	Very Low	Weak

Legend:

	Weak recommendation
	Strong recommendation

1. Introduction

Physical rehabilitation in primary care settings is an essential aspect of healthcare, particularly for underserved populations in the Philippines, where it plays a crucial role in optimizing functioning and reducing disability among individuals with health conditions. Despite the growing recognition of rehabilitation as integral to comprehensive health services, significant gaps remain in accessibility, quality, and integration of these services within the primary healthcare framework. These challenges are exacerbated by limited resources, a shortage of trained professionals, and socio-economic barriers that hinder effective service delivery, particularly in rural and low-income areas.³⁻⁵ The World Health Organization defines rehabilitation as a set of interventions designed to optimize functioning and reduce disability, underscoring its importance in addressing the needs of patients with chronic and non-communicable diseases.⁶ However, studies show that less than half of those in need of rehabilitation in low- and middle-income countries (LMICs) currently receive adequate care, which highlights the pressing need for improved policies and infrastructure to effectively bridge these gaps in the Philippines.

Community-Based Rehabilitation (CBR) has long been a fundamental approach in the Philippine rehabilitation landscape, aiming to empower individuals with disabilities and promote their inclusion within the community.⁷ However, implementation at the local government unit (LGU) level faces persistent challenges, including fragmented service delivery, limited funding, inadequate infrastructure, and the uneven capacity of health and social service providers.^{8,9} These issues contribute to significant variations in rehabilitation practices for physical disabilities across regions, resulting in disparities in access and outcomes.

Best practices in CBR emphasize a multidisciplinary, participatory approach—one that involves not only health professionals but also families, local stakeholders, and persons with disabilities themselves.⁷ Successful models highlight the importance of capacity-building for LGUs, sustainable financing mechanisms, and the integration of rehabilitation into broader health and development agendas.^{9,10} Integrating best practices and effective rehabilitation delivery models into nationally implemented clinical practice guidelines could improve outcomes and productivity among persons with disabilities.

Addressing these gaps—through robust data collection, investment in local systems, and the development of context-appropriate guidelines—will be essential for ensuring equitable, effective, and sustainable rehabilitation services that meet the needs of Filipinos with physical disabilities.

2. Objective, Target population, Scope, and Target users

2.1 Objective and Target Population

The main objective of this clinical practice guideline is to develop evidence-based and consensus-driven recommendations on the management of adult and pediatric patients with physical disability in the primary care setting.

2.2 Scope

The CPG covers issues on screening, management, and referral of persons with physical disability. Outcomes include but not limited to injury prevention, prevention of complication, maintain optimum functional level, improved muscle strength, prevention of deformities, improved self-care, improved transfer, facilitated acquisition of new developmental skills, reintegration, improved balance and coordination, prevention of contractures, facilitates return to work, improved mobility, costing studies, improved range of motion, quality of life years and disability-adjusted life years.

2.3 Target Users

The expected users of the guidelines are medical professionals (general practitioners, pediatricians, family medicine specialists, and rehabilitation medicine specialists), allied health professionals (nurses, physical therapists, occupational therapists, and speech language therapists), and community workers (disability affairs officer, barangay health worker, and special education teachers). This CPG is intended to support evidence-informed, function-oriented care for individuals with physical disability across community settings. Medical professionals may use this guideline to guide evidence-based functional screening, assessment, and interventions, inform diagnostic and referral decisions, and integrate function-based goals into patient management. Allied health professionals may apply the recommendations to implement evidence-based rehabilitation interventions, develop individualized care plans, and ensure coordinated, interdisciplinary care. Community-based workers particularly barangay health workers may use the guideline to support community-based rehabilitation, facilitate early identification and referral, and promote participation and social inclusion. Across all target users, this CPG also serves to standardize care pathways, inform training and capacity-building initiatives, and guide program development and quality improvement efforts aligned with national health priorities.

3. CPG Development Methodology

3.1 Organization of the Process

The guideline questions were formulated and prioritized in accordance with the current and urgent need for primary care provisions in rehabilitation services. With primary care services rendered in the form of community-based rehabilitation, targeted implementors are community health workers within rural health units as additional primary care package component. These community workers may not be rehabilitation medicine specialists (e.g. rural health unit physicians, nurses, and social workers); thus, function-based and not disease-based assessments for screening, management, and referral pathways were utilized. In view of physical disability being the most prevalent disability category and the identification of apparent disability being an established task- and capacity-ready competency of community health workers in rural health units, the guideline questions in this practice guideline were focused on apparent physical disability within the primary care setting.

The DOH Manual for CPG Development outlined the guideline development process into four phases: (1) preparation and prioritization, (2) CPG generation, (3) CPG appraisal, and (4) implementation.¹¹

The Guideline Development Group (GDG) includes the Steering Committee (SC), the Evidence Reviewers, and the Guideline Panel (GP). Members were selected for their expertise in the fields of public health, rehabilitation medicine, research, policy, and guideline development. All members of the GDG submitted a Declaration of Conflict of Interest (DCOI) and their curriculum vitae prior to the guideline development process. These were reviewed by the COI Review Committee (COIRC) who thoroughly evaluated each member's financial, intellectual, and other potential conflicts that could compromise objectivity or independence. In cases of potentially significant COIs, the COIRC conducted further investigation to ensure the integrity of the guideline development process. The committee then deliberated on the findings and provided recommendations on the extent of participation appropriate for each member.

In the preparation and prioritization phase, the Steering Committee (SC) set the CPG objectives, scope, target audience, and clinical questions. They identified and formed the working groups involved in creating the evidence base. The SC and guideline panel (GP) members ranked the outcomes for each guideline question. The Evidence Reviewers, were tasked to assess international guidelines to see if they can answer the clinical questions and if the recommendations can be applied in the Philippine context. When existing guidelines do not adequately address a clinical question or are not applicable to the Philippine context, a de novo recommendation may be developed based on the evidence relevant to each clinical question. The evidence summaries were then presented to the guideline panel members during the *en banc* meeting.

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The guideline panel (GP), composed of ten (10) multi sectoral representatives, was tasked to review the evidence summaries and develop recommendations during the *en banc* meeting. The GP also discussed considerations revolving around the recommendations and voted on each recommendation and its strength.

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Table 1. PICO of Guideline Questions

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?	
Population	Persons at risk of functional decline or disability (e.g., due to chronic disease, multimorbidity, or sensory/mobility limitations) in the primary care setting
Intervention	Functional screening performed outside the clinical facility (e.g., home or community settings) using validated tools for detecting early functional decline
Comparison	Usual care or facility-based screening (if routinely done) using validated functional assessment tools
Outcomes	Critical outcomes: Reduced incidence of injuries, early identification of functional limitation, early prevention of secondary impairments, prevented the development of secondary complications, early referral for rehabilitation services Important outcomes: Improved patient sense of confidence in daily tasks, improved patient sense of safety, improved patient comfort
Question 2. Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability
Intervention	Provision of functional use of assistive technologies with caregiver re-/training
Comparison	Provision of functional use of assistive technology alone
Outcomes	Critical outcomes: Increased social participation, improved functional independence, reduced incidence of injuries, reduced incidence of fall, improved patient compliance, prevented the development of secondary complications, reduced anxiety of patient or caregiver, improved patient or caregiver satisfaction, improved ease and comfort of device use, improved perceived self-worth, reduced fear of patient or caregiver
Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability
Intervention	Task-oriented approach in the community or home setting
Comparison	Task-oriented approach in the facility setting
Outcomes	Critical outcomes: Improved functional performance (e.g., Barthel Index), improved functional independence, improved patient satisfaction, improve social participation, hasten return-to-function Important outcomes: Improved rehabilitation participation, reduced incidence of fall, reduced incidence of injuries, improved rehabilitation motivation (i.e., RMS), prevented secondary complications, overall survival, improved patient compliance, reduced the need for or incidence of rehospitalization

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability
Intervention	Group-based therapeutic exercise
Comparison	Individual-based therapeutic exercise
Outcomes	Critical outcomes: increased social participation, improved functional performance (e.g., Barthel Index), improved functional independence, improved overall mobility, improved rehabilitation motivation (i.e., RMS), hasten return-to-function, improved rehabilitation participation, improved patient compliance, improved exercise tolerance, reduced fatigue, improved muscle strength (e.g., MRC scale), prevented secondary complications, improved patient or caregiver satisfaction Important outcomes: reduced incidence of fall, reduced pain levels, reduced incidence of injuries, improved range of motion
Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?	
Population	Persons with apparent moderate physical disability
Intervention	Community- or home-based therapeutic exercises with physical modalities
Comparison	Facility-based or standard therapeutic exercises alone (without physical modalities)
Outcomes	Critical outcomes: Prevention of secondary complications or disabilities, improved mobility, reduced pain, prevented deformities or contractures, improved functional independence, reduced discomfort, improved range of motion, improved joint alignment, reduced stiffness, patient satisfaction, improved muscle tone or reduced muscle spasticity (e.g., Modified Ashworth Scale) Important outcomes: Improved perception of posture
Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability
Intervention	Community or home-based activities of daily living re/training with environmental modifications
Comparison	Facility-based simulated activities of daily living training
Outcomes	Critical outcomes: Improved functional independence, improved self-care (e.g., ADL index), improved social participation, reduced re-hospitalization, hasten return-to-function, improved patient satisfaction, improved perceived self-worth Important outcomes: Improved rehabilitation participation, reduced incidence of fall, prevented secondary complications, improved patient compliance, improved patient or caregiver satisfaction, reduced incidence of injuries

Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability
Intervention	Community-based or home-based mobility training with caregiver training
Comparison	Facility-based mobility training alone
Outcomes	Critical outcomes: Improved overall mobility, improved functional independence, increased social participation, improved functional performance (e.g., Barthel index), improved patient compliance, improved gait, reduced incidence of fall, reduced secondary injuries, improved perceived self-worth, improved patient or caregiver satisfaction, reduced patient or caregiver fear, reduced patient or caregiver anxiety
Question 8. Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?	
Population	Persons born with apparent physical disability
Intervention	Caregiver-led habilitation interventions
Comparison	Therapist-led habilitation interventions
Outcomes	Critical outcomes: Improved functional independence, improved adherence and compliance to care plan, improved developmental milestones (i.e., gross motor and fine motor), improved self-care, increased social participation, improved balance and coordination, improved patient safety Important outcomes: Improved compliance to assistive technologies, prevented secondary impairments
Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?	
Population	Persons with apparent mild to moderate physical disability in the primary care setting
Intervention	Follow-up and monitoring
Comparison	No follow-up and monitoring
Outcomes	Critical outcomes: Patient satisfaction, improved adherence and compliance to care plan, improved perceived self-worth, increased social participation, improved functional independence, improved self-care Important outcomes: Boosted cost-benefit, improved cost-effectiveness
Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?	
Population	Persons with severe physical disability
Intervention	Referral and specialist care management in the primary care setting
Comparison	No referral and specialist care management in the primary care setting

Outcomes	Critical outcomes: Improved patient safety, prevented secondary impairments, improved self-care, improved developmental milestones, improved functional independence, improved adherence and compliance to care plan, improved compliance to assistive technologies Important outcomes: Improved patient or caregiver satisfaction, boosted cost-benefit, improved patient compliance, improved cost-effectiveness, reduced patient or caregiver fear, reduced caregiver fatigue, reduced patient or caregiver anxiety
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3.2 Evidence Summaries

A systematic search using electronic databases, which included PubMed by MEDLINE, Cochrane Central Register of Controlled Trials, the Philippine Health Research Development Information Network (HERDIN), Cumulative Index to Nursing and Allied Health Literature (CINAHL), and ProQuest, was conducted to identify relevant and high-quality clinical practice guidelines, randomized controlled trials, and comparative non-randomized (observational) studies. Other online resources such as Google Scholar, UpToDate, and electronic registries from professional societies such as the Physiotherapy Evidence Database were likewise searched. Other relevant studies were identified from citations of eligible studies (forward citation searching) and from reference listing (backward citation checking). Only English language or English-translated studies were included. Keywords were based on population, intervention and exposure, comparison, and outcomes (PICO) in medical subject headings (MeSH) and free text for each guideline question.

The general eligibility criteria for included studies are as follows:

- Studies among adult and pediatric patients with apparent physical disability
- Apparent mild, moderate, and severe physical disability
- Studies on screening, therapy particularly non-pharmacologic, and management strategies such as follow-up and specialty referrals
- Articles published from 2015 to 2025

For each guideline question, specific eligibility criteria were based on its PICO framework. Inclusion and exclusion criteria were defined a priori based on the target population, eligible interventions and comparators, and critical and important outcomes, ensuring consistent and transparent study selection across questions.

A data extraction tool used by Raftery et al¹² was utilized by evidence reviewers. The table includes the type of design, description of the clinical trial including setting, population, intervention and comparator, and outcomes with pertinent results of the study, and other relevant information. Data were independently extracted and validated by at least two reviewers (Evidence Reviewer and Technical Lead).

Critical appraisal tools such as the A Measurement Tool To Assess Systematic Reviews (AMSTAR), Cochrane Risk-of-Bias (RoB) Tool, Painless Evidence-Based Medicine (Painless EBM) Guide, Risk of Bias in Non-Randomized Studies (ROBINS) II Tool were utilized for evaluation of risk of bias according to study design as appropriate. Risk of bias was independently evaluated by at least two reviewers (Evidence Reviewer and Technical Lead).

Evidence was synthesized using both qualitative and quantitative methods. When studies were sufficiently homogeneous, a meta-analysis was conducted and pooled effect estimates were reported. Effectiveness of interventions was reported in terms of risk ratio (RR) or odds ratio (OR) for dichotomous outcomes and either mean differences (MD) or standardized mean differences (SMD) for continuous outcomes. Meta-analysis in random-effects model was conducted when at least two studies reported sufficiently similar outcomes. Pooled effect estimates with their corresponding 95% confidence interval (95% CI) were visualized using forest plots. Clinically significant difference was established using minimally clinically important difference (MCID) derived from current literature and rehabilitation medicine standards. RevMan, and STATA were used for the quantitative synthesis of critical and important clinical outcomes. When pooling was not feasible due to clinical or methodological heterogeneity, we summarized the findings through a narrative synthesis. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated in accordance with the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) methodology to determine certainty of evidence. Evidence profiles were generated using the GRADEpro. Certainty of evidence was independently evaluated by at least two reviewers (Evidence Reviewer and Technical Lead).

3.3 Formulation of the Recommendations

Prior to the *en banc* meeting, the guideline panel reviewed the evidence summaries and the Evidence-to-Decision (EtD) framework shown in Table 2. The evidence summaries and summary of EtD responses were presented during the *en banc* meeting. The panel members discussed the issues related to the clinical questions, drafted the recommendations, and voted on each recommendation. Each evidence summary included evidence on the burden of the problem, benefits, harm, and social and economic impact of the intervention. Evidence/information that will facilitate decision-making (i.e., cost of screening test, cost-effectiveness studies, qualitative studies) were also included in the evidence summaries.

Table 2. Detailed Considerations Based on the Evidence-to-Decision Framework

- | |
|---|
| <ol style="list-style-type: none"> 1. Is the problem a priority? 2. How substantial are the desirable anticipated effects? 3. How substantial are the undesirable anticipated effects? 4. What is the overall certainty of the evidence? 5. Does the balance between desirable and undesirable effects favor the intervention or the comparison? 6. How large are the resource requirements (costs)? 7. What is the certainty of the evidence of resource requirements (costs)? 8. Does cost-effectiveness favor the intervention or the comparison? 9. What would be the impact on health equity? 10. Is the intervention acceptable to key stakeholders? 11. Is the intervention feasible to implement? 12. Is there important uncertainty or variability in how much people value the main outcomes, including the adverse effects and burden of the intervention? |
|---|

The strength of each recommendation (i.e., strong or weak) was determined by the panel considering all the factors mentioned above. Strong recommendation means that the panel is “confident that the desirable effects of adherence to a

recommendation outweigh the undesirable effects” while weak recommendation means that the “desirable effects of adherence to a recommendation probably outweigh the undesirable effect but is not confident.”

The recommendations for each guideline question, including their direction and strength, were determined through consensus voting process. Consensus was predefined as agreement by at least 75% of all voting guideline panel members. If consensus was not achieved during the first voting round, the guideline panel members engaged in facilitated discussions to further clarify evidence, address uncertainties, and consider contextual factors. Subsequent voting was then conducted with a maximum of two rounds to reach consensus. All recommendations in this CPG achieved consensus within two rounds of voting.

3.4 Planning for Dissemination and Implementation

A comprehensive dissemination and implementation strategy was developed to support the introduction and uptake of the guideline. Key stakeholder groups were identified including rehabilitation medicine physicians, physical and occupational therapists, nurses, primary care providers, program managers, hospital administrators, and policy makers to ensure targeted dissemination.

Upon approval, the practice guideline will be published in the Philippine Department of Health Compendium of Clinical Practice Guidelines website (<https://doh.gov.ph/dpcb/doh-approved-cpg/>), ensuring open access for national distribution. Dissemination activities will include circulation of the executive summary and key recommendations to professional organizations, training institutions, and regional and local health units. Additional channels will include digital distribution, presentations in professional society conventions, webinars, and stakeholder forums.

3.5 External Review

Three external reviewers with relevant clinical, methodological, and stakeholder expertise evaluated the CPG. The purpose of the external review was to evaluate the clarity, relevance, applicability, and methodological rigor of the recommendations prior to finalization of the CPG. External review was conducted using the Appraisal of Guidelines for Research and Evaluation II (AGREE II) supplemented by open-ended feedback to capture context-specific insights. All reviewer comments were systematically documented and consolidated. The comments were reviewed and discussed by the Steering Committee and Technical Lead, and appropriate revisions to the CPG manuscript were undertaken. A detailed comment-response matrix was maintained to ensure methodological transparency and traceability of all changes.

4. Recommendation and Evidence Summaries

4.1 Should function-based screening in the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

RECOMMENDATION 1

Among persons at risk of disability in the primary care setting, we **suggest the performance of function-based screening** in the community or home setting.

Weak recommendation, Very low certainty of evidence

Considerations

- The panel voted in favor of function-based screening in the community or home setting despite very low certainty evidence and uncertain benefits over facility-based screening, because it may facilitate earlier identification of functional limitations, prompt linkage to care, and improved access for individuals who face barriers to facility-based services. To support effective implementation, the panel emphasized the need for clear referral pathways, adequate training of primary care providers, and the use of simple, easy-to-administer screening tools to minimize provider burden. Function-based screening was viewed as an important initial step in identifying individuals at risk of functional decline and initiating timely rehabilitation services. However, the panel raised concerns about potential inequities, including the risk of favoring certain population groups particularly adults due to the limited scope of existing tools, lack of structured referral system, and the lack of evidence among children, as well as screening in rural or resource-limited areas without available rehabilitation services. Given that screening already occurs informally in many settings, the panel noted that formal guidance could help standardize practice and therefore issued a weak recommendation to allow flexibility based on local resources and health system readiness. Given the UHC policy of the health sector, there is potential to integrate function-based screening in primary care providers in local governments as a standard tool under PhilHealth Yaman ng Kalusugan Program (YAKAP), thereby providing an opportunity to enhance referral and generate evidence.

Key Findings

- No study directly compared the outcomes of function-based screening done at the home- or community setting versus at the primary care facility. Indirect evidence used to inform this guideline recommendation came from 3 cluster RCTs¹³⁻¹⁵ investigating the effect of proactive function-based screening approaches (2 facility-based, 1 community-based) to guide management and referrals for older adults at risk of disability, compared to usual care which does not involve systematic screening activities. Studies involved mostly community-dwelling adults ≥60 years but used a wide variety of screening tools with different targets.
- It is uncertain whether function-based screening done at the home/community setting will result in higher referral rates for rehabilitation services, prevent more complications, or identify more individuals at risk of functional decline, compared to facility-based screening.
- Based on 3 RCTs¹³⁻¹⁵ comparing function-based screening with usual care (without structured screening), there is very low certainty of evidence suggesting the following:
 - Facility-based screening for risk of persistent disability using the STarT Back Screening Tool may increase referral rates for physiotherapy services and

- may increase the number of individuals achieving a good functional outcome, less fear avoidance, and pain catastrophizing compared to usual care.
 - Community-based screening for functional decline risk in the elderly using the BRIGHT questionnaire may not have an effect on referral rates for rehabilitation services, may not improve daily functioning or reduce rates of hospitalizations, but may increase the likelihood of being placed in residential care.
 - Facility-based screening for frailty in the elderly using data from electronic medical records may not improve daily functioning or reduce rates of hospital admissions, emergency visits, or deaths.
- Based on 4 prospective cohort studies¹⁶⁻¹⁹, function-based screening done in any setting may facilitate earlier identification of functional limitations. Community/home-based screening using the ISAR-PC, ISCOPE, or GPSS questionnaires may identify individuals at risk of functional decline with moderate accuracy. Facility-based screening using FIF may identify individuals at risk for injurious falls.

INTRODUCTION

Based on the most recent (2021) Global Burden of Disease data, the leading causes of years lived with disability (YLDs, i.e., how much time people spend in less-than-perfect health) in the Philippines were dominated by non-communicable diseases, particularly mental disorders and musculoskeletal disorders, which have consistently ranked first and second since 1990.²⁰ Other top conditions causing chronic disability include sense organ diseases (notably hearing and vision loss), neurological disorders, and skin diseases. YLD patterns in the Philippines suggest a major epidemiological shift from infectious diseases and maternal conditions (e.g., tuberculosis, respiratory infections, nutritional deficiencies) to a dual burden of chronic and lifestyle-related diseases. It is also estimated that 1 in every 3 people would require rehabilitation services, especially in the Western Pacific region.²¹

This shift underscores the need for integrating rehabilitation services in the primary care and community setting. One possible strategy towards this goal is function-based screening, which involves the use of brief (i.e., 1-2 items or short tests), validated tools to systematically detect early limitations in physical, cognitive, or psychosocial functioning before the onset of any major disability that may affect an individual's ability to perform daily activities, participate in social roles, or maintain independence. The goal of function-based screening is to enable timely referral, intervention, or rehabilitation. Unlike disease-specific screening, function-based screening emphasizes activity and participation rather than only impairments or diagnoses.

This review aimed to synthesize current best available evidence regarding the impact of function-based screening done at the community or home setting in preventing disability. The scope of this review is limited to screening tools addressing mobility/physical function.

REVIEW METHODS

The evidence base for this guideline question was obtained using a *de novo* approach as scoping search did not yield potentially adaptable existing CPGs. A systematic literature search was performed in MEDLINE, Embase, and HERDIN databases on 09 September 2025 for published articles using a combination of free text and medical subject headings related to “primary care,” “screening,” “function,” and “disability.” The detailed search strategy is included in Appendix 2 of this document.

We included randomized or non-randomized controlled trials as well as observational studies that reported on the effect of any function-based screening activity applied to adults or children at risk of functional decline or disability. Function-based screening involves the use of standardized tools with the goal of detecting early or emerging functional limitations. We specifically intended to find studies comparing function-based screening done in the community/home setting versus clinic/primary healthcare facility. The detailed inclusion and exclusion criteria used to screen articles can be found in Appendix 2. Due to time and resource constraints, we excluded prospective cohort studies, non-English, unpublished articles, or conference proceedings/abstracts. Risk of bias was assessed using the ROBUST-RCT tool.²² Results were summarized qualitatively due to the heterogeneous nature of the evidence found. The certainty in the effect estimates was rated using the GRADE approach.

Definition of terms

- **Functioning:** an objective performance in a given life domain
- **Disability:** decrement in each functioning domain
- **Community setting:** healthcare activities or services provided at the level of the Rural Health Units or City Health Center
- **Home setting:** healthcare activities or services done by a provider by visiting a patient's home
- **Primary care:** point of care or first contact in a health facility in the community (RHU, City Health Center, Private General Clinic); outside a hospital setting, focuses on providing general care/service

RESULTS

Characteristics of included studies

No study directly compared the outcomes of function-based screening done at the home- or community setting versus at a healthcare facility.

Indirect evidence used to inform this guideline recommendation came from three (3) cluster RCTs (BRIGHT¹³, U-PROFIT¹⁴, STarT Back¹⁵) investigating the effect of proactive, community-based screening approaches to guide management and referrals for older adults at risk of disability, compared to usual care which does not involve systematic screening activities. These trials provided data regarding the impact of screening versus usual care on daily functioning and complications (i.e., rate of hospitalizations, pain catastrophizing, fear avoidance), and referral rates for rehabilitation services. The BRIGHT and U-PROFIT trials targeted community-dwelling adults ≥60 years, while STarT Back focused on adults ≥ 18 years old with back pain. U-PROFIT and STarT Back involved screening activities in a facility/clinic, while BRIGHT trial involved sending questionnaires to participants by mail. For the outcome of early identification of functional limitations, data were obtained from 4 prospective cohort studies.¹⁶⁻¹⁹

The kinds of screening tools used and target populations for the studies were highly varied, making meta-analysis difficult and inappropriate. The specific name, setting of application, brief description, and scoring system for each tool is summarized in [Appendix 7](#).

Efficacy outcomes

Prevention of secondary complications (3 RCTs¹³⁻¹⁵, n=5,698, Very low certainty of evidence)

Facility-based screening

Frailty screening in the elderly using EMR data vs. usual care

Screening for frailty did not result in a significant effect on daily functioning (measured using the Katz Index) compared to usual care without systematic screening (Mean Difference [MD] = -0.02 points [95%CI -0.80, 0.76]).¹⁴ The mean change (SD) in Katz-15 scores from baseline was 0.27 (1.98) points in the screening group and 0.29 (1.96) in usual care group. This degree of change is less than 0.47 points, which is considered the minimum important change for Katz scores.²³

There were no significant differences between the screening vs. usual care group in terms of the rate of secondary complications, expressed in terms of the mean rate of hospital admissions (0.29 vs. 0.33; MD -0.04 [95%CI -0.11, 0.03]), emergency department visits (0.12 vs. 0.14; MD -0.02 [95%CI -0.10, 0.06]), and mortality (0.002 vs 0.004; MD 0 [95%CI -0.1, 0.1]).¹⁴

Screening (STarT Back Tool) for persistent disability in adults with low-back pain vs. usual care

More participants in the screening group compared to control exhibited “good” functional outcome at 12 months (65% vs. 57%; OR 1.40 [95%CI 1.05, 1.88]), defined as the number of participants achieving $\geq 30\%$ change in Roland and Morris Disability Questionnaire (RMDQ) score. The actual change in RMDQ scores at 12 months was -4.3 (SD 6.4) in the intervention group, compared to -3.3 (SD 6.2) in the control group. This degree of change in RMDQ scores was considered clinically meaningful (>3.5 points).²⁴ Larger reductions in disability were observed in medium-risk and high-risk participants, further illustrating the potential benefit derived from using a screening tool to stratify participants. The adjusted mean differences (95%CI) in RMDQ scores were as follows: low risk MD 0.06 (-1.37, 1.50); medium-risk MD 1.35 (0.12, 2.58); MD high-risk 1.56 (-0.72, 3.84).

Psychological complications contributing to chronic disability, namely fear-avoidance beliefs and catastrophizing, were measured as secondary outcomes in the STarT Back Trial using the Tampa Scale of Kinesiophobia (TSK) and Pain Catastrophizing Scale (PCS), respectively. At 12 months follow-up, those in the screening group showed higher mean change in TSK scores (5.2 vs 3.3, $P=0.001$; MD 2.18 [95%CI 0.73, 3.63]) and PCS scores (6.1 vs 4.4, $P=0.011$; MD 1.69 [0.37, 3.01]), which indicates a better clinical outcome.¹⁵ A mean change of at least +6 points in PCS²⁵ and +5 points in the TSK²⁶ was considered to be the minimum clinically important difference. Therefore, at 12 months of follow-up, patients who received care guided by StarT Back screening tool showed greater and clinically meaningful improvement in fear-avoidance beliefs and catastrophizing.

Community-based screening

Screening for risk of functional decline in the elderly using BRIGHT Questionnaire vs. usual care

Community-based screening using the BRIGHT questionnaire delivered by mail did not have a significant effect on functional status compared to usual care, assessed using the Nottingham Extended Activities of Daily Living Scale (NEADL) scores (MD 0 points [95%CI -0.16, 0.16]). The mean change (SD) in NEADL scores from baseline was -0.2 (2.47) in both the screening and control groups.¹³ The minimum clinically important difference in NEADL is 4.9 points.²⁷

The BRIGHT trial also measured residential care placement and hospitalization, which are major consequences of disability and frailty. There was no difference between groups in the overall proportions of patients hospitalized or in the rate of ambulatory care-sensitive

hospitalization ($P=0.88$). Actual estimates could not be calculated from the published report, although hospitalization rates ranged from 6% to 10%. Screened patients were significantly more likely to be placed in residential care than those in the control group (8.4% vs 6.2%; hazard ratio =1.32 [95% CI 1.04, 1.68]; $P=0.02$).

Early referral for rehabilitation services (2 RCTs, n=4,744, Very low certainty of evidence)

Community-based screening

Screening for risk of functional decline in the elderly using BRIGHT Questionnaire vs. usual care

Compared to usual care, community-based screening using a postal questionnaire may have little to no effect on the proportion of elderly who had further geriatric assessment and/or used rehabilitation community services during the 3-year trial period ($P=0.09$). This includes comprehensive assessment, physiotherapy, occupational therapy, social work, gerontology nursing, and case management. Although actual values were not explicitly stated by the authors, referral rates did not exceed 10% for either group.

Facility-based screening

Screening (STarT Back Tool) for persistent disability in adults with low-back pain vs. usual care

Based on the STarT Back RCT,¹⁵ facility-based screening may increase referral rates to physiotherapy compared to usual care, with about 169 more (from 108 to 221 more) being referred per 1,000 screened individuals. A higher proportion of patients in the intervention group were referred for further physiotherapy compared to the control group (75% vs 58.3%; OR 2.17 [95%CI 1.60, 2.93]). Among referred participants, high initial treatment adherence was noted at 93% for both groups.

Early identification of functional limitations (4 cohort studies, n=10,764, Very low certainty of evidence)

Community-based screening

Geriatric Postal Screening Survey (GPSS)¹⁷

A longitudinal cohort study in the US involving 2,382 patients ≥ 65 years old found that using a brief mailed screening has good accuracy (AUC 0.68; Sensitivity 0.22; Specificity 0.97) in identifying individuals with functional impairment and who could possibly benefit from targeted geriatric assessment and management. Patients classified as high-risk based on the GPSS had higher rates of hospitalizations (37.5% vs 22.1%; $P=0.002$), longer hospital stays (6.3 vs 2.4 days; $P=0.002$), and admissions to nursing home (5.3% vs. 1.3%; $P=0.034$).

Identification of Seniors At Risk - Primary Care (ISAR-PC)¹⁹

Based on a prospective cohort study involving 3,363 adults ≥ 70 years old, the ISAR-PC screening questionnaire exhibited moderate discriminative power for classifying community-dwelling elderly at risk of functional decline after 1 year (AUC range 0.63–0.64). ISAR-PC screens for 3 components independently associated with functional decline: age ≥ 75 years, dependence in instrumental activities of daily living, and memory problems.

ISCOPE Screening Questionnaire¹⁶

A cohort study ($n=2,211$) embedded within the Integrated Systemic Care for Older People (ISCOPE) study evaluated the predictive value of the ISCOPE screening questionnaire for

functional decline based on the GARS (Groningen Activities Restriction Scale). Participants who had 2 problematic domains in the ISCOPE questionnaire exhibited ~2x greater odds for functional decline at 1 year (OR 1.97 [95%CI 1.17, 3.30]). ISCOPE will identify 77 more patients with functional decline per 1,000 screened (from 15 more to 163 more). Even higher ORs were found if more domains are affected: 3 domains (OR 2.14 [95%CI 1.29, 3.54]) and 4 domains (OR 3.55 [95%CI 2.10, 5.99]). ISCOPE score combined with +1 yr age increase and male sex showed moderate accuracy for predicting functional decline (AUC 0.644).

Facility-based screening

First Injurious Fall Screening Tool (FIF)¹⁸

In a Swedish prospective cohort study involving 2,808 community-living older adults (mean age: 73 yrs; 998 men, 1607 women), a higher risk for first injurious fall among those classified as medium-risk (i.e, FIF score 1-3) and “high-risk” (FIF score ≥ 4) based on FIF tool. In women, the hazard ratios for injurious fall were 3.12 (95%CI 1.71, 5.68) for medium-risk and 14.18 (95%CI 7.86, 25.58) for high-risk. In men, HRs were 4.66 (95%CI 2.71, 8.02) for medium-risk and 14.66 (95%CI 8.48, 25.35) for high-risk. FIF screening items considered risk factors for fall involved age ≥ 70 , living alone, dependence for IADLs, failed one leg balance test.

Reduced incidence of injuries

(No evidence)

None of the included studies measured the incidence of injuries as a primary or secondary outcome. It is uncertain whether home-based or community-based screening will result in lower incidence of injuries compared to facility-based screening.

Table 3. Summary of Findings (Q1)

Outcome and follow-up	Patients (studies), N	Relative effect (95% CI)	Absolute effects (95% CI)			Certainty	Plain language summary
			Usual care	Screening	Difference		
Referral for rehabilitation services							
[Subgroup 1] Community-based screening for risk of functional decline using BRIGHT vs. usual care							
Referral for further geriatric assessment or rehabilitation services Follow-up: 3 years	3893 (1 RCT) ^a	Referral rates did not exceed 10% for either group, although actual values were not explicitly stated by the authors. There was no significant difference (P=0.09) between intervention and control groups.				⊕○○○ Very low ^{b,c}	It is very uncertain if community/home-based screening would result in more referrals for rehabilitation services compared to facility-based screening. Community-based screening for risk of functional decline using BRIGHT tool may have no effect on referral for rehabilitation services compared to usual care.
[Subgroup 2] Facility-based screening for risk of disability using STarT Back Screening Tool vs. usual care							
Referral for further physiotherapy Follow-up: 1 years	851 (1 RCT) ^d	OR = 2.17 (1.60 to 2.93)	583 per 1,000	752 per 1,000 (691 to 804)	169 more per 1,000 (from 108 more to 221 more)	⊕○○○ Very low ^e	Facility-based screening for risk of disability using STarT Back Tool may result in more participants being referred for further physiotherapy compared to usual care.
Prevention of complications							
[Subgroup 1] Community-based screening for risk of functional decline using BRIGHT vs. usual care							
Change in functioning (NEADL scores) Follow-up: 3 years	3893 (1 RCT) ^a	-	-0.2 pts	-0.2 pts	0 (-0.16 to 0.16)	⊕○○○ Very low ^c	It is very uncertain if community/home-based screening would prevent more secondary

Outcome and follow-up	Patients (studies), N	Relative effect (95% CI)	Absolute effects (95% CI)			Certainty	Plain language summary
			Usual care	Screening	Difference		
Hospitalization Follow-up: 3 years	3893 (1 RCT) ^a	No difference between screening and usual groups in terms of proportions of patients hospitalized, or in the rate of ambulatory care-sensitive hospitalization (P=0.88). Actual estimates could not be calculated from the published report, although hospitalization rates ranged from 6% to 10%.				⊕○○○ Very low ^c	complications than facility-based screening. Community-based screening for risk of functional decline using BRIGHT tool may have no effect on preventing complications (functional decline, hospitalization rate), but may increase the risk of residential care placement compared to usual care.
[Subgroup 2] Facility-based screening for risk of disability using STarT Back Screening Tool vs. usual care							
Change in functioning (no. of participants with ≥30% change in the RMDQ Score) Follow-up: 1 years	1697 (1 RCT) ^d	OR = 1.40 (1.05 to 1.88)	565 per 1,000	646 per 1,000 (577 to 710)	80 more per 1,000 (from 12 more to 144 more)	⊕○○○ Very low ^{c,e}	Facility-based screening for risk of disability using STarT Back Tool may prevent more complications (more participants with better functioning, less pain catastrophizing, and less fear avoidance) than those in usual care.
Pain catastrophizing (PCS score) Follow-up: 1 years	851 (1 RCT) ^d	-	4.4 points	6.09 points ^f	1.69 (0.37 to 3.01)	⊕○○○ Very low ^{c,e,g}	
Fear avoidance (Tampa Scale of Kinesiophobia score) Follow-up: 1 years	851 (1 RCT) ^d	-	3.3 points	5.48 points ^h	2.18 (0.73 to 3.63)	⊕○○○ Very low ^{c,e}	
[Subgroup 3] Facility-based screening for frailty using EMR data vs. usual care							
Change in functioning (mean change in Katz-15 scores) Follow-up: 1 years	108 (1 RCT) ⁱ	-	0.29	0.27 ^j	-0.02 (-0.8 to 0.76)	⊕○○○ Very low ^{c,k}	Facility-based screening for frailty using EMR data may have no effect on preventing complications (functioning, hospital admissions, emergency
Mean rate of hospital admissions Follow-up: 1 years	108 (1 RCT) ⁱ	-	0.33	0.29	-0.04 (-0.11 to 0.03)	⊕○○○ Very low ^{c,k}	

Outcome and follow-up	Patients (studies), N	Relative effect (95% CI)	Absolute effects (95% CI)			Certainty	Plain language summary
			Usual care	Screening	Difference		
Mean rate of emergency department visits Follow-up: 1 years	108 (1 RCT) ⁱ	-	0.14	0.12	-0.02 (-0.1 to 0.06)	⊕○○○ Very low ^{c,k}	department visits, and mortality rate) than those in usual care.
Mean mortality rate Follow-up: 1 years	108 (1 RCT) ⁱ	-	0.004	0.002	0 (-0.1 to 0.1)	⊕○○○ Very low ^{c,k}	
Identification of functional limitation							
Identification of functional limitation Follow-up: 1-5 years	10764 (4 cohort studies) ^j	Community/home-based screening: Identification of Seniors At Risk – Primary Care (ISAR-PC): - moderate discrimination (AUC 0.63-0.64) for classifying elderly at risk of functional decline Integrated Systemic Care for Older People (ISCOPE) Screening Questionnaire: ~2x higher odds for functional decline if 2 domains are problematic (OR 1.97 [1.17, 3.30]) compared to when no domains are affected - Will identify 77 more patients with functional decline per 1,000 screened (from 15 more to 163 more) - Moderate accuracy for predicting functional decline if combined with every +1yr age and male sex (AUC 0.64) Geriatric Postal Screening Survey (GPSS): - good accuracy for identifying elderly at risk of functional impairment (AUC 0.68; Sensitivity 0.22; Specificity 0.97) Facility-based screening: First Injurious Fall Screening Tool (FIF): - In women, the hazard ratios for injurious fall were - Medium-risk: HR 3.12 (95%CI 1.71, 5.68) - High-risk: HR 14.18 (95%CI 7.86, 25.58) - In men: - Medium-risk: HR 4.66 (95%CI 2.71, 8.02) - High-risk: HR 14.66 (95%CI 8.48, 25.35)				⊕○○○ Very low ^{m,n}	Community/home-based screening using the ISAR-PC, ISCOPE, or GPSS questionnaires may identify individuals at risk of functional decline with moderate accuracy. Facility-based screening using FIF may identify individuals at risk for injurious falls.
CI: confidence interval; HR: hazard ratio; MD: mean difference; OR: odds ratio Cells highlighted GREEN suggest benefit; GRAY suggests little to no effect.							

- a. BRIGHT RCT (Kerse 2014)
- b. Allocation occurred at the cluster level and could not be concealed. Participants and providers were unblinded. 22.7% were lost to follow-up, which includes deaths and withdrawals.
- c. Study did not explicitly compare community/home based functional screening with facility-based screening. Rather, the comparison was screening vs. usual care that does not involve systematic screening.
- d. STarT Back RCT (Hill 2011)
- e. Unblinded participants and healthcare providers may introduce performance bias. Attrition bias also appears substantial as loss to follow-up was about 25%. The attrition was also unbalanced: 23% loss to follow-up in the intervention group (440/568 completed) versus 26% loss in the control group (209/283 completed).
- f. Screening group showed higher mean change in PCS scores (6.1 vs 4.4, $P=0.011$; MD 1.69 [0.37, 3.01]). A mean change of 6 is considered the minimum clinically important difference (MCID) for PCS.
- g. Confidence intervals for the mean difference was both > 0
- h. Screening group showed higher mean change in TSK scores (5.2 vs 3.3, $P=0.001$; MD 2.18 [95%CI 0.73, 3.63]). A mean change of 5 is considered the MCID for TSK.
- i. U-PROFIT RCT (Bleijenberg 2016)
- j. Mean change in Katz-15 scores was 0.27 in screening group vs. 0.29 in usual care. Standard deviation for the mean change cannot be calculated based on reported data by the authors.
- k. Although efforts were made for single-blinding (patients not knowing the assigned arm), the intervention was complex and likely noticeable in Group B (nurse-led care). Unblinding of providers is very likely to lead to differential provider-initiated co-interventions. The authors themselves noted that GPs in the non-blinded control group may have "upgraded their usual care" due to awareness of the study, resulting in diminished effectiveness of the intervention. About 22% were lost to follow-up. The attrition was statistically significant and differential: 26% loss in the intervention group vs. 17% loss in the control group ($P<0.05$)
- l. ISAR-PC (Suijker 2014); FIF (Ek 2019); ISCOPE (Van Blijswijk 2019); GPSS (Alessi 2003)
- m. Across the four included studies, overall risk of bias was generally moderate to serious. Alessi 2003 showed serious concerns due to baseline imbalance, substantial missing data, and self-reported outcome measurement. Ek 2019 had moderate risk of bias, mainly from residual confounding, although outcome measurement was objective and missing data were well handled. Suijker 2014 showed serious risk of bias, driven by selective attrition and subjective, self-reported functional decline outcomes. Van Blijswijk 2018 also had serious risk of bias due to selective exclusion of frailer participants, reliance on self-reported or subjective predictors, and substantial missing data.
- n. Studies did not compare if facility-based screening is better than community/home-based screening in identifying functional limitations.

Most RCTs were pragmatic and conducted in real-world primary care contexts, but several had serious risk of bias due to cluster randomization without blinding, incomplete follow-up, or reliance on self-reported outcomes. Cohort studies were generally low risk of bias in measurement but limited by potential confounding and observational design. Certainty of evidence was further downgraded due to indirectness (i.e., studies were done in other healthcare systems/countries)

RECOMMENDATIONS FROM OTHER GROUPS

Table 4 summarizes the current recommendations from the 2023 Philippine Guidelines for Periodic Health Examination that may complement function-based screening.²⁸ Screening for musculoskeletal diseases using the Gait, Arms, Legs, and Spine (GALS) tool is already suggested for children and adults, while screening for fall risk and sarcopenia is strongly recommended only for older adults ≥ 60 years of age. Screening for musculoskeletal injury risk was not recommended due to the limited evidence supporting its net benefit. Although PHEX is targeted for healthcare providers at the primary care level, it was not stated if screening should be done in the facility or community setting.

Table 4. Existing recommendations on musculoskeletal diseases screening in the Philippines

Population		Recommendation	Screening Tool/s
Musculoskeletal disease	Adults	Weak recommendation in favor of screening	GALS locomotor screen (1x/yr)
	Children	Weak recommendation in favor of screening	pGALS locomotor screen (1x/yr)
Risk of MSK injuries	Adults	Weak recommendation against screening	<i>Not recommended</i>
	Children	Weak recommendation against screening	<i>Not recommended</i>
Fall risk	≥ 60 yo	Weak recommendation in favor of screening	Timed Up and Go (TUG) Get Up and Go (GUG) Berg Balance Scale (BBS)
	< 60 yo	Weak recommendation against screening	<i>Not recommended</i>
Sarcopenia	≥ 60 yo	Strong recommendation in favor of screening	SARC-Calf +/- grip strength (1x/yr or after fall, fracture, hospitalization)
	< 60 yo	Weak recommendation against screening	<i>Not recommended</i>
Physical inactivity	Adults	Strong recommendation in favor of screening	Physical Activity Vital Sign (PAVS) Questionnaire (1x/yr)
	Adolescents	Weak recommendation in favor of screening	Global School-based Student Health Survey (GSHS) (1x/yr) Physical Activity Questionnaire for Older Children or Adolescents (PAQ-C) (1x/yr)
	Children	Weak recommendation against screening	<i>Not recommended</i>

ONGOING STUDIES AND RESEARCH GAPS

No ongoing local or international studies were identified on this topic. Future research is needed to determine the impact of function-based screening in the Philippine setting within local governments or PhilHealth YAKAP implementers, either through prospective cohort studies that track outcomes of screened individuals over time or through controlled trials comparing disability incidence between screened and unscreened groups.

Resource Implications (Cost / Cost Effectiveness)

No local relevant health economic studies were found.

Screening for back pain may be cost-effective, although this finding remains very uncertain in the Philippine setting as evidence comes from the STarT Back RCT¹⁵ done in the UK. In this RCT, stratifying patients into different risk-groups using a simple-to-use back pain screening tool was associated with both an increase in generic health benefit (0.039 additional QALYs [Quality-Adjusted Life Years]) and cost savings (£240.01 vs £274.40) compared with the control group. Savings were partially attributed to reductions in the number of workdays lost.

To be adopted into wide-scale clinical use, function-based screening must require as few resources (i.e., time, money) as possible.²⁹ Concerns over the added time burden of using these screening tools suggest that a single self-reported item with good psychometric properties, requires no training or change in clinic workflow, and adequately captures treatment response would be ideal.³⁰

Equity and feasibility

No studies to date have explored the acceptability of function-based screening in the Philippine context as well as barriers and facilitators to its implementation.

A key factor for implementation is which screening tool to use. A recent scoping review has shown the large variety and number of available tools for screening rehabilitation needs—however, there is still no single generic screener that is applicable across health conditions and settings as well as which screening components or functioning domains are important to include.³¹ Even if screening tools become available, they must also be linguistically and culturally validated first.

It remains uncertain whether function-based screening would disadvantage specific population subgroups. Evidence from a UK rural general practice survey³² suggests that screening may exacerbate inequitable access to disability services, with older adults (≥75 years) more likely to receive aids, adaptations, and personal assistance, while the needs of younger individuals with disabilities being often overlooked.

Conversely, a large-scale implementation study³³ in France demonstrated that a function-oriented, person-centered care pathway for older adults (ICOPE program) can be feasibly integrated into clinical practice, achieving a 94% screening completion rate among over 18,000 participants through self-assessment or professional screening using a digital monitoring platform.

Stakeholder values, preferences and acceptability

Acceptability to clinicians and primary care providers

Potential acceptability issues were explored in a qualitative study of primary care clinicians in the U.S. caring for older adults.³⁰ Although providers recognized the value of assessing function, they also underscored the need to address practical barriers such as time constraints, added workload, complex electronic documentation systems, and limited access to appropriate referral services to ensure successful integration into routine care.

Another qualitative study of primary care providers in two low-resource contexts (Zimbabwe and South Africa)³ revealed that non-rehabilitation providers already take on additional screening, referral, and education roles due limited availability of rehabilitation services. Professionals who do home visits also relate that routine screening for vulnerability in community-living older adults is best performed by an interdisciplinary team.³⁴ As such, to effectively meet community rehabilitation needs in such settings, context-specific guidance, stronger leadership, and greater investment in rehabilitation are essential.

Acceptability to patients

Whether behavioral interventions for persistent physical symptoms are acceptable to Filipino patients will likely depend on strong patient–provider relationships, clear communication, and consistent follow-up support. Existing evidence from a review of qualitative studies suggest that acceptability decreases when patients lack understanding of their symptoms or when providers feel inadequately trained in managing such conditions.³⁵ Home-based procedures may also be preferred by patients with musculoskeletal concerns residing in rural communities, as it minimizes travel required to access care.³⁶

4.2 Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 2

Among persons with apparent mild to moderate physical disability, we **suggest the provision of functional use of assistive technology with caregiver re/training** rather than provision of assistive technology alone.

Weak recommendation, Low certainty of evidence

Considerations

- The panel suggested the provision of functional use of assistive technology with caregiver re-/training as informed by the Philippine healthcare setting where caregiver involvement in assistive technology training is already part of current practice. The Philippines has TESDA-trained caregivers (National Certificate II) with training on how to handle health monitoring, assistance, and home-exercises, under the supervision of trained professionals e.g. physical therapists or rehabilitation physicians. The panel judged that the potential desirable effects—particularly improved caregiver confidence, appropriate device use, and reduced misuse—likely outweigh the minimal anticipated harms, with the quality of caregiver training identified as a critical determinant of benefit. To enhance feasibility and equity, the panel emphasized the importance of structured and repeated training with scheduled follow-ups, the use of simple, low-literacy training materials, and implementation in both urban and rural settings. Given the low certainty of the evidence and variability in health system capacity, the panel issued a weak recommendation to allow flexibility while underscoring the importance of structured caregiver re-/training.

Key Findings

- One RCT³⁷ with 94 dyads of patients and caregivers was included in this evidence base.
- Among persons with apparent mild to moderate physical disability, the provision for functional use of assistive technologies with caregiver re/training may have little to no effect on social participation, functional independence, functional performance, caregiver anxiety, caregiver satisfaction, and overall caregiver burden compared with functional use of assistive technologies alone but the evidence is very uncertain.
- No evidence was found on reduction of incidence of injuries, reduction of incidence of fall, improvement in patient compliance, prevention of secondary complications, ease and comfort of device use, improvement in self-worth, reduction in fear of patient or caregiver, and adverse events.
- The overall certainty of the evidence was low due to risk of bias and imprecision.

INTRODUCTION

Mild to moderate physical disability often results in partial loss of mobility and functional independence, limiting an individual's ability to perform activities such as transfers and ambulation.⁵ These impairments may arise from various conditions, including neurological, musculoskeletal, or age-related disorders, and frequently lead to reduced participation and quality of life. Rehabilitation aims to optimize residual function and promote safe mobility through individualized interventions that include the use of assistive technologies and skill retraining.³⁸ Early and appropriate intervention not only supports physical recovery but also minimizes secondary complications such as falls, deconditioning, and caregiver burden.

Given the growing emphasis on person-centered and home-based rehabilitation, the provision of assistive technology for mobility and transfers combined with adequate caregiver training has become increasingly important. Devices such as walkers, transfer boards, and canes can significantly enhance safety and autonomy when appropriately prescribed and supported by education.³⁹ However, variability in training standards remains, and whether caregiver training is necessary is still unclear. Therefore, it is warranted to examine the current evidence on assistive technology provision and caregiver training in supporting functional independence among individuals with mild to moderate physical disability, guiding best practices for rehabilitation programs and guideline development.

REVIEW METHODS

A systematic search using PubMed, CINAHL, and ProQuest was performed and completed on September 12, 2025. The search utilized MeSH terms relating to lower leg amputation, acquired amputation, congenital amputation, paraplegia, hemiplegia, devices, crutches, canes, walkers, transfer device, transfer board, slide board, ambulation aid, walking aid, rollator, walking frame, walking stick, and gait trainer. The search strategy is detailed in Appendix 2. A total of 1,750 citations were screened. RCTs that compared functional use of assistive technology with caregiver re/training versus functional use of assistive technology alone be done among adults and children with apparent mild to moderate physical disability identified and retrieved were included. A person with mild physical disability is defined as independent with assistive device or may require standby assistance with or without cueing in performing activities accurately and safely, and with unrestricted community participation while a person with moderate physical disability is defined as assisted in preparing, initiating, or completing activities accurately and safely with restricted community participation. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. Only one RCT³⁷ was found to be direct enough to answer the review question. Published protocol⁴⁰ was retrieved for risk of bias assessment. Risk of bias was assessed using Risk of Bias 2 (RoB-2) Tool. Efficacy outcomes were reported in terms of mean difference (MD) of post-intervention scores at six weeks follow-up. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro ([https://www. gradepr.org](https://www.gradepr.org)).

RESULTS

Characteristics of included study

One RCT³⁷ included ninety-four dyads (patient and caregiver) with adult patients with mobility limitations referred for assistive technology-related homecare services in Canada. One group received the home-based caregiver-inclusive assistive technology intervention called Assistive Technology Provision, Updating, and Tune-Up (ATPUT) for six weeks delivered by occupational therapists (OT). The control group received standard OT services consisting of

interventions normally provided to clients by the local health authorities. Those assigned in the control group were provided with assistive technology based on the local funding policies and received follow-up visits at the discretion of the OT and participation of the family caregiver was not required. Two categories of outcomes were reported. Patient-related outcomes included mobility and activities of daily living (ADL) performance, instrumental activities of daily living (IADL) performance, functional independence, and ability to manage activities, roles, and relationships. Caregiver-related outcomes included perceived physical and psychological burden, overall caregiver burden, caregiver burden, and caregiver health. The outcomes were assessed at baseline, at six weeks, at 22 weeks, and at 58 weeks of follow-up. The risk of bias of the study was rated as high risk due to serious risk of bias attributable to some concerns on risk of bias arising from randomization process particularly on allocation concealment (Domain 1) and missing outcome data with lost to follow-up of 0/44 in Assistive Technology Provision, Updating, and Tune-Up (ATPUT) and 3/46 (7%) in customary (usual) care interventions.

Efficacy outcomes

Social participation (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in social participation assessed using the Reintegration to Normal Living Index (MD 6.5 points, 95% CI -1.7 to 14.7). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Functional independence (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in functional independence assessed using the Functional Autonomy Measurement System Activities of Daily Living and Mobility (MD -0.7 points, 95% CI -2.79 to 1.39) and Self-Reported Functional Independence Measure (MD -3.5 points, 95% CI -8.91 to 1.91). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Functional performance (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in functional performance assessed using the Functional Autonomy Measurement System Instrumental Activities of Daily Living (MD 0.8 points, 95% CI -1.07 to 2.67). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Caregiver anxiety (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in caregiver anxiety assessed using the Caregiver Assistive Technology Outcomes Measure Items 1-14 (MD -3.3 points, 95% CI -7.93 to 1.33). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Caregiver satisfaction (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in caregiver satisfaction assessed using the Caregiver Assistive Technology Outcomes Measure Items 15-18 (MD -1.3 points, 95% CI -3.14 to 0.54). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Caregiver burden (1 RCT, n=94, Low certainty of evidence)

Data from one RCT³⁷ comparing provision for functional use of assistive technology with caregiver re/training (ATPUT) and functional use of assistive technology alone (usual care) demonstrated no significant difference in overall caregiver burden assessed using the Caregiver Burden Inventory (MD 2.2 points, 95% CI -2.75 to 7.15). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Safety outcomes

No assessment of adverse events was reported in the included study.

Certainty of the evidence

The overall certainty of evidence was low due to serious risk of bias attributable to some concerns on risk of bias arising from randomization process particularly on allocation concealment (Domain 1) and missing outcome data with lost to follow-up of 0/44 in Assistive Technology Provision, Updating, and Tune-Up (ATPUT) and 3/46 (7%) in customary (usual) care interventions. Certainty was further downgraded for imprecision given the limited sample size and wide confidence intervals.

Table 5. Summary of Findings (Q2)

Outcomes	Basis (no. of studies by type, total participants)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Functional use of assistive technology with caregiver retraining (ATPUT) score at 6 weeks post-intervention	Functional use of assistive technology alone (Usual care) score at 6 weeks post-intervention	Mean difference (95% CI)		
Social participation RNLI Scale: 0 to 100 points (Higher is better reintegration) MCID: 7 points	1 RCT (n=94)	78.4 (72.7 to 84.2)	71.9 (66.0 to 77.7)	6.5 points higher (1.7 lower to 14.7 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in social participation when compared with functional use of assistive technology alone but the evidence is very uncertain.
Functional independence SMAF ADL & Mobility Scale: -39 to 0 points (Higher is better independence) MCID: 3 points	1 RCT (n=94)	-8.6 (-10.1 to -7.1)	-7.9 (-9.4 to -6.5)	0.7 points lower (2.79 lower to 1.39 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in functional independence when compared with functional use of assistive technology alone
Functional independence SR-FIM Scale: 13 to 91 points (Higher is better independence)	1 RCT (n=94)	72.3 (68.5 to 76.2)	75.8 (72.0 to 79.6)	3.5 points lower (8.91 lower to 1.91 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in functional independence when compared with functional use of assistive technology alone.

Outcomes	Basis (no. of studies by type, total participants)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Functional use of assistive technology with caregiver retraining (ATPUT) score at 6 weeks post-intervention	Functional use of assistive technology alone (Usual care) score at 6 weeks post-intervention	Mean difference (95% CI)		
MCID: 16 points						
Functional performance SMAF Instrumental ADL Scale: -24 to 0 points (Higher is better performance) MCID: 4 points	1 RCT (n=94)	-13.0 (-10.4 to 4.4)	-12.5 (-13.9 to -11.2)	0.8 points higher (1.07 lower to 2.67 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in functional performance when compared with functional use of assistive technology alone.
Caregiver anxiety CATOM 1-14 Scale: 14 to 70 points (Higher is better with less anxiety) MCID: 5-6 points	1 RCT (n=94)	48.8 (45.5 to 52.1)	52.1 (48.8 to 55.3)	3.3 points lower (7.93 lower to 1.33 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in caregiver anxiety when compared with functional use of assistive technology alone.
Caregiver satisfaction CATOM 15-18 Scale: 4 to 20 points (Higher is better satisfaction with AT helpful) MCID: 2-3 points	1 RCT (n=94)	15.1 (13.8 to 16.4)	16.4 (15.1 to 17.7)	1.3 points lower (3.14 lower to 0.54 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in caregiver satisfaction when compared with functional use of assistive technology alone
Caregiver burden CBI Scale: 0 to 56 points (Lower is better with lower fear and burden) MCID: 6 points	1 RCT (n=94)	20.3 (16.8 to 23.8)	18.1 (14.6 to 21.6)	2.2 points higher (2.75 lower to 7.15 higher)	⊕⊕○○ Low ^{a,b}	Functional use of assistive technology with caregiver re/training may have little to no effect in overall caregiver burden when compared with functional use of assistive technology alone.

ADL: Activities of Daily Living; **ATPUT:** Assistive Technology Provision, Updating, and Tune-Up; **CATOM:** Caregiver Assistive Technology Outcomes Measure; **CBI:** Caregiver Burden Inventory; **CI:** confidence interval; **MCID:** minimal clinically important

difference; **MD**: mean difference; **RCT**: randomized clinical trial; **RNLI**: Reintegration to Normal Living Index; **SMAF**: Functional Autonomy Measurement System; **SR-FIM**: Self-Reported Functional Independence Measure

Explanations

- a. Some concerns on risk of bias arising from randomization process particularly on allocation concealment (Domain 1) and missing outcome data with lost to follow-up of 0/44 in Assistive Technology Provision, Updating, and Tune-Up (ATPUT) and 3/46 (7%) in customary (usual) care interventions
- b. Limited sample size and wide confidence intervals

RECOMMENDATIONS FROM OTHER GROUPS

There are no known available guidelines that directly answer the guideline question as of writing this evidence summary.

ONGOING STUDIES AND RESEARCH GAPS

No ongoing studies have been identified that directly compare caregiver-inclusive assistive technology training with assistive technology training alone among individuals with physical disabilities.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource implications (Cost / Cost Effectiveness)

No economic evaluations were done on caregiver training alongside the provision of assistive technologies. However, in the Philippine setting, caregiver training is typically embedded in rehabilitation therapy sessions and does not incur additional costs on top of home rehabilitation therapy session fees.

Stakeholder values, preferences, and acceptability

Evidence that is truly device-specific (canes, crutches, walkers) is very limited. However, it was shown that caregivers value structured, repeated training in mobility tasks (including walking and balance) in caring for adult patients with stroke. When such training is provided, satisfaction tends to increase and confidence improves.^{41,42}

Equity and feasibility

No studies were found reporting on equity and feasibility.

4.3 Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 3

Among persons with apparent mild to moderate physical disability, we **suggest the provision of task-oriented rehabilitation** in the community or home setting.

Weak recommendation, Very low certainty of evidence

Considerations

- The panel judged that the care setting itself is unlikely to substantially modify treatment effects; however, community- or home-based delivery may offer important advantages, including reduced costs, improved accessibility, and greater relevance of training conducted within the patient's actual environment. Resource considerations favored community-based approaches, as facility-based rehabilitation entails higher direct and indirect costs related to transportation, the need for accompanying persons, and lost income, which disproportionately burden patients and families. Nevertheless, the panel raised feasibility and equity concerns, including variability in workforce availability, the absence of standardized training or certification for providers in the primary care setting, potential gaps in monitoring that could lead to neglect, and social perceptions that may equate community-based care with lower quality. In light of these considerations and the continued need for facility-based care in selected cases, the panel issued a weak recommendation that allows patient choice while emphasizing the importance of strengthening primary care capacity, establishing clear monitoring and referral mechanisms, and ensuring adequate training of health care workers prior to implementation.

Key Findings

- Four RCTs⁴³⁻⁴⁶ with 1,302 participants were included in this evidence base.
- Among persons with apparent mild to moderate physical disability, task-oriented rehabilitation in the community or home setting may provide little to no effect on functional performance, functional independence, and patient satisfaction when compared with task-oriented rehabilitation in the facility setting.
- No evidence was found for social participation, hastening return-to-function, improvement in rehabilitation participation, reduction of fall, reduction of injuries, improvement in rehabilitation motivation, prevention of secondary complications, overall survival, improvement in patient compliance, reduction of rehospitalization, and adverse events.
- The overall certainty of the evidence is very low due to risk of bias and imprecision.

INTRODUCTION

With the limited accessibility of affordable healthcare in the country, it is important to optimize the available treatment options which can be offered to patients with physical disability, who are most vulnerable to the socioeconomic effects of physical impairment. In the Philippines, Administrative Order 2025-0014⁴⁷ defines physical disability as “a restriction from any physical impairment to perform functional tasks, activities of daily living, and participation in their community”. The severity of physical disabilities ranges from mild to severe, with “mild to moderate” functionality comprising conditions wherein the patient retains some degree of independent activity without being totally dependent on a caregiver.⁵

Task-oriented training is a rehabilitation framework which is primarily applied for in the management of stroke. A scoping review by Halford and colleagues⁴⁸ in 2023 with 172 articles on task-oriented training found that there is “no consistent and comprehensive definition of task-oriented training”. However, they provided a proposed definition based on key components and principles which were present in task-oriented training literature, further stating that “task-oriented training is an effective stroke rehabilitation intervention that focuses on the use of client-centered, repetitive practice of activities that are of high intensity and meaningful to the client”.

While task-oriented approach primarily describes stroke management, this rehabilitation framework may be applied to a wide range of physical disabilities including physical impairments following traumatic brain injury. Additionally, recent studies^{49,50} show that home-based rehabilitation for individuals with moderate disability may be effective in improving functional outcomes, prompting the guideline task force to explore if there may be an important benefit in task-oriented training performed in the community or home setting compared to facility setting.

REVIEW METHODS

A systematic search using PubMed and Cochrane, and electronic journal repositories (American Journal of Occupational Therapy) was performed and completed on September 25, 2025. The search strategy is detailed in Appendix 2. Clinical practice guidelines (CPGs) and randomized controlled trials (RCT) that compared task-oriented approach in the community or home setting and facility setting among adult patients with apparent mild to moderate physical disability in the primary care setting were identified and retrieved.

A person with mild physical disability is defined as independent with assistive device or may require standby assistance with or without cueing in performing activities accurately and safely, and with unrestricted community participation while a person with moderate physical disability is defined as assisted in preparing, initiating, or completing activities accurately and safely with restricted community participation. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. This evidence review utilized the GRADE-ADOLOPMENT approach⁵¹ to explore published high-quality guidelines which may be adopted or adapted for use in the Philippine healthcare system. Two CPGs, the Australian and New Zealand Living Clinical Guidelines for Stroke Management⁵² and the National Clinical Guideline for Stroke for the UK and Ireland⁵³ were retrieved and screened for eligibility. CPGs were critically appraised using the AGREE-II tool⁵⁴ presented in Appendix 5. A total of four RCTs retrieved from the two CPGs and the literature search were included in this evidence base. Risk of bias assessment, data extraction, and meta-analysis were performed using RevMan 5.4 online (<https://revman.cochrane.org/>).⁵⁵ Results of studies for each outcome were reported as relative risks for dichotomous variables and as mean differences or standard mean differences for continuous variables. Pooled estimates were analyzed in random-effects model. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated using GRADEpro (<https://www.gradepro.org>).⁵⁶

RESULTS

Characteristics of included studies

Four randomized trials⁴³⁻⁴⁶ with 1,302 adult stroke patients with apparent mild to moderate physical disability were included in the analysis. All four trials implemented interventions which involved task-oriented rehabilitation in the community or home setting administered either directly or under the supervision of a rehabilitation healthcare team. The comparisons involved task-oriented rehabilitation in a facility-based setting administered by a rehabilitation healthcare team in a hospital or clinic. Treatment duration ranged from one to six months. Two trials reported functional independence measured using the Barthel Index^{44,46} and the Modified Rankin Score⁴⁴. Two trials reported functional performance measured using six-minute⁴³ and 10-minute^{43,45} walk tests. Two trials reported on patient satisfaction.^{43,45} No evidence was found for social participation, hastening return-to-function, improvement in rehabilitation participation, reduction of fall, reduction of injuries, improved of rehabilitation motivation, prevention of secondary complications, overall survival, improvement in patient compliance, reduction of rehospitalization, and adverse events. All four trials⁴³⁻⁴⁶ were assessed to have high risk of bias due to some concerns in blinding of participants and personnel (performance bias) and blinding of outcome assessment (detection bias).

