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# Rehabilitation

# Current Awareness Bulletin

## April 2026

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Supervision in Speech and Language Therapy: Personal Stories and Professional Wisdom - edited by Cathy Sparkes, Sam Simpson and Deborah Harding – 2024 - 978-1032293424

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**New / Updated Guidance from NICE**

### Climate Change – How Does It Affect Physiotherapists and What Can We Do About It?

A 2023 Lancet report re-affirmed the WHO stance that climate change and environmental degradation represent significant threats to public health.[1,2] Although the direct local effects of climate change differ from region to region, there is undeniable evidence that the direct and indirect effects of climate change are currently affecting the health of our population.[3–6] Such consequences have implications for healthcare workers, including Physiotherapists. The 30th Conference of the Parties to the UNFCCC, or COP30, naturally stimulated conversations worldwide on climate change, how it affects us and our role in tackling it. As individual citizens we can take action, but we argue that physiotherapists, as a profession, also possess strong leverage for effective change in this area, and that our role in the climate change crisis is currently under-reported and under-utilised.

### Why Is Climate Change Relevant to the Profession of Physiotherapy?

Climate change is highly relevant to physiotherapy because it affects the health conditions we treat, how and where we deliver care and the profession's responsibility in health promotion and system sustainability. Climate change is increasing the burden of disease on people with conditions we already manage, including respiratory and cardiovascular diseases – heatwaves,[7] air pollution,[8] wildfire smoke[9] and allergens worsen symptoms of asthma, COPD and cardiovascular diseases. Musculoskeletal conditions and pain can also be negatively affected.[10,11] Neurological conditions are affected through multi-system environmental

degradation.[12] Furthermore, climate-related injuries such as those sustained in storms increase rehabilitation demand.

Climate change does not happen in isolation. Research has shown that environmental degradation affects every system of the human body, from extreme temperatures on cardiorespiratory health to microplastics' impact on neuroendocrine function.[4,6,12] Detailing the extent of this falls outside the scope of this letter, however, physiotherapy's broad scope of practice across many disciplines means that no speciality will escape the indirect effects and/or upstream drivers of climate change. Research has shown that it disproportionately affects people with disabilities, people with chronic disease, rural and low-income populations,[6] many of whom already rely heavily on physiotherapy. With regard to secondary effects, displacement, transport disruption and infrastructure damage reduce access to care, which presents challenges to how many physiotherapists currently provide care. Such challenges also present opportunities to develop more adaptable service models in order to meet changing demands.

What can our profession do to adapt to and mitigate the effects of climate change?

As a profession, physiotherapists have a strong role to play in climate mitigation, and such efforts also lead to co-benefits for health.[13–16] With an emphasis across our profession on prevention of disease and patient self-care, as well as predominantly sustainable prescriptions (exercise and movement being key, both of which have a low carbon footprint), and as advocates for active transport,[13] it has been argued that physiotherapy as a profession is well-poised to act as a carbon sink for healthcare generally.[15] The planetary and human health co-benefits are numerous in our profession – we argue that they are simply not seen as such…yet! For example, while evidence is admittedly lacking, it is logical to draw connections between the reduction in the environmental cost of pad use for those with incontinence and pelvic floor strengthening. Furthermore, hospitals are not carbon neutral – health systems are responsible for around 5% of global greenhouse gas (GHG) emissions annually[17,18] – and much of our work has been shown to reduce hospital admissions, re-admissions and length of stay, in addition to rationalising use of resource-intensive imaging.[19–25] With many healthcare systems globally committed to reducing their carbon footprint, the contribution physiotherapists have to make is likely a significant one!

## A Call to Action

As an evidence-based profession trained to think systematically who frequently use the ICF, it is now time to consider and measure not only the human health benefits and cost efficacy of our work but also the significant co-benefits to our environment. Among the barriers to us reaching our potential in this regard is a dearth of evidence; this letter therefore calls on our profession to view and report on their work with health co-benefits to people and planet in mind.

