National Institute for Health and Care Excellence

Final

Rehabilitation for chronic neurological disorders including acquired brain injury

[M] Evidence review for support to access employment

NICE guideline NG252

Evidence review for recommendation for research in the NICE guideline

October 2025

Final

This evidence review was developed by NICE

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Review question

What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Introduction

'Good work' not only provides a safe workplace but promotes health and wellbeing. It provides structure to the day and is associated with improved self-esteem. Studies on return to work following illness or injury have shown that the longer people are off work, the less likely they are to make a successful return to work. While some people are able to return to work or volunteering with small adjustments, some will need additional help or specialist interventions through a vocational rehabilitation approach. Being able to stay in work, return to work, or have a supportive plan for leaving work and identifying other meaningful occupation, is an important part of an individual's journey following diagnosis of chronic neurological disorder.

The objective of this review is to determine the best methods to support people with chronic neurological disorders to enter, remain in, return to, or leave employment or volunteering, with the aim of improving workplace or volunteering outcomes, self-efficacy and satisfaction for people with chronic neurological disorders.

Summary of the protocol

See Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population	Adults and children with rehabilitation needs due to the following chronic neurological disorders: • Acquired brain injury • Acquired spinal cord injury • Acquired peripheral nerve disorders • Progressive neurological diseases • Functional neurological disorders
Intervention	**Interventions to support participation in employment (including entering, remaining in, returning to, or leaving employment)** Examples of support to enter employment include • Vocational coaching • Access to work schemes • Benefits advice related to entering employment Examples of support to remain in employment include • Reasonable adjustments • Work skills analysis/ functional capacity evaluation • Employer education (in relation to the Disability Discrimination Act) • Employment support intervention via occupational health • Payment protection schemes (within human resources context) • Employee assistance programmes • Supported employment schemes

	• Supportive technology Examples of support to return to employment include • Benefits advice about going back to work • Graded or phased return to work including pacing. • Employment support intervention via occupational health • Vocational rehabilitation **Interventions to support participation in volunteering (including entering, remaining in, returning to, or leaving volunteering)** Examples include peer support and skills assessment.

Comparison	Interventions compared with others in the same group or:
	• Placebo (placebo or sham)
	• Control (no intervention, waitlist, standard rehabilitation care alone, or 'usual care')
	• The same intervention (as listed under 'intervention') but varied in terms of:
	  ○ Frequency
	  ○ Intensity
	  ○ Timing
	  ○ Setting

Outcome	**Critical** • Return to or participation in work or volunteering (assessed objectively by a count of return to work or volunteering) • Stability of employment (measured by a count of periods of time claiming out of work benefits) • Absenteeism from the workplace or volunteering (assessed objectively by a count of absences or presence). • Workplace or volunteering self-efficacy (measured using a validated scale such as the Occupational Self-Efficacy Scale). **Important** • Personal goal attainment (measured using a validated tool of personal goal attainment such as Goal Attainment Scale [GAS]) • Patient satisfaction (measured using any standardised, validated measure of patient satisfaction)

For further details see the review protocol in appendix A.

Methods and process

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual. Methods specific to this review question are described in the review protocol in appendix A and the methods document (Supplement 1).

Declarations of interest were recorded according to NICE's conflicts of interest policy.

Effectiveness evidence

Included studies

Five papers were included in this review; 4 randomised controlled trials (RCTs: Dorstyn 2018, Dorstyn 2019, Dorstyn 2022, Howe 2020) and 1 secondary paper reporting additional information for Howe 2020 (Fure 2021).

The included studies are summarised in Table 2.

Three studies were conducted in Australia (Dorstyn 2018, Dorstyn 2019, Dorstyn 2022), and 1 study was conducted in Norway (Howe 2020).

Two studies investigated interventions designed to support participation in employment for people with progressive neurological diseases (Dorstyn 2018, Dorstyn 2022), 1 study investigated an intervention designed to support participation in employment for people with acquired brain injury (Howe 2020), and 1 study investigated an intervention designed to support participation in employment for people with acquired spinal cord injury (Dorstyn 2019).

There were no trials reporting data for interventions supporting participation in employment or volunteering for children and young people with chronic neurological disorders. Additionally, none of the included studies reported data from adults with acquired peripheral nerve disorders, or functional neurological disorders.

Data for the following outcomes were identified through analysis of the included studies:

- Return to or participation in work or volunteering
- Workplace or volunteering self-efficacy

No meta-analysis was conducted on the data due to heterogeneity in interventions, time points and outcome measurements between included studies.

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review are listed, and reasons for their exclusion are provided in appendix J.

Summary of included studies

Summaries of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included studies

Study	Population	Intervention	Comparison	Outcomes
Dorstyn 2018 RCT Australia	N=95 adults with multiple sclerosis • Work and MS: n=45 • Waitlist control: n=50 Age in years [Mean (SD)]: • Work and MS: 41.40 (11.36) • Waitlist control: 41.20 (8.34) Sex (M/F): • Work and MS: n=8/n=37 • Waitlist control: n=6/n=44	Work and MS 4-week access to online job-information resource programme consisting of 1 introductory module, 3 job-seeking modules, 2 modules on job-interviewing skills and 1 module on career development. Protocol intervention group: Interventions to support	Waitlist control	• Workplace or volunteering self-efficacy

Study	Population	Intervention	Comparison	Outcomes
	Chronic neurological disorder category: Progressive neurological diseases	participation in employment		
Dorstyn 2019 RCT Australia	N=48 adults with spinal cord injury or disorder • Work and SCI: n=25 • Waitlist control: n=23 Age in years [Mean (SD)]: • Work and SCI: 43.0 (10.9) • Waitlist control: 40.7 (11.0) Sex (M/F): • Work and SCI: n=12/n=13 • Waitlist control: n=15/n=8 Chronic neurological disorder category: Acquired spinal cord injury	Work and SCI 4-week access to online information package created by SCI specialists and consisting of 1 introductory module, 3 job-seeking modules, 2 modules on job-interviewing skills and 1 module on career development. Protocol intervention group: Interventions to support participation in employment	Waitlist control	• Workplace or volunteering self-efficacy
Dorstyn 2022 RCT Australia	N=29 adults with multiple sclerosis • MS JobSeek: n=14 • Information control: n=15 Age in years [Mean (SD)]: • MS JobSeek: 43.6 (8.4) • Information control: 46.8 (10.1) Sex (M/F): • MS JobSeek: n=3/n=11 • Information control: n=4/n=11	MS JobSeek 4 month access to secure online discussion forum. Participants completed training within 1 week, and encouraged to login for a minimum of 5-10 minutes per week for 2 months. Forum included trained peer mentors who posted questions or topics related to returning to work. Participants also had access to the information control material as part of the forum.	Information control 7-module information programme consisting of modules designed to improve return-to-work outcomes for people with multiple sclerosis. Programme included 3 job-seeking modules, 2 modules on interviewing skills and 1 module on career development.	• Workplace or volunteering self-efficacy

Study	Population	Intervention	Comparison	Outcomes
	Chronic neurological disorder category: Progressive neurological diseases	Protocol intervention group: Interventions to support participation in employment		
Fure 2021 RCT Norway	See Howe 2020.	See Howe 2020.	See Howe 2020.	• Return to or participation in work or volunteering
Howe 2020 RCT Norway	N=116 adults with traumatic brain injury • Combined compensatory cognitive training and supported employment: n=60 • Usual care: n=56 Age in years [Mean (SD)]: • Combined compensatory cognitive training and supported employment: 41 (10) • Usual care: 44 (9) Sex (M/F): • Combined compensatory cognitive training and supported employment: n=27/n=33 • Usual care: n=20/n=36 Chronic neurological disorder category: Acquired brain injury	Combined compensatory cognitive training and supported employment Compensatory cognitive training consisted of 10x weekly 2-hour group sessions designed to improve cognition and functioning in people with mild-to-moderate traumatic brain injury, using psychoeducation and compensatory strategies. Supported employment: Maximum of 6 months follow-up with employment specialists, focusing on client engagement, employer engagement and on-and-off the job support. Participants also received standard Norwegian statutory sick leave follow up. No further details reported.	Usual care Personalised programmes designed to address physical, psychological, and cognitive symptoms, and improve knowledge of challenges and rights when returning to work. Also included 4x weekly 2-hour education group designed to increase knowledge of traumatic brain injury and how to manage the injury in everyday life. Participants also received standard Norwegian statutory sick leave follow up. No further details reported.	• Return to or participation in work or volunteering

Study	Population	Intervention	Comparison	Outcomes
		Protocol intervention group: Interventions to support participation in employment		

MS: multiple sclerosis; N/n: number of participants; RCT: randomised controlled trial; SCI: spinal cord injury; SD: standard deviation

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there are no forest plots in appendix E).

Summary of the evidence

In adults with acquired brain injury, combined compensatory cognitive training and supported employment showed no important difference compared with usual care (personalised programmes for physical, psychological and cognitive symptom) in terms of number of people in employment at post-intervention or 6 months follow-up.

The 'Work and SCI' programme delivered to adults with acquired spinal cord injury showed no important difference compared with a waitlist control in job procurement self-efficacy outcomes at post-intervention.

The 'Work and MS' programme showed an important benefit in adults with multiple sclerosis when compared to a waitlist control in job procurement self-efficacy outcomes at post-intervention. The 'MS JobSeek' programme delivered in adults with multiple sclerosis showed no important difference in job procurement self-efficacy outcomes compared with an information control at post-intervention.

All the evidence was very low or low quality.

There was no evidence for the following outcomes:

- Stability of employment
- Absenteeism from the workplace or volunteering
- Personal goal attainment
- Patient satisfaction

See appendix F for full GRADE tables.

Economic evidence

Included studies

One economic study was identified which was relevant to this question (Howe 2022).

See supplementary material 2 for details on the economic search undertaken for this guideline.

Excluded studies

Economic studies not included in this review are listed, and reasons for their exclusion are provided in appendix J.

Summary of included economic evidence

The systematic search of the economic literature undertaken for the guideline identified the following studies:

- A Norwegian study which evaluated the cost-effectiveness and cost-utility of supported employment and cognitive training intervention for adults with traumatic brain injury (Howe 2022).

See the economic evidence tables in appendix H. See Table 3 for the economic evidence profile of the included study.

Table 3: Economic evidence profile for vocational rehabilitation and cognitive rehabilitation (CCT-SE) in adults with traumatic brain injury (TBI)

Study	Limitations	Applicability	Other comments	Incremental			Uncertainty
				Costs[3]	Effect	Cost effectiveness	
Howe 2022 Norway Cost-effectiveness and cost utility analysis	Minor1 [1]	Partially [2]	Economic evaluation alongside an RCT (N=116) Time horizon: 12 months Outcome: Days until return to pre-injury work level and QALYs QALY estimation: -M1: adjusted for baseline EQ-5D-5L differences -M2: parallel adjustment [4] for baseline EQ-5D-5L differences -M3: using a change in HRQoL from baseline to 12 months	£767	16 (number of days to return to work) QALYs M1: 0.009 M2: 0.031 M3: 0.042	£48 per day earlier back to work M1: £85,187/QALY M2: £24,732/QALY M3: £18,254/QALY	-The cost difference and the differences in outcomes were not significant. - CCT-SE is preferred to TAU for cost per QALY threshold values above: M1: £81,063 M2: £25,181 M3: £17,838

Abbreviations: CCT-SE: Compensatory Cognitive Training and Supported Employment; CI: Confidence Interval; EQ-5D-5L: EuroQol five dimensions questionnaire with 5 levels; HRQoL: Health-Related Quality of Life; M: Method; RCT: Randomised Controlled Trial; QALY: Quality-Adjusted Life Year; TAU: Treatment as Usual; WTP: Willingness to Pay.
[1] Short time horizon, based on a single RCT (N=116), otherwise a well conducted study.
[2] Non-UK study, QALYs estimated using EQ-5D-5L.
[3] Costs reported in Euros were converted to NK using the conversion rate reported in the publication, and then to GBP using IMF Purchasing Power Parities: https://eppi.ioe.ac.uk/costconversion/default.aspx.
[4] This approach parallel shifted the observation for the intervention group upwards and equal to the difference at baseline, equal to 0.065.

Economic model

No economic modelling was undertaken for this review because the committee agreed that other topics were higher priorities for economic evaluation.

The committee's discussion and interpretation of the evidence

The outcomes that matter most

When deciding on the critical outcomes for this review, the committee discussed how the outcomes would need to be able to appropriately reflect the wide range of experiences people with chronic neurological disorders face when participating in employment and volunteering. For example, even if people are able to return to work or volunteering after a period of absence, their diagnosis may affect their ability to retain their role. Similarly, the amount of time they may need to take off from work or volunteering may affect their ability to progress in their chosen profession. The committee therefore not only chose 'return to or participation in work or volunteering' as a critical outcome, but also stability of employment and absenteeism from the workplace or volunteering. The committee also discussed that self-belief and confidence is often an affected area in people with chronic neurological disorders, which in turn can impact their ability to engage in employment or volunteering. The committee therefore decided to add workplace or volunteering self-efficacy as a final critical outcome.

The committee discussed how often rehabilitation goal setting includes vocational goals, and the importance of achieving these goals to an individual's engagement with and progress throughout rehabilitation. Therefore, they agreed to select personal goal attainment as an important outcome. The committee discussed the long-term nature of chronic neurological disorders and noted that people may need several periods of rehabilitation throughout their lifetime in order to support their participation in employment or volunteering. While the exact nature of interventions may change depending on the individual's needs at the time (for example, are they returning to the same role or re-training for a new position due to advancement of symptoms), the committee agreed that people would be less likely to engage in vocational rehabilitation if they were not pleased with previous interventions. Therefore, they selected patient satisfaction as another important outcome.

The quality of the evidence

The evidence was assessed using GRADE methodology and the overall confidence in the findings ranged from very low to low.