Efficacy outcomes

Improved Functional Independence (2 RCTs, n=1106, Low certainty of evidence)

Pooled data from two RCTs^{44,46} with 1,106 participants comparing task-oriented rehabilitation in the community or home setting and task-oriented rehabilitation in a facility-setting demonstrated no significant difference in functional independence assessed using the Barthel Index (MD 2.46 points, 95% CI -5.89 to 10.82, I²=60%). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Likewise, data from one RCT⁴⁴ with 1,211 participants comparing task-oriented rehabilitation in the community or home setting and task-oriented rehabilitation in a facility-setting demonstrated no significant difference in functional independence assessed with Modified Rankin Scale score of 0-3 which indicates good functional independence (RR 0.99 points, 95% CI 0.88 to 1.11). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Improved Functional Performance (2 RCTs, n=30, Very low certainty of evidence)

Data from one RCT⁴³ with 18 participants comparing task-oriented rehabilitation in the community or home setting and task-oriented rehabilitation in a facility-setting demonstrated no significant difference in functional performance assessed using 10-minute walk test speed (MD -0.01 meter/second, 95% CI -0.27 to 0.25). Certainty of evidence was downgraded to very low due to serious risk of bias and very serious imprecision arising from small sample size and wide confidence interval.

Another RCT⁴⁵ with 12 participants comparing task-oriented rehabilitation in the community or home setting and task-oriented rehabilitation in a facility-setting demonstrated no significant difference in functional performance assessed using six-minute walk test distance (MD -2.00 meters, 95% CI -43.06 to 39.06). Certainty of evidence was downgraded to very low due to serious risk of bias and very serious imprecision arising from small sample size and wide confidence interval.

Improved Patient Satisfaction (2 RCTs, n=30, Very low certainty of evidence)

Pooled data from two RCTs with 30 participants comparing task-oriented rehabilitation in the community or home setting and task-oriented rehabilitation in a facility-setting demonstrated no significant difference in patient satisfaction assessed using the Canadian Occupational Performance Measure⁴³ and the Client Satisfaction Questionnaire 8⁴⁵ (SMD 0.47, 95% CI -

0.27 to 1.21, $I^2=0\%$). Certainty of evidence was downgraded to very low due to serious risk of bias and very serious imprecision arising from small sample size and wide confidence interval.

Overall certainty of the evidence

The overall certainty of the evidence was rated as very low. All four trials⁴³⁻⁴⁶ were assessed to have high risk of bias due to some concerns in blinding of participants and personnel (performance bias) and blinding of outcome assessment (detection bias). Certainty of evidence was further downgraded to very low due to very serious imprecision attributable to small sample size and wide confidence interval of effect estimates particularly on functional performance and patient satisfaction in two RCTs^{43,45}.

Table 6. Summary of Findings (Q3)

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Community setting	Facility setting	Absolute difference(95% CI)		
Functional independence Barthel Index* Scale: 0 to 100 points *Post-intervention scores Higher score is better functional independence MCID: 12-15 points (SRALab)	2 RCTs (n=1106)	-	85.13 ±20.86	83.26 ±23.93	MD 2.46 points higher (5.89 lower to 10.82 higher)	⊕⊕○○ Low ^{a,b}	Task-oriented rehabilitation in the community or home may provide little to no effect in improving functional independence compared with task-oriented rehabilitation in the facility setting.
Functional independence[†] Modified Rankin Scale Score Scale: 0 to 5 †Number of participants with mRS score of 0 to 3 indicating good functional independence	1 RCT (n=1211)	RR 0.99 (0.88 to 1.11)	284 /606	287 /605	5 fewer per 1000 (from 57 fewer to 52 more)	⊕⊕○○ Low ^{a,b}	Task-oriented rehabilitation in the community or home may provide little to no effect in improving functional independence compared with task-oriented rehabilitation in the facility setting.
Functional performance 10MWT Speed in meters/sec Higher speed is better MCID: 0.10 m/sec	1 RCT (n=18)	-	0.73 ±0.28	0.74 ±0.28	MD 0.01 m/sec lower (0.27 lower to 0.25 higher)	⊕○○○ Very low ^{a,c}	Task-oriented rehabilitation in the community or home may provide little to no effect in improving functional performance compared with task-oriented rehabilitation in the facility setting but the evidence is very uncertain.
Functional performance	1 RCT (n=12)	-	49 ±43	51 ±28	MD 2.00 meters lower (43.06 lower to 39.06 higher)	⊕○○○ Very low ^{a,c}	Task-oriented rehabilitation in the community or home may

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Community setting	Facility setting	Absolute difference(95% CI)		
6MWT Distance in meters Higher is better (longer distance) MCID: 34 meters for stroke patients (SR Lab)							provide little to no effect in improving functional performance compared with task-oriented rehabilitation in the facility setting but the evidence is very uncertain.
Patient satisfaction COPM* CSQ-8† Higher score is better	2 RCT (n=30)	-	4.9 ±1.74*	4.5 ±1.57*	SMD 0.47 higher (0.27 lower to 1.21 higher)	⊕○○○ Very low ^{a,c}	Task-oriented rehabilitation in the community or home may provide little to no effect in patient satisfaction compared with task-oriented rehabilitation in the facility setting but the evidence is very uncertain.

6MWT: six-meter walk test in terms of distance, **10MWT:** 10-meter walk test in terms of speed, **CI:** confidence interval, **COPM:** Canadian Occupational Performance Measure, **CSQ-8:** Client Satisfaction Questionnaire-8, **MCID:** minimal clinically important difference, **mRS:** Modified Rankin Scale, **m:** meters, **m/sec:** meters/second, **RCT:** randomized clinical trial, **SMD:** standardized mean difference

Explanations:

- Some concerns in blinding of participants and personnel (performance bias) and blinding of outcome assessment (detection bias)
- Wide confidence interval (serious imprecision)
- Wide confidence interval and limited sample size (very serious imprecision)

Table 7. Recommendations from other groups (Q3)

Group or Agency	Year	Recommendation	Applicability	Strength of Recommendation/ Certainty/Quality of Evidence
Australian and New Zealand Living Clinical Guidelines for Stroke Management ⁵²	2023	“Home-based rehabilitation may be considered as a preferred model for delivering rehabilitation in the community. Where home rehabilitation is unavailable, stroke patients requiring rehabilitation should receive centre-based care. Home-based rehabilitation resulted in a small improvement in short-term functional independence compared with centre-based rehabilitation, but little or no difference for medium-term functional independence. Home-based rehabilitation may improve quality of life and disability, however the findings were based on data from one study (n = 61)”	Directly Applicable	Weak Recommendation Low certainty of evidence (included studies have some risk of bias and overall quality is rated as low)

ONGOING STUDIES AND RESEARCH GAPS

No relevant ongoing studies were identified during the literature search. There is a lack of a universally accepted definition for task-oriented training⁴⁸ along with a lack of high-certainty evidence on the topic of TOT in the community-/home-based setting.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost / Cost Effectiveness)

A study by Diestro and coworkers⁵⁷ in 2021 cited that the median in-hospitalization cost for stroke in a government-run low-middle income setting was Php 17,141.50, while PhilHealth only reimburses PhP 28,000 to PhP 38,000 for ischemic and hemorrhagic stroke, respectively, inclusive of various costs such as imaging, laboratories, medications, emergency room, and physician fees. The lack of a dedicated benefit package for rehabilitation services means that most, if not all, rehabilitation costs will be shouldered by the patient as an out-of-pocket expense. Meanwhile, Gonzalez-Suarez and coworkers⁵⁸ in 2015 reported that stroke patients have a median length of stay of seven days in the hospital, while those referred to rehabilitation usually stay five times longer. One Danish RCT⁴⁶ included in this evidence base further reported a lower average total cost at \$124 savings per patient in favor home-based rehabilitation.

Stakeholder values, preferences and acceptability

No local data was found during literature search. Australian and New Zealand Living Clinical Guidelines on Stroke⁵² reported that home-based rehabilitation is preferred by the majority of stroke patients.

Equity and feasibility

No local data on equity or feasibility for community-/home-based TOT was found during literature search.

4.4 Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 4.1

Among adults with apparent mild to moderate physical disability, we **suggest the provision of group-based therapeutic exercises** in the primary care setting.

Weak recommendation, Low certainty of evidence

RECOMMENDATION 4.2

Among children with apparent mild physical disability, we **suggest the provision of group-based therapeutic exercises** in the primary care setting.

Weak recommendation, Low certainty of evidence

RECOMMENDATION 4.3

Among children with apparent moderate physical disability, we **suggest against the use group-based therapeutic exercises** in the primary care setting.

Weak recommendation, Low certainty of evidence

Considerations

- The panel suggested providing group-based therapeutic exercises in the primary care setting for adults and children with apparent mild physical disability despite low certainty evidence. The panel judged that group-based approaches may offer reduced costs, more efficient use of limited rehabilitation personnel, and opportunities for socialization, peer support, and caregiver motivation. For children with apparent mild physical disability, group-based exercises were considered acceptable when participants have similar functional profiles and activities are age-appropriate, supervised by trained professionals, and supportive of social interaction. The panel emphasized that group-based exercises should not replace individualized therapy when clinically indicated and should be implemented flexibly, allowing individual-based rehabilitation to continue when group sessions are not feasible or preferred. Given implementation variability, patient and caregiver preferences, and the need for professional supervision, the panel issued a weak recommendation supporting group-based therapeutic exercises as an option in the primary care setting.
- The panel suggested **not using** group-based therapeutic exercises for children with apparent moderate physical disability in the primary care setting due to concerns that group delivery may compromise safety, attention, and appropriateness of care. Although evidence was limited, the panel judged that children with moderate disability often require individualized, closely supervised interventions tailored to specific impairments, particularly for conditions such as cerebral palsy with heterogeneous presentations. Feasibility concerns included limited capacity of primary care settings and reliance on non-specialist personnel. The panel also raised equity concerns that group-based delivery

could inadvertently shortchange children who require more intensive and individualized support, underscoring the need for government-funded individualized therapy for this group. Given these considerations, the panel issued a weak recommendation against group-based exercises, while emphasizing the importance of thorough assessment to distinguish between mild and moderate physical disability and ensure appropriate care pathways.

Key Findings

- Fourteen randomized clinical trials⁵⁹⁻⁷² with 1,371 participants were included in this evidence base.
- Among patients with mild to moderate physical disability, group-based therapeutic exercises have little to no effect on improving overall mobility, improving social participation, hastening return-to-function, improving exercise tolerance, reducing fatigue, improving muscle strength, increasing patient satisfaction, and increasing caregiver satisfaction when compared with individual-based therapeutic exercises.
- No evidence was found on improving functional performance, improving functional independence, improved rehabilitation motivation, improving rehabilitation participation, improving patient compliance, and preventing secondary complications.
- The overall certainty of evidence is low, downgraded for inconsistency and imprecision.

INTRODUCTION

Physical therapy services are necessary for many conditions for the patient to return to function. However, in the Philippines, these services are difficult to obtain due to a multitude of reasons. Some of these would be access to physical therapy services in the country, and another would be the cost they entail.⁵ With this, being able to improve access to the intervention to reach more individuals would be greatly helpful for many people.

Therapeutic exercise in physical therapy can be done through individual supervision or through the management of groups, with both interventions seen to be more effective than home exercise programs or controls. Since group physiotherapy was seen to be of lower cost compared to individualized care,⁷³ if it can maintain or improve the quality of usual physiotherapy while requiring less time and resources it may be something to consider in areas with limited access.

This evidence review was created to give evidence-based recommendations towards the provision of group physiotherapy in the Philippines.

REVIEW METHODS

A systematic search using PubMed, Cochrane, and Physiotherapy Evidence Database (<https://pe dro.org.au>) was performed and completed on October 29, 2025. UpToDate was further used to search for new relevant articles. The search strategy is detailed in Appendix 2. A total of 5,727 citations were screened. Randomized controlled trials (RCTs) that compared group-based versus individual therapeutic exercises among adults and children with apparent mild to moderate physical disability identified and retrieved were included. A person with mild physical disability is defined as independent with assistive device or may require standby assistance with or without cueing in performing activities accurately and safely, and with

unrestricted community participation while a person with moderate physical disability is defined as assisted in preparing, initiating, or completing activities accurately and safely with restricted community participation. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. A total of 14 RCTs were considered direct enough to answer the review question. Risk of bias was assessed using Risk of Bias 2 (RoB-2) Tool. Efficacy outcomes were reported in terms of relative risk for dichotomous outcomes and mean difference (MD) or standardized mean difference (SMD) for continuous outcomes. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro ([2](https://www.gradepro.org)). [gradepr.org](https://www.gradepro.org)).

RESULTS

Characteristics of included studies

There were 14 randomized controlled trials included in this evidence summary, with 1,371 participants. Most of these studies focused on adults, with one study⁵⁹ having a pediatric population. Five studies included musculoskeletal conditions: two^{60,61} focused on patients with knee osteoarthritis, two⁶²⁻⁶³ focused on patients with subacromial pain, and one⁶⁴ on those with non-specific low back pain. The other nine studies had populations with a variety of non-musculoskeletal complaints, such as cerebral palsy,⁵⁹ multiple sclerosis,⁶⁵ Parkinson's disease,⁶⁶⁻⁷⁰ stroke,⁷¹ and traumatic brain injury.⁷²

Most of the studies^{59,60,62,63,67,71,72} delivered the group intervention in a similar manner as the individual intervention, with the only difference being how many people were being handled per session. Other studies included in the review had interventions that can be given through a group or class format, such as yoga^{61,64,65,68} or dance.^{66,69,70}

In general, most of the articles^{63-65,68,69,71,72} included had some risk of bias, primarily due to missing outcome data, as there was a high rate of drop out in many studies combined with an inability to perform intention-to-treat analyses. Some bias was also suspected due to unclear randomization process in some studies^{59,71,72}. One study⁶⁰ also had bias in the measurement of the selected outcome, as total therapy time for the control group was noted to be less than the interventional group. Other studies^{61,62,66,67,70} had low risk of bias across all domains.

Efficacy outcomes

Social participation and overall mobility (2 RCTs, n=49, Low certainty of evidence)

Evidence from two RCTs^{66,67} comparing group therapeutic exercises and individual therapeutic exercises among persons with Parkinson's Disease demonstrated no significant difference in social participation and overall mobility assessed using the Parkinson's Disease Questionnaire-39 or PDQ-8 (MD -5.47 points, 95% CI -18.85 to 7.91, I²=85%). Certainty of evidence was downgraded to low due to inconsistency and imprecision.

Social participation in adults (2 RCTs, n=261, Moderate certainty of evidence)

Evidence from two RCTs^{64,65} comparing group therapeutic exercises and individual therapeutic exercises among adults with multiple sclerosis and non-specific low back pain demonstrated no significant difference in social participation at 10 to 12 weeks post-intervention assessed using the Short Form Health Survey-36 or SF-36 (MD 2.14 points, 95% CI -0.89 to 5.18, I²=0%). Certainty of evidence was downgraded to moderate due to imprecision.

Social participation in children (1 RCTs, n=30, Low certainty of evidence)

Evidence from one RCT⁵⁹ comparing group therapeutic exercises and individual therapeutic exercises among children with cerebral palsy demonstrated no significant difference in social

participation at 10 to 12 weeks post-intervention assessed using the Cerebral Palsy Quality of Life or CP QoL (MD 0.70 points, 95% CI -1.99 to 0.59.18). Certainty of evidence was downgraded to low due to very serious imprecision attributable to limited sample size and imprecision.

Hasten return-to-function in adults (11 RCTs, n=906, Moderate certainty of evidence)

Evidence from 8 RCTs comparing group therapeutic exercises and individual therapeutic exercises in 906 adult patients demonstrated no significant difference in overall hastening return to function at 4 to 26 weeks post-intervention using reduction in disability as an indicator (SMD 0.06, 95% CI -0.09 to 0.21, I²=0%). Overall certainty of evidence was downgraded to moderate due to imprecision.

Disability reduction as indicator of return-to-function at 4 to 6 weeks follow-up

Evidence from three RCTs comparing group therapeutic exercises and individual therapeutic exercises in 143 patients with Parkinson's Disease^{66,67} and stroke⁷¹ demonstrated no significant difference in hastening return to function at 4 to 6 weeks post-intervention using reduction in disability as an indicator (SMD -0.33, 95% CI -0.75 to 0.08, I²=35%).

Disability reduction as indicator of return-to-function at 10 to 12 weeks follow-up

Evidence from five RCTs^{61-64,69} comparing group therapeutic exercises and individual therapeutic exercises in 536 patients demonstrated no significant difference in hastening return to function at 10 to 12 weeks post-intervention using reduction in disability as an indicator (SMD 0.12, 95% CI -0.05 to 0.29, I²=0%).

Disability reduction as indicator of return-to-function at 24 to 26 weeks follow-up

Evidence from three RCTs comparing group therapeutic exercises and individual therapeutic exercises in 227 patients with subacromial pain^{62,63} and stroke⁷¹ demonstrated no significant difference in hastening return to function at 24 to 26 weeks post-intervention using reduction in disability as an indicator (SMD 0.17, 95% CI -0.09 to 0.43, I²=0%).

Hasten return-to-function in children (1 RCT, n=32, Low certainty of evidence)

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 32 children with cerebral palsy⁵⁹ demonstrated no significant difference in hastening return to function at 10 to 12 weeks (MD -0.70 points, 95% CI -1.99 to 0.59) and 24 to 26 weeks (MD 0.80 points, -0.43 to 2.03) post-intervention using reduction in disability as an indicator (Overall MD 0.09, 95% CI -0.80 to 0.98, I²=63%). Overall certainty of evidence was downgraded to low due to inconsistency and imprecision.

Exercise tolerance in adults (4 RCTs, n=182, Low certainty of evidence)

Evidence from four RCTs comparing group therapeutic exercises and individual therapeutic exercises in 182 adult patients demonstrated no significant difference in exercise tolerance at 4 to 26 weeks post-intervention in terms of six-minute walk test distance in meters (MD 28.19 meters, 95% CI -23.29 to 79.68, I²=68%). Overall, certainty of evidence was downgraded to low due to inconsistency and imprecision.

Exercise tolerance at 4 to 6 weeks follow-up

Evidence from two RCTs comparing group therapeutic exercises and individual therapeutic exercises in 102 patients with Parkinson's Disease⁶⁶ and stroke⁷¹ demonstrated no significant difference in exercise tolerance at 4 to 6 weeks post-intervention measured using six-minute walk test (MD 28.88 meters, 95% CI -71.25 to 129.00, I²=88%).

Exercise tolerance at 10 to 12 weeks follow-up

Evidence from two RCTs comparing group therapeutic exercises and individual therapeutic exercises in 44 patients with osteoarthritis⁶¹ and multiple sclerosis⁶⁵ demonstrated no significant difference in exercise tolerance at 10 to 12 weeks post-intervention measured using six-minute walk test (MD 2.46 meters, 95% CI -84.58 to 89.51, I²=32%).

Exercise tolerance at 24 to 26 weeks follow-up

Evidence from one RCTs comparing group therapeutic exercises and individual therapeutic exercises in 36 patients with stroke⁷¹ demonstrated no significant difference in exercise tolerance at 24 to 26 weeks post-intervention measured using six-minute walk test (MD 63.80 meters, 95% CI -4.93 to 132.53).

Exercise tolerance in children (1 RCT, n=30, Low certainty of evidence)

Evidence from one RCT⁵⁹ comparing group therapeutic exercises and individual therapeutic exercises in 58 children with cerebral palsy demonstrated no significant difference in exercise tolerance at 10 to 12 weeks (MD -15.10 meters, 95% CI -35.68 to 5.48) and 24 to 26 weeks (MD -3.40 meters, -22.23 to 15.43) post-intervention using one-meter fast walk test (Overall MD -8.73 meters, 95% CI -22.63 to 5.16, I²=0%). Overall certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Fatigue (5 RCTs, n=181, Moderate certainty of evidence)

Evidence from 5 RCTs comparing group therapeutic exercises and individual therapeutic exercises in 181 adult patients demonstrated no significant difference in reduction of fatigue at 4 to 26 weeks post-intervention (SMD 0.02, 95% CI -0.27 to 0.32, I²=0%). The overall certainty of evidence was downgraded to moderate due to imprecision.

Fatigue at 4 to 6 weeks follow-up

Evidence from two RCTs comparing group therapeutic exercises and individual therapeutic exercises in 102 patients with Parkinson's Disease⁶⁶ and stroke⁷¹ demonstrated no significant difference in fatigue at 4 to 6 weeks post-intervention measured using the Parkinson Fatigue Scale and Fatigue Severity Scale respectively (SMD 0.17, 95% CI -0.22 to 0.56, I²=0%).

Fatigue at 10 to 12 weeks follow-up

Evidence from two RCTs comparing group therapeutic exercises and individual therapeutic exercises in 43 patients with multiple sclerosis⁶⁵ and Parkinson's Disease⁶⁹ demonstrated no significant difference in fatigue at 10 to 12 weeks post-intervention measured using the Fatigue Assessment Scale and Parkinson Fatigue Scale 16 respectively (SMD -0.01, 95% CI -0.62 to 0.60, I²=0%).

Fatigue at 24 to 26 weeks follow-up

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 73 patients with stroke⁷¹ demonstrated no significant difference in fatigue at 24 to 26 weeks post-intervention measured using the Fatigue Severity Scale (MD 0.70, 95% CI -1.91 to 0.51).

Improved Muscle Strength (2 RCTs, n=71, Low certainty of evidence)

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 31 patients with osteoarthritis⁶¹ demonstrated no significant difference in knee extensor strength at 10 to 12 weeks post-intervention measured using peak torque dynamometer (MD 0, 95% CI -0.22 to 0.22). Certainty of evidence was downgraded to low

due to very imprecision attributed to limited sample size and wide confidence interval. Evidence from another RCT with 41 patients with Parkinson's Disease⁶⁸ demonstrated no significant difference in muscle strength at 12 weeks post-intervention measured using leg press weight over body weight (MD 0.10, 95% CI -0.08 to 0.28). Certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Patient Satisfaction (2 RCTs, n=375, Moderate certainty of evidence)

Evidence from 2 RCTs comparing group therapeutic exercises and individual therapeutic exercises in 375 adult patients demonstrated no significant difference in patient satisfaction at 4 to 26 weeks post-intervention (RR 0.93, 95% CI 0.85 to 1.02, I²=0%). The overall certainty of evidence was downgraded to moderate due to imprecision.

Satisfaction at 10 to 12 weeks follow up

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 238 patients with non-specific low back pain⁶⁴ demonstrated no significant difference in patient satisfaction at 10 to 12 weeks post-intervention (RR 0.87, 95% CI 0.66 to 1.15).

Satisfaction at 24 to 26 weeks follow up

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 137 patients with subacromial pain⁶² demonstrated no significant difference in patient satisfaction at 24 to 26 weeks post-intervention (RR 0.94, 95% CI 0.85 to 1.03).

Caregiver Satisfaction (1 RCTs, n=32, Low certainty of evidence)

Evidence from one RCT comparing group therapeutic exercises and individual therapeutic exercises in 32 patients with cerebral palsy⁵⁹ demonstrated no significant difference in caregiver satisfaction at 10 to 12 weeks (MD -0.5 points, 95% CI -1.94 to 0.94) and 24 to 26 weeks (MD 1.00 point, 95% CI -0.34 to 2.34) of post-intervention measured using the Canadian Occupational Performance Measure Satisfaction subscale. Certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Table 8. Summary of Findings (Q4)

Table 6. Summary of Findings (Q4)							
Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Group Exercise	Individual Exercise	Absolute difference (95% CI)		
Overall mobility and social participation							
Improvement in overall mobility and social participation	2 RCTs (n=79)	-	-	-	MD 5.47 points lower (18.85 lower to 7.91 higher)	⊕⊕○○ Low ^{a,b}	Group-based therapeutic exercises may provide little to no difference on overall mobility and social participation compared with individual-based therapeutic exercises.
PDQ-39 for HR-QoL Scale: 0 to 100 points Lower score is better QoL (better overall mobility and social participation)							

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Group Exercise	Individual Exercise	Absolute difference (95% CI)		
MCID: 7-8 points							
Social participation							
Improvement in social Participation in adults	2 RCT (n=261)	-	-	-	MD 2.14 points higher (from 0.89 lower to 5.18 higher)	⊕⊕⊕○ Moderate ^b	Group-based therapeutic exercises probably provide little to no difference on social participation compared with individual-based therapeutic exercises.
SF-36 Scale: 0 to 100 Higher score is better social participation MCID: 5-10 points							
Improvement in social participation in children	1 RCT (n=30)	-	-	-	0.70 points lower (from 1.99 lower to 0.59 higher)	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference on social participation in children with cerebral palsy compared with individual-based therapeutic exercises.
Cerebral Palsy QoL Child Participation Scale: 1 to 9 as mean participation score Higher score is better social participation MCID: 1 point							
Hastening return-to-function							
Hastening return-to- function in adults	11 RCT (n=906)		-	-	SMD 0.07 higher (0.06 lower to 0.20 higher) at 4- 26 weeks overall follow-up	⊕⊕⊕○ Moderate ^b	Group-based therapeutic exercises probably provide little to no difference on hastening return-to-function in adults compared with individual-based therapeutic exercises.
Various disability scales Lower is better							
Hastening return-to- function in children with cerebral palsy	1 RCT (n=32)		-	-	MD 0.09 points higher (0.80 lower to 0.98 higher) at 10-26 weeks overall follow-up	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference on hastening return-to- function in children with cerebral palsy compared individual-based therapeutic exercises.
GMFM 88							

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Group Exercise	Individual Exercise	Absolute difference (95% CI)		
Higher is better							
Exercise tolerance							
Improvement in exercise tolerance in adults	4 RCT (n=182)		-	-	MD 28.19 meters higher (23.29 lower to 79.68 higher) at 4-26 weeks overall follow-up	⊕⊕○○ Low ^{a,b}	Group-based therapeutic exercises may provide little to no difference on improving exercise tolerance in adults compared with individual-based therapeutic exercises.
6MWT Distance in meters Higher is better							
Improvement in exercise tolerance in children with cerebral palsy	1 RCT (n=30)		-	-	MD 8.73 meters lower (22.63 lower to 5.16 higher) at 10-26 weeks overall follow-up	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference on improving exercise tolerance in children with cerebral palsy compared with individual-based therapeutic exercises.
1MFWT Distance in meters Higher is better							
MCID: 10 m							
Fatigue							
Reduced fatigue	5 RCTs (n=181)		-	-	SMD 0.02 higher (0.27 lower to 0.32 higher) at 4-26 weeks overall follow-up	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference on reducing fatigue compared with individual-based therapeutic exercises.
Various fatigue scales (FAS, FSS, PFS, PFS 16) Lower is better							
Muscle strength							
Improved muscle strength	1 RCT (n=31)		-	-	MD 0 (0.22 lower to 0.22 higher) at 4-26 weeks overall follow-up	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference in improving muscle strength compared individual-based therapeutic exercises.
Knee extensor strength in patients with osteoarthritis Higher is better							
Improved muscle strength	1 RCT (n=41)		-	-	MD 0.10 units higher (0.08 lower to 0.28 higher) at 4-26 weeks overall follow-up	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference in improving muscle strength compared individual-based therapeutic exercises.
Leg press weight over body weight							

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
			Group Exercise	Individual Exercise	Absolute difference (95% CI)		
in patient with Parkinson's Disease Higher is better							
Patient and caregiver satisfaction							
Increase in patient satisfaction Number of patients who perceived satisfaction Higher is better MCID: 75 per 1000 more	2 RCTs (n=473)	RR 0.93 (0.85, 1.02)	623 per 1,000 (684 to 570)	670 per 1,000	47 fewer per 1,000 (from 101 fewer to 13 more)	⊕⊕⊕○ Moderate ^b	Group-based therapeutic exercises probably provide little to no difference on patient satisfaction compared with individual-based therapeutic exercises.
Increase in caregiver satisfaction COPM-S by caregivers of children with cerebral palsy Higher is better MCID: 2 points	1 RCT (n=32)	-	-	-	MD 0.30 points higher (0.68 lower to 1.28 higher)	⊕⊕○○ Low ^{b,c}	Group-based therapeutic exercises may provide little to no difference on caregiver satisfaction compared with individual-based therapeutic exercises.

Explanations

- Inconsistency due to substantial heterogeneity
- Imprecision due to wide confidence interval
- Imprecision due to limited sample size

Overall certainty of the evidence

Overall, the certainty of evidence is low due to significant heterogeneity (inconsistency) and imprecision (limited sample size and wide confidence interval).

Table 9. Recommendations from other groups (Q4)

Group or Agency	Recommendation	Strength of Recommendation/ Certainty/Quality of Evidence
EULAR recommendations for the nonpharmacological core management of hip and knee osteoarthritis: 2023 update ⁷⁴	Recommends that the mode of delivery of exercises, including if it is to be delivered in individual or group sessions should be selected according to local availability and patient preferences. These exercises should preferably be embedded in an individual plan for physical activity.	Level A
A clinical practice guideline for physical therapy in patients with hip	Recommends to consider offering group therapy if little individual guidance is required.	Not stated

Group or Agency	Recommendation	Strength of Recommendation/ Certainty/Quality of Evidence
or knee osteoarthritis (Dutch Guideline for Physical Therapy) 2020 ⁷⁵		
NICE guideline: Low back pain and sciatica in over 16s: assessment and management (2020 update) ⁷⁶	Recommends to consider a group exercise program for people with a specific episode or flare-up of low back pain with or without sciatica. Additionally recommends to take people's specific needs, preferences and capabilities into account when choosing the type of exercise.	Not stated
APTA Physical Therapy Management Of Congenital Muscular Torticollis: a 2018 Evidence-Based Clinical Practice Guideline ⁷⁷	Noted a single observational study regarding group congenital muscular torticollis intervention that may be an alternative to individual intervention, recommends additional research regarding equivalency of outcomes and cost-effectiveness.	Not stated

ONGOING STUDIES AND RESEARCH GAPS

A noted research gap would be the lack of studies on pediatric populations. Out of 14 RCTs, only one study on patients with cerebral palsy explored group interventions at this age group. Other research gaps noted would be a paucity of literature on adverse events due to group-based interventions, or lack thereof. More evidence regarding limitations on equity and feasibility are also required.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost / Cost Effectiveness)

In a study by Ryans et al,⁶³ it was noted that there was a general increase in total health service cost in the group intervention with a mean of 77.59 pounds (CI -1.62 to 178.09), but this was offset by decreased costs in physiotherapy treatment, with a mean of -114.06 GBP (CI – 136.75 to -89.38). The mean difference between the two interventions was -41.00 GBP (CI – 129.20 to 79.13).

In another study by Christiansen and Hjort,⁶² it was noted that individual exercises were most expensive and home exercises were least, but these were not significantly different from the group exercise group.

One systematic review⁷⁸ highlighted the costs of exercise-based fall prevention programs for people with Parkinson's Disease, showing that the least cost resource use was among the group assigned to take Tai Ji Quan classes. Tai Ji Quan showed a mean health care cost of \$80,441 versus resistance training at \$88,952 and stretching \$111,896. All of these figures were cost estimates for 54 months with base year 2011.

Stakeholder values, preferences and acceptability

A study by Momsen et al⁷⁹ explored different rehabilitation interventions and participation among patients with multiple sclerosis. Although primarily explored under cognitive behavioral therapy, being in a group setting during exercise was noted to be beneficial for these patients and was conducive to participation.

Equity and feasibility

No studies included gave direct evidence regarding equity and feasibility of the interventions.

4.5 Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

RECOMMENDATION 5

Among persons with apparent moderate physical disability, we **suggest against the use of physical modalities** in the community or home setting.

Weak recommendation, Very low certainty of evidence

Considerations

- The panel suggested against the use of physical modalities in the community or home setting among persons with apparent moderate physical disability, primarily due to safety concerns such as misuse, burns, masking of symptoms, and inappropriate application of modalities including TENS machines. While home-based therapeutic exercise programs are acceptable, feasible, and cost-saving, the panel emphasized that physical modalities should be used only as adjunctive, condition-specific interventions requiring appropriate prescription and professional supervision. For these modalities to be effective under professional supervision, there has to be a mechanism for sustainable financing. There is a current PhilHealth benefit that can pay for therapy sessions; but more facilities and practicing professionals should be able to register on this package so that more patients can benefit. In light of the limited and uncertain evidence of benefit, regulatory concerns, and potential for harm, the panel issued a weak recommendation against community- or home-based use of physical modalities.

Key Findings

- Seventeen RCTs⁸⁰⁻⁹⁶ with 729 patients with apparent moderate physical disability were included in this evidence base.
- Among persons with apparent moderate physical disability, therapeutic exercises with physical modalities demonstrated little to no difference in terms of improving mobility, pain reduction, and improvement in range of motion when compared with therapeutic exercises alone but the evidence was very uncertain.
- No evidence was found on prevention of secondary complications or disabilities, prevented deformities or contractures, reduced discomfort, improved functional independence, improved joint alignment, reduced stiffness, patient satisfaction, improved muscle tone.
- The overall certainty of evidence was very low due to risk of bias, indirectness, inconsistency, and imprecision across critical outcomes.

INTRODUCTION

Physical disability is any physical impairment that restricts the performance of functional tasks, activities of daily living and participation in the community. Different etiologies may be congenital or acquired from trauma, infection, surgical, or medical and include the following disorders: connective tissue, musculoskeletal or orthopedic disorders, neurological or neuromuscular disorders, cardiopulmonary disorders, pediatric and congenital disorders, and immunologic, endocrine and metabolic disorders.⁴⁷ Physical therapy interventions for these impairments may include therapeutic exercise, manual therapy, patient education and modalities or biophysical agents.⁹⁷ According to the APTA Guide to Physical Therapy Practice, physical modalities intend to do the following: assist muscle force generation and contraction, decrease unwanted muscular activity, increase the rate of healing of open wounds and soft tissue, maintain strength after injury or surgery, modulate or decrease pain, reduce or eliminate edema, improve circulation, decrease inflammation, connective tissue extensibility, or restriction associated with musculoskeletal injury or circulatory dysfunction, increase joint mobility muscle performance, and neuromuscular performance, increase tissue perfusion and remodel scar tissue, and treat skin conditions.⁹⁸ However, ineffective modalities incorporated in rehabilitation programs should be avoided to avoid unnecessary economic burden and wasting of time especially in resource limited settings. This guideline question was prioritized due to ongoing variations in practice and limited evidence on the benefits of physical modalities in addition to the standard home or community-based rehabilitation exercises.

REVIEW METHODS

A systematic search using PubMed and Google Scholar was performed and completed on October 16, 2025. The search strategy is detailed in Appendix 1. A total of 408 citations were screened. Randomized controlled trials (RCTs) that compared therapeutic exercises with physical modalities (TE + PM) versus therapeutic exercises alone (TE alone) among adults and children with apparent moderate physical disability identified and retrieved were included. A person with moderate physical disability is defined as assisted in preparing, initiating, or completing activities accurately and safely with restricted community participation. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. A total of 17 RCTs were considered direct enough to answer the review question. Risk of bias was assessed using Risk of Bias 2 (RoB-2) Tool. Efficacy outcomes were reported in terms of relative risk for dichotomous outcomes and mean difference (MD) or standardized mean difference (SMD) for continuous outcomes. Metaanalysis was performed using Review Manager (RevMan) 5.4.⁵⁵ For pain outcomes, a reduction of ≥ 20 mm on a 0 to 100 mm visual analog scale (VAS) or ≥ 2 points on 0 to 10 points on VAS or on Numeric Pain Rating Scale (NPRS) were considered clinically significant.⁹⁹ For functional outcomes, ≥ 3 -second improvement on the Timed Up and Go (TUG), $\geq 10\%$ change in strength or muscle size over baseline, $\geq 10\%$ increase in meters covered at the six-minute walk test (6MWT), and $\geq 10^\circ$ increase in range of motion (ROM) were considered clinically significant. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro (<https://www.gradeepro.org>).¹⁰⁰

RESULTS

Characteristics of included studies

Seventeen randomized controlled trials were included in this evidence base.⁸⁰⁻⁹⁶ The total population of 729 included adults classified as having moderate physical disability with the following conditions: knee osteoarthritis, low back pain, myofascial pain syndrome, chronic neck pain, post operative cases, COPD, malignancies, orthopedic injuries and stroke population. Sixteen studies used electrical stimulation (ES)^{80-89,91-96} or transcutaneous electrical nerve stimulation (TENS) while one study⁹⁰ used thermotherapy as a physical modality. The included interventions were conducted within supervised rehabilitation facilities rather than in home- or community-based settings. Given that the intended context for applying this guideline is primary care, where interventions are predominantly self-managed or

delivered outside institutional rehabilitation centers, the direct applicability of these findings was limited. Of the 17 included studies, six studies evaluated improvement in mobility using TUG time⁸⁰⁻⁸⁵ and 6MWT⁸⁵, 11 studies evaluated pain reduction^{81,84,86-94}, and eight studies evaluated improvement in range of motion^{86-89,92,93,95,96}.

Efficacy outcomes

Improved mobility (6 RCTs⁸⁰⁻⁸⁵, n=217, Very low certainty of evidence)

Improvement in mobility was assessed using two performance-based measures, particularly improvement in TUG time⁸⁰⁻⁸⁵ and improvement in 6MWT⁸⁵, both validated indicators of functional mobility.

Improved TUG time (6 RCTs, n=217, Very low certainty of evidence)

Evidence from six RCTs⁸⁰⁻⁸⁵ comparing TE + PM and TE alone in 217 adult patients with apparent moderate physical disability demonstrated little to no difference in improving TUG (MD -0.23 seconds, 95% CI -0.74 to 0.28, I²=42%). Certainty of evidence was downgraded to very low due to risk of bias, indirectness, and imprecision.

Improved 6MWT (1 RCT, n=42; Very low certainty)

Evidence from one RCT⁸⁵ comparing TE + PM and TE alone in 42 adult patients with apparent moderate physical disability demonstrated little to no difference in improvement in 6MWT distance (MD -18.23 meters, 95% CI -57.47 to 21.01). Certainty of evidence was downgraded to very low due to risk of bias, indirectness, and imprecision.

Pain Reduction (11 RCTs, n=519, Very low certainty of evidence)

Pain reduction was assessed using three different pain scales which included VAS 0 to 100 points, VAS 0 to 10 points, and NPRS. Evidence from 11 RCTs^{81,84,86-94} comparing therapeutic exercises with physical modalities (TE + PM) and therapeutic exercises alone (TE alone) in 519 adults with apparent moderate physical disability demonstrated little to no difference in pain reduction measured using VAS at 0 to 100 points, VAS at 0 to 10 points, and NPRS. The overall certainty of evidence was very low due to risk of bias, inconsistency, indirectness, and imprecision.

Pain reduction measured using VAS 0 to 100 (3 RCTs, n=193, Very low certainty of evidence)

Evidence from three RCTs^{84,86,87} comparing TE + PM and TE alone in 193 adults with apparent moderate physical disability demonstrated little to no difference in pain reduction measured using VAS at 0 to 100 points (MD -7.74 points, 95% CI -19.57 to 7.10, I²=85%). Certainty of evidence was downgraded to very low due to risk of bias, inconsistency, indirectness, and imprecision.

Pain reduction measured using VAS 0 to 10 (5 RCTs, n=194, Very low certainty of evidence)

Evidence from five RCTs⁸⁸⁻⁹² comparing TE + PM and TE alone in 194 adult patients with apparent moderate physical disability demonstrated modest pain reduction measured using VAS at 0 to 10 points (MD -2.38 points, 95% CI -3.34 to -1.41, I²=84%). Certainty of evidence was downgraded to very low due to risk of bias, inconsistency, and indirectness.

Pain reduction measured using NPRS (3 RCTs, n=132, Low certainty of evidence)

Evidence from three RCTs^{81,93,94} comparing TE + PM and TE alone in 132 adult patients with apparent moderate physical disability demonstrated little to difference in pain

reduction measured using NPRS (MD -1.5 points, 95% CI -1.99 to -1.00, I²=0%). Certainty of evidence was downgraded to low due to risk of bias and indirectness.

Improved ROM (8 RCTs, n=386, Very low certainty of evidence)

Evidence from eight RCTs^{86-89,92,93,95,96} comparing TE + PM and TE alone in 386 adult patients with apparent moderate physical disability demonstrated little to no difference in improving ROM (MD 4.98 degrees, 95% CI -0.69 to 10.64, I²=99%). Certainty of evidence was downgraded to very low due to risk of bias, inconsistency, indirectness, and imprecision.

Table 10. Summary of Findings (Q5)

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			TE + PM	TE Alone	Absolute difference (95% CI)		
Improved mobility							
Functional mobility (TUG)	6 RCTs (n=217)	-	-	-	MD 0.23 seconds lower (0.74 lower to 0.28 higher)	⊕○○○ Very low ^{a,b,c}	TE + PM may provide little to no difference in improving mobility in terms of TUG when compared with TE alone but the evidence is very uncertain
MCID: 3-seconds improvement							
Functional mobility (6MWT)	1 RCT (n=42)	-	-	-	MD 18.23 meters lower (57.47 lower to 21.01 higher)	⊕○○○ Very low ^{a,b,c}	TE + PM may provide little to no difference in improving mobility in terms of 6MWT when compared with TE alone but the evidence is very uncertain
MCID: 20-30 meters							
Pain reduction							
Pain reduction (100-point VAS)	3 RCT (n=193)	-	-	-	MD 7.74 lower (19.57 lower to 4.10 higher)	⊕○○○ Very low ^{a,b,c,d}	TE + PM may provide little to no difference in pain reduction when compared with TE alone but the evidence is very uncertain
MCID: 20 points							
Pain reduction (10-point VAS)	5 RCT (n=387)	-	-	-	MD 2.38 lower (3.34 lower to 1.41 lower)	⊕○○○ Very low ^{a,b,d}	TE + PM may provide modest pain reduction when compared with TE alone but the evidence is very uncertain
MCID: 2 points							
Pain reduction (NPRS)	3 RCT (n=132)	-	-	-	MD 1.5 lower (1.99 lower to 1 lower)	⊕○○○ Low ^{a,b}	TE + PM may provide little to no difference in pain reduction when compared with TE alone
MCID: 2 points							
Improved ROM							
Range of motion	8 RCT (n=386)	-	-	-	MD 4.98 higher (-0.69 lower to 10.64 higher)	⊕○○○ Very low ^{a,b,c,d}	TE + PM may provide little to no difference in improving ROM when compared with TE alone but the evidence is very uncertain
MCID: 10 degrees							

6MWT: 6-minute walk test; **CI:** confidence interval; **MD:** mean difference; **NPRS:** numerical pain rating scale; **RCT:** randomized trial; **RR:** relative risk **TE+PM:** therapeutic exercises with physical modalities; **TE Alone** = therapeutic exercises without physical modalities; **TUG:** timed up and go; **VAS:** visual analog scale

Explanations

- risk of bias due to lack of blinding of participants and outcome assessment
- included interventions were conducted within supervised rehabilitation facilities rather than in home- or community-based settings
- wide confidence interval
- significant heterogeneity $I^2 > 50\%$

Overall certainty of the evidence

The overall certainty of evidence was very low attributed to risk of bias (lack of blinding of participants and outcome assessment), indirectness (TE + PM and TE arms across trials were both performed in rehabilitation facilities instead of community-based setting), inconsistency, and imprecision across critical outcomes.

Table 11. Recommendations from other groups (Q5)

Group or Agency	Recommendation	Strength of Recommendation/ Certainty/Quality of Evidence
NICE Stroke Rehabilitation in Adult (UK 2023) ¹⁰¹	Do not routinely offer people after stroke electrical stimulation for their hand or arm. Consider a trial of electrical stimulation therapy as part of a comprehensive rehabilitation programme for people who have evidence of muscle contraction after stroke but cannot move their arm against resistance Consider a trial of neuromuscular electrical stimulation, functional electrical stimulation, or transcutaneous electrical nerve stimulation, for people after stroke with focal spasticity.	Not Indicated
NICE Osteoarthritis (UK 2022) ¹⁰²	Do not offer any of the following electrotherapy treatments to people with osteoarthritis because there is insufficient evidence of benefit: - transcutaneous electrical nerve stimulation - ultrasound therapy - interferential therapy - laser therapy - pulsed short-wave therapy - neuromuscular electrical stimulation	Not Indicated
WHO Guideline for Non-surgical Management of Chronic Primary Low Back Pain in Adults in Primary and Community Care ¹⁰³	Transcutaneous electrical nerve stimulation should not be used as part of routine care for adults, including older people, with chronic primary low back pain	Conditional recommendation against use, Very low certainty of evidence

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost / Cost Effectiveness)

Superficial thermotherapy utilizes simple and inexpensive equipment, including hot packs, moist heat towels, and electrical heating devices, which are widely available and easy to maintain. Owing to its low cost, safety, and ease of application, thermotherapy is particularly suitable for use in community-based or resource-limited rehabilitation settings and can often be safely self-administered by patients.¹⁰⁴

A United Kingdom systematic review¹⁰⁵ evaluating the cost-effectiveness of adjunct non-pharmacological interventions for knee osteoarthritis reported that TENS represented the most cost-effective treatment option across all included trials.

In the Philippine setting, the average price for a TENS machine can range from approximately PHP 1,400 to 3,800 PHP, with prices varying based on features, brand, and where it is purchased. On the other hand, the average cost for a basic physical therapy session in the Philippines can range from PHP 500 to over PHP 1,999. Sessions for chronic pain may reveal clinical improvement in pain and function after 8–12 weeks. Sessions are ideally scheduled two to three times per week.¹⁰⁶

Stakeholder values, preferences and acceptability

These interventions are perceived as non-invasive, easily applicable, and associated with minimal adverse effects, contributing to their favorable acceptability in community-based settings.¹⁰⁴

Equity and feasibility

Electrotherapy including TENS and NMES demonstrates high clinical accessibility and widespread use among health practitioners.¹⁰⁷ TENS devices, typically portable and battery-operated or wireless, are intended for independent use by patients. Evidence from previous trials indicate strong adherence and completion rates when incorporated into home-based rehabilitation protocols, including those for cancer-related and chronic musculoskeletal pain, underscoring their applicability in out-of-clinic settings.¹⁰⁸

4.6 Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 6

Among persons with apparent mild to moderate physical disability, we **suggest the provision of activities of daily living re/training with environmental modifications** in the community or home setting.

Weak recommendation, Moderate certainty of evidence

Considerations

- The panel acknowledged that community- or home-based activities of daily living (ADL) re/training with environmental modifications offer meaningful benefits, particularly by improving functional independence and self-care. Although the certainty of evidence was moderate, most studies were conducted in high-income countries, raising concerns about applicability to the Philippine setting. In addition, the potentially significant cost of environmental modifications, uncertainties regarding financing mechanisms, and variability in home and community environments were considered as important feasibility constraints, especially for lower-income households. Balancing the probable benefits against contextual limitations related to cost, feasibility, and local implementation capacity, the panel issued a weak recommendation in favor of ADL re/training with environmental modifications, emphasizing the need for local adaptation and pragmatic implementation strategies.

Key Findings

- Four systematic reviews with meta-analyses^{50,109-111} that synthesized 21 RCTs involving 1,629 adults after stroke with apparent mild to moderate physical disability were included in this evidence base.
- Evidence shows that community or home-based activities of daily living re/training with environmental modifications probably provide significant improvement in functional independence and improvement in self-care.
- Overall certainty of evidence was moderate.

INTRODUCTION

Physical disability is a common outcome following stroke and other disabling conditions, resulting in limitations in performing activities of daily living (ADL) and reduced participation in community life.^{112,113} For individuals with mild to moderate physical disability, interventions that emphasize functional retraining within real-world contexts are essential to optimize recovery and independence.^{49,114} In the primary care setting, function-based rehabilitation offers an accessible and person-centered strategy that supports continuity of care after hospital discharge, particularly for populations with limited access to specialized rehabilitation facilities.¹¹⁵⁻¹¹⁷

Activities of daily living retraining refers to structured interventions that develop or restore the ability to perform self-care tasks, such as feeding, bathing, dressing, toileting, and mobility.^{112,118} When delivered in the community or home, this intervention integrates environmental modifications and caregiver participation to enable clients to practice these tasks in their natural environments.^{112,119,120} This approach is often referred to as community-based or home-based rehabilitation, defined as rehabilitation services prescribed by trained professionals and implemented within the individual's home or community settings, including programs that involve home visits, caregiver training, and where appropriate, environmental modifications.^{119,121,122} By contrast, facility-based rehabilitation refers to structured rehabilitation delivered within hospitals, rehabilitation centers, or clinics, where ADL retraining often occurs in simulated environments using standardized equipment and controlled settings.^{49,122,123}

The need to review this topic arises from ongoing variability in rehabilitation practices across care levels and uncertainty about the relative effectiveness of function-based ADL retraining in real-life environments compared to simulated, facility-based approaches. Although previous evidence has demonstrated the potential benefits of home-based and transitional care programs for improving ADL independence, inconsistencies remain regarding their comparative efficacy, cost-effectiveness, and feasibility when integrated within primary care systems. As primary care increasingly serves as the entry point for rehabilitation in low- and middle-income countries, synthesizing the best available evidence on the effectiveness of ADL retraining with environmental modifications versus facility-based simulated training can help guide resource allocation, inform practice standards, and promote equitable access to function-based rehabilitation services.

REVIEW METHODS

This evidence synthesis followed the GRADE-ADOLOPMENT approach. Under this method, existing high-quality guidelines and systematic reviews were identified, appraised, and synthesized to inform context-specific recommendations for the Philippine primary care setting. A systematic search using PubMed by MEDLINE, CINAHL Plus, EMBASE, PsycInfo, CENTRAL, Scopus, Web of Science, ProQuest, Psychology and Behavioral Sciences Collection, and Health Research Development Information Network (HERDIN) Philippines was performed and completed on November 2, 2025. The systematic search utilized a comprehensive combination of MeSH terms and free-text keywords relating to physical disability, ADL retraining, home-based rehabilitation, environmental modification, and primary health care. The search strategy is detailed in Appendix 2. A total of 81 citations were screened. The most recent and relevant systematic reviews and meta-analyses that investigated the effects of ADL retraining with environmental modifications compared with facility-based simulated ADL training among adults with apparent mild to moderate physical disabilities were identified, retrieved, and included. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. Four systematic reviews with meta-analysis of randomized controlled trials (RCTs) satisfied the inclusion criteria.^{50,109-111} Identification and screening of articles is detailed in Appendix 2. Each systematic review article was critically appraised using the AMSTAR 2 tool to assess methodological quality. Efficacy outcomes were reported in terms of relative risk for dichotomous outcomes and mean difference (MD) or standardized mean difference (SMD) for continuous outcomes. A sensitivity analysis was conducted stratifying trials by publication date (prior to 2015 versus 2015 onwards). Results from trials published in 2015 and later, which reflect more contemporary rehabilitation practices and methodological standards, are reported in this guideline. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro (<https://www.gradepro.org>).

RESULTS

Evidence was obtained from four systematic reviews with meta-analyses^{50,109-111} of RCTs evaluating community- or home-based ADL re/training incorporating caregiver involvement and environmental modification compared with facility-based simulated ADL re/training among adults after stroke.

This evidence base synthesized 21 RCTs involving 1,629 participants. All trials enrolled adults living at home or transitioning to community settings following acute care for stroke. Although disability severity was not uniformly reported, most samples reflected mild to moderate residual physical impairment, aligning with the primary care population of community-dwelling adults with apparent physical disability.

The intervention group with 818 adults after stroke received home- or community-based programs emphasizing task-specific ADL re/training or components of ADL re/training conducted in real-world home environments through home visits supplemented in some studies by telephone follow-up. Many interventions incorporated caregiver training and multidisciplinary management from physical therapists, occupational therapists, and nurses. Environmental modifications and assistive equipment were explicitly described in several trials.

The control group with 811 adults after stroke received facility-based rehabilitation programs, typically involving center-based or outpatient therapy with simulated ADL re/training. In Chi et al. (2020)⁵⁰, Do et al. (2025)¹⁰⁹, and Qin et al. (2022)¹¹⁰, both home-based and facility-based programs included structured ADL re-training components, whereas Wang et al. (2017)¹¹¹ evaluated transitional care elements including education, discharge planning, scheduled home visits, structured phone support, and community rehabilitation with ADL training.

Across studies, outcomes were consistently centered on functional independence^{50,109-111} and self-care⁵⁰, measured using validated instruments such as the Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, and the Stroke Impact Scale ADL subscale.

Efficacy outcomes

Improved functional independence (6 RCT, n=457, Moderate certainty of the evidence)

Evidence from six RCTs^{46,113,124-127} involving 457 adults after stroke demonstrated a significant improvement in functional independence, measured using the Barthel Index and Modified Barthel Index, favoring community- or home-based ADL re/training (SMD 0.37, 95% CI 0.06 to 0.69, I²=60%). Five RCTs^{46,124-127} with 431 patients utilized the Barthel Index and Modified Barthel Index to measure improvement in functional independence. Pooled analysis of this subset of studies showed clinically significant improvement in functional independence favoring community or home-based ADL re/training (MD 5.42, 95% CI 0.48 to 10.37, I²=64%). One RCT¹¹³ with 26 patients used the Barthel Index Supplementary Scale. Data from this trial showed no significant difference in functional independence (MD 2.30, 95% CI -1.94 to 6.54). The certainty of evidence was rated as moderate, downgraded due to inconsistency.

Improved self-care (15 RCT, n=1172, Moderate certainty of evidence)

Evidence from 15 RCTs from Chi et al (2020)⁵⁰ involving 1,172 adults after stroke demonstrated a significant improvement in ADL independence and self-care, measured using the Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, and the Stroke Impact Scale ADL subscale, favoring community- or home-based ADL re/training (SMD 0.88, 95% CI 0.59 to 1.16, I²=88%). The certainty of evidence was rated as moderate, downgraded due to inconsistency.

Safety outcomes

No evidence on safety outcomes was reported.

Certainty of the evidence

The overall certainty of evidence was moderate.

Table 12. Summary of Findings (Q6)

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Home-based ADL retraining	Facility-based ADL retraining	Absolute difference (95% CI)		
Improved functional independence ^{46,113,124-127}							
Barthel Index and Modified Barthel Index Scale: 0-100 Higher Is better MCID for scale: 5 points	6 RCT (n=457)	-	-	-	SMD 0.37 units higher (0.06 higher to 0.69 higher)	⊕⊕⊕○ Moderate ^a	Community or home-based ADL re/training with environmental modifications probably results in greater improvement in functional independence compared with facility-based training without environmental modification.
Barthel Index Supplementary Scale Scale: 0-60 Higher is better MCID for scale: 3 points							
For both scales, MCID for SMD: 0.2							
Improved ADL independence and self-care ⁵⁰							
Barthel Index Scale: 0-100	15 RCTs (n=1,172)	-	-	-	SMD 0.88 higher (0.59 higher to 1.16 higher)	⊕⊕⊕○ Moderate ^a	Community or home-based ADL re/training with environmental modifications probably results in improved ADL independence and self-care.
Modified Barthel Index Scale: 0-100							
Functional Independence Measure Scale: 18-126							
SF-36 Physical Function Scale: 0-100							
Stroke Impact Scale ADL Scale: 0-100							
For all scales, higher is better MCID for SMD: 0.2							

a. Statistical heterogeneity is higher than 50%

Table 13. Recommendations from other groups (Q6)

Group or Agency	Recommendation	Strength of Recommendation/ Certainty/Quality of Evidence
AOTA Occupational Therapy Practice Guidelines for Adults with Stroke ¹²⁸	“Interventions with strong strength of evidence for improving performance in activities of daily living and functional mobility include mirror therapy, task-oriented training, mental imagery, balance training, self-management strategies, and a multidisciplinary three-stages-of-care rehabilitation program.” “Home-based ADL training before discharge from inpatient rehabilitation” and “home-based ADL training and education” are listed among interventions supported by the guideline.” “Home-based occupation-based interventions to improve ADL performance” are listed under interventions to improve ADLs/IADLs.	Strong strength of evidence
AOTA Occupational Therapy Practice Guidelines for Adults with Traumatic Brain Injury ¹²⁹	“Interventions with strong evidence for improving performance in ADL, IADL, and functional cognition include task-oriented interventions, environmental modifications, and the use of adaptive equipment.” “Context-based and occupation-based interventions are recommended to improve performance in daily life tasks and promote participation.” “Training and interventions delivered in natural contexts support better functional outcomes and generalization than interventions delivered in simulated settings.”	Strong strength of evidence
AOTA Occupational Therapy Practice Guidelines for Adults with Chronic Conditions ¹³⁰	“Home- and community-based interventions are recommended to improve performance in ADLs and IADLs, support participation, and promote health management for adults with chronic conditions.” “Environmental modifications, assistive technology, and compensatory strategies are recommended to enhance independence and participation in daily activities.” “Interventions should incorporate client-centered goals and be designed to support self-management, functional independence, and sustained engagement in daily life.” “Caregiver training and education are recommended to improve safety, performance of daily activities, and participation for adults with chronic conditions living at home or in the community.”	Strong strength of evidence

ONGOING STUDIES AND RESEARCH GAPS

A review of the Health Research and Development Information Network (HERDIN) and the Philippine Health Research Registry revealed no ongoing or registered studies in the Philippines directly related to ADL retraining with environmental modifications compared to facility-based simulated ADL training for individuals with physical disabilities in primary care settings. Similarly, the included international systematic reviews did not cite ongoing or forthcoming trials that are likely to change the direction or certainty of the current evidence.

The evidence review identified several important research gaps. First, all available meta-analyses were limited to post-stroke populations, leaving a lack of evidence for other causes of physical disability, such as musculoskeletal, traumatic, or chronic progressive conditions. Second, few studies explicitly evaluated activities of daily living (ADL) retraining within primary care or community health systems in low- and middle-income countries, including the Philippines. Third, while several trials mentioned home-based rehabilitation, only a small number specifically described or assessed the impact of environmental modifications or assistive technologies as distinct components of the intervention. Fourth, evidence on non-functional and patient-centered outcomes, such as patient satisfaction, social participation, caregiver burden, and safety outcomes (e.g., falls, fatigue, or secondary complications), was lacking. Finally, no studies were found assessing the cost-effectiveness, acceptability, or feasibility of home- or community-based ADL retraining in resource-limited primary care contexts.

Future research should prioritize locally relevant trials and implementation studies within the Philippine primary care system. These should include a broader range of physical disabilities, clearly defined environmental modification strategies, and outcomes that reflect patient and caregiver perspectives to ensure both clinical and contextual applicability.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost / Cost Effectiveness)

No cost-effectiveness analyses, cost-utility studies, or direct cost reports related to community or home-based ADL retraining with environmental modifications versus facility-based simulated ADL training were reported in the included systematic reviews.

Do et al. (2025)¹⁰⁹ conducted an economic evaluation comparing community or home-based and facility-based rehabilitation programs in general. Evidence from three cost-effectiveness studies, with one additional economic analysis accompanying an included RCT, consistently demonstrated that home-based rehabilitation is less costly than hospital-based rehabilitation for adults after stroke. Across studies, cost savings were primarily attributed to reduced staffing, travel, and facility-related expenses. Lloréns et al. (2015)¹³¹ reported an average cost savings of USD 654.72 per participant in favor of home-based rehabilitation. Similarly, Björkdahl et al. (2006)¹³² found home-based programs to be approximately €1,830 less expensive per participant than hospital-based care. Anderson et al. (2000)¹³³ conducted a cost-minimization analysis showing mean costs of USD 8,040 for home-based rehabilitation compared with USD 10,054 for hospital-based rehabilitation, although this difference did not reach statistical significance. Rasmussen et al. (2016)⁴⁶ likewise reported lower total costs for home-based rehabilitation. Overall, these findings suggest that home-based rehabilitation which includes ADL retraining is cost saving compared with facility-based rehabilitation.

From a resource perspective, home- and community-based ADL retraining with environmental modifications requires costs related to therapist home visits, caregiver training, and environmental modifications (e.g., grab bars, ramps, adapted bathroom fixtures, rearrangement of household spaces). In contrast, facility-based simulated ADL training

involves costs associated with maintaining rehabilitation centers, simulated ADL units, and transport expenses for patients and caregivers.

In the Philippine setting, basic environmental modifications (e.g., grab bars, non-slip mats, handrails) typically range from PHP 500 to PHP 2,000 per item in both government and private markets, while larger modifications, such as bathroom adaptations and ramps, may cost PHP 10,000 to PHP 50,000, depending on the materials and labor used. Occupational therapy home program training sessions in private practice typically range from PHP 500 to PHP 1,500 per session, while government facilities may offer these services at little to no direct cost to patients.

Stakeholder values, preferences and acceptability

No studies reporting stakeholder (patients, caregivers, providers, funders/government) values, preferences, or acceptability of community/home-based ADL retraining (with or without environmental modifications) versus facility-based simulated training were found in the included reviews.

However, indirect evidence from the guideline recommendations suggests that patients and caregivers generally value interventions that are contextualized in the home or community, as these are perceived to be more relevant to daily living, facilitate independence, and support carryover into real environments.^{128,129} Caregiver involvement was also emphasized across the guidelines as a crucial factor in the success and acceptability of interventions.

Global reports from WHO^{134,135} highlight that persons with disabilities and their families prioritize rehabilitation interventions that improve independence, participation, and safety in the home environment, particularly in low-resource settings where access to facility-based rehabilitation may be limited. These findings indirectly support the acceptability of home- and community-based interventions with environmental modifications. No specific studies from the Philippines were identified.

Equity and feasibility

No studies were identified in the included reviews that explicitly assessed barriers and facilitators to uptake, compliance, or delivery. The reviews reported implementation characteristics of the interventions as part of trial descriptions, including: predominant use of home visits in 45 of 49 trials, occasional home with telephone follow-up in four of 49 trials, frequent caregiver involvement in 37 of 49 trials, use of multidisciplinary teams in a subset of trials, average program duration approximately 19 weeks, ranging from three to 144 weeks), and environmental modifications and assistive equipment reported in 22 of 49 trials.⁵⁰ Transitional care models included education, discharge planning, scheduled home visits, structured telephone support, and community rehabilitation components.¹¹¹ No trial-level analyses were reported that linked these delivery features to equity or feasibility outcomes.

Indirect evidence from global reports^{134,135} indicates that access to rehabilitation is often inequitable, particularly for persons with disabilities in low- and middle-income countries, where barriers include limited-service availability, financial constraints, transportation challenges, and lack of trained rehabilitation providers. Home- and community-based ADL retraining with environmental modifications may improve equity by reducing the need for travel to rehabilitation facilities and addressing environmental barriers directly in patients' homes. However, feasibility may be limited by the availability of rehabilitation professionals able to deliver home-based services, variability in caregiver capacity, and the costs of implementing environmental modifications in resource-limited households.

Overall, while home- and community-based interventions may enhance equity of access compared to facility-based training, their feasibility depends on workforce capacity, caregiver involvement, and financial support for environmental modifications.

4.7 Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 7.1

Among adults with apparent mild to moderate physical disability, we **suggest the provision of community-based or home-based mobility training with caregiver training** in the primary care setting.

Weak recommendation, Very low certainty of evidence

RECOMMENDATION 7.2

Among children with apparent mild to moderate physical disability, we **recommend the provision of community-based or home-based mobility training with caregiver training** in the primary care setting.

Strong recommendation, Moderate certainty of evidence

Considerations

- Despite the limited and uncertain effects, the panel judged that home-based mobility training remains a reasonable option, given its relevance to real-world mobility demands, and alignment with patient values favoring convenience and reduced transportation burden. Caregiver training was viewed as an important supportive component, particularly for providing continuity of care, although concerns were raised about inconsistent caregiver availability and lack of structured support. The Philippines has TESDA-trained caregivers (National Certification II) with training on how to handle health monitoring, assistance and home-exercises, under the supervision of trained professionals e.g. physical therapists or rehabilitation physicians. Cost considerations favored home-based approaches in many settings due to savings from reduced travel and facility-related expenses, but feasibility was judged to be variable, depending on the availability of rehabilitation professionals and caregiver capacity. Balancing minimal differences in effects, very low certainty of evidence, patient preferences, and contextual feasibility concerns, the panel issued a weak recommendation supporting community- or home-based mobility training with caregiver training, while emphasizing the need for monitoring, standardized caregiver guidance, and appropriate referral pathways for complex cases.
- For children, although the observed benefits were unlikely to be clinically significant, the panel considered them meaningful within the context of child development, early intervention, and sustained caregiver involvement. Early initiation of mobility training and consistent caregiver participation were judged to be critical for optimizing long-term functional outcomes, particularly in settings with limited access to facility-based rehabilitation services. Community- and home-based approaches were also viewed as promoting equity by expanding access to essential rehabilitation in rural areas, provided that appropriate professional oversight and structured caregiver training are in

place. In light of the moderate certainty of evidence, strong alignment with child and caregiver values, and the importance of early, context-specific mobility practice, the panel issued a **strong recommendation** for community- or home-based mobility training with caregiver training in children.