There is also need to spread awareness of our contribution to One Health, an integrated approach to health recognising that the health of humans, domestic and wild animals, plants and the wider environment, including ecosystems, is closely linked and interdependent.[26] When working as patient advocates, we must not overlook the role that the climate crisis plays in the health of patient populations. Similarly, our role in patient education is a potent one – where appropriate we must begin to explicitly link patient health outcomes to their environment. An example might be to ask a patient whether they have access to green space to exercise in their locality, or to public and active transport options.

Research has shown that healthcare professionals are trusted messengers to convey the urgency of the climate crisis.[27] It can be argued that it is our duty of care as clinicians and patient advocates to lobby for greater steps taken towards justly implemented climate action. The potential health benefits of mitigation are substantial[28] and as a profession we should

explicitly operate to leverage such potential. This cannot happen without our workforce understanding the connections between our practice, the upstream socioeconomic and environmental determinants of health and the current climate crisis.

Our call to action is a simple one. It begins with encouraging a deeper awareness of how and why patients present to hospital or clinic, as well as the environmental cost of available interventions – and a subsequent realisation that these factors are all modifiable, with bold, brave action. Protecting health means protecting our environment. We must unite as a profession and join with other healthcare professionals calling for just climate action and environmentally responsible healthcare. Much of our work is inherently aligned with sustainability goals; it is simply not framed as such, yet this adds significant weight to the impact of our work. Physiotherapy has the potential to assume a significant role in the emerging sphere of climate-health intersection worldwide, and we should take every opportunity to embrace this.

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1. **Activities and Time Spent on Rehabilitation in Scandinavian ICUs: A Cross-Sectional Survey Among Healthcare Professionals**

**Authors:** Alfheim, Hanne B.;Svenningsen, Helle;Holm, Anna;Ågård, Anne S.;Åkerman, Eva;Lind, Ranveig;Nielsen, Anne H. and Collet, Marie O.

**Publication Date:** 2026

**Journal:** Acta Anaesthesiologica Scandinavica 70(4), pp. 1–9

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2. **Exploring Barriers and Facilitators in Physiotherapy Rehabilitation for Patients With Knee Osteoarthritis: A Scoping Review**

**Authors:** Bathran, Chandra and Samuel, Asir John

**Publication Date:** 2026

**Journal:** Musculoskeletal Care 24(2), pp. e70221

**Abstract:** Background and Purpose: Evidence on barriers and facilitators to physiotherapy (PT) rehabilitation for patients with knee osteoarthritis (KOA) is limited. Hence, there is a definite need to identify the barriers and facilitators to PT rehabilitation for patients with KOA by reviewing the existing literature.; Methods: Original articles on barriers and facilitators to PT rehabilitation for patients with KOA, published from 2016 to July 2025, were included. This scoping review followed Arksey and O'Malley's framework and the Joanna Briggs Institute (JBI) methodology. Search strategies were developed using PubMed, Scopus, ProQuest, and Web of Science and were limited to English. Data were extracted using a data extraction form and analysed thematically in NVivo 15.; Results: Of the 469 articles identified, 20 were included that focused on the barriers and facilitators to influencing PT. Eight sub-themes were developed for the barriers theme, and seven for the facilitators theme. Barriers to PT experienced by patients with KOA include limited education, access, and time to access and adhere to PT rehabilitation, whereas facilitators include physiotherapists' follow-up and social support.; Conclusions: Barriers and facilitators were identified, highlighting the importance of involving patients in treatment decision-making and adopting a patient-centred approach to address these barriers and enhance adherence, especially in low- and middle-income countries. (© 2026 John Wiley & Sons Ltd.)

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3. **The effect of artificial intelligence-assisted pulmonary rehabilitation on exercise capacity: A systematic review and meta-analysis**