Findings were downgraded due to concerns relating to risk of bias (for example, when there was a lack of blinding in a study or if there was a large loss to follow-up) and imprecision (for example, when 95% confidence intervals crossed 1 or more decision-making thresholds). Evidence was also downgraded for indirectness (for example, when the time since injury of study participants did not meet the guideline definition of chronic [at least 3 months]). No evidence was downgraded for inconsistency, as no meta-analysis was performed due to heterogeneity between studies meaning they were too different to pool.

There was no evidence for the following interventions:

- Interventions to support participation in volunteering (including entering, remaining in, or returning to volunteering)

No evidence was identified for the following outcomes:

- Stability of employment
- Absenteeism from the workplace or volunteering

- Personal goal attainment
- Patient satisfaction

Benefits and harms

The committee discussed 1 of the studies identified in this evidence review that showed an important benefit in workplace or volunteering self-efficacy in people receiving an online job-information resource programme directed at people with multiple sclerosis when compared to waitlist control. However, they also noted that this evidence was very low quality and was only measured at intervention completion, with no longer term follow up measures available. They also noted that this observed benefit was in contradiction with a comparable return to work intervention by the same authors in the spinal cord injury population. The committee observed that the evidence from the other 4 studies in the review failed to show any important differences in workplace or volunteering self-efficacy or return to work.

Due to the paucity of evidence, the committee decided not to make recommendations based on this review question. Instead, they made their recommendations about support to access employment using qualitative evidence, and a full account of their discussion and recommendations can be found in evidence review K.

In discussing the results of this review, the committee highlighted the importance of increasing or prolonging employment and, or volunteering in this population. Due to the chronic nature of conditions, failing to do so can have a large impact on both personal quality of life and national productivity. They therefore made a recommendation for more research into this review question, which could help inform recommendations in future guideline updates.

Cost effectiveness and resource use

There was evidence from one study conducted in Norway (Howe 2022) that estimated the cost effectiveness and cost-utility of group-based compensatory cognitive training and individualised supported employment intervention for people with mild or moderate traumatic brain injury. The study suggested that this intervention was unlikely to be cost effective compared to treatment as usual using quality-adjusted life-years (QALYs) as an outcome measure. However, these findings were based on non-significant differences in costs and QALYs. This evidence was partially applicable to the NICE decision-making context and had minor limitations including short time horizon, effectiveness and baseline outcomes from a single RCT.

Based on their experience, the committee discussed the positive outcomes that vocational rehabilitation can bring to individuals, and that days to return to work is a very limited measure. Other benefits include enhanced self-esteem, a sense of fulfilment and greater participation within society. Furthermore, the committee stressed that vocational rehabilitation have important productivity benefits. However, it was acknowledged that productivity gains fall outside of the scope of the NHS and Personal Social Services perspective used by NICE for clinical guidelines. Given the lack of effectiveness and economic evidence the committee made their recommendations on vocational rehabilitation using qualitative evidence, and a full account of their discussion and recommendations can be found in evidence review K.

Other factors the committee took into account

As described above, the committee made their recommendations about support to access employment using qualitative evidence. A full account of their discussion and recommendations can be found in evidence review K.

Recommendations supported by this evidence review

No recommendations were made from this evidence review. This evidence review supports the recommendation for research on support to access employment.

References – included studies

Effectiveness

Dorstyn 2018

Dorstyn, Diana, Roberts, Rachel, Murphy, Gregory et al. (2018) Online Resource to Promote Vocational Interests Among Job Seekers With Multiple Sclerosis: A Randomized Controlled Trial in Australia. Archives of physical medicine and rehabilitation 99(2): 272-280

Dorstyn 2019

Dorstyn, Diana, Roberts, Rachel, Murphy, Gregory et al. (2019) Work and SCI: a pilot randomized controlled study of an online resource for job-seekers with spinal cord dysfunction. Spinal cord 57(3): 221-228

Dorstyn 2022

Dorstyn, D., Oxlad, M., Roberts, R. et al. (2022) MS JobSeek: A pilot randomized controlled trial of an online peer discussion forum for job-seekers with multiple sclerosis. Journal of Vocational Rehabilitation 56(1): 81-91

Fure 2021

Fure, Silje C R, Howe, Emilie Isager, Andelic, Nada et al. (2021) Cognitive and vocational rehabilitation after mild-to-moderate traumatic brain injury: A randomised controlled trial. Annals of physical and rehabilitation medicine 64(5): 101538

Howe 2020

Howe, Emilie Isager, Fure, Silje C R, Lovstad, Marianne et al. (2020) Effectiveness of Combining Compensatory Cognitive Training and Vocational Intervention vs. Treatment as Usual on Return to Work Following Mild-to-Moderate Traumatic Brain Injury: Interim Analysis at 3 and 6 Month Follow-Up. Frontiers in neurology 11: 561400

Economic

Howe 2022

Howe, E. I., Andelic, N., Fure, S. C., Røe, C., Søberg, H. L., Hellstrøm, T., et al., Cost-effectiveness analysis of combined cognitive and vocational rehabilitation in patients with mild-to-moderate TBI: results from a randomized controlled trial, BMC Health Services Research, 22, 185, 2022

Appendices

Appendix A Review protocols

Review protocol for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Table 4: Review protocol

ID	Field	Content
0.	PROSPERO registration number	CRD42023469196
1.	Review title	Rehabilitation for employment and volunteering
2.	Review question	What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?
3.	Objective	To determine the effectiveness of rehabilitation interventions to support employment and volunteering for people with chronic neurological disorders.
4.	Searches	The following databases will be searched: • Medline • Embase • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • International Health Technology Assessment (INAHTA) Searches will be restricted by: • Date: 2013 onwards • English language • Human studies • Systematic Reviews • RCTs

ID	Field	Content
		• Non-randomised studies Other searches: • Inclusion lists of systematic reviews With the agreement of the guideline committee the searches will be re-run 6 weeks before final submission of the review and further studies retrieved for inclusion. The full search strategies will be published in the final review.
5.	Condition or domain being studied	Rehabilitation interventions to support employment and volunteering for people with chronic neurological disorders
6.	Population	**Inclusion:** Adults and children with rehabilitation needs due to the following chronic neurological disorders: • Acquired brain injury • Acquired spinal cord injury • Acquired peripheral nerve disorders • Progressive neurological diseases • Functional neurological disorders **Exclusion:** • Conditions which do not fit one of the 5 categories of chronic neurological disorder as defined in the guideline scope. These exclusions will be by exception and examined on a case-by-case basis rather than whole disorder groups. For example, this guideline will not cover autonomic neuropathy or the acute stabilisation of conditions such as encephalitis or hydrocephalus and will not cover degenerative disc disorder as spinal discs do not form part of the spinal cord. • Disorders for which interventions are primarily focused on altering body structure and functions, for example isolated peripheral nerve injuries (that is, single nerve or plexus injuries). • Surgical management of conditions (for example brain tumours, orthopaedic complications). • Conditions for which NICE rehabilitation and rehabilitation related recommendations already exist, including stroke in people aged 16 years and over, dementia including Alzheimer's disease, cerebral

ID	Field	Content
		palsy, myalgic encephalomyelitis (or encephalopathy)/chronic fatigue syndrome and post-COVID-19 syndrome. • Early rehabilitation after spinal cord injury as this will be covered in the NICE guideline on rehabilitation after traumatic injury
7.	Intervention	**Interventions to support participation in employment** (including entering, remaining in, returning to, or leaving employment). Examples of support to enter employment include • Vocational coaching • Access to work schemes • Benefits advice related to entering employment Examples of support to remain in employment include • Reasonable adjustments • Work skills analysis/ functional capacity evaluation • Employer education (in relation to the Disability Discrimination Act) • Employment support intervention via occupational health • Payment protection schemes (within human resources context) • Employee assistance programmes • Supported employment schemes • Supportive technology Examples of support to return to employment include • Benefits advice about going back to work • Graded or phased return to work including pacing. • Employment support intervention via occupational health • Vocational rehabilitation **Interventions to support participation in volunteering** (including entering, remaining in, or returning to volunteering)

ID	Field	Content
		Examples include peer support and skills assessment.

8.	Comparator	Interventions compared with others in the same group or:
		• Placebo (placebo or sham)
		• Control (no intervention, waitlist, standard rehabilitation care alone, or 'usual care')
		• The same intervention (as listed under 'intervention') but varied in terms of:
		  ○ Frequency
		  ○ Intensity
		  ○ Timing
		  ○ Setting

9.	Types of study to be included	Include published full-text papers: • Systematic reviews of RCTs • Experimental studies with random assignment to intervention and control groups. If insufficient* RCT evidence is located to support decision making about children and young people, then experimental studies with non-random assignment to intervention and control groups (quasi-randomised controlled trials, non-randomised controlled trials and prospective and retrospective cohort studies) will also be considered, if a method of controlling for confounding variables is used**. Systematic reviews of these studies will also be considered. * Sufficiency will be judged on issues such as the number and quality of the included studies; sample sizes, reported outcomes, and availability of data on subgroups of interest. ** Studies must match or adjust for age and severity of chronic neurological disorder. Other confounding factors are: • Sex • Delivery setting, for instance whether community or inpatient.
10.	Other exclusion criteria	Inclusion: • Full text papers

ID	Field	Content
		• Studies conducted in the UK, Australia, New Zealand and Canada and high-income European countries (according to the World Bank). Exclusion: • Conference abstracts/proceedings • Non-English language articles • Articles published before 2013 • Non-English language articles • Books, book chapters and theses. • Papers that do not include methodological details will not be included as they do not provide sufficient information to evaluate risk of bias/study quality.
11.	Context	Recommendations will apply to all inpatient (excluding critical care units), outpatient and community settings, including tertiary settings and care homes in which either fully or partially NHS-funded rehabilitation interventions for chronic neurological disorders are provided.
12.	Primary outcomes (critical outcomes)	• **Return to or participation in work or volunteering** (assessed objectively by a count of return to work or volunteering) • **Stability of employment** (measured by a count of periods of time claiming out of work benefits) • **Absenteeism from the workplace or volunteering** (assessed objectively by a count of absences or presence). • **Workplace or volunteering self-efficacy** (measured using a validated scale such as the Occupational Self-Efficacy Scale).
13.	Secondary outcomes (important outcomes)	• **Personal goal attainment** (measured using a validated tool of personal goal attainment such as Goal Attainment Scale [GAS]) • **Patient satisfaction** (measured using any standardised, validated measure of patient satisfaction)
14.	Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into EPPI reviewer and de-duplicated. Titles and abstracts of the retrieved citations will be screened to identify studies that potentially meet the inclusion criteria outlined in the review protocol.

ID	Field	Content
		Dual sifting will be performed on at least 10% of records (or 300 records, whichever is smaller); 90% agreement is required and disagreements will be resolved via discussion with the senior systematic reviewer. The full set of records will not be dual screened because the population, interventions and relevant study designs are relatively clear and should be readily identified from titles and abstracts. Full versions of the selected studies will be obtained for assessment. Studies that fail to meet the inclusion criteria once the full version has been checked will be excluded at this stage. Each study excluded after checking the full version will be listed, along with the reason for its exclusion. The included and excluded studies lists will be circulated to the Topic Group for their comments. Resolution of disputes will be by discussion between the senior reviewer, Topic Advisor and Chair. A standardised form will be used to extract the following data from included studies: study details (reference, country where study was carried out, type and dates), participant characteristics, inclusion and exclusion criteria, details of the interventions if relevant, setting and follow-up, relevant outcome data and source of funding. This will be quality assessed by the senior reviewer.
15.	Risk of bias (quality) assessment	Quality assessment of individual studies will be performed according to Developing NICE guidelines: the manual, using the following checklists. • ROBIS tool for systematic reviews • Cochrane RoB tool v.2 for RCTs • Cochrane ROBINS-I for non-randomised controlled trials. The quality assessment will be performed by one reviewer and this will be quality assured by a senior reviewer.
16.	Strategy for data synthesis	Depending on the availability of the evidence, the findings will be summarised narratively or quantitatively. Where possible, pairwise meta-analyses will be conducted using Cochrane Review Manager software. A fixed effect meta-analysis will be conducted and data will be presented as odds ratios or risk ratios for dichotomous outcomes. Peto odds ratio will be used for outcomes with zero events. Mean differences or standardised mean differences will be calculated for continuous outcomes.