Key Findings

- Seven RCTs^{124,125,136-140} involving 586 adults and children with mild to moderate physical disability were included in this evidence base.
- Evidence in adults show that home-based mobility training with caregiver training probably provides little to no difference in the effect on functional independence, social participation, functional performance, compliance, gait, incidence of fall and patient satisfaction when compared with facility-based mobility training.
- Evidence in children with cerebral palsy show that home-based mobility training with caregiver training may provide marginal improvement on functional performance and increase satisfaction. However, benefits were unlikely to be clinically significant.
- Overall certainty of evidence in adults was very low while overall certainty of evidence in children was moderate.

INTRODUCTION

Physical disability refers to impairments that restrict functional task performance, activities of daily living, and community participation. Categories of apparent physical disability include limb loss or deficiency, gait deviation despite assistive device use, dependence for sitting or standing, and burn-related contractures, arising from congenital or acquired musculoskeletal, neurologic, neuromuscular, or congenital conditions.⁴⁷ Standard facility-based rehabilitation improves functional outcomes, yet access remains limited in Southeast Asia and the Philippines due to inadequate integration of rehabilitation services within primary care and persistent gaps particularly in geographically isolated and disadvantaged areas.^{9,141} To address access barriers, especially highlighted during the COVID-19 pandemic, home-based rehabilitation has been recognized as a feasible alternative service delivery model. Home-based rehabilitation involves providing services directly in the patient's home, either in person or via telerehabilitation with caregiver support, and forms part of community-based rehabilitation strategies.^{141,142} Current evidence suggests potential benefits of home-based rehabilitation. However, existing studies utilize different interventions, limiting direct comparison and applicability of findings.¹⁴³ This guideline evaluates whether home-based mobility training with caregiver retraining should be recommended over facility-based mobility training for individuals with mild to moderate physical disability in primary care.

REVIEW METHODS

A systematic search using PubMed by MEDLINE and Google Scholar was performed and completed on October 30, 2025. The search strategy is detailed in Appendix 2. A total of 53 citations were screened. Randomized controlled trials (RCTs) that compared community or home-based mobility training with caregiver training versus facility-based mobility training among persons with apparent mild to moderate physical disability identified and retrieved were included. A person with mild physical disability is defined as independent with assistive device or may require standby assistance with or without cueing in performing activities accurately and safely, and with unrestricted community participation while a person with moderate physical disability is defined as assisted in preparing, initiating, or completing activities accurately and safely with restricted community participation. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-

English publications were excluded. A total of seven articles^{124,125,136-140} were included in this review. Identification and screening of articles is detailed in Appendix 2. Risk of bias was assessed using Risk of Bias 2 (RoB-2) Tool. Efficacy outcomes were reported in terms of relative risk (RR) for dichotomous variables and mean difference (MD) or standardized mean difference (SMD) of post-intervention scores for continuous variables. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro (<https://www.gradeepro.org>).

RESULTS

Characteristics of included studies

Seven RCTs^{124,125,136-140} involving 586 adults and children with mild to moderate physical disability evaluated home-based rehabilitation interventions incorporating caregiver training compared with therapist-supervised or facility-based rehabilitation programs.

Five trials enrolled 447 adults with neurologic conditions. Atterbury et al.¹³⁶ included 40 adults aged 50 to 80 years with mild to moderate Parkinson's disease and compared home-based balance training program supported by digital video resources with therapist-supervised balance training, assessing gait improvement using the instrumented Timed Up and Go. Barzel et al.¹²⁴ included 156 adults with mild to moderate upper limb dysfunction after stroke and evaluated home-based constraint-induced movement therapy (CIMT) delivered by professional or non-professional coaches versus standard therapy, measuring functional independence (Modified Barthel Index, Instrumental Activities of Daily Living) and functional performance (Motor Activity Log-Quality of Movement). Chen et al.¹²⁵ examined 51 adults with hemiplegia post-stroke receiving home-based tele-supervised rehabilitation compared with conventional outpatient therapy, assessing functional independence (Modified Barthel Index). Cramer et al.¹³⁷ assessed 124 adults with post-stroke arm motor deficits receiving home-based tele-rehabilitation versus in-clinic therapy, with outcomes including functional independence (Fugl-Meyer Assessment), adherence, and patient satisfaction. Gandolfi et al.¹³⁸ included 76 adults with moderate Parkinson's disease undergoing home-based virtual reality balance training versus in-clinic sensory integration balance training, assessing social participation (Parkinson's Disease Questionnaire 8), gait performance (10-Minute Walk Test), and incidence of falls.

Two Australian trials evaluated children with unilateral cerebral palsy. James et al.¹³⁹ examined a 20-week home-based multimodal program (Move It To Improve It) versus consultative care in 92 parent-child dyads, while Sakzewski et al.¹⁴⁰ compared standard home-based upper limb therapy with modified CIMT delivered in a community setting in 47 parent-child dyads, assessing functional performance (Canadian Occupational Performance Measure, Assessment of Motor and Process Skills) and patient satisfaction (Patient Satisfaction Questionnaire).

Efficacy outcomes in adults

Improved functional independence (3 RCTs, n=331, Moderate certainty of evidence)

Evidence from three RCTs which compared home-based mobility training and facility or clinic-based mobility training in 331 adult patients after stroke demonstrated no significant difference in improving functional independence evaluated using the Modified Barthel Index (MD 0.26 points, 95% CI -4.45 to 4.97, I²=0%), the Fugl Meyer Assessment (MD 0.50 points, 95% CI -2.92 to 1.92) and the Instrumental Activities of Daily Living (MD 0.02 points, 95% CI -0.72 to 0.76). Pooled analysis across different assessment tools further demonstrated no significant difference in improving functional independence (SMD -0.02, 95% -0.19 to 0.16, I²=0%). Certainty of evidence was downgraded to moderate due to imprecision.

Improved social participation (1 RCT, n=76, Low certainty of evidence)

Evidence from one RCT which compared home-based mobility training and facility or clinic-based mobility training in 76 adult patients with Parkinson's Disease demonstrated no significant difference in improving social participation evaluated using the Parkinson's Disease Questionnaire 8 (MD 1.91 points, 95% CI -4.52 to 8.34). Certainty of evidence was downgraded to low due to very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Improved functional performance (2 RCTs, n=232, Low certainty of evidence)

Two RCTs compared home-based mobility training and facility or clinic-based mobility training in patients after stroke and patients with Parkinson's Disease. One trial demonstrated no significant difference in improving functional performance evaluated using the Motor Activity Log-Quality of Movement (MD -0.03 points, 95% CI -0.40 to 0.34) in patients after stroke. Another trial demonstrated no significant difference in improving functional performance evaluated using the 10-Meter Walk Test (MD 0.04 meter/second, 95% CI -0.14 to 0.22) in patients with Parkinson's Disease. Certainty of evidence for each outcome measure was downgraded to low due to very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Improved adherence to therapy (1 RCT, n=72, Low certainty of evidence)

Evidence from one RCT which compared home-based mobility training and facility or clinic-based mobility training in 72 adult patients after stroke demonstrated no significant difference in improving adherence to therapy. Patients randomized to home-based mobility training were adherent to 33.6 of the 36 therapy sessions (0.9333) while patients randomized to clinic-based mobility training were adherent to 35.4 of the 36 therapy sessions (0.9833). This resulted in no significant difference in adherence to therapy (MD 0.05, 95% CI -0.12 to 0.02). Certainty of evidence was downgraded to low due to very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Improved gait (1 RCT, n=39, Very low certainty of evidence)

Evidence from one RCT which compared home-based mobility training and facility or clinic-based mobility training in 39 adult patients with Parkinson's Disease demonstrated that home-based mobility training may probably result to worsening of gait evaluated using Instrumented Time Up and Go (MD 3.75 seconds, 95% -1.60 to 9.10). Certainty of evidence was downgraded to very low due to risk of bias and very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Incidence of fall (1 RCT, n=76, Low certainty of evidence)

Evidence from one RCT which compared home-based mobility training and facility or clinic-based mobility training in 76 adult patients with Parkinson's Disease demonstrated no significant difference in the incidence of fall (MD 0.52 episodes, 95% CI -1.64 to 0.60). Certainty of evidence was downgraded to low due to very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Patient satisfaction (1 RCT, n=124, Low certainty of evidence)

Evidence from one RCT which compared home-based mobility training and facility or clinic-based mobility training in 124 adult patients after stroke demonstrated no significant difference in patient satisfaction evaluated using a 70-point Patient Satisfaction Questionnaire (MD 3.30 points, 95% CI -22.54 to 15.97). Certainty of evidence was downgraded to low due to very serious imprecision attributable to wide confidence interval and limited sample size from a single trial.

Safety outcomes

No evidence found on safety outcomes.

Table 14. Summary of Findings (Q7, Adult Population)

Outcome	Basis (No. of studies, study design, total participant s)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Home- based mobility training	Facility- based mobility training	Absolute difference (95% CI)		
Improved functional independence							
Modified Barthel Index Scale: 0 to 100 Higher is better MCID: 10 points	3 RCTs (n=331)	-	77.66 ±21.17	77.34 ±21.17	SMD 0.02 units lower (0.19 lower to 0.16 higher)	⊕⊕⊕○ Moderate ^a	Home-based mobility training with caregiver training probably provides little to no difference on the effect on improving functional independence compared with facility-based training.
Fugl Meyer Scale: 0 to 66 Higher is better MCID: 5 points			7.86 ±6.68	8.36 ±7.04			
Instrumental ADL Scale: 1 to 8 Higher is better MCID: 1 point			4.05 ±2.45	4.03 ±2.24			
Improved social participation							
Parkinson's Disease Questionnaire 8 (Post-intervention scores at 4 weeks) Scale 0 to 100 Lower is better MCID: 5 points	1 RCT (n=76)	-	25.82 ±14.9	23.91 ±13.20	MD 1.91 points higher (4.52 lower to 8.34 higher)	⊕⊕○○ Low ^b	Home-based mobility training with caregiver training may provide little to no difference in the effect on improving social participation compared with facility-based training.
Improved functional performance							
Motor Activity Log-Quality of Movement (Post-intervention score) Scale: 0 to 5 Higher is better MCID: 0.5 points	1 RCT (n=156)	-	1.78 ±1.13	1.81 ±1.23	MD 0.03 lower (0.40 lower to 0.34 higher)	⊕⊕○○ Low ^b	Home-based mobility training with caregiver training may provide little to no difference in the effect on improving functional performance when compared with facility-based training.
10-Meter Walking Test (Post-intervention speed in m/sec) Higher is better MCID: 0.25 m/sec	1 RCT (n=76)	-	1.57 ±0.42	1.52 ±0.37	MD 0.04 m/s higher (0.14 lower to 0.22 higher)	⊕⊕○○ Low ^b	Home-based mobility training with caregiver training may provide little to no difference on the effect on improving functional performance when compared with facility-based training.

Outcome	Basis (No. of studies, study design, total participants)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Home-based mobility training	Facility-based mobility training	Absolute difference (95% CI)		
Improved compliance							
Adherence to therapy (Mean sessions attended over total number of session) Higher is better MCID: 0.10	1 RCT (n=72)	-	33.6 per 36 (0.9333)	35.4 per 36 (0.9833)	MD 0.05 lower (0.12 lower to 0.02 higher)*	⊕⊕○○ Low ^b	Home-based mobility training with caregiver training may provide little to no difference on the effect on compliance compared with facility-based training
Improved gait							
Instrumented Time Up and Go (Duration in seconds) Lower is better MCID: ≥3 seconds	1 RCT (n=39)	-	20.89 ±10.58	19.14 ±3.29	MD 3.75 seconds higher (1.60 lower to 9.10 higher)	⊕○○○ Very low ^{a,b}	Home-based mobility training with caregiver training may result to worsening of gait when compared with facility-based mobility training but the evidence is very uncertain.
Incidence of fall							
Number of falls in the previous month Lower is better MCID: 1.25 falls per month	1 RCT (n=76)	-	0.29 ±0.94	0.81 ±3.31	MD 0.52 episodes lower (1.64 lower to 0.60 higher)	⊕○○○ Very low ^{b,c}	Home-based mobility training with caregiver training may provide little to no effect on fall episodes but the evidence is very uncertain.
Patient satisfaction							
Patient Satisfaction Questionnaire (Score) Scale: 0 to 70 points Higher is better MCID: 4 points	1 RCT (n=124)	-	55.2 ±7.70	58.50 ±3.31	MD 3.30 points lower (22.54 lower to 15.97 higher)	⊕⊕○○ Low ^b	Home-based mobility training with caregiver training may provide little to no difference on the effect on patient satisfaction compared with facility-based training.

*calculated using binomial approximation

CI: confidence interval; MCID: minimal clinically important difference; MD: mean difference; RCT: randomized trial; RR: relative risk; SMD: standardized mean difference

Explanations

- Imprecision due to wide confidence interval
- Very serious imprecision due to wide confidence interval and limited samples size from a single trial
- Risk of bias due to some concerns on allocation and high attrition rate

Efficacy outcomes in children

Improved functional performance (2 RCTs, n=134, Moderate certainty of evidence)

Evidence from two RCTs which compared home-based mobility training and facility or clinic-based mobility training in 134 children with cerebral palsy demonstrated statistically significant improvement in functional performance outcomes with home-based mobility training. When expressed as mean differences, home-based mobility training resulted in higher Canadian Occupational Performance Measure (COPM) Performance scores (MD 1.13 points, 95% CI 0.61 to 1.66, $I^2=0\%$) as well as modest gains in Assessment of Motor and Process Skills (AMPS) Motor scale (MD 0.27 logits, 95% CI 0.08 to 0.46) and AMPS Process scale (MD 0.31 logits, 95% CI 0.13 to 0.49). Although all outcomes favoured home-based mobility training and achieved statistical significance, the magnitude of improvement did not attain established minimal clinically important differences defined as at least 2.0 points for the COPM Performance and at least 1.0 logit for the AMPS Motor and Process scales. Overall analysis using standardized mean differences similarly indicated statistically significant moderate effects across all instruments (Pooled SMD 0.67, 95% CI 0.44 to 0.90, $I^2=0\%$) indicating a consistent moderate effect in favour of home-based mobility training. However, despite these moderate standardized effect sizes, the corresponding gains in original scale units remained below clinically important thresholds further indicating that, although home-based mobility training improved functional performance statistically, the benefits are unlikely to be clinically meaningful. Certainty of evidence was downgraded to moderate due to imprecision.

Patient and/or caregiver satisfaction (2 RCTs, n=134, Moderate certainty of evidence)

Evidence from two RCTs which compared home-based mobility training and facility or clinic-based mobility training in 134 children with cerebral palsy demonstrated significantly better satisfaction with home-based mobility training evaluated using the COPM Satisfaction Scale (MD 1.26 points, 95% CI 0.60 to 1.93, $I^2=13\%$). The mean difference, however, is below the minimal clinically important difference of 2.0 points. Certainty of evidence was downgraded to moderate due to imprecision.

Table 15. Summary of Findings (Q7, Pediatric Population)

Table 10: Summary of Findings (Q1, 1: Adults Population)							
Outcome	Basis (No. of studies, study design, total participant s)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Home- based mobility training	Facility- based mobility training	Absolute difference (95% CI)		
Improved functional performance							
COPM – Performance Scale Scale: 0 to 10 Higher is better MCID: 2 points	2 RCT (n=134)	-	6.33 ±1.67	5.23 ±1.43	SMD 0.67 units higher (0.44 higher to 0.90 higher)	⊕⊕⊕○ Moderate ^a	Home-based mobility training with caregiver training probably provides little to no difference on the effect on improving functional performance compared with facility-based training.
AMPS – Motor Scale Scale: -3 to 4 Higher is better MCID: 1 logit	1 RCT (n=92)		1.38 ±0.44	1.11 ±0.48			
AMPS – Process Scale Scale: -4 to 3 Higher is better MCID: 1 logit	1 RCT (n=92)		1.39 ±0.34	1.08 ±0.53			
Improved patient satisfaction							
COPM – Satisfaction Scale Scale: 0 to 10 Higher is better MCID: 2 points	2 RCT (n=134)	-	6.85 ±1.86	5.62 ±1.73	MD 1.26 points higher (0.60 higher to 1.93 higher)	⊕⊕⊕○ Moderate ^a	Home-based mobility training with caregiver training probably provides little to no difference on the effect on patient satisfaction compared with facility-based training..

AMPS: Assessment of Motor and Process Skills; **CI:** confidence interval; **COPM:** Canadian Occupational Performance Measure; **MCID:** minimal clinically important difference; **MD:** mean difference; **RCT:** randomized trial; **RR:** relative risk; **SMD:** standardized mean difference

Explanations

a. Imprecision due to failure to attain minimal clinically important difference

Overall certainty of the evidence

The overall certainty of the evidence in the adult population is very low attributed to serious risk of bias due to concerns on allocation concealment and attrition bias, and serious to very serious imprecision due to wide confidence interval and limited sample size across critical outcomes.

The overall certainty of the evidence in the pediatric population is moderate due to imprecision.

RECOMMENDATIONS FROM OTHER GROUPS

Currently, no clinical practice guidelines have issued specific recommendations relevant to this guideline question.

ONGOING STUDIES AND RESEARCH GAPS

No ongoing studies have been identified.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost / Cost Effectiveness)

A 2024 study in Iran¹⁴⁴ showed that average rehabilitation cost for the home strategy (\$2,306 ± 35.018) was less than that for the hospital (\$2,955 ± 48.18) and stroke unit (\$3,485 ± 51.63) strategies. Iran has a better primary health care system¹⁴³ but there is also higher cost of physical therapy services.¹⁴⁶ No Philippine economic evaluation that directly compares the cost of home-based rehabilitation with caregiver training versus facility-based rehabilitation was found.

Stakeholder values, preferences, and acceptability

Qualitative studies among adults after a stroke, their caregivers, and therapists show that home-based rehabilitation is generally valued for its convenience, reduced need to travel, and being able to practice tasks in the actual home environment. However, concerns still include inadequate caregiver capacity, home space constraints, and anxiety about doing exercises wrong without proper supervision.¹⁴⁷

In children with cerebral palsy, qualitative studies likewise report that parents generally value home-based or parent-delivered programs including CIMT and web-based mobility or upper-limb training for flexibility and integration into daily routines but parents and caregivers also describe emotional burden, time demands, and the need for ongoing professional coaching.¹⁴⁸

Thus, stakeholders may prefer home-based rehabilitation programs when adequate caregiver training, professional support, and safety standards are in place. Some parents and caregiver may still favor facility-based therapy for more complex cases or when caregiver time and skills are limited.

Equity and feasibility

Home-based rehabilitation is likely to increase equity compared with facility-based rehabilitation alone, particularly for persons with disabilities in rural, geographically isolated and disadvantaged areas, or low-income communities who face substantial geographic and financial barriers to facility-based care. Evidence from Philippine community-based rehabilitation experiences and tele-rehabilitation initiatives indicates improved access and participation among indigent persons with disabilities when services are brought to the home or community. However, implementation may inadvertently disadvantage families without an available caregiver, adequate housing, or access to digital technologies, and these groups may require additional support or alternative models.¹⁴⁹ At present the impact of integrating caregiver training in home or community-based rehabilitation is still unknown.

4.8 Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?

RECOMMENDATION 8

Among persons born with apparent physical disability, we **suggest against the use caregiver-led habilitation interventions** in the primary care setting.

Weak recommendation, Very low certainty of evidence

Considerations

- Despite the absence of reported adverse events, the panel expressed concern that children with congenital conditions—such as spinal muscular atrophy and Duchenne muscular dystrophy—require specialized assessment, close monitoring, and timely adjustments that are best provided by trained rehabilitation professionals, particularly during critical periods of neurodevelopment and neuroplasticity. While the panel acknowledged the practical importance of caregivers and recognized the limited availability of rehabilitation professionals at the community level, they judged that the level and breadth of training required for safe and effective caregiver-led habilitation across diverse congenital conditions would be substantial and difficult to standardize in primary care. Caregivers were viewed as essential partners in care delivery, but primarily in a supportive role rather than as lead providers of habilitation. Considering the very low certainty of evidence and the need for specialized professional oversight, the panel issued a weak recommendation against caregiver-led habilitation interventions in the primary care setting.

Key Findings

- Two RCTs^{150,151} with 118 children born with apparent physical disability were included in this evidence base.
- Among children born with apparent physical disability, caregiver-led habilitation interventions may provide little to no difference on the effect on improving functional independence (mobility), improving self-care, improving developmental milestones, and improving social participation when compared with therapist-led habilitation interventions.
- No adverse events were reported.
- The overall certainty of the evidence is low.

INTRODUCTION

Children born with physical disabilities such as neuromuscular and musculoskeletal conditions require habilitation to support attainment, maintenance, and utilization of skills for functionalities of daily living with the goal of optimizing functionality and well-being.¹⁵² The Philippine health system, through the Universal Health Care framework, emphasizes the delivery of community-based interventions within the primary care setting to ensure

accessible, people-centered, and equitable service for all Filipinos particularly persons with disabilities.¹⁵³ Parent or caregiver-delivered interventions is a practical option alongside traditional therapist-led care in pediatric occupational therapy.¹⁵⁴ However, comparative effectiveness of parent or caregiver-led versus therapist-led interventions remain uncertain particularly in habilitation in children born with physical disabilities. This guideline question aims to determine whether caregiver-led versus therapist-led habilitation interventions should be recommended for children born with apparent physical disability.

REVIEW METHODS

A systematic search using PubMed by MEDLINE, Cochrane, Scopus, Health Research Development Information Network (HERDIN) Philippines, ProQuest, and Cumulated Index in Nursing and Allied Health Literature (CINAHL) was performed and completed on November 2, 2025. The search strategy is detailed in Appendix 2. A total of 530 citations were screened. Randomized controlled trials (RCTs) that compared parent-led versus therapist-led habilitation interventions in children born with apparent physical disability identified and retrieved were included. Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. Only two RCTs^{150,151} were found to be direct enough to answer the review question. Identification and screening of articles is detailed in Appendix 2. Risk of bias was assessed using Risk of Bias 2 (RoB-2) Tool. Efficacy outcomes were reported in terms of mean difference (MD) of post-intervention scores. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated and summarized using GRADEpro ([https://www. gradepr.org](https://www.gradepr.org)).

RESULTS

Characteristics of included studies

Evidence from two RCTs assessed parent or caregiver-led and therapist-led habilitation interventions in children born with apparent physical disability. One RCT¹⁵⁰ compared a seven-week caregiver skill training programme and therapist-led training programme in 74 caregiver-child dyads in Malawi. The population included children with cerebral palsy aged nine months to 14 years. Outcomes were assessed using the Pediatric Evaluation of Disability Inventory (PEDI) and the Child and Adolescent Scale of Participation (CASP). The PEDI included domains on mobility and self-care while the CASP measured social participation across home, community, and daily living contexts. One RCT¹⁵¹ compared a 12-week parent-led therapist-supervised articulation therapy versus speech and language therapy sessions as routine care in 44 caregiver-child dyads in Ireland. The population included children with cleft palate aged three to seven years old. Outcomes were assessed using the Focus on Outcomes of Communication Under Six (FOCUS), which measured developmental milestones in terms of communication. Characteristics of included studies are summarized in Appendix 3.

Efficacy outcomes

Improved functional independence and self-care (1 RCT, n=74, low certainty of evidence)

Evidence from one RCT¹⁵⁰ comparing caregiver-led and therapist-led habilitation interventions in 74 children with cerebral palsy demonstrated little to no difference in improving functional independence and self-care evaluated using the PEDI (MD -13.00 points, 95% CI -40.45 to 14.45). Functional independence was assessed using the PEDI mobility domain which included bed mobility, chair and wheelchair transfers, and indoor and outdoor locomotion while self-care was assessed using the PEDI self-care domain. Certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Improved developmental milestone (1 RCT, n=44, low certainty of evidence)

Evidence from one RCT¹⁵¹ comparing caregiver-led and therapist-led habilitation interventions in 44 pre-school children with cleft palate demonstrated little to no difference in improving communication evaluated using the FOCUS (MD -7.00 points, 95% CI -31.5 to 17.5). FOCUS evaluated functional communication which includes speech, language, and social communication. Certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Improved functional independence and self-care (1 RCT, n=74, low certainty of evidence)

Evidence from one RCT¹⁵⁰ comparing caregiver-led and therapist-led habilitation interventions in 74 children with cerebral palsy demonstrated little to no difference in improving social participation. Outcomes assessed using the CASP showed no significant differences in home participation (MD 0 points, 95% CI -9.17 to 9.17), community participation (MD -6.30 points, 95% CI -15.24 to 2.65), and home and community living (MD 0 points, 95% CI 2.0 to 2.0). Certainty of evidence was downgraded to low due to very serious imprecision attributed to limited sample size and wide confidence interval.

Table 16. Summary of Findings (Q8)

Outcome	Basis (No. of studies, study design, total participant s)	Relativ e Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Caregiver- led interventions	Therapist- led interventions	Absolute difference (95% CI)		
Improved functional independence and self-care ¹⁵⁰							
Improved functional independence (mobility), self-care PEDI Scale: 0 to 100 Higher is better MCID: 30 points	1 RCT (n=74)	-	54 ± 40.74	67 ± 74.81	MD 13.00points lower (40.45 lower to 14.45 higher)	⊕⊕○○ Low ^a	Caregiver-led interventions may provide little to no difference in the effect on functional independence (mobility) and self-care when compared with therapist-led interventions
Improved developmental milestones ¹⁵¹							
Improved developmental milestones (communication) FOCUS Scale: 50 to 350 Higher is better MCID: 16 points	1 RCT (n=44)	-	257.2 ±45.0	264.2 ±36.7	MD 7.00points lower (31.5 lower to 17.5 higher)	⊕⊕○○ Low ^a	Caregiver-led interventions may provide little to no difference in the effect on improving developmental milestones (communication) when compared with therapist-led interventions
Improved social participation ¹⁵⁰							

Outcome	Basis (No. of studies, study design, total participant s)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Caregiver- led interventions	Therapist- led interventions	Absolute difference (95% CI)		
Home participation MCID: 8 points	1 RCT (n=74)	-	45.80 ±15.5	45.80 ±18.5	MD 0 (9.17 lower to 9.17 higher)	⊕⊕○○ Low ^a	Caregiver-led interventions may provide little to no difference on the effect on social participation when compared with therapist-led interventions
Community participation MCID: 8 points			37.50 ±18.5	43.80 ±13.85	MD 6.30 points lower(15.25 lower to 2.65 higher)		
Home & community living MCID: 2 points			20.0 ±3.70	20.0 ±3.70	MD 0 (2 lower to 2 higher)		
CASP Standardized score: 0 to 100 Higher is better							

CASP: Child and Adolescent Scale of Participation; **CI:** confidence interval; **FOCUS:** Focus on Outcomes of Communication Under Six; **MCID:** minimal clinically important difference; **MD:** mean difference; **PEDI:** Pediatric Evaluation of Disability Inventory; **RCT:** randomized trial; **RR:** relative risk

Explanations

- Limited sample size and wide confidence interval

Overall certainty of the evidence

The overall certainty of evidence was low attributed to very serious imprecision.

RECOMMENDATIONS FROM OTHER GROUPS

Currently, no clinical practice guidelines have issued specific recommendations on caregiver-led and therapist-led habilitation interventions for children born with apparent physical disability in the primary care setting.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE TO DECISION (ETD) PHASE

Resource Implications (Cost/Cost Effectiveness)

In the African setting, caregiver facilitators reduce dependency on professionals.¹⁵⁵ Transportation and meals were required to ensure retention for caregiver training.¹⁵⁶ In the Malaysian setting, children receiving home-based therapy was four times more costly compared to center-based due to higher indirect costs (home-based caregivers spend significantly more time staying home to support therapy sessions leading to productivity loss) and a large portion of expenses go to complementary & alternative medicine because of lack of confidence in home-based outcomes.¹⁵⁷

Stakeholder values, preferences and acceptability

Bakuwa and coworkers cited an 89% retention rate and 100% fidelity to the caregiver training program for children with cerebral palsy.¹⁵⁰ In the Philippine setting, a prospective cohort study of caregivers of children with cerebral palsy showed a 69% adherence rate to outpatient rehabilitation with further decrease in adherence among subgroups of children who had more therapy interventions such as occupational therapy, speech and language therapy, and psychological interventions needed aside from physical therapy, and among those with more severe presentations of cerebral palsy.¹⁵⁸

4.9 Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?

RECOMMENDATION 9

Among persons with apparent mild to moderate physical disability, we **suggest follow-up and monitoring** in the primary care setting.

Weak recommendation, Low certainty of evidence

Considerations

- Despite the uncertainty of measurable benefit, the panel judged follow-up and monitoring to be an integral component of rehabilitation care, particularly in the primary care setting where services are often fragmented and patients are frequently lost to follow-up after facility-based rehabilitation. Structured follow-up was viewed as potentially beneficial for preventing negative outcomes, supporting continuity of care, enabling timely referrals, and generating data to improve the quality of community-based rehabilitation services. Currently, the PhilHealth YAKAP or primary care package should cover education, screening, basic diagnostics, essential medicines and follow-up or monitoring. YAKAP-registered patients including persons and children with disabilities should be able to benefit from this service with proper documentation and communication support. However, concerns were raised regarding feasibility, cost, workforce capacity, reimbursement mechanisms (including telehealth), and the applicability of evidence largely derived from high-income country settings. Considering the low certainty of evidence and resource-related constraints, the panel issued a weak recommendation suggesting follow-up and monitoring for persons with apparent mild to moderate physical disability in the primary care setting, with emphasis on risk stratification and mixed follow-up approaches adapted to local contexts.

Key Findings

- There are no direct studies to answer the question of monitoring/follow up vs no follow up. Because of this, the following definitions were revised:
 - “No follow up” in the studies included are usual care or education
 - “Follow-up and monitoring strategies”—ranges from structured enhancement programs, telephone monitoring, case management to integrated workplace programs.
- We identified seven RCTs evaluating the effect of follow-up or monitoring on community reintegration among individuals with *mild to moderate apparent disability* involving persons with neurologic and musculoskeletal disabilities.
 - Four RCTs¹⁵⁹⁻¹⁶² were found looking at neurologic physical disability and 3 RCTs¹⁶³⁻¹⁶⁵ on musculoskeletal disability.
- Because of the different scales and measures of community reintegration, it was not possible to do pooled estimates or meta-analysis.

- Among individuals with mild to moderate physical disability, randomized controlled trials comparing structured follow-up interventions with minimal or no follow-up demonstrated variable effects across conditions. It may have little or no effect on social participation, functional independence, functional performance/outcomes, self-efficacy and patient satisfaction
- The overall certainty of evidence was low due to risk of bias and indirectness.

INTRODUCTION

Community reintegration has been defined as a “re-organization of physical, psychological and social characteristics so that the individual can resume well-readjusted living after incapacitating illness or trauma”.¹⁶⁶ It is also the term used to refer to returning to the mainstream of family and community life, engaging in normal roles and responsibilities, actively contributing to one's social groups and the society as a whole.¹⁶⁷ Community reintegration is a core rehabilitation goal for persons with mild to moderate neurologic (e.g., stroke, traumatic brain injury, spinal cord injury) or musculoskeletal (e.g., osteoarthritis, fracture, chronic low back pain) disabilities after acute care or rehabilitation. It includes productive roles — returning to work or school — social participation, and independent community living. Follow-up and monitoring strategies, from structured phone check-ins, case management to workplace reintegration programs, aim to bridge the gap between initial treatment and real-world recovery.

REVIEW METHODS

A comprehensive literature search was done from January to Nov 2025 using Medline, Cochrane Library, Google Scholar and HERDIN plus with a combined MeSH and free text search using the following search terms: “mild or moderate apparent neurologic or musculoskeletal disability”, “follow up or monitoring strategies, vs “no follow up” “community reintegration”, patient satisfaction”, “Self-care”, “Self-worth or self-efficacy”, “Social Participation”, “Functional Outcomes”, “Functional independence”

limiting the search to RCT's from 2015 onwards. Studies with only abstracts available, as well as those published in a foreign language were excluded. When systematic reviews were identified, the reference that included studies were screened. Study screening and selection were performed and the risk of bias was assessed using GRADEpro for each outcome of each study. When discrepancies on the judgements emerged, discussion and consensus were done. Outcomes of interest for Community Reintegration included: Patient satisfaction, Self-care, Self-worth/self-efficacy, Physical and Social Participation, Functional Outcomes, Functional independence.

RESULTS

Characteristics of included studies

The closest evidence found looking at the effect of monitoring and/or follow up on community reintegration and its impact on persons with apparent mild to moderate disability are 7 RCTS. Quantity and quality of RCT evidence among people with mild-to-moderate physical disability comparing structured follow-up interventions with minimal/no follow-up are limited. Four RCTs¹⁵⁹⁻¹⁶² with a total population of 554 adults were found looking at neurologic physical disability and 3 RCTs¹⁶³⁻¹⁶⁵ looking at 695 adults with musculoskeletal disability.

Across all included studies, the overall risk of bias was high, largely due to lack of blinding, leading to potential selection, performance, and detection bias. There was also indirectness,

given the varied populations and outcome measures used. Because of these limitations, the overall certainty of evidence was downgraded to low.

Because of the different scales and measures of community reintegration, it was not possible to do pooled estimates or meta-analysis. As such, a description of the individual trials with their outcomes is outlined below.

Neurologic Disability and Musculoskeletal disability

Social Participation (4 RCTs n=374, low certainty of evidence)

Four randomized controlled trials (RCTs) evaluated structured follow-up or community-based interventions aimed at improving social participation among stroke survivors, individuals with spinal cord injury, and adults with rheumatic and musculoskeletal (MSK) diseases.

The COMPASS trial (2024)¹⁵⁹ included 185 adults with recent stroke who were randomized to either a *Community Participation Transition Program*—consisting of a median of 5.5 home visits with strategy training by occupational therapists—or an *attentional control group* that received informational home visits without problem-solving, in addition to usual care. The primary outcome was *Reintegration to Normal Living Index (RNLI)*, a measure of social participation, self-care, and self-efficacy. At 12 months, there was no significant difference in RNLI scores between groups. Certainty of evidence was downgraded to low due to risk of bias and indirectness.

A second RCT¹⁶⁰ including 83 stroke survivors discharged from inpatient rehabilitation compared a *client-centered “tune-up” program* (home-based occupational therapy at 6- and 12-months post-discharge focusing on mobility goals) with *assessment-only follow-up*. Community integration was measured using the *Subjective Index of Physical and Social Outcome (SIPSO)*, assessing physical and social integration and quality of life. Both groups showed improvements in SIPSO scores by 12 months, but there were no significant between-group differences (mean difference -0.5 ; 95% CI -1.8 to 2.7 ; $p = 0.68$). Certainty of evidence was downgraded to low due to risk of bias and indirectness.

In an RCT¹⁶¹ of 81 individuals with spinal cord injury, participants underwent six weekly interactive learning sessions designed to enhance self-efficacy and social participation. While the program was well-received, there were no significant differences in life satisfaction, or participation outcomes compared with usual care, both at 6 weeks and 30 weeks. Certainty of evidence was downgraded to low due to risk of bias and indirectness.

Finally, a 2023 RCT¹⁶³ involving 374 adults with rheumatic and musculoskeletal (MSK) diseases—including inflammatory rheumatic conditions, systemic connective tissue disorders, osteoarthritis, osteoporosis, fibromyalgia, chronic widespread pain, and persistent non-specific back, neck, or shoulder pain—evaluated a *structured “Bridge” follow-up intervention* versus *usual care*. The intervention did not significantly improve social participation as measured by the *COOP/WONCA* scale. Certainty of evidence was downgraded to low due to risk of bias and indirectness.

Functional Independence (3 RCTs, n=494, low certainty of evidence)

In the COMPASS trial,¹⁵⁹ secondary outcomes included the *In-Home Occupational Performance Evaluation (I-HOPE)*. At 12 months, the intervention group demonstrated small improvements in activity performance and satisfaction with daily activities, though effects were modest.

Another RCT¹⁶² involving 103 adults with mild stroke examined functional recovery following *very early supported discharge (VESD)* compared with usual discharge procedures. At 3 months, the VESD group showed significantly better functional independence (ADL Taxonomy

l) and *Stroke Impact Scale mobility* scores. However, these gains were not sustained at 12 months. Certainty of evidence was downgraded to low due to risk of bias and imprecision.

A third RCT (2021)¹⁶⁴ involving 206 adults aged ≥45 with chronic knee osteoarthritis compared SMS reminders combined with a thrice-weekly home exercise program and an educational website versus educational materials alone. The SMS-supported group showed no significant differences in physical activity or self-efficacy for function and exercise. Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Functional Performance/ Outcomes (4 RCTs, n=837, low certainty of evidence)

Four RCTs examined functional performance outcomes. Secondary analyses from the COMPASS trial¹⁵⁹ using the *Stroke Impact Scale–ADL (SIS-ADL)* showed no significant between-group differences in functional performance at 12 months.

In the chronic knee OA trial¹⁶⁴ (206 participants), SMS-supported home exercise did not improve physical activity or functional performance relative to an educational website alone.

Similarly, the “Bridge” follow-up intervention among 374 adults with rheumatic and MSK diseases showed no significant improvements in the *KOOS Sports and Recreation* subscale compared with usual care.¹⁶³

A fourth RCT (2025) from China¹⁶⁵ enrolled 112 older adults with chronic knee OA to compare monthly community follow-up (education plus supervised exercise adherence) with semi-annual reviews. Monthly follow-ups produced greater improvements in pain, overall KOOS scores, and multiple SF-36 domains (physical functioning, role limitations, vitality, and mental health). Certainty of evidence was downgraded to low due to risk of bias and imprecision.

Self- Efficacy (2 RCTs, n=287, low certainty of evidence)

In the RCT¹⁶³ involving 81 adults with spinal cord injury, six weekly interactive learning sessions showed no significant improvements in self-efficacy at 6 or 30 weeks compared with usual care.

Similarly, in the RCT by Nelligan et al. (2021)¹⁶² involving 206 adults with chronic knee OA, SMS-supported follow-up combined with a home exercise program did not produce significant improvements in self-efficacy for function or exercise.

Patient Satisfaction (2 RCTs n=351, low certainty of evidence)

In the COMPASS trial,¹⁵⁹ patient satisfaction measured via the *I-HOPE* scale showed no significant change in satisfaction with daily activities at 12 months.

Coker et al. (2021)¹⁶³ evaluated 81 individuals with spinal cord injury, comparing weekly interactive learning sessions with no follow-up. The intervention did not improve life satisfaction at either 6 or 30 weeks.

Safety outcomes

There was no direct evidence on harm as this involves the coordination of care across healthcare settings and is not a pharmacologic intervention. The caveat is that the teams doing the structured follow up and monitoring are properly trained and that there is close coordination of care across the continuum of care. Lack of communication and coordination of care may lead to medical errors.

Table 17. Summary of Findings (Q9)

Outcomes	Basis	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Follow-up and monitoring	No Follow up and monitoring	Mean Difference (95% CI)		
Social Participation Community Reintegration (RNLI) Scale: 0-100 points Higher is better	1 RCT (2024) (185 participants)	COMPASS 13.9 (8.1-19.8)	Usual Care 12.7 (6.7-18.6)	1.3 points higher (-7.1 to 9.6)	⊕⊕○○ Low ^{a,b}	In home occupational therapy (OT) visits including facilitation of home modifications and strategy training vs usual care may result in little to no difference in improving social participation
Subjective Index of Physical and Social Outcome (SIPSO) Physical And Social Integration Scale: 0-40 Higher is better	1 RCT (2018) 83 stroke survivors	Tune up 26.8+/-1.2	Control 26.6+/-1.1	0.5 lower (-1.8 to 2.7) p = 0.68	⊕⊕○○ Low ^{a,b}	Tune up group (therapy sessions at home) may result in little to no difference compared to usual care in improving physical and social participation
Participation Assessment with Recombined Tools – Objective (PART-O) Scale 0-5 Higher score, greater participation	1 RCT (2018) 81 individuals with SCI who were at least 4 weeks post-discharge from initial rehabilitation.	CBT 0.05	No follow up 0.00	0.06 higher (-0.19 to .030) P=6432	⊕⊕○○ Low ^{a,b}	Six weekly facilitator-led sessions, with each session lasting 2 hours (CBT) may result in little to no difference vs those who were not followed in improving participation at 6 and 30 weeks
Social Participation subscale of COOP/WONCA (1–5, 1 is best) Lower is better	1 RCT (2023) 374 adults with rheumatic and MSK diseases	2.4 (1.2)	2.7 (1.3)	0.3 lower (0.0, 0.5) p: 0.503	⊕⊕○○ Low ^{a,b}	BRIDGE intervention which comprised structured goal setting, action planning, motivational interviewing, digital self-monitoring of goal progress, and individual follow-up support after discharge according to patients' needs and available resources in primary healthcare may result in little to no difference vs usual care in improving social participation
Functional Independence I HOPE Activity Performance	1 RCT (2024) (185 participants)	COMPASS 0.04 (0.003 to 0.08) 1.18 (0.91 to 1.45)	Usual Care 0.05 (0.01-0.09) 0.79 (0.52 to 1.06)	0.01 lower (-0.06-0.05) 0.39 higher (0.01 to 0.77) P <0.05	⊕⊕○○ Low ^{a,b}	In home occupational therapy (OT) visits including facilitation of home modifications and strategy training vs usual care may result in little to no difference in improving functional independence and no difference in improving functional activity

Outcomes	Basis	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Follow-up and monitoring	No Follow up and monitoring	Mean Difference (95% CI)		
Activities of Daily Living Taxonomy Score ADL Tax B (self-care) ADL Tax I (functional independence) Lower score - better	1 RCT (2023) 103 Mild stroke patients With no or slight disability	Very early supported discharge (VESD) 0 (0-1) 3 months 0 (0-1) 12 months 3 (2-6) 3 months 2(1-5) 12 months	Control 0 (0-1) 3 months 0 (0-1) 12 months 4.5 (3-9) 3 months 4 (1-7) 12 months	0 (3 months) P:0.797 0 (12 months) P:0.851 1.5 point lower P: 0.013 (3 mos) 1 points lower P: 0.071 (6 mos)	⊕⊕○○ Low ^{a,b}	The evidence suggests Very Early Supported Discharge (VESD) with 4 weeks of home rehabilitation provided by a multidisciplinary stroke team results in a large increase at 3 months in improving functional independence (but the effect was not seen at 12 months compared to the control group)
Sports and Recreation KOOS Scale 0-100 MCID = 6 points Lower scores indicating worse function	1 RCT (2021) 206 people	website + SMS + Home exercise -16.9 (22.2)	website only -8.4 (22.8)	8.5 points lower (-15.3 to -2.9) p: 0.004	⊕⊕○○ Low ^{a,b}	The intervention group (Website + SMS + Home exercise 3x a week) may result in little to no difference improving functional independence compared to the control group
Functional Performance Stroke Impact Scale ADL Scale 0-100 Higher scores indicating less difficulty	1 RCT (2024) (185 participants)	COMPASS 11.1 (6.4-15.8)	Usual Care 12.9 (8.0- 17.8)	1.8 points lower (-8.6 to 5)	⊕⊕○○ Low ^{a,b}	In home occupational therapy (OT) visits including facilitation of home modifications and strategy training vs usual care may result in little to no difference in improving functional performance
Short Form Survey-36 (encompassing 8 domains which includes physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional, and mental health) MCID = 10 points <i>higher scores – better health status</i>	1 RCT (2025) 112 elderly patients with chronic knee OA	Monthly follow up 7.51±9.24	Semi follow up 1.48±10.19	4.04 points higher P<0.01	⊕⊕○○ Low ^{a,b}	Patients who were followed up monthly may result in a large increase vs usual care in improving functional performance but the evidence is uncertain
PASE (physical activity levels) Scale: 0-400 MCID = 6 points Higher scores indicating more activity	1 RCT (2021) 206 people	website + SMS + Home exercise -14 (67.1)	website only -9.6 (78.7)	9.6 points lower (-29.8 to 10.5). p: 0.35	⊕⊕○○ Low ^{a,b}	The intervention group (Website + SMS + Home exercise 3x a week) may result in little or no difference in improving functional performance/activity

Outcomes	Basis	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Follow-up and monitoring	No Follow up and monitoring	Mean Difference (95% CI)		
						levels compared to the control group
Patient-Specific Functional Scale mean ability score for goals 1, 2, and 3 Scale 0–10, 10 is best Higher scores better	1 RCT (2023) 374 adults with rheumatic and MSK diseases	BRIDGE intervention At 12 months 5.4 (2.2)	Usual care At 12 months 5.3 (2.2)	At 12 months 0.1 points higher (-0.5, 0.8) p: 0.703	⊕⊕○○ Low ^{a,b}	The BRIDGE intervention which comprised structured goal setting, action planning, motivational interviewing, digital self-monitoring of goal progress, and individual follow-up support after discharge according to patients' needs and available resources in primary healthcare may result in little to no difference vs usual care in improving functional performance
Self-Efficacy/Worth Moorong Self Efficacy Scale Scale 1-7 MCID: 6 weeks = 8 30 weeks = 14 Higher score, better Generalized Self Efficacy Scale Scale 1-4 MCID: 6 weeks = 3 30 weeks = 5 Higher score, better	1 RCT (2018) 81 individuals	CBT 4.68 (6 weeks) 3.39 (30 weeks) 1.38 (6 weeks) 1.37 (30 weeks)	No follow up 0.92 (6 weeks) -1.09 (30 weeks) 0.00 -0.44	3.76 points higher (6 weeks) 4.47 points higher (30 weeks) (-1.61, 10.56) p: 0.1492 1.38 higher (-0.01, 2.77) p: 0.0517 1.81 higher (-0.51, 4.13) p: 0.1254	⊕⊕○○ Low ^{a,b}	Cognitive Behavior therapy with close follow up may result in little to no difference vs those who were not followed up in improving self-efficacy at 6 and 30 weeks
Arthritis Self-Efficacy Scale (ASES) Pain Function Scale 1-10 higher scores indicating greater self-efficacy Self-Efficacy Exercise Scale 0-90	1 RCT (2021) 206 people	Website + SMS+ PT -0.7 (2.6) -0.3 (2.2) 4.8 (23.5)	Website -0.0 (1.9) -0.2 (1.3) 6.2 (19.5)	0.6 lower (-1.3 to 0.0) P: .046 0.0 lower (-0.4 to 0.5) P: .89 2.4 lower (-7.9 to 3.1) P: .39	⊕⊕○○ Low ^{a,b}	The intervention group (Website + SMS + Home exercise 3x a week) may result in little to no difference in improving self-efficacy for pain, function and exercise compared to the control group

Outcomes	Basis	Absolute Effects			Certainty of Evidence	Plain Language Interpretation
		Follow-up and monitoring	No Follow up and monitoring	Mean Difference (95% CI)		
Greater scores indicating greater self-efficacy						
Patient Satisfaction IHOPE Satisfaction Scale 1-5 Higher scores, greater satisfaction	1 RCT (2023) 103 Mild stroke	Very early supported discharge (VESD) 1.32 (1.01 to 1.63)	Control 0.80 (0.49 to 1.11)	0.52 higher (0.08 to 0.96) P <0.05	⊕⊕○○ Low ^{a,b}	Very early supported discharge (VESD) may result in little to no difference at 3 and 12 months in proving patient satisfaction compared to the control group
Satisfaction with life scale (SWLS) Scale 1-7 Higher score, greater perceived QOL	1 RCT (2018) 81 individuals	0.98 (6 weeks) 1.10 (30 weeks)	0.12 (6 weeks) 1.26 (30 weeks)	0.85 higher (6 wk) (-1.31,3.01) p: 0.4391 0.16 lower (30 wk) (-3.74,3.43) p: 0.9322	⊕⊕○○ Low ^{a,b}	Cognitive Behavior therapy with close follow up may result in little to no difference vs those who were not followed up in improving life satisfaction at 6 and 30 weeks

CI: confidence interval; MD: mean difference

Explanations

- Lack of blinding
- The study was done in a setting with a resource-rich health system.

RECOMMENDATIONS FROM OTHER GROUPS

Guidelines advocate structured follow-up despite limited randomized evidence. Major stroke guidelines (World Stroke Organization¹⁶⁸ and UK National Clinical Guideline for Stroke¹⁶⁹) recommend routine reassessment at defined time points and ongoing monitoring to detect complications and address physical, psychological and social needs. The INESSS-ONF guideline for TBI¹⁷⁰ emphasizes supported employment with job retention and follow-up. These recommendations are based largely on observational data, expert consensus and small trials.

Table 18. Recommendations from other groups (Q9)

Name of Group (Date)	Recommendation	Certainty of Evidence, Strength of Recommendation
Global Stroke Services Guidelines and Action Plan (World Stroke Organization 2019) ¹⁶⁸	The roadmap emphasizes that stroke survivors returning to the community should have regular and ongoing monitoring and follow-up with healthcare providers to assess recovery, prevent deterioration, maximize functional and psychosocial outcomes and improve quality of life Key performance indicators include documentation of a comprehensive follow-up check (e.g., post-stroke checklist) and evidence of a follow-up appointment with a member of the	Evidence levels cited (A–C) reflect observational studies; randomized evidence for long-term follow-up was limited.

Name of Group (Date)	Recommendation	Certainty of Evidence, Strength of Recommendation
	stroke team at ~6 weeks post discharge. The guideline encourages reassessment of patients whose functional status declines even months after stroke and recommends routine monitoring for post-stroke fatigue, depression and cognitive impairment	
National Clinical Guideline for Stroke (UK Stroke Guideline 2023) ¹⁶⁹	Recommends that structured needs assessments be performed at around 6 months after stroke and at least annually, covering physical, psychological and social needs including relationships, leisure, work and finances. Such reviews should be used to guide ongoing rehabilitation and community support	The recommendations are consensus-based but supported by observational studies and some RCTs of community interventions.
INESSS-ONF Clinical Practice Guideline for Moderate to Severe Traumatic Brain Injury (2015) ¹⁷⁰	For adults with TBI, the guideline recommends supported employment programs that include job placement, on-site training, advocacy and job retention and follow-up. The guideline states that vocational rehabilitation should provide a comprehensive pre-injury history, assessment of current capacities, evaluation of vocational needs and identification of environmental factors, with verbal and written advice about the return to work including arrangements for review and follow-up.	These recommendations are based on observational studies and small RCTs demonstrating that resource facilitation and supported employment improve employment and community participation outcomes
VA/DoD Clinical Practice Guideline for Rehabilitation of Individuals with Lower Limb Amputation (2024) ¹⁷¹	Recommends early peer support visits for patients following amputation and notes that follow-up peer visits can be conducted via phone, email, text messaging or telehealth to broaden access	Evidence for peer support includes one quasi-experimental study; randomized evidence is limited.

ONGOING STUDIES AND RESEARCH GAPS

There is a paucity of high-quality, long-term studies looking at the impact of follow and monitoring in musculoskeletal conditions, cost effectiveness analysis and research on diverse population and intervention types. There are also varied tools of measurement for the outcome of community reintegration making it hard to do a meta-analysis

ADDITIONAL CONSIDERATIONS FOR EVIDENCE TO DECISION (ETD) PHASE

Resource implications (Cost / Cost Effectiveness)

Evidence on the cost-effectiveness of structured follow-up interventions for individuals with mild to moderate physical disability remains limited and variable.

International studies suggest that while structured or multidisciplinary follow-up may increase short-term program costs (due to personnel time, coordination, and technology requirements), it may also reduce long-term expenditures by preventing complications, hospital readmissions, and loss of functional independence.

There are currently no published local cost-effectiveness studies evaluating structured follow-up or monitoring interventions for persons with mild to moderate physical disability in the Philippines. If such data exist, they are likely unpublished or limited to institutional experiences.

The cost of implementing structured follow-up programs—including professional fees for rehabilitation medicine specialists, and the resources needed to establish and sustain multidisciplinary teams—may be prohibitive in many settings, particularly in resource-constrained public health facilities.

Stakeholder values, preferences, and acceptability

The limited number of rehabilitation medicine specialists, including doctors, physical therapists, occupational therapists, and speech pathologists, in the Philippines underscores the need for innovative strategies to improve access to rehabilitative care. The integration of technology-based interventions may serve as a viable approach to address these gaps. Embedding follow-up and monitoring mechanisms within existing primary care or community-based rehabilitation frameworks and optimizing the roles of allied health professionals through telehealth platforms, could enhance continuity of care while mitigating associated costs.

Equity and feasibility

No studies were found reporting on equity and feasibility.

4.10 Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

RECOMMENDATION 10.1

Among adults with severe physical disability, we **suggest the provision of** referral and specialist care management in the primary care setting.

Weak recommendation, Low certainty of evidence

RECOMMENDATION 10.2

Among children with severe physical disability, we **suggest the provision of** referral and specialist care management in the primary care setting.

Weak recommendation, Very low certainty of evidence

Considerations

- Despite limitations in the evidence base, the panel judged that the severity and complexity of disability warrant referral and specialist involvement to prevent complications, support appropriate clinical decision-making, and guide care coordination across the continuum from primary to higher levels of care. Even modest functional gains were considered meaningful in this population, particularly for children, given their implications for long-term development and caregiving demands. However, substantial concerns were raised regarding feasibility, cost, workforce availability, geographic inequities, and the sustainability of specialist services within primary care, including the readiness of teleconsultation and referral infrastructure. Balancing the potential benefits against the low certainty of evidence and contextual constraints related to cost, equity, and implementation capacity, the panel issued a weak recommendation suggesting referral and specialist care management for persons with severe physical disability in the primary care setting.

Key Findings

- Two non-randomized controlled trials^{172,173} and two prospective cohort studies^{174,175} involving 883 adults after stroke with substantial motor limitation and advanced Parkinson's Disease, and 150 children with severe motor impairment due to cerebral palsy compared specialist rehabilitation care management versus non-specialist or usual management.
- Evidence demonstrates that specialist care management may provide improvement in functional independence and self-care among adults after stroke with substantial motor limitation and advanced Parkinson's Disease.

- Evidence demonstrates that specialist care management may provide improvement in motor function but may provide little to no effect on improving communication, speech production, and caregiver anxiety in children with severe motor impairment due to cerebral palsy but evidence is very uncertain.
- Certainty of evidence was low in the adult population and very low in the pediatric population.

INTRODUCTION

Severe physical disability resulting from musculoskeletal and neurologic disorders is a major cause of long-term functional dependence globally. The World Health Organization (WHO) estimates that 1.3 billion people or 16% of the world's population live with significant physical disability with many requiring assistive technologies for mobility, self-care, communication, and daily functioning.¹⁷⁶ In the Philippines, the 2020 Census of Population and Housing reported that over 8.4 million Filipinos or 8.7% of population have at least one functional impairment.¹⁷⁷ The National Disability Prevalence Survey and WHO estimates further indicate that about 12% of Filipinos aged 15 years or older experience severe disability.¹⁷⁷ Among children, the UNICEF estimates that 1 in 7 Filipino children or around 5 million, live with disabilities that affect learning, mobility, and participation.¹⁷⁸ Given the complex needs for persons severe disability, the WHO recognizes that rehabilitation and multidisciplinary management within primary care are essential to optimize functioning, prevent complications, and improve independence.¹⁷⁹ This guideline question evaluates whether specialist care management should be recommended over non-specialist management for individuals with severe physical disability in the primary care setting.

REVIEW METHODS

A systematic search was conducted in MEDLINE via PubMed supplemented by relevant citation searching and was completed on December 11, 2025. The search strategy employed structured medical subject heading terminologies including *stroke*, *advanced Parkinson's Disease*, *cerebral palsy*, *rehabilitation*, *community*, *primary care*, and *specialist management*. The detailed search strategy is presented in Appendix 2. A total of 461 citations were screened. Randomized controlled trials and observational studies that compared specialist care management versus non-specialist or primary care management of adults and children with severe physical disability were retrieved and assessed for eligibility. Severe physical disability is operationally defined as inability to perform activities and community participation even with assistance.¹⁸⁰ Studies published more than 10 years (2014 or earlier), conference abstracts, full articles that were not accessible, and non-English publications were excluded. The evidence base for this review comprised one non-randomized controlled trial,¹⁷² one pragmatic quasi experimental study,¹⁷³ and two prospective cohort studies.^{174,175} The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram outlining identification, screening, and inclusion processes is presented in Appendix 2. Risk of bias (RoB) for each included study was assessed using the Risk Of Bias in Non-randomized Studies of Interventions (ROBINS-I) Tool. RoB for individual studies was graphically presented using a traffic light plot and domain-level assessments were summarized in a RoB graph (<https://mcguinlu.shinyapps.io/robvis/>)¹⁸¹. RoB visualizations are presented in Appendix 5. Effectiveness of interventions was reported in terms of odds ratio for dichotomous outcomes and either mean differences (MD) or standardized mean differences (SMD) for continuous outcomes. Meta-analysis in random-effects model was conducted when at least two studies reported sufficiently similar outcomes. Pooled effect estimates with their corresponding 95% confidence interval (95% CI) were visualized using forest plots. Risk of bias, inconsistency, indirectness, imprecision, and publication bias were evaluated in accordance with the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) methodology Evidence profiles were generated using the GRADEpro (<https://www.gradepr.org>).¹⁰⁰

RESULTS

Four studies from low¹⁷³ and high-income^{172,174,175} settings evaluated specialist rehabilitation management versus non-specialist or primary care management in 1,033 adults^{172,174,175} and children¹⁷³ with severe physical disability. The characteristics of included studies are summarized in Appendix 3.

Fleisher et al. (2022)¹⁷² studied 384 homebound adults in the United States with advanced Parkinson's disease (Hoehn & Yahr [HY] 3 to 5) who received specialist management in an outpatient Center of Excellence for Parkinson's Disease compared with Interdisciplinary Home Visits for Parkinson's Disease (IN-HOME-PD) focused on symptom management, safety, and psychosocial needs delivered by program coordinator and nurses. The Parkinson's Foundation Center of Excellence at Rush University operates under a model of care in which services are led or supervised by movement disorders and rehabilitation medicine specialists, ensuring that patients receive expert, subspecialty-level management consistent with international standards for advanced Parkinson's disease care. Only a subset of 85 patients with severe disabling disease bed or wheelchair confined patients (HY 4 to 5) was included in this review. Quality of life, functional independence, and self-care were measured using the Parkinson's Disease Questionnaire (PDQ) 39 over 12 months in a non-randomized controlled design.

López-Liria et al. (2016)¹⁷⁴ conducted a prospective comparison of specialized outpatient hospital physiotherapy and home-based primary-care rehabilitation in Spain for 145 community-dwelling adult patients after stroke with substantial functional limitation (Barthel Index [BI] rating <40 at baseline) assessing change in functional independence and mobility (BI) at baseline and program completion after 10 to 12 weeks.

Thompson et al. (2025)¹⁷⁵ performed a secondary analysis of the REGIONS Care prospective stroke cohort in New Zealand including 2,379 adults after stroke. Exposure to community multidisciplinary stroke rehabilitation was compared with no structured rehabilitation or actual service routine practice in the primary care setting. Only a subset of 653 patients with the most severe physical impairment defined as not fully verbal or orientated, unable to walk without assistance, and unable to lift both arms (Six Simple Variable [SSV] 0 rating) was included in this review. Functional independence and self-care were measured using the Health-Related Quality of Life (HRQoL) European Quality of Life 5-Dimensions 3-Levels (EuroQoL 5D 3L) over a 12-month follow-up period.

Finally, Karim et al. (2021)¹⁷³ implemented a pragmatic quasi-experimental study of 150 children with cerebral palsy with severe motor impairment (Gross Motor Function Classification System [GMFCS] III to IV) in rural Bangladesh. Children enrolled in a multidisciplinary specialist-directed caregiver-led, community-based early-intervention programme delivered through Shishu Shorgo centres were compared with registry peers receiving only basic advice from community-based clinics. with outcomes including gross motor function (Gross Motor Function Measure [GMFM] 66), communication (Communication Function Classification System [CFCS]), speech production (Viking Speech Scale [VSS]), and caregiver psychological distress (Depression Anxiety Stress Scale [DASS] Short Form 21) over a 12-month follow-up period.

Overall, these studies provide real-world evidence on neuromuscular conditions, including stroke with substantial functional limitation, advanced Parkinson's Disease, and cerebral palsy with severe motor impairment across low- and high-income health systems, direct enough to inform this guideline question on specialist versus non-specialist management of persons with severe physical disability in the primary care setting.

Efficacy outcomes

Improvement in functional independence (3 studies, n=883, Low certainty of the evidence)

Evidence from one non-randomized clinical trial¹⁷² and two prospective cohort studies^{174,175} involving 85 adults with advanced Parkinson's Disease and 798 adults severe motor impairment after stroke demonstrated a clinically significant improvement in functional independence favoring specialist care management (SMD 0.75, 95% CI 0.44 to 1.06, I²=68%). Among patients with severe Parkinson's Disease, functional independence was measured using the PDQ 39 (MD -11.13 points, 95% CI -21.17 to -1.09) while among patients with stroke, functional independence was evaluated using BI (MD 17.94 points, 95% CI 8.98 to 26.90) and EuroQoL 5D 3L (MD 0.32 index points, 95% CI 0.27 to 0.37). All assessments consistently demonstrated clinically significant improvement of functional independence in favor of specialist care management. Minimal clinically significant differences (MCID) were ≥5 points for PDQ 39, ≥10 points for BI, and ≥0.1 index points for EuroQoL 5D 3L. The certainty of evidence was low.

Improvement in self-care (1 study, n=653, Low certainty of evidence)

Evidence from one prospective cohort study¹⁷⁵ involving adults after stroke with severe motor impairment demonstrated a clinically significant improvement in self-care, measured using the EuroQoL 5D 3L subscale (MD 0.27 index points, 95% CI 0.22 to 0.32). The certainty of evidence was low.

Improvement in motor function (1 study, n=150, Very low certainty of evidence)

Evidence from one prospective cohort study¹⁷³ involving children with severe motor impairment from cerebral palsy demonstrated that specialist care management may probably improve motor function measured using GMFM 66 (MD 8.67, 95% CI -0.73 to 18.08) but the evidence was very uncertain. MCID for GMFM 66 was ≥5 points. Certainty of evidence was very low downgraded for imprecision attributed to not meeting the optimal information size (OIS).

Improvement in communication (1 study, n=150, Very low certainty of evidence)

Evidence from one prospective cohort study¹⁷³ involving children with severe motor impairment from cerebral palsy demonstrated that specialist care management may provide little to no effect on improving communications (CFCS Level I and II OR 1.35, 95% CI 0.56 to 3.26) but the evidence was very uncertain. MCID for improvement in communication was 100 more per 1000. Certainty of evidence was very low downgraded for imprecision due to wide confidence interval and to not meeting the OIS.

Improvement in speech production (1 study, n=150, Very low certainty of evidence)

Evidence from one prospective cohort study¹⁷³ involving children with severe motor impairment from cerebral palsy demonstrated that specialist care management may provide little to no effect on improving speech production (VSS Levels I and II OR 1.28, 95% CI 0.50 to 3.26) but the evidence was very uncertain. MCID for improvement in communication was 100 more per 1000. Certainty of evidence was very low downgraded for imprecision due to wide confidence interval and to not meeting the OIS.

Reduction in caregiver anxiety (1 study, n=150, Very low certainty of evidence)

Evidence from one prospective cohort study¹⁷³ involving children with severe motor impairment from cerebral palsy demonstrated that specialist care management may provide little to no effect on reducing caregiver anxiety measured using DASS Short Form 21 (MD -

0.66, 95% CI -2.14 to 0.83) but the evidence was very uncertain. MCID for DASS Short Form 21 was ≥ 3 points. Certainty of evidence was very low downgraded for imprecision due to wide confidence interval and to not meeting the OIS.

Safety outcomes

No safety outcomes were reported.

Certainty of the evidence

The certainty of evidence was low in the adult population and very low in the pediatric population.