**Authors:** Cinkavuk, Ecran;Calik, Ebru and Vardar-Yagli, Naciye

**Publication Date:** 2026

**Journal:** International Journal of Medical Informatics 211, pp. 106336

**Abstract:** Introduction: Artificial intelligence (AI) technologies are increasingly being integrated into pulmonary rehabilitation (PR) to improve individualization, real-time monitoring, and adherence in individuals with chronic respiratory diseases. However, their clinical impact on exercise capacity remains unclear. This systematic review and meta-analysis aimed to evaluate the effectiveness of AI-supported PR programs compared to usual care in improving exercise capacity and respiratory function in adults with chronic respiratory diseases.; Methods: This systematic review and meta-analysis followed PRISMA guidelines and was registered with PROSPERO (ID: CRD420251075622). A comprehensive search was conducted across five electronic databases (PubMed, Web of Science, Scopus, Cochrane Central Register of Controlled Trials (CENTRAL) and PEDro) from inception to July 2025. Statistical analyses for the meta-analysis were conducted using RevMan 5.4.; Results: Three eligible RCTs with a total of 456 participants were included. Pooled analysis showed a significant improvement in 6-minute walk distance (6MWD) after AI-assisted PR group compared to control (MD: 22.08 m; 95% CI: 4.96-39.20; p = 0.01). Moderate heterogeneity was observed (I2 = 40%). No meta-analysis was conducted for respiratory function due to insufficient pre-post data. Risk of bias was generally low, though participant blinding was absent in all studies. Methodological quality was good, with a mean PEDro score of 6.0 ± 0.82.; Conclusion: AI-supported PR can significantly improve exercise capacity in individuals with chronic respiratory diseases. Despite promising results, high-quality studies in different pulmonary patient groups are needed to address existing limitations, particularly regarding standardization, cost-effectiveness, and clinical integration of AI-technology. 

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4. **Acceptance and commitment therapy in rehabilitation for chronic pain and fatigue: a qualitative interview study with patients**

**Authors:** Johansen, May-Lill;Eriksen, Thor Eirik and Solhaug, Ida Therese

**Publication Date:** 2026

**Journal:** Scandinavian Journal of Primary Health Care 44(1), pp. 2608121

**Abstract:** Purpose: To shed a nuanced light on the experiences of taking part in a rehabilitation programme using acceptance and commitment therapy (ACT) for people living with persistent pain and fatigue.; Materials and Methods: The ACT intervention, designed by the Pain Clinic of a University Hospital, consisted of six four-hour sessions, each for four groups of 6-8 participants, given over the course of four months. An interdisciplinary research team thematically analysed 13 post-programme individual interviews with people aged 21 to 54 with different symptoms and diagnoses using systematic text condensation.; Results: Participants reported that while illness had led to feelings of loneliness, loss and failure, participating in a safe and supportive group setting led to a nurturing sense of shared community, understanding and learning. Increased self-awareness, self-acceptance and self-compassion were valued outcomes of the programme. Most felt that they had acquired new

tools, such as exercises, practices and altered ways of thinking. A few participants were uncomfortable with the sharing practices and felt that the programme brought few benefits for them.; Conclusions: The study indicates the value of a sense of community and experiencing illness as a shared human condition. Learning to see oneself as worthy of self-compassion, suggested in the literature as key to pain rehabilitation, was connected to group validation and ACT-specific sessions. Information, exercises and sharing practices could have been even better targeted and tailored to individual participants.

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5. **A Systematic Review of International Evidence to Inform Occupational Therapy Practice Guidelines for Total Knee Replacement in the Korean Health System**

**Authors:** Kim, Junghun Aj;Ha, Seong-Kyu;Jung, Min-Ye and Kaushik, Shashank

**Publication Date:** 2026

**Journal:** Occupational Therapy International 2026, pp. 1–17

**Abstract:** Introduction: This review synthesizes international evidence on occupational therapy (OT) interventions for total knee replacement (TKR) as part of the project "Developing Occupational Therapy Practice Guidelines for Total Knee Replacement," with the goal of informing practice within the Korean healthcare system. It evaluates OT interventions' effectiveness in enhancing recovery pathways amid an aging population, increasing healthcare costs, and the need for patient satisfaction and recovery. Method: Centering on OT interventions in Korea for adults with post-TKR, this review adhered to the Royal College of Occupational Therapists′ guidelines and PRISMA standards and searched nine electronic databases for literature published between 2000 and November 2021. A broad stakeholder group, including medical professionals and social workers, contributed to refining the research scope of outcomes. Results: From an initial pool of 10,749 articles, 51 studies were selected, predominantly cohort studies. Analysis identified key-OT interventions improving activities of daily living, mental health, community reintegration, patient satisfaction, and notably reducing hospital stay lengths. Conclusion: This review highlights the multifaceted contributions of OT in TKR rehabilitation, with benefits observed across physical, mental, and cognitive recovery. It supports the need for policy changes to broaden the role of OT. Future research, particularly high-quality and longitudinal studies, is warranted to further strengthen the evidence base and inform the ongoing development of OT practice across diverse healthcare systems.