ID	Field	Content
		Heterogeneity in the effect estimates of the individual studies will be assessed using the I2 statistic. Alongside visual inspection of the point estimates and confidence intervals, I2 values of greater than 50% and 80% will be considered as significant and very significant heterogeneity, respectively. Heterogeneity will be explored as appropriate using sensitivity analyses and pre-specified subgroup analyses. If heterogeneity cannot be explained through subgroup analysis then a random effects model will be used for meta-analysis, or the data will not be pooled. The confidence in the findings across all available evidence will be evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group: http://www.gradeworkinggroup.org/ Importance and imprecision of findings will be assessed against minimally important differences (MIDs). Default MIDs will be used for risk ratios and continuous outcomes only, unless the committee pre-specifies published or other MIDs for specific outcomes • For risk ratios: 0.8 and 1.25. • For continuous outcomes: ○ MID is calculated by ranking the studies in order of SD in the control arms. The MID is calculated as +/- 0.5 times median SD. ○ For studies that have been pooled using SMD (meta-analysed): +0.5 and -0.5 in the SMD scale are used as MID boundaries.
17.	Analysis of sub-groups	Evidence will be stratified by: • Age at time of intervention (children versus adults). Children are classified as being aged 17 years or younger. • Functional neurological disorders as distinct from the 4 other categories of neurological disorder. Evidence will be sub-grouped by the following only in the event that there is significant heterogeneity in outcomes: • The 4 disorder categories not separated out through a priori stratification (acquired brain injury, acquired spinal cord injury, acquired peripheral nerve disorders and progressive neurological diseases)

ID	Field	Content			
		• Age (for the ≤17 years of age stratification only). Categories are <4 years, 4-11 years and >11 years • The size of the organisation (micro, small, medium, large) • Study design (RCT versus NRS) Where evidence is stratified or sub grouped the committee will consider on a case-by-case basis if separate recommendations should be made for distinct groups. Separate recommendations may be made where there is evidence of a differential effect of interventions in distinct groups. If there is a lack of evidence in one group, the committee will consider, based on their experience, whether it is reasonable to extrapolate and assume the interventions will have similar effects in that group compared with others.			
18.	Type and method of review	☒	Intervention		
		☐	Diagnostic		
		☐	Prognostic		
		☐	Qualitative		
		☐	Epidemiologic		
		☐	Service Delivery		
		☐	Other (please specify)		
19.	Language	English			
20.	Country	England			
21.	Anticipated or actual start date	May 2022			
22.	Anticipated completion date	December 2023			
23.	Stage of review at time of this submission	Review stage	Started	Completed	
		Preliminary searches	☑	☑	
		Piloting of the study selection process	☑	☑	
		Formal screening of search results against eligibility criteria	☑	☑	

ID	Field	Content		
		Data extraction	☑	☑
		Risk of bias (quality) assessment	☑	☑
		Data analysis	☑	☑
24.	Named contact	**5a. Named contact** NICE **5b. Named contact e-mail** rehabforcnd@nice.org.uk **5c. Organisational affiliation of the review** National Institute for Health and Care Excellence (NICE)		
25.	Review team members	NICE Technical Team		
26.	Funding sources/sponsor	This systematic review is being completed by NICE, which receives funding from the Department of Health and Social Care.		
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.		
28.	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10181		
29.	Other registration details	Not applicable		

ID	Field	Content	
30.	Reference/URL for published protocol	https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42023469196	
31.	Dissemination plans	NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as: • notifying registered stakeholders of publication • publicising the guideline through NICE's newsletter and alerts • issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE.	
32.	Keywords	Acquired brain injury; acquired spinal cord injury; activities of daily living; neurological diseases; neurological disorders; peripheral nerve disorders; rehabilitation.	
33.	Details of existing review of same topic by same authors	Not applicable	
34.	Current review status	☐	Ongoing
		☐	Completed but not published
		☒	Completed and published
		☐	Completed, published and being updated
		☐	Discontinued
35.	Additional information	Not applicable	
36.	Details of final publication	www.nice.org.uk	

COVID-19: Coronavirus; GRADE: Grading of Recommendations Assessment, Development and Evaluation; MID: minimally important difference; NRS: non-randomised studies; RCT: randomised controlled trial; RoB tool v.2: risk of bias tool version 2; ROBINS-I: risk of bias in non-randomised studies - of interventions; ROBIS: risk of bias in systematic reviews; SD: standard deviation: SMD: standardised mean difference

Appendix B Literature search strategies

Literature search strategies for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Database: Ovid MEDLINE(R) ALL <1946 to July 06, 2023>

Date of last search: 07/07/2023

1	(CRANIOCEREBRAL TRAUMA/ or brain injuries/ or exp brain hemorrhage, traumatic/ or exp brain injuries, diffuse/ or exp brain injuries, traumatic/ or exp brain injury, chronic/ or Shaken Baby Syndrome/ or HYPOXIA, BRAIN/ or Brain Damage, Chronic/ or exp INTRACRANIAL HEMORRHAGE, TRAUMATIC/ or exp BRAIN NEOPLASMS/ or BRAIN DISEASES/ or BRAIN ABSCESS/ or BRAIN DISEASES, METABOLIC/ or CEREBELLAR DISEASES/ or cerebrovascular disorders/ or basal ganglia cerebrovascular disease/ or cerebrovascular trauma/ or intracranial arteriovenous malformations/ or "intracranial embolism and thrombosis"/ or intracranial hemorrhages/ or vascular headaches/ or exp ENCEPHALITIS/ or exp HYDROCEPHALUS/) not (exp STROKE/ or dementia/)
2	((brain* or cereb* or craniocereb* or cranial or intracrani* or neurocognit*) adj2 (injur* or trauma* or damage* or disease*1 or disorder* or infect* or h?emorrhag* or neoplasm* or cancer* or tumo?r* or insult* or impair* or ischemi* or ischaemi* or infarcti* or hypoxi* or drown*)).ti,ab.
3	(chronic* adj1 trauma* adj2 encephalopath*).ti,ab.
4	((infratentorial* or supratentorial* or hypothalam* or pituitar* or choroid plexus) adj2 (neoplasm* or cancer* or tumo?r* or carcinom* or adenocarcinom*)).ti,ab.
5	(brain* adj2 abscess*).ti,ab.
6	(carotid arter* adj2 (disease* or injur*)).ti,ab.
7	("basal ganglia disease*" or encephalitis or meningoencephalitis or hydrocephal* or "paraneoplastic cereb* degenerat*" or "shak* baby syndrome*").ti,ab.
8	exp STROKE/ and (ADOLESCENT/ or MINORS/ or exp CHILD/ or exp INFANT/ or exp PEDIATRICS/ or exp PUBERTY/)
9	(stroke? adj3 (p?ediatric* or child* or adolescen* or kid or kids or youth* or youngster* or minor or minors or underage* or under-age* or "under age*" or teen or teens or teenager* or juvenile* or boy or boys or boyhood or girl or girls or girlhood or schoolchild* or "school age*" or schoolage* or "under 16" or "under sixteen*")).ti,ab.
10	exp SPINAL CORD INJURIES/ or exp SPINAL CORD NEOPLASMS/ or EPIDURAL ABSCESS/ or SPINAL CORD DISEASES/ or exp SPINAL CORD VASCULAR DISEASES/ or SPINAL CORD COMPRESSION/ or MYELITIS, TRANSVERSE/
11	((spinal* or spine?) adj2 (injur* or trauma* or tumo?r* or neoplasm* or cancer* or infect* or insult* or disease? or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or h?emorrhag*)).ti,ab.
12	(Central cord syndrome* or transverse myelitis).ti,ab.
13	(epidural* adj2 (neoplasm* or cancer* or tumo?r* or abscess*)).ti,ab.
14	((spinal* or spine?) adj2 (viral* or virus* or polio* or acquired immunodeficiency syndrome or AIDS or HIV or bacterial* or neurosyphili* or neuro-syphili* or tubercul*)).ti,ab.
15	PERIPHERAL NERVE INJURIES/ or exp CRANIAL NERVE INJURIES/ or PERIPHERAL NERVOUS SYSTEM NEOPLASMS/ or exp CRANIAL NERVE NEOPLASMS/ or exp PERIPHERAL NERVOUS SYSTEM DISEASES/ or exp CRANIAL NERVE DISEASES/
16	((periph* or cranial*) adj1 (nerve? or nervous system) adj2 (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumo?r* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome?)).ti,ab.
17	(Guillain* adj1 Barr*).ti,ab.
18	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 injur*).ti,ab.
19	(optic* adj1 nerve* adj2 (neoplasm* or cancer* or tumo?r*)).ti,ab.
20	(brachial plexus adj1 (neuropath* or neuritis)).ti,ab.
21	(complex regional pain syndrome* or causalgia or mononeuropath* or nerve compression syndrome*).ti,ab.
22	((femoral or median or peroneal or radial or sciatic or tibial or ulnar) adj1 neuropath*).ti,ab.
23	((carpal-tunnel or piriformis-muscle or tarsal-tunnel or thoracic-outlet) adj1 syndrome*).ti,ab.

24	(pudendal neuralgia or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*).ti,ab.
25	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 disease*).ti,ab.
26	(periph* adj2 neuropath*).ti,ab.
27	(((periph* or cranial*) adj2 (nerve? or nervous system)) and lupus).ti,ab.
28	((multi-focal* or multifocal*) adj2 motor adj1 neuropath*).ti,ab.
29	(((periph* or cranial*) adj2 (nerve? or nervous system)) and alcohol*).ti,ab.
30	exp MOTOR NEURON DISEASE/ or POSTPOLIOMYELITIS SYNDROME/ or exp PARKINSONIAN DISORDERS/ or MUSCULAR DYSTROPHY, DUCHENNE/ or exp MULTIPLE SCLEROSIS/ or NEUROMUSCULAR DISEASES/ or SPASTIC PARAPLEGIA, HEREDITARY/ or FRIEDREICH ATAXIA/ or exp MULTIPLE SYSTEM ATROPHY/ or SUPRANUCLEAR PALSY, PROGRESSIVE/ or CORTICOBASAL DEGENERATION/ or LEUKODYSTROPHY, METACHROMATIC/ or exp MITOCHONDRIAL MYOPATHIES/ or exp MUCOPOLYSACCHARIDOSES/ or WILLIAMS SYNDROME/ or GENETIC DISEASES, INBORN/ or RETT SYNDROME/ or FETAL ALCOHOL SPECTRUM DISORDERS/ or DYSTONIC DISORDERS/ or "HEREDITARY SENSORY AND MOTOR NEUROPATHY"/ or SPINAL DYSRAPHISM/
31	(neurolog* adj1 (condition* or disease* or damage* or disorder* or impair*)).ti,ab.
32	((motor-neuron* or gehrig* or charcott* or kennedy*) adj1 disease*).ti,ab.
33	((amyotroph* or primary) adj1 lateral* adj1 sclero*).ti,ab.
34	(bulbar adj1 pals*).ti,ab.
35	((muscular or muscle* or bulbo) adj1 atroph* adj1 spin*).ti,ab.
36	(progressiv* adj1 (muscular or muscle*) adj1 atroph*).ti,ab.
37	((postpolio* or post-polio*) adj1 syndrome?).ti,ab.
38	(Parkinson* or duchenne* or multiple scleros?s* or aphasia or creutzfeldt-jakob or huntington* or kluver-bucy).ti,ab.
39	(muscular adj1 dystroph*).ti,ab.
40	(neuromusc* adj1 (disease* or disorder?)).ti,ab.
41	(heredit* adj1 spastic* adj1 parapleg*).ti,ab.
42	"friedreich* ataxia*".ti,ab.
43	((multiple system or olivopontocerebellar) adj1 atroph*).ti,ab.
44	(shy-drager syndrome* or striatonigral degenerat* or batten* disease?).ti,ab.
45	(progressive adj1 supranuclear adj1 pals*).ti,ab.
46	(richardson* adj1 (disease? or syndrome?)).ti,ab.
47	((corticobasal or cortico basal) adj1 degenerat*).ti,ab.
48	(white adj1 matter adj1 disorder?).ti,ab.
49	(metachromatic leukodystroph* or mitochondrial myopath* or mucopolysaccharidos*).ti,ab.
50	(lysosomal adj1 storage adj1 disorder?).ti,ab.
51	((genetic or William* or catch-22 or rett* or congenital or f?etal alcohol) adj1 (syndrome or disorder*)).ti,ab.
52	(perinatal illness* or perinatal hypoxia*).ti,ab.
53	(primary adj1 dystonia?).ti,ab.
54	(heredit* adj1 motor* adj1 sens* adj1 neuropath*).ti,ab.
55	(spina bifida? or spinal dysraphism?).ti,ab.
56	MOVEMENT DISORDERS/ or MOTOR DISORDERS/ or CONVERSION DISORDER/
57	((functional* or psychogenic* or dissociative*) adj1 neurologic* adj1 (disorder* or dysfunction* or difficult*)).ti,ab.
58	((movement* or motor* or convers*) adj1 (disorder* or dysfunct*)).ti,ab.
59	((psychogenic or dissociative or non-epilep* or nonepilep*) adj1 (seizure* or convulsion* or fit or fits or spasm* or attack*)).ti,ab.
60	(pseudo-seizure* or pseudoseizure*).ti,ab.
61	(medical* adj1 (unexplain* or un-explain*) adj1 symptom?).ti,ab.
62	or/1-61
63	employment/ or unemployment/
64	workplace/ or work/ or occupations/ or workforce/ or work engagement/ or career mobility/

65	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)).ti,ab.
66	vocational education/ or vocational guidance/ or education, professional/
67	Job application/
68	employment, supported/ or sheltered workshops/
69	*volunteers/
70	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation* or professional*) adj4 (coach* or training or trainee* or retrain* or shadow* or placement? or experience* or advice or guid* or counsel* or service? or educat* or program* or intervention* or scheme? or school* or peer support* or mentor* or motivational interview* or plan* or find* or apply? or applied or application)).ti,ab.
71	((career? or job? or vocation* or prevocation*) adj2 (develop* or progress* or goal? or success* or opportunit*)).ti,ab.
72	((sheltered or supported or voluntary or paid or unpaid) adj (work* or employment or role?)).ti,ab.
73	(intern? or internship? or traineeship? or apprentice* or volunteering).ti,ab.
74	rehabilitation, vocational/
75	return to work/
76	occupational health/ or occupational health services/
77	work performance/ or work schedule tolerance/ or workload/
78	work capacity evaluation/ or "Personnel Staffing and Scheduling"/
79	Working conditions/
80	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (rehab* or telerehab* or neurorehab*)).ti,ab.
81	(VR or EIVR).ti,ab.
82	(((return* or back or stay* or transition* or resum*) adj4 (work* or employ* or labo?r)) or RTW).ti,ab.
83	((graded or phase* or gradual) adj4 return*).ti,ab.
84	((job? or work* or duty or duties or responsibilit*) adj2 (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)).ti,ab.
85	(reasonable adj4 (accommodat* or adjust* or modif* or flexib* or accessib*)).ti,ab.
86	((sustain* or maintain* or retain* or retention* or stable or stability) adj4 (career? or job? or work* or employ* or occupation*)).ti,ab.
87	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((voice? or speech* or speak* or communicat*) adj4 (software* or tech* or device? or aid? or recogn*))).ti,ab.
88	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((assist* or adapt* or "self help" or support*) adj4 (tech* or device* or tool* or equipment* or hardware* or software*))).ti,ab.
89	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (comput* adj4 (interfac* or hardware* or software* or equipment))).ti,ab.
90	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (keyboard? or joystick? or roller ball?)).ti,ab.
91	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (mouse adj2 computer*)).ti,ab.
92	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (eye? adj4 (gaze? or gazing or track*) adj4 (software or technolog* or device?))).ti,ab.
93	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj2 (function* or skill? or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)).ti,ab.
94	((work* or occupational) adj (environment? or condition?)).ti,ab.
95	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj4 ergonomic*).ti,ab.
96	((employee? or occupation* or personnel) adj2 (health* or assistance or manage*)).ti,ab.
97	sick leave/ or pension/ or retirement/
98	(employment support allowance or New Deal for Disabled People or WORKSTEP).ti,ab.
99	Access to work.ti,ab.
100	((employment or unemployment) adj2 benefit?).ti,ab.