Table 19. Summary of Findings (Q10, Adult Population)

Summary of findings (SMD, Risk of bias)							
Outcome	Basis (No. of studies, study design, total participant s)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Specialist care	Non- specialist care	Absolute difference (95% CI)		
Improvement in functional independence ^{172,174,175}							
PDQ 39 Scale: 0-100 Lower is better MCID ≥5 points	3 Non- randomize d studies (n=883)	-	58.5 ±23.5	69.63 ±23.45	SMD 0.75 units higher (0.44 higher to 1.06 higher)	⊕⊕○○ Low	Specialist care management may provide improvement in functional independence when compared with non- specialist care management.
EuroQoL 5D3L Index scale: 0-1.0 Higher is better MCID ≥0.1 index points			0.51 ±0.32	0.19 ±0.33			
Barthel Index Index scale: 0-100 Higher is better MCID ≥10 points			76.58 ±21.16	58.64 ±31.89			
For all scales, SMD MCID ≥0.2 units							
Improvement in self-care ¹⁷⁵							
EuroQoL 5D3L Index scale: 0-1.0 Higher is better MCID ≥0.1 index points	1 Non- randomize d study (n=653)	-	0.57 ±0.29	0.30 ±0.37	MD 0.27 points higher (0.22 higher to 0.32 higher)	⊕⊕○○ Low	Specialist care management may provide improvement in self-care when compared with non- specialist care management.

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Table 20. Summary of Findings (Q10, Pediatric Population)

Outcome	Basis (No. of studies, study design, total participant s)	Relative Effect (95% CI)	Absolute Effects (95% CI)			Certainty of Evidence	Plain Language Interpretation
			Specialist care	Non- specialist care	Absolute difference (95% CI)		
Improvement in motor function ¹⁷³							
GMFM* Index scale: 0-100 Higher is better MCID ≥5 points	1 Non- randomize d study (n=150)	-	9.24 ±20.23	2.27 ±21.92	MD 8.67 points higher (0.73 lower to 18.67 higher)	⊕○○○ Very low ^a	Specialist care management may provide improvement in motor function when compared with non-specialist care management but the evidence is very uncertain.
Improvement in communication ¹⁷³							
CFCS* No. of patients with good communicati on (CFCS Levels I to II) Higher is better MCID ≥ 100 per 1000	1 Non- randomize d study (n=150)	OR 1.35 (0.56 to 3.26)	31/77 (40.3%)	34/73 (46.6%)	75 more per 1000 (from 138 fewer to 274 more)	⊕○○○ Very low ^{a,b}	Specialist care management may provide little to no effect on improving communication when compared with non- specialist care management and the evidence is very uncertain.
Improvement in speech production ¹⁷³							
VSS* No. of patients with good communicati on as VSS Levels I to II Higher is better MCID ≥ 100 per 1000	1 Non- randomize d study (n=150)	OR 1.28 (0.50 to 3.26)	15/77 (19.5%)	28/73 (38.4%)	60 more per 1000 (from 146 fewer to 286 more)	⊕○○○ Very low ^{a,b}	Specialist care management may provide little to no effect on improving speech production when compared with non-specialist care management and the evidence is very uncertain.
Reduction in caregiver anxiety ¹⁷³							
DASS 21* Scale 0-21 Lower is better MCID ≥ 3 points	1 Non- randomize d study (n=150)	-	2.62 ±3.22	3.15 ±3.36	MD 0.66 points lower (2.14 lower to 0.83 higher)	⊕○○○ Very low ^{a,b}	Specialist care management may provide little to no effect on improving speech production when compared with non-specialist care management and the evidence is very uncertain.

* Effect estimates pooled for subgroups according to age stratified to <5 years and ≥5 years

Explanations

- a. Optimal information size not met.
- b. The confidence interval is wide.

Table 21. Recommendations from other groups (Q10)

Group or Agency	Recommendation	Strength of Recommendation Certainty of Evidence
NICE Stroke Rehabilitation in Adults 2023 ¹⁸²	People who need rehabilitation after stroke should receive it from a specialist stroke service in a stroke unit and subsequently from a specialist stroke team in the community or directly from a specialist stroke team in the community if they have left hospital through early supported discharge (where people in an inpatient setting are offered early discharge to continue rehabilitation at home) or in a level 1 or 2 specialist inpatient neurorehabilitation unit and subsequently from a specialist stroke team in the community.	Strong recommendation for specialist multidisciplinary stroke rehabilitation
Australian Stroke Foundation Living Clinical Practice Guidelines Recommendations for Home-based Rehabilitation ¹⁸³	Where appropriate home-based coordinated stroke services are available, early supported discharge services should be offered to stroke patients with mild to moderate disability.	Strong recommendation Moderate certainty of evidence
	Home-based rehabilitation may be considered as a preferred model for delivering rehabilitation in the community. Where home rehabilitation is unavailable, stroke patients requiring rehabilitation should receive center-based care.	Weak recommendations Low certainty of evidence
	Telehealth services may be used as an alternative approach to delivering rehabilitation, especially for patients who cannot access specialist rehabilitation in the community. It may also be used as an adjunct to in-person therapy. Delivering specific interventions via telehealth should only be considered for those that have demonstrated benefits.	Weak recommendations Low certainty of evidence
APTA Clinical Practice Guideline: Physical Therapist Management of Parkinson's Disease ¹⁸⁴	Physical therapist services should be delivered within an integrated care approach to reduce motor disease severity and improve quality of life in individuals with PD	Strong recommendation Strong evidence quality
	Integrated care approaches for individuals with PD involve a variety of professionals, which may include but are not limited to physical therapists or movement disorder specialists, neurologists, rehabilitation medicine providers, nurses, social workers, speech therapists, occupational therapists, and others.	
Parkinson's Foundation Rehabilitation Medicine Task Force ¹⁸⁵	Rehabilitative services should be implemented across all stages of disease and integrated with other interventions (e.g., medications, surgery), from early stages (which can be as soon as the time of diagnosis) to advanced disease. Services implemented should involve all or any combination of the rehabilitation team disciplines according to the specific changing needs of the person with PD across all stages of the disease.	Expert-based consensus Low-moderate certainty

Group or Agency	Recommendation	Strength of Recommendation Certainty of Evidence
	Rehabilitative services can be provided in a variety of settings including: outpatient therapy locations, day rehabilitation programs, inpatient hospital programs, community-based programs, at home, and long-term care facilities, as well as in single-discipline (e.g., physical therapy alone) or multidiscipline (e.g., physical therapy and occupational therapy) settings that take into account differences in patient needs and resource availability.	
Physical Academy of Rehabilitation Medicine Clinical Practice Guideline on Stroke Rehabilitation ¹⁸⁶	PARM recommends that stroke survivors living in the community who have difficulty with activities of daily living, instrumental activities of daily living, and mobility should have access to therapy, as well as evaluation, where appropriate, to improve or prevent deterioration in activities of daily living.	Level IIA, Inconsistent low volume evidence
	PARM suggests that contact with community resources be offered through formal or informal referral.	Insufficient evidence
Canadian Spinal Cord Injury Practice Guideline Recommendations for Community-based Rehabilitation ¹⁸⁷	Clinicians should conduct regular and accessible interdisciplinary follow-up to determine progress towards functional goals.	Level C recommendation

ONGOING STUDIES AND RESEARCH GAPS

At present, there are no registered or ongoing RCTs that directly compare specialist-directed multidisciplinary rehabilitation versus non-specialist or usual community-based rehabilitation for persons with severe physical disability.

ADDITIONAL CONSIDERATIONS FOR THE EVIDENCE-TO-DECISION PHASE

Resource Implications (Cost / Cost Effectiveness)

Community Stroke Rehabilitation Teams (CSRT) provide interdisciplinary, community-based specialist rehabilitation services designed specifically for adults recovering from stroke. CSRT programs implements coordinated, specialized stroke rehabilitation delivered in the patient's home or community, with the goal of improving functional independence, preventing disability progression, and reducing the need for institutional care.¹⁸⁸ CSRT provide structured, home-based interdisciplinary rehabilitation for stroke survivors who remain with significant disability after hospital discharge.¹⁸⁹ A cost-effectiveness study by Allen et al. (2019)¹⁹⁰ demonstrates that CSRT is both more effective and less costly than usual care across a lifetime horizon. Using a public payer perspective, CSRT generated a net monetary benefit of US\$ 43,655 over usual care translating to 1.65 additional quality-adjusted life-years (QALYs) while reducing lifetime healthcare costs by US\$ 17,255 per patient. These savings arise primarily from preventing long-term care placement, reducing hospitalizations, and lowering reliance on paid home-support services which are major cost drivers for disabled-at-home patients. Adapting

these figures to the Philippine context, an estimated PhP 350,000 to PhP 450,000 lifetime saving per patient with CSRT. Even at conservative willingness-to-pay thresholds commonly applied locally PhP 120,000 to PhP 150,000 per QALY¹⁹¹, CSRT remains highly cost-effective, with a net monetary benefit of PhP 580,000 to PhP 800,000 per patient. In a health system where formal long term care access is limited and caregiver burden is substantial, community-based rehabilitation may produce even greater real-world value by preventing disability progression and reducing avoidable hospital utilization. These findings support the national adoption of CSRT-like home-based rehabilitation for disabled stroke survivors, integrated within primary care networks and community rehabilitation programs. Investing in CSRT represents a cost-saving, equity-enhancing strategy aligned with universal health coverage goals, offering substantial health gains while reducing long-term financial burden on the Philippine healthcare system.

Stakeholder values, preferences and acceptability

In the Specialist Parkinson's Integrated Rehabilitation Team Trial (SPIRiT) by Gage et al. (2014),¹⁹² acceptability of the specialist community-based multidisciplinary rehabilitation was high among people with Parkinson's disease, their live-in carers, and participating staff. Patients valued the home-based delivery, which reduced travel burden and anxiety and allowed advice to be tailored to real-life contexts. Participants consistently reported that multidisciplinary team members were knowledgeable, approachable, and attentive, and that the intervention improved their understanding of Parkinson's disease and confidence in self-management, even when physical improvements were modest or short-lived. Carers appreciated being included in assessments and goal-setting, reporting that this recognition and education helped them cope better with caregiving demands. Ongoing support from Parkinson's Care Assistants was perceived as particularly helpful in reinforcing multidisciplinary team advice and maintaining routines after the formal rehabilitation period ended. Multidisciplinary team professionals viewed integrated team working and Parkinson's Care Assistants involvement as appropriate and beneficial, though they noted challenges related to time, coordination, and long-term sustainability. Overall, acceptability exceeded the magnitude and durability of measured functional gains.

Equity and feasibility

From an equity perspective, geographic barriers to accessing facility-based rehabilitation disproportionately affect persons with disability living in rural and geographically isolated and disadvantaged areas. Collantes et al (2021) reported on the unequal distribution of post-stroke rehabilitation facilities in the country where majority of rehabilitation facilities are concentrated in Metro Manila and other regions in Luzon.¹⁹³ Strengthening primary and community-based rehabilitation care with provisions for a specialist-led multidisciplinary rehabilitation strategy may address this inequity.

From a feasibility perspective, local studies show that community-based rehabilitation, including physical therapist-coordinated models, can be implemented using existing primary care networks with physician specialists input provided through teleconsultation. Teleconsultation may also address the lack of physical and rehabilitation medicine specialists in the country particularly in rural areas.^{183,194} Community-based specialist rehabilitation may be feasible, scalable, and equity-promoting model within the Philippine health system.

In the SPIRiT trial,¹⁹² specialist multidisciplinary team rehabilitation delivered in the community was shown to be operationally feasible, with successful recruitment, coordinated home visits, and acceptable intervention fidelity, although attrition increased over time because of disease progression and follow-up burden. Feasibility depended on strong coordination by a specialist nurse, regular multidisciplinary team communication, and access to rehabilitation professionals, while the use of trained care assistants helped extend specialist input but required supervision and clear role delineation. When adapted to the Philippine

primary care context, feasibility would likely depend on task-sharing and task-shifting, given shortages of neurologists and rehabilitation medicine specialists. A model anchored in primary care physicians, nurses, and barangay health workers, with periodic specialist outreach or telehealth support, may improve practicality. Home-based delivery aligns with geographic and financial barriers common in rural and underserved areas but would require investment in workforce training, referral networks, and coordination mechanisms. Overall, multidisciplinary team-style care is feasible in principle in Philippine primary care, but simplified team structures and sustained system support would be essential for scale-up.

5. Research Implications/Gaps

Across the rehabilitation topics reviewed, several consistent and critical research gaps were identified. There is an absence of direct comparative studies between home-/community-based and facility-based approaches for function-based screening, activities of daily living (ADL) retraining, mobility training, and task-oriented training, with no studies involving children for function-based screening and very limited pediatric evidence across other interventions. Local evidence is particularly lacking: no Philippine studies were found on effectiveness, cost-effectiveness, equity, feasibility, acceptability, or stakeholder values for function-based screening, caregiver training with assistive technologies, task-oriented training, ADL retraining, mobility training, or structured follow-up interventions. Existing evidence is further constrained by narrow populations (predominantly post-stroke), unclear or non-standardized intervention definitions (e.g., task-oriented training), limited reporting on safety and adverse events, and insufficient attention to patient- and caregiver-centered outcomes such as satisfaction, caregiver burden, social participation, and community reintegration. Methodological limitations include heterogeneous outcome measures, short follow-up periods, and a lack of long-term and implementation-focused studies, hindering synthesis and applicability to primary care. Overall, there is a strong need for locally relevant effectiveness, economic, and implementation research within the Philippine primary care context to inform future guideline updates and ensure equity, feasibility, and sustainability of rehabilitation interventions.

6. Dissemination and Implementation

The dissemination of the guideline will be done after the approval from the National Practice Guidelines Clearinghouse of the Department of Health. The dissemination platform includes the regular national forum of professional societies like Philippine Society of Public Health Physicians (PSPHP), Philippine Academy of Rehabilitation Medicine (PARM), Philippine Academy of Occupational Therapists (PAOT), Philippine Academy of Family Physicians (PAFP), Association of Municipal Health Officers of the Philippines (AMHOP), Philippine Pediatric Society (PPS), Philippine Physical Therapists Association (PPTA), Philippine Association of Speech Pathologists (PASP), Philippine Society of General Internal Medicine (PSGIM), and the DOH-organized research fora.

The SC recommends the following dissemination indicators:

1. Number of guideline presentation
2. Number of attendees
3. Feedback of the participants on the presented guidelines

To monitor the provision of community-based or home-based mobility training with caregiver training among children with apparent mild to moderate physical disability in

the primary care setting, the guideline development group proposes the indicators specified in Table 22. Only Recommendation 7.2 was selected for monitoring because it is the sole strong recommendation in the guideline and represents the standard of care for eligible patients, given the clear balance of benefits over harms.

Table 22. Proposed Indicators for Recommendation 7.2

Indicator	Definition	Data source	Frequency	Purpose
Proportion of eligible children enrolled in community- or home-based mobility training with caregiver training	Number of children with apparent mild to moderate physical disability who received mobility training with documented caregiver training ÷ total number of eligible children identified in primary care	Primary care and barangay health records	Quarterly	Assesses reach and uptake of the intervention
Proportion of caregivers who completed prescribed mobility training sessions	Number of caregivers completing ≥80% of prescribed sessions ÷ number of caregivers enrolled	Therapist logs, caregiver attendance sheets	Quarterly	Measures feasibility of caregiver training
Proportion of children demonstrating improvement in mobility function	Number of children with ≥1-level improvement in a standardized mobility measure (e.g., GMFCS level, PEDI mobility domain, or locally adapted mobility scale) within 6 months	Clinical assessment forms	Baseline and 6 months after baseline	Evaluates effectiveness of the intervention

7. Applicability Issues

Implementation of function-based rehabilitation in primary care may be constrained by limited human resources, particularly shortages of rehabilitation professionals and insufficient training of primary care providers and caregivers in function-based approaches. Fragmented service delivery and weak referral pathways between community, primary care, and specialist services can hinder continuity of care. Resource and infrastructure limitations, including lack of assistive technologies, space for therapy, and funding at the LGU level, may reduce feasibility, especially in rural and underserved areas. Limited local evidence, including the absence of cost-effectiveness, safety, and implementation data, may reduce policy prioritization and provider confidence. Variability in stakeholder awareness, acceptability, and caregiver capacity, alongside competing caregiver responsibilities, may further affect uptake and adherence. These barriers to implementation were identified from responses to the

evidence-to-decision framework provided by the members of the guideline panel and from discussions during the en banc guideline panel meeting.

Implementation is supported by the integration of rehabilitation into existing primary care and community health platforms, including barangay health services and home-based care models. Caregiver involvement and training can extend service reach, improve continuity, and reduce reliance on facility-based care. Function-based approaches align with patient-centered, goal-oriented care, which may enhance acceptability among children, families, and providers. Standardized functional assessment tools, clear care pathways, and structured follow-up mechanisms can improve consistency and monitoring of outcomes. Finally, local capacity-building, supportive LGU leadership, and policy alignment with community-based rehabilitation principles can facilitate scale-up and sustainability. Similarly, these implementation strategies were identified from responses to the evidence-to-decision framework provided by the members of the guideline panel and from discussions during the en banc guideline panel meeting.

8. Updating of the Guidelines

This practice guideline will undergo updating at five-year intervals, or earlier should substantial new evidence become available. An evidence surveillance process will be implemented to identify relevant new studies, particularly high-quality randomized controlled trials, which may lead to changes in effect estimates or certainty of evidence, safety signals, or significant shifts in clinical practice or policy. Identified evidence will be appraised using the same systematic methods applied in the original guideline development, including risk-of-bias assessment, and GRADE certainty of evidence ratings. Recommendations will be revised through structured deliberation by the technical working group and the consensus panel, with comprehensive documentation of changes, rationale, and implications for practice.

9. References

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10. Appendices

Appendix 1. Summary of Conflict of Interest (COI) Declaration

Name	Role	Declaration and Management of Conflicts of Interest (COI)	Assessment
Dr. Josephine R. Bundoc	Steering Committee Chair	Declared: Non-Financial Interests – to declare Function-based Rehabilitation Model: An Initial Step Towards Universal Health Coverage ACTA MEDICA Philippina. Vol 56 (No 4)2022 - Project Lead for Studies on Prosthesis, PCHRD -Department of Health Task Force on Community Based Rehabilitation 2023 - present -Prosthesis Unit and Fellowship Program Head, UPCM -President, Walk Foundation	B
Ted Dizon	Steering Committee Member	Declared: Employment in Health Care Practice and Policy Management • Received honorarium from Johnson and Johnson (Tylenol)	B
Dr. Lester Sam Geroy	Steering Committee Member	Declared: Publication: Function-based Rehabilitation Model: An Initial Step towards Universal Health Coverage	B
Dr. Cynthia Ang	Steering Committee Member	Declared: Member, Editorial Board of the PARM Proceedings, scientific journal of the Philippine Academy of Rehabilitation Medicine (PARM), 2009 to Present. • Publication: Function-based Rehabilitation Model: An Initial Step towards Universal Health Coverage. Acta Med Philipp [Internet]. 2022 Mar. 14 [cited 2025 Mar. 21];56(4).	B

Name	Role	Declaration and Management of Conflicts of Interest	Assessment
Tomas P. Reginaldo Jr	Steering Committee Member	None	A
Nikka Karla Santos	Steering Committee Member	None	A
Dr. Christopher Manalo	Technical Lead	None	A
Dr. Jeriel De Silos	Co-technical Lead	None	A
Dr. Louella Carpio	Evidence Reviewer	None	A
Howell Henrian Bayona	Evidence Reviewer	Declared: Evidence Review Expert (ERE) /Technical Reviewer Philippine Guidelines on Periodic Health Examinations (PHEX) Musculoskeletal Diseases Task Force*	B
Dr. Deborah Ona	Evidence Reviewer	None	A
Dr. Justin Maranan	Evidence Reviewer	Declared: Senior Medical Officer & Occupational Health Physician MedGrocer (MG Health Solutions Inc.)*	B
Dr. John De Castro	Evidence Reviewer	None	A
Dr. Christopher S. Constantino	Evidence Reviewer	None	B
Jon Timothy Rivero	Evidence Reviewer	Declared: Consultant Physical Therapist for Ruth Foundation*	B
Dr. Ivan Neil B. Gomez	Evidence Reviewer	Declared: Member Philippine Academy of Occupational Therapy and other local and international organization*	B
Dr. Isabella E. Supnet	Evidence Reviewer	Declared: Owns stocks at Metro Pasay Hospital and Medical Center no dividends, just right to practice.*	B
Dr. Hazel Abigail Lim	Evidence Reviewer	Declared: Diplomate, Philippine Academy of Rehabilitation Medicine*	B
Dr. Ramona Luisa Pablo- Santos	Guideline Panel	None	A
Mr. Michael Gabilo	Guideline Panel	None	A
Dr. Frances Carlos	Guideline Panel	None	A
Ms. Anafe Maravillas	Guideline Panel	Declared: President Las Piñas Persons with Disability Federation, Inc.*	B

Name	Role	Declaration and Management of Conflicts of Interest	Assessment
Ms. Peñafrancia Ching	Guideline Panel	Declared: Resource person: Empowerment through Maintenance and Customization: A Workshop on Assistive Care Device National Council on Disability Affairs*	B
Dr. Zuzette Catabona	Guideline Panel	Declared: 19th Science & Technology Week University of the Philippines Manila "Appropriate and Affordable Intermediate Wheelchair for Filipinos: Initial Conceptual Design and Product Development"	B
Dr. Paul Matthew Jiao	Guideline Panel	Declared: Owns stocks at FastCare, a company which operates medical clinics and sell medical devices. Decisions or management terms made by the COIRC may be appealed; <i>Did not participate in guideline question number 2 and 10†</i>	C
Dr. Pia Camara-Chua	Guideline Panel	Declared: Owns dividend-providing stocks at Pasig Doctors Medical Center; <i>Did not participate in guideline question number 10†</i>	C
Dr. Leonila Firmalo	Guideline Panel	None	A
Maria Theresa dela Cruz	Guideline Panel	Declare: AKAPIN*	B

* COI of Steering Committee members, Evidence Reviewers, and Guideline Panel members (COI B) were declared in the manuscript and disclosed during the en banc guideline panel meeting.

† COI of Guideline Panel members (COI C) were declared in the manuscript and disclosed during the en banc guideline panel meeting. Panel members with declared COI did not participate in the voting process on guideline questions related to their COI.

Appendix 2. Search Strategies

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

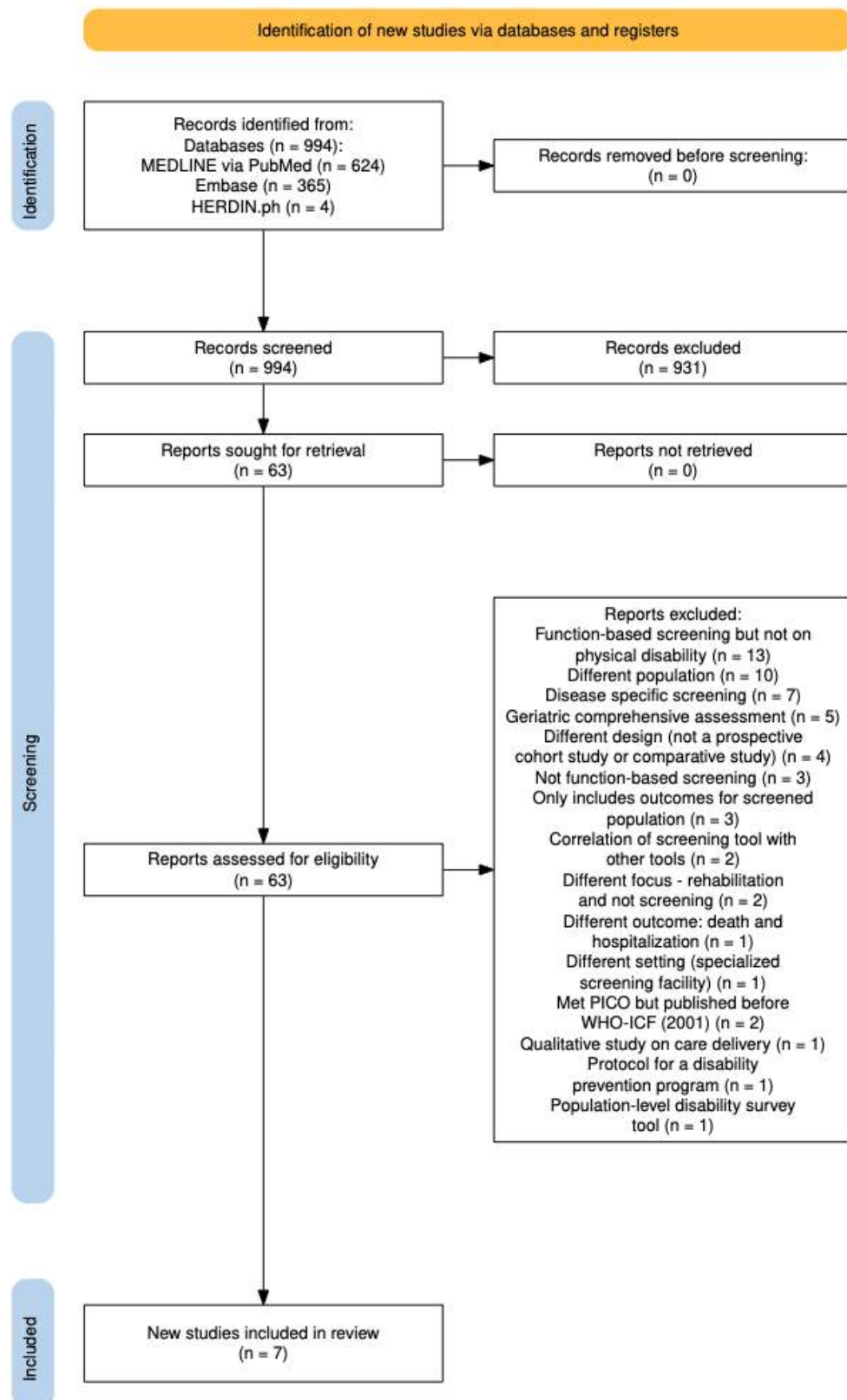
MEDLINE (PubMed) search strategy run on 2025-09-11 (23:27)

Database	PICO	No	Search terms	Yield
Medline via PubMed (09/11/25)	Setting	1	"Primary Health Care"[Mesh] OR "Primary Care"[Title/Abstract] OR "family practice"[Title/Abstract] OR "general practice"[Title/Abstract] OR "primary care clinic"[Title/Abstract] OR "primary healthcare"[Title/Abstract]	354,620
	Intervention	2	"Mass Screening"[Mesh] OR "Screening"[Title/Abstract] OR screen*[Title/Abstract] OR "case find*[Title/Abstract] OR "case-finding"[Title/Abstract] OR "case finding"[Title/Abstract] OR "case detection"[Title/Abstract]	1,207,027
	Intervention	3	"Disability Evaluation"[Mesh] OR "Disabled Persons"[Mesh] OR disability[Title/Abstract] OR "functional decline"[Title/Abstract] OR "functional limitation*[Title/Abstract] OR "functional impairment*[Title/Abstract] OR "functional status"[Title/Abstract] OR "activities of daily living"[Title/Abstract] OR ADL[Title/Abstract] OR IADL[Title/Abstract] OR "instrumental activities of daily living"[Title/Abstract] OR "mobility limitation"[Title/Abstract] OR "mobility impair*[Title/Abstract] OR "performance-based"[Title/Abstract] OR "performance based"[Title/Abstract] OR "function-based"[Title/Abstract] OR "functional assessment"[Title/Abstract] OR "functional screening"[Title/Abstract]	405,814
	Intervention	4	"Home Care Services"[Mesh] OR "Home Nursing"[Mesh] OR home[Title/Abstract] OR "home-based"[Title/Abstract] OR "home based"[Title/Abstract] OR "home visit*[Title/Abstract] OR "community-based"[Title/Abstract] OR "community based"[Title/Abstract] OR community[Title/Abstract] OR "community health worker*[Title/Abstract] OR outreach[Title/Abstract] OR "home health"[Title/Abstract] OR "Hospitals"[Mesh] OR "Ambulatory Care Facilities"[Mesh] OR clinic[Title/Abstract] OR outpatient[Title/Abstract] OR "facility-based"[Title/Abstract] OR "facility based"[Title/Abstract] OR "primary care clinic"[Title/Abstract] OR "health centre"[Title/Abstract] OR "health center"[Title/Abstract]	1,823,205
	Total yield	5	#1 AND #2 AND #3 AND #4	624
	Method filter: guidelines	6	((((((((((("Guideline" [Publication Type]) OR "Practice Guideline" [Publication Type]) OR "Consensus"[Mesh]) OR ("Consensus Development Conference, NIH" [Publication Type] OR "Consensus Development Conference" [Publication Type])) OR (consensuses[ti] or consensus[ti])) OR "position statement"[ti] OR "position statements"[ti]) OR "practice parameter"[ti] OR "practice parameters"[ti] OR "appropriate use criteria" [ti] OR "appropriateness criteria" [ti] OR ("guidance statement"[ti] OR "guidance statements"[ti]) OR (guideline[ti] or guidelines[ti]))	182,370
	Method filter: Systematic reviews	7	(((((systematic review*[Title] OR (meta analys*[Title])) OR (metaanalys*[Title])) AND (((((((search*[Title] OR (strateg*[Title])) OR (filter[Title/Abstract])) OR (filters[Title/Abstract])) OR (retrieve*[Title])) OR (identif*[Title])) OR (locat*[Title])) OR (find*[Title])) OR ((indexing[Title] OR indexed[Title])) OR ((review*[Title] AND (((search*[Title] OR (review*[Title])) OR (filter*[Title]))	900,505
	Method filter: RCTs	8	(((((((((randomized controlled trial[Publication Type] OR (controlled clinical trial[Publication Type])) OR (randomized[Title/Abstract])) OR (placebo[Title/Abstract])) OR (drug therapy [sh])) OR (randomly[Title/Abstract])) OR (trial[Title/Abstract])) OR (groups[Title/Abstract])) NOT (animals [mh] NOT humans [mh]))	5,723,900
	CPGs only	9	#5 AND #6	8
	SRs only	10	#5 AND #7	48

	RCTs only	11	#5 AND #8	229
Embase (06/24/25)		1	('primary health care'/exp OR 'primary health care' OR 'primary care':ti,ab OR 'family practice':ti,ab OR 'general practice':ti,ab OR 'primary care clinic':ti,ab OR 'primary healthcare':ti,ab) AND ('mass screening'/exp OR 'mass screening' OR screening:ti,ab OR screen*:ti,ab OR 'case find*:ti,ab OR 'case finding':ti,ab OR 'case detection':ti,ab) AND ('disability evaluation'/exp OR 'disability evaluation' OR 'disabled persons'/exp OR 'disabled persons' OR disability:ti,ab OR 'functional decline':ti,ab OR 'functional limitation*:ti,ab OR 'functional impairment*:ti,ab OR 'functional status':ti,ab OR 'activities of daily living':ti,ab OR adl:ti,ab OR iadl:ti,ab OR 'instrumental activities of daily living':ti,ab OR 'mobility limitation':ti,ab OR 'mobility impair*:ti,ab OR 'performance based':ti,ab OR 'function based':ti,ab OR 'functional assessment':ti,ab OR 'functional screening':ti,ab) AND ('home care services'/exp OR 'home care services' OR 'home nursing'/exp OR 'home nursing' OR home:ti,ab OR 'home based':ti,ab OR 'home visit*:ti,ab OR 'community based':ti,ab OR community:ti,ab OR 'community health worker*:ti,ab OR outreach:ti,ab OR 'home health':ti,ab OR 'hospitals'/exp OR hospitals OR 'ambulatory care facilities'/exp OR 'ambulatory care facilities' OR clinic:ti,ab OR outpatient:ti,ab OR 'facility based':ti,ab OR 'primary care clinic':ti,ab OR 'health centre':ti,ab OR 'health center':ti,ab)	1,054
	Filter: Excluding MEDLINE records, preprints, clinical trials	2	#1 AND [embase]/lim NOT ([embase]/lim AND [medline]/lim OR [preprint]/lim OR 'clinical trial':dtype)	365
HERDIN.ph (06/24/25)		1	disability	4

Eligibility criteria

Parameter	Inclusion criteria	Exclusion criteria
Population	adults (≥ 18 years old) or children at risk of functional decline or disability due to age, chronic disease, sensory impairment, neurologic, musculoskeletal, cardiopulmonary, cancer, or chronic pain conditions;	persons with already established severe disabilities or were institutionalized (e.g., long-term care, post-stroke rehab inpatients)
Intervention	Any function-based screening activity aimed at detecting early or emerging functional limitations, using standardized or validated tools (e.g., TUG, SPPB, gait speed, ADL/IADL, WHODAS, Mini-Cog, etc.). Screening can occur in community, home, or primary care settings.	aims to screen for presence of a specific disease (e.g., hypertension, cancer) without a functional component; use of a screening tool as an outcome measurement after intervention, rather than screening.
Outcome	Reporting on at least one of the following: • Early identification of functional limitation • Early referral to rehabilitation • Prevention of functional decline or complications • Improved self-efficacy, safety, or confidence • Improved adherence to care plan • Reduction in falls, injuries, or hospitalizations	No outcome related to function, early detection, or referral is reported
Setting	Primary care, community, or home-based settings; includes studies involving primary care providers, community health workers, or rehabilitation outreach services linked to primary care; involves health facility in the community focused on providing general care/health services	Hospital settings; rehabilitation centers or specialty centers
Study Design	Randomized controlled trials (RCTs), quasi-experimental studies, cohort, case-control, or cross-sectional studies; program evaluations and implementation studies relevant to screening.	None

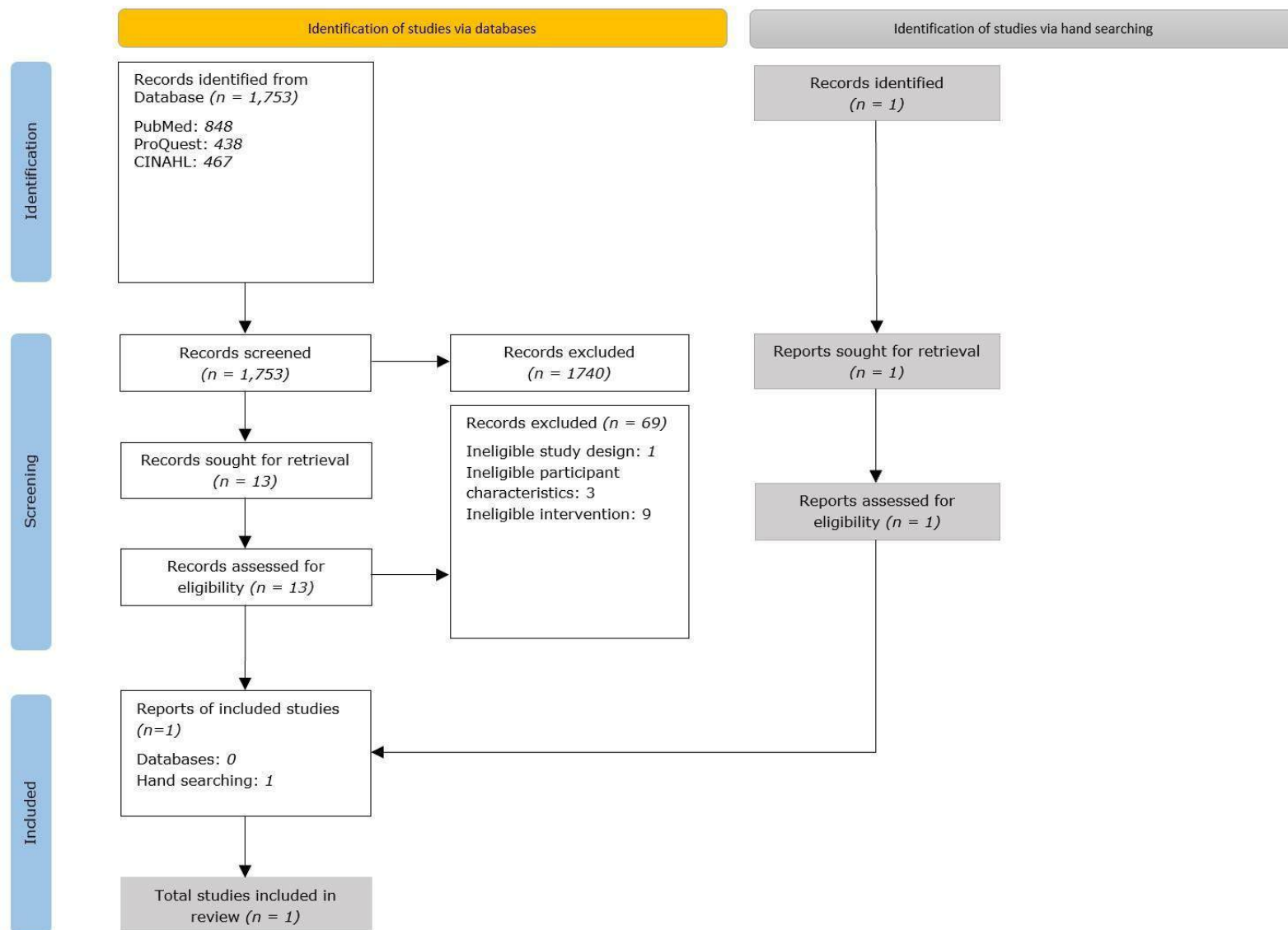


PRISMA Flow Diagram

Question 2. Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

DATABASE	SEARCH STRATEGY	RESULTS	
		Yield	Eligible
PubMed	("Amputation, Surgical"[Mesh] OR "Amputation, Traumatic"[Mesh] OR "Amputation Stumps"[Mesh] OR "Amputation, Congenital"[Supplementary Concept] OR "Amputees"[Mesh] OR amput*[tiab] OR disarticulation[tiab] OR "limb loss"[tiab] OR "limb-loss"[tiab] OR "limb deficienc*[tiab] OR "congenital absence of limb"[tiab] OR "congenital limb deficiency"[tiab] OR "congenital limb absence"[tiab] OR "Paralysis"[Mesh] OR "Paresis"[Mesh] OR "Hemiplegia"[Mesh] OR "Paraplegia"[Mesh] OR hemipleg*[tiab] OR hemipar*[tiab] OR parapleg*[tiab] OR parapares*[tiab] OR dipleg*[tiab] OR dipares*[tiab] OR monopleg*[tiab] OR monopares*[tiab] OR plegia[tiab] OR paresis[tiab] OR paraly*[tiab]) AND ("Self-Help Devices"[Mesh] OR "Crutches"[Mesh] OR "Canes"[Mesh] OR "Walkers"[Mesh] OR "Patient Transfer"[Mesh] OR "Transportation of Patients"[Mesh] OR "Transfer Device*[tiab] OR "Transfer board*[tiab] OR "Slide board*[tiab] OR "Ambulation aid*[tiab] OR "Walking aid*[tiab] OR cane[tiab] OR canes[tiab] OR crutch*[tiab] OR walker*[tiab] OR "rollator"[tiab] OR "walking frame"[tiab] OR "walking stick"[tiab] OR "gait trainer*[tiab])	848	0
CINAHL	((MH "Amputation, Surgical+") OR (MH "Amputation, Traumatic+") OR (MH "Amputation Stumps+") OR (MW "Amputation, Congenital") OR (MH Amputees+) OR (TI amput* OR AB amput*) OR (TI disarticulation OR AB disarticulation) OR (TI "limb loss" OR AB "limb loss") OR (TI limb-loss OR AB limb-loss) OR (TI "limb deficienc*" OR AB "limb deficienc*") OR (TI "congenital absence of limb" OR AB "congenital absence of limb") OR (TI "congenital limb deficiency" OR AB "congenital limb deficiency") OR (TI "congenital limb absence" OR AB "congenital limb absence") OR (MH Paralysis+) OR (MH Paresis+) OR (MH Hemiplegia+) OR (MH Paraplegia+) OR (TI hemipleg* OR AB hemipleg*) OR (TI hemipar* OR AB hemipar*) OR (TI parapleg* OR AB parapleg*) OR (TI parapares* OR AB parapares*) OR (TI dipleg* OR AB dipleg*) OR (TI dipares* OR AB dipares*) OR (TI monopleg* OR AB monopleg*) OR (TI monopares* OR AB monopares*) OR (TI plegia OR AB plegia) OR (TI paresis OR AB paresis) OR (TI paraly* OR AB paraly*)) AND ((MH "Self-Help Devices+") OR (MH Crutches+) OR (MH Canes+) OR (MH Walkers+) OR (MH "Patient Transfer+") OR (MH "Transportation of Patients+") OR (TI "Transfer Device*" OR AB "Transfer Device*") OR (TI "Transfer board*" OR AB "Transfer board*") OR (TI "Slide board*" OR AB "Slide board*") OR (TI "Ambulation aid*" OR AB "Ambulation aid*") OR (TI "Walking aid*" OR AB "Walking aid*") OR (TI cane OR AB cane) OR (TI canes OR AB canes) OR (TI crutch* OR AB crutch*) OR (TI walker* OR AB walker*) OR (TI rollator OR AB rollator) OR (TI "walking frame" OR AB "walking frame") OR (TI "walking stick" OR AB "walking stick") OR (TI "gait trainer*" OR AB "gait trainer*"))	467	0
ProQuest	(MESH("Amputation, Surgical") OR MESH("Amputation, Traumatic") OR MESH("Amputation Stumps") OR NOFT("Amputation, Congenital") OR MESH(Amputees) OR TI,AB(amput*) OR TI,AB(disarticulation) OR TI,AB("limb loss") OR TI,AB(limb-loss) OR TI,AB("limb deficienc*") OR TI,AB("congenital absence of limb") OR TI,AB("congenital limb deficiency") OR TI,AB("congenital limb absence") OR MESH(Paralysis) OR MESH(Paresis) OR MESH(Hemiplegia) OR MESH(Paraplegia) OR TI,AB(hemipleg*) OR TI,AB(hemipar*) OR TI,AB(parapleg*) OR TI,AB(parapares*) OR TI,AB(dipleg*) OR TI,AB(dipares*) OR TI,AB(monopleg*) OR TI,AB(monopares*) OR TI,AB(plegia) OR TI,AB(paresis) OR TI,AB(paraly*)) AND (MESH("Self-Help Devices") OR MESH(Crutches) OR MESH(Canes) OR MESH(Walkers) OR MESH("Patient Transfer") OR	438	0

	MESH("Transportation of Patients") OR TI,AB("Transfer Device*") OR TI,AB("Transfer board*") OR TI,AB("Slide board*") OR TI,AB("Ambulation aid*") OR TI,AB("Walking aid*") OR TI,AB(cane) OR TI,AB(caness) OR TI,AB(crutch*) OR TI,AB(walker*) OR TI,AB(rollator) OR TI,AB("walking frame") OR TI,AB("walking stick") OR TI,AB("gait trainer*")		
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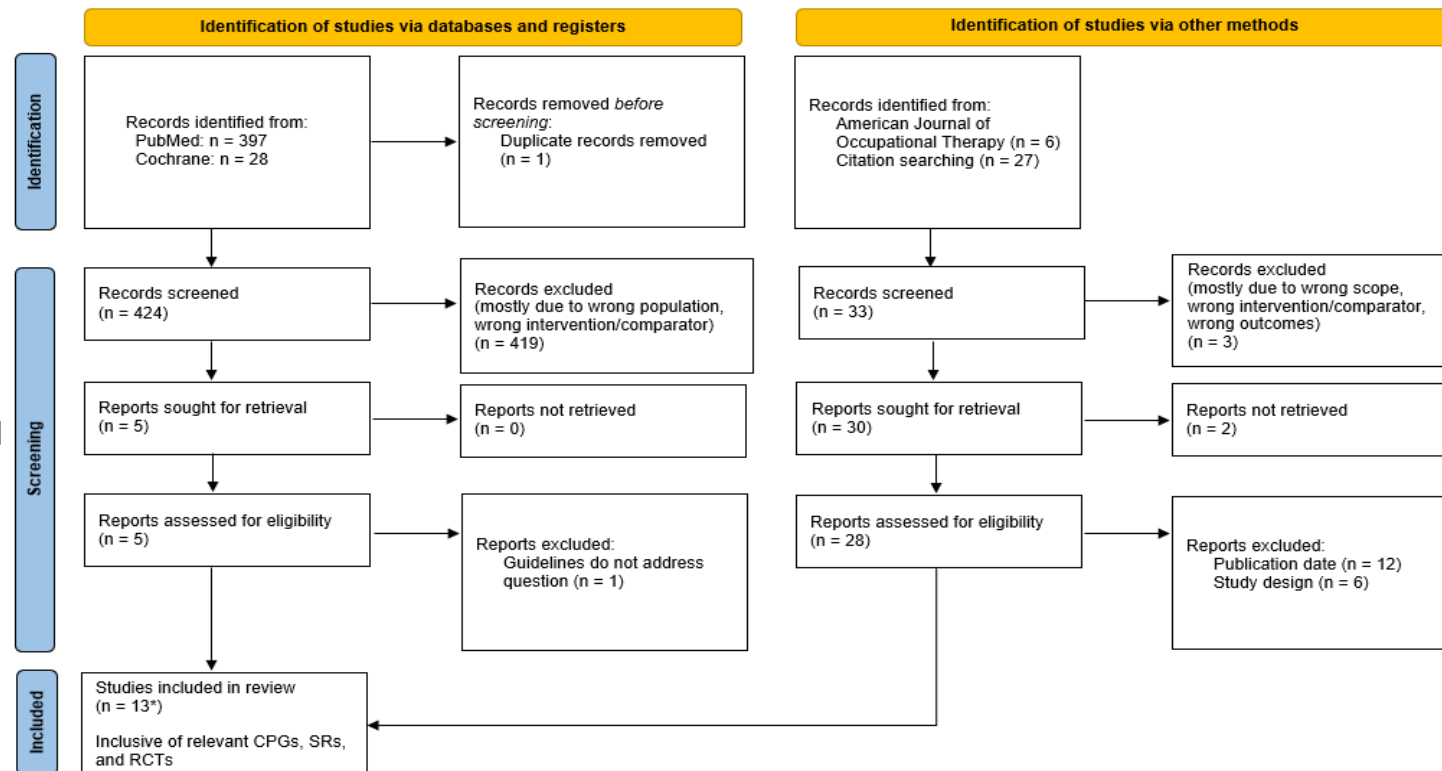


PRISMA Flow Diagram

Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

DATABASE	SEARCH STRATEGY / SEARCH TERMS	DATE AND TIME OF SEARCH	RESULTS	
			Yield	Eligible
PubMed	("task-based approach"[Title/Abstract] OR "task-oriented approach"[Title/Abstract] OR "task-specific training"[Title/Abstract] OR "task-focused training"[Title/Abstract]) AND ("Rehabilitation"[MeSH] OR "Physical Therapy Modalities"[MeSH] OR "Occupational Therapy"[MeSH] OR "Exercise Therapy"[MeSH] OR "Activities of Daily Living"[MeSH] OR rehabilitation[Title/Abstract] OR "physical therapy"[Title/Abstract] OR physiotherapy[Title/Abstract] OR "occupational therapy"[Title/Abstract] OR neurorehabilitation[Title/Abstract] OR "stroke rehabilitation"[Title/Abstract] OR "motor training"[Title/Abstract])	September 9, 2025 9:21AM	397	2
Cochrane	(task oriented OR task based OR task specific OR task focused):ti,ab,kw AND (HOME OR COMMUNITY):ti,ab,kw AND MeSH descriptor: [Rehabilitation] explode all trees AND guidelines	September 25, 2025 12PM	21	1
American Journal of Occupational Therapy	home based OR community based AND facility based AND mild to moderate disability AND rehabilitation AND systematic review	September 25, 2025 3:56PM	18	1

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <http://www.prisma-statement.org/>

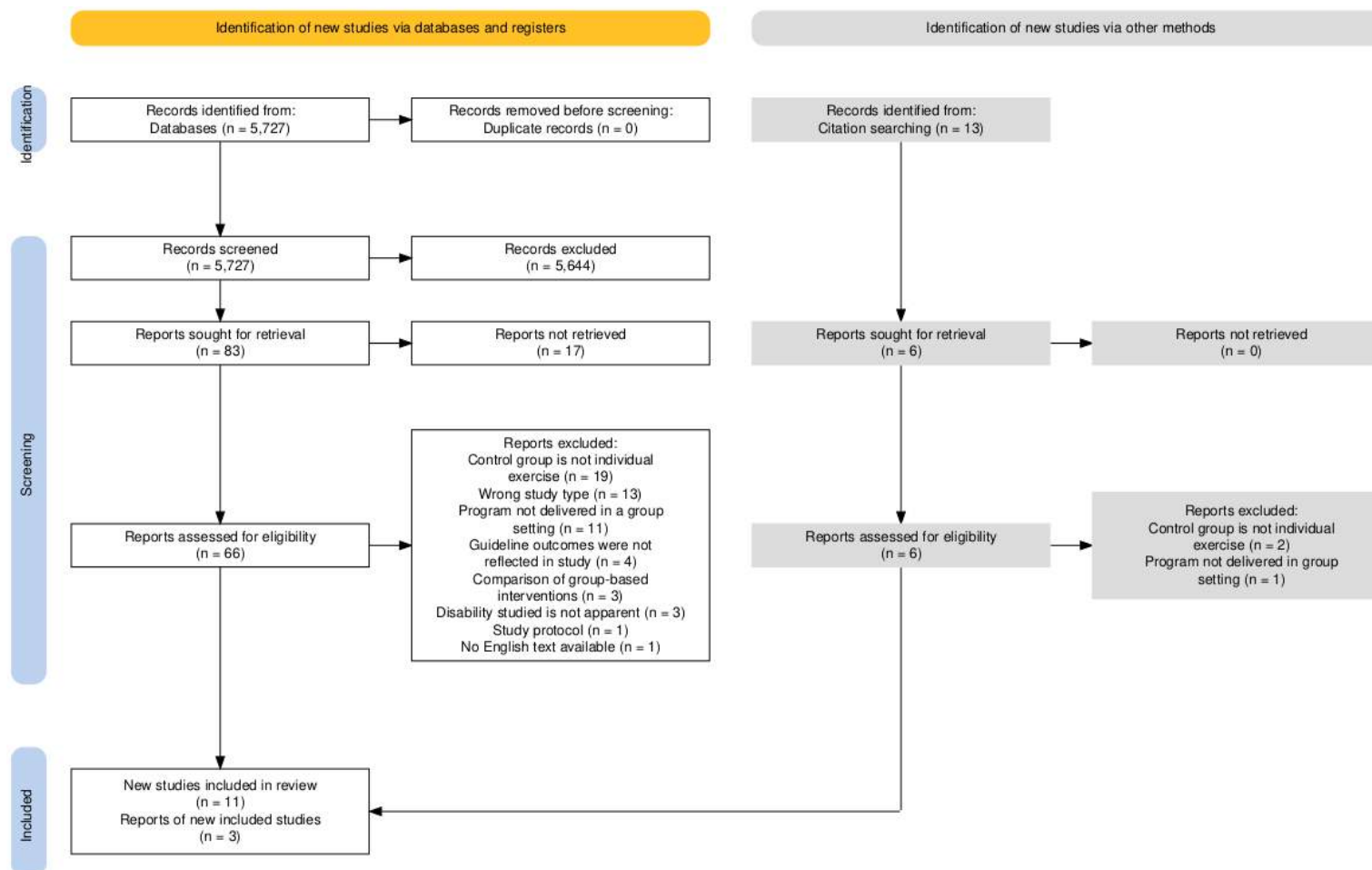
PRISMA Flow Diagram

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

MEDLINE

Search number	Query	Search Details	Results	Time	Date
1	("physiotherap*[Title/Abstract] OR "physical therap*[Title/Abstract]) NOT ("cognitive therap*[Title/Abstract] OR "psych* therap*[Title/Abstract] OR "behavio*r* therap*[Title/Abstract])	("physiotherap*[Title/Abstract] OR "physical therap*[Title/Abstract]) NOT ("cognitive therap*[Title/Abstract] OR "psych* therap*[Title/Abstract] OR "behavio*r* therap*[Title/Abstract])	76,603	3:42:16	10/29/25
2	"individ*[Title/Abstract] OR "person*[Title/Abstract] OR "one-on-one"[Title/Abstract] OR "one-to-one"[Title/Abstract] OR "class*[Title/Abstract] OR "program*[Title/Abstract] OR "school*[Title/Abstract] OR "group*[Title]	"individ*[Title/Abstract] OR "person*[Title/Abstract] OR "one-on-one"[Title/Abstract] OR "one-to-one"[Title/Abstract] OR "class*[Title/Abstract] OR "program*[Title/Abstract] OR "school*[Title/Abstract] OR "group*[Title]	6,266,921	3:42:25	10/29/25
3	y_10[Filter]	"2015/10/29 00:00": "3000/01/01 05:00"[Date - Publication]	13,964,237	3:42:36	10/29/25
4	("randomized controlled trial"[Publication Type] OR "controlled clinical trial"[Publication Type] OR "randomized"[Title/Abstract] OR "placebo"[Title/Abstract] OR "drug therapy"[MeSH Subheading] OR "randomly"[Title/Abstract] OR "trial"[Title/Abstract]) NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms])	("randomized controlled trial"[Publication Type] OR "controlled clinical trial"[Publication Type] OR "randomized"[Title/Abstract] OR "placebo"[Title/Abstract] OR "drug therapy"[MeSH Subheading] OR "randomly"[Title/Abstract] OR "trial"[Title/Abstract]) NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms])	3,870,915	3:43:35	10/29/25
5	"pulmonary"[Title/Abstract] OR "lung*[Title/Abstract] OR "renal"[Title/Abstract] OR "kidney*[Title/Abstract] OR "cancer"[Title/Abstract] OR "multiple sclerosis"[Title/Abstract] OR "parkinson*[Title/Abstract] OR "brain"[Title/Abstract] OR "incontinen*[Title/Abstract] OR "stroke"[Title/Abstract] OR "CVA"[Title/Abstract] OR "neuro*[Title/Abstract] OR	"pulmonary"[Title/Abstract] OR "lung*[Title/Abstract] OR "renal"[Title/Abstract] OR "kidney*[Title/Abstract] OR "cancer"[Title/Abstract] OR "multiple sclerosis"[Title/Abstract] OR "parkinson*[Title/Abstract] OR "brain"[Title/Abstract] OR "incontinen*[Title/Abstract] OR "stroke"[Title/Abstract] OR "CVA"[Title/Abstract] OR "neuro*[Title/Abstract] OR "heart"[Title/Abstract] OR "cardiac*[Title/Abstract]	8,945,880	3:43:54	10/29/25

	"heart"[Title/Abstract] OR "cardiac"[Title/Abstract]				
6	#1 AND #2 AND #3 AND #4	((("physiotherap*[Title/Abstract] OR "physical therap*[Title/Abstract]) NOT ("cognitive therap*[Title/Abstract] OR "psych* therap*[Title/Abstract] OR "behavio*r* therap*[Title/Abstract])) AND ("individ*[Title/Abstract] OR "person*[Title/Abstract] OR "one-on-one"[Title/Abstract] OR "one-to-one"[Title/Abstract] OR "class*[Title/Abstract] OR "program*[Title/Abstract] OR "school*[Title/Abstract] OR "group*[Title/Abstract]) AND "2015/10/29 00:00":"3000/01/01 05:00"[Date - Publication] AND (("randomized controlled trial"[Publication Type] OR "controlled clinical trial"[Publication Type] OR "randomized"[Title/Abstract] OR "placebo"[Title/Abstract] OR "drug therapy"[MeSH Subheading] OR "randomly"[Title/Abstract] OR "trial"[Title/Abstract]) NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms]))	5,727	3:44:15	10/29/25



PRISMA Flow Diagram

Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

PubMed Search Strategy

History and Search Details						Download	Delete
Search	Actions	Details	Query	Results	Time		
#6	...	>	Search: (#5) AND (#4)	27	03:41:32		
#5	...	>	Search: ((#1) AND (#2)) AND (#3)	408	03:38:59		
#4	...	>	Search: (home based) OR (community based) Filters: in the last 10 years	285,760	03:19:22		
#3	...	>	Search: (((((((Contracture/prevention and control OR Joint Contractures OR "arthrofibrosis"[tiab]) OR (range of motion)) OR (pain)) OR (muscle tone)) OR (spasticity)) OR (tightness)) OR (deformity)) OR (motor strength)) OR (manual muscle strength NOT manual therapy)) OR (strength)) OR (dynamometer) Filters: in the last 10 years	1,241,750	03:18:44		
#2	...	>	Search: "Exercise Therapy"[Mesh] OR "Therapeutic Exercise"[tiab] OR "Rehabilitation Exercise"[tiab] OR "Exercise Intervention"[tiab] OR "Exercise Training" Filters: in the last 10 years	49,164	03:15:30		
#1	...	>	Search: ("Transcutaneous Electric Nerve Stimulation"[Mesh] OR "Transcutaneous Electrical Nerve Stimulation" OR "TENS therapy" OR "Electrical stimulation") OR ("Cold Packs" OR "Cold Therapy" OR "Ice Packs" OR "Cold Compress")) OR ("moist heat"[tiab] OR "hot towel" OR "hot pack"[tiab] OR "moist heat therapy"[tiab] OR "thermotherapy"[tiab]) Filters: in the last 10 years	22,956	03:14:58		

Showing 1 to 6 of 6 entries

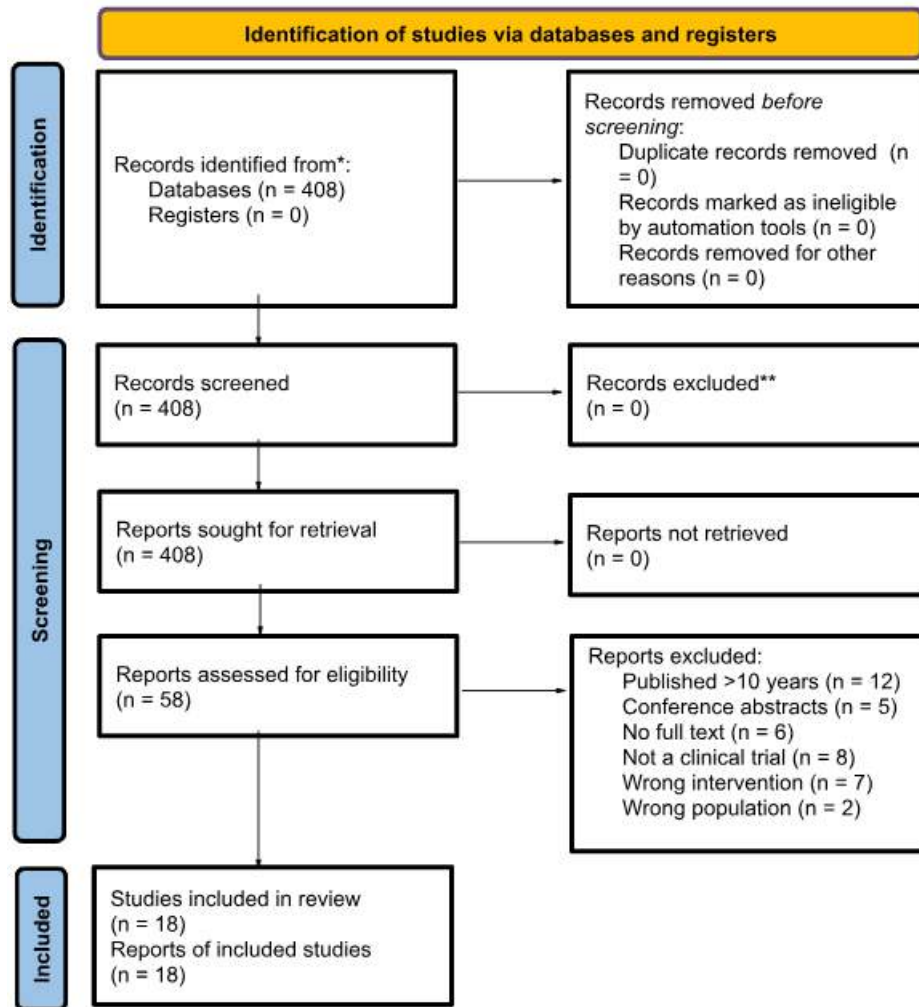
("Transcutaneous Electric Nerve Stimulation"[MeSH Terms] OR "Transcutaneous Electrical Nerve Stimulation"[All Fields] OR "TENS therapy"[All Fields] OR "Electrical stimulation"[All Fields] OR "Cold Packs"[All Fields] OR "Cold Therapy"[All Fields] OR "Ice Packs"[All Fields] OR "Cold Compress"[All Fields] OR "moist heat"[Title/Abstract] OR "hot towel"[All Fields] OR "hot pack"[Title/Abstract] OR "moist heat therapy"[Title/Abstract] OR "thermotherapy"[Title/Abstract]) AND (y_10[Filter])

AND

("Exercise Therapy"[MeSH Terms] OR "Therapeutic Exercise"[Title/Abstract] OR "Rehabilitation Exercise"[Title/Abstract] OR "Exercise Intervention"[Title/Abstract] OR "Exercise Training"[All Fields]) AND (y_10[Filter])

AND

("contracture/prevention and control"[MeSH Terms] OR (("joint s"[All Fields] OR "joints"[MeSH Terms] OR "joints"[All Fields] OR "joint"[All Fields]) AND ("contractural"[All Fields] OR "Contracture"[MeSH Terms] OR "Contracture"[All Fields] OR "contractures"[All Fields] OR "contractured"[All Fields])) OR "arthrofibrosis"[Title/Abstract] OR ("range of motion, articular"[MeSH Terms] OR ("range"[All Fields] AND "motion"[All Fields] AND "articular"[All Fields]) OR "articular range of motion"[All Fields] OR ("range"[All Fields] AND "motion"[All Fields]) OR "range of motion"[All Fields]) OR ("pain"[MeSH Terms] OR "pain"[All Fields]) OR ("muscle tonus"[MeSH Terms] OR ("muscle"[All Fields] AND "tonus"[All Fields]) OR "muscle tonus"[All Fields] OR ("muscle"[All Fields] AND "tone"[All Fields]) OR "muscle tone"[All Fields]) OR ("muscle spasticity"[MeSH Terms] OR ("muscle"[All Fields] AND "spasticity"[All Fields]) OR "muscle spasticity"[All Fields] OR "spastic"[All Fields] OR "spasticity"[All Fields] OR "spastics"[All Fields] OR "spasticities"[All Fields]) OR "tightness"[All Fields] OR ("abnormalities"[MeSH Subheading] OR "abnormalities"[All Fields] OR "deformities"[All Fields] OR "congenital abnormalities"[MeSH Terms] OR ("congenital"[All Fields] AND "abnormalities"[All Fields]) OR "congenital abnormalities"[All Fields] OR "deformity"[All Fields] OR "deform"[All Fields] OR "deformabilities"[All Fields] OR "deformability"[All Fields] OR "deformable"[All Fields] OR "deformably"[All Fields] OR "deformation"[All Fields] OR "deformational"[All Fields] OR "deformations"[All Fields] OR "deformative"[All Fields] OR "deformed"[All Fields] OR "deforming"[All Fields] OR "deforms"[All Fields]) OR (("motor"[All Fields] OR "motor s"[All Fields] OR "motoric"[All Fields] OR "motorically"[All Fields] OR "motorics"[All Fields] OR "motoring"[All Fields] OR "motorisation"[All Fields] OR "motorised"[All Fields] OR "motorization"[All Fields] OR "motorized"[All Fields] OR "motors"[All Fields]) AND ("strength"[All Fields] OR "strengths"[All Fields])) OR (((("manual s"[All Fields] OR "manualization"[All Fields] OR "manualized"[All Fields] OR "manually"[All Fields] OR "manuals as topic"[MeSH Terms] OR ("manuals"[All Fields] AND "topic"[All Fields]) OR "manuals as topic"[All Fields] OR "manual"[All Fields] OR "manuals"[All Fields]) AND ("muscle strength"[MeSH Terms] OR ("muscle"[All Fields] AND "strength"[All Fields]) OR "muscle strength"[All Fields])) NOT ("musculoskeletal manipulations"[MeSH Terms] OR ("musculoskeletal"[All Fields] AND "manipulations"[All Fields]) OR "musculoskeletal manipulations"[All Fields] OR ("manual"[All Fields] AND "therapy"[All Fields]) OR "manual therapy"[All Fields])) OR ("strength"[All Fields] OR "strengths"[All Fields]) OR ("dynamometer"[All Fields] OR "dynamometers"[All Fields])) AND (y_10[Filter])