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6. **Unveiling the Impact of Occupational Therapy on Acute Care Outcomes: A Machine Learning Approach**

**Authors:** Lee, Mi Jung;Johnson, Joshua K.;Marchiando, Anna;Sullivan, Virginia and Freburger, Janet K.

**Publication Date:** 2026

**Journal:** Archives of Physical Medicine & Rehabilitation 107(4), pp. 631–639

**Abstract:** To examine the effects of occupational therapy (OT) services on patient discharge outcomes. This is a retrospective cohort study. We developed decision tree algorithms to investigate how 3 measures of OT service delivery—(1) the total number of completed OT visits, (2) the total minutes of all completed OT visits, and (3) the proportion of hospitalized days that included an OT visit (frequency)—affect outcomes. Acute care settings. The target population was patients admitted to and discharged from the Cleveland Clinic between 2017

and 2021, who received at least 1 OT session and stayed in the hospital for <30 days, with an orthopedic physician designated as the primary treating provider (N=36,300). Not applicable. Reduced 30-day readmission rates, increased rates of home discharge, and improved daily activity abilities after hospital discharge. Our prediction models for predicting our outcomes showed good to excellent performance metrics (accuracy, 0.69-0.91). Our model demonstrated that variations in the total number, minutes, or frequency of OT sessions are associated with the likelihood of readmission within 30 days after hospital discharge and minimal detectable improvements in daily activities for subgroups of patients with orthopedic conditions. Our study suggests that the effective use of limited OT services may require prioritizing certain subgroups of patients for providing more frequent OT sessions to optimize the impact of OT services on patient outcomes.

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7. **Content analysis of current role/job descriptors for Band 5/junior physiotherapists and mapping of these to Physiotherapy Professional standards of practice**

**Authors:** Minns Lowe, Catherine,J.;Clements, Ben;Heneghan, Nicola;Atkinson, Karen;Patel, Reena and Beeton, Karen

**Publication Date:** 2026

**Journal:** Physiotherapy 131, pp. 101421

**Abstract:** Background: KNOWBEST was a mixed methods study exploring the KNOWledge, BEhaviours and Skills required of the modern physioTherapy graduate.; Objectives: To undertake a content analysis of current role descriptors (RDs) for Band5/junior physiotherapists and map these to the knowledge, skills, behaviours and attributes required for contemporary physiotherapy practice.; Design: Content analyses and mapping.; Setting: All health care settings: PARTICIPANTS: Available RDs for newly qualified/Band 5 physiotherapists across a representative range of roles and settings for this stage of a physiotherapist's career across the UK and all health care settings.; Methods: Job descriptors were obtained using three approaches 1) via direct upload to the study website, 2) on-line searches of job vacancies, 3) directly emailing managers to fill any gaps in representativeness. Data regarding knowledge, skills, behaviours and attributes were extracted, coded (BC) and checked (CML).; Data Analyses: Documentary content analyses and mapping of these to Professional Standards of practice.; Results: 19 RDs were analysed. High expectations of behaviours and attributes, and extensive pre-requisite knowledge and skills were identified and detailed. Considerable variability was seen across RDs, at least seven being suited to more highly specialist and/or experienced staff. Equality, diversity and inclusivity concerns were evidenced. Active research was not included in many RDs and not mentioned in any standards. Digital learning and skills were not strongly evidenced.; Conclusions: A review of Band 5/Junior post and RD requirements is recommended including a standard template developed to promote equity. Professional standards emphasise some pillars of practice, such as clinical, more than others. CONTRIBUTION OF THE PAPER. 