101	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj6 ((pay or financ* or income?) adj1 (protect* or support* or assist* or aid*))).ti,ab.
102	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj4 (((disab* or sick*) adj2 (benefit? or pay)) or social security or employee assistance or pension? or retire*)).ti,ab.
103	((medical* or disab* or sick*) adj1 (leav* or absen*)).ti,ab.
104	or/63-103
105	62 and 104
106	letter/
107	editorial/
108	news/
109	exp historical article/
110	Anecdotes as topic/
111	comment/
112	case reports/
113	(letter or comment*).ti.
114	or/106-113
115	randomized controlled trial/ or random*.ti,ab.
116	114 not 115
117	animals/ not humans/
118	exp Animals, Laboratory/
119	exp Animal Experimentation/
120	exp Models, Animal/
121	exp Rodentia/
122	(rat or rats or rodent* or mouse or mice).ti.
123	or/116-122
124	105 not 123
125	limit 124 to english language
126	limit 125 to yr="2013 -Current"
127	meta-analysis/
128	meta-analysis as topic/
129	(meta analy* or metanaly* or metaanaly*).ti,ab.
130	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
131	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
132	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
133	(search* adj4 literature).ab.
134	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
135	cochrane.jw.
136	or/127-135
137	randomized controlled trial.pt.
138	controlled clinical trial.pt.
139	pragmatic clinical trial.pt.
140	randomi#ed.ab.
141	placebo.ab.
142	randomly.ab.
143	CLINICAL TRIALS AS TOPIC/ or trial.ti.
144	or/137-143
145	126 and (136 or 144)

Database: Embase <1974 to 2023 July 06>

Date of last search: 07/07/2023

1	(head injury/ or exp brain injury/ or chronic brain disease/ or brain hemorrhage/ or brain hypoxia/ or exp brain tumor/ or brain disease/ or brain abscess/ or metabolic encephalopathy/ or cerebellum disease/ or exp cerebrovascular disease/ or encephalitis/ or hydrocephalus/) not (exp cerebrovascular accident/ or dementia/)
2	((brain* or cereb* or craniocereb* or cranial or intracrani* or neurocognit*) adj2 (injur* or trauma* or damage* or disease*1 or disorder* or infect* or h?emorrhag* or neoplasm* or cancer* or tumo?r* or insult* or impair* or ischemi* or infarcti* or hypoxi* or drown*)).ti,ab.
3	(chronic* adj1 trauma* adj2 encephalopath*).ti,ab.
4	((infratentorial* or supratentorial* or hypothalam* or pituitar* or choroid plexus) adj2 (neoplasm* or cancer* or tumo?r* or carcinom* or adenocarcinom*)).ti,ab.
5	(brain* adj2 abscess*).ti,ab.
6	(carotid arter* adj2 (disease* or injur*)).ti,ab.
7	("basal ganglia disease*" or encephalitis or meningoencephalitis or hydrocephal* or "paraneoplastic cereb* degenerat*" or "shak* baby syndrome*").ti,ab.
8	exp cerebrovascular accident/ and (adolescent/ or "minor (person)"/ or exp child/ or exp infant/ or pediatrics/ or exp pediatrics/ or exp puberty/)
9	(stroke? adj3 (p?ediatric* or child* or adolescen* or kid or kids or youth* or youngster* or minor or minors or underage* or under-age* or "under age*" or teen or teens or teenager* or juvenile* or boy or boys or boyhood or girl or girls or girlhood or schoolchild* or "school age*" or schoolage* or "under 16" or "under sixteen*")).ti,ab.
10	exp spinal cord injury/ or exp spinal cord tumor/ or epidural abscess/ or spinal cord disease/ or exp spinal cord vascular disease/ or spinal cord compression/ or transverse myelitis/
11	((spinal* or spine?) adj2 (injur* or trauma* or tumo?r* or neoplasm* or cancer* or infect* or insult* or disease? or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or h?emorrhag*)).ti,ab.
12	(Central cord syndrome* or transverse myelitis).ti,ab.
13	(epidural* adj2 (neoplasm* or cancer* or tumo?r* or abscess*)).ti,ab.
14	((spinal* or spine?) adj2 (viral* or virus* or polio* or acquired immunodeficiency syndrome or AIDS or HIV or bacterial* or neurosyphili* or neuro-syphili* or tubercul*)).ti,ab.
15	peripheral nerve injury/ or exp cranial nerve injury/ or peripheral nerve tumor/ or exp cranial nerve tumor/ or exp peripheral neuropathy/ or exp cranial neuropathy/
16	((periph* or cranial*) adj1 (nerve? or nervous system) adj2 (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumo?r* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome?)).ti,ab.
17	(Guillain* adj1 Barr*).ti,ab.
18	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 injur*).ti,ab.
19	(optic* adj1 nerve* adj2 (neoplasm* or cancer* or tumo?r*)).ti,ab.
20	(brachial plexus adj1 (neuropath* or neuritis)).ti,ab.
21	(complex regional pain syndrome* or causalgia or mononeuropath* or nerve compression syndrome*).ti,ab.
22	((femoral or median or peroneal or radial or sciatic or tibial or ulnar) adj1 neuropath*).ti,ab.
23	((carpal-tunnel or piriformis-muscle or tarsal-tunnel or thoracic-outlet) adj1 syndrome*).ti,ab.
24	(pudendal neuralgia or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*).ti,ab.
25	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 disease*).ti,ab.
26	(periph* adj2 neuropath*).ti,ab.
27	(((periph* or cranial*) adj2 (nerve? or nervous system)) and lupus).ti,ab.
28	((multi-focal* or multifocal*) adj2 motor adj1 neuropath*).ti,ab.
29	(((periph* or cranial*) adj2 (nerve? or nervous system)) and alcohol*).ti,ab.
30	exp motor neuron disease/ or postpoliomyelitis syndrome/ or exp parkinsonism/ or Duchenne muscular dystrophy/ or exp multiple sclerosis/ or neuromuscular disease/ or hereditary motor sensory neuropathy/ or Friedreich ataxia/ or exp Shy Drager syndrome/ or progressive supranuclear palsy/ or corticobasal degeneration/ or metachromatic leukodystrophy/ or exp mitochondrial myopathy/ or exp mucopolysaccharidosis/ or Williams Beuren syndrome/ or genetic disorder/ or Rett syndrome/ or fetal alcohol syndrome/ or dystonic disorder/ or hereditary motor sensory neuropathy/ or spinal dysraphism/

31	(neurolog* adj1 (condition* or disease* or damage* or disorder* or impair*)).ti,ab.
32	((motor-neuron* or gehrig* or charcott* or kennedy*) adj1 disease*).ti,ab.
33	((amyotroph* or primary) adj1 lateral* adj1 sclero*).ti,ab.
34	(bulbar adj1 pals*).ti,ab.
35	((muscular or muscle* or bulbo) adj1 atroph* adj1 spin*).ti,ab.
36	(progressiv* adj1 (muscular or muscle*) adj1 atroph*).ti,ab.
37	((postpolio* or post-polio*) adj1 syndrome?).ti,ab.
38	(Parkinson* or duchenne* or multiple scleros?s* or aphasia or creutzfeldt-jakob or huntington* or kluver-bucy).ti,ab.
39	(muscular adj1 dystroph*).ti,ab.
40	(neuromusc* adj1 (disease* or disorder?)).ti,ab.
41	(heredit* adj1 spastic* adj1 parapleg*).ti,ab.
42	"friedreich* ataxia*".ti,ab.
43	((multiple system or olivopontocerebellar) adj1 atroph*).ti,ab.
44	(shy-drager syndrome* or striatonigral degenerat* or batten* disease?).ti,ab.
45	(progressive adj1 supranuclear adj1 pals*).ti,ab.
46	(richardson* adj1 (disease? or syndrome?)).ti,ab.
47	((corticobasal or cortico basal) adj1 degenerat*).ti,ab.
48	(white adj1 matter adj1 disorder?).ti,ab.
49	(metachromatic leukodystroph* or mitochondrial myopath* or mucopolysaccharidos*).ti,ab.
50	(lysosomal adj1 storage adj1 disorder?).ti,ab.
51	((genetic or William* or catch-22 or rett* or congenital or f?etal alcohol) adj1 (syndrome or disorder*)).ti,ab.
52	(perinatal illness* or perinatal hypoxia*).ti,ab.
53	(primary adj1 dystonia?).ti,ab.
54	(heredit* adj1 motor* adj1 sens* adj1 neuropath*).ti,ab.
55	(spina bifida? or spinal dysraphism?).ti,ab.
56	motor dysfunction/ or motor dysfunction/ or conversion disorder/
57	((functional* or psychogenic* or dissociative*) adj1 neurologic* adj1 (disorder* or dysfunction* or difficult*)).ti,ab.
58	((movement* or motor* or convers*) adj1 (disorder* or dysfunct*)).ti,ab.
59	((psychogenic or dissociative or non-epilep* or nonepilep*) adj1 (seizure* or convulsion* or fit or fits or spasm* or attack*)).ti,ab.
60	(pseudo-seizure* or pseudoseizure*).ti,ab.
61	(medical* adj1 (unexplain* or un-explain*) adj1 symptom?).ti,ab.
62	or/1-61
63	exp employment/ or unemployment/
64	workplace/ or work/ or occupation/ or workforce/ or work engagement/ or career/ or career mobility/ or job change/ or vocation/
65	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)).ti,ab.
66	Vocational education/ or vocational guidance/
67	job finding/ or career planning/
68	*volunteer/ or apprenticeship/
69	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation* or professional*) adj4 (coach* or training or trainee* or retrain* or shadow* or placement? or experience* or advice or guid* or counsel* or service? or educat* or program* or intervention* or scheme? or school* or peer support* or mentor* or motivational interview* or plan* or find* or apply? or applied or application)).ti,ab.
70	((career? or job? or vocation* or prevocation*) adj2 (develop* or progress* or goal? or success* or opportunit*)).ti,ab.
71	((sheltered or supported or voluntary or paid or unpaid) adj (work* or employment or role?)).ti,ab.
72	(intern? or internship? or traineeship? or apprentice* or volunteering).ti,ab.
73	Vocational rehabilitation/
74	Return to work/ or work resumption/

75	Occupational health/ or occupational health service/
76	Job performance/ or work schedule/ or workload/ or working time/ or work capacity/
77	personnel management/
78	Job accommodation/ or job adaptation/
79	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (rehab* or telerehab* or neurorehab*)).ti,ab.
80	(VR or EIVR).ti,ab.
81	(((return* or back or stay* or transition* or resum*) adj4 (work* or employ* or labo?r)) or RTW).ti,ab.
82	((graded or phase* or gradual) adj4 return*).ti,ab.
83	((job? or work* or duty or duties or responsibilit*) adj2 (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)).ti,ab.
84	(reasonable adj4 (accommodat* or adjust* or modif* or flexib* or accessib*)).ti,ab.
85	((sustain* or maintain* or retain* or retention* or stable or stability) adj4 (career? or job? or work* or employ* or occupation*)).ti,ab.
86	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((voice? or speech* or speak* or communicat*) adj4 (software* or tech* or device? or aid? or recogn*))).ti,ab.
87	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((assist* or adapt* or "self help" or support*) adj4 (tech* or device* or tool* or equipment* or hardware* or software*))).ti,ab.
88	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (comput* adj4 (interfac* or hardware* or software* or equipment))).ti,ab.
89	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (keyboard? or joystick? or roller ball?)).ti,ab.
90	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (mouse adj2 computer*)).ti,ab.
91	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (eye? adj4 (gaze? or gazing or track*) adj4 (software or technolog* or device?))).ti,ab.
92	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj2 (function* or skill? or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)).ti,ab.
93	((work* or occupational) adj (environment? or condition?)).ti,ab.
94	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj4 ergonomic*).ti,ab.
95	((employee? or occupation* or personnel) adj2 (health* or assistance or manage*)).ti,ab.
96	medical leave/ or pension/ or retirement/
97	(employment support allowance or New Deal for Disabled People or WORKSTEP).ti,ab.
98	Access to work.ti,ab.
99	((employment or unemployment) adj2 benefit?).ti,ab.
100	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj6 ((pay or financ* or income?) adj1 (protect* or support* or assist* or aid*))).ti,ab.
101	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj4 (((disab* or sick*) adj2 (benefit? or pay)) or social security or employee assistance or pension? or retire*)).ti,ab.
102	((medical* or disab* or sick*) adj1 (leav* or absen*)).ti,ab.
103	or/63-102
104	62 and 103
105	letter.pt. or letter/
106	note.pt.
107	editorial.pt.
108	case report/ or case study/
109	(letter or comment*).ti.
110	or/105-109
111	randomized controlled trial/ or random*.ti,ab.
112	110 not 111
113	animal/ not human/
114	nonhuman/