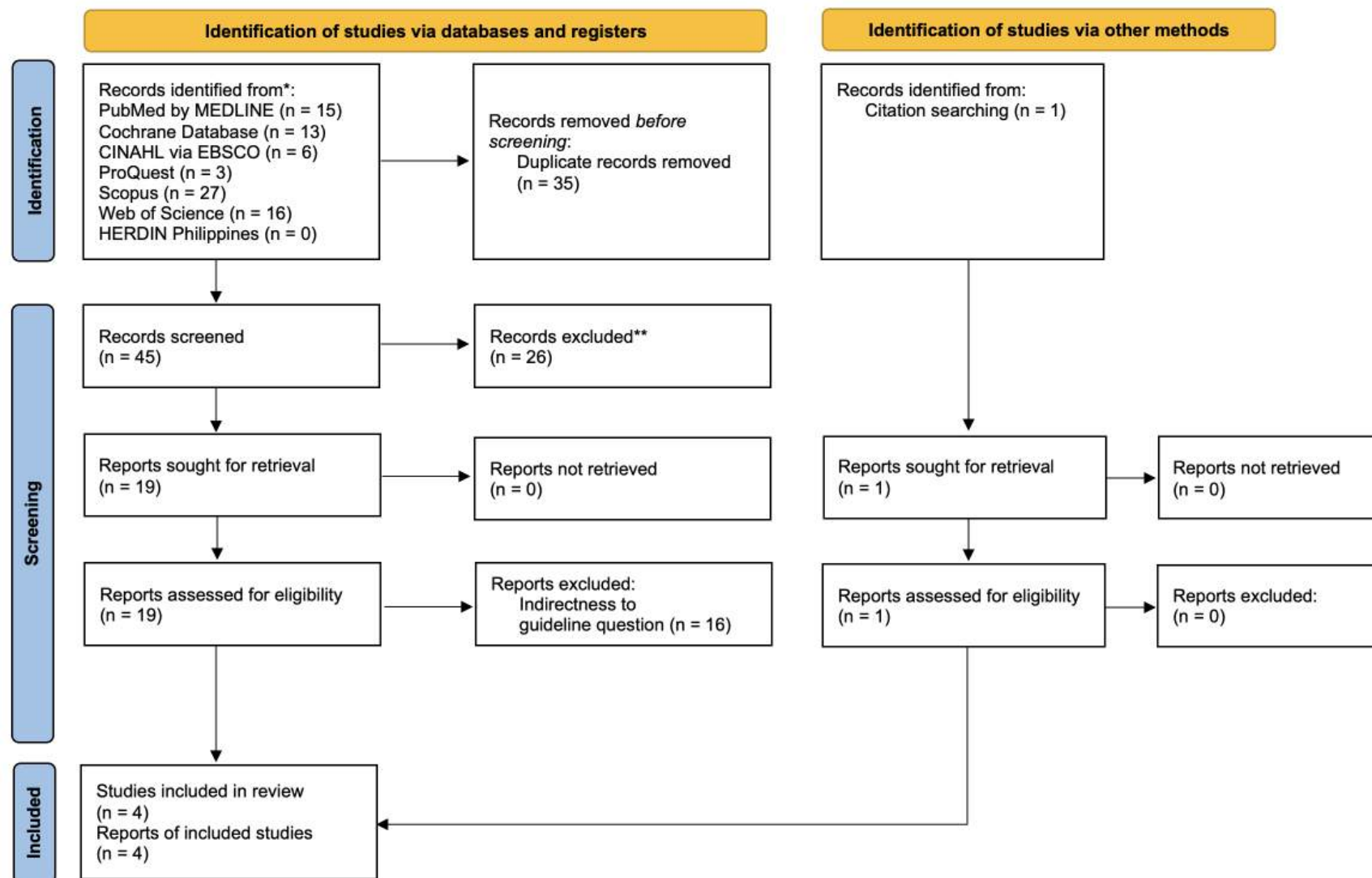


PRISMA Flow Diagram

Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

DATABASE	SEARCH STRATEGY / SEARCH TERMS	DATE AND TIME OF SEARCH	RESULTS	
			Yield	Eligible
PubMed	"disability"[Title/Abstract] AND ("activities of daily living"[Title/Abstract] OR "ADL"[Title/Abstract]) AND ("meta-analysis"[Title/Abstract] OR "systematic review"[Title/Abstract])	November 2, 2025 6:00 PM	255	15
Cochrane	((disability:ti,ab) AND (("activities of daily living":ti,ab) OR (ADL:ti,ab))) AND ((meta-analysis:ti,ab) OR ("systematic review":ti,ab))	November 2, 2025 7:00 PM	371	13
CINAHL (via EBSCO)	AB (disability or disabilities or disabled) AND AB (activities of daily living or adl) OR AB (home care or homebased or at home) OR TI (home rehabilitation) OR TI (community or community care) AND TI (rehabilitation) OR TI (outpatient clinics or ambulatory care or outpatient services)	November 2, 2025 7:30 PM	24	6

	or outpatient care) AND TI (activity participation or engagement) OR TI (quality of life or well being or well-being or health-related quality of life) OR TI (patient satisfaction) AND TI (meta-analysis or systematic review)			
ProQuest	disability AND "activities of daily living" OR ADL AND meta-analysis OR "systematic review"	November 2, 2025 7:45 PM	20	3
Scopus	disability AND "activities of daily living" OR ADL AND meta-analysis OR "systematic review"	November 2, 2025 8:00 PM	331	27
Web of Science	disability (Abstract) AND "activities of daily living" (Abstract) OR ADL (Abstract) AND meta-analysis (Abstract) OR "systematic review" (Abstract) AND rehabilitation (Abstract) AND primary care (Abstract) OR primary health care (Abstract)	November 2, 2025 8:30 PM	54	16
HERDIN	disability AND "activities of daily living" OR ADL AND meta-analysis OR "systematic review"	November 2, 2025 9:00 PM	0	0



PRISMA Flow Diagram

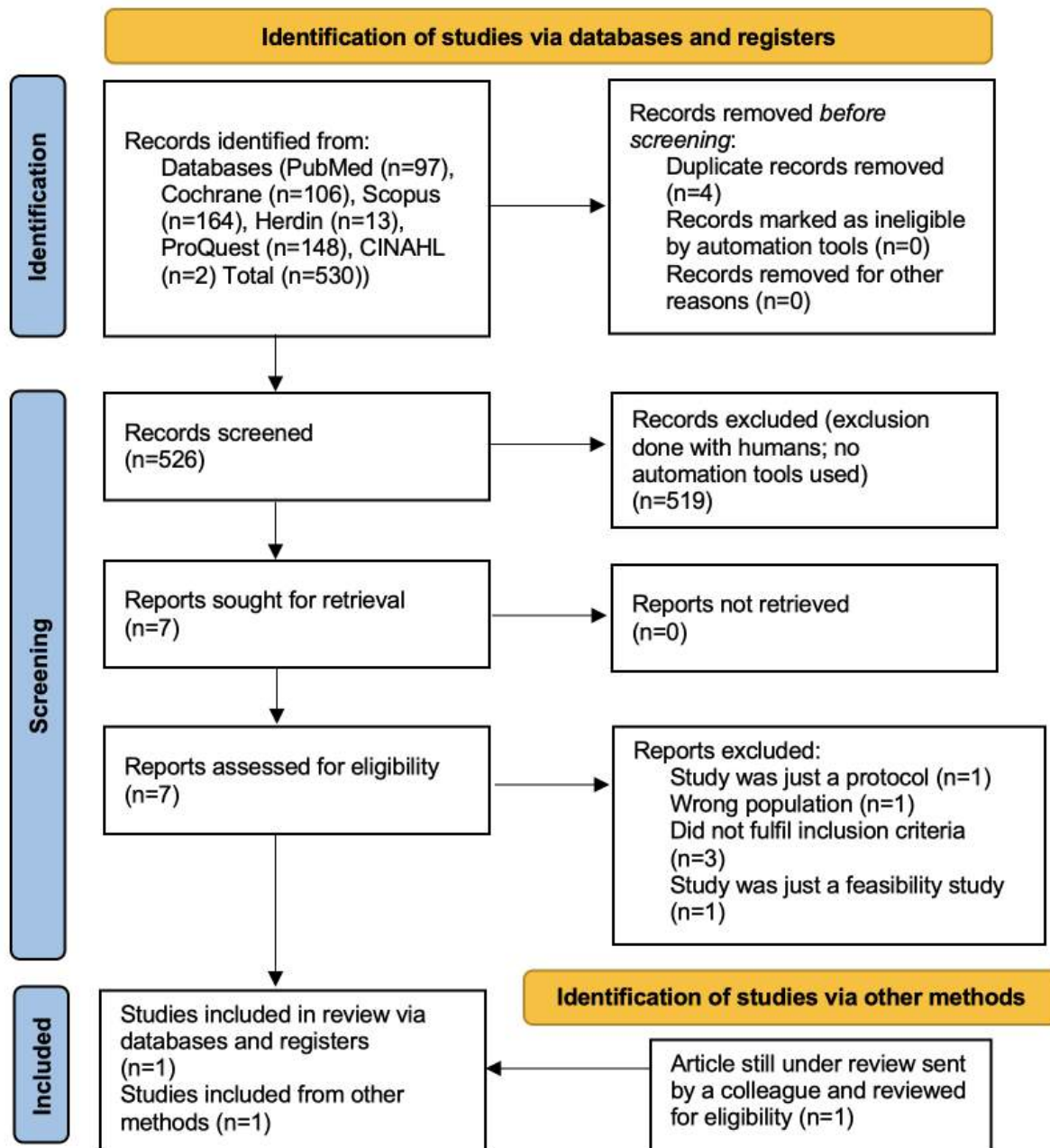
Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

DATABASE	SEARCH STRATEGY / SEARCH TERMS	DATE AND TIME OF SEARCH	RESULTS	
			Yield	Eligible
PubMed	"Community Health Services"[Mesh] OR "Community Health Centers"[Mesh] OR "Home Care Services"[Mesh] OR "Home Nursing"[Mesh] OR "Caregivers"[Mesh] OR "Family"[Mesh] OR "Telemedicine"[Mesh] OR "Telerehabilitation"[Mesh] OR "Remote Consultation"[Mesh] OR "Mobile Applications"[Mesh] OR "community-based"[tiab] OR "community based"[tiab] OR "home-based"[tiab] OR "home based"[tiab] OR "caregiver training"[tiab] OR "family training"[tiab] OR telerehab*[tiab] OR tele-rehab*[tiab] OR telemedicine[tiab] OR tele-health[tiab] OR telehealth[tiab] OR teletherapy[tiab] OR "remote consultation"[tiab] OR "virtual rehabilitation"[tiab] AND "Hospitals, Rehabilitation"[Mesh] OR "Rehabilitation Centers"[Mesh] OR "Ambulatory Care Facilities"[Mesh] OR "Outpatient Clinics, Hospital"[Mesh] OR "Physical Therapy Department, Hospital"[Mesh] OR "facility-based"[tiab] OR "facility based"[tiab] OR "hospital-based"[tiab] OR "hospital based"[tiab] OR "outpatient clinic*"[tiab] OR "rehabilitation center*"[tiab] AND "Disabled Persons"[Mesh] OR "Amputees"[Mesh] OR "Leg Length Inequality"[Mesh] OR "Limb Deformities, Congenital"[Mesh] OR "Gait Disorders, Neurologic"[Mesh] OR "Gait"[Mesh] OR "Walking"[Mesh] OR "Postural Balance"[Mesh] OR "Posture"[Mesh] OR ("Burns"[Mesh] AND ("Contracture"[Mesh] OR "Cicatrix"[Mesh] OR "Cicatrix, Hypertrophic"[Mesh])) OR "Cerebral Palsy"[Mesh] OR "Spinal Cord Injuries"[Mesh] OR "Stroke"[Mesh] OR "Brain Injuries, Traumatic"[Mesh] OR "Hemiplegia"[Mesh] OR "Paraplegia"[Mesh] OR "Quadriplegia"[Mesh] OR amput*[tiab] OR "leg length discrep*"[tiab] OR "limb deficien*"[tiab] OR "gait deviation*"[tiab] OR "gait abnormal*"[tiab] OR "walking difficult*"[tiab] OR "sit to stand"[tiab] OR "sit-to-stand"[tiab] OR "postural imbalance"[tiab] OR "burn contracture*"[tiab] OR "scar contracture*"[tiab] Filters: in the last 10 years, Consensus Development Conference, NIH, Controlled Clinical Trial, Guideline, Meta-Analysis, Practice Guideline, Randomized Controlled Trial, Systematic Review	October 30, 2025 6:24 PM	53	7

Question 8. Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?

20	#10 AND #19
19	#17 AND #18
18	HABILITATION OR REHABILITATION OR "EARLY INTERVENTION"
17	#11 OR #12 OR #13 OR #14 OR #15 OR #16
16	"parent-mediated" OR "parent-led" OR "family-led" OR "caregiver-mediated" OR "caregiver-delivered" OR "home-based" OR "home program"
15	parent*
14	FAMIL*
13	Families Family Life Cycles Life Cycle, Family Life Cycles, Family Family Life Cycle Family Research Research, Family Family Members Family Member Filiation Kinship Networks Kinship Network Network, Kinship Networks, Kinship Relatives
12	PARENT
11	Caregiver Care Givers Care Giver Carers Carer Family Caregivers Caregiver, Family Caregivers, Family Family Caregiver Spouse Caregivers Caregiver, Spouse Caregivers, Spouse Spouse Caregiver Informal Caregivers Caregiver, Informal Caregivers, Informal Informal Caregiver
10	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9
9	"neural tube defect*" OR "limb deficient*" OR "spina bifida" OR clubfoot OR arthrogryposis
8	congenital OR "birth defect*" OR "congenital anomaly"
7	Congenital Limb Deformities Congenital Limb Deformity Deformities, Congenital Limb Deformity, Congenital Limb Limb Deformity, Congenital
6	Defect, Neural Tube Defects, Neural Tube Neural Tube Defect Developmental Defects, Neural Tube Developmental Neural Tube Defects Neural Tube Developmental Defects Diastematomyelia Diastematomyelias Tethered Cord Syndrome Tethered Cord Syndromes Occult Spinal Dysraphism Dysraphism, Occult Spinal Dysraphisms, Occult Spinal Occult Spinal Dysraphisms Spinal Dysraphism, Occult Spinal Dysraphisms, Occult Occult Spinal Dysraphism Sequence Tethered Spinal Cord Syndrome Craniorachischisis Craniorachischises Exencephaly Exencephalies Spinal Cord Myelodysplasia Myelodysplasia, Spinal Cord Myelodysplasias, Spinal Cord Spinal Cord Myelodysplasias Acrania Acranias Iniencephaly Iniencephalies Neurenteric Cyst Cyst, Neurenteric Cysts, Neurenteric Neurenteric Cysts Neuroenteric Cyst Cyst, Neuroenteric Cysts, Neuroenteric Neuroenteric Cysts
5	"Dysraphism, Spinal" OR "Dysraphisms, Spinal" OR "Spinal Dysraphisms" OR "Cleft Spine" OR "Cleft Spines" OR "Spine, Cleft" OR "Open Spine" OR "Open Spines" OR "Spine, Open" OR "Spinal Dysraphia" OR "Dysraphia, Spinal" OR "Spinal Dysraphias" OR "Spina Bifida" OR "Bifida, Spina" OR "Spina Bifidas" OR Schistorrhachis OR "Status Dysraphicus" OR "Dysraphicus, Status" OR Rachischisis OR Rachischises
4	"Abnormalities, Musculoskeletal" OR "Abnormality, Musculoskeletal" OR "Musculoskeletal Abnormality"
3	"Malformation, Nervous System" OR "Malformations, Nervous System" OR "Nervous System Malformation" OR "Nervous System Congenital Abnormal*" OR "Nervous System Congenital Malformations" OR "Nervous System Malformations, Congenital" OR "Congenital Anomalies, Nervous System" OR "Abnormalities, Nervous System" OR "Abnormality, Nervous System" OR "Nervous System Abnormality" OR "Nervous System Abnormalities" OR "Abnormalities, Congenital, Nervous System" OR "Anomalies, Nervous System" OR "Anomaly, Nervous System" OR "Nervous System Anomaly" OR "Congenital Abnormalities, Nervous System" OR "Congenital Malformations, Nervous System" OR "Nervous System Anomalies" OR "Malformations, Nervous System, Congenital" OR Cranioschisis OR Cranioschises
2	"Abnormality, Congenital" OR "Congenital Abnormality" OR "Abnormalities, Congenital" OR "Birth Defects"

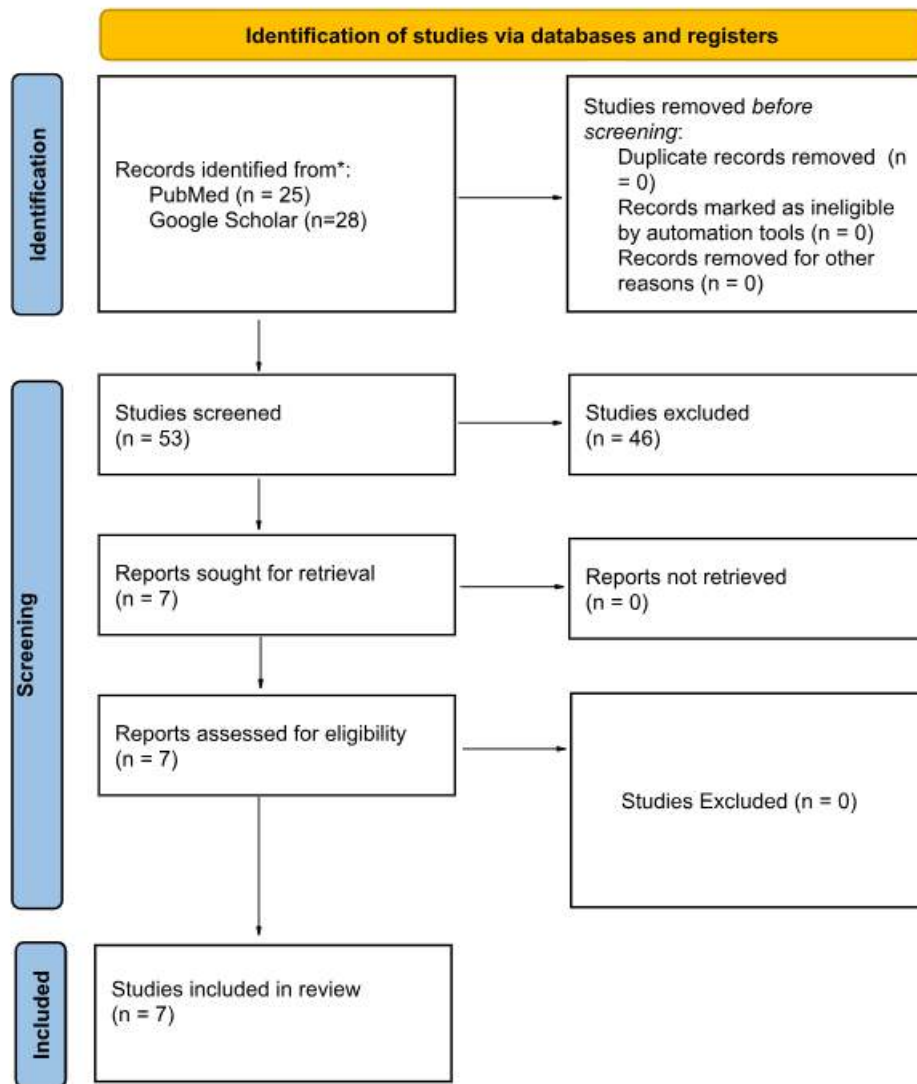
	OR "Birth Defect" OR "Defect, Birth" OR "Congenital Defects" OR "Congenital Defect" OR "Defect, Congenital" OR "Defects, Congenital" OR "Congenital Deformities" OR "Congenital Deformity" OR "Fetal Anomalies" OR "Anomaly, Fetal" OR "Fetal Anomaly" OR "Fetal Malformations" OR "Fetal Malformation" OR "Malformation, Fetal"
1	"Children with Disability" OR "Disability, Children with" OR "Disabled Children" OR "Handicapped Children" OR "Children, Handicapped" OR "Child, Disabled" OR "Disabled Child" OR "Children, Disabled" OR "Handicapped Child" OR "Child, Handicapped"



PRISMA Flow Diagram

Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?

DATABASE	SEARCH STRATEGY / SEARCH TERMS	DATE AND TIME OF SEARCH	RESULTS	
			Yield	Eligible
Medline/Pubmed	Search Terms: (((mild or moderate apparent neurologic or musculoskeletal disability[MeSH Terms]) AND (follow up, monitoring[MeSH Terms])) AND (no follow up[MeSH Terms])) AND (community reintegration[MeSH Terms])) AND (Patient satisfaction, Self care, Self worth/self efficacy, Physical and Social Participation, Functional Outcomes, Functional independence.[MeSH Terms]) Filters: in the last 10 years, Randomized Controlled Trial, Systematic Review Sort by: Most Recent (((mild or moderate apparent neurologic or musculoskeletal disability[MeSH Terms]) AND (follow up, monitoring[MeSH Terms])) AND (no follow up[MeSH Terms])) AND (community reintegration[MeSH Terms])) AND (Patient satisfaction, Self care, Self worth/self efficacy, Physical and Social Participation, Functional Outcomes, Functional independence.[MeSH Terms])) AND ((y_10[Filter]) AND (randomizedcontrolledtrial[Filter] OR systematicreview[Filter])) Translations moderate: "moderate"[All Fields] OR "moderated"[All Fields] OR "moderately"[All Fields] OR "moderates"[All Fields] OR "moderating"[All Fields] OR "moderation"[All Fields] OR "moderational"[All Fields] OR "moderations"[All Fields] OR "moderator"[All Fields] OR "moderators"[All Fields] neurologic: "neurologic"[All Fields] OR "neurological"[All Fields] OR "neurologically"[All Fields] Patient satisfaction: "patient satisfaction"[MeSH Terms] OR ("patient"[All Fields] AND "satisfaction"[All Fields]) OR "patient satisfaction"[All Fields] , Self care: "self care"[MeSH Terms] OR ("self"[All Fields] AND "care"[All Fields]) OR "self care"[All Fields] <i>Filters: Jan 2015 to October 2025</i>	October 15, 2025 6:00 PM	25	5
Google Scholar	monitoring/follow up vs no follow up on patients with mild to moderate apparent neurologic and musculoskeletal disability and its effects on community reintegration	October 2025	28	2



PRISMA Flow Diagram

Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

PubMed Search Strategy for stroke

Search number	Query	Filters	Search Details	Results	Time	Date
14	(((stroke[Title/Abstract]) AND (rehabilitation[Title/Abstract])) AND ((community[Title/Abstract]) OR (primary care[Title/Abstract]))) AND (((community[Title/Abstract]) OR (primary care[Title/Abstract])) OR ((specialist[Title/Abstract])	in the last 10 years, Clinical Trial, Observational Study	("stroke"[Title/Abstract] AND "rehabilitation"[Title/Abstract] AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract]) AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract] OR ("specialist"[Title/Abstract] OR "speciali*"[Title/Abstract])))	237	22:16:16	2025/12/10

	OR (speciali*[Title/Abstract]))		AND ((y_10[Filter]) AND (clinicaltrial[Filter] OR observationalstudy[Filter]))			
12	((stroke[Title/Abstract]) AND (rehabilitation[Title/Abstract])) AND ((community[Title/Abstract]) OR (primary care[Title/Abstract])) AND (((community[Title/Abstract]) OR (primary care[Title/Abstract])) OR ((specialist[Title/Abstract]) OR (speciali*[Title/Abstract])))	in the last 10 years	("stroke"[Title/Abstract] AND "rehabilitation"[Title/Abstract] AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract]) AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract] OR ("specialist"[Title/Abstract] OR "speciali*" [Title/Abstract])) AND (y_10[Filter])	1,509	22:07:03	2025/12/10
13	((stroke[Title/Abstract]) AND (rehabilitation[Title/Abstract])) AND ((community[Title/Abstract]) OR (primary care[Title/Abstract])) AND (((community[Title/Abstract]) OR (primary care[Title/Abstract])) OR ((specialist[Title/Abstract]) OR (speciali*[Title/Abstract])))	in the last 10 years, Clinical Trial	("stroke"[Title/Abstract] AND "rehabilitation"[Title/Abstract] AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract]) AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract] OR ("specialist"[Title/Abstract] OR "speciali*" [Title/Abstract])) AND ((y_10[Filter]) AND (clinicaltrial[Filter]))	162	22:05:10	2025/12/10
11	((stroke[Title/Abstract]) AND (rehabilitation[Title/Abstract])) AND ((community[Title/Abstract]) OR (primary care[Title/Abstract])) AND (((community[Title/Abstract]) OR (primary care[Title/Abstract])) OR ((specialist[Title/Abstract]) OR (speciali*[Title/Abstract])))		"stroke"[Title/Abstract] AND "rehabilitation"[Title/Abstract] AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract]) AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract] OR ("specialist"[Title/Abstract] OR "speciali*" [Title/Abstract]))	2,482	22:02:08	2025/12/10
10	((community[Title/Abstract]) OR (primary care[Title/Abstract])) OR ((specialist[Title/Abstract]) OR (speciali*[Title/Abstract]))		"community"[Title/Abstract]] OR "primary care"[Title/Abstract] OR "specialist"[Title/Abstract] OR "speciali*" [Title/Abstract]	1,217,603	22:01:35	2025/12/10
9	(specialist[Title/Abstract]) OR (speciali*[Title/Abstract])		"specialist"[Title/Abstract] OR "speciali*" [Title/Abstract]	341,432	22:01:17	2025/12/10

8	speciali*[Title/Abstract]	"speciali**"[Title/Abstract]	341,432	22:01:03	2025/12/10
7	specialist[Title/Abstract]	"specialist"[Title/Abstract]	82,942	22:00:38	2025/12/10
6	(community[Title/Abstract]) OR (primary care[Title/Abstract])	"community"[Title/Abstract] OR "primary care"[Title/Abstract]	910,912	22:00:18	2025/12/10
5	primary care[Title/Abstract]	"primary care"[Title/Abstract]	168,851	22:00:09	2025/12/10
4	community[Title/Abstract]	"community"[Title/Abstract]	766,575	21:59:47	2025/12/10
3	(stroke[Title/Abstract]) AND (rehabilitation[Title/Abstract])	"stroke"[Title/Abstract] AND "rehabilitation"[Title/Abstract]	29,088	21:59:00	2025/12/10
2	rehabilitation[Title/Abstract]	"rehabilitation"[Title/Abstract]	253,662	21:58:43	2025/12/10
1	stroke[Title/Abstract]	"stroke"[Title/Abstract]	367,091	21:58:30	2025/12/10

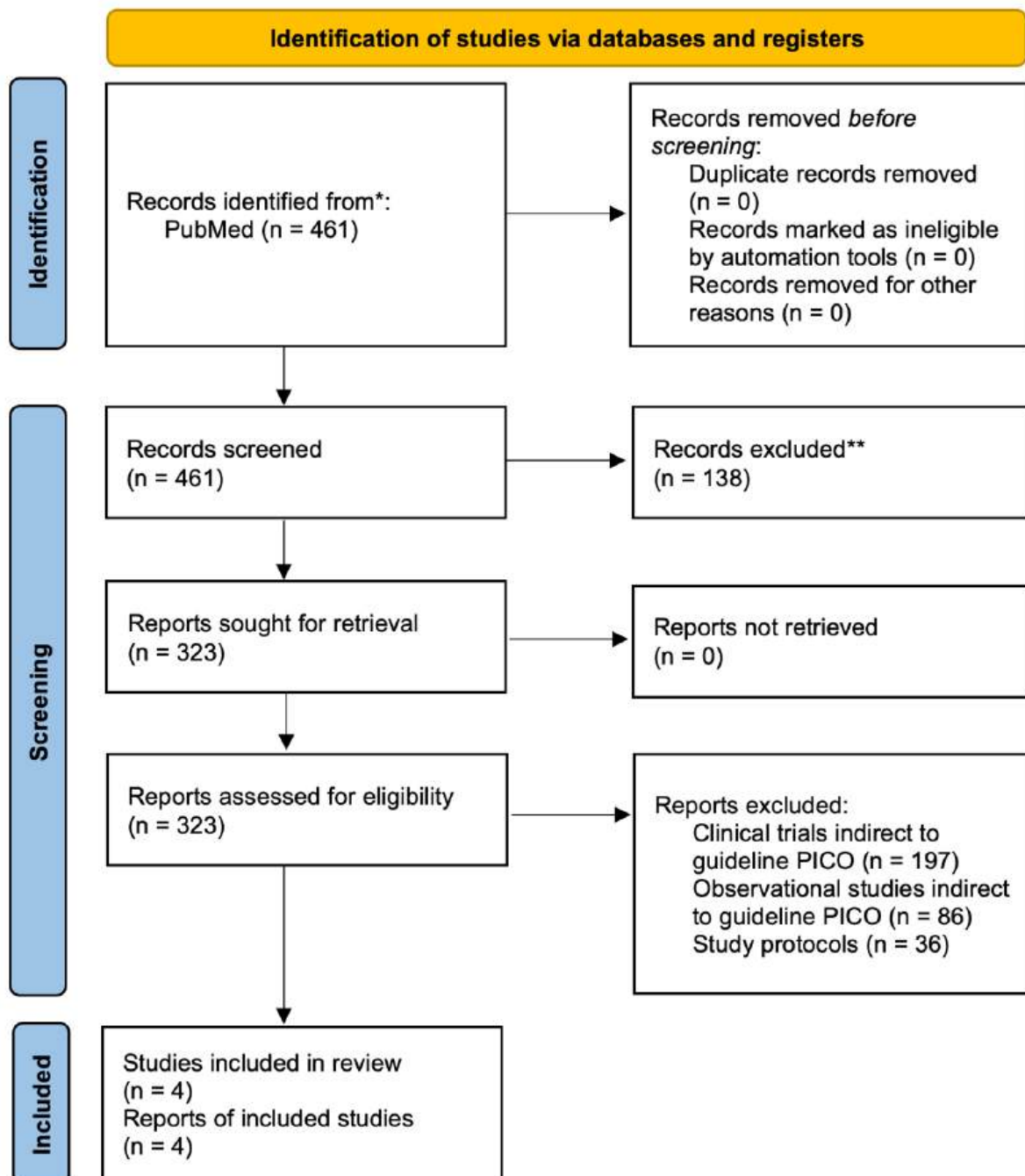
PubMed Search Strategy for Parkinson's Disease

Search number	Query	Filters	Search Details	Results	Time	Date
6	(advanced Parkinson's disease[Title/Abstract]) AND (((primary care[Title/Abstract]) OR (community[Title/Abstract]) OR (home[Title/Abstract])))		"advanced parkinson s disease"[Title/Abstract] AND ("primary care"[Title/Abstract] OR "community"[Title/Abstract] OR "home"[Title/Abstract])	71	22:25:53	2025/12/10
5	((primary care[Title/Abstract]) OR (community[Title/Abstract]) OR (home[Title/Abstract]))		"primary care"[Title/Abstract] OR "community"[Title/Abstract] OR "home"[Title/Abstract]	1,186,928	22:25:42	2025/12/10
4	home[Title/Abstract]		"home"[Title/Abstract]	324,251	22:25:31	2025/12/10
3	community[Title/Abstract]		"community"[Title/Abstract]	766,575	22:25:19	2025/12/10
2	primary care[Title/Abstract]		"primary care"[Title/Abstract]	168,851	22:25:04	2025/12/10
1	advanced Parkinson's disease[Title/Abstract]		"advanced parkinson s disease"[Title/Abstract]	2,057	22:24:29	2025/12/10

PubMed Search Strategy for cerebral palsy

Search number	Query	Filters	Search Details	Results	Time	Date
7	((cerebral palsy[Title/Abstract]) AND		"cerebral palsy"[Title/Abstract] AND	217	22:37:08	2025/12/10

	(rehabilitation[Title/Abstract]) AND ((community[Title/Abstract]) OR (primary care[Title/Abstract]))	"rehabilitation"[Title/Abstract] AND ("community"[Title/Abstract] OR "primary care"[Title/Abstract])				
6	(community[Title/Abstract]) OR (primary care[Title/Abstract])	"community"[Title/Abstract] OR "primary care"[Title/Abstract]	910,912	22:36:56	2025/12/10	
5	primary care[Title/Abstract]	"primary care"[Title/Abstract]	168,851	22:36:46	2025/12/10	
4	community[Title/Abstract]	"community"[Title/Abstract]	766,575	22:36:32	2025/12/10	
3	(cerebral palsy[Title/Abstract]) AND (rehabilitation[Title/Abstract])	"cerebral palsy"[Title/Abstract] AND "rehabilitation"[Title/Abstract]	3,460	22:36:12	2025/12/10	
2	rehabilitation[Title/Abstract]	"rehabilitation"[Title/Abstract]	253,662	22:36:02	2025/12/10	
1	cerebral palsy[Title/Abstract]	"cerebral palsy"[Title/Abstract]	31,247	22:35:37	2025/12/10	



PRISMA Flow Diagram

Appendix 3. Characteristics of Included Studies

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

Randomized controlled trials (RCTs) and non-randomized trials

#	Study	Design	Setting	Participants	Intervention	Comparator	Outcomes	Main Findings
1	Bleijenberg et al., 2016 (Netherlands)	Cluster controlled trial	12 general practices in Nijmegen, the Netherlands	536 frail community-dwelling adults aged ≥70 years identified using the EASY-Care two-step screening instrument (287 intervention, 249 control)	Frailty Screening followed by routine care from general practitioner (n=790) Frailty Screening followed by nurse-led care: comprehensive geriatric assessment, care coordination (n=1,446)	Usual care by general practitioners and community services without structured proactive screening or integrated case management. (n=856)	Primary outcome: Independence in functioning (Katz-15 index). Secondary outcomes: quality of life (EQ-5D+C), mental health, health-related social functioning, hospitalization, institutionalization, mortality.	No significant differences between groups in independence or secondary outcomes after 12 months. The intervention was feasible but not more effective than usual care in preventing functional decline.
2	Hill et al., 2011 (UK)	Cluster randomized controlled trial	Ten general practices within the Keele General Practice Research Partnership, England	1,573 adults (≥18 years) with back pain of any duration, with or without radiculopathy	STarT Back stratified care model: prognostic screening using the Keele STarT Back Screening Tool to categorize patients into low, medium, or high risk of persistent disability. Treatment pathways matched to risk group: minimal intervention and advice for low-risk; standardized physiotherapy for medium-risk; psychologically informed	Current best practice: non-stratified care following usual GP and physiotherapy management without prognostic screening.	Primary outcome: Roland–Morris Disability Questionnaire (RMDQ) at 12 months. Secondary outcomes: pain intensity, EQ-5D quality of life, work days lost, health care costs, and cost-effectiveness (incremental QALYs).	Stratified management significantly improved mean RMDQ disability scores and was cost-effective compared to usual care. The greatest gains were among medium- and high-risk subgroups, supporting the use of early prognostic screening and matched treatment to improve outcomes and resource efficiency.

#	Study	Design	Setting	Participants	Intervention	Comparator	Outcomes	Main Findings
					physiotherapy for high-risk.			
3	Kerse et al., 2014 (New Zealand)	Pragmatic cluster randomized controlled trial	60 primary care practices across 3 regions in New Zealand	3,893 community-dwelling adults aged ≥75 years (mean 80.3, 55% female)	BRIGHT intervention: Annual proactive case finding using the <i>Brief Risk Identification Geriatric Health Tool (BRIGHT)</i> mailed as a birthday card. Score ≥3 triggered referral to regional geriatric assessment and rehabilitation services. Practices received nurse funding support and geriatrics teams were pre-funded to handle referrals.	Usual care: Standard primary care, including referrals to geriatric services at clinician discretion, without systematic screening.	Primary outcomes: Residential care placement and hospitalization (including ambulatory care-sensitive hospitalizations). Secondary outcomes: Disability (NEADL), quality of life (WHOQOL-BREF), functional ability (AM-PAC), depression (GDS-15), satisfaction with care, and use of home help/personal care.	No reduction in hospitalizations or disability. Residential care placement increased (8.4% vs 6.2%, HR = 1.32; 95% CI 1.04–1.68). Slightly smaller declines in physical (Δ 1.6 vs 2.9, p = 0.007) and psychological quality of life (Δ 1.1 vs 2.4, p = 0.005) in intervention group. No differences in disability or service use. Authors concluded that systematic screening improved identification of disability but did not improve outcomes and may increase institutionalization.

Prospective cohort / longitudinal studies

#	Author Year	Country/Setting	Study design	Population	Screening tool used	Aims of screening	Follow-up period	Outcomes assessed
1	Alessi 2003	Outpatient primary care clinic at a Department of Veterans Affairs teaching ambulatory care center, Sepulveda, California	Longitudinal cohort study	Patients (N=2,382) aged ≥ 65 years, community-dwelling	Geriatric Postal Screening Survey (GPSS) (10-item postal survey screening for depression, cognitive impairment, urinary incontinence, falls, and functional status impairment)	To assess the yield, reliability, and validity of the GPSS to identify older persons in need of outpatient geriatric assessment and follow-up services.	1 year	Yield, reliability, and validity; hospital days used; functional status (IADL subscale of FSQ); nursing home admissions; hospital admissions; 1-year survival.
2	Ek 2019	Swedish National Study on Aging and Care in Kungsholmen (SNAC-K), Sweden	Longitudinal cohort study	Community-living older adults (N=2808) aged ≥ 60 years (mean age 73). Excluded institutionalized or those with injurious falls in the 3 years prior to baseline.	First Injurious Fall (FIF) screening tool (developed in this study, components: age, living alone, Instrumental Activities of Daily Living (IADL) dependency, and impaired balance).	To create a screening tool to predict first-time injurious falls in community-living older men and women.	Up to 5 years from baseline (mean \$4.37\$ years).	Injurious falls within 5 years from baseline survey. Predictive values (Harrell C statistic), sensitivity, and specificity. Hazard ratios (HRs) for injurious falls by score category.
3	Suijker 2014	Netherlands (General Practices: Development and Validation Cohorts)	Prospective development (n=790) and external validation cohorts (n=2,573)	Community-dwelling persons aged ≥ 70 years.	ISAR-Primary Care (ISAR-PC) (3-item modified ISAR: age, IADL dependence, impaired memory). Original ISAR also tested.	To modify and validate the ISAR questionnaire in primary health care to identify older persons at increased risk of functional decline.	12 months.	Functional decline at 12 months (defined as an increase of at least one point on the modified Katz ADL index score compared with baseline or death). Predictive performance (AUC).

#	Author Year	Country/Setting	Study design	Population	Screening tool used	Aims of screening	Follow-up period	Outcomes assessed
4	van Blijswijk 2018	Netherlands (General practices).	Longitudinal follow-up cohort study (ISCOPE trial embedded).	Community-dwelling older persons aged ≥ 75 years (N=2211 analyzed).	ISCOPE-screening questionnaire (23 questions on 4 health domains: somatic, functional, psychological, social; yielding ISCOPE-score). Also used GPs' opinion on vulnerability.	To investigate the predictive value of readily available variables, questionnaire scores, and GP-opinion on functional decline.	12 months.	Functional decline (defined as death, nursing home admission, or the 10% with greatest proportional functional decline in Groningen Activities Restriction Scale (GARS) score). Predictive value (AUC) of various models.

List of Excluded Studies

No.	Article	Reason for exclusion
Did not meet PICO		
1	Froom J, Schlager DS, Stenecker S, Jaffe A. Detection of major depressive disorder in primary care patients. J Am Board Fam Pract. 1993;6(1):5-11.	The primary focus is disease-specific screening for Major Depressive Disorder in a general ambulatory population, rather than screening for general functional decline in an aged or frailty risk population.
2	Habtemu K, Medhin G, Selamu M, Tirfessa K, Hanlon C, Fekadu A. Functional impairment among people diagnosed with depression in primary healthcare in rural Ethiopia: a comparative cross-sectional study. Int J Ment Health Syst. 2019;13:50. Published 2019 Jul 17. doi:10.1186/s13033-019-0305-8	The study revolves around disease-specific screening (depressive symptoms using PHQ-9), and functional assessment (WHODAS-2.0) is used primarily as an outcome measure among clinically diagnosed cases.
3	Collingwood C, Paddick SM, Kisoli A, et al. Development and community-based validation of the IDEA study Instrumental Activities of Daily Living (IDEA-IADL) questionnaire. Glob Health Action. 2014;7:25988. Published 2014 Dec 22. doi:10.3402/gha.v7.25988	The intervention is primarily diagnostic evaluation and screening for a specific disease (dementia), followed by clinical DSM-IV assessment
4	Oladeji BD, Kola L, Abiona T, Montgomery AA, Araya R, Gureje O. A pilot randomized controlled trial of a stepped care intervention package for depression in primary care in Nigeria. BMC Psychiatry. 2015;15:96. Published 2015 May 1. doi:10.1186/s12888-015-0483-0	The intervention is disease-specific screening (depression using PHQ-9), and the functional tool (WHODAS II) is used as a secondary outcome measure for the intervention, not as the primary function-based screening mechanism for general functional limitations
5	Zhao N, Xu J, Zhou Q, et al. Screening behaviors for diabetic foot risk and their	The study focuses on disease-specific screening for a complication (Diabetic

	influencing factors among general practitioners: a cross-sectional study in Changsha, China. BMC Prim Care. 2023;24(1):68. Published 2023 Mar 13. doi:10.1186/s12875-023-02027-3	Foot Risk Screening), which, despite including some physical components (peripheral neuropathy), is specialized disease screening excluded by criterion.
6	van Leeuwen KM, Bosmans JE, Jansen AP, et al. Cost-Effectiveness of a Chronic Care Model for Frail Older Adults in Primary Care: Economic Evaluation Alongside a Stepped-Wedge Cluster-Randomized Trial. J Am Geriatr Soc. 2015;63(12):2494-2504. doi:10.1111/jgs.13834	The study involves assessment following a broader Geriatric Care Model and not screening for function.
7	Wells KB, Jones L, Chung B, et al. Community-partnered cluster-randomized comparative effectiveness trial of community engagement and planning or resources for services to address depression disparities. J Gen Intern Med. 2013;28(10):1268-1278. doi:10.1007/s11606-013-2484-3	The study evaluates disease-specific screening for mental health conditions (depression/substance use)
8	Trani JF, Babulal GM, Bakhshi P. Development and Validation of the 34-Item Disability Screening Questionnaire (DSQ-34) for Use in Low and Middle Income Countries Epidemiological and Development Surveys. PLoS One. 2015;10(12):e0143610. Published 2015 Dec 2. doi:10.1371/journal.pone.0143610	Population-level disability survey tool; not primary care or early screening for functional decline. Provides indirect evidence on psychometric properties of function-based measures.
9	Sackley CM, van den Berg ME, Lett K, et al. Effects of a physiotherapy and occupational therapy intervention on mobility and activity in care home residents: a cluster randomised controlled trial. BMJ. 2009;339:b3123. Published 2009 Sep 1. doi:10.1136/bmj.b3123	The study population consists of institutionalized individuals (Care home residents in nursing and residential homes).
10	Rudd AG, Wolfe CD, Tilling K, Beech R. Randomised controlled trial to evaluate early discharge scheme for patients with stroke. BMJ. 1997;315(7115):1039-1044. doi:10.1136/bmj.315.7115.1039	Focuses on rehabilitation after established disability, not function-based screening or early detection in persons at risk.
11	Ambigapathy R, Ramachandram S, Rahim FF. Referral patterns and outcomes of children who failed Modified Checklist for Autism in Toddlers screening during routine health screening at maternal and child health clinics in the northeast district of Penang: A retrospective cohort study. Malays Fam Physician. 2024;19:9. Published 2024 Feb 7. doi:10.51866/oa.378	Pediatric, diagnostic (autism) screening study; not function-based screening for disability risk or functional limitation.
12	van Schroyen Lantman-de Valk HM, Metsemakers JF, Soomers-Turlings MJ, Haveman MJ, Crebolder HF. People with intellectual disability in general practice: case definition and case finding. J Intellect Disabil Res. 1997;41 (Pt 5):373-379. doi:10.1111/j.1365-2788.1997.tb00724.x	Focuses on diagnostic case finding through GP records, not on functional screening or early detection of functional limitations. No function-based assessment or outcome measures used.
13	Gillis K, Augruso A, Coe T, et al. Physiotherapy extended-role practitioner for individuals with hip and knee arthritis: patient perspectives of a rural/urban	Qualitative study on care delivery; no screening or function-based assessment component.

	partnership. Physiother Can. 2014;66(1):25-32. doi:10.3138/ptc.2012-55	
14	Petersen EM, Wroe EB, Nyangulu K, et al. Integrated home-based screening for people living with disabilities: A case study from rural Malawi. Afr J Disabil. 2019;8:582. Published 2019 Nov 22. doi:10.4102/ajod.v8i0.582	Already includes people with disabilities.
15	Chan TA, Summach AHJ, O'Rourke T. Virtual frailty screening: A quality improvement project to enhance community-based assessment. Aging and Health Research. 2024;4(3):100198. doi:10.1016/j.ahr.2024.100198	Virtual frailty screening
16	Daniels R, van Rossum E, Metzelthin S, Sipers W, Habets H, Hobma S, van den Heuvel W, de Witte L. A disability prevention programme for community-dwelling frail older persons. Clin Rehabil. 2011 Nov;25(11):963-74. doi: 10.1177/0269215511410728. Epub 2011 Aug 17. PMID: 21849375.	Protocol for a disability prevention program that starts with frailty screening using Groningen Frailty Index (GFI)
17	Dasgupta P, Frisch A, Huber J, Sejdic E, Suffoletto B. Predicting falls within 3 months of emergency department discharge among community-dwelling older adults using self-report tools versus a brief functional assessment. Am J Emerg Med. 2022 Mar;53:245-249. doi: 10.1016/j.ajem.2021.12.071. Epub 2022 Jan 17. PMID: 35085878; PMCID: PMC9231635.	Involves adults to be discharged from Emergency Department
18	Davis DL, Almadawi R, Terrin ML. Identification of Community-Dwelling Older Adults With Shoulder Dysfunction: A Pilot Study to Evaluate the Disabilities of the Arm, Shoulder and Hand Survey. Geriatr Orthop Surg Rehabil. 2022 Oct 10;13:21514593221129177. doi: 10.1177/21514593221129177. PMID: 36250187; PMCID: PMC9554132.	Correlation of screening tool for shoulder dysfunction with other outcome measures
19	Hustey FM, Mion LC, Connor JT, Emerman CL, Campbell J, Palmer RM. A brief risk stratification tool to predict functional decline in older adults discharged from emergency departments. J Am Geriatr Soc. 2007 Aug;55(8):1269-74. doi: 10.1111/j.1532-5415.2007.01272.x. PMID: 17661968.	Functional screening done at the Emergency Department to predict subsequent functional decline and high-risk patients who would benefit from further referrals
20	Maggio M, Barbolini M, Longobucco Y, Barbieri L, Benedetti C, Bono F, Cacciapuoli I, Donatini A, Iezzi E, Papini D, Rodelli PM, Tagliaferri S, Moro ML. A Novel Tool for the Early Identification of Frailty in Elderly People: The Application in Primary Care Settings. J Frailty Aging. 2020;9(2):101-106. doi: 10.14283/jfa.2019.41. PMID: 32259184; PMCID: PMC12275750.	Aims to measure concordance between 9-item Sunfrail Checklist done by general practitioner versus Comprehensive Geriatric Assessment
21	Mazzaglia G, Roti L, Corsini G, et al. Screening of older community-dwelling people at risk for death and hospitalization: the Assistenza Socio-Sanitaria in Italia project. J Am Geriatr Soc. 2007;55(12):1955-1960. doi:10.1111/j.1532-	Different outcome: death and hospitalization

	5415.2007.01446.x	
22	McCusker J, Verdon J, Tousignant P, de Courval LP, Dendukuri N, Belzile E. Rapid emergency department intervention for older people reduces risk of functional decline: results of a multicenter randomized trial. <i>J Am Geriatr Soc.</i> 2001 Oct;49(10):1272-81. doi: 10.1046/j.1532-5415.2001.49254.x. PMID: 11890484.	Emergency department screening for functional limitation
23	McCusker J, Jacobs P, Dendukuri N, Latimer E, Tousignant P, Verdon J. Cost-effectiveness of a brief two-stage emergency department intervention for high-risk elders: results of a quasi-randomized controlled trial. <i>Ann Emerg Med.</i> 2003 Jan;41(1):45-56. doi: 10.1067/mem.2003.4. PMID: 12514682.	Cost effectiveness of emergency department screening for functional limitation
24	Ogunbode AM, Adebuse LA, Olowookere OO, Alonge TO. Physical functionality and self-rated health status of adult patients with knee osteoarthritis presenting in a primary care clinic. <i>Ethiop J Health Sci.</i> 2014 Oct;24(4):319-28. doi: 10.4314/ejhs.v24i4.7. PMID: 25489196; PMCID: PMC4248031.	Not a prospective cohort study or controlled trial
25	Perell KL, Manzano ML, Weaver R, Fiuzat M, Voss-McCarthy M, Opava-Rutter D, Castle SC. Outcomes of a consult fall prevention screening clinic. <i>Am J Phys Med Rehabil.</i> 2006 Nov;85(11):882-8. doi: 10.1097/01.phm.0000233209.49518.46. PMID: 17079960.	Involves a specialized screening facility different from primary care setting
26	Rudd AG, Wolfe CD, Tilling K, Beech R. Randomised controlled trial to evaluate early discharge scheme for patients with stroke. <i>BMJ.</i> 1997 Oct 25;315(7115):1039-44. doi: 10.1136/bmj.315.7115.1039. Erratum in: <i>BMJ</i> 1998 Feb 7;316(7129):435. PMID: 9366727; PMCID: PMC2127677.	Involves patients with stroke in the hospital setting
27	Tan LF, Chan YH, Tay A, Jayasundram J, Low NA, Merchant RA. Practicality and Reliability of Self Vs Administered Rapid Geriatric Assessment Mobile App. <i>J Nutr Health Aging.</i> 2021;25(9):1064-1069. doi: 10.1007/s12603-021-1672-9. PMID: 34725662; PMCID: PMC8432277.	Tests the validity of Rapid Geriatric Assessment conducted via an app; only tests psychometrics
28	Vellas B, Balardy L, Gillette-Guyonnet S, Abellan Van Kan G, Ghisolfi-Marque A, Subra J, Bismuth S, Oustric S, Cesari M. Looking for frailty in community-dwelling older persons: the G�rontop�le Frailty Screening Tool (GFST). <i>J Nutr Health Aging.</i> 2013 Jul;17(7):629-31. doi: 10.1007/s12603-013-0363-6. PMID: 23933875.	Validation of a frailty screening tool
29	Baker JG, Johnston MV. Prevalence and identification of problems in daily functioning in a primary medicine clinic. <i>Disabil Rehabil.</i> 2000 Nov 10;22(16):716-24. doi: 10.1080/09638280050191981. PMID: 11117591.	Not a prospective cohort study or controlled trial

30	Hay WI. Prospective care of elderly patients in family practice part 2: is screening worthwhile? Can Fam Physician. 1990 Jun;36:1121-6. PMID: 21233981; PMCID: PMC2280484.	Not a systematic review
31	Rubenstein LZ, Alessi CA, Josephson KR, Trinidad Hoyl M, Harker JO, Pietruszka FM. A randomized trial of a screening, case finding, and referral system for older veterans in primary care. J Am Geriatr Soc. 2007 Feb;55(2):166-74. doi: 10.1111/j.1532-5415.2007.01044.x. PMID: 17302651.	Evaluated effects of an intervention program for geriatric assessment and management compared to usual care for all participants identified as high-risk based on Geriatric Postal Screening Survey. Outcomes of unscreened vs screened individuals cannot be determined.
32	Ruikes FG, Zuidema SU, Akkermans RP, Assendelft WJ, Schers HJ, Koopmans RT. Multicomponent Program to Reduce Functional Decline in Frail Elderly People: A Cluster Controlled Trial. J Am Board Fam Med. 2016 Mar-Apr;29(2):209-17. doi: 10.3122/jabfm.2016.02.150214. PMID: 26957377.	All participants were screened using Easy-Care Two-Step Older Persons (TOS) tool, then those identified as frail were assigned to receive CareWell primary care program (involving multidisciplinary team meetings, proactive care planning, case management, and medication review) or usual care. Outcomes of unscreened vs screened individuals cannot be determined.
33	Delitto A, Patterson CG, Stevans JM, Freburger JK, Khoja SS, Schneider MJ, Greco CM, Freel JA, Sowa GA, Wasan AD, Brennan GP, Hunter SJ, Minick KI, Wegener ST, Ephraim PL, Beneciuk JM, George SZ, Saper RB. Stratified care to prevent chronic low back pain in high-risk patients: The TARGET trial. A multi-site pragmatic cluster randomized trial. EClinicalMedicine. 2021 Mar 30;34:100795. doi: 10.1016/j.eclinm.2021.100795. PMID: 33870150; PMCID: PMC8040279.	Both intervention and control groups received screening using STarT Back Screening tool. The intervention group received targeted physical therapy based on risk, while the control group did not receive structured risk-based intervention.
34	Metzelthin SF, van Rossum E, de Witte LP, Ambergen AW, Hobma SO, Sipers W, Kempen GI. Effectiveness of interdisciplinary primary care approach to reduce disability in community dwelling frail older people: cluster randomised controlled trial. BMJ. 2013 Sep 10;347:f5264. doi: 10.1136/bmj.f5264. PMID: 24022033; PMCID: PMC3769159.	Focused on the intervention after successful identification of frailty
35	Scharf AC, Gronewold J, Dahmann C, Schlitzer J, Kribben A, Gerken G, Rassaf T, Kleinschnitz C, Dodel R, Frohnhofer H, Hermann DM. Health outcome of older hospitalized patients in internal medicine environments evaluated by Identification of Seniors at Risk (ISAR) screening and geriatric assessment. BMC Geriatr. 2019 Aug 14;19(1):221. doi: 10.1186/s12877-019-1239-3. PMID: 31412787; PMCID: PMC6694685.	ISAR Screening tool; Uses screening but not in the primary care context (hospitalized patients in internal medicine)
36	Dendukuri N, McCusker J, Belzile E. The identification of seniors at risk screening tool: further evidence of concurrent and predictive validity. J Am Geriatr Soc. 2004 Feb;52(2):290-6. doi: 10.1111/j.1532-5415.2004.52073.x. PMID: 14728643.	ISAR Screening tool; Not in primary care context (emergency department)
37	Romero-Ortuno R, Soraghan C. A Frailty Instrument for primary care for those aged 75 years or more: findings from the Survey of Health, Ageing and Retirement	Frailty assessment; not a brief screening tool

	in Europe, a longitudinal population-based cohort study (SHARE-FI75+). BMJ Open. 2014 Dec 23;4(12):e006645. doi: 10.1136/bmjopen-2014-006645. PMID: 25537787; PMCID: PMC4275665.	
38	Jansen-Kosterink S, van Velsen L, Frazer S, Dekker-van Weering M, O'Caoimh R, Vollenbroek-Hutten M. Identification of community-dwelling older adults at risk of frailty using the PERSSILAA screening pathway: a methodological guide and results of a large-scale deployment in the Netherlands. BMC Public Health. 2019 May 3;19(1):504. doi: 10.1186/s12889-019-6876-0. PMID: 31053090; PMCID: PMC6500037.	Not a longitudinal cohort study
39	Hayes C, Whiston A, Fitzgerald C, Devlin C, Condon B, Manning M, Leahy A, Robinson K, Galvin R. Community Specialist Teams for Older Persons (CST-OP) at risk of, or living with frailty in Ireland: a prospective cohort study of a new model of integrated care for community dwelling older adults. BMC Prim Care. 2025 Jun 5;26(1):193. doi: 10.1186/s12875-025-02895-x. PMID: 40474059; PMCID: PMC12139166.	Not a screening tool - comprehensive geriatric assessment
40	Mayhew AJ, Griffith LE, Gilsing A, Beauchamp MK, Kuspinar A, Raina P. The Association Between Self-Reported and Performance-Based Physical Function With Activities of Daily Living Disability in the Canadian Longitudinal Study on Aging. J Gerontol A Biol Sci Med Sci. 2020 Jan 1;75(1):147-154. doi: 10.1093/gerona/glz122. PMID: 31081885; PMCID: PMC6909898.	Not originally intended to assess relationship of function-based screening with development of disability
41	Welch SA, Ward RE, Beauchamp MK, Leveille SG, Travison T, Bean JF. The Short Physical Performance Battery (SPPB): A Quick and Useful Tool for Fall Risk Stratification Among Older Primary Care Patients. J Am Med Dir Assoc. 2021 Aug;22(8):1646-1651. doi: 10.1016/j.jamda.2020.09.038. Epub 2020 Nov 13. PMID: 33191134; PMCID: PMC8113335.	Not originally intended to assess relationship of function-based screening with development of disability

Met PICO but involved screening for other functional domains		
1	Amritanand A, Paul P, Jasper S, Kumar SPV, Abraham V. Incorporating primary eye care into primary health care: Piloting a perceived visual disability questionnaire based model in rural southern India - An observational study. Indian J Ophthalmol. 2018 Jul;66(7):957-962. doi: 10.4103/ijo.IJO_144_18. PMID: 29941739; PMCID: PMC6032735.	Visual function
2	Arieli M, Agmon M, Gil E, Kizony R. The contribution of functional cognition screening during acute illness hospitalization of older adults in predicting participation in daily life after discharge. BMC Geriatr. 2022 Sep 12;22(1):739. doi: 10.1186/s12877-022-	Cognition

	03398-5. PMID: 36089574; PMCID: PMC9464608.	
3	Bernie C, Montgomery A, Sealy L, Descallar J, Dissanayake C, Jalaludin B, Murphy E, Woolfenden S, Williams K, Eapen V. Sensitivity and Specificity of Developmental Surveillance and Autism Screening in an Australian Multicultural Cohort: The Watch Me Grow Study. <i>J Autism Dev Disord</i> . 2025 May 15. doi: 10.1007/s10803-025-06859-z. Epub ahead of print. PMID: 40372565.	Communication / autism screening
4	Bifulco L, Anderson DR, Blankson ML, Channamsetty V, Blaz JW, Nguyen-Louie TT, Scholle SH. Evaluation of a Chronic Pain Screening Program Implemented in Primary Care. <i>JAMA Netw Open</i> . 2021 Jul 1;4(7):e2118495. doi: 10.1001/jamanetworkopen.2021.18495. PMID: 34313738; PMCID: PMC8317006.	Chronic pain
5	Cardozo LJ, Steinberg J, Lepczyk MB, Binnus-Emerick L, Cardozo YM, Aranha AN. Delivery of preventive healthcare to older African-American patients: a performance comparison from two practice models. <i>Am J Manag Care</i> . 1998 Jun;4(6):809-16. PMID: 10181067.	ADL, cognition
6	Davis A, Smith P, Ferguson M, Stephens D, Gianopoulos I. Acceptability, benefit and costs of early screening for hearing disability: a study of potential screening tests and models. <i>Health Technol Assess</i> . 2007 Oct;11(42):1-294. doi: 10.3310/hta11420. PMID: 17927921.	Hearing disability
7	Iliffe S, Kharicha K, Harari D, Swift C, Gillmann G, Stuck AE. Health risk appraisal in older people 6: factors associated with self-reported poor vision and uptake of eye tests in older people. <i>BMC Fam Pract</i> . 2013 Sep 3;14:130. doi: 10.1186/1471-2296-14-130. PMID: 24006949; PMCID: PMC3766676.	Visual function
8	Loh KY, Khairani O, Norlaili T. The prevalence of functional impairment among elderly aged 60 years and above attending Klinik Kkesihatan Batu 9 Ulu Langat, Selangor. <i>Med J Malaysia</i> . 2005 Jun;60(2):188-93. PMID: 16114159.	Instrumental ADL screening
9	Michelet M, Lund A, Strand BH, Engedal K, Selbaek G, Bergh S. Characteristics of patients assessed for cognitive decline in primary healthcare, compared to patients assessed in specialist healthcare. <i>Scand J Prim Health Care</i> . 2020 Jun;38(2):107-116. doi: 10.1080/02813432.2020.1753334. Epub 2020 May 2. PMID: 32362213; PMCID: PMC8570739.	Cognitive decline
10	Saliba D, Orlando M, Wenger NS, Hays RD, Rubenstein LZ. Identifying a short functional disability screen for older persons. <i>J Gerontol A Biol Sci Med Sci</i> . 2000 Dec;55(12):M750-6. doi: 10.1093/gerona/55.12.m750. PMID: 11129398.	ADL/iADL
11	Hudson Scholle S, Nguyen-Louie TT, Bifulco L, Blaz JW, Blankson ML, Channamsetty V, Anderson DR. Are Pain Screening and Functional Assessment Results Associated with New Diagnoses and Treatment for Pain in Primary Care? An Observational Study. <i>J Pain Res</i> . 2022 Aug 5;15:2249-2261. doi: 10.2147/JPR.S367480. PMID: 35957962; PMCID: PMC9362509.	Chronic pain
12	Tolea MI, Heo J, Chrisphonte S, Galvin JE. A Modified CAIDE Risk Score as a Screening Tool for Cognitive Impairment in Older Adults. <i>J Alzheimers Dis</i> . 2021;82(4):1755-1768. doi: 10.3233/JAD-210269. PMID: 34219721; PMCID: PMC8483620.	Cognitive function
13	Zazove P, Plegue MA, Kileny PR, McKee MM, Schleicher LS, Green LA, Sen A, Rapai ME, Guetterman TC, Mulhem E. Initial	Hearing screening

	Results of the Early Auditory Referral-Primary Care (EAR-PC) Study. Am J Prev Med. 2017 Oct;53(4):e139-e146. doi: 10.1016/j.amepre.2017.06.024. Epub 2017 Aug 18. PMID: 28826949.	
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Met PICO but published before 2001 (publication of the WHO ICF)		
1	McEwan RT, Davison N, Forster DP, Pearson P, Stirling E. Screening elderly people in primary care: a randomized controlled trial. Br J Gen Pract. 1990 Mar;40(332):94-7. PMID: 2112022; PMCID: PMC1371072.	Home-based nurse-led screening versus usual care/no screening
2	Calkins DR, Rubenstein LV, Cleary PD, Davies AR, Jette AM, Fink A, Kosecoff J, Young RT, Brook RH, Delbanco TL. Functional disability screening of ambulatory patients: a randomized controlled trial in a hospital-based group practice. J Gen Intern Med. 1994 Oct;9(10):590-2. doi: 10.1007/BF02599291. PMID: 7823232.	Screening using results from FSQ instrument versus screening without using results from FSQ instrument

Question 2. Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Country	Number of patients	Population	Intervention Group(s)	Control	Outcomes
Mortenson 2018	RCT	Canada	94 dyads	Care recipients aged ≥55 years, lived at home, with mobility limitations referred for AT-related home care services	Assistive Technology Provision, Updating, and Tune-Up (ATPUT)	Usual or customary care from OT assigned to them by their center	Patient: Mobility, activities of daily living (ADL) and instrumental activities of daily living (IADL) performance, functional independence, ability to manage activities, roles, and relationships Caregiver: caregiver burden and health

Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

STUDY ID Country Study Design	Population	Interventions	Control	Outcomes
Rasmussen 2016 (Denmark) Randomized controlled trial	Adults post-stroke, with mild to moderate physical disability (n=61)	Home-based rehabilitation (n=31)	Usual care at facility (n=30)	Improved functional Performance at 3 months
Malagoni 2016 (Italy) Randomized controlled trial	Adults (20-80 yrs), chronic hemiplegic stroke, with mild to moderate physical disability (n=12)	Structured home-based exercise program (n=6)	Standard supervised group-setting exercise program in the facility (n=6)	Improved functional performance Improved patient satisfaction at 10 weeks
Lindley 2017 (India) Randomized controlled trial	Adults post-stroke, with mild to moderate physical disability (n=1211)	Family-led stroke rehabilitation (n=606)	Usual care as hospital-based physiotherapy and outpatient sessions (n=605)	Improved functional performance at 6 months Improved functional independence at 6 months
Hsieh 2018 (Taiwan) Randomized crossover trial	Adults post-stroke with mild to moderate disability (n=18)	Home-based rehabilitation (n=9)	Clinic-based rehabilitation (n=9)	Improved functional performance Improved patient satisfaction at 4 weeks