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8. **Comparative effects of cognitive training with whole-body vibration vs. traditional physiotherapy on balance and plantar sensation in diabetic neuropathy**

**Authors:** Niajalili, Maryam;Sadeghi, Soheila;Baghban, Alireza Akbarzadeh;Khademi Kalantari, Khosro and Naimi, Sedigheh Sadat

**Publication Date:** 2026

**Journal:** Journal of Bodywork and Movement Therapies 46, pp. 1–9

**Abstract:** Background: Physical inactivity and the global prevalence of diabetes increase disability related to diabetic neuropathy. Physiotherapy techniques-such as infrared radiation, laser therapy, ultrasound, electrical stimulation, electromagnetic waves, whole-body vibration, and therapeutic exercises-are widely used to manage symptoms. Cognitive exercises activating the frontal and prefrontal lobes also help address cognitive decline and depressive symptoms. Motor and cognitive training improve balance and functional performance, but the combined effect of whole-body vibration and cognitive exercises on neuropathic symptoms remains unclear.; Materials and Methods: This randomized controlled trial involved 42 diabetic patients aged 40-75 years with moderate peripheral neuropathy. Participants were randomly assigned to three groups: (1) Control receiving routine physiotherapy; (2) Treatment Group 1 performing balance exercises with transcutaneous electrical nerve stimulation (TENS); and (3) Treatment Group 2 receiving whole-body vibration (WBV) combined with cognitive exercises. Interventions were performed over ten sessions in four weeks. Functional balance and plantar tactile sensation were evaluated using the Timed Up and Go (TUG), Functional Reach Test (FRT), and 5.07 monofilament tests. Data were analyzed using repeated-measures ANOVA with Bonferroni post-hoc tests ($p < 0.05$).; Results: All groups showed significant improvement ($P < 0.001$), with the greatest gains in Group 2, followed by Group 1.; Conclusion: Combining WBV and cognitive exercises yields superior benefits in enhancing plantar sensation and balance in diabetic patients with neuropathy. 

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9. **The effect of physical therapy in spine surgery: a systematic review**

**Authors:** Park, Minjun;McLaughlin, Nathan D.;Patel, Mayur S.;Urquiaga, Jorge F. and Avila, Mauricio J.

**Publication Date:** 2026

**Journal:** Journal of Clinical Neuroscience : Official Journal of the Neurosurgical Society of Australasia 147, pp. 111900

**Abstract:** While physical therapy is a well-established preoperative intervention to manage pain and improve function for patients undergoing spinal surgery, its postoperative utility, particularly following fusion procedures, remains less well defined. We aim to systematically review the current literature on the efficacy of physical therapy following spine surgery. A systematic review in accordance with PRISMA guidelines was performed with a comprehensive search in PubMed, EBSCO, and CINAHL database. The database was searched up to March 2025 with the following MESH terms using AND or OR boolean operators: ("Spine/surgery" "Spinal Fusion" "Laminectomy" "Discectomy"), ("Physical Therapy Modalities" "Exercise Therapy" "Rehabilitation"), and ("Treatment Outcome" "Outcome Assessment (Health Care)" "Recovery of Function"). Thirty-one studies involving 4,335 patients were included: 22 RCTs, 8 retrospective analyses and 1 prospective cohort. Studies focused on lumbar surgeries (n = 25) and cervical surgeries (n = 6). In lumbar fusion studies (n = 7), 43% (3/7) demonstrated significant pain improvement and 17% (1/6) showed reduced disability with postoperative rehabilitation. Among non-instrumented lumbar procedures (n = 18), 63% (10/16) of studies found greater pain relief and 59% (10/17) observed reduced disability with physical therapy. Cervical studies revealed pain benefits in 40% (2/5) of trials and disability improvement in 33% (1/3) associated with postoperative physical therapy. Evidence supporting postoperative physical therapy following lumbar fusion is mixed with

respect to pain, disability, and functional outcomes. In contrast, non-instrumented lumbar procedures show more consistent benefit, particularly in pain outcomes. Additional high-quality randomized controlled trials are warranted to better define the role of rehabilitation in post-operative spinal surgery care. 