115	exp Animal Experiment/
116	exp Experimental Animal/
117	animal model/
118	exp Rodent/
119	(rat or rats or rodent* or mouse or mice).ti.
120	or/112-119
121	104 not 120
122	limit 121 to english language
123	limit 122 to yr="2013 -Current"
124	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
125	123 not 124
126	systematic review/
127	meta-analysis/
128	(meta analy* or metanaly* or metaanaly*).ti,ab.
129	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
130	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
131	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
132	(search* adj4 literature).ab.
133	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
134	((pool* or combined) adj2 (data or trials or studies or results)).ab.
135	cochrane.jw.
136	or/126-135
137	random*.ti,ab.
138	factorial*.ti,ab.
139	(crossover* or cross over*).ti,ab.
140	((doubl* or singl*) adj blind*).ti,ab.
141	(assign* or allocat* or volunteer* or placebo*).ti,ab.
142	CROSSOVER PROCEDURE/
143	SINGLE BLIND PROCEDURE/
144	RANDOMIZED CONTROLLED TRIAL/
145	DOUBLE BLIND PROCEDURE/
146	or/137-145
147	125 and (136 or 146)

Database: Cochrane Database of Systematic Reviews Issue 7 of 12, July 2023

Cochrane Central Register of Controlled Trials Issue 7 of 12, July 2023

Date of last search: 12/07/2023

#1	MeSH descriptor: [Craniocerebral Trauma] this term only
#2	MeSH descriptor: [Brain Injuries] this term only
#3	MeSH descriptor: [Brain Hemorrhage, Traumatic] explode all trees
#4	MeSH descriptor: [Brain Injuries, Diffuse] explode all trees
#5	MeSH descriptor: [Brain Injuries, Traumatic] explode all trees
#6	MeSH descriptor: [Brain Injury, Chronic] explode all trees
#7	MeSH descriptor: [Shaken Baby Syndrome] this term only
#8	MeSH descriptor: [Brain Damage, Chronic] this term only
#9	MeSH descriptor: [Hypoxia, Brain] this term only
#10	MeSH descriptor: [Intracranial Hemorrhage, Traumatic] explode all trees
#11	MeSH descriptor: [Brain Neoplasms] explode all trees

#12	MeSH descriptor: [Brain Diseases] this term only
#13	MeSH descriptor: [Brain Abscess] this term only
#14	MeSH descriptor: [Brain Diseases, Metabolic] this term only
#15	MeSH descriptor: [Cerebellar Diseases] this term only
#16	MeSH descriptor: [Cerebrovascular Disorders] this term only
#17	MeSH descriptor: [Basal Ganglia Cerebrovascular Disease] this term only
#18	MeSH descriptor: [Cerebrovascular Trauma] this term only
#19	MeSH descriptor: [Intracranial Arteriovenous Malformations] this term only
#20	MeSH descriptor: [Intracranial Embolism and Thrombosis] this term only
#21	MeSH descriptor: [Intracranial Hemorrhages] this term only
#22	MeSH descriptor: [Vascular Headaches] this term only
#23	MeSH descriptor: [Encephalitis] this term only
#24	MeSH descriptor: [Hydrocephalus] this term only
#25	{or #1-#24}
#26	MeSH descriptor: [Stroke] explode all trees
#27	MeSH descriptor: [Dementia] this term only
#28	#26 or #27
#29	#25 NOT #28
#30	((brain* or cereb* or craniocereb* or cranial or intracrani* or neurocognit*) NEAR/2 (injur* or trauma* or damage* or disease* or diseases* or disorder* or infect* or hemorrhag* or haemorrhag* or neoplasm* or cancer* or tumour* or tumor* or insult* or impair* or ischemi* or ischaemi* or infarcti* or hypoxi* or drown*)):ti,ab
#31	(chronic* NEAR/1 trauma* NEAR/2 encephalopath*):ti,ab
#32	((infratentorial* or supratentorial* or hypothalam* or pituitar* or "choroid plexus") NEAR/2 (neoplasm* or cancer* or tumour* or tumor* or carcinom* or adenocarcinom*)):ti,ab
#33	(brain* NEAR/2 abscess*):ti,ab
#34	(carotid arter* NEAR/2 (disease* or injur*)):ti,ab
#35	(("basal ganglia" next disease*) or encephalitis or meningoencephalitis or hydrocephal* or "paraneoplastic cerebellar" next degenerat* or "shaken baby" next syndrome* or "shaking baby" next syndrome*):ti,ab
#36	MeSH descriptor: [Stroke] explode all trees
#37	MeSH descriptor: [Adolescent] this term only
#38	MeSH descriptor: [Minors] this term only
#39	MeSH descriptor: [Child] explode all trees
#40	MeSH descriptor: [Infant] explode all trees
#41	MeSH descriptor: [Pediatrics] explode all trees
#42	MeSH descriptor: [Puberty] explode all trees
#43	{or #37-#42}
#44	#36 and #43
#45	((stroke or strokes) NEAR/3 (paediatric* or pediatric* or child* or adolescen* or kid or kids or youth* or youngster* or minor or minors or underage* or "under age" or "under ages" or "under aged" or teen or teens or teenager* or juvenile* or boy or boys or boyhood or girl or girls or girlhood or schoolchild* or "school ages" or "school age" or schoolage* or "school age" or "school aged" or "under 16" or "under sixteen" or "under sixteens")):ti,ab
#46	MeSH descriptor: [Spinal Cord Injuries] explode all trees
#47	MeSH descriptor: [Spinal Cord Neoplasms] explode all trees
#48	MeSH descriptor: [Epidural Abscess] this term only
#49	MeSH descriptor: [Spinal Cord Diseases] this term only
#50	MeSH descriptor: [Spinal Cord Vascular Diseases] explode all trees
#51	MeSH descriptor: [Spinal Cord Compression] this term only
#52	MeSH descriptor: [Myelitis, Transverse] this term only
#53	((spinal* or spine or spines) NEAR/2 (injur* or trauma* or tumour* or tumor* or neoplasm* or cancer* or infect* or insult* or disease or diseases or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or hemorrhag* or haemorrhag*)):ti,ab
#54	("Central cord" next syndrome* or "transverse myelitis"):ti,ab
#55	(epidural* NEAR/2 (neoplasm* or cancer* or tumour* or tumor* or abscess*)):ti,ab

#56	((spinal* or spine or spines) NEAR/2 (viral* or virus* or polio* or "acquired immunodeficiency syndrome" or AIDS or HIV or bacterial* or neurosyphili* or neuro next syphili* or tubercul*)):ti,ab
#57	MeSH descriptor: [Peripheral Nerve Injuries] this term only
#58	MeSH descriptor: [Cranial Nerve Injuries] explode all trees
#59	MeSH descriptor: [Peripheral Nervous System Neoplasms] this term only
#60	MeSH descriptor: [Cranial Nerve Neoplasms] explode all trees
#61	MeSH descriptor: [Peripheral Nervous System Diseases] explode all trees
#62	MeSH descriptor: [Cranial Nerve Diseases] explode all trees
#63	((periph* or cranial*) NEAR/1 (nerve or nerves or "nervous system") NEAR/2 (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumour* or tumor* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome*)):ti,ab
#64	(Guillain* NEAR/1 Barr*):ti,ab
#65	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or "ocular motility" or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) NEAR/1 nerve* NEAR/1 injur*):ti,ab
#66	(optic* NEAR/1 nerve* NEAR/2 (neoplasm* or cancer* or tumour* or tumor*)):ti,ab
#67	(brachial next plexus NEAR/1 (neuropath* or neuritis)):ti,ab
#68	("complex regional pain" next syndrome* or causalgia or mononeuropath* or "nerve compression" next syndrome*):ti,ab
#69	((femoral or median or peroneal or radial or sciatic or tibial or ulnar) NEAR/1 neuropath*):ti,ab
#70	((carpal next tunnel or piriformis next muscle or tarsal next tunnel or thoracic next outlet) NEAR/1 syndrome*):ti,ab
#71	(pudendal next neuralgia or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*):ti,ab
#72	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or "ocular motility" or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) NEAR/1 nerve* NEAR/1 disease*):ti,ab
#73	(periph* NEAR/2 neuropath*):ti,ab
#74	(((periph* or cranial*) NEAR/2 (nerve or nerves or "nervous system")) and lupus):ti,ab
#75	((multi next focal* or multifocal*) NEAR/2 motor NEAR/1 neuropath*):ti,ab
#76	(((periph* or cranial*) NEAR/2 (nerve or nerves or nervous system)) and alcohol*):ti,ab
#77	{or #29-#35, #44-#76}
#78	MeSH descriptor: [Motor Neuron Disease] explode all trees
#79	MeSH descriptor: [Postpoliomyelitis Syndrome] this term only
#80	MeSH descriptor: [Parkinsonian Disorders] explode all trees
#81	MeSH descriptor: [Muscular Dystrophy, Duchenne] this term only
#82	MeSH descriptor: [Multiple Sclerosis] explode all trees
#83	MeSH descriptor: [Neuromuscular Diseases] this term only
#84	MeSH descriptor: [Spastic Paraplegia, Hereditary] this term only
#85	MeSH descriptor: [Friedreich Ataxia] this term only
#86	MeSH descriptor: [Multiple System Atrophy] explode all trees
#87	MeSH descriptor: [Supranuclear Palsy, Progressive] this term only
#88	MeSH descriptor: [Corticobasal Degeneration] explode all trees
#89	MeSH descriptor: [Leukodystrophy, Metachromatic] this term only
#90	MeSH descriptor: [Mitochondrial Myopathies] explode all trees
#91	MeSH descriptor: [Mucopolysaccharidoses] explode all trees
#92	MeSH descriptor: [Williams Syndrome] this term only
#93	MeSH descriptor: [Genetic Diseases, Inborn] this term only
#94	MeSH descriptor: [Rett Syndrome] this term only
#95	MeSH descriptor: [Fetal Alcohol Spectrum Disorders] this term only
#96	MeSH descriptor: [Dystonic Disorders] this term only
#97	MeSH descriptor: [Hereditary Sensory and Motor Neuropathy] this term only
#98	MeSH descriptor: [Spinal Dysraphism] this term only
#99	(neurolog* NEAR/1 (condition* or disease* or damage* or disorder* or impair*)):ti,ab
#100	((motor next neuron* or gehrig* or charcott* or kennedy*) NEAR/1 disease*):ti,ab
#101	((amyotroph* or primary) NEAR/1 lateral* NEAR/1 sclero*):ti,ab
#102	(bulbar NEAR/1 pals*):ti,ab

#103	((muscular or muscle* or bulbo) NEAR/1 atroph* NEAR/1 spin*):ti,ab
#104	(progressiv* NEAR/1 (muscular or muscle*) NEAR/1 atroph*):ti,ab
#105	((postpolio* or post next polio*) NEAR/1 (syndrome*)):ti,ab
#106	(Parkinson* or duchenne* or multiple next scleros* or sclerosos* or aphasia or creutzfeldt next jakob or huntington* or kluver next bucy):ti,ab
#107	(muscular NEAR/1 dystroph*):ti,ab
#108	(neuromusc* near/1 (disease* or disorder*)):ti,ab
#109	(heredit* NEAR/1 spastic* NEAR/1 parapleg*):ti,ab
#110	(friedreich* next ataxia*):ti,ab
#111	(("multiple system" or olivopontocerebellar) NEAR/1 atroph*):ti,ab
#112	((shy next drager next syndrome*) or striatonigral next degenerat* or batten next disease*):ti,ab
#113	(progressive NEAR/1 supranuclear NEAR/1 pals*):ti,ab
#114	(richardson* NEAR/1 (disease* or syndrome*)):ti,ab
#115	((corticobasal or "cortico basal") NEAR/1 degenerat*):ti,ab
#116	("white matter" NEAR/1 (disorder*)):ti,ab
#117	(metachromatic next leukodystroph* or mitochondrial next myopath* or mucopolysaccharidos*):ti,ab
#118	(lysosomal NEAR/1 storage NEAR/1 disorder*):ti,ab
#119	((genetic or William* or "catch-22" or rett* or congenital or fetal or "foetal alcohol") NEAR/1 (syndrome* or disorder*)):ti,ab
#120	(perinatal NEAR/1 (illness* or hypoxia*)):ti,ab
#121	(primary NEAR/1 (dystonia or dystonias)):ti,ab
#122	(heredit* NEAR/1 motor* NEAR/1 sens* NEAR/1 neuropath*):ti,ab
#123	(spina next (bifida or bifidas) or spinal next (dysraphism or dysraphisms)):ti,ab
#124	MeSH descriptor: [Movement Disorders] this term only
#125	MeSH descriptor: [Motor Disorders] this term only
#126	MeSH descriptor: [Conversion Disorder] this term only
#127	((functional* or psychogenic* or dissociative*) NEAR/1 neurologic* NEAR/1 (disorder* or dysfunction* or difficult*)):ti,ab
#128	((movement* or motor* or convers*) NEAR/1 (disorder* or dysfunct*)):ti,ab
#129	((psychogenic or dissociative or non-epilep* or nonepilep*) NEAR/1 (seizure* or convulsion* or fit or fits or spasm* or attack*)):ti,ab
#130	(pseudo next seizure or pseudoseizure):ti,ab
#131	(medical* NEAR/1 (unexplain* or un next explain*) NEAR/1 (symptom*)):ti,ab
#132	{or #77-#131}
#133	MeSH descriptor: [Employment] this term only
#134	MeSH descriptor: [Unemployment] this term only
#135	MeSH descriptor: [Workplace] this term only
#136	MeSH descriptor: [Work] this term only
#137	MeSH descriptor: [Occupations] this term only
#138	MeSH descriptor: [Workforce] this term only
#139	MeSH descriptor: [Work Engagement] this term only
#140	MeSH descriptor: [Career Mobility] this term only
#141	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or (labo* NEXT market*) or occupation*) NEAR/4 (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)):ti,ab
#142	MeSH descriptor: [Vocational Education] this term only
#143	MeSH descriptor: [Vocational Guidance] this term only
#144	MeSH descriptor: [Education, Professional] this term only
#145	MeSH descriptor: [Job Application] this term only
#146	MeSH descriptor: [Employment, Supported] this term only
#147	MeSH descriptor: [Sheltered Workshops] this term only
#148	MeSH descriptor: [Volunteers] this term only
#149	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or (labo* NEXT market*) or occupation* or professional*) NEAR/4 (coach* or training or trainee* or retrain* or shadow* or placement* or experience* or advice or guid* or counsel* or service* or educat* or program* or