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author/Year	Study design	Country	Number of patients	Population	Intervention Group(s)	Control	Outcomes
Allen 2016	RCT	USA	320	Knee osteoarthritis	Group physical therapy; six 1-hour sessions, typically 8 participants per group	Individual physical therapy; two 1-hour sessions	Disability (WOMAC-Function), Pain (WOMAC-Pain)
Christiansen and Hjort 2021	RCT	Denmark	208	Subacromial Pain	12 group sessions of 45 to 60 minutes in duration	12 one-on-one sessions of 30 to 45 minutes in duration	HRQoL (EQ-5D-5L), Satisfaction (Danish Cancer Society PREM Questionnaire), Disability (Quick-DASH), Pain (11-point scale)
Frisaldi 2021	RCT	Italy	36	Parkinson's disease	1 h of conventional physiotherapy followed by 1 h of dance class each	1 h of conventional physiotherapy followed by 1 h of conventional	HRQoL (PDQ-39), Disability (UPDRS-III Total), Exercise Tolerance (6MWT), Fatigue (Parkinson Fatigue Scale-16),

					day, 3 times a week, for 5 weeks	physiotherapy each day, 3 times a week, for 5 weeks	Balance (TUG), Pain (King's PD Pain Scale)
King 2015	RCT	USA	59	Parkinson's disease	Group class 3x/week for one hour	Individual exercise 3x/week for an hour	HRQoL (PDQ-39), Disability (UPDRS-III ADL), Balance (TUG)
Krese 2020	RCT	USA	13	Traumatic brain injury	Group class for one hour, 2-5 patients	Individual sessions for one hour	Fatigue (Global Fatigue Index)
Kuntz 2018	RCT	Canada	31	Knee osteoarthritis	Yoga classes	Traditional strengthening exercises	HRQoL (KOOS-QOL), Disability (LEFS), Exercise Tolerance (6MWT), Muscle Strength (Peak Torque through dynamometer), Balance (TUG), Pain (KOOS-Pain)
Lysogorskaia 2023	RCT	Russia	56	Multiple Sclerosis	Yoga class, 2x/week for twelve weeks, 60-75 minutes	Physical therapy classes 2x/week for 12 weeks, 60-75 minutes	Participation (SF-36 social), Exercise Tolerance (6MWT), Fatigue (Fatigue Assessment Scale), Balance (Berg Balance Scale)
Ni 2016	RCT	USA	41	Parkinson's disease	Group yoga class for one hour, 2x/week for 12 weeks	Individual power training 2x/week for 12 weeks	Disability (UPDRS-motor), Exercise Tolerance (Mwalk), Muscle Strength (1-RM), Balance (Berg Balance Scale)
Renner 2016	RCT	Germany	73	Stroke	Group therapy delivered in 90-minute, structured progressive task training program five times a week over a six-week period	Individual 90-minute, progressive individually tailored task training 5 times a week over a 6-week period	Disability (Stroke Impact Scale), Exercise Tolerance (6MWT), Fatigue (Fatigue Severity Scale), Balance (TUG)
Ryans 2020	RCT	United Kingdom	136	Subacromial impingement	Six rotator cuff rehabilitation classes: one class per week for six weeks (30 min length) aiming for 5-10 participants	Routine individual physiotherapy: one session per week for six weeks (30 min)	Disability (SPADI-Disability), Pain (SPADI-Pain)
Saper 2017	RCT	USA	320	Non-specific low back pain	Yoga classes in 12 weekly 75-minute sessions	Physical therapy in fifteen 60-minute appointments over 12 weeks	Participation (SF-36), Satisfaction (5-point scale), Disability (RMDQ), Pain (11-point scale)
Solla 2019	RCT	Italy	20	Parkinson's disease	Medical therapy plus 12-week Ballu Sardu dance program	Usual care involving medical therapy	Disability (UPDRS-III), Fatigue (PFS-16), Balance (Berg Balance Scale)

Thomas 2016	RCT	Australia	34	Children with cerebral palsy	Group of four to six children, six hours -- six weekly 60-minute sessions	One-on-one intervention provided by the child's usual physiotherapist, six hours -- six weekly 60-minute sessions	Participation (CP QOL-Child Participation), Satisfaction (COPM-S), Disability (GMFM-88), Exercise Tolerance (1MFWT), Balance (Pediatric Reach Test), Pain (CP QOL-Child Pain)
Volpe 2025	RCT	Italy	24	Parkinson's disease	Dance classes 2x/week, lasting one hour each, for four weeks	60 min conventional physiotherapy twice a week for four weeks	Disability (UPDRS-III), Exercise Tolerance (6MWT), Balance (Berg Balance Scale)

Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

STUDY ID Country Study Designs	Population	Intervention/s	Comparator/s	Outcomes
Urucurum 2018 (Turkey) RCT	- o N = 39 - o Mean age ~48 years - o Shoulder impingement syndrome (moderate disability)	o Intervention (n=20): Hot pack + exercises + TENS	- o (n=19): Hot pack + exercises - o Details of comparator/s	- o VAS pain (mm), DASH, SF-36 - o 4 weeks
Alahmari 2020 (Saudi Arabia) RCT	- o N = 40 - o Mean age ~ 25 years - o Acute ankle sprain (moderate disability)	o (n=20): PNF exercises + TENS	o (n=20) PNF exercises alone	- o Pain (VAS), ROM, proprioception, muscle strength, balance, FADI - o 5 weeks
Labanca 2018 (Brazil) RCT	- o N = 33 - o Mean age ~ 21 years - o Post-ACL reconstruction (moderate disability)	o Intervention (n=16): NMES + sit-to-stand	o (n=17): Standard rehab alone	o Knee strength, symmetry index, pain 60 days postop
Safran 2022 (Israel) RCT	- o N = 31 - o Mean age ~ 39 years - o Hematologic cancer (moderate disability)	o Intervention (n=16): Resistance ex + NMES	o (n=15): Resistance exercises alone	- o Knee strength, STS30, TUG - o 4 weeks
Eid 2021 (Egypt) RCT	- o N = 52 - o Mean age ~ 43 years - o Pudendal neuralgia (mild - moderate disability)	o Intervention (n=26): Exercises + TENS	o (n=26): Exercises + sham TENS	- o NPRS - o 12 weeks
Yamada 2025 (Japan) RCT	- o N = 42 - o Mean age ~ 60 years - o Knee OA, chronic pain (mild - moderate disability)	o Intervention (n=23): Wearable TENS + exercise	o (n=19): Exercise only	- o 6MWT, TUG, stairs, VAS Post-intervention - o 4 weeks
Jang 2021 (Korea) RCT	- o N = 19 - o Mean age ~ 73 years old - o Elderly with knee osteoarthritis (mild disability)	o Intervention (n=9): NMES + exercise	o (n=10): Exercise only	- o Grip strength, TUG - o 4 weeks

Dissanayaka 2016 (Sri Lanka) RCT	- o N = 70 - o Mean age ~ 38 years - o Myofascial pain syndrome (mild to moderate disability)	o Intervention (n=35): TENS + standard care	o (n=35): Standard rehab	- o Cervical ROM, VAS - o Post-treatment - o 5 weeks
Acheche 2020 (Tunisia) RCT	- o N = 42 - o Mean age ~ 62 years - o COPD (moderate disability)	o Intervention (n=22): Endurance + resistance exercises +NMES	o (n=20): Endurance + resistance	- o TUG, BBS, 6MWT - o Post-intervention - o 24 weeks
Tsukuda 2019 (Japan) RCT	- o N = 53 - o Mean age ~ 73 years - o Post-TKA (moderate disability)	o Intervention (n=26): ES antagonist training	o (n=27): Standard rehab	- o Knee strength, VAS, TUG - o 12 weeks
Alrawaily 2018 (Saudi Arabia) RCT	- o N = 30 - o Mean age ~ 73 years - o Chronic low back pain (mild – moderate disability)	o Intervention (n=15): Stabilization exercises + ES	o (n=15): Stabilization alone	- o NPRS, strength - o 6 weeks
Azatcam 2016 (Turkey) RCT	- o N = 46 - o Mean age ~ 73 years - o Upper back pain/ Myofascial pain syndrome (mild to moderate disability)	o Intervention (n=23): TENS + exercises	o (n=23): Exercises only	- o VAS, ROM - o Post-treatment - o 12 weeks
De Santana 2025 (Brazil)] RCT	- o N = 50 - o Mean age ~ 38 years - o Chronic neck pain (mild –disability)	o Intervention (n=25): Multimodal + IFC/TENS	o (n=25): Multimodal only	- o NPRS, ROM, NDI - o 1 month
Forogh 2017 (Iran) RCT	- o N = 70 - o Mean age ~ 26 years - o Post-ACL reconstruction (moderate disability)	o Intervention (n=35): Exercise + HF-TENS	o (n=35): Exercise only	- o VAS, IKDC, ROM - o 14 weeks
Yildiz 2025 (Turkey) RCT	- o N = 34 - o Mean age ~ 38 years - o Myogenous TMD (mild – moderate disability)	o Intervention (n=17): TENS + exercise/MT	o (n=17): Exercise only	- o VAS, MMO - o Post-treatment - o 6 weeks
Ganesh 2017 (India) RCT	- o N = 56 - o Mean age ~ 57 years - o Stroke with spasticity (moderate disability)	o Intervention (n=30): Russian/Faradic + task ex	o (n=26): Task ex	- o MAS, ROM, gait - o Post-treatment - o 6 weeks
Laddha 2015 (India) RCT	- o N = 20 - o Mean age ~ 46 years - o Stroke with spasticity (moderate disability)	o Intervention (n=10): TENS + exercises	o (n=10): Exercises	- o ROM, MAS, TUG - o Post-treatment - o 6 weeks
Shin 2020 (Korea) RCT	- o N = 35 - o Mean age ~ 67 years - o Chronic neck pain elderly (moderate disability)	o Intervention (n=18): Stabilization + thermotherapy	o (n=17): Stabilization	- o VAS, NDI - o 2 weeks

Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Country	Number of patients	Population	Intervention	Control	Outcomes
Chi 2020	Systematic review and metaanalysis (49 RCTs)	Taiwan	4,597	Adult patients after stroke at home with mild to moderate severity)	Home-based rehabilitation emphasizing ADL training in real environments (mostly home visits)	Facility/outpatient rehab (active control) or usual care/education	Physical Function (BI, FIM, MBI), Quality of Life (SF-36), Stroke Impact Scale (SIS-ADL)
Do 2025	Systematic review and metaanalysis (46 RCTs)	Korea	4,049	Adult patients diagnosed with stroke regardless of period onset	Home-based rehabilitation with ADL training or components of ADL training	Hospital-based rehabilitation with ADL training or components of ADL training or Usual care	ADL independence (Barthel Index, Modified Barthel Index), Mobility, Balance, Upper Extremity Function, Quality of Life
Qin 2022	Systematic review and metaanalysis (16 RCTs)	China	7,063	Adult patients after stroke at home	Professionally prescribed home-based ADL interventions (task/environment-oriented practice)	Institution-based rehab, usual care, or no intervention	Basic Activities of Daily Living (BADL)
Wang 2017	Systematic review and metaanalysis (31 RCTs)	China	7,637	Adult patients after stroke transitioning from hospital to community	Transitional care interventions (TCI): Discharge planning, education, scheduled home visits, and phone support	Routine/standard care (traditional rehab)	Activities of Daily Living (ADL), Physical functioning, Hospital readmission rates, Mortality

Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Country	n	Population	Intervention	Control	Outcomes
Atterbury 2017	RCT	South Africa	40	Adults with Parkinson's Disease aged 50 to 80 years with H&Y Stage I and II (mild to moderate) Parkinson's Disease, active functional status with no cognitive impairments (Montreal Cognitive Assessment Score >17)	Home-based balance training programme with a series of digital video disc for patient and caregiver for 8 weeks (n=16)	Therapist-supervised balance training programme for 8 weeks (n=24)	Improved gait (Instrumented Time Up and Go)

Barzel 2015	RCT	Germany	156	Adults with mild to moderate upper limb dysfunction at least 6 months after stroke aged 18 years or older	Home-based Constraint-Induced Movement Therapy by professional or non-professional coach in the home environment (n=85)	Standard therapy depends on the prescription and given either in a patient's home or in a therapeutic practice (n=71)	Functional independence (Modified Barthel Index, Instrumental Activities of Daily Living), functional performance (MAL-QOM)
Chen 2017	RCT	China	51	Adults with hemiplegia after stroke aged 35 to 85 years, with NIHSS 5-20 (mild to moderate-severe)	Home-based tele-supervising rehabilitation group for patients with their caregivers (n=26)	Conventional rehabilitation therapy in the outpatient rehabilitation department (n=25)	Functional independence (Modified Barthel Index)
Cramer 2019	RCT	United States of America	124	Adults with stroke with arm motor deficits (Fugl Meyer - Upper Extremity 22-55 of 66) aged 18 years and older	Home-based telerehabilitation for 36 sessions of standard therapy (n=62)	In-clinic standard therapy for 36 sessions (n=62)	Functional independence (Fugl Meyer Assessment), patient compliance (Adherence rate), patient Satisfaction (Patient Satisfaction Questionnaire)
Gandolfi 2017	RCT	Italy	76	Adults with Parkinson's Disease aged 18 years and above with modified Hoehn and Yahr Stage II and III (moderate)	Home-based Virtual Reality (TeleWii) balance training for patient and their caregiver at the patient's home (n=38)	In-clinic Sensory Integration Balance Training (SIBT) at rehabilitation center (n=38)	Social participation (PDQ 8), functional performance (10MWT) Incidence of fall (Mean rate of fall over 1 month)
James 2015	RCT	Australia	92	Children with spastic type unilateral cerebral palsy aged 8 to 18 years MACS level II to III and GMFCS I or II	Move It To Improve It web-based multimodal therapy programme delivered in the home environment for 20 weeks (n=47)	Consultative sessions with medical and allied health professionals (n=45)	Functional performance (Assessment of Motor and Process Skills, Canadian Occupational Performance Measure-Performance), Patient satisfaction (Canadian Occupational Performance Measure-Satisfaction)
Sakzewski 2015	RCT	Australia	47	Children with unilateral cerebral palsy aged 5 to 16 years, predominant spasticity MAS grade greater than 1	Combined modified CIMT and bimanual training delivered in a community facility using a day camp format for 6 hours (n=27)	Standard care group with 45-hour targeted structured upper limb therapy home programme (n=20)	Functional performance (Canadian Occupational Performance Measure-Performance), Patient satisfaction (Canadian Occupational Performance Measure-Satisfaction)

Question 8. Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?

STUDY ID Country Study Designs	Population	Intervention/s	Comparator/s	Outcomes
Bakuwa 2025 (Malawi) Randomized Clinical Trial	- o 74 caregiver-child dyads - o Children with cerebral palsy aged 9 months to 14 years old	o Caregiver-led training programme for cerebral palsy (n=37)	o Therapist-led training programme for cerebral palsy (n=37)	- o Functional independence (mobility) and self-care measures using Pediatric Evaluation of Disability Inventory (PEDI) - o Social participation (home participation, community participation, and home and community living) measure using Children and Adolescent Scale Participation
Sweeney 2020 (Ireland) Randomized Clinical Trial	- o 44 caregiver-child dyads - o Children with aged 3 to 7 years old	o Parent-led therapist-supervised articulation therapy (n=22)	o Routine speech and language therapy (n=22)	o Developmental milestone (communication)

Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Country	Number of patients	Population	Intervention Group(s)	Control	Outcomes
Hu, R. (2025)	RCT	China	112	elderly patients with chronic knee OA Male: 55 Female: 57 age between 60 and 85 years; diagnosis of KOA confirmed through clinical symptoms and imaging with Kellgren-Lawrence (KL) grade II–III; disease duration exceeding 6 months, with ongoing	56 adults follow-up group (monthly community interventions including pain management education and exercise adherence supervision) during the 14-month study.	56 adults control group (semi-annual follow-ups)	Follow up 14 months Functional Performance

				symptoms affecting daily activities; VAS score of ≥ 4 ;			
Bollinger, RM (2024)	RCT	USA	185	> 50 years of who were independent with ADLs before stroke Mean age: 66.3 years old 105 men, 80 women	85 adults In home occupational therapy (OT) visits including facilitation of home modifications and strategy training	100 adults attentional control In person stroke education with OT	12 months follow up Social Participation Functional Independence Functional Performance
Björkdahl, A. (2023)	RCT	Sweden	103	mild stroke with no or slight disability Mean MRS <2 Male: 59 Women: 45 Mean Age: 75	52 adults Very early supported discharge (VESD) with 4 weeks of home rehabilitation provided by a multidisciplinary stroke team	52 adults Control group (referral to primary care when needed)	Follow up at post discharge, 1 month, 3 months and 12 months Functional Independence Patient satisfaction
Berdal, G (2023)	RCT	Norway	374	adults with rheumatic and musculoskeletal diseases aged ≥ 18 years; admitted to rehabilitation due to one of the following verified diagnoses: inflammatory rheumatic diseases, systemic connective tissue disorders, osteoarthritis, osteoporosis, fibromyalgia or chronic widespread pain, or non-specific low back, neck, or shoulder pain (persistent for > 3 months);	BRIDGE intervention A new rehabilitation intervention which comprised structured goal setting, action planning, motivational interviewing, digital self-monitoring of goal progress, and individual follow-up support after discharge according to patients' needs and available resources in primary healthcare N: 168	Usual Care N: 206	Followed up 2 months, 7 months and 12 months Social Participation Functional Performance
Nelligan, RK (2021)	RCT	Australia	206	Adults aged 45 years and older, with chronic knee OA	103 adults (My Knee Exercise) website + SMS + Home exercise 3x a week	103 adults (control) Website only contains OA and exercise	3 months follow up Functional independence Functional Performance

				Activity related joint pain with knee pain most days for more than 3 months Mean age: 60 (8.4) years Male: 80 Female: 126		educational information only	Self-efficacy
Coker, J (2019)	RCT	USA	81	Individuals with spinal cord injury post discharge from rehab Age: 48-52 Male: 66 Female: 15	41 individuals 6 interactive learning sessions (1 session per week) with structured and facilitated group interactions	40 individuals Control group (followed up at matching time points for all outcome measures)	6 weeks follow up Self-Efficacy
Brouwer, B. (2018)	RCT	Canada and United Kingdom	103	Hemiparetic stroke Mean Age: 62 Male: 54	51 patients in the tune-up group received 1-hour therapy sessions in their home 3times/wk for 2 weeks at 6 months post discharge focusing on identified mobility-related goals. A second tune-up was provided at 12 months (cognitive behavioral therapy-CBT)	52 patients in the control group	Followed up at 3 months and 12 months Physical and Social participation

Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

Author Year	Study design	Country	Number of patients	Population	Intervention	Control	Outcomes
Fleisher 2022⁶	Non-randomized controlled trial	United States of America	85	Homebound community-dwelling adults ≥40 y with Parkinson's Disease (n=384) with subgroup of advanced Parkinson's Disease defined as severe disabling disease and confinement to bed or wheelchair unless aided (Hoehn & Yahr [HY] 4 & 5) under care of a Parkinson Foundation Center of Excellence; all had an informal caregiver and Medicare	Participants in the Parkinson's Outcomes Project registry receiving standard outpatient PD care at Centers of Excellence facility (n=47)	IN-HOME-PD: quarterly, structured, telehealth-enhanced interdisciplinary home visits for one year, focusing on motor and non-motor symptom management, home safety, medication reconciliation, and psychosocial needs (n=38)	Functional independence and self-care (Parkinson's Disease Questionnaire 39) at one year follow-up period

homebound status							
Karim 2021⁷	Pragmatic quasi experimental study	Bangladesh	150	Children with cerebral palsy (0–18 y) from rural communities enrolled in the Bangladesh Cerebral Palsy Register (BPCR); high proportion with severe motor impairment (Gross Motor Function Classification System Levels [GMFCS] III-IV) and communication impairment	Family-centered, community-based early-intervention program (Shishu Shorgo centres): intensive caregiver-led group therapy (activities of daily living, communication, movement, cognition, social skills), community follow-up, assistive devices, and caregiver training and peer support, delivered by trained community therapists under physiotherapist supervision (n=77)	Standard care only: one-off advice from multidisciplinary BCPR team; no structured rehabilitation program, with assessments done during home visits (n=79)	Developmental milestones: Motor function (Gross Motor Function Measure [GMFM] 66), Everyday communication (Communication Function Classification System [CFCS]), Verbal Speech (Viking Speech Scale [VSS]) at six months follow-up period Caregiver anxiety (Depression, Anxiety Stress Scale [DASS] Short Form 21) at six months follow-up period
López-Liria 2016⁸	Prospective cohort study	Spain	145	Adults after stroke referred for rehabilitation, community-dwelling (able to live at home) with substantial functional limitation to severe dependency at baseline (Barthel Index [BI]<40)	Standard outpatient physiotherapy in a specialized rehabilitation service (n=78)	Home-based rehabilitation (Rehabilitation in the Home [RITH]) delivered in primary care: individualized physiotherapy at the patient's home (n=67)	Functional independence and mobility (Barthel Index) at 10 to 12 weeks follow-up period
Thompson 2025⁹	Prospective cohort study	New Zealand	653	Adults with after stroke recruited consecutively from all 28 hospitals providing stroke care, case-mix included mild to very severe stroke (n=2103) with subgroup of most severely affected defined as not fully verbal and orientated, unable to walk without physical assistance, and unable to lift both arms classified using Six Simple Variable [SSV] 0.	Receipt of community stroke rehabilitation (multidisciplinary services) (n=247)	No inpatient rehabilitation and/or no community rehabilitation - comparators defined by actual service use in routine practice (n=406)	Functional independence and self-care (Health-Related Quality of Life, European Quality of Life 5-Dimensions, 3-Levels [EuroQoL 5D 3L]) over at 12 months follow-up period

Appendix 4. GRADE Evidence Profiles

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

Author(s): HHGBayona, CManalo

Question: Function-based screening in the community or home setting (low back pain) compared to facility-based screening for persons at risk of disability

Setting: Primary care setting (point of care or first contact in a health facility in the community (RHU, City Health Center, Private General Clinic); outside a hospital setting, focuses on providing general care/service)

Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Screening	Usual care	Relative (95% CI)	Absolute (95% CI)		

Referral for rehabilitation services

[Subgroup 1] Community-based screening for risk of functional decline using BRIGHT vs. usual care

Referral for further geriatric assessment or rehabilitation services

(follow-up: 3 years; assessed with: no. of patients who used comprehensive assessment, physiotherapy, occupational therapy, social work, gerontology nursing, and case management)

1 ^a	Cluster RCT	serious ^b	not serious	very serious ^c	not serious	none	Referral rates did not exceed 10% for either groups, although actual values were not explicitly stated by the authors. There was no significant difference (P=0.09) between intervention and control groups.				⊕○○○ Very low ^{b,c}	CRITICAL
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[Subgroup 2] Facility-based screening for risk of disability using STarT Back Screening Tool vs. usual care

Referral for further physiotherapy

(follow-up: 1 years)

1 ^d	Cluster RCT	serious ^e	not serious	very serious ^c	not serious	none	427/568 (75.2%)	165/283 (58.3%)	OR 2.17 (1.60 to 2.93)	169 more per 1,000 (from 108 more to 221 more)	⊕○○○ Very low ^{c,e}	CRITICAL
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Prevention of secondary complications

[Subgroup 1] Community-based screening for risk of functional decline using BRIGHT vs. usual care

Change in functioning

(follow-up: 3 years; assessed with: Nottingham Extended Activities of Daily Living Scale (NEADL) scores)

1 ^a	Cluster RCT	serious	not serious	very serious ^b	not serious	none	2049	1844	-	MD 0 higher/lower (0.16 lower to 0.16 higher)	⊕○○○ Very low ^{b,c}	CRITICAL
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Hospitalization

(follow-up: 3 years)

1 ^a	Cluster RCT	serious	not serious	very serious ^b	not serious	none	No difference between groups in the overall proportions of patients hospitalized or in the rate of ambulatory care-sensitive hospitalization (P=0.88). Actual estimates could not be calculated from the published report, although hospitalization rates ranged from 6% to 10%.				⊕○○○ Very low ^{b,c}	CRITICAL
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Risk of being placed in residential care

(follow-up: 3 years)

1 ^a	Cluster RCT	serious	not serious	very serious ^b	not serious	none	2049 participants	1844 participants	HR 1.32 (1.04 to 1.68) [Risk of being placed in residential care]	19 more per 1,000 (from 2 more to 40 more)	⊕○○○ Very low ^{c,e}	CRITICAL
								6.2%				

[Subgroup 2] Facility-based screening for risk of disability using STarT Back Screening Tool vs. usual care

Change in functioning

(follow-up: 1 years; assessed with: number of participants with ≥30% change in the Roland Morris Disability Questionnaire Score)

1 ^d	Cluster RCT	serious ^e	not serious	very serious ^c	not serious	none	734/1131 (64.9%)	320/566 (56.5%)	OR 1.40 (1.05 to 1.88)	80 more per 1,000 (from 12 more to 144 more)	⊕○○○ Very low ^{c,e}	CRITICAL
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Pain catastrophizing

(follow-up: 1 years; assessed with: Pain Catastrophizing Scale)

1 ^d	Cluster RCT	serious ^e	not serious	very serious ^c	not serious ^h	none	568	283	-	MD 1.69 points higher (0.37 higher to 3.01 higher) ⁱ	⊕○○○ Very low ^{c,e,h}	CRITICAL
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Fear avoidance

(follow-up: 1 years; assessed with: Tampa Scale of Kinesiophobia)

1 ^d	Cluster RCT	serious ^e	not serious	very serious ^c	not serious	none	568	283	-	MD 2.18 points higher (0.73 higher to 3.63 higher) ^j	⊕○○○ Very low ^{c,e}	CRITICAL
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[Subgroup 3] Facility-based screening for frailty using EMR data vs. usual care

Change in functioning

(follow-up: 1 years; assessed with: mean change in Katz-15 scores)

1 ^f	Cluster RCT	serious ^g	not serious	very serious ^c	not serious	none	37	71	-	MD 0.02 lower (0.8 lower to 0.76 higher) ^k	⊕○○○ Very low ^{c,g}	CRITICAL
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Mean rate of hospital admissions

(follow-up: 1 years)

1 ^f	Cluster RCT	serious ^g	not serious	very serious ^c	not serious	none	37	71	-	MD 0.04 lower (0.11 lower to 0.03 higher)	⊕○○○ Very low ^{c,g}	CRITICAL
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Mean rate of emergency department visits

(follow-up: 1 years)

1 ^f	Cluster RCT	serious ^g	not serious	very serious ^c	not serious	none	37	71	-	MD 0.02 lower (0.1 lower to 0.06 higher)	⊕○○○ Very low ^{c,g}	CRITICAL
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Mean mortality rate

(follow-up: 1 years)

1 ^f	Cluster RCT	serious ^g	not serious	very serious ^c	not serious	none	37	71	-	MD 0 (0.1 lower to 0.1 higher)	⊕○○○ Very low ^{c,g}	CRITICAL
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Identification of functional limitation

(follow-up: median 1 years; assessed with: varied tools)

4	Prospective cohort ^l	serious ^m	not serious	very serious ⁿ	not serious	none	Community/home-based screening: ISAR-PC (1 yr follow-up): - moderate discrimination (AUC 0.63-0.64) for classifying elderly at risk of functional decline ISCOPE Screening Questionnaire (1 yr follow-up): ~2x higher odds for functional decline if 2 domains are problematic (OR 1.97 [1.17, 3.30]). higher ORs if 3 or 4 domains are affected. - Moderate accuracy for predicting functional decline if combined with every +1yr age and male sex (AUC 0.64) GPSS (1 yr follow-up):: - good accuracy for identifying elderly at risk of functional impairment (AUC 0.68; Sensitivity 0.22; Specificity 0.97) Facility-based screening: FIF (5 yr follow-up): - In women, the hazard ratios for injurious fall were 3.12 (95%CI 1.71, 5.68) for medium-risk and 14.18 (95%CI 7.86, 25.58) for high-risk. In men, HRs were 4.66 (95%CI 2.71, 8.02) for medium-risk and 14.66 (95%CI 8.48, 25.35) for high-risk	⊕○○○ Very low ^{m,n}	CRITICAL
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CI: confidence interval; MD: mean difference; OR: odds ratio

Explanations

- BRIGHT RCT (Kerse 2014)
- Allocation occurred at the cluster level and could not be concealed. Participants and providers were unblinded. 22.7% were lost to follow-up, which includes deaths and withdrawals.
- Study did not explicitly compare community/home based functional screening with facility-based screening. Rather, the comparison was screening vs. usual care that does not involve systematic screening.
- STarT Back RCT (Hill 2011)
- Unblinded participants and healthcare providers may introduce performance bias. Attrition bias also appears substantial as loss to follow-up was about 25%. The attrition was also unbalanced: 23% loss to follow-up in the intervention group (440/568 completed) versus 26% loss in the control group (209/283 completed).
- U-PROFIT RCT (Bleijenberg 2016)
- Although efforts were made for single-blinding (patients not knowing the assigned arm), the intervention was complex and likely noticeable in Group B (nurse-led care). Unblinding of providers is very likely to lead to differential provider-initiated co-interventions. The authors themselves noted that GPs in the non-blinded control group may have "upgraded their usual care" due to awareness of the study, resulting in diminished effectiveness of the intervention. About 22% were lost to follow-up. The attrition was statistically significant and differential: 26% loss in the intervention group vs. 17% loss in the control group (P<0.05)
- Confidence intervals for the mean difference were both > 0

- i. Screening group showed higher mean change in PCS scores (6.1 vs 4.4, P=0.011; MD 1.69 [0.37, 3.01]). A mean change of 6 is considered the minimum clinically important difference (MCID) for PCS.
- j. Screening group showed higher mean change in TSK scores (5.2 vs 3.3, P=0.001; MD 2.18 [95%CI 0.73, 3.63])). A mean change of 5 is considered the MCID for TSK.
- k. Mean change in Katz-15 scores was 0.27 in screening group vs. 0.29 in usual care. Standard deviation for the mean change cannot be calculated based on reported data by the authors.
- l. ISAR-PC (Suijker 2014); FIF (Ek 2019); ISCOPE (Van Blijswijk 2019); GPSS (Alessi 2003)
- m. Across the four included studies, overall risk of bias was generally moderate to serious. Alessi 2003 showed serious concerns due to baseline imbalance, substantial missing data, and self-reported outcome measurement. Ek 2019 had moderate risk of bias, mainly from residual confounding, although outcome measurement was objective and missing data were well handled. Suijker 2014 showed serious risk of bias, driven by selective attrition and subjective, self-reported functional decline outcomes. Van Blijswijk 2018 also had serious risk of bias due to selective exclusion of frailer participants, reliance on self-reported or subjective predictors, and substantial missing data.
- n. Studies did not compare if facility-based screening is better than community/home-based screening in identifying functional limitations.

Question 2. Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Jon Timothy M. Rivero, MS, PTRP, Christopher G. Manalo, MD, MSc, Josephine R. Bundoc, MD

Question: Provision for functional use of assistive technology with caregiver retraining compared to functional use of assistive technology alone for among persons with apparent mild to moderate physical disability in the primary care setting?

Setting: Primary care setting (community or home versus facility setting)

Bibliography: Mortenson WB, Demers L, Fuhrer MJ, Jutai JW, Bilkey J, Plante M, et al. Effects of a caregiver-inclusive assistive technology intervention: a randomized controlled trial. BMC Geriatr. 2018;18:97.

Certainty assessment							№ of patients		Effect	Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	functional use of assistive technology with caregiver retraining (ATPUT)	functional use of assistive technology alone (usual care)	Absolute (95% CI)		
Social participation (follow-up: 6 weeks; assessed with: Reintegration to Normal Living Index [RNL]; Higher score is better reintegration; Scale from: 0 to 100)											
1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 6.5 points higher (1.7 lower to 14.7 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
Functional independence (follow-up: 6 weeks; assessed with: Functional Autonomy Measurement System [SMAF] ADL & Mobility; Higher score is more independent; Scale from: -39 to 0)											
1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 0.7 points lower (2.79 lower to 1.39 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
Functional independence (follow-up: 6 weeks; assessed with: Self-Reported Functional Independence Measure [SR-FIM]; Higher score is more independent; Scale from: 13 to 91)											
1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 3.5 points lower (8.91 lower to 1.91 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL

Certainty assessment							№ of patients		Effect	Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	functional use of assistive technology with caregiver retraining (ATPUT)	functional use of assistive technology alone (usual care)	Absolute (95% CI)		

Functional performance (follow-up: 6 weeks; assessed with: Functional Autonomy Measurement System [SMAF] Instrumental ADL; Higher score is better functional performance; Scale from: -24 to 0)

1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 0.8 points higher (1.07 lower to 2.67 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
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Caregiver anxiety (follow-up: 6 weeks; assessed with: Caregiver Assistive Technology Outcomes Measure [CATOM] Items 1-14; Higher score is less anxiety; Scale from: 14 to 70)

1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 3.3 points lower (7.93 lower to 1.33 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
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Caregiver satisfaction (follow-up: 6 weeks; assessed with: Caregiver Assistive Technology Outcomes Measure [CATOM] Items 15-18; Higher score is better satisfaction (AT more helpful); Scale from: 4 to 20)

1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 1.3 points lower (3.14 lower to 0.54 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
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Caregiver burden (follow-up: 6 weeks; assessed with: Caregiver Burden Inventory [CBI]; Lower is lower burden; Scale from: 0 to 56)

1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	44	43	MD 2.2 points higher (2.75 lower to 7.15 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
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CI: confidence interval; MD: mean difference

Explanations

- Some concerns on risk of bias arising from randomization process particularly on allocation concealment (Domain 1) and missing outcome data with lost to follow-up of 0/44 in Assistive Technology Provision, Updating, and Tune-Up (ATPUT) and 3/46 (7%) in customary (usual) care interventions.
- Limited sample size and wide confidence intervals

Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Justin Bryan D. Maranan, MD, Christopher G. Manalo, MD, MSc, Nikka Karla Santos, OTD, OTR, OTRP

Question: Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability?

Setting: Primary care setting (community of home versus facility)

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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	task-oriented rehabilitation in the community or home setting	task-oriented rehabilitation in the facility setting	Relative (95% CI)	Absolute (95% CI)		
Functional independence (assessed with: Barthel Index)												
2	randomised trials	serious ^{a,c}	not serious	not serious	serious ^b	none	564	542	-	MD 2.46 higher (5.89 lower to 10.82 higher)	⊕⊕○○ Low ^{a,b,c}	CRITICAL
Functional dependence (assessed with: Modified Rankin Scale 3 to 6 as Functionally Dependent)												
1	randomised trials	serious ^a	not serious	not serious	serious ^b	none	284/606 (46.9%)	287/605 (47.4%)	RR 0.99 (0.88 to 1.11)	5 fewer per 1,000 (from 57 fewer to 52 more)	⊕⊕○○ Low ^{a,b}	CRITICAL
Functional performance (assessed with: 10MWT in terms of speed in m/s)												
1	randomised trials	serious ^{a,c}	not serious	not serious	very serious ^{b,d}	none	9	9	-	MD 0.01 m/s lower (0.27 lower to 0.25 higher)	⊕○○○ Very low ^{a,b,c,d}	CRITICAL
Functional performance (assessed with: 6MWT in terms of change in distance in m)												
1	randomised trials	serious ^{a,c}	not serious	not serious	very serious ^{b,d}	none	6	6	-	MD 2 m higher (43 higher to 39 higher)	⊕○○○ Very low ^{a,b,c,d}	CRITICAL
Patient satisfaction (assessed with: COPM and CSQ-8)												
2	randomised trials	serious ^{a,c}	not serious	not serious	very serious ^{b,d}	none	15	15	-	SMD 0.47 SD higher (0.27 lower to 1.21 higher)	⊕○○○ Very low ^{a,b,c,d}	CRITICAL

CI: confidence interval; MD: mean difference; RR: risk ratio; SMD: standardised mean difference; 6MWT: 6-minute walk test; 10MWT: 10-minute walk test

Explanations

- a. Some concerns on blinding of participant and personnel (performance bias)
- b. Wide confidence interval
- c. Some concerns on blinding of outcome assessment (detection bias)
- d. Limited (small) sample size

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Isabella E. Supnet, MD, Christopher G. Manalo, MD, MSc, Tomas P. Reginaldo Jr., PRTP, MOH

Question: Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

Setting: Primary care setting

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	group therapeutic exercises	individual therapeutic exercises	Relative (95% CI)	Absolute (95% CI)		
Overall mobility and social participation (assessed with: PDQ-39)												
2	randomised trials	not serious	serious ^a	not serious	serious ^b	none	39	40	-	MD 5.47 points lower (18.85 lower to 7.91 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
Social participation (assessed with: SF-36 Social Functioning Subscale)												
2	randomised trials	not serious	not serious	not serious	serious ^b	none	140	121	-	MD 2.14 points higher (0.89 lower to 5.18 higher)	⊕⊕⊕○ Moderate ^b	CRITICAL
Social participation (assessed with: Cerebral Palsy QoL Child Participation))												
1	randomised trials	not serious	not serious	not serious	very serious ^c	none	16	14	-	MD 0.7 points lower (1.99 lower to 0.59 higher)	⊕⊕○○ Low ^c	CRITICAL
Hastening return-to-function in adults												
11	randomised trials	not serious	not serious	not serious	serious ^b	none	443	463	-	SMD 0.07 SD higher (0.06 lower to 0.20 higher)	⊕⊕⊕○ Moderate ^b	CRITICAL
Hastening return-of-function in children in with cerebral palsy												
1	randomised trials	not serious	not serious	not serious	very serious ^c	none	17	15	-	MD 0.09 points higher (0.8 lower to 0.98 higher)	⊕⊕○○ Low ^c	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	group therapeutic exercises	individual therapeutic exercises	Relative (95% CI)	Absolute (95% CI)		
Exercise tolerance in adults												
4	randomised trials	not serious	not serious	serious ^a	serious ^b	none	91	91	-	MD 28.19 meters higher (23.29 lower to 79.68 higher)	 Low ^{a,b}	CRITICAL
Exercise tolerance in children with cerebral palsy												
1	randomised trials	not serious	not serious	not serious	very serious ^c	none	15	15	-	MD 8.73 meters lower (22.63 lower to 5.16 higher)	 Low ^c	CRITICAL
Fatigue												
3	randomised trials	not serious	not serious	not serious	very serious ^c	none	91	90	-	SMD 0.02 SD higher (0.27 lower to 0.32 higher)	 Low ^c	CRITICAL
Patient satisfaction												
2	randomised trials	not serious	not serious	not serious	serious ^b	none	211/233 (90.5%)	226/240 (94.2%)	RR 0.96 (0.91 to 1.01)	38 fewer per 1,000 (from 85 fewer to 9 more)	 Moderate ^b	CRITICAL
Caregiver satisfaction (assessed with: COPM-S)												
1	randomised trials	not serious	not serious	not serious	very serious ^c	none	17	15	-	MD 0.3 points higher (0.68 lower to 1.28 higher)	 Low ^c	

CI: confidence interval; MD: mean difference; RR: risk ratio; SMD: standardised mean difference

Explanations

- a. Inconsistency due to substantial heterogeneity
- b. Imprecision due to wide confidence interval
- c. Very serious imprecision due to limited sample size and wide confidence interval

Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

Author(s): John M. De Castro, MD, Christopher G. Manalo, MD, MSc, Tomas P. Reginaldo Jr., PRTP, MOH

Question: Community- or home-based therapeutic exercises with physical modalities (TE + PM) compared to facility-based therapeutic exercises alone (TE Alone) for persons with apparent moderate physical disability in the primary care setting

Setting: Primary care setting

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TE + PM	TE Alone	Relative (95% CI)	Absolute (95% CI)		
Improved mobility (assessed with: Timed Up and Go)												
6	randomised trials	serious ^a	not serious	serious ^b	serious ^c	none	111	106	-	MD 0.23 seconds lower (0.74 lower to 0.28 higher)	⊕○○○ Very low ^{a,b,c}	CRITICAL
Improved mobility (assessed with: Six-meter Walk Test)												
1	randomised trials	serious ^a	not serious	serious ^b	serious ^c	none	21	21	-	MD 18.23 meters lower (57.47 lower to 21.01 higher)	⊕○○○ Very low ^{a,b,c}	CRITICAL
Pain reduction (assessed with: Visual Analogue Scale; Scale from: 0 to 100)												
3	randomised trials	serious ^a	serious ^d	serious ^b	serious ^c	none	96	97	-	MD 7.74 points lower (19.57 lower to 4.1 higher)	⊕○○○ Very low ^{a,b,c,d}	CRITICAL
Pain reduction (assessed with: Visual Analogue Scale; Scale from: 0 to 10)												
5	randomised trials	serious ^a	serious ^d	serious ^b	not serious	none	98	96	-	MD 4.46 points lower (6.58 lower to 2.34 higher)	⊕○○○ Very low ^{a,b,d}	CRITICAL

Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TE + PM	TE Alone	Relative (95% CI)	Absolute (95% CI)		

Pain reduction (assessed with: National Pain Rating Scale; Scale from: 0 to 10)

3	randomised trials	serious ^a	not serious	serious ^b	not serious	none	66	66	-	MD 1.5 points lower (1.99 lower to 1 higher)	⊕⊕○○ Low ^{a,b}	CRITICAL
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Improved range of motion (assessed with: degrees)

8	randomised trials	serious ^a	serious ^d	serious ^b	serious ^c	none	195	191	-	MD 4.98 degrees higher (0.69 lower to 10.64 higher)	⊕○○○ Very low ^{a,b,c,d}	CRITICAL
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CI: confidence interval; MD: mean difference; TE + PM: therapeutic exercises with physical modalities; TE Alone: therapeutic exercises without physical modalities

Explanations

- a. lack of blinding of participant (performance bias) and outcome assessment (detection bias)
- b. included interventions were conducted within supervised rehabilitation facilities rather than in home- or community-based settings.
- c. wide confidence interval
- d. significant heterogeneity I²>50%

Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Ivan Neil Gomez, PhD, Jeriel De Silos, MD, MPM-HSD, Christopher G. Manalo, MD, MSc, Nikka Karla R. Santos, OTD, Josephine R. Bundoc, MD

Question: Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Home-based ADL training	Facility-based simulated ADL training	Relative (95% CI)	Absolute (95% CI)		
Improved ADL independence (assessed with: Barthel Index, Modified Barthel Index)												
6	randomised trials	not serious	serious ^a	not serious	not serious	none	235	222	-	SMD 0.37 more (0.06 more to 0.69 more)	⊕⊕⊕○ Moderate ^a	CRITICAL
Improved self-care (assessed with: Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, Stroke Impact Scale ADL subscale)												
15	randomised trials	not serious	serious ^a	not serious	not serious	none	583	589	-	SMD 0.88 higher (0.59 higher to 1.16 higher)	⊕⊕⊕○ Moderate ^a	CRITICAL

ADL: activities of daily living; CI: confidence interval; SMD: standardised mean difference

Explanations

a. Statistical heterogeneity is higher than 50%

Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Hazel Abigail Lim, MD; Jeriel De Silos, MD, MPM-HSD, Christopher Manalo, MD, MSc, Cynthia Ang, MD

Question: Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	home-based MT	facility-based MT	Relative (95% CI)	Absolute (95% CI)		
Improved functional independence (assessed with: Modified Barthel Index, Fugl Meyer Assessment, Instrumental Activities of Daily Living)												
3	randomised trials	not serious	not serious	not serious	serious ^a	none	173	158	-	SMD 0.02 SD higher (0.19 lower to 0.16 higher)	⊕⊕⊕○ Moderate ^a	CRITICAL
Improved social participation (assessed with: Parkinson's Disease Questionnaire 8)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	38	38	-	MD 1.91 points higher (4.52 lower to 8.34 higher)	⊕⊕○○ Low ^b	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	home-based MT	facility-based MT	Relative (95% CI)	Absolute (95% CI)		
Improved functional performance (assessed with: Motor Activity Log-Quality of Movement)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	85	71	-	MD 0.03 points lower (0.4 lower to 0.34 higher)	⊕⊕○○ Low ^b	CRITICAL
Improved functional performance (assessed with: 10-meter walk test)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	38	38	-	MD 0.04 m/s higher (0.14 higher to 0.22 higher)	⊕⊕○○ Low ^b	CRITICAL
Improved compliance (assessed with: Mean sessions attended)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	62	62	-	MD 0.05 lower (0.12 lower to 0.12 higher)	⊕⊕○○ Low ^b	CRITICAL
Improved gait (assessed with: Instrumented TUG)												
1	randomised trials	serious ^c	not serious	not serious	very serious ^b	none	16	24	-	MD 3.75 sec higher (1.6 lower to 9.1 higher)	⊕○○○ Very low ^{b,c}	CRITICAL
Incidence of fall (assessed with: Mean number of fall incidents over 1 month)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	38	38	-	MD 0.52 episodes higher (1.64 lower to 0.6 higher)	⊕⊕○○ Low ^b	CRITICAL
Patient satisfaction (assessed with: Patient Satisfaction Questionnaire)												
1	randomised trials	not serious	not serious	not serious	very serious ^b	none	62	62	-	MD 3.3 points lower (22.54 lower to 15.97 higher)	⊕⊕○○ Low ^b	CRITICAL

CI: confidence interval; MD: mean difference; SMD: standardised mean difference

Explanations

- a. Imprecision due to wide confidence interval
- b. Very serious imprecision due to wide confidence interval and limited sample size from a single trial
- c. Serious risk of bias due to unclear allocation and attrition

Author(s): Hazel Abigail Lim, MD; Jeriel De Silos, MD, MPM-HSD, Christopher Manalo, MD, MSc, Cynthia Ang, MD

Question: Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	home-based MT	facility-based Mt	Relative (95% CI)	Absolute (95% CI)		
Improved functional performance (assessed with: Canadian Occupational Performance Measure, Assessment of Motor and Process Skills)												
2	randomised trials	not serious	not serious	not serious	serious ^d	none	112	114	-	SMD 0.67 SD higher (0.44 higher to 0.9 higher)	⊕⊕⊕○ Moderate ^d	CRITICAL
Improved satisfaction (assessed with: Canadian Occupation Performance Measure)												
2	randomised trials	not serious	not serious	not serious	serious ^d	none	67	72	-	0 (0 to 0)	⊕⊕⊕○ Moderate ^d	CRITICAL

CI: confidence interval; MD: mean difference; SMD: standardised mean difference

Explanations

d. Imprecision due to failure to attain minimal clinically important difference

Question 8. Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?

Author(s): Christopher S. Constantino, MD, Jeriel De Silos, MD, MPM-HSD, Christopher G. Manalo, MD, MSc, Tomas P. Reginaldo, Jr., PRTP, MOH

Question: Caregiver-led compared to therapist-led habilitation interventions for persons born with apparent physical disability in the primary care setting

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Certainty assessment							N _e of patients		Effect		Certainty	Importance
N _e of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	caregiver-led	therapist-led habilitation interventions	Relative (95% CI)	Absolute (95% CI)		

Improved functional independence and self-care (assessed with: Pediatric Evaluation of Disability Inventory)

1	randomised trials	not serious	not serious	not serious	very serious ^a	none	37	37	-	MD 13 points higher (40.45 lower to 14.45 higher)	⊕⊕○○ Low ^a	CRITICAL
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Improved developmental milestones (assessed with: Focus on Outcomes of Communication Under Six)

1	randomised trials	not serious	not serious	not serious	very serious ^a	none	23	21	-	MD 7 points lower (31.5 lower to 17.5 higher)	⊕⊕○○ Low ^a	CRITICAL
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Improved social participation (assessed with: Child and Adolescent Scale of Participation: Home Participation)

1	randomised trials	not serious	not serious	not serious	very serious ^a	none	24	29	-	MD 0 points (9.17 lower to 9.17 higher)	⊕⊕○○ Low ^a	CRITICAL
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Improved social participation (assessed with: Child and Adolescent Scale of Participation: Community Participation)

1	randomised trials	not serious	not serious	not serious	very serious ^a	none	24	29	-	MD 6.3 points higher (15.25 lower to 2.65 higher)	⊕⊕○○ Low ^a	CRITICAL
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Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	caregiver-led	therapist-led habilitation interventions	Relative (95% CI)	Absolute (95% CI)		

Improved social participation (assessed with: Child and Adolescent Scale of Participation: Home and Community Living)

1	randomised trials	not serious	not serious	not serious	very serious ^a	none	24	29	-	MD 0 points (2 higher to 2 higher)	⊕⊕○○ Low ^a	CRITICAL
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CI: confidence interval; MD: mean difference

Explanations

a. limited sample size and wide confidence interval

Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author(s): Ona, Deborah; De Silos, Jeriel

Question: Follow-up and monitoring compared to no follow-up and monitoring in improving community reintegration

Setting: Primary care

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Certainty assessment							N _o of patients		Effect		Certainty	Importance
N _o of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		

Social Participation - Community Reintegration (assessed with: Reintegration to Normal Living Index (RNLI); Scale from: 0 to 100)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	85	100	-	MD 1.3 points higher (7.1 lower to 9.6 higher)	 Low ^{a,b}	
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Social Participation - Physical And Social Integration (assessed with: Subjective Index of Physical and Social Outcome (SIPSO) Physical And Social Integration; Scale from: 0 to 40)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	51	52	-	MD 0.5 points lower (1.8 higher to 2.7 higher)	 Low ^{a,b}	
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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		

Social Participation (assessed with: Participation Assessment with Recombined Tools – Objective; Scale from: 0 to 5)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	168	206	-	MD 0.06 points higher (0.19 lower to 0.3 higher)	 Low ^{a,b}	
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Social Participation (assessed with: Cooperative Research Network and the World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/ Family Physicians (COOP/WONCA) scale; Scale from: 1 to 5)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	168	206	-	MD 0.3 points higher (0 to 0.5 higher)	 Low ^{a,b}	
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Functional Independence (assessed with: In-Home Occupational Performance Evaluation (I-HOPE) Activity)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	85	100	-	MD 0.01 lower (0.06 lower to 0.05 higher)	 Low ^{a,b}	
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Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		

Functional Independence (assessed with: I-HOPE Performance)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	85	100	-	MD 0.39 points higher (0.01 higher to 0.77 higher)	 Low ^{a,b}	
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Functional Independence - Activities of Daily Living, 3 months (assessed with: ADL Taxonomy B)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	52	52	-	median 0 points (0 to 1 higher)	 Low ^{a,b}	
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Functional Independence - Activities of Daily Living, 3 months (assessed with: ADL Taxonomy I)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	52	52	-	median 1.5 points lower (0 to 1 higher)	 Low ^{a,b}	
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Certainty assessment							Nº of patients		Effect		Certainty	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		

Functional Independence - Activities of Daily Living , 12 months (assessed with: ADL Taxonomy B)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	52	52	-	median 0 points (0 to 1 higher)	 Low ^{a,b}	
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Functional Independence - Activities of Daily Living 6 months (assessed with: ADL Taxonomy I)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	52	52	-	median 1 points lower (0 to 1 higher)	 Low ^{a,b}	
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Functional Independence - Sports and Recreation (assessed with: Knee Injury and Osteoarthritis Outcome Score (KOOS); Scale from: 0 to 100)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	103	103	-	MD 8.5 points lower (15.3 lower to 2.9 higher)	 Low ^{a,b}	
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Functional Performance (assessed with: Stroke Impact Scale ADL; Scale from: 0 to 100)

Certainty assessment							Nº of patients		Effect		Certainty	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	85	100	-	MD 1.8 points lower (8.6 lower to 5 higher)	⊕⊕○○ Low ^{a,b}	

Functional Performance (assessed with: Short Form Survey-36)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	56	56	-	MD 4.04 points higher (0.97 higher to 7.11 higher)	⊕⊕○○ Low ^{a,b}	
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Functional Performance (assessed with: Physical Activity Levels Scale (PASE); Scale from: 0 to 400)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	103	103	-	MD 9.6 points lower (29.8 lower to 10.5 higher)	⊕⊕○○ Low ^{a,b}	
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Functional Performance (assessed with: Patient-Specific Functional Scale mean ability score (PSFS))

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	168	206	-	MD 0.1 points higher (0.5 lower to 0.8 higher)	 Low ^{a,b}	

Self-Efficacy - 6 weeks (assessed with: Moorong Self-Efficacy Scale; Scale from: 0 to 10)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 0.1 points higher (0.5 lower to 0.8 higher)	 Low ^{a,b}	
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Self-Efficacy - 30 weeks (assessed with: Moorong Self-Efficacy Scale; Scale from: 1 to 7)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 4.47 points higher (1.61 lower to 10.56 higher)	 Low ^{a,b}	
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Self-Efficacy - 6 weeks (assessed with: Generalized Self Efficacy Scale; Scale from: 1 to 4)

Certainty assessment							Nº of patients		Effect		Certainty	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 1.38 points higher (0.01 lower to 2.77 higher)	⊕⊕○○ Low ^{a,b}	

Self-Efficacy - 30 weeks (assessed with: Generalized Self Efficacy Scale; Scale from: 1 to 4)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 1.81 points higher (0.51 lower to 4.13 higher)	⊕⊕○○ Low ^{a,b}	
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Self-Efficacy - pain (assessed with: Arthritis Self-Efficacy Scale (ASES) Pain Subscale; Scale from: 1 to 10)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	103	103	-	MD 0.6 points lower (1.3 lower to 0)	⊕⊕○○ Low ^{a,b}	
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Self-Efficacy - function (assessed with: Arthritis Self-Efficacy Scale (ASES) Function Subscale; Scale from: 1 to 10)

Certainty assessment							Nº of patients		Effect		Certainty	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	103	103	-	MD 0 points (0.4 lower to 0.5 higher)	 Low ^{a,b}	

Self-Efficacy - exercise (assessed with: Self-Efficacy Exercise Scale; Scale from: 0 to 90)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	103	103	-	MD 2.4 points lower (7.9 lower to 3.1 higher)	 Low ^{a,b}	
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Patient Satisfaction (assessed with: IHOPE Satisfaction Scale; Scale from: 1 to 5)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	52	52	-	MD 0.52 points higher (0.08 higher to 0.96 higher)	 Low ^{a,b}	
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Patient Satisfaction - 6 weeks (assessed with: Satisfaction with life scale (SWLS); Scale from: 1 to 7)

Certainty assessment							Nº of patients		Effect		Certainty	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	follow-up and monitoring compared	no follow-up and monitoring	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 0.85 points higher (1.31 lower to 3.01 higher)	⊕⊕○○ Low ^{a,b}	

Patient Satisfaction - 30 weeks (assessed with: Satisfaction with life scale (SWLS); Scale from: 1 to 7)

1	randomised trials	serious ^a	not serious	serious ^b	not serious	none	41	40	-	MD 0.16 points lower (3.74 lower to 3.43 higher)	⊕⊕○○ Low ^{a,b}	
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CI: confidence interval; MD: mean difference

Explanations

a. Lack of blinding

b. The study was done in a setting with a resource-rich health system.

Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

GRADE Evidence Profile for Adult Population

Author(s): Christopher G. Manalo MD MSc, Cynthia Ang MD

Question: Specialist care management compared to non-specialist care management for patients with severe physical disability in the primary care setting?

Setting: Community and hospital-based settings in New Zealand (Thompson 2025), Spain (López-Liria 2016), and USA (Fleisher 2022)

Bibliography:

1. Fleisher JE, Hess SP, Klostermann EC, Lee J, Myrick E, Mitchem D, Niemet C, Woo K, Sennott BJ, Sanghvi M, Witek N, Beck JC, Wilkinson JR, Ouyang B, Hall DA, Chodosh J. IN-HOME-PD: The effects of longitudinal telehealth-enhanced interdisciplinary home visits on care and quality of life for homebound individuals with Parkinson's disease. *Parkinsonism Relat Disord*. 2022 Sep;102:68-76. doi: 10.1016/j.parkreldis.2022.07.017. Epub 2022 Aug 7. PMID: 35963046; PMCID: PMC9578443.
2. López-Liria R, Vega-Ramírez FA, Rocamora-Pérez P, Aguilar-Parra JM, Padilla-Góngora D. Comparison of Two Post-Stroke Rehabilitation Programs: A Follow-Up Study among Primary versus Specialized Health Care. *PLoS One*. 2016 Nov 11;11(11):e0166242. doi: 10.1371/journal.pone.0166242. PMID: 27835673; PMCID: PMC5106026.
3. Thompson SG, Thakkar D, McNaughton H, Levack W, Ranta A. The impact of inpatient and community stroke rehabilitation on health-related quality of life in New Zealand. *Eur J Phys Rehabil Med*. 2025 Aug;61(4):587-594. doi: 10.23736/S1973-9087.25.08903-8. PMID: 41159514; PMCID: PMC12613447.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	specialist care management	non-specialist care management	Relative (95% CI)	Absolute (95% CI)		
Improvement of functional independence among patient with stroke and Parkinson's Disease (follow-up: mean 12 months; assessed with: EuroQoL 5D 3L, PDQ 39 ADL Subscale)												
3	non-randomised studies	not serious	not serious	not serious	not serious	none	372	511	SMD 0.75 SD units higher (0.44 higher to 1.05 higher)	⊕⊕○○ Low	CRITICAL	
Improvement of self-care among patients with stroke (follow-up: mean 12 months; assessed with: EuroQoL 5D 3L)												
1	non-randomised studies	not serious	not serious	not serious	not serious	none	247	406	MD 0.27 points higher (0.22 higher to 0.32 higher)	⊕⊕○○ Low	CRITICAL	

CI: confidence interval; MD: mean difference; OR: odds ratio; SMD: standardised mean difference

GRADE Evidence Profile for Pediatric Population

Author(s): Christopher G. Manalo MD MSc, Cynthia Ang MD

Question: Specialist care management compared to non-specialist care management for patients with severe physical disability in the primary care setting?

Setting: Community and hospital-based settings in Bangladesh (Karim 2021)

Bibliography:

1. Karim T, Muhit M, Jahan I, Galea C, Morgan C, Smithers-Sheedy H, Badawi N, Khandaker G. Outcome of Community-Based Early Intervention and Rehabilitation for Children with Cerebral Palsy in Rural Bangladesh: A Quasi-Experimental Study. *Brain Sci*. 2021 Sep 10;11(9):1189. doi: 10.3390/brainsci11091189. PMID: 34573210; PMCID: PMC8469407.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	specialist care management	non-specialist care management	Relative (95% CI)	Absolute (95% CI)		
Improvement in motor function among children with cerebral palsy (follow-up: mean 6 months; assessed with: GMFM)												
1	non-randomised studies	not serious	not serious	not serious	serious ^{a,b}	none	77	73	MD 8.67 points higher (0.73 lower to 18.08 higher)	⊕○○○ Very low ^{a,b}	CRITICAL	
Improvement in everyday communication among children with cerebral palsy (follow-up: mean 6 months; assessed with: No. of patients with good communication level as CFCS Level I and II)												
1	non-randomised studies	not serious	not serious	not serious	serious ^{a,b}	none	31/77 (40.3%)	34/73 (46.6%)	OR 1.35 (0.56 to 3.26)	75 more per 1,000 (from 138 fewer to 274 more)	⊕○○○ Very low ^{a,b}	CRITICAL
Improvement in speech production among children with cerebral palsy (follow-up: mean 6 months; assessed with: No. of patients with good communication level as VSS Level I and II)												
1	non-randomised studies	not serious	not serious	not serious	serious ^{a,b}	none	15/77 (19.5%)	28/73 (38.4%)	OR 1.28 (0.50 to 3.26)	60 more per 1,000 (from 146 fewer to 286 more)	⊕○○○ Very low ^{a,b}	CRITICAL
Improvement in caregiver anxiety of children with cerebral palsy (follow-up: mean 6 months; assessed with: DASS Short Form 21)												
1	non-randomised studies	not serious	not serious	not serious	serious ^{a,b}	none	77	73	MD 0.66 points lower (2.14 lower to 0.83 higher)	⊕○○○ Very low ^{a,b}	CRITICAL	

CI: confidence interval; MD: mean difference; OR: odds ratio; SMD: standardised mean difference

Explanations

- a. Optimal information size is not met.
- b. The confidence interval is wide.

Appendix 5. Quality Assessments

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

		Risk of bias					
		D1	D2	D3	D4	D5	Overall
Study	U-PROFIT 2016 (Facility-based)	+	+	+	×	+	×
	STarT Back 2011 (Facility-based)	+	+	×	×	+	×
	BRIGHT 2014 (Community-based)	+	×	×	×	+	×

D1: Random sequence generation
 D2: Allocation concealment
 D3: Blinding of participants
 D4: Blinding of personnel
 D5: Blinding of outcome assessment
 D6: Incomplete outcome data

Judgement
 × High
 + Low

		Risk of bias domains						
		D1	D2	D3	D4	D5	D6	Overall
Study	Alessi 2003 (Community; GPSS)	×	-	-	+	×	×	×
	Suijker 2014 (Community; ISAR-PC)	-	+	-	+	×	×	×
	Van Blijwijk 2018 (Community; ISCOPE)	-	×	-	+	×	-	×
	Ek 2019 (Facility; FIF)	-	+	+	+	+	+	-

Domains:
 D1: Bias due to confounding.
 D2: Bias due to selection of participants.
 D3: Bias in classification of interventions.
 D4: Bias due to deviations from intended interventions.
 D5: Bias due to missing data.
 D6: Bias in measurement of outcomes.
 D7: Bias in selection of the reported result.

Judgement
 × Serious
 - Moderate
 + Low

Bleijenberg 2016 (*U-PROFIT RCT*)

#	ROBUST-RCT Item	Risk of Bias	Setting
1	Random sequence generation	Low	Before randomization, practices were stratified according to practice size and location (urban/rural area). Within each stratum, practices were randomized using a computer-generated random allocation sequence with permuted blocks of four.
2	Allocation concealment	Low	The initial generation of the allocation sequence via a blinded biostatistician using computer-generated allocation sequence stratified by specific factors suggests that the allocation mechanism itself was adequate to conceal the sequence before implementation
3	Blinding of participants	High	Although efforts were made for single-blinding (patients not knowing the assigned arm), the intervention was complex and likely noticeable in Group B (nurse-led care).
4	Blinding of healthcare providers	High	Unblinding of providers is very likely to lead to differential provider-initiated co-interventions. The authors themselves noted that GPs in the non-blinded control group may have "upgraded their usual care" due to awareness of the study, resulting in diminished effectiveness of the intervention.
5	Blinding of outcome assessors	Low	The primary outcome (Katz-15) and secondary outcomes were patient-reported (questionnaires/telephone interviews). For questionnaires returned by post, blinding is inherent. For telephone interviews, assessors were explicitly stated to be blinded
6	Outcome data not included in analysis	High	The total number of participants followed was N=346. At the main endpoint (24 months), 78% (n=270) completed the study. This represents a loss to follow-up of 76 participants, or approximately 22% overall. The attrition was statistically significant and differential: 26% loss in the intervention group vs. 17% loss in the control group (P<0.05)

Hill 2011 (*STarT Back RCT*)

#	ROBUST-RCT Item	Risk of Bias	Setting
1	Random sequence generation	Low	Participants were randomly assigned using a computer-generated stratified block randomisation
2	Allocation concealment	Low	The method used to assign participants was administered by a clinic administrator telephoning a remote clinical trials unit (Keele University), which assigned participants. This describes a centralized allocation method, which is typically high quality for allocation concealment.

3	Blinding of participants	High	The trial involves face-to-face treatment interventions (advice, exercises, physiotherapy sessions, or psychologically informed physiotherapy)
4	Blinding of healthcare providers	High	The study explicitly stated that physiotherapists administering the active intervention could not be masked to randomisation because they were delivering the stratified care model
5	Blinding of outcome assessors	Low	The research nurse who retrieved outcome data was masked to randomisation, and concealment strategies were employed, including using a masked follow-up database
6	Outcome data not included in analysis	High	A total of 851 patients were randomly assigned. At the 12-month primary endpoint, 74% (n=649) of the total population responded. This represents a loss to follow-up of approximately 26% (25.6%). The attrition was also unbalanced: 23% loss to follow-up in the intervention group (440/568 completed) versus 26% loss in the control group (209/283 completed)

Kerse 2014 (*BRIGHT RCT*)

#	ROBUST-RCT Item	Risk of Bias	Setting
1	Random sequence generation	Low	Clusters were randomly assigned
2	Allocation concealment	High	The allocation occurred at the practice level, where 60 primary care practices were assigned to intervention or control groups. It is impossible to conceal the allocation from the healthcare providers (the cluster unit) once the study began.
3	Blinding of participants	High	Participants were unblinded, and assessment of outcomes involving function and quality of life constitutes outcomes requiring considerable judgment/subjectivity by the participant.
4	Blinding of healthcare providers	High	The unblinded status of the healthcare providers is very likely to influence the outcomes, especially healthcare usage, identification, and subjective patient interaction, risking differential provider-initiated co-interventions
5	Blinding of outcome assessors	Low	the study explicitly states that the outcome assessors were blinded to group allocation
6	Outcome data not included in analysis	High	After 36 months, 3,010 (77%) completed the trial. This means 883 participants (approximately 22.7%) were lost to follow-up, which includes deaths and withdrawals.