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10. **The role of physiotherapists in acute post-stroke neurorehabilitation: qualitative perspectives from clinicians and stroke unit managers**

**Authors:** Pérez-De La Cruz, Sagrario

**Publication Date:** 2026

**Journal:** International Journal of Qualitative Studies on Health and Well-Being 21(1), pp. 2634880

**Abstract:** Purpose: The aim of this study was to explore and compare the perspectives of both physiotherapists and medical managers regarding the professional role and clinical contributions of physiotherapy within stroke units.; Method: A qualitative study was conducted involving ten physiotherapists and five medical managers from stroke units. Participants shared their professional experiences concerning work performance and the perceived impact of physiotherapy on patient care.; Results: Thematic analysis identified four key areas for physiotherapists: specific training, professional functions, treatment modalities, and the relevance of professionalism and empathy. For medical managers, the analysis focused on their perception of physiotherapy work, their understanding of factors that enhance treatment, and assigned functions. The findings reveal a lack of standardized treatment protocols (non-heterogeneity) and emphasize the need for strong interpersonal professional relationships and high standards of professionalism.; Conclusions: The observed heterogeneity in practices leads to inconsistencies in patient care. Furthermore, there is a notable gap in medical managers' understanding of the specific clinical scope and technical interventions provided by physiotherapists. These findings highlight the need for coordinated rehabilitation programs and a clearer definition of the physiotherapist's role in acute stroke units to ensure equitable and comprehensive care.

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11. **The Core Components and Instruments of the Therapeutic Relationship in Musculoskeletal Physiotherapy: A Systematic Integrative Review**

**Authors:** Puustinen, Sini;Kvist, Tarja and Stolt, Minna

**Publication Date:** 2026

**Journal:** Musculoskeletal Care 24(2), pp. e70219

**Abstract:** Background: The therapeutic relationship is meaningful and valuable to patients in rehabilitation and is positively associated with improved rehabilitation outcomes. Despite its central role, a comprehensive understanding of what constitutes the therapeutic relationship in physiotherapy and how it can be assessed is yet to be achieved.; Objective: This study aimed to identify the core components of the therapeutic relationship and the patient-reported instruments used to assess it in musculoskeletal physiotherapy.; Methods: A systematic integrative review was conducted. Six databases (CINAHL, PubMed/Medline, Scopus, Web of Science, The Cochrane Library, and PEDro) were searched. Two reviewers independently conducted study selection and methodological quality appraisal. Data were synthesised using inductive qualitative content analysis.; Results: Eighteen studies were included. Two core

components and six subcomponents of the therapeutic relationship in musculoskeletal physiotherapy were identified: (1) therapeutic partnership (partnership and therapeutic communication) and (2) collaborative person-centred physiotherapy (collaboration; a holistic and individualised approach; coherent, competent, and credible physiotherapy; and empowerment support). Six instruments used to assess therapeutic relationships in musculoskeletal physiotherapy were identified.; Conclusions: In musculoskeletal physiotherapy, the therapeutic relationship is a multidimensional and dynamic construct encompassing therapeutic partnership and collaborative person-centred practice. Physiotherapists can actively influence the therapeutic relationship by utilising multimodal communication, implementing person-centred care strategies, and supporting patients' agency and empowerment. Existing patient-reported therapeutic relationship instruments capture these components only partially. Future research is needed to strengthen conceptual clarity and refine both the operationalisation and assessment of the therapeutic relationship in musculoskeletal physiotherapy. (© 2026 The Author(s). Musculoskeletal Care published by John Wiley & Sons Ltd.)

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12. **Robotic rehabilitation and intelligent algorithms improving the performance skills of stroke patients: a scoping review**