	intervention* or scheme* or school* or (peer NEXT support*) or mentor* or (motivational NEXT interview*) or plan* or find* or apply* or applied or application)):ti,ab
#150	((career* or job* or vocation* or prevocation*) NEAR/2 (develop* or progress* or goal* or success* or opportunit*)):ti,ab
#151	((sheltered or supported or voluntary or paid or unpaid) NEXT (work* or employment or role*)):ti,ab
#152	(intern* or traineeship* or apprentice* or volunteering):ti,ab
#153	MeSH descriptor: [Rehabilitation, Vocational] this term only
#154	MeSH descriptor: [Return to Work] this term only
#155	MeSH descriptor: [Occupational Health] this term only
#156	MeSH descriptor: [Occupational Health Services] this term only
#157	MeSH descriptor: [Work Performance] this term only
#158	MeSH descriptor: [Work Schedule Tolerance] this term only
#159	MeSH descriptor: [Workload] this term only
#160	MeSH descriptor: [Work Capacity Evaluation] this term only
#161	MeSH descriptor: [Personnel Staffing and Scheduling] this term only
#162	MeSH descriptor: [Working Conditions] this term only
#163	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or (labo* NEXT market*) or occupation*) NEAR/4 (rehab* or telerehab* or neurorehab*)):ti,ab
#164	(VR or EIVR):ti,ab
#165	(((return* or back or stay* or transition* or resum*) NEAR/4 (work* or employ* or labo*)) or RTW):ti,ab
#166	((graded or phase* or gradual) NEAR/4 return*):ti,ab
#167	((job* or work* or duty or duties or responsibilit*) NEAR/2 (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)):ti,ab
#168	(reasonable NEAR/4 (accommodat* or adjust* or modif* or flexib* or accessib*)):ti,ab
#169	((sustain* or maintain* or retain* or retention* or stable or stability) NEAR/4 (career* or job* or work* or employ* or occupation*)):ti,ab
#170	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 ((voice* or speech* or speak* or communicat*) NEAR/4 (software* or tech* or device* or aid* or recogn*))):ti,ab
#171	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 ((assist* or adapt* or "self help" or support*) NEAR/4 (tech* or device* or tool* or equipment* or hardware* or software*))):ti,ab
#172	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 (comput* NEAR/4 (interfac* or hardware* or software* or equipment))):ti,ab
#173	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 (keyboard* or joystick* or (roller NEXT ball*))):ti,ab
#174	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 (mouse NEAR/2 computer*)):ti,ab
#175	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/6 (eye* NEAR/4 (gaze* or gazing or track*) NEAR/4 (software or technolog* or device*))):ti,ab
#176	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/2 (function* or skill* or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)):ti,ab
#177	((work* or occupational) NEXT (environment* or condition*)):ti,ab
#178	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) NEAR/4 ergonomic*):ti,ab
#179	((employee* or occupation* or personnel) NEAR/2 (health* or assistance or manage*)):ti,ab
#180	MeSH descriptor: [Sick Leave] this term only
#181	MeSH descriptor: [Pensions] this term only
#182	MeSH descriptor: [Retirement] this term only
#183	("employment support allowance" or "New Deal for Disabled People" or WORKSTEP):ti,ab
#184	"Access to work":ti,ab
#185	((employment or unemployment) NEAR/2 benefit*):ti,ab
#186	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation* or (human NEXT resource*) or HR) NEAR/6 ((pay or financ* or income*) NEAR/1 (protect* or support* or assist* or aid*))):ti,ab
#187	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation* or (human NEXT resource*) or HR) NEAR/6 (((disab* or sick*) NEAR/2 (benefit* or pay)) or "social security" or "employee assistance" or pension* or retire*)):ti,ab

#188	((medical* or disab* or sick*) NEAR/1 (leav* or absen*)):ti,ab
#189	{or #133-#188}
#190	#132 AND #189
#191	"conference":pt or (clinicaltrials or trialsearch):so
#192	#190 not #191 with Publication Year from 2013 to 2023, in Trials
#193	#190 not #191 with Cochrane Library publication date Between Jan 2013 and Jul 2023, in Cochrane Reviews

Social Policy and Practice <202304>

Date of last search: 07/07/2023

1	((brain* or cereb* or craniocereb* or cranial or intracrani* or neurocognit*) adj2 (injur* or trauma* or damage* or disease*1 or disorder* or infect* or h?emorrhag* or neoplasm* or cancer* or tumo?r* or insult* or impair* or ischemi* or ischaemi* or infarcti* or hypoxi* or drown*)).ti,ab.
2	((brain* or cereb* or craniocereb* or cranial* or intracrani* or neurocognit*) and (injur* or trauma* or damage* or disease*1 or disorder* or infect* or h?emorrhag* or neoplasm* or cancer* or tumo?r* or insult* or impair* or ischemi* or ischaemi* or infarcti* or hypoxi* or drown*)).hw.
3	(chronic* adj1 trauma* adj2 encephalopath*).ti,ab.
4	(chronic* and trauma* and encephalopath*).hw.
5	((infratentorial* or supratentorial* or hypothalam* or pituitar* or choroid plexus) adj2 (neoplasm* or cancer* or tumo?r* or carcinom* or adenocarcinom*)).ti,ab.
6	((infratentorial* or supratentorial* or hypothalam* or pituitar* or choroid plexus*) and (neoplasm* or cancer* or tumo?r* or carcinom* or adenocarcinom*)).hw.
7	(brain* adj2 abscess*).ti,ab.
8	(brain* and abscess*).hw.
9	(carotid arter* adj2 (disease* or injur*)).ti,ab.
10	(carotid arter* and (disease* or injur*)).hw.
11	("basal ganglia disease*" or encephalitis or meningoencephalitis or hydrocephal* or "paraneoplastic cereb* degenerat*" or "shak* baby syndrome*").ti,ab.
12	("basal ganglia disease*" or encephalitis* or meningoencephalitis* or hydrocephal* or "paraneoplastic cereb* degenerat*" or "shak* baby syndrome*").hw.
13	(stroke? adj3 (p?ediatric* or child* or adolescen* or kid or kids or youth* or youngster* or minor or minors or underage* or under-age* or "under age*" or teen or teens or teenager* or juvenile* or boy or boys or boyhood or girl or girls or girlhood or schoolchild* or "school age*" or schoolage* or "under 16" or "under sixteen*")).ti,ab.
14	(stroke* and (p?ediatric* or child* or adolescen* or kid* or youth* or youngster* or minor* or underage* or under-age* or "under age*" or teen* or juvenile* or boy* or girl* or schoolchild* or "school age*" or schoolage* or "under 16*" or "under sixteen*")).hw.
15	((spinal* or spine?) adj2 (injur* or trauma* or tumo?r* or neoplasm* or cancer* or infect* or insult* or disease? or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or h?emorrhag*)).ti,ab.
16	((spinal* or spine*) and (injur* or trauma* or tumo?r* or neoplasm* or cancer* or infect* or insult* or disease* or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or h?emorrhag*)).hw.
17	(Central cord syndrome* or transverse myelitis).ti,ab.
18	(Central cord syndrome* or transverse myelitis*).hw.
19	(epidural* adj2 (neoplasm* or cancer* or tumo?r* or abscess*)).ti,ab.
20	(epidural* and (neoplasm* or cancer* or tumo?r* or abscess*)).hw.
21	((spinal* or spine?) adj2 (viral* or virus* or polio* or acquired immunodeficiency syndrome or AIDS or HIV or bacterial* or neurosyphili* or neuro-syphili* or tubercul*)).ti,ab.
22	((spinal* or spine*) and (viral* or virus* or polio* or acquired immunodeficiency syndrome* or AIDS or HIV or bacterial* or neurosyphili* or neuro-syphili* or tubercul*)).hw.

23	((periph* or cranial*) adj1 (nerve? or nervous system) adj2 (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumo?r* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome?)).ti,ab.
24	((periph* or cranial*) and (nerve* or nervous system*) and (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumo?r* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome*)).hw.
25	(Guillain* adj1 Barr*).ti,ab.
26	(Guillain* and Barr*).hw.
27	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 injur*).ti,ab.
28	((abducen* or accessor* or facial* or glossopharyngeal* or hypoglossal* or oculomotor* or ocular* motility* or olfactory* or optic* or trigeminal* or trochlear* or vestibulocochlear*) and nerve* and injur*).hw.
29	(optic* adj1 nerve* adj2 (neoplasm* or cancer* or tumo?r*)).ti,ab.
30	(optic* and nerve* and (neoplasm* or cancer* or tumo?r*)).hw.
31	(brachial plexus adj1 (neuropath* or neuritis)).ti,ab.
32	(brachial plexus* and (neuropath* or neuritis*)).hw.
33	(complex regional pain syndrome* or causalgia or mononeuropath* or nerve compression syndrome*).ti,ab.
34	(complex regional pain syndrome* or causalgia* or mononeuropath* or nerve compression syndrome*).hw.
35	((femoral or median or peroneal or radial or sciatic or tibial or ulnar) adj1 neuropath*).ti,ab.
36	((femoral* or median* or peroneal* or radial* or sciatic* or tibial* or ulnar*) and neuropath*).hw.
37	((carpal-tunnel or piriformis-muscle or tarsal-tunnel or thoracic-outlet) adj1 syndrome*).ti,ab.
38	((carpal-tunnel* or piriformis-muscle* or tarsal-tunnel* or thoracic-outlet*) and syndrome*).hw.
39	(pudendal neuralgia or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*).ti,ab.
40	(pudendal neuralgia* or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*).hw.
41	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 disease*).ti,ab.
42	((abducen* or accessory* or facial* or glossopharyngeal* or hypoglossal* or oculomotor* or ocular motility* or olfactory* or optic* or trigeminal* or trochlear* or vestibulocochlear*) and nerve* and disease*).hw.
43	(periph* adj2 neuropath*).ti,ab.
44	(periph* and neuropath*).hw.
45	(((periph* or cranial*) adj2 (nerve? or nervous system)) and lupus).ti,ab.
46	((periph* or cranial*) and (nerve* or nervous system*) and lupus*).hw.
47	((multi-focal* or multifocal*) adj2 motor adj1 neuropath*).ti,ab.
48	((multi-focal* or multifocal*) and motor* and neuropath*).hw.
49	(((periph* or cranial*) adj2 (nerve? or nervous system)) and alcohol*).ti,ab.
50	((periph* or cranial*) and (nerve* or nervous system*) and alcohol*).hw.
51	(neurolog* adj1 (condition* or disease* or damage* or disorder* or impair*)).ti,ab.
52	(neurolog* and (condition* or disease* or damage* or disorder* or impair*)).hw.
53	((motor-neuron* or gehrig* or charcott* or kennedy*) adj1 disease*).ti,ab.
54	((motor-neuron* or gehrig* or charcott* or kennedy*) and disease*).hw.
55	((amyotroph* or primary) adj1 lateral* adj1 sclero*).ti,ab.
56	((amyotroph* or primary*) and lateral* and sclero*).hw.
57	(bulbar adj1 pals*).ti,ab.
58	(bulbar* and pals*).hw.
59	((muscular or muscle* or bulbo) adj1 atroph* adj1 spin*).ti,ab.
60	((muscular* or muscle* or bulbo*) and atroph* and spin*).hw.
61	(progressiv* adj1 (muscular or muscle*) adj1 atroph*).ti,ab.
62	(progressiv* and (muscular* or muscle*) and atroph*).hw.
63	((postpolio* or post-polio*) adj1 syndrome?).ti,ab.
64	((postpolio* or post-polio*) and syndrome*).hw.