Alessi 2003 (*Geriatric Postal Screening Survey (GPSS)*)

#	ROBINS-I Item	Risk of Bias	Setting
1	Confounding	Serious	Comparison group (High vs. Lower Risk) differed significantly at baseline (e.g., age, comorbidity), and predictive analysis did not adjust for these factors.
2	Selection of participants	Moderate	Reliance on a small (12%) random sample of the lower-risk group for comparison introduces potential bias.
3	Classification of interventions	Moderate	Risk categorization (GPSS score) relied on a self-administered postal survey, susceptible to reliability/validity limitations inherent in self-report.
4	Deviations from intended interventions	Low	No issues
5	Missing data	Serious	Information was unobtainable for 21% of high-risk respondents due to refusal/ineligibility/contact issues, suggesting substantial potential for differential missingness.
6	Measurement of outcomes	Serious	Outcomes (healthcare use, IADL status) relied on subject self-reporting via telephone interview, raising uncertainty regarding assessor blinding.
7	Selection of reported result	Low	no indication of selective reporting.
	OVERALL ROB	Serious	

Ek 2019 (*First Time Injurious Fall Risk Screening Tool*)

#	ROBINS-I Item	Risk of Bias	Setting
1	Confounding	Moderate	Prediction model uses multivariate Cox regression to control for key prognostic factors, but elimination of other known predictors (e.g., medication use, vision, strength) results in likely residual confounding.
2	Selection of participants	Low	Study specifically excluded prior injurious fallers and followed the inception cohort from baseline, reducing risks of immortal time bias or lead-time bias related to prior falls.
3	Classification of interventions	Low	Risk classification based on objective measures (clinical exams, physical tests) collected at baseline.
4	Deviations from intended interventions	Low	Study assesses assignment to risk category; no specific intervention was mandated.

5	Missing data	Low	Primary predictability testing used complete-case analysis (excluding participants with missing factor values), although multiple imputation sensitivity analyses was done.
6	Measurement of outcomes	Low	Outcome (injurious fall) was objective, derived from national patient registers using ICD-10 codes, minimizing measurement error/detection bias.
7	Selection of reported result	Low	Transparent report of model development using backward stepwise procedures.
	OVERALL ROB	Moderate	

Suijker 2014 (*Identification of Seniors At Risk (ISAR) - Primary Care*)

#	ROBINS-I Item	Risk of Bias	Setting
1	Confounding	Moderate	Model selection attempted to control for key predictors (age, IADL, memory), but eliminated other strong prognostic factors (e.g., falls, depressive symptoms), suggesting residual confounding.
2	Selection of participants	Low	No comment
3	Classification of interventions	Moderate	Risk classification derived from items on a self-reported postal screening questionnaire.
4	Deviations from intended interventions	Low	Study is prognostic; deviations from intended intervention (usual care) are unlikely to be unbalanced.
5	Missing data	Serious	High percentage of loss to follow-up (approx. 18.5–19%) which was associated with increased baseline risk factors for functional decline (selective attrition).
6	Measurement of outcomes	Serious	Functional decline outcome relied on self-reported changes in the modified Katz-ADL index score, where participants were aware of their baseline risk status, increasing the risk of detection bias.
7	Selection of reported result	Low	Transparent reporting of model development and selection criteria.
	OVERALL ROB	Serious	

Van Blijswijk 2018

#	ROBINS-I Item	Risk of Bias	Setting
1	Confounding	Moderate	Prediction models included and controlled for multiple readily available prognostic factors (age, sex, polypharmacy, multimorbidity, etc.), mitigating confounding among observed factors.
2	Selection of participants	Serious	Participants excluded from the final analysis were significantly frailer (older, higher GARS, more vulnerable GP opinion), likely biasing the predicted risk estimates downwards.
3	Classification of interventions	Moderate	Key classification variables (polypharmacy, multimorbidity, ISCOPE score) relied on self-reported questionnaire data, and GP opinion is a subjective assessment, risking misclassification.
4	Deviations from intended interventions	Low	Study is embedded in the ISCOPE RCT.
5	Missing data	Serious	Substantial differential exclusion (n=502 excluded from initial N=2713 baseline visited) occurred, with those excluded being significantly older and frailer.
6	Measurement of outcomes	Moderate	Functional decline relies partly on the subjective GARS score assessed by research nurses; uncertainty exists regarding assessor blinding to baseline risk factors/trial arm.
7	Selection of reported result	Low	Clear use of pre-selected variables and transparent comparison of eight stepwise models.
	OVERALL ROB	Serious	

Question 2. Should provision of functional assistive technologies with caregiver re/training versus assistive technology provision alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Domain 1 Risk of bias arising from randomization process	Domain 2 Risk of bias due to deviations from the intended interventions	Domain 3 Missing outcome data	Domain 4 Risk of bias in measurement of outcomes	Domain 5 Risk of bias in selection of the reported result	Overall Risk of Bias
Mortenson 2018	RCT	Some concerns Remarks: Centralized randomization by study coordinators unclear if study coordinators are third party controlled allocation concealment	Low Risk	Some concerns Remarks: Missing outcomes 0/44 in ATPUT and 3/46 (7%) in customary or usual care (declined to continue) at 6 weeks	Low risk	Low risk	High Risk

Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

Quality Assessment of Clinical Practice Guidelines (Adolopment)

Domain (AGREE II)	Item	Australian and New Zealand Living Clinical Guidelines for Stroke Management	National Clinical Guideline for Stroke for the UK and Ireland
Scope and purpose	The overall objective(s) of the guideline is (are) specifically described.	7	7
	The health question(s) covered by the guideline is (are) specifically described.	7	7
	The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.	7	7
Stakeholder involvement	The guideline development group includes individuals from all the relevant professional groups.	7	7
	The views and preferences of the target population (patients, public, etc.) have been sought.	6	6
	The target users of the guideline are clearly defined.	7	7
Rigor of development	Systematic methods were used to search for evidence.	6	7
	The criteria for selecting the evidence are clearly described.	5	7
	The strengths and limitations of the body of evidence are clearly described.	7	7
	The methods for formulating the recommendations are clearly described.	7	7
	The health benefits, side effects and risks have been considered in formulating the recommendations.	7	6
	There is an explicit link between the recommendations and the supporting evidence.	7	6
	The guideline has been externally reviewed by experts prior to its publication.	7	7
	A procedure for updating the guideline is provided.	7	5
	The recommendations are specific and unambiguous.	5	6

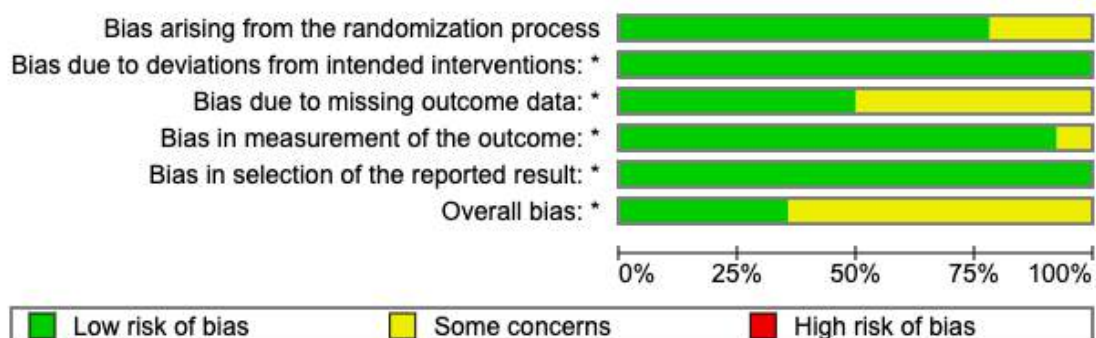
Clarity of presentation	The different options for management of the condition or health issue are clearly presented.	7	6
	Key recommendations are easily identifiable.	7	7
Applicability	The guideline describes facilitators and barriers to its application.	7	7
	The guideline provides advice and/or tools on how the recommendations can be put into practice.	6	7
	The potential resource implications of applying the recommendations have been considered.	7	7
	The guideline presents monitoring and/ or auditing criteria.	5	7
Editorial independence	The views of the funding body have not influenced the content of the guideline.	7	7
	Competing interests of guideline development group members have been recorded and addressed	7	7
Overall Guideline Assessment	1. Rate the overall quality of this guideline	6	6
	2. I would recommend this guideline for use	Yes	Yes

Risk of Bias Assessment

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Hsieh 2018	+	+	?	?	+	+	+
Lindley 2017	+	+	?	+	+	+	+
Malagoni 2016	+	+	?	?	+	+	+
Rasmussen 2016	+	+	?	?	+	+	+

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?

Risk of Bias Assessment



	Bias arising from the randomization process	Bias due to deviations from intended interventions: *	Bias due to missing outcome data: *	Bias in measurement of the outcome: *	Bias in selection of the reported result: *	Overall bias: *
Allen et al 2016	+	+	+	?	+	?
Christiansen and Hjort 2021	+	+	+	+	+	+
Frisaldi et al 2021	+	+	+	+	+	+
King et al 2015	+	+	+	+	+	+
Krese et al 2020	?	+	?	+	+	?
Kuntz et al 2018	+	+	+	+	+	+
Lysogorskaia et al 2023	+	+	?	+	+	?
Ni et al 2016	+	+	?	+	+	?
Renner et al 2016	?	+	?	+	+	?
Ryans et al 2020	+	+	?	+	+	?
Saper et al 2017	+	+	?	+	+	?
Solla et al 2019	+	+	?	+	+	?
Thomas et al 2016	?	+	+	+	+	?
Volpe et al 2025	+	+	+	+	+	+

Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

Risk of Bias Assessment

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Acheche 2020	+	+	-	?	+	+	+
Alahmarl 2020	+	+	-	?	+	+	+
Alrawally 2018	+	+	-	-	+	+	+
Azatcam 2016	+	+	-	+	+	+	+
Bao 2022	+	+	?	-	+	+	+
de Santana 2025	+	+	-	+	+	+	+
Dissanayaka 2016	+	+	-	-	+	+	+
Eld 2021	+	+	-	+	+	+	+
Forogh 2017	+	+	-	+	+	+	+
Ganesh 2017	+	?	-	+	+	+	+
Jang 2021	+	+	-	?	+	+	+
Labanca 2018	+	+	-	+	-	+	+
Laddha 2015	+	?	-	?	+	+	?
Safran 2022	+	+	-	?	-	+	+
Shin 2020	+	+	-	+	+	+	+
Tsukada 2019	+	+	-	?	+	+	+
Urucrum 2018	+	+	-	?	+	+	+
Yamada 2025	+	?	-	?	-	+	+
Yang 2018	+	?	-	+	+	+	+
Yildiz 2025	+	+	-	+	+	+	+

Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

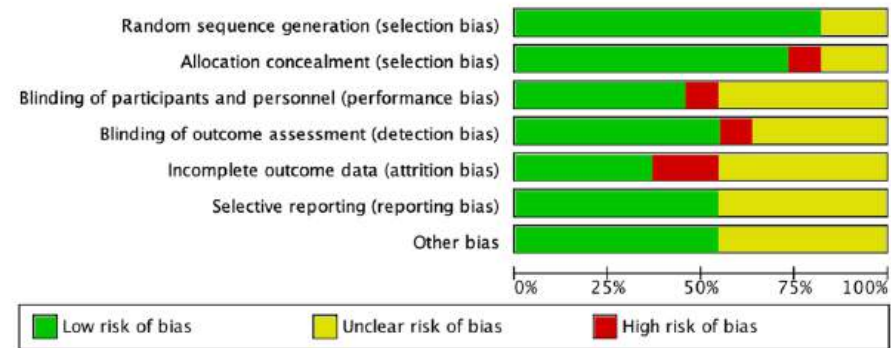
Quality Assessment of Included Studies (Systematic Reviews and Metanalysis)

AMSTAR 2 Item	Chi 2020	Do 2025	Qin 2022	Wang 2017
1. PICO components clearly defined	Yes – Population (stroke), Intervention (home-based rehab), Comparator (facility/usual care), Outcomes (ADL, FIM, QoL)	Yes – Population (stroke), Intervention (home-based rehab), Comparator (facility/usual care), Outcomes (ADL independence, mobility, balance, upper extremity function, quality of life)	Yes – Explicit PICO framing with BADL as main outcome	Yes – Clear PICO elements in transitional care context
2. Protocol established before conduct and deviations justified	No – No pre-registration or mention of prior protocol	Yes – PROSPERO registered (CRD42024526273)	Yes – PROSPERO registered (CRD42020191526)	No – No pre-registration or mention of prior protocol
3. Justification for inclusion of study designs	Yes – Explained inclusion of RCTs only to assess intervention effects	Yes – RCTs only, rationale provided	Yes – RCTs only, rationale provided	Yes – RCTs only, rationale explained
4. Comprehensive literature search	Yes – 5 databases searched (PubMed, Cochrane, Embase, CINAHL, Scopus), full strategies reported	Yes – 3 (MEDLINE, OVID, EMBASE) databases searched, keywords and MeSH listed	Yes – 7 databases searched, keywords and MeSH listed	Yes – ≥2 databases, no grey literature or expert consultation
5. Study selection in duplicate	Yes – Two reviewers independently screened titles/abstracts	Yes – Conducted independently by two reviewers	Yes – Conducted independently by two reviewers	Yes – Two independent reviewers performed selection
6. Data extraction in duplicate	Yes – Two reviewers extracted data; discrepancies resolved by consensus	Yes – Dual extraction, consensus procedure described	Yes – Dual extraction, consensus procedure described	Yes – Dual extraction confirmed
7. List of excluded studies with justification	Partial Yes – Flow diagram provided, no full excluded list	Yes – PRISMA diagram, No listing excluded records	Yes – PRISMA diagram only, no appendix listing excluded records	No – Did not provide excluded list or justification
8. Description of included studies	Yes – Detailed tables for design, sample, intervention, comparator, and outcomes	Yes – Detailed tables for study characteristics	Yes – Detailed tables for study characteristics	Yes – Summary tables less detailed for population and setting
9. Risk of bias assessment of individual studies	Yes – Cochrane Risk of Bias tool applied to all RCTs	Yes – Cochrane Risk of Bias 2	Yes – PEDro scale applied to each RCT	Yes – Reported
10. Reporting of funding sources for included studies	Yes – Reported	Yes – Reported	Yes – Reported	Yes – Reported

11. Appropriate meta-analytic methods	Yes – Random-effects model, heterogeneity explored ($I^2 = 88\%$), sensitivity analysis	Yes – Fixed-effect and random-effects model, heterogeneity and subgroup analyses	Yes – Random-effects model, heterogeneity and subgroup analyses	Yes – Random-effects model, heterogeneity reported
12. Impact of risk of bias on results assessed	Partial Yes – Sensitivity analysis by RoB level	Yes – Subgroup analyses by study quality	Yes – Subgroup analyses by study quality (PEDro score)	No – Not analyzed
13. Consideration of RoB when interpreting results	Yes – Discussed methodological quality and its influence	Yes – Discussed impact of study quality on pooled results	Yes – Discussed impact of study quality on pooled results	Partial Yes – Mentioned study quality generally but not linked to interpretation
14. Explanation/discussion of heterogeneity	Yes – Sources of heterogeneity analyzed and discussed	Yes – Heterogeneity explored through subgroup analysis	Yes – Heterogeneity explored through subgroup analysis	Yes – Discussed potential causes of heterogeneity (setting, intensity)
15. Publication bias assessment	Yes – Funnel plot and Egger's test conducted	Yes – Funnel plot performed, publication bias discussed	Yes – Funnel plot performed, publication bias discussed	Partial Yes – Funnel plot used, no statistical test reported
16. Conflicts of interest/funding for review reported	Yes – Funding source (institutional grant) and no conflict declared	Yes – Funding acknowledged, no competing interests	Yes – Funding acknowledged, no competing interests	Yes – Funding and conflicts disclosed

Risk of Bias Assessment for included RCTs

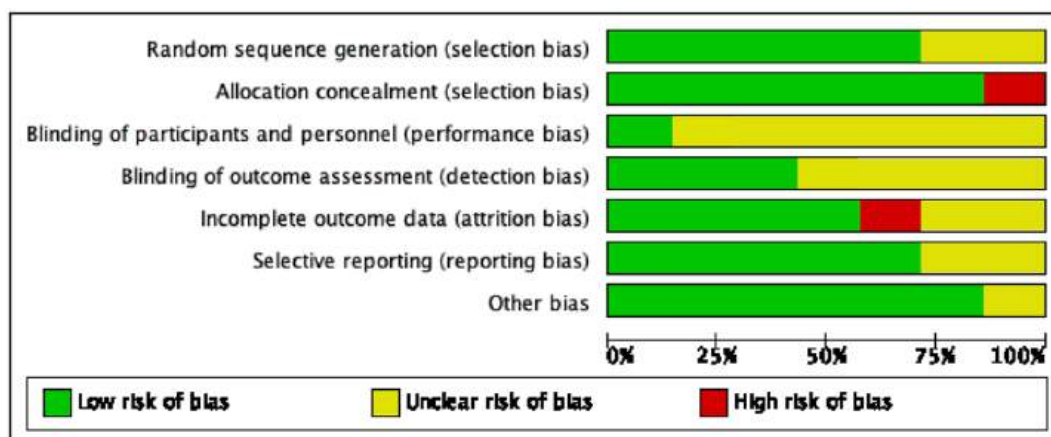
	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Andersen 2002	+	+	?	+	+	+	+
Anderson 2000	+	+	+	?	?	+	?
Barzel 2015	+	+	+	+	?	?	+
Chaiyawat 2012	+	+	+	?	+	?	?
Chen 2017	+	+	+	+	?	?	?
Chen 2020	?	+	+	+	?	?	?
Han 2020	?	+	+	?	?	?	?
Hesse 2011	+	?	?	?	+	+	+
Mayo 2000	+	+	?	+	+	+	+
Rasmussen 2016	+	?	?	+	+	+	+
Wong 2015	+	+	?	+	+	+	+



Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

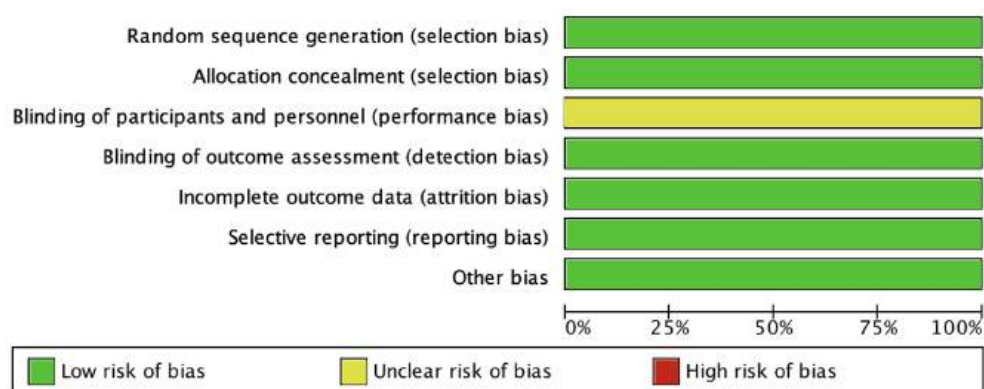
Risk of Bias Assessment

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Atterbury 2017	?	●	?	?	●	?	+
Barzel 2015	+	+	+	?	+	+	+
Chen 2017	+	+	?	+	+	+	+
Cramer 2019	?	+	?	+	+	+	+
Gandolfi 2017	+	+	?	+	+	+	+
James 2015	+	+	?	+	+	+	+
Sakzewski 2015	+	+	?	+	+	+	+



Question 8. Should caregiver-led versus therapist-led habilitation be done among persons born with apparent physical disability in the primary care setting?

Risk of Bias Assessment



	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Bakuwa 2025	+	+	?	+	+	+	+
Sweeney 2020	+	+	?	+	+	+	+

Question 9. Should follow-up and monitoring versus no follow-up and monitoring be done among persons with apparent mild to moderate physical disability in the primary care setting?

Author Year	Study design	Domain 1 (Randomization)	Domain 2 (Deviations from Intervention)	Domain 3 (Missing Outcome Data)	Domain 4 Imprecision (Measurement of Outcome)	Overall assessment
Hu, R. (2025)	RCT	Low	Some concerns	Low	Some concerns	High Risk

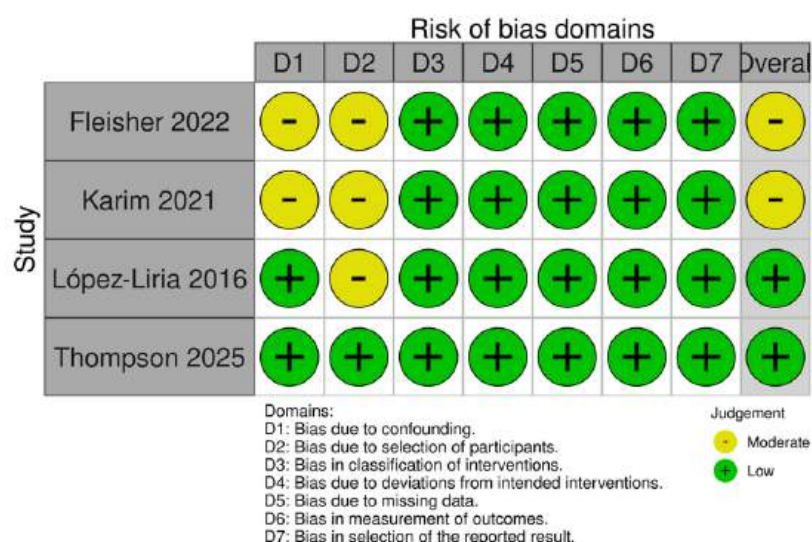
Author Year	Study design	Domain 1 (Randomization)	Domain 2 (Deviations from Intervention)	Domain 3 (Missing Outcome Data)	Domain 4 Imprecision (Measurement of Outcome)	Overall assessment
			<i>Participants are not blinded.</i>		This is a subjective Patient-Reported Outcome Measure (PROM). Lack of blinding leads to high risk of detection bias	
Bollinger, RM (2024)	<i>RCT</i>	<i>Low</i>	Some concerns <i>Participants are not blinded</i>	<i>Low</i>	Some concerns Social participation and functional independence are self-reported. Unblinded participants are biased to report improvements.	High Risk
Björkdahl, A. (2023)	<i>RCT</i>	<i>Low</i>	Some concerns <i>Participants are not blinded</i>	<i>Low</i>	Some concerns Patients receiving specialized team care are inherently biased to report higher satisfaction than standard care.	High Risk
Berdal, G (2023)	<i>RCT</i>	<i>Low</i>	Some concerns <i>Participants are not blinded</i>	<i>Low</i>	Some concerns Self-reported scale (COOP/WONCA). Awareness of intervention status influences self-perception of health.	High Risk
Nelligan, RK (2021)	<i>RCT</i>	<i>Low</i>	Some concerns <i>Participants are not blinded</i>	<i>Low</i>	Some concerns Outcomes are entirely subjective. The intervention group knew they were being monitored, influencing their self-reporting.	High Risk
Coker, J (2019)	<i>RCT</i>	<i>Low</i>	Some concerns <i>Participants are not blinded</i>	<i>Low</i>	Some concerns Psychological outcomes are highly susceptible to detection bias when participants	High Risk

Author Year	Study design	Domain 1 (Randomization)	Domain 2 (Deviations from Intervention)	Domain 3 (Missing Outcome Data)	Domain 4 Imprecision (Measurement of Outcome)	Overall assessment
					know they are receiving therapy.	
Brouwer, B. (2018)	RCT	Low	Some concerns Participants are not blinded	Low	Some concerns Subjective measure of social integration. Lack of blinding biases the assessor (the patient).	High Risk

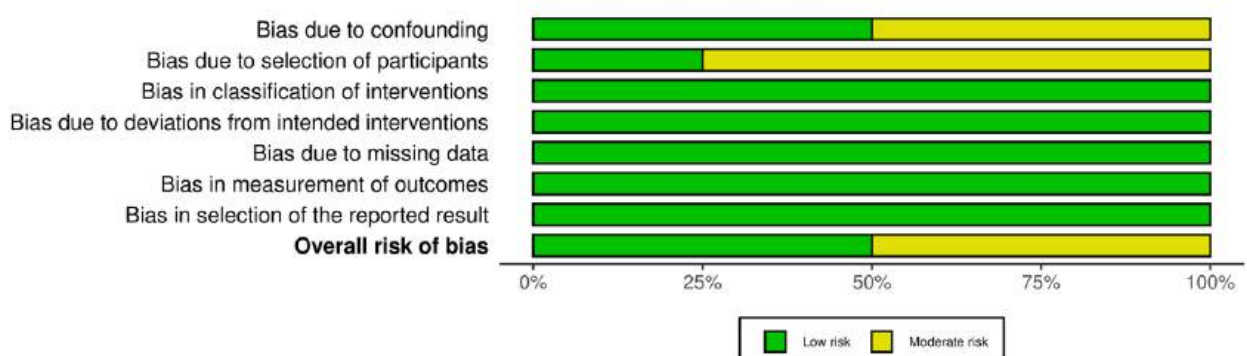
Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

Risk of Bias Assessment using ROBINS-I

RoB summary: Review of author's judgments about each RoB item for each included study



Risk of bias graph: Review author's judgements about each ROBINS-I domain presented as percentages across all included studies



Appendix 6. Forest Plots

Question 1. Should function-based screening at the community or home setting versus facility-based screening be done among persons at risk of disability in the primary care setting?

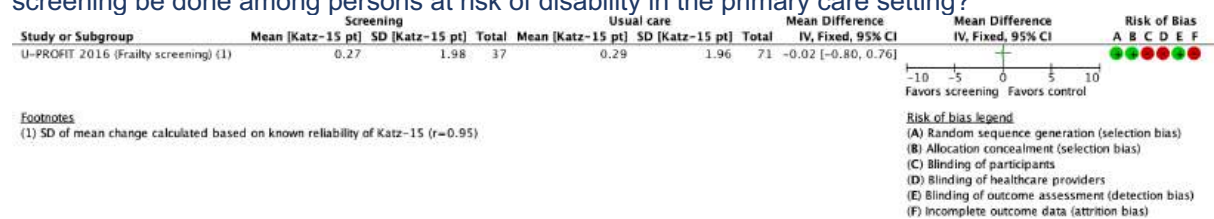


Figure 1. Frailty screening vs. usual care: effect on daily functioning at 1 year follow-up

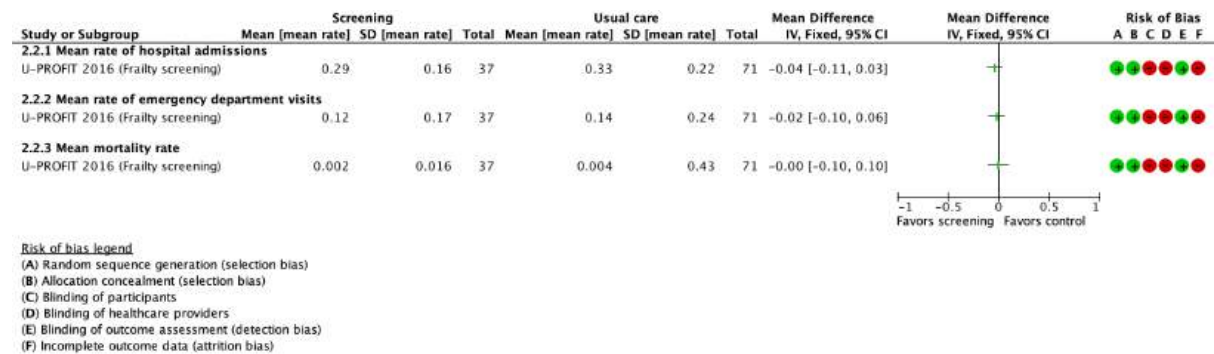


Figure 2. Frailty screening vs. usual care: effect on rate of hospital admissions, emergency department visits, mortality at 1 year follow-up.

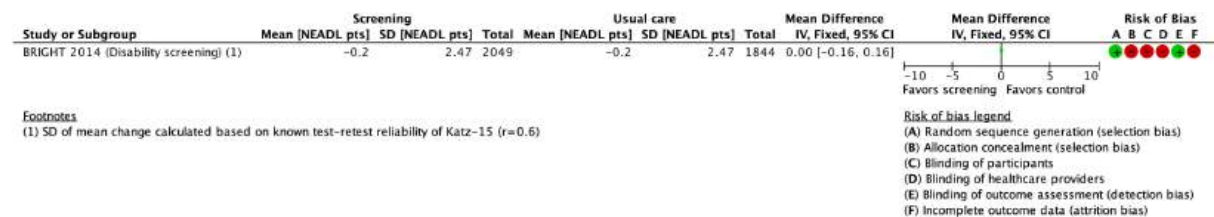


Figure 3. Disability screening using BRIGHT vs. usual care: Effect on functioning at 1 year follow-up.

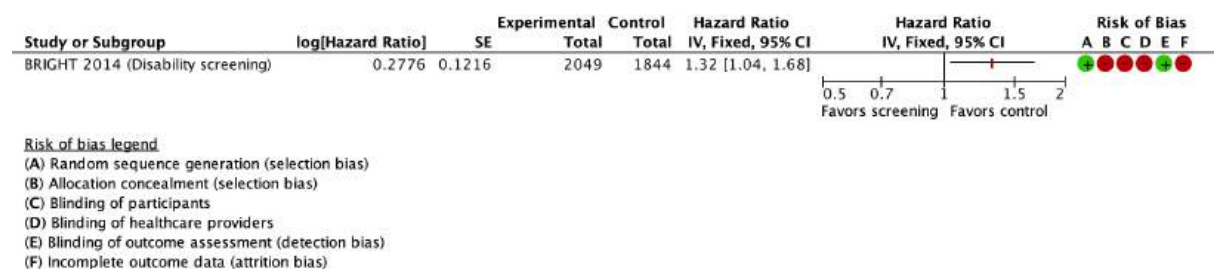


Figure 4. Disability screening using BRIGHT vs. usual care: Effect on residential care placement at 1 year follow-up.

Question 3. Should task-oriented approach in the community or home setting versus facility setting be done among persons with apparent mild to moderate physical disability in the primary care setting?

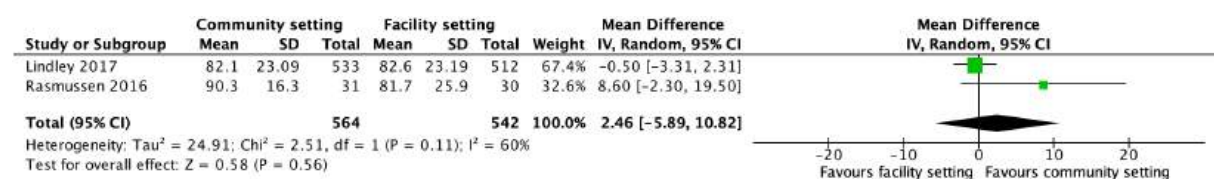


Figure 1. Community setting vs Facility setting: effect on Functional independence (Barthel Index Scores, Scale 0 to 100)

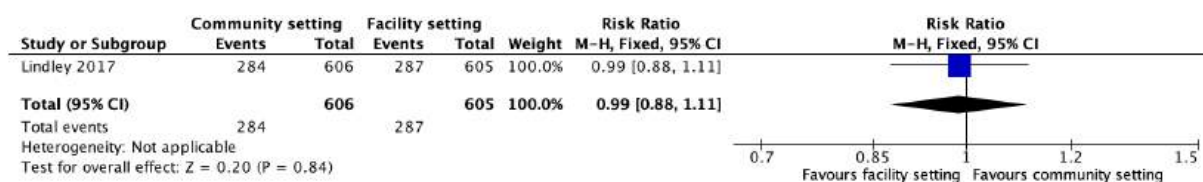


Figure 2. Community setting vs Facility setting: effect on Functional independence (Modified Rankin Scale Score 0-3, Good Functional Independence)

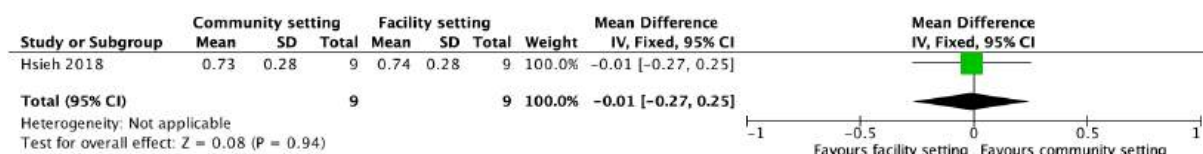


Figure 3. Community setting vs Facility setting: effect on Functional performance (10-meter Walk Test Speed, meters/second)

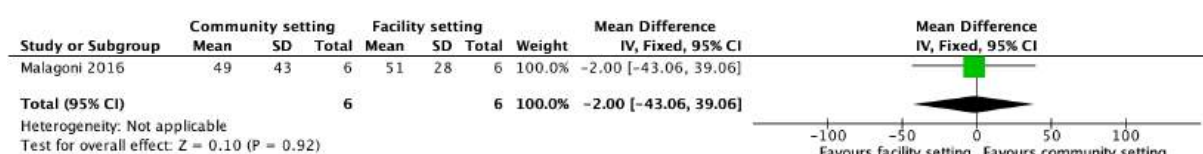


Figure 4. Community setting vs Facility setting: effect on Functional performance (6-meter Walk Test Distance, meters)

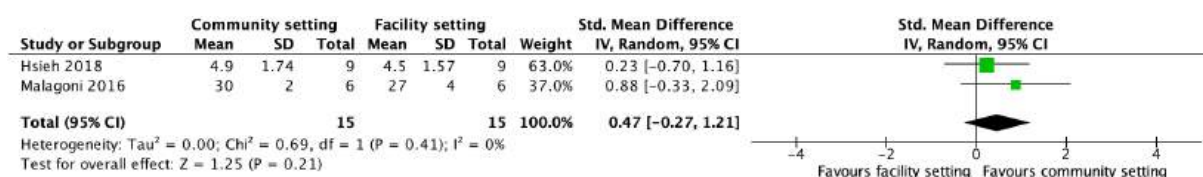
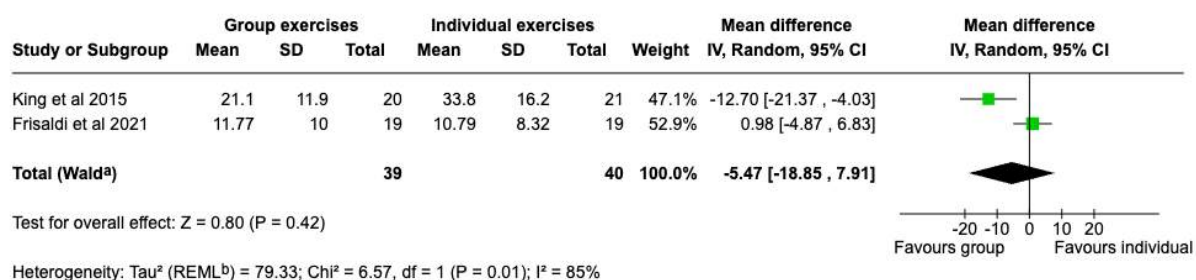


Figure 5. Community setting vs Facility setting: effect on Patient satisfaction

Question 4. Should group-based therapeutic exercises versus individual-based therapeutic exercises be done among persons with apparent mild to moderate physical disability in the primary care setting?



Footnotes

^aCI calculated by Wald-type method.

^bTau² calculated by Restricted Maximum-Likelihood method.

Figure 1. Social participation and overall mobility measured using Health-Related Quality of Life at 4-6 weeks of follow-up (PDQ-39)

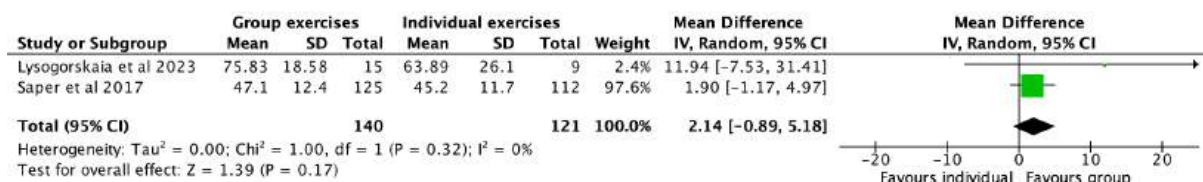


Figure 2a. Social participation at 10-12 weeks of follow-up (SF-36 Social Functioning Subscale)

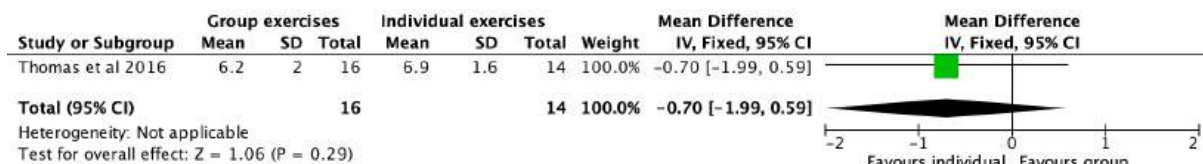
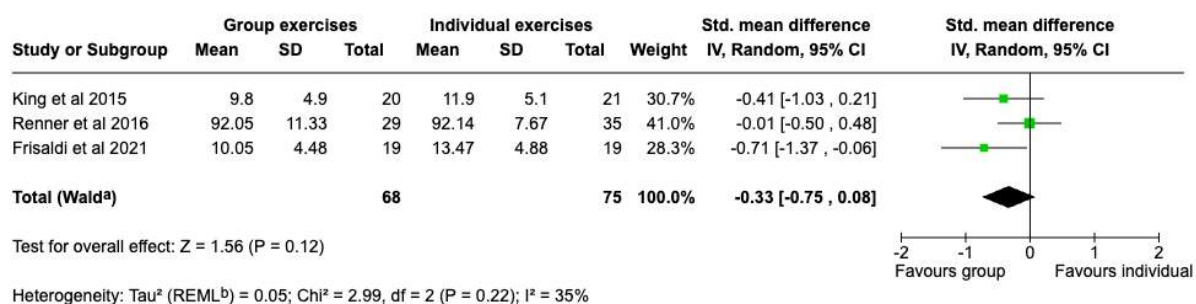


Figure 2b. Social participation at 10-12 weeks of follow-up (Cerebral Palsy QoL Child Participation)



Footnotes

^aCI calculated by Wald-type method.

^b τ^2 calculated by Restricted Maximum-Likelihood method.

Figure 3a. Hastening return-to-function with reduced disability as indicator at 4-6 weeks of follow-up

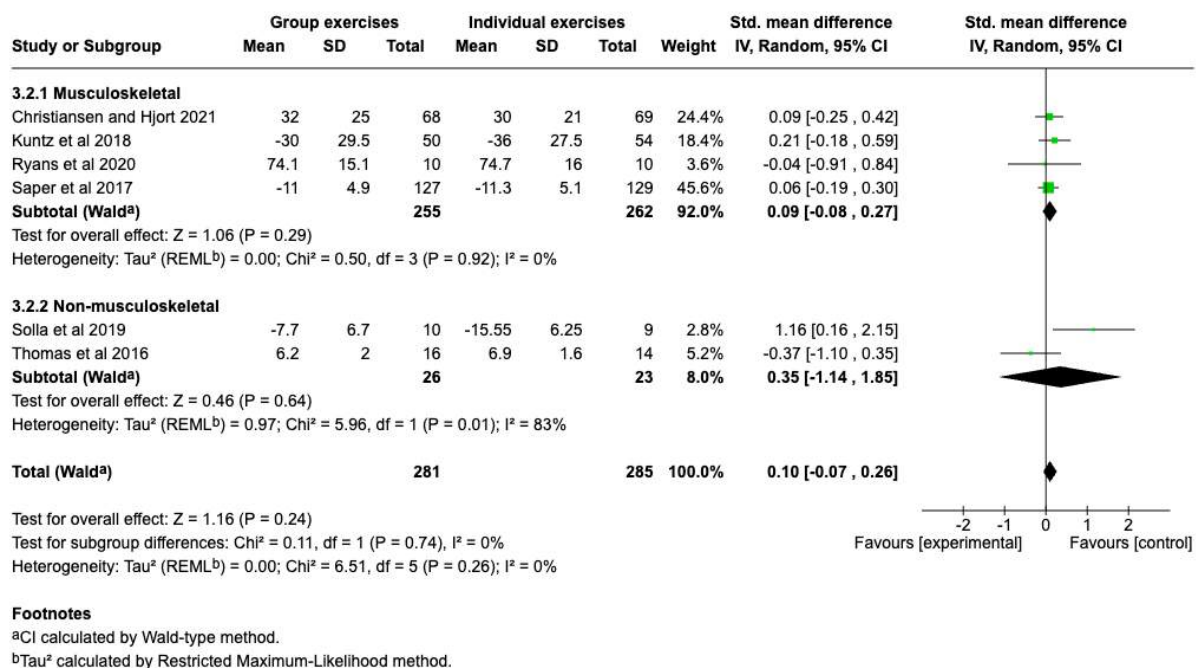


Figure 3b. Hastening return-to-function with reduced disability as indicator at 10-12 weeks of follow-up

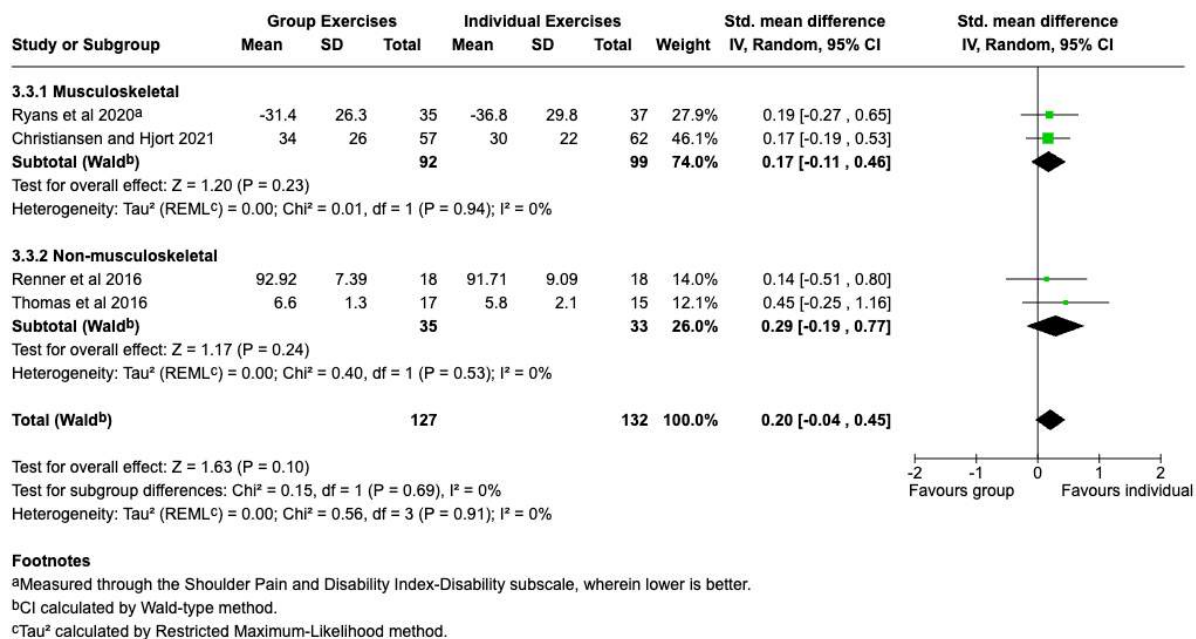
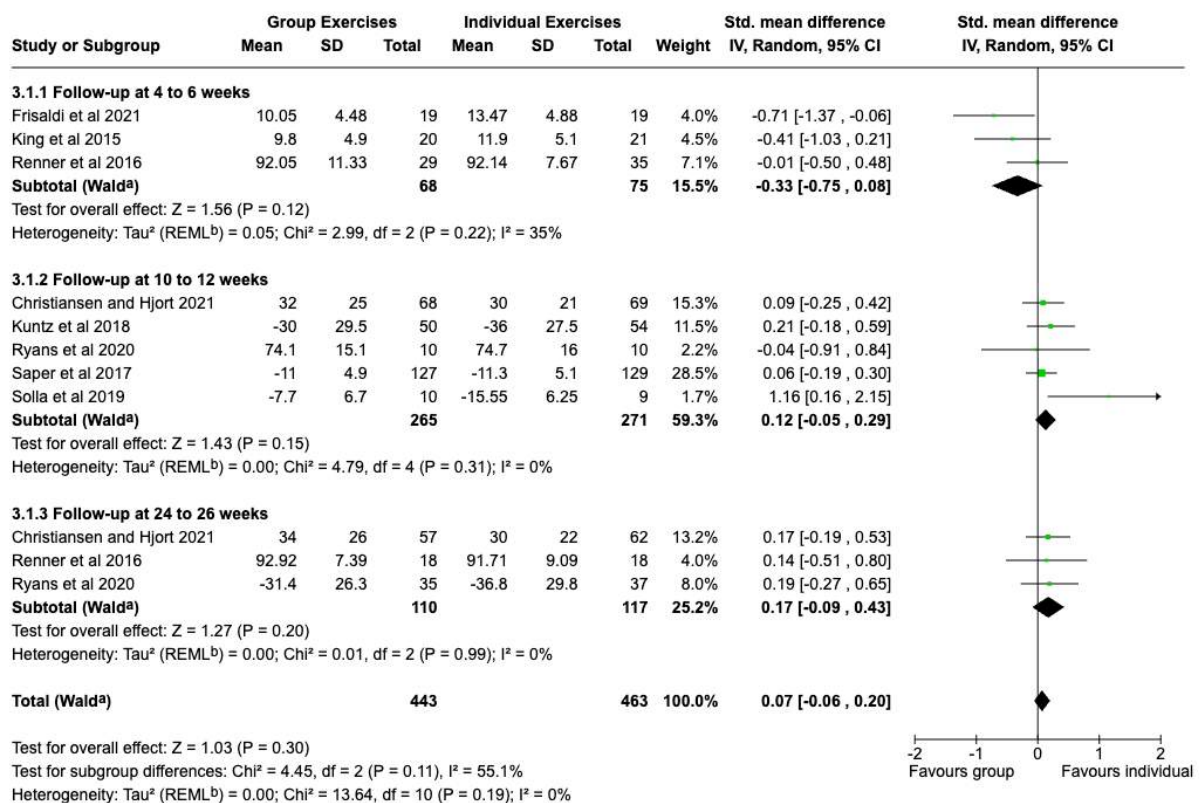


Figure 3c. Hastening return-to-function with reduced disability as indicator at 24-26 weeks of follow-up



Footnotes

^aCI calculated by Wald-type method.

^bTau² calculated by Restricted Maximum-Likelihood method.

Figure 3d. Hastening return-to-function with reduced disability as indicator at 4 to 26 weeks follow-up (Adult patients)

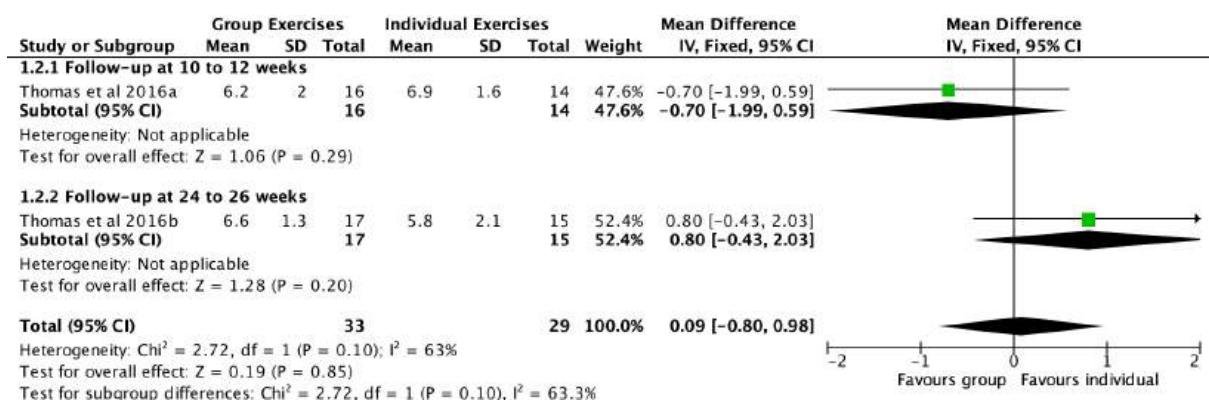


Figure 3e. Hastening return-to-function with reduced disability as indicator at 10 to 26 weeks follow-up (Pediatric patients)

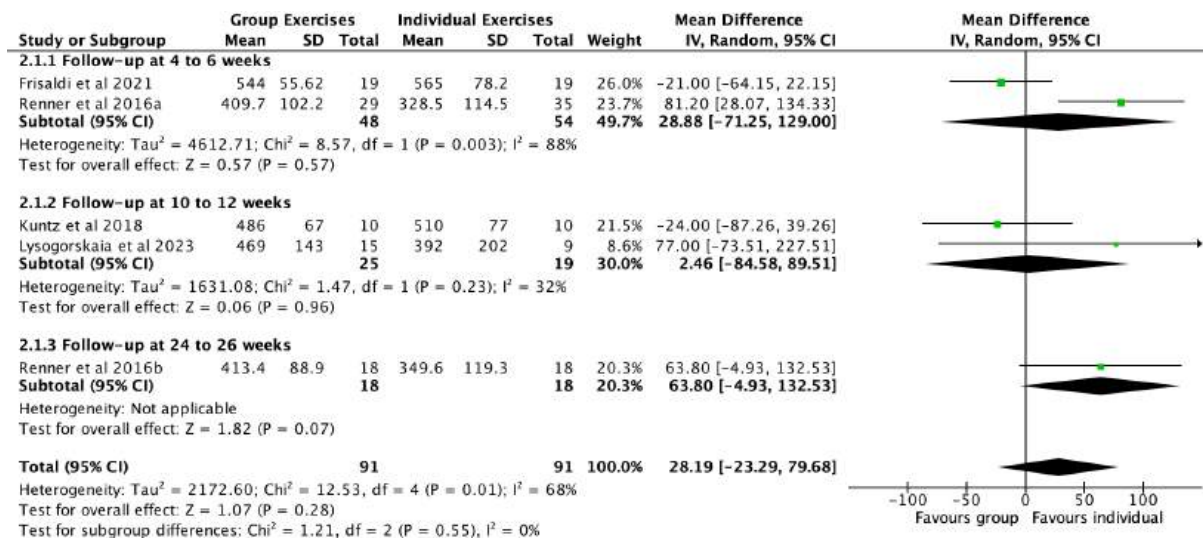


Figure 4a. Overall exercise tolerance at 4 to 26 weeks follow-up (Adult patients)

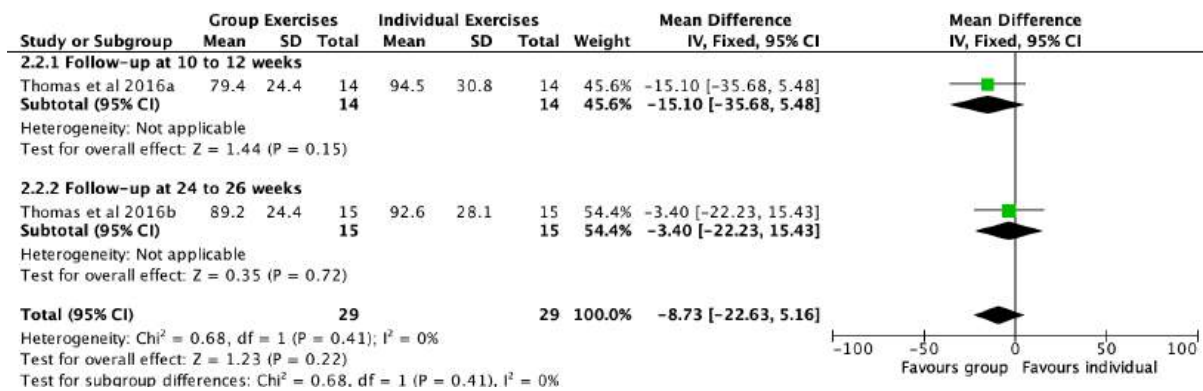


Figure 4b. Overall exercise tolerance at 4 to 26 weeks follow-up (Pediatric patients)

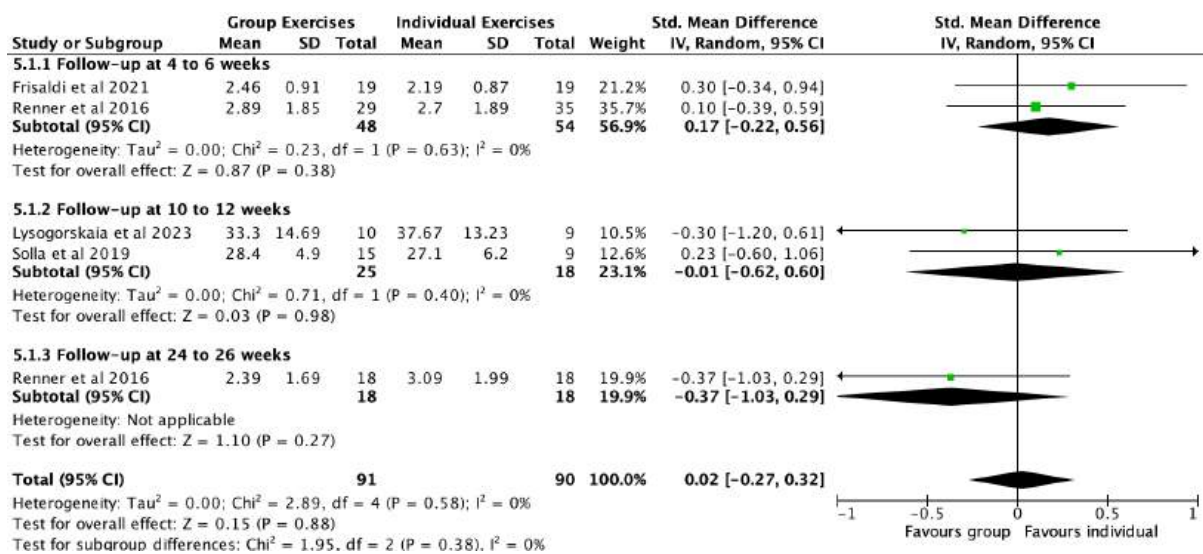


Figure 5. Fatigue at 4 to 26 weeks of follow-up

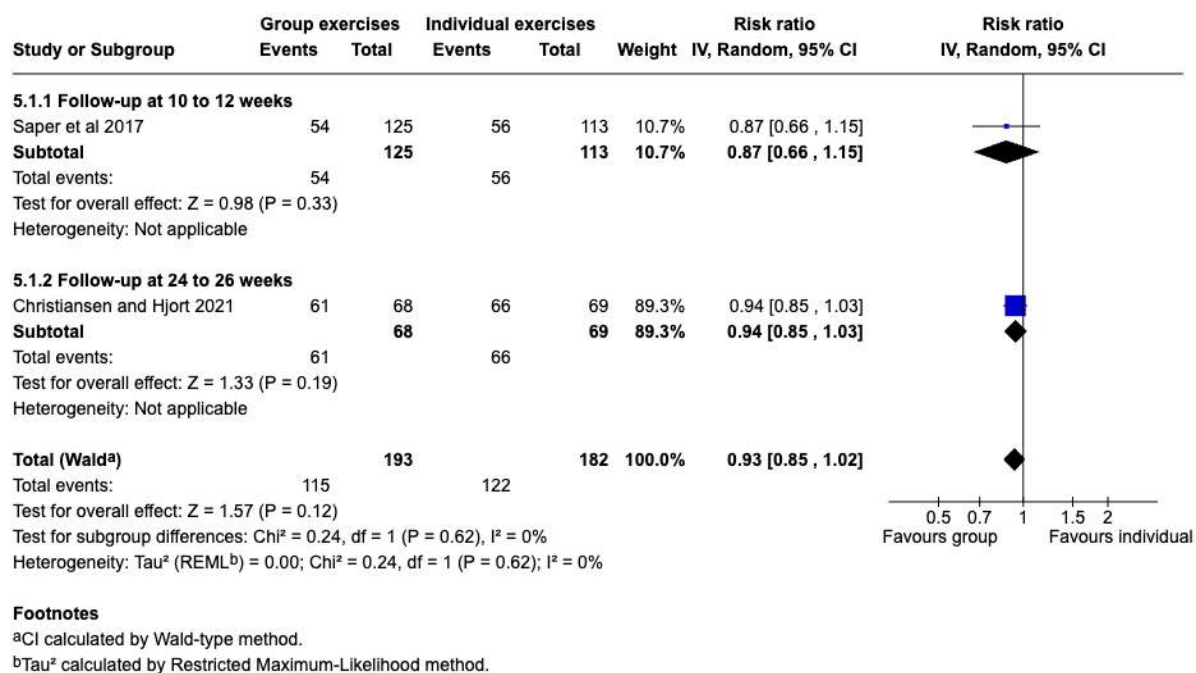


Figure 6a. Patient satisfaction at 10 to 26 weeks follow-up (Adult population)

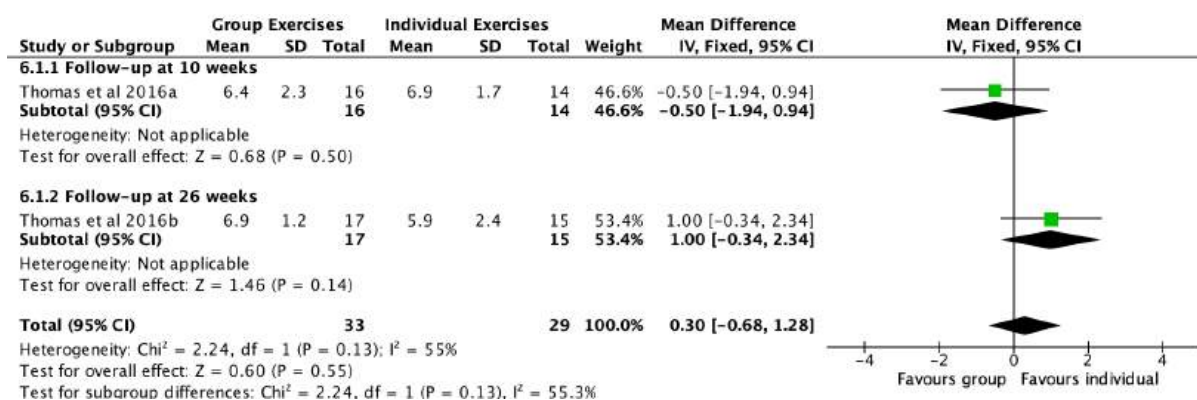


Figure 6b. Caregiver satisfaction at 10 to 52 weeks follow-up (Pediatric population)

Question 5. Should community- or home-based therapeutic exercises with physical modalities versus facility-based therapeutic exercises alone be done among persons with apparent moderate physical disability in the primary care setting?

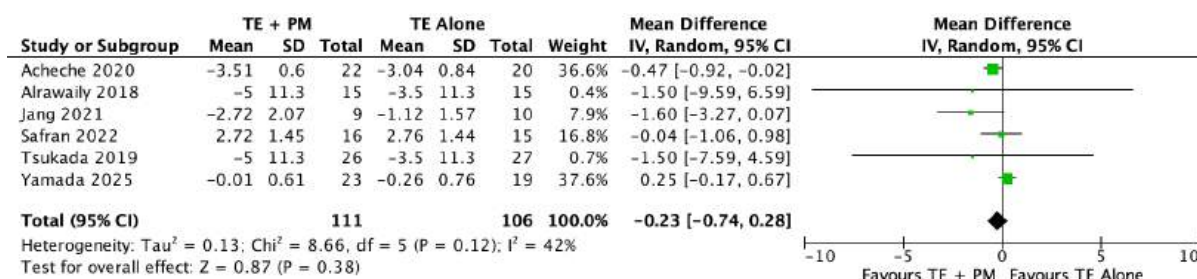


Figure 1. Effect of TE + PM versus TE alone in improving mobility assessed using TUG

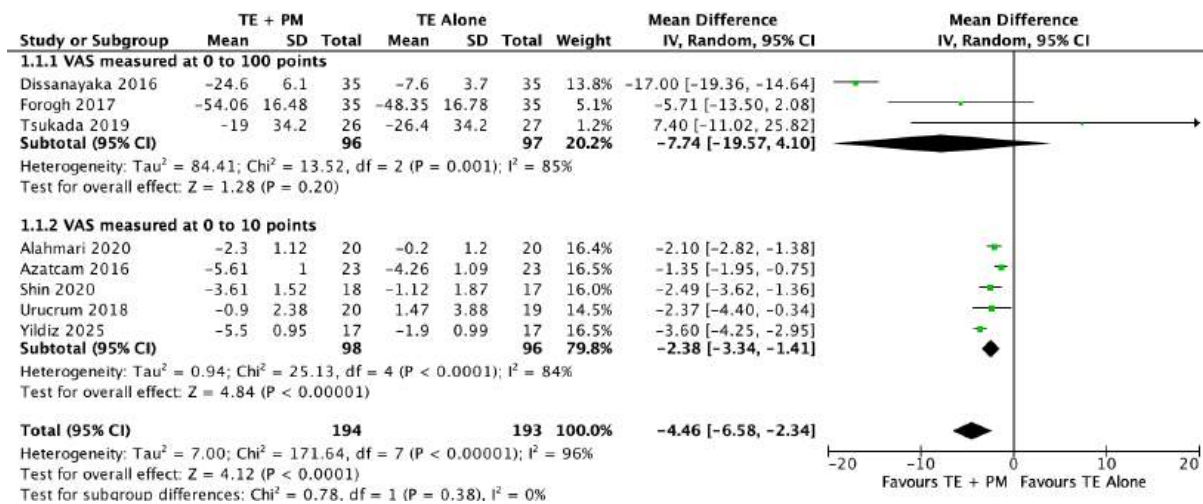


Figure 2. Effect of TE + PM versus TE alone in reducing pain assessed using VAS

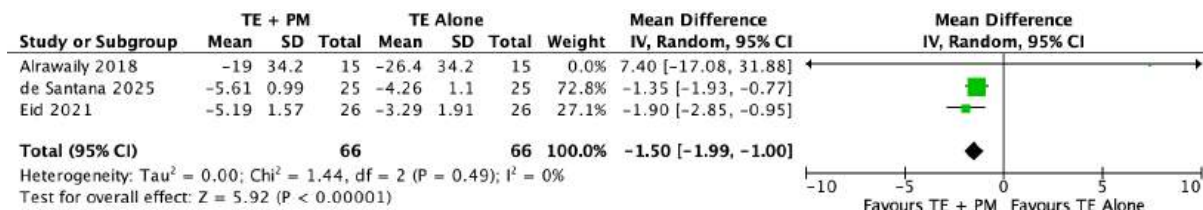


Figure 3. Effect of TE + PM versus TE alone in reducing pain assessed using NPRS

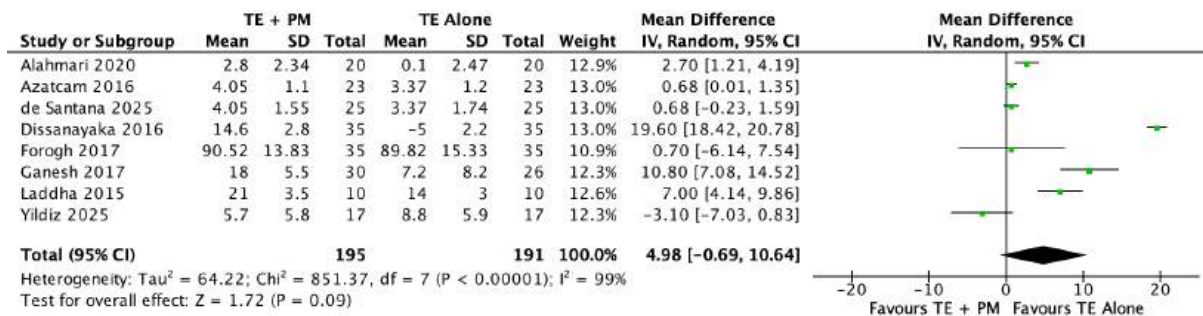


Figure 4. Effect of TE + PM versus TE alone in improving ROM

Question 6. Should activities of daily living re/training with environmental modifications versus facility-based simulated activities of daily living training be done among persons with apparent mild to moderate physical disability in the primary care setting?