**Authors:** Rustamzadeh, Omid;Hosseini, Seyed Ali;Tanha, Rastegar Rahmani and Akbarfahimi, Nazila

**Publication Date:** 2026

**Journal:** Journal of Bodywork and Movement Therapies 46, pp. 308–331

**Abstract:** Background: This scoping review highlights major advances and persisting gaps in robotic and AI-driven rehabilitation for stroke, evaluating their impact on hand strength, dexterity, and ROM, and offering clinicians practical, updated guidance.; Methods: Studies that focused on robotic-assisted technologies (RATs) in upper limb rehabilitation for stroke survivors (2014-2024) were included. Study designs unrelated to stroke, animal studies, and conference abstracts were excluded. Systematic searching in PubMed, Web of Science, Scopus, and Google Scholar employed robotic rehabilitation, AI, hand function, and stroke recovery-related terms. Data extraction encompassed intervention type, duration of treatment, dosage of therapy, outcome measures, cost-effectiveness, and patient satisfaction. Types of robotic rehabilitation: end-effector robots, exoskeletons, soft robotic gloves (SRGs), brain-computer interfaces (BCIs), and AI-enhanced virtual reality (AIVR).; Results: These devices can augment motion, grip strength, and functional independence, especially in chronic and subacute stroke patients. Therapies are made fine-grained by algorithms to balance challenge and engagement, thus lightning therapists' burdens. Conventional energy sources may offer a more attractive option at shorter timelines and with reasonably predictable availability. Models that can be done at home enhance adherence at that higher level, though usability appears high for most models. Still, challenges with setup and independence for participants remain.; Conclusion: Robotic rehabilitation has a significant impact on motor function (MF) among stroke patients. Despite this, obstacles such as cost, accessibility, and long-term efficacy need even more research. Therapy dose optimization, adaptive AI integration, and cognitive-emotional outcome assessment are all areas of gaps in robotic rehabilitation that still need to be addressed. (Copyright © 2025. Published by Elsevier Ltd.)

13. **Impact of Rehabilitation on Readmission Rates in Older Patients with COPD with Disability After Hospital Discharge**

**Authors:** Shirakawa, Chigusa;Shiroshita, Akihiro;Miyakoshi, Chisato;Uda, Kazuaki;Nagata, Kazuma;Tachikawa, Ryo;Tomii, Keisuke and Kataoka, Yuki

**Publication Date:** 2026

**Journal:** COPD 23(1), pp. 2593282

**Abstract:** This study aimed to evaluate the impact of rehabilitation on readmission rates among older patients requiring nursing care following with COPD following hospitalization for lower respiratory tract infection, focusing on whether initiating rehabilitation within two months post-discharge reduces readmissions. We conducted a retrospective observational study using insurance claim data in Kobe City, Japan, with a population of approximately 1.5 million. We included Patients with COPD aged 65 or older with certified care-need levels under Long-term Care Insurance system in Japan, hospitalized for lower respiratory tract infections and survived alive. Patients were classified based on their functional capacity in Activities of Daily Living (ADL). We used the extended Cox model to consider rehabilitation as time-varying exposure and assess the hazard ratios for readmission, adjusting for ADL. The ADL level was adjusted as a confounder. The survival probabilities were estimated among patients who experienced rehabilitation within two months and those who did not experience rehabilitation. Among 745 patients, 479 received rehabilitation within two months post-discharge, 105 received it later, and 161 did not receive rehabilitation. Participation in rehabilitation was associated with an increased hazard ratio for readmission (HR: 1.63, 95% CI: 1.19, 2.24), compared to those without it. The estimated survival curve of patients receiving rehabilitation within two months overlapped with that of those who did not receive rehabilitation. Rehabilitation following exacerbation in older patients with COPD who have disability may increase the risk of readmission after discharge. Healthcare providers should consider that patients with COPD with severe disability and complex needs may require staged, individualized rehabilitation.

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14. **Artificial intelligence in occupational therapy: Comparing ChatGPT and occupational therapist approaches in assessment and intervention.**

**Authors:** Değerli Y.

**Publication Date: 2026**

**Journal:** British Journal of Occupational Therapy, 89(1):6–18.

**Abstract** [Artificial intelligence is playing an increasingly important role in supporting rehabilitation processes, offering benefits for both clients and therapists. This study aimed to explore the potential use of ChatGPT—an AI-powered online chatbot—in occupational therapy using clinical case scenarios and to compare the clinical decision-making approaches of ChatGPT and occupational therapists.]

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15. **Artificial intelligence in rehabilitation: a review of clinical effectiveness, real world performance, safety, and equity across modalities and settings.**

**Authors:** Abdalla N, et al.

**Publication Date:** 2026

**Journal:** Frontiers in Digital Health, Volume 8:1737957

**Abstract** [AI can expand rehabilitation when held to clinical standards that matter to patients and services. With clear adoption gates and continuous post-market monitoring, systems can extend access and independence without sacrificing rigour, safety, equity, or fairness.]