65	(Parkinson* or duchenne* or multiple scleros?s* or aphasia or creutzfeldt-jakob or huntington* or kluver-bucy).ti,ab.
66	(Parkinson* or duchenne* or multiple scleros?s* or aphasia* or creutzfeldt-jakob* or huntington* or kluver-bucy*).hw.
67	(muscular adj1 dystroph*).ti,ab.
68	(muscular* and dystroph*).hw.
69	(neuromusc* adj1 (disease* or disorder?)).ti,ab.
70	(neuromusc* and (disease* or disorder*)).hw.
71	(heredit* adj1 spastic* adj1 parapleg*).ti,ab.
72	(heredit* and spastic* and parapleg*).hw.
73	"friedreich* ataxia*".ti,ab.
74	"friedreich ataxia*".hw.
75	((multiple system or olivopontocerebellar) adj1 atroph*).ti,ab.
76	((multiple system* or olivopontocerebellar*) and atroph*).hw.
77	(shy-drager syndrome* or striatonigral degenerat* or batten* disease?).ti,ab.
78	(shy-drager syndrome* or striatonigral degenerat* or batten* disease*).hw.
79	(progressive adj1 supranuclear adj1 pals*).ti,ab.
80	(progressive* and supranuclear* and pals*).hw.
81	(richardson* adj1 (disease? or syndrome?)).ti,ab.
82	(richardson* and (disease* or syndrome*)).hw.
83	((corticobasal or cortico basal) adj1 degenerat*).ti,ab.
84	((corticobasal* or cortico basal*) and degenerat*).hw.
85	(white adj1 matter adj1 disorder?).ti,ab.
86	(white* and matter* and disorder*).hw.
87	(metachromatic leukodystroph* or mitochondrial myopath* or mucopolysaccharidos*).ti,ab.
88	(metachromatic leukodystroph* or mitochondrial myopath* or mucopolysaccharidos*).hw.
89	(lysosomal adj1 storage adj1 disorder?).ti,ab.
90	(lysosomal* and storage* and disorder*).hw.
91	((genetic or William* or catch-22 or rett* or congenital or f?etal alcohol) adj1 (syndrome or disorder*)).ti,ab.
92	((genetic* or William* or catch-22* or rett* or congenital* or f?etal alcohol*) and (syndrome* or disorder*)).hw.
93	(perinatal illness* or perinatal hypoxia*).ti,ab.
94	(perinatal illness* or perinatal hypoxia*).hw.
95	(primary adj1 dystonia?).ti,ab.
96	(primary* and dystonia*).hw.
97	(heredit* adj1 motor* adj1 sens* adj1 neuropath*).ti,ab.
98	(heredit* and motor* and sens* and neuropath*).hw.
99	(spina bifida? or spinal dysraphism?).ti,ab.
100	(spina bifida* or spinal dysraphism*).hw.
101	((functional* or psychogenic* or dissociative*) adj1 neurologic* adj1 (disorder* or dysfunction* or difficult*)).ti,ab.
102	((functional* or psychogenic* or dissociative*) and neurologic* and (disorder* or dysfunction* or difficult*)).hw.
103	((movement* or motor* or convers*) adj1 (disorder* or dysfunct*)).ti,ab.
104	((movement* or motor* or convers*) and (disorder* or dysfunct*)).hw.
105	((psychogenic or dissociative or non-epilep* or nonepilep*) adj1 (seizure* or convulsion* or fit or fits or spasm* or attack*)).ti,ab.
106	((psychogenic* or dissociative* or non-epilep* or nonepilep*) and (seizure* or convulsion* or fit* or fits* or spasm* or attack*)).hw.
107	(pseudo-seizure* or pseudoseizure*).ti,ab.
108	(pseudo-seizure* or pseudoseizure*).hw.
109	(medical* adj1 (unexplain* or un-explain*) adj1 symptom?).ti,ab.
110	(medical* and (unexplain* or un-explain*) and symptom*).hw.
111	or/1-110

112	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)).ti,ab.
113	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market* or occupation*) and (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)).hw.
114	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation* or professional*) adj4 (coach* or training or trainee* or retrain* or shadow* or placement? or experience* or advice or guid* or counsel* or service? or educat* or program* or intervention* or scheme? or school* or peer support* or mentor* or motivational interview* or plan* or find* or apply? or applied or application)).ti,ab.
115	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market* or occupation* or professional*) and (coach* or training or trainee* or retrain* or shadow* or placement* or experience* or advice or guid* or counsel* or service* or educat* or program* or intervention* or scheme* or school* or peer support* or mentor* or motivational interview* or plan* or find* or apply* or applied or application)).hw.
116	((career? or job? or vocation* or prevocation*) adj2 (develop* or progress* or goal? or success* or opportunit*)).ti,ab.
117	((career* or job* or vocation* or prevocation*) and (develop* or progress* or goal* or success* or opportunit*)).hw.
118	((sheltered or supported or voluntary or paid or unpaid) adj (work* or employment or role?)).ti,ab.
119	((sheltered or supported or voluntary or paid or unpaid) and (work* or employment or role*)).hw.
120	(intern? or internship? or traineeship? or apprentice* or volunteering).ti,ab.
121	(intern* or internship* or traineeship* or apprentice* or volunteering).hw.
122	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (rehab* or telerehab* or neurorehab*)).ti,ab.
123	((career* or job* or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market* or occupation*) and (rehab* or telerehab* or neurorehab*)).hw.
124	(VR or EIVR).ti,ab.
125	(VR or EIVR).hw.
126	(((return* or back or stay* or transition* or resum*) adj4 (work* or employ* or labo?r)) or RTW).ti,ab.
127	(((return* or back or stay* or transition* or resum*) and (work* or employ* or labo?r)) or RTW).hw.
128	((graded or phase* or gradual) adj4 return*).ti,ab.
129	((graded or phase* or gradual) and return*).hw.
130	((job? or work* or duty or duties or responsibilit*) adj2 (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)).ti,ab.
131	((job* or work* or duty or duties or responsibilit*) and (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)).hw.
132	(reasonable adj4 (accommodat* or adjust* or modif* or flexib* or accessib*)).ti,ab.
133	(reasonable and (accommodat* or adjust* or modif* or flexib* or accessib*)).hw.
134	((sustain* or maintain* or retain* or retention* or stable or stability) adj4 (career? or job? or work* or employ* or occupation*)).ti,ab.
135	((sustain* or maintain* or retain* or retention* or stable or stability) and (career* or job* or work* or employ* or occupation*)).hw.
136	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((voice? or speech* or speak* or communicat*) adj4 (software* or tech* or device? or aid? or recogn*))).ti,ab.
137	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and ((voice* or speech* or speak* or communicat*) and (software* or tech* or device* or aid* or recogn*))).hw.
138	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((assist* or adapt* or "self help" or support*) adj4 (tech* or device* or tool* or equipment* or hardware* or software*))).ti,ab.
139	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and ((assist* or adapt* or "self help*" or support*) and (tech* or device* or tool* or equipment* or hardware* or software*))).hw.
140	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (comput* adj4 (interfac* or hardware* or software* or equipment))).ti,ab.
141	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and (comput* and (interfac* or hardware* or software* or equipment))).hw.

142	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (keyboard? or joystick? or roller ball?)).ti,ab.
143	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and (keyboard* or joystick* or roller ball*)).hw.
144	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (mouse adj2 computer*)).ti,ab.
145	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and (mouse and computer*)).hw.
146	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (eye? adj4 (gaze? or gazing or track*) adj4 (software or technolog* or device?))).ti,ab.
147	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and (eye* and (gaze* or gazing or track*) and (software or technolog* or device*))).hw.
148	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj2 (function* or skill? or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)).ti,ab.
149	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and (function* or skill* or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)).hw.
150	((work* or occupational) adj (environment? or condition?)).ti,ab.
151	((work* or occupational) and (environment* or condition*)).hw.
152	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj4 ergonomic*).ti,ab.
153	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation*) and ergonomic*).hw.
154	((employee? or occupation* or personnel) adj2 (health* or assistance or manage*)).ti,ab.
155	((employee* or occupation* or personnel) and (health* or assistance or manage*)).hw.
156	(employment support allowance or New Deal for Disabled People or WORKSTEP).ti,ab.
157	(employment support allowance or New Deal for Disabled People or WORKSTEP).hw.
158	Access to work.ti,ab.
159	Access to work.hw.
160	((employment or unemployment) adj2 benefit?).ti,ab.
161	((employment or unemployment) and benefit*).hw.
162	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj6 ((pay or financ* or income?) adj1 (protect* or support* or assist* or aid*))).ti,ab.
163	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation* or human resource* or HR) and ((pay or financ* or income*) and (protect* or support* or assist* or aid*))).hw.
164	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj4 (((disab* or sick*) adj2 (benefit? or pay)) or social security or employee assistance or pension? or retire*)).ti,ab.
165	((career* or job* or work* or employment or employer* or employee* or vocation* or occupation* or human resource* or HR) and (((disab* or sick*) and (benefit* or pay)) or social security or employee assistance or pension* or retire*)).hw.
166	((medical* or disab* or sick*) adj1 (leav* or absen*)).ti,ab.
167	((medical* or disab* or sick*) and (leav* or absen*)).hw.
168	or/112-167
169	111 and 168
170	limit 169 to yr="2013 -Current"

Database: PsycInfo <1987 to June Week 4 2023>

Date of last search: 07/07/2023

1	(exp Brain Injuries/ or anoxia/ or exp brain disorders/ or exp cerebrovascular disorders/ or exp headache/) not (exp Dementia/ or Cerebrovascular Accidents/)
2	((brain* or cereb* or craniocereb* or cranial or intracrani* or neurocognit*) adj2 (injur* or trauma* or damage* or disease*1 or disorder* or infect* or h?emorrhag* or neoplasm* or cancer* or tumo?r* or insult* or impair* or ischemi* or ischaemi* or infarcti* or hypoxi* or drown*)).ti,ab.

3	(chronic* adj1 trauma* adj2 encephalopath*).ti,ab.
4	((infratentorial* or supratentorial* or hypothalam* or pituitar* or choroid plexus) adj2 (neoplasm* or cancer* or tumo?r* or carcinom* or adenocarcinom*)).ti,ab.
5	(brain* adj2 abscess*).ti,ab.
6	(carotid arter* adj2 (disease* or injur*)).ti,ab.
7	("basal ganglia disease*" or encephalitis or meningoencephalitis or hydrocephal* or "paraneoplastic cereb* degenerat*" or "shak* baby syndrome*").ti,ab.
8	Cerebrovascular Accidents/ and (exp childhood development/ or exp adolescent development/ or pediatrics/ or puberty/)
9	(stroke? adj3 (p?ediatric* or child* or adolescen* or kid or kids or youth* or youngster* or minor or minors or underage* or under-age* or "under age*" or teen or teens or teenager* or juvenile* or boy or boys or boyhood or girl or girls or girlhood or schoolchild* or "school age*" or schoolage* or "under 16" or "under sixteen*")).ti,ab.
10	spinal cord injuries/ or (Spinal Cord/ and neoplasms/) or (Cardiovascular Disorders/ and spinal cord/) or exp myelitis/
11	((spinal* or spine?) adj2 (injur* or trauma* or tumo?r* or neoplasm* or cancer* or infect* or insult* or disease? or disorder* or degenrat* or compress* or vascular* or ischemi* or ischaemi* or infarct* or h?emorrhag*)).ti,ab.
12	(Central cord syndrome* or transverse myelitis).ti,ab.
13	(epidural* adj2 (neoplasm* or cancer* or tumo?r* or abscess*)).ti,ab.
14	((spinal* or spine?) adj2 (viral* or virus* or polio* or acquired immunodeficiency syndrome or AIDS or HIV or bacterial* or neurosyphili* or neuro-syphili* or tubercul*)).ti,ab.
15	(exp Peripheral Nervous System/ and (Injuries/ or neoplasms/)) or nervous system disorders/
16	((periph* or cranial*) adj1 (nerve? or nervous system) adj2 (injur* or trauma* or disorder* or disease* or damage* or neoplasm* or cancer* or tumo?r* or inflamm* or autoimmun* or paraneoplastic* or neuropath* or syndrome?)).ti,ab.
17	(Guillain* adj1 Barr*).ti,ab.
18	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 injur*).ti,ab.
19	(optic* adj1 nerve* adj2 (neoplasm* or cancer* or tumo?r*)).ti,ab.
20	(brachial plexus adj1 (neuropath* or neuritis)).ti,ab.
21	(complex regional pain syndrome* or causalgia or mononeuropath* or nerve compression syndrome*).ti,ab.
22	((femoral or median or peroneal or radial or sciatic or tibial or ulnar) adj1 neuropath*).ti,ab.
23	((carpal-tunnel or piriformis-muscle or tarsal-tunnel or thoracic-outlet) adj1 syndrome*).ti,ab.
24	(pudendal neuralgia or polyneuropath* or polyradiculoneuropath* or polyradiculopath* or radiculopath*).ti,ab.
25	((abducen* or accessory or facial or glossopharyngeal or hypoglossal or oculomotor or ocular motility or olfactory or optic* or trigeminal or trochlear or vestibulocochlear) adj1 nerve* adj1 disease*).ti,ab.
26	(periph* adj2 neuropath*).ti,ab.
27	(((periph* or cranial*) adj2 (nerve? or nervous system)) and lupus).ti,ab.
28	((multi-focal* or multifocal*) adj2 motor adj1 neuropath*).ti,ab.
29	(((periph* or cranial*) adj2 (nerve? or nervous system)) and alcohol*).ti,ab.
30	motor neurons/ or exp muscular disorders/ or exp neuromuscular disorders/ or multiple sclerosis/ or neurodegenerative diseases/ or Progressive Supranuclear Palsy/ or corticobasal degeneration/ or Metabolism Disorders/ or Williams Syndrome/ or genetic disorders/ or rett syndrome/ or fetal alcohol syndrome/ or exp peripheral neuropathy/ or spina bifida/
31	(neurolog* adj1 (condition* or disease* or damage* or disorder* or impair*)).ti,ab.
32	((motor-neuron* or gehrig* or charcott* or kennedy*) adj1 disease*).ti,ab.
33	((amyotroph* or primary) adj1 lateral* adj1 sclero*).ti,ab.
34	(bulbar adj1 pals*).ti,ab.
35	((muscular or muscle* or bulbo) adj1 atroph* adj1 spin*).ti,ab.
36	(progressiv* adj1 (muscular or muscle*) adj1 atroph*).ti,ab.
37	((postpolio* or post-polio*) adj1 syndrome?).ti,ab.
38	(Parkinson* or duchenne* or multiple scleros?s* or aphasia or creutzfeldt-jakob or huntington* or kluver-bucy).ti,ab.
39	(muscular adj1 dystroph*).ti,ab.
40	(neuromusc* adj1 (disease* or disorder?)).ti,ab.