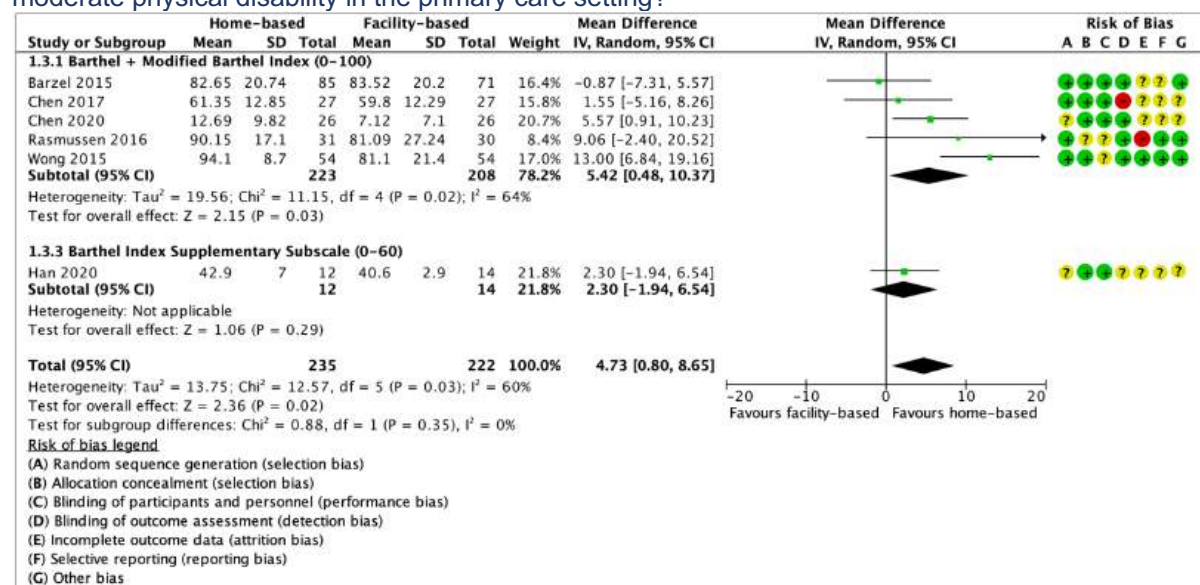


Figure 1a. Forest plot for improved functional independence analyzed using mean difference in random-effects

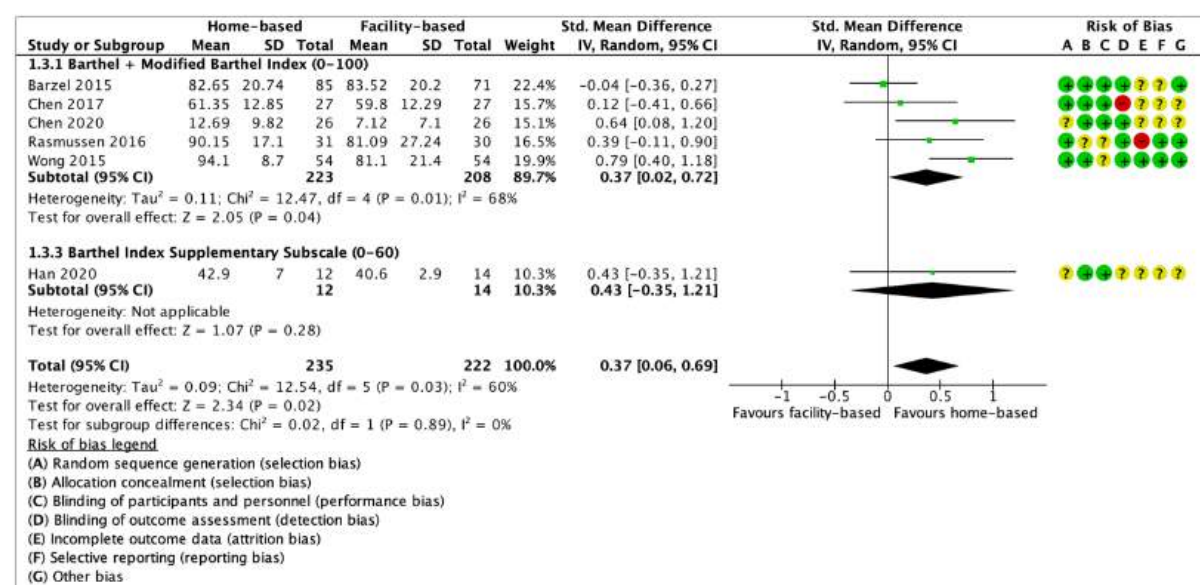


Figure 1b. Forest plot for improved functional independence analyzed using standardized mean difference in random-effects

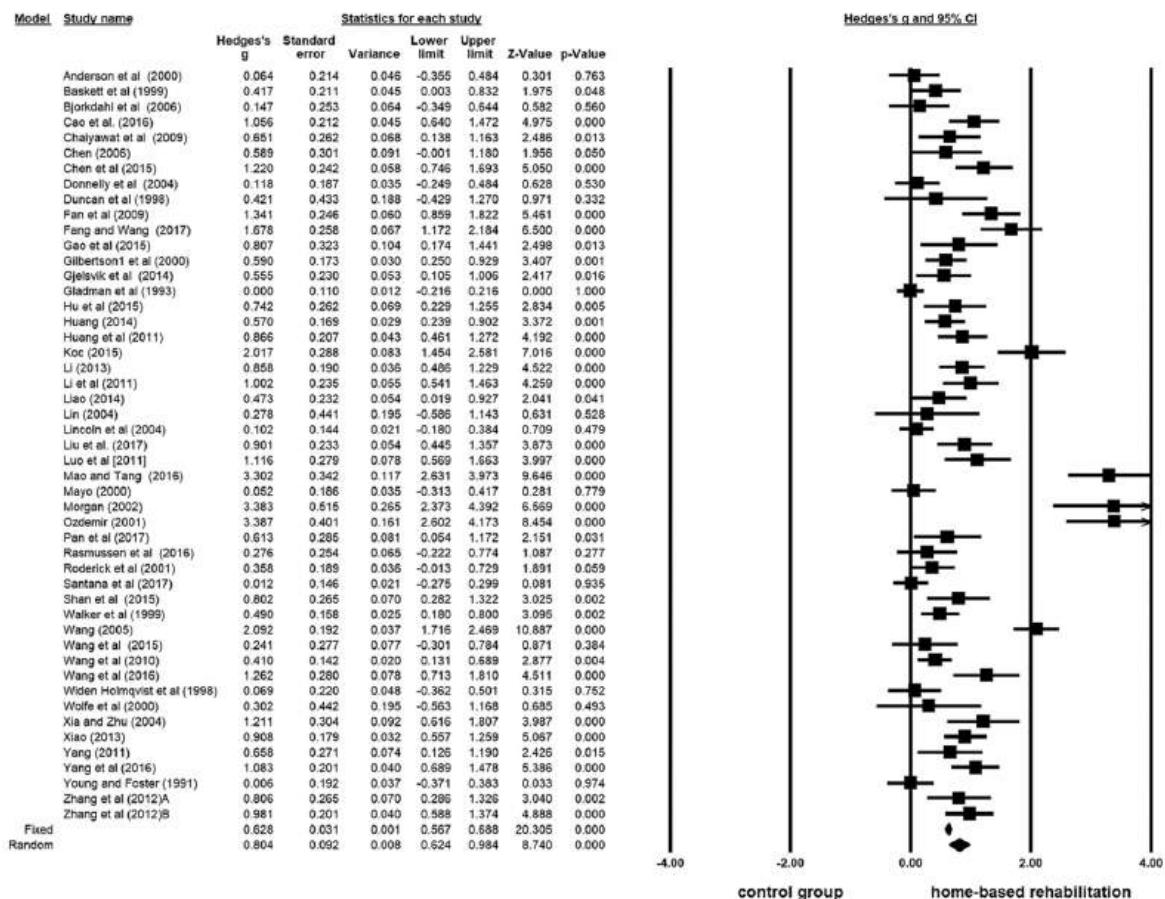


Figure 2a. Forest plot for improved self-care measured using Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, and Stroke Impact Scale ADL subscale¹⁴

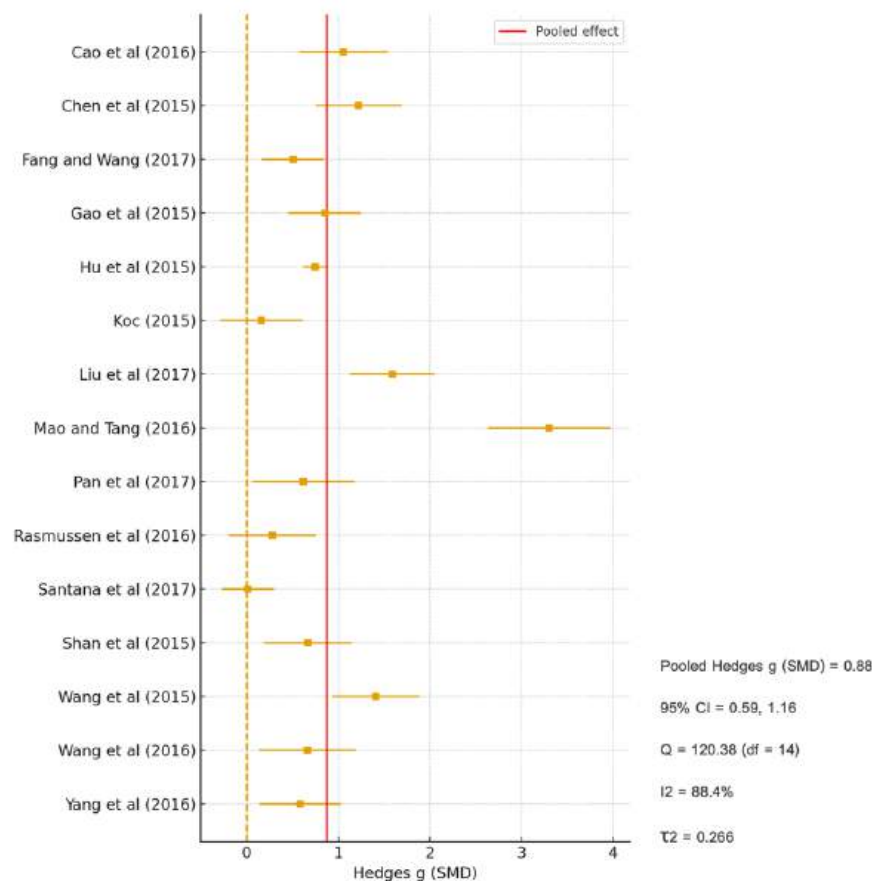


Figure 2b. Sensitivity analysis for trials published 2015 onwards for improved self-care measured using Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, and Stroke Impact Scale ADL subscale¹⁴

Table 2b. Statistics for trials published 2015 onwards for improved self-care measured using Barthel Index, Modified Barthel Index, Short Form-36, Functional Independence Measure, and Stroke Impact Scale ADL subscale¹⁴

Study	n_exp	n_cnr l	Hedge s g	SE	Varian ce	Lower CI	Upper CI	Z	Weight (random)
Cao et al (2016)	48	52	1.058	0.245	0.06	0.579	1.537	4.295	3.0701
Chen et al (2015)	40	40	1.22	0.242	0.058	0.745	1.694	5.05	3.0891
Fang and Wang (2017)	40	40	0.507	0.173	0.03	0.168	0.846	2.931	3.3816
Gao et al (2015)	19	21	0.857	0.203	0.041	0.419	1.296	4.23	3.2603
Hu et al (2015)	32	29	0.742	0.062	0.004	0.619	0.865	12.025	3.7076
Koc (2015)	35	37	0.159	0.229	0.053	-0.289	0.621	0.694	3.1376
Liu et al (2017)	40	40	1.587	0.237	0.056	1.122	2.053	6.706	3.1083
Mao and Tang (2016)	40	40	3.302	0.342	0.117	2.631	3.974	9.63	2.6129
Pan et al (2017)	25	25	0.618	0.285	0.081	0.071	1.172	2.151	2.8842
Rasmussen et al (2016)	31	30	0.276	0.243	0.059	-0.202	0.774	1.097	3.0796
Santana et al (2017)	92	93	0.012	0.146	0.021	-0.293	0.299	0.081	3.4878
Shan et al (2015)	30	30	0.669	0.246	0.059	0.187	1.152	2.693	3.0796
Wang et al (2015)	25	26	1.41	0.242	0.059	0.937	1.883	5.827	3.0796
Wang et al (2016)	30	30	0.662	0.262	0.073	0.313	1.011	5.01	2.9523
Yang et al (2016)	56	56	0.586	0.225	0.051	0.145	1.027	2.606	3.1574

Question 7. Should community-based or home-based mobility training with caregiver training versus facility-based mobility training alone be done among persons with apparent mild to moderate physical disability in the primary care setting?

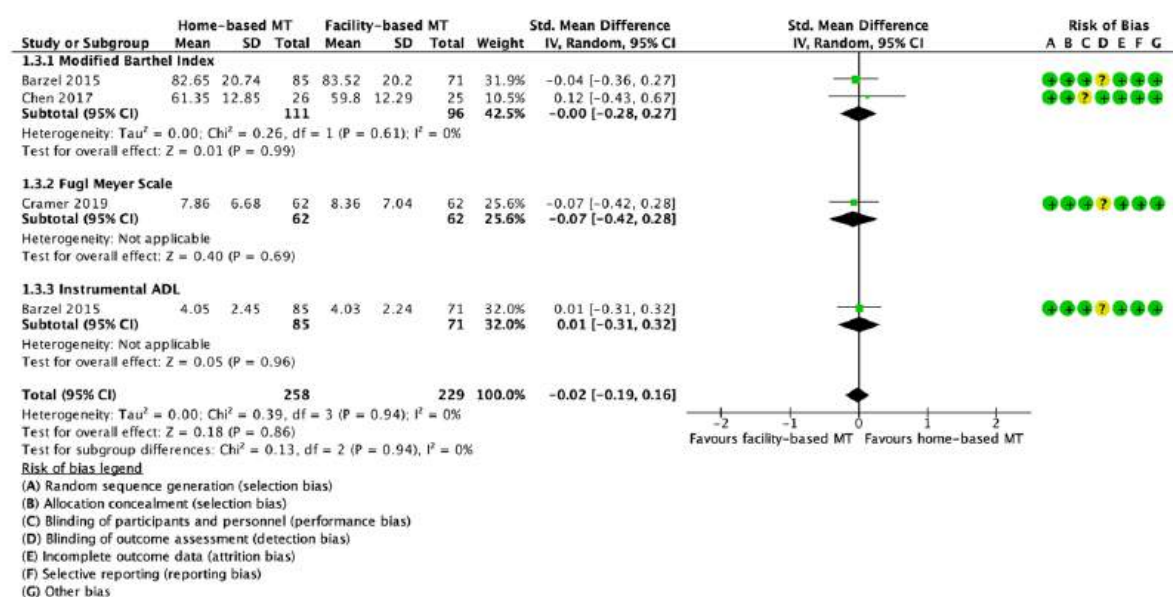


Figure 4-1. Forest plot for improvement in functional independence in adults

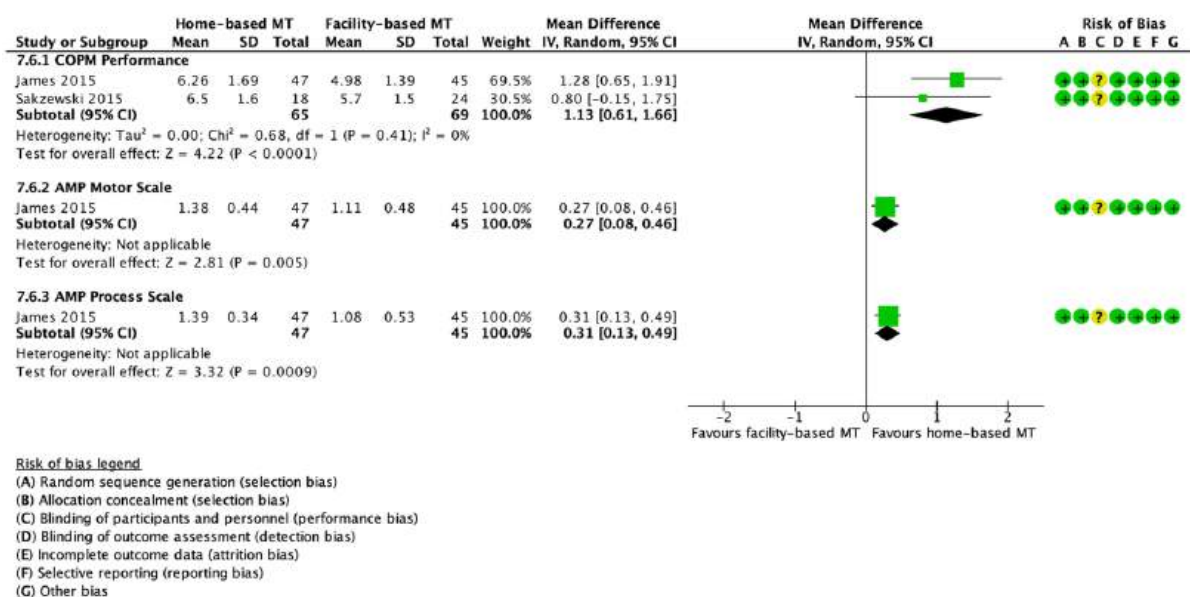


Figure 4-2. Forest plot for improvement in functional performance in children analyzed using mean difference

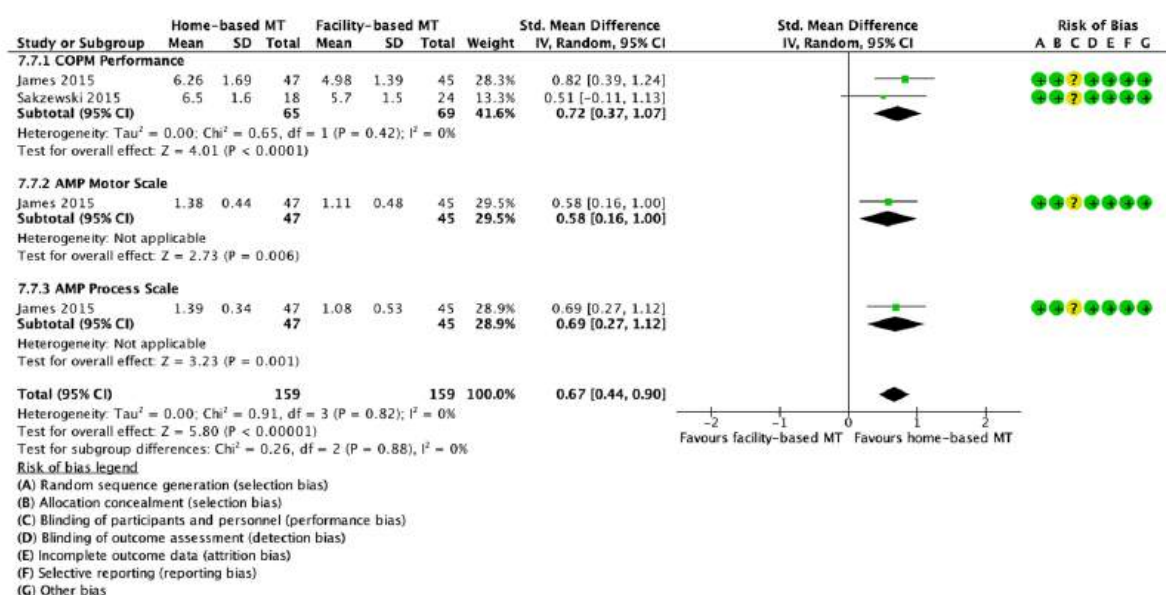


Figure 4-3. Forest plot for improvement in functional performance in children analyzed using standardized mean difference

Question 10. Should referral and specialist care management be done among persons with severe physical disability in the primary care setting?

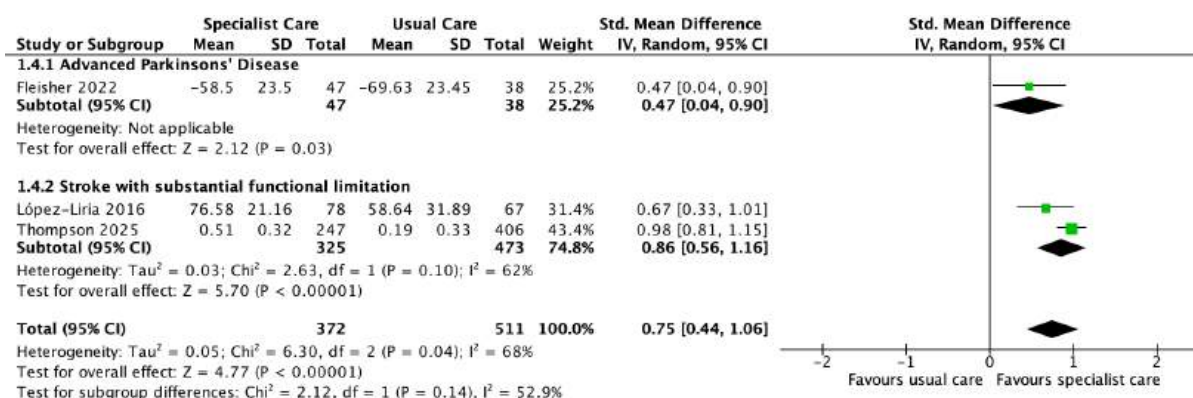


Figure 1. Forest plot of comparison 1 Critical outcome, outcome: 1.1 Functional independence measured using PDQ 39⁶, BI⁸, and EuroQoL 5D 3L⁹

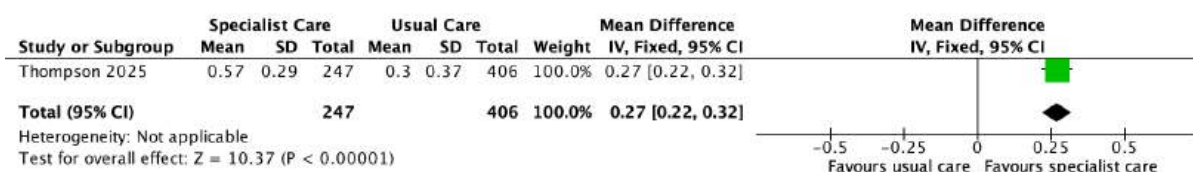


Figure 2. Forest plot of comparison 1 Critical outcome, outcome: 1.2 Self-care measured using EuroQoL 5D 3L⁹ at 3 months

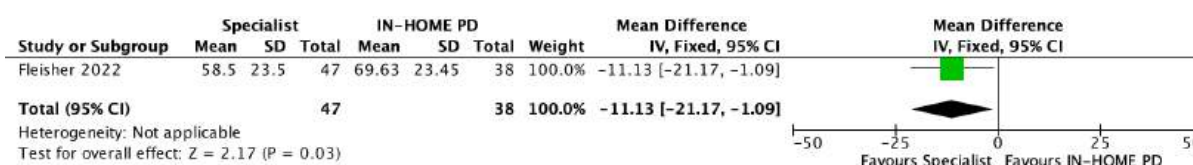


Figure 3. Forest plot of comparison 1 Critical outcome, outcome: 1.3 Functional independence + ADL measured using PDQ 39⁶ at 12 month

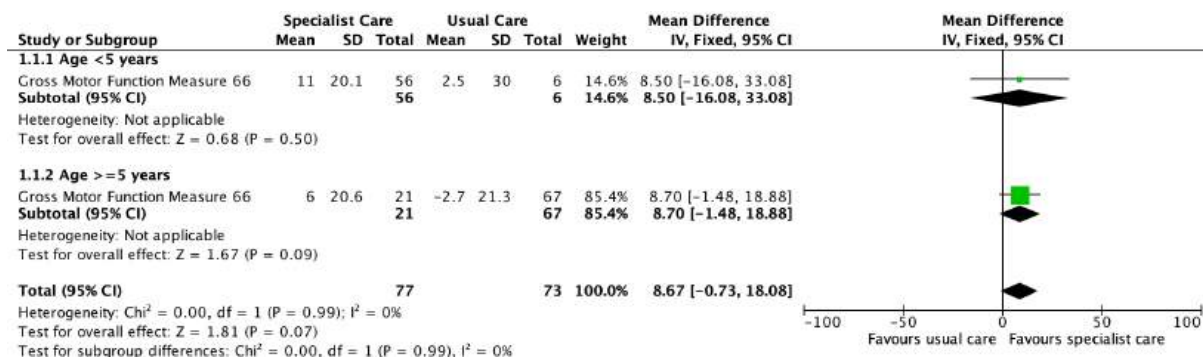


Figure 4. Forest plot of comparison 2 Critical outcome, outcome: 2.1 Motor function measured using GMFM⁷ at 6 months

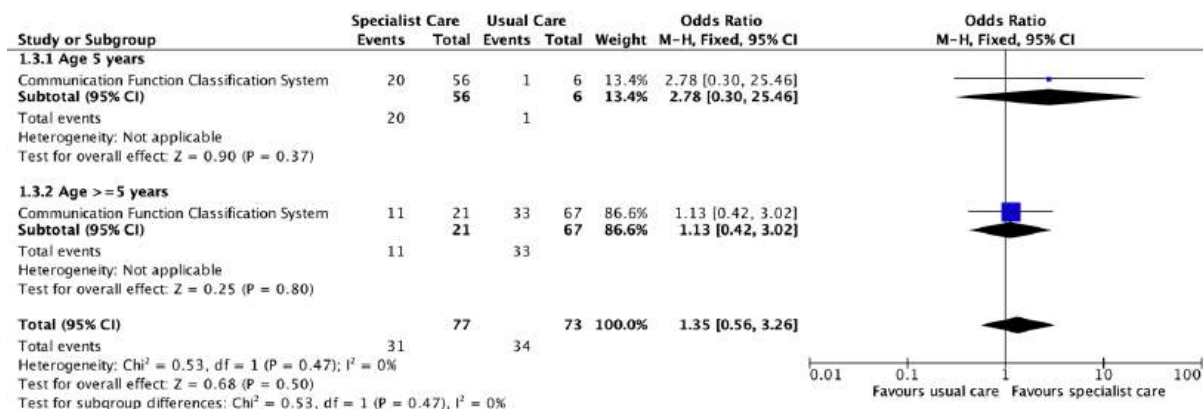


Figure 5. Forest plot of comparison 2 Critical outcome, outcome: 2.2 Communication measured using CFCS⁷ at 6 month

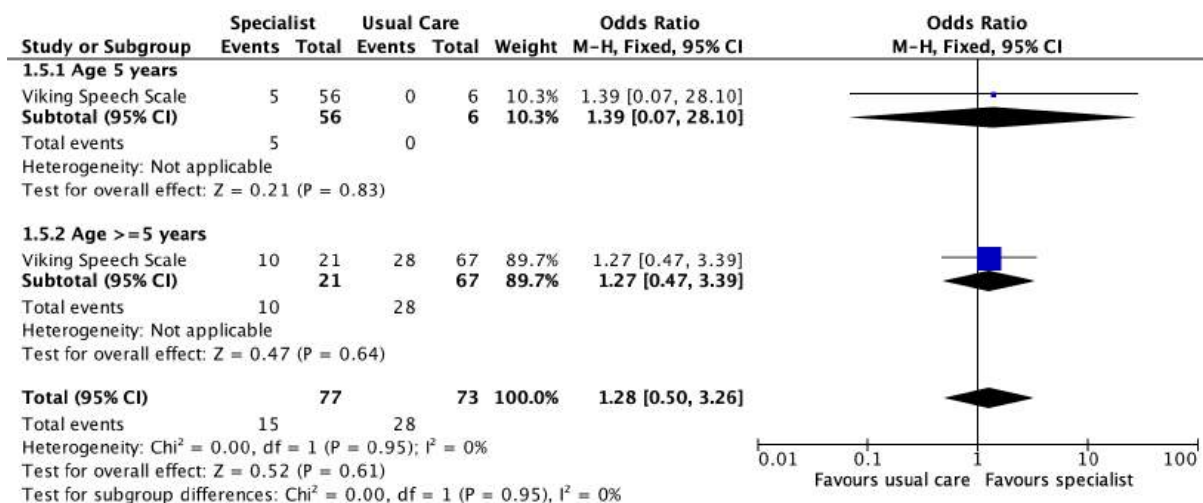


Figure 6. Forest plot of comparison 2 Critical outcome, outcome: 2.3 Speech production measured using VSS⁷ at 6 months

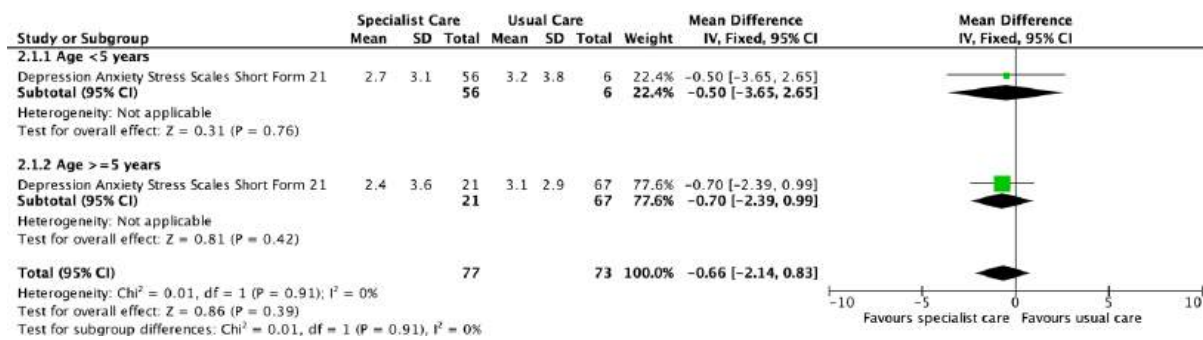


Figure 7. Forest plot of comparison 2 Critical outcome, outcome: 2.4 Caregiver anxiety measured using DASS 21⁷ at 6 months

Appendix 7. Screening Tools used in the included studies in Q1

Screening Tool	Setting	Tool Description	Scoring
Screening tools used in the RCTs comparing screening vs. usual care			
Brief Risk Identification Geriatric Health Tool (BRIGHT) Tool ^{4,11}	Home/community (postal survey)	11-item tool with yes/no questions about good health, need help with ADLs, falls, shortness of breath, feeling depressed, difficulty making decisions, memory problems.	0-11 (higher score = worse) ≥ 3: require referral for geriatric services for assessment and possible intervention
Frailty Screening using electronic medical record data ⁵	Facility-based	Using patients' electronic medical records to identify presence of 3 risk factors: (1) score 0.20 on a Frailty Index (i.e., calculated based on number of deficits/diseases patient has), (2) polypharmacy (using ≥ 5 medications), or (3) had no visit with a general practitioner for ≥ 3 years).	At least 1 of the 3 risk factors present = frail
Keele STarT Back Screening Tool ⁶	Facility-based	9-item self-administered tool asking the patient for presence of following for the past 2 weeks: back pain spreading down the legs, shoulder or neck pain, walked short distances only, dressed more slowly, worry, feeling that back pain is terrible or bothersome, inability to enjoy usual activities.	0-9 (higher score = worse) Low risk: ≤ 3 Medium risk: ≥ 4 (with scores ≤ 3 on items 5-9) High risk: ≥ 4 (with scores ≥ 4 on items 5-9)
Screening tools used in prospective cohort studies			
Geriatric Postal Screening Survey (GPSS) ⁸	Home/community (postal survey)	11-item tool with questions about general health, health in the previous year, weight loss, number of medications, recent fall, balance problems, dependence for ADLs, bladder problems, pain, memory loss, sadness/depression.	0-11 (higher score = worse) Lower risk: < 4 High risk: ≥ 4
Identification of Seniors At Risk-Primary Care (ISAR-PC) ¹⁰	Home/community (self-report)	3-item tool that screens for components found to be independently associated with functional decline: age ≥ 75 years, dependence in instrumental activities of daily living, and presence of regular memory problems.	0-7.5 (higher score = worse) 0-1: not at risk ≥ 2: at risk of functional decline
Integrated Systemic Care for Older People (ISCOPE) Screening Questionnaire ⁷	Home/community (postal survey)	23 questions on four health domains (somatic, functional, psychological and social).	0-4 (higher score = worse) ISCOPE-score = number of domains with problems (i.e. when the participants experiences ≥ 2 items in this domain as a problem)
First Injurious Fall Screening Tool (FIF) ⁹	Facility-based	4-item tool that screens for risk factors for falls requiring hospitalization or outpatient care: age ≥ 70, living alone, dependence for IADLs, failure to do one leg balance test for 5 seconds.	0-8 for women, 0-7 for men (higher score = worse) <u>Fall risk classification:</u> Low: 0 (women), 0-2 (men) Medium: 1-3 (women), 3-4 (men) High: 4+ (women), 5+ (men)

Facility-based screening for persistent disability in adults with low back pain using STarT Back

- (1) **Hill et al. (2011) STarT Back trial:**⁶ A cluster RCT conducted in UK primary care comparing stratified primary care management versus non-stratified current best practice for adults (n=851) aged ≥18 years with back pain. The intervention used a **9-item self-administered Keele STarT Back Screening Tool** to classify patients with low back pain by risk of persistent disability (low, medium, high). Minimal treatment is given for low-risk individuals and psychologically informed physiotherapy for high-risk ones. The control group received standard physiotherapy referrals based solely on clinicians' judgment without knowing screening results. The primary outcome was disability (Roland Morris Disability Questionnaire, RMDQ) at 12 months, with secondary outcomes including quality-adjusted life years (QALYs) and healthcare costs.

Facility-based screening for frailty in the elderly using electronic medical record (EMR) data

- (2) **Bleijenberg et al. (2016) U-PROFIT trial:**⁵ A 3-arm cluster RCT in 39 Dutch primary care practices including 3,092 community-dwelling adults aged ≥60 years identified as potentially frail from electronic medical record (EMR) data. At-risk patients were identified as those who score 0.20 on a Frailty Index, exposed to polypharmacy (using ≥ 5 medications), or had no visit with a general practitioner for ≥3 years). Primary care practices were randomized to: (1) Screening only via EMR followed by usual GP care; (2) Screening + nurse-led care (EMR screening plus comprehensive assessment, care planning, and follow-up); or (3) Usual care without systematic screening. The primary outcome was daily functioning (Katz-15 index), with secondary outcomes of quality of life (RAND-36, EQ-5D), mortality, institutionalization, and healthcare utilization.

Community-based screening for risk of functional decline and disability in elderly using BRIGHT

- (3) **Kerse et al. (2014) BRIGHT trial:**⁴ A pragmatic cluster-RCT conducted among 3,893 community-dwelling elderly patients in 60 primary care practices in New Zealand, evaluating proactive case-finding for disability risk among older adults. The intervention group were proactively screened annually for 3 years using the **Brief Risk Identification Geriatric Health Tool (BRIGHT) Tool**¹¹, which was contained in a birthday card sent from their General Practitioner. The control group continued with usual primary care, which included referrals to the geriatrics community team only when considered necessary by the primary health care team, relying on non-systematic methods of identification. Outcomes included the number of patients needing residential care placement and hospitalization, disability (Nottingham Extended Activities of Daily Living Scale, NEADL) and quality of life (WHOQOL-BREF).

A. STarT Back Screening Tool

The Keele STarT Back Screening Tool

Patient name: _____ Date: _____

Thinking about the **last 2 weeks** tick your response to the following questions:

	Disagree 0	Agree 1
1 My back pain has spread down my leg(s) at some time in the last 2 weeks	☐	☐
2 I have had pain in the shoulder or neck at some time in the last 2 weeks	☐	☐
3 I have only walked short distances because of my back pain	☐	☐
4 In the last 2 weeks, I have dressed more slowly than usual because of back pain	☐	☐
5 It's not really safe for a person with a condition like mine to be physically active	☐	☐
6 Worrying thoughts have been going through my mind a lot of the time	☐	☐
7 I feel that my back pain is terrible and it's never going to get any better	☐	☐
8 In general I have not enjoyed all the things I used to enjoy	☐	☐

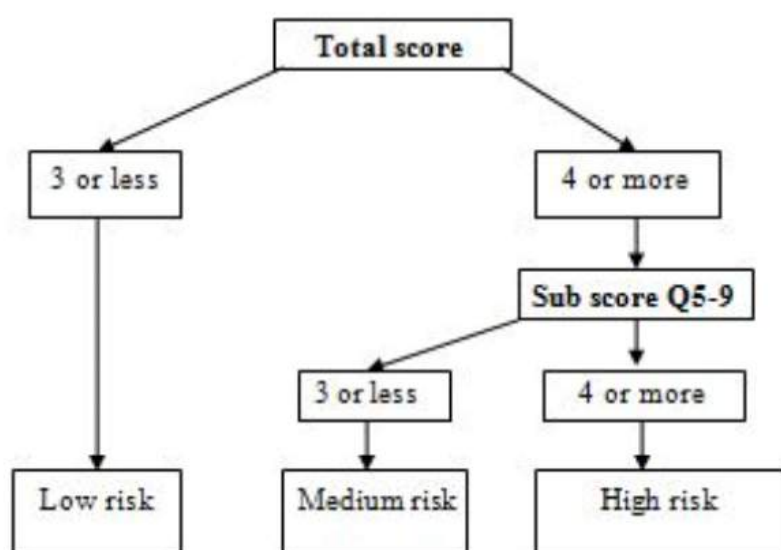
9. Overall, how **bothersome** has your back pain been in the **last 2 weeks**?

Not at all	Slightly	Moderately	Very much	Extremely
☐	☐	☐	☐	☐
0	0	0	1	1

Total score (all 9): _____ **Sub Score (Q5-9):** _____

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The STarT Back Tool Scoring System



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B. BRIGHT Questionnaire

BRIGHT Questionnaire

Please circle your response to the questions below and return the completed questionnaire in the envelope provided.



Thinking of how you have been in the last 3 months.

1. In general do you have good health?	Yes	No
2. Do you need someone to help you get around indoors?	Yes	No
3. Have you tripped or fallen?	Yes	No
4. Do you get short of breath walking across the room?	Yes	No
5. Do you usually need someone to help you bathe or shower?	Yes	No
6. Do you usually need someone to help you comb your hair, brush your teeth, shave, apply makeup, or wash/dry your face and hands?	Yes	No
7. Do you usually need someone to help you dress your lower body?	Yes	No
8. Have you been bothered by feeling down, depressed or hopeless?	Yes	No
9. Do you have any difficulties making decisions about everyday activities?	Yes	No
10. Do you have memory problems that make everyday activities difficult?	Yes	No
11. Do you usually need any help with ordinary housework?	Yes	No
Did you fill in this questionnaire by yourself? If No, Who?	Yes	No

***Please fill in the information requested on the back of this form. Thank you for filling it in.
Please send it back in the envelope provided.***

Source: Kerse N, Boyd M, McLean C, Koziol-McLain J, Robb G. The BRIGHT tool. Age Ageing. 2008 Sep;37(5):553-88. doi: 10.1093/ageing/afn145. PMID: 18755783. (Supplementary Data)

C. Frailty Index deficits (U-PROFIT Trial)

Deficit	Deficit name	Deficit Prev. (%)	ICPC*	ICPC-Label	Days**	Item Prev. (%)
1	General complaints	10.6	A01	Pain general/multiple sites	365	2.1
			A04	Weakness/tiredness general	365	4.0
			A05	General deterioration	365	0.4
			A28	Limited function/disability (NOS)	-	0
			B28	Limited function/disability (blood, blood forming)	-	0
			B80	Iron deficiency anaemia	365	1.8
			B81	Anaemia, Vitamin B12/folate def.	365	0.9
			B82	Anaemia other/unspecified	365	0.9
			D28	Limited function/disability (digestive)	-	0.1
			F28	Limited function/disability (eye)	-	0.3
			H28	Limited function/disability (ear)	-	0
			K28	Limited function/disability (circulatory)	-	0
			L28	Limited function/disability (musculoskeletal)	-	0.8
			N28	Limited function/disability (neurological)	-	0
			P28	Limited function/disability (psychological)	-	0
			P78	Neuraesthesia/surmenage	365	0.3
			R28	Limited function/disability (respiratory)	-	0.1
			S28	Limited function/disability (skin)	-	0
			T28	Limited function/disability (metabolic, endocrine, nutrition)	-	0
			U28	Limited function/disability (urinary)	-	0.1
			X28	Limited function/disability (female, genital)	-	0
			Y28	Limited function/disability (male, genital)	-	0
			Z28	Limited function/disability (social)	-	0.1
2	Neoplasm - other	10.9	A79	Malignancy NOS	-	0
			B72	Hodgkin's disease	-	0.3
			B73	Leukaemia	-	0.3
			B74	Malignant neoplasm blood other	-	0.1
			D74	Malignant neoplasm stomach	-	0.1
			D76	Malignant neoplasm pancreas	-	0.1
			D77	Malig. neoplasm digest other/NOS	-	0.4
			F74	Neoplasm of eye/adnexa	-	0.1
			H75	Neoplasm of ear	-	0
			K72	Neoplasm cardiovascular	-	0
			L71	Malignant neoplasm musculoskeletal	-	0.3
			N74	Malignant neoplasm nervous system	-	0
			R84	Malignant neoplasm bronchus/lung	-	0.7
			S77	Malignant neoplasm of skin	-	4.6
			T71	Malignant neoplasm thyroid	-	0.1
			U75	Malignant neoplasm of kidney	-	0.3
			U76	Malignant neoplasm of bladder	-	0.9
			U77	Malignant neoplasm urinary other	-	0.1
			X75	Malignant neoplasm cervix	-	0.2
			X76	Malignant neoplasm breast female	-	2.3
			X77	Malignant neoplasm genital other (f)	-	0.7
3	Incontinence	11.0	D17	Incontinence of bowel	-	0.9
			U04	Incontinence urine	-	7.3
			X87	Uterovaginal prolapse	-	3.6
4	GI / Liver disease	5.9	D72	Viral hepatitis	-	0.4
			D97	Cirrhosis / liver disease NOS	-	0.9
			D75	Malignant neoplasm colon/rectum	-	1.8
			D85	Duodenal ulcer	365	1.2
			D86	Peptic ulcer other	365	0.9
			D94	Chronic enteritis/ulcerative colitis	-	1.0
5	Oesophagus disease	5.8	D84	Oesophagus disease	365	5.8
6	Visual impairment	9.7	F83	Retinopathy	-	1.6
			F94	Blindness	-	0.4
			F84	Macular degeneration	-	2.6
			F93	Glaucoma	-	5.5
7	Cataract	13.4	F92	Cataract	-	13.4

8	Hearing impairment	8.8	H84	Presbycusis	-	5.8
			H85	Acoustic trauma	-	0.4
			H86	Deafness	-	2.8
9	Respiratory problems	5.7	K02	Pressure/tightness of heart	365	1.2
			R02	Shortness of breath/dyspnoea w/o K02	365	2.3
			R81	Pneumonia	365	2.4
10	Angina pectoris	11.2	K74	Angina pectoris	365	11.2
11	Myocardial disease	6.3	K75	Acute myocardial infarction	365	5.7
			K76	Other / chronic ischaemic heart disease	-	0.7
12	Heart failure	5.3	K77	Heart failure	-	5.3
13	Atrial fibrillation/flutter	8.2	K78	Atrial fibrillation/flutter	365	8.2
14	Hypertension - uncomplicated	35.8	K86	Hypertension uncomplicated	365	35.8
15	Hypertension - complicated	8.8	K87	Hypertension complicated	-	8.8
16	Dizziness	8.1	A06	Fainting/syncope	365	1.6
			H82	Vertiginous syndrome / labyrinthitis	365	4.6
			K88	Postural hypotension	365	0.4
			N17	Vertigo/dizziness	365	1.7
17	TIA / CVA	8.9	K89	Transient cerebral ischaemia	365	3.9
			K90	Stroke/cerebrovascular accident	-	5.2
18	Vascular disease	8.0	K91	Atherosclerosis	-	1.0
			K92	other PVD	-	3.3
			K93	Pulmonary embolism	365	0.7
			K94	Phlebitis/thrombophlebitis	365	1.1
			K99	Cardiovascular disease other	-	2.7
19	Fracture / Osteoporosis	11.3	A80	Trauma/injury NOS	365	1.1
			L72	Fracture: radius/ulna	365	0.5
			L73	Fracture: tibia/fibula	365	0.5
			L74	Fracture: hand/foot bone	365	0.3
			L75	Fracture: femur	365	0.9
			L76	Fracture: other	365	1.1
			L95	Osteoporosis	-	8.0
20	Arthritis / Osteoarthritis	7.7	L88	Rheumatoid arthritis / related condition	-	1.7
			L89	Osteoarthritis of hip	-	3.6
			L91	Osteoarthritis other / related condition	-	2.7
21	Osteoarthritis knee	6.2	L90	Osteoarthritis of knee	-	6.2
22	Neurologic disease	7.1	N86	Multiple sclerosis	-	0.2
			N99	Neurological disease, other	-	0.7
			N99	Migraine	365	0.9
			N87	Parkinsonism, Parkinson's disease	-	1.3
			N88	Epilepsy	-	1.5
			N94	Peripheral neuritis/neuropathy	-	3.0
23	Depression	8.0	P03	Feeling depressed	365	2.0
			P76	Depressive disorder	365	6.1
24	Sleep disturbance	11.5	P06	Sleep disturbance	365	11.5
25	Cognitive impairment	5.6		Memory / concentration / orientation disturbance	365	2.3
			P20			
			P85	Mental retardation	-	0.1
26	Psychiatric problems / Substance abuse	5.1	P70	Dementia / Alzheimer's disease	-	3.3
			P71	Organic psychosis other	365	0.5
			P72	Schizophrenia	-	0.1
			P73	Affective psychosis	365	0.4
			P74	Anxiety disorder/anxiety state	365	1.5
			P15	Chronic alcohol abuse	-	1.6
			P16	Acute alcohol abuse	365	0.1
			P17	Tobacco abuse	-	1.1
			P18	Medication abuse	365	0
			P19	Drug abuse	365	0
27	COPD	8.8	R91	Chronic bronchitis / bronchiectasis	-	0.7
			R95	Chronic obstructive pulmonary disease	-	8.1
28	Asthma	5.8	R96	Asthma	-	5.8
29	Skin problems	6.8	S70	Herpes zoster	365	1.5
			S91	Psoriasis	-	1.7
			S97	Chronic ulcer skin	365	3.7

30	Weight problems	4.9	T05	Feeding problem of adult	365	0.1
			T07	Weight gain	365	0.1
			T08	Weight loss	365	1.3
			T83	Overweight	-	0.8
			T82	Obesity	-	2.7
31	Thyroid disorders	6.2	T85	Hyperthyroidism/thyrotoxicosis	365	1.2
			T86	Hypothyroidism/myxoedema	365	5.0
32	Diabetes mellitus	18.8	T90	Diabetes mellitus	-	18.8
33	Urinary disease	7.5	U99	Urinary disease, other	-	7.5
34	Prostate problems	5.4	Y77	Malignant neoplasm prostate	-	2.1
			Y85	Benign prostatic hypertrophy	-	3.3
35	Social problems	5.7	Z01	Poverty/financial problem	365	0.1
			Z03	Housing/neighbourhood problem	365	0.4
			Z04	Social cultural problem	365	0.2
			Z29	Social problem NOS	365	0.4
			Z12	Relationship problem with partner	365	0.5
			Z14	Partner illness problem	365	1.0
36	Polypharmacy	28.8	Z15	Loss/death of partner problem	-	3.4
			-	-	365	28.8

* Dutch ICPC-1 version as currently used in general practices

** '365 days' indicates that the belonging item is only considered present when registered at least once in the past year. For items without the '365 days' indication, all time presence is considered. Prev. = Prevalence

Source: Drubbel I, de Wit NJ, Bleijenberg N, Eijkemans RJ, Schuurmans MJ, Numans ME. Prediction of adverse health outcomes in older people using a frailty index based on routine primary care data. J Gerontol A Biol Sci Med Sci. 2013 Mar;68(3):301-8. doi: 10.1093/gerona/gls161. Epub 2012 Jul 25. PMID: 22843671.

D. ISAR-PC (Identification of Seniors At Risk (ISAR) - Primary Care)

ISAR-PC		
1. Did you need assistance on a regular basis in the last month (e.g. preparing meals, shopping, housekeeping)?	No	0.0
	Yes	2.5
2. Do you regularly have memory problems?	No	0.0
	Yes	2.0
3. What is your age?	74 years or younger	0.0
	Between 75 and 84 years	1.5
	85 years and older	3.0
Total score		
Maximum score:	7.5 points	
Total score 0 or 1:	Not at risk of functional decline	
Total score 2 or higher:	At risk of functional decline	

Source: Suijker JJ, Buurman BM, van Rijn M, van Dalen MT, ter Riet G, van Geloven N, de Haan RJ, Moll van Charante EP, de Rooij SE. A simple validated questionnaire predicted functional decline in community-dwelling older persons: prospective cohort studies. *J Clin Epidemiol.* 2014 Oct;67(10):1121-30. doi: 10.1016/j.jclinepi.2014.05.014. Epub 2014 Aug 4. PMID: 25103817.

D. First Time Injurious Falls - FIF Screening Tool

First time Injurious Falls – the FIF screening tool

			Women	Men
How old are you?	60-69	☐	0	0
	70-79	☐	1	2
	80-89	☐	2	3
	≥90	☐	4	4
Do you live with someone?	Yes	☐	0	0
	No	☐	1	1
Do you need help in any or several of the following:	Yes	☐	2	1
	No	☐	0	0
- managing finances - preparing meals - using telephone - cleaning - grocery shopping - doing laundry - using public transportation				
Physical test (eyes open - 2 attempts/leg - best attempt counts)				
One leg balance	<5 seconds	☐	1	1
	≥5 seconds	☐	0	0
Total score =			___ /8	___ /7

Low fall risk Women 0 p Men 0-2 p	Medium fall risk Women 1-3 p Men 3-4 p	High fall risk Women 4+ p Men 5+ p
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Fig. 1. Utilization of the FIF screening tool in a primary care setting.

Source: Ek S, Rizzuto D, Calderón-Larrañaga A, Franzén E, Xu W, Welmer AK. Predicting First-Time Injurious Falls in Older Men and Women Living in the Community: Development of the First Injurious Fall Screening Tool. J Am Med Dir Assoc. 2019 Sep;20(9):1163-1168.e3. doi: 10.1016/j.jamda.2019.02.023. Epub 2019 Apr 4. PMID: 30954420.

E. Geriatric Postal Screening Survey and Scoring Scale (GPSS)

Questions	Risk Score	
1. In general, would you say your health is:		
a. Excellent	0	
b. Very good	0	
c. Good	0	
d. Fair	1	
e. Poor	1	
2. Compared with 1 year ago, how would you rate your health in general now?		
a. Much better now than 1 year ago	0	
b. Somewhat better now than 1 year ago	0	
c. About the same as 1 year ago	0	
d. Somewhat worse now than 1 year ago	1	
e. Much worse now than 1 year ago	1	
3. Are you losing weight without trying?		
a. No	0	
b. Yes	1	
4. How many different doctor-ordered (prescription) medications do you take?		
a. None	0	
b. One	0	
c. Two	0	
d. Three	0	
e. Four	1	
f. Five	1	
g. More than five	1	
5. Have you fallen down in the past 3 months?*		
a. No	0	
b. Yes	1	
6. Do you have any problems keeping your balance?*		
a. No	0	
b. Yes	1	
7. Do you need help from another person to:†		
a. Take a bath or shower?	= 0 or = 1	
b. Go to the toilet?	= 0 or = 1	0
c. Dress yourself?	= 0 or = 1	1
d. Feed yourself?	= 0 or = 1	
Responses for each item:		
I don't need help = 0		
I need a little help = 1		
I can't do this without help = 1		
8. Do you have any problems with bladder control or losing urine?		
a. No	0	
b. Yes	1	
9. Do you have any problems with pain?		
a. No	0	
b. Yes	1	
10. Do you have problems with memory loss?		
a. No	0	
b. Yes	1	

11. Do you often feel sad or depressed?

- | | |
|--------|---|
| a. No | 0 |
| b. Yes | 1 |

Total Risk Score _____ **<4 lower risk; ≥ 4 high risk**

Scoring instructions:

- Questions 5 and 6 are combined to create 1 risk score. If the response is No to both questions 5 and 6, then the risk score = 0. If the response is Yes to either question, the risk score = 1.
- † Each activity of daily living (ADL) item is scored 0 or 1. If the additive score for the four ADL items is ≥2, then the risk score = 1.
- Add the individual scores for the 10 items to determine the Total Risk Score.

Source: Alessi CA, Josephson KR, Harker JO, Pietruszka FM, Hoyl MT, Rubenstein LZ. The yield, reliability, and validity of a postal survey for screening community-dwelling older people. J Am Geriatr Soc. 2003 Feb;51(2):194-202. doi: 10.1046/j.1532-5415.2003.51058.x. PMID: 12558716.

F. ISCOPE Screening Questionnaire

Daily life abilities	
<i>These first questions relate to how you function/manage day-to-day life. You may be helped in these activities by aids such as a stick walking frame or wheelchair.</i>	
Questions	Response
1. Can you do the shopping without help from anyone else?	Yes / No
2. Can you walk outdoors without help from anyone else?	Yes / No
3. Can you dress and undress yourself without help from anyone else?	Yes / No
4. Can you go to the toilet without help from anyone else?	Yes / No
5. Can you manage your finances yourself (collect your money, pay your bills)?	Yes / No
6. How well would you say you cope with your general day-to-day life?	Well / Average / Not at all well
Health and illness	
7. Which mark would you give for your physical fitness?	Not at all fit 1 2 3 4 5 6 7 8 9 10 Very fit
8. Do you experience day-to-day problems due to poor eyesight (even if you wear glasses or contact lenses)?	Yes / No
9. Do you experience day-to-day problems due to poor hearing (even if you wear a hearing aid)?	Yes / No
10. Do you experience problems with incontinence of urine or stool?	Yes / No
11. Do you experience daily problems due to pain?	Yes / No
12. Have you lost weight (more than 6 kg) in the last 6 months unintentionally?	Yes / No
13. Are you using more than 4 different kinds of medicine at the moment?	Yes / No
14. Have you had a fall in the last month?	Yes / No
15. Have you been admitted to the hospital in the last 6 months?	Yes / No
Psychological functioning	
16. Do you feel you have memory complaints?	Yes /Sometimes/ No
17. Have you recently felt sad or depressed?	Yes /Sometimes/ No
18. Have you recently felt nervous or anxious?	Yes /Sometimes/ No
19. Do you feel pretty worthless at the moment?	Yes /Sometimes/ No
Social functioning	
20. Do you feel that your life is empty?	Yes /Sometimes/ No

21. Do you feel the lack of a close friend?	Yes /Sometimes/ No
22. Do you feel left alone sometimes?	Yes /Sometimes/ No
23. Do you feel there are enough people with whom you feel a close connection?	Yes /Sometimes/ No
24. Do you receive help from anybody in you immediate surrounding because you are unable to do things for yourself?	Yes / No
25. Has anyone helped you to fill in this questionnaire?	No, I have filled in the questionnaire myself. Yes, someone helped me to answer these questions. Somebody has answered them for me.
26. At the moment, which health complaints limit you the most in your day-to-day life?	

Source: van Blijswijk SCE, Blom JW, de Craen AJM, den Elzen WPJ, Gussekloo J. Prediction of functional decline in community-dwelling older persons in general practice: a cohort study. BMC Geriatr. 2018 Jun 11;18(1):140. doi: 10.1186/s12877-018-0826-z. PMID: 29898672; PMCID: PMC6001140.

Appendix 8. AGREE Reporting Checklist (Self Evaluation)

CHECKLIST ITEM AND DESCRIPTION	REPORTING CRITERIA	Page #
DOMAIN 1: SCOPE AND PURPOSE		
1. OBJECTIVES <i>Report the overall objective(s) of the guideline. The expected health benefits from the guideline are to be specific to the clinical problem or health topic.</i>	☒ Health intent(s) (i.e., prevention, screening, diagnosis, treatment, etc.) ☐ Expected benefit(s) or outcome(s) ☒ Target(s) (e.g., patient population, society)	16
2. QUESTIONS <i>Report the health question(s) covered by the guideline, particularly for the key recommendations.</i>	☒ Target population ☒ Intervention(s) or exposure(s) ☒ Comparisons (if appropriate) ☒ Outcome(s) ☒ Health care setting or context	18-21
3. POPULATION <i>Describe the population (i.e., patients, public, etc.) to whom the guideline is meant to apply.</i>	☒ Target population, sex and age ☒ Clinical condition (if relevant) ☒ Severity/stage of disease (if relevant) ☒ Comorbidities (if relevant) ☐ Excluded populations (if relevant)	16
DOMAIN 2: STAKEHOLDER INVOLVEMENT		
4. GROUP MEMBERSHIP <i>Report all individuals who were involved in the development process. This may include members of the steering group, the research team involved in selecting and reviewing/rating the evidence and individuals</i>	☒ Name of participant ☐ Discipline/content expertise (e.g., neurosurgeon, methodologist) ☒ Institution (e.g., St. Peter's hospital) ☐ Geographical location (e.g., Seattle, WA) ☒ A description of the member's role in the guideline development group	5-6

<i>involved in formulating the final recommendations.</i>		
5. TARGET POPULATION PREFERENCES AND VIEWS <i>Report how the views and preferences of the target population were sought/considered and what the resulting outcomes were.</i>	☒ Statement of type of strategy used to capture patients'/publics' views and preferences (e.g., participation in the guideline development group, literature review of values and preferences) ☒ Methods by which preferences and views were sought (e.g., evidence from literature, surveys, focus groups) ☐ Outcomes/information gathered on patient/public information ☒ How the information gathered was used to inform the guideline development process and/or formation of the recommendations	22-23
6. TARGET USERS <i>Report the target (or intended) users of the guideline.</i>	☒ The intended guideline audience (e.g. specialists, family physicians, patients, clinical or institutional leaders/administrators) ☒ How the guideline may be used by its target audience (e.g., to inform clinical decisions, to inform policy, to inform standards of care)	16-17
DOMAIN 3: RIGOUR OF DEVELOPMENT		
7. SEARCH METHODS <i>Report details of the strategy used to search for evidence.</i>	☒ Named electronic database(s) or evidence source(s) where the search was performed (e.g., MEDLINE, EMBASE, PsychINFO, CINAHL) ☒ Time periods searched (e.g., January 1, 2004 to March 31, 2008) ☒ Search terms used (e.g., text words, indexing terms, subheadings) ☒ Full search strategy included (e.g., possibly located in appendix)	21-22; evidence summaries; Appendix 2
8. EVIDENCE SELECTION CRITERIA <i>Report the criteria used to select (i.e., include and exclude) the evidence. Provide rationale, where appropriate.</i>	☒ Target population (patient, public, etc.) characteristics ☒ Study design ☒ Comparisons (if relevant) ☒ Outcomes ☒ Language (if relevant) ☐ Context (if relevant)	21; Evidence summaries
9. STRENGTHS & LIMITATIONS OF THE EVIDENCE <i>Describe the strengths and limitations of the evidence. Consider from the perspective of the individual studies and the body of evidence aggregated across all the studies. Tools</i>	☒ Study design(s) included in body of evidence ☒ Study methodology limitations (sampling, blinding, allocation concealment, analytical methods) ☒ Appropriateness/relevance of primary and secondary outcomes considered ☒ Consistency of results across studies ☒ Direction of results across studies	24-102

<i>exist that can facilitate the reporting of this concept.</i>	☒ Magnitude of benefit versus magnitude of harm ☒ Applicability to practice context	
10. FORMULATION OF RECOMMENDATIONS <i>Describe the methods used to formulate the recommendations and how final decisions were reached. Specify any areas of disagreement and the methods used to resolve them.</i>	☒ Recommendation development process (e.g., steps used in modified Delphi technique, voting procedures that were considered) ☒ Outcomes of the recommendation development process (e.g., extent to which consensus was reached using modified Delphi technique, outcome of voting procedures) ☒ How the process influenced the recommendations (e.g., results of Delphi technique influence final recommendation, alignment with recommendations and the final vote)	22-23
11. CONSIDERATION OF BENEFITS AND HARMS <i>Report the health benefits, side effects, and risks that were considered when formulating the recommendations.</i>	☒ Supporting data and report of benefits ☒ Supporting data and report of harms/side effects/risks ☒ Reporting of the balance/trade-off between benefits and harms/side effects/risks ☒ Recommendations reflect considerations of both benefits and harms/side effects/risks	24-102
12. LINK BETWEEN RECOMMENDATIONS AND EVIDENCE <i>Describe the explicit link between the recommendations and the evidence on which they are based.</i>	☒ How the guideline development group linked and used the evidence to inform recommendations ☒ Link between each recommendation and key evidence (text description and/or reference list) ☒ Link between recommendations and evidence summaries and/or evidence tables in the results section of the guideline	24-102
13. EXTERNAL REVIEW <i>Report the methodology used to conduct the external review.</i>	☒ Purpose and intent of the external review (e.g., to improve quality, gather feedback on draft recommendations, assess applicability and feasibility, disseminate evidence) ☒ Methods taken to undertake the external review (e.g., rating scale, open-ended questions) ☒ Description of the external reviewers (e.g., number, type of reviewers, affiliations) ☒ Outcomes/information gathered from the external review (e.g., summary of key findings) ☒ How the information gathered was used to inform the guideline development process and/or	23-24

	formation of the recommendations (e.g., guideline panel considered results of review in forming final recommendations)	
14. UPDATING PROCEDURE <i>Describe the procedure for updating the guideline.</i>	☒ A statement that the guideline will be updated ☒ Explicit time interval or explicit criteria to guide decisions about when an update will occur ☒ Methodology for the updating procedure	105
DOMAIN 4: CLARITY OF PRESENTATION		
15. SPECIFIC AND UNAMBIGUOUS RECOMMENDATIONS <i>Describe which options are appropriate in which situations and in which population groups, as informed by the body of evidence.</i>	☒ A statement of the recommended action ☒ Intent or purpose of the recommended action (e.g., to improve quality of life, to decrease side effects) ☒ Relevant population (e.g., patients, public) ☒ Caveats or qualifying statements, if relevant (e.g., patients or conditions for whom the recommendations would not apply) ☒ If there is uncertainty about the best care option(s), the uncertainty should be stated in the guideline	14-15; 24-102
16. MANAGEMENT OPTIONS <i>Describe the different options for managing the condition or health issue.</i>	☒ Description of management options ☒ Population or clinical situation most appropriate to each option	24-102
17. IDENTIFIABLE KEY RECOMMENDATIONS <i>Present the key recommendations so that they are easy to identify.</i>	☒ Recommendations in a summarized box, typed in bold, underlined, or presented as flow charts or algorithms ☒ Specific recommendations grouped together in one section	14-15; 24-102
DOMAIN 5: APPLICABILITY		
18. FACILITATORS AND BARRIERS TO APPLICATION <i>Describe the facilitators and barriers to the guideline's application.</i>	☒ Types of facilitators and barriers that were considered ☒ Methods by which information regarding the facilitators and barriers to implementing recommendations were sought (e.g., feedback from key stakeholders, pilot testing of guidelines before widespread implementation) ☒ Information/description of the types of facilitators and barriers that emerged from the inquiry (e.g., practitioners have the skills to deliver the recommended care, sufficient equipment is not available to ensure	104-105

	all eligible members of the population receive mammography) ☒ How the information influenced the guideline development process and/or formation of the recommendations	
19. IMPLEMENTATION ADVICE/TOOLS <i>Provide advice and/or tools on how the recommendations can be applied in practice.</i>	☒ Additional materials to support the implementation of the guideline in practice. For example: ○ Guideline summary documents ○ Links to check lists, algorithms ○ Links to how-to manuals ○ Solutions linked to barrier analysis (see Item 18) ○ Tools to capitalize on guideline facilitators (see Item 18) ○ Outcome of pilot test and lessons learned	Appendix 7
20. RESOURCE IMPLICATIONS <i>Describe any potential resource implications of applying the recommendations.</i>	☒ Types of cost information that were considered (e.g., economic evaluations, drug acquisition costs) ☒ Methods by which the cost information was sought (e.g., a health economist was part of the guideline development panel, use of health technology assessments for specific drugs, etc.) ☒ Information/description of the cost information that emerged from the inquiry (e.g., specific drug acquisition costs per treatment course) ☒ How the information gathered was used to inform the guideline development process and/or formation of the recommendations	pp. 35, 41, 47, 57, 62, 69, 79, 83, 93, 101
21. MONITORING/ AUDITING CRITERIA <i>Provide monitoring and/or auditing criteria to measure the application of guideline recommendations.</i>	☒ Criteria to assess guideline implementation or adherence to recommendations ☒ Criteria for assessing impact of implementing the recommendations ☒ Advice on the frequency and interval of measurement ☒ Operational definitions of how the criteria should be measured	104
DOMAIN 6: EDITORIAL INDEPENDENCE		
22. FUNDING BODY <i>Report the funding body's influence on the content of the guideline.</i>	☒ The name of the funding body or source of funding (or explicit statement of no funding) ☒ A statement that the funding body did not influence the content of the guideline	2

23. COMPETING INTERESTS <i>Provide an explicit statement that all group members have declared whether they have any competing interests.</i>	☒ Types of competing interests considered ☒ Methods by which potential competing interests were sought ☒ A description of the competing interests ☒ How the competing interests influenced the guideline process and development of recommendations	120-122
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