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16. **Future trends and challenges in occupational therapy: Insights from a Delphi study.**

**Authors:** Onal G.

**Publication Date:** 2026

**Journal:** *British Journal of Occupational Therapy,* 89(2):102–115.

**Abstract:** [Participants emphasized the importance of integrating virtual reality/augmented reality interventions, artificial intelligence-supported assessments, and telehealth into occupational therapy practice. Neuroplasticity-based interventions and simulation-based learning were highlighted for future competence. Ethical concerns regarding artificial intelligence, as well as cost and digital literacy barriers, were also noted.]

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17. **Service user perspectives on the value and effectiveness of occupational therapy following intervention for severe depression.**

**Authors:** Christie L.

**Publication Date:** 2026

**Journal:** *British Journal of Occupational Therapy,* 89(2):83–93.

**Abstract:** [Occupational therapy supports people to participate in the activities they want or need to do; however, there is limited evidence on the perceived effectiveness of occupational therapy for people with depression. The study aims/objectives were to identify service user perspectives on (i) the effectiveness of individualised occupational therapy in enabling improvement in occupational functioning and participation, and (ii) the most effective components of occupational therapy.]

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18. **Understanding the current available workforce planning data for Occupational Therapists: A scoping review to support collaboration workforce planning in the Leeds Health and Care System.**

**Authors:** Matysiak K.

**Publication Date:** 2026

**Journal:** British Journal of Occupational Therapy, 89(3):154–164.

**Abstract:** Strategic workforce planning is a priority for health and social care, and the city of

Leeds is focused on localised planning to balance supply and demand and develop this based on changing needs of the system. There are gaps in data required for Occupational Therapy (OT) workforce modelling; therefore, we need to find out whether proxy data exist that can support this activity in Leeds.

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19. **Elizabeth Casson Memorial Lecture 2024: The time is now, building a social movement to demonstrate the value of occupation**.

**Authors:** Bannigan K.

**Publication Date:** 2026

**Journal:** British Journal of Occupational Therapy, 89(2):70–82

**Abstract:** [There is a pervading feeling of dissonance within the occupational therapy profession: a sense that occupational therapy, and the work of occupational therapists, is not always recognised. Alongside this, there are examples of occupational therapists whose work is recognised at the highest levels and who are realising Elizabeth Casson's legacy.]

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20.**Revisiting the core principles of physical rehabilitation after stroke: It's not only what you do but how you do it that matters.**

**Authors:** Stockley R C.

**Publication Date:** 2026

**Journal:** British Journal of Occupational Therapy, 89(2): 67–69.

**Abstract: [**Editorial] [In the second of two linked editorials, we build on the discussion of interventions for motor rehabilitation after stroke recommended by the UK 2023 National Clinical Guidelines for Stroke (Royal College of Physicians, 2023). Specifically, we will explore the key elements of motor learning (Carr and Shepherd, 2000) which underpins repetitive task practice, one of two principal rehabilitation approaches (the other being exercise) recommended in the UK Guidelines for motor recovery.]

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21. **Exploring the emotional labour of occupational therapists when interacting with clients**.

**Authors:** Hings H F.

**Publication Date:** 2026

**Journal:** British Journal of Occupational Therapy, 89(1):36–45.

**Abstract:** [Occupational therapy is an inherently emotional endeavour for both clients and therapists. Despite navigating diverse and challenging work environments, relatively little is known about how occupational therapists are expected to manage and express their emotions in line with job-related emotion norms. The aim of this study was to explore the emotional labour experiences of occupational therapists when interacting with clients.]

22. **Walking just 2 weeks after ankle surgery is safe for many.**

**Publication Date:** 2026

**Source:** National Institute for Health and Care Research (NIHR);

**Abstract:** https://evidence.nihr.ac.uk/alert/walking-just-2-weeks-after-ankle-surgery-is-safe-for many/ [After surgery for a broken ankle, it is common practice for people to be told to keep weight off their ankle for 6 weeks. However, some surgeons encourage people to walk again after 2 weeks. This trial compared the safety of walking after 2 weeks with waiting 6 weeks.]