41	(heredit* adj1 spastic* adj1 parapleg*).ti,ab.
42	"friedreich* ataxia*".ti,ab.
43	((multiple system or olivopontocerebellar) adj1 atroph*).ti,ab.
44	(shy-drager syndrome* or striatonigral degenerat* or batten* disease?).ti,ab.
45	(progressive adj1 supranuclear adj1 pals*).ti,ab.
46	(richardson* adj1 (disease? or syndrome?)).ti,ab.
47	((corticobasal or cortico basal) adj1 degenerat*).ti,ab.
48	(white adj1 matter adj1 disorder?).ti,ab.
49	(metachromatic leukodystroph* or mitochondrial myopath* or mucopolysaccharidos*).ti,ab.
50	(lysosomal adj1 storage adj1 disorder?).ti,ab.
51	((genetic or William* or catch-22 or rett* or congenital or f?etal alcohol) adj1 (syndrome or disorder*)).ti,ab.
52	(perinatal illness* or perinatal hypoxia*).ti,ab.
53	(primary adj1 dystonia?).ti,ab.
54	(heredit* adj1 motor* adj1 sens* adj1 neuropath*).ti,ab.
55	(spina bifida? or spinal dysraphism?).ti,ab.
56	conversion disorder/
57	((functional* or psychogenic* or dissociative*) adj1 neurologic* adj1 (disorder* or dysfunction* or difficult*)).ti,ab.
58	((movement* or motor* or convers*) adj1 (disorder* or dysfunct*)).ti,ab.
59	((psychogenic or dissociative or non-epilep* or nonepilep*) adj1 (seizure* or convulsion* or fit or fits or spasm* or attack*)).ti,ab.
60	(pseudo-seizure* or pseudoseizure*).ti,ab.
61	(medical* adj1 (unexplain* or un-explain*) adj1 symptom?).ti,ab.
62	or/1-61
63	exp employment status/
64	exp occupations/ or career change/ or occupational choice/ or occupational mobility/ or reemployment/ or employee engagement/ or job search/
65	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (participat* or engage* or reengage* or integrat* or reintegrat* or enter* or reenter* or join* or rejoin* or leav* or chang* or mobility)).ti,ab.
66	exp vocational education/ or occupational guidance/ or vocational counselors/ or career education/ or career development/ or professional development/ or professional certification/
67	training/ or personnel training/ or job applicants/ or coaching/ or coaches/ or mentor/ or occupational aspirations/
68	exp Sheltered Workshops/ or exp Supported Employment/
69	apprenticeship/ or *volunteers/
70	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation* or professional*) adj4 (coach* or training or trainee* or retrain* or shadow* or placement? or experience* or advice or guid* or counsel* or service? or educat* or program* or intervention* or scheme? or school* or peer support* or mentor* or motivational interview* or plan* or find* or apply? or applied or application)).ti,ab.
71	((career? or job? or vocation* or prevocation*) adj2 (develop* or progress* or goal? or success* or opportunit*)).ti,ab.
72	((sheltered or supported or voluntary or paid or unpaid) adj (work* or employment or role?)).ti,ab.
73	(intern? or internship? or traineeship? or apprentice* or volunteering).ti,ab.
74	vocational rehabilitation/ or vocational evaluation/ or workplace intervention/ or exp disability management/ or employee retention/
75	occupational health/ or occupational adjustment/ or work adjustment training/
76	exp job performance/ or exp working conditions/ or employee assistance programs/
77	((career? or job? or work* or employ* or unemploy* or vocation* or prevocation* or labo?r market? or occupation*) adj4 (rehab* or telerehab* or neurorehab*)).ti,ab.
78	(VR or EIVR).ti,ab.
79	(((return* or back or stay* or transition* or resum*) adj4 (work* or employ* or labo?r)) or RTW).ti,ab.
80	((graded or phase* or gradual) adj4 return*).ti,ab.
81	((job? or work* or duty or duties or responsibilit*) adj2 (accommodat* or adjust* or adapt* or modif* or flexib* or accessib* or pace* or pacing or design* or redesign or reduc*)).ti,ab.

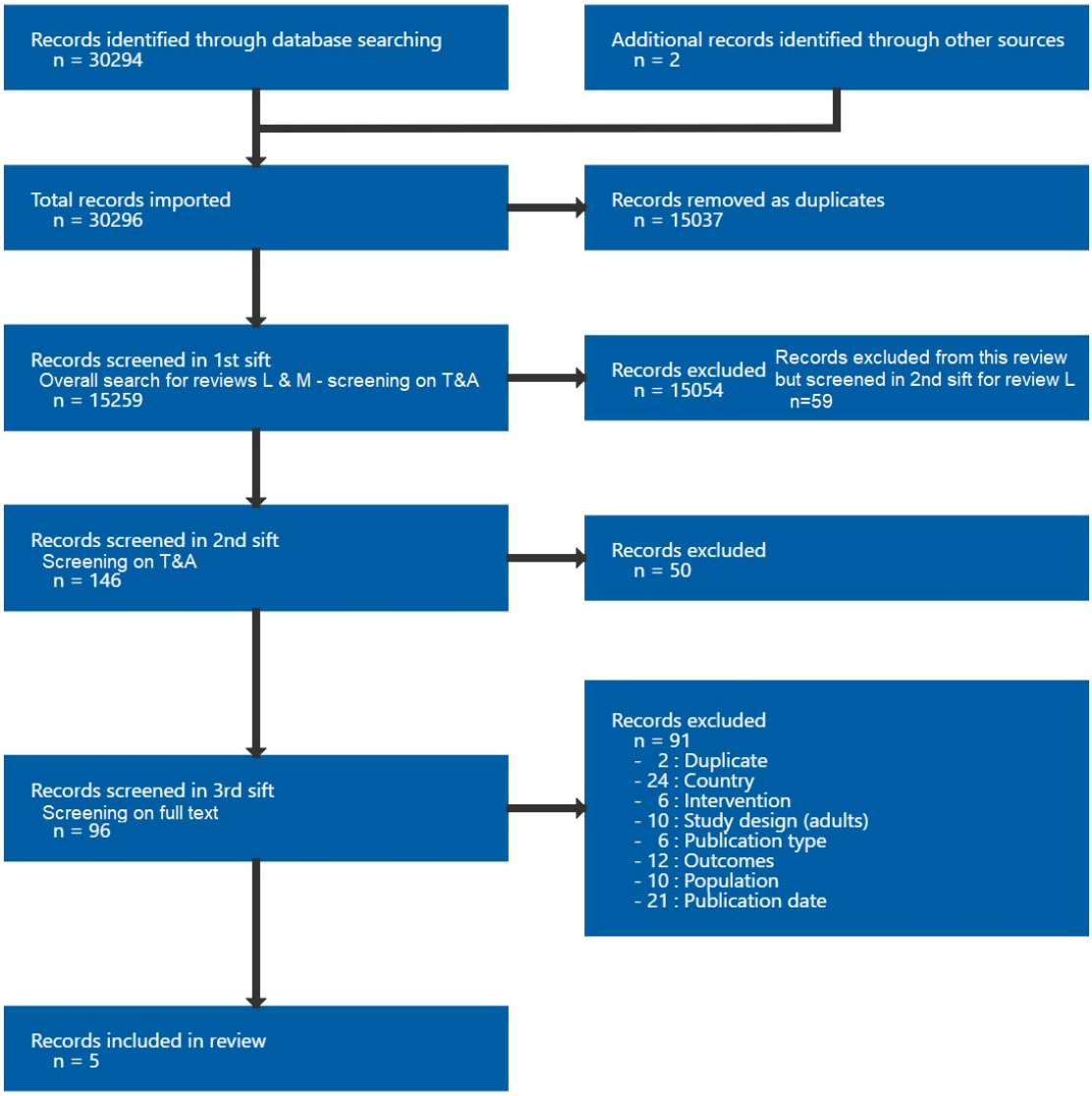
82	(reasonable adj4 (accommodat* or adjust* or modif* or flexib* or accessib*)).ti,ab.
83	((sustain* or maintain* or retain* or retention* or stable or stability) adj4 (career? or job? or work* or employ* or occupation*)).ti,ab.
84	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((voice? or speech* or speak* or communicat*) adj4 (software* or tech* or device? or aid? or recogn*))).ti,ab.
85	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 ((assist* or adapt* or "self help" or support*) adj4 (tech* or device* or tool* or equipment* or hardware* or software*))).ti,ab.
86	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (comput* adj4 (interfac* or hardware* or software* or equipment))).ti,ab.
87	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (keyboard? or joystick? or roller ball?)).ti,ab.
88	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (mouse adj2 computer*)).ti,ab.
89	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj6 (eye? adj4 (gaze? or gazing or track*) adj4 (software or technolog* or device?))).ti,ab.
90	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj2 (function* or skill? or productiv* or fitness or assess* or evaluat* or capacit* or abilit* or tolera*)).ti,ab.
91	((work* or occupational) adj (environment? or condition?)).ti,ab.
92	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation*) adj4 ergonomic*).ti,ab.
93	((employee? or occupation* or personnel) adj2 (health* or assistance or manage*)).ti,ab.
94	employee leave benefits/ or exp employee health insurance/ or employee pension plans/ or disability evaluation/ or exp government programs/ or retirement/
95	(employment support allowance or New Deal for Disabled People or WORKSTEP).ti,ab.
96	Access to work.ti,ab.
97	((employ* or unemploy*) adj2 benefit?).ti,ab.
98	((career? or job? or work* or employment or employer? or employee? or vocation* or occupation* or human resource? or HR) adj6 ((pay or financ* or income?) adj1 (protect* or support* or assist* or aid?))).ti,ab.
99	((career? or job? or work* or employ* or vocation* or occupation* or human resource? or HR) adj4 (((disab* or sick*) adj2 (benefit? or pay)) or social security or employee assistance or pension? or retire*)).ti,ab.
100	((medical* or disab* or sick*) adj1 (retire* on leav* or absen*)).ti,ab.
101	or/63-100
102	62 and 101
103	(letter or editorial or comment reply).dt. or case report/
104	(letter or comment*).ti.
105	or/103-104
106	exp randomized controlled trial/
107	random*.ti,ab.
108	or/106-107
109	105 not 108
110	animal.po.
111	(rat or rats or rodent* or mouse or mice).ti.
112	or/109-111
113	102 not 112
114	limit 113 to english language
115	limit 114 to yr="2013 -Current"
116	(meta analysis or "systematic review").md.
117	META ANALYSIS/
118	SYSTEMATIC REVIEW/
119	(meta analy* or metanaly* or metaanaly*).ti,ab.
120	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
121	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
122	(search strategy or search criteria or systematic search or study selection or data extraction).ab.

123	(search* adj4 literature).ab.
124	((pool* or combined) adj2 (data or trials or studies or results)).ab.
125	(medline or pubmed or cochrane or embase or psychlit or psyclit or cinahl or science citation index or bids or cancerlit).ab.
126	or/116-125
127	clinical trial.md.
128	Clinical trials/
129	Randomized controlled trials/
130	Randomized clinical trials/
131	assign*.ti,ab.
132	allocat*.ti,ab.
133	crossover*.ti,ab.
134	cross over*.ti,ab.
135	((doubl* or singl*) adj blind*).ti,ab.
136	factorial*.ti,ab.
137	placebo*.ti,ab.
138	random*.ti,ab.
139	volunteer*.ti,ab.
140	trial?.ti,ab.
141	or/127-140
142	115 and (126 or 141)

Appendix C Effectiveness evidence study selection

Study selection for: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Figure 1: Study selection flow chart



Appendix D Evidence tables

Evidence tables for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Table 5: Evidence tables

Dorstyn, 2018

Bibliographic Reference	Dorstyn, Diana; Roberts, Rachel; Murphy, Gregory; Kneebone, Ian; Craig, Ashley; Migliorini, Christine; Online Resource to Promote Vocational Interests Among Job Seekers With Multiple Sclerosis: A Randomized Controlled Trial in Australia.; Archives of physical medicine and rehabilitation; 2018; vol. 99 (no. 2); 272-280

Study details

Country/ies where study was carried out	Australia
Study type	Randomised controlled trial (RCT)
Study dates	May 2016 - August 2016
Inclusion criteria	Participants had to: - Be diagnosed with multiple sclerosis, - Be aged over 18 years, - Live in the community, - Be actively seeking employment (either returning to work or currently employed but looking for alternative roles),

	- Be fluent in English, - Have access to a device with internet capability.
Exclusion criteria	- People retired from employment
Patient characteristics	N=95 adults with multiple sclerosis - Work and MS: n=45 - Waitlist control: n=50 Age in years [Mean (SD)]: - Work and MS: 41.40 (11.36) - Waitlist control: 41.20 (8.34) Sex (M/F): - Work and MS: n=8/n=37 - Waitlist control: n=6/n=44 Time since diagnosis in years [Mean (SD)]: - Work and MS: 7.29 (9.54) - Waitlist control: 5.60 (4.79)

	Chronic neurological disorder category: Progressive neurological diseases
Intervention(s)/control	**Intervention** Name: Work and MS. Protocol intervention group: Interventions to support participation in employment (including entering, remaining in, returning to, or leaving employment). Delivery setting: Online. Number/ frequency of sessions: 7 PowerPoint modules. Initial 3 modules emailed immediately after enrolment, with final 4 sent a week later. Duration: To be completed at the participant's own pace, but suggestion of 20 minutes a module (excluding activity sheets) and total time of 1 month. Practitioner(s): Not applicable. Programme schedule was 1 introductory module; 3 modules covering the job-seeking process, 2 modules covering job interviewing skills, and 1 career development module. Each module was comprised of module objectives, interactive components illustrating key messages (including activity sheets that could be completed and emailed for feedback), further educational materials, case studies on the practical aspects of returning to work, and content summary. **Control** Name: Waitlist control. Protocol comparison group: Control (waitlist). Delivery setting: Not applicable. Number/ frequency of sessions: Not applicable.

	Duration: Not applicable. Practitioner(s): Not applicable.
Duration of follow-up	Post-intervention (1 month from baseline)
Sources of funding	Not reported
Sample size	N=95 - Work and MS: n=45 - Waitlist control: n=50

MS: multiple sclerosis; N/n: number of participants; SD: standard deviation

Outcomes

Work and MS versus Waitlist control: Workplace or volunteering self-efficacy

Job-Procurement Self-efficacy Scale - Polarity - Higher values are better

Outcome	Work and MS, N = 45	Waitlist control, N = 50
Job-Procurement Self-efficacy Scale at post-intervention Mean scores at follow-up. Mean (SD)	70.5 (14.86)	56.65 (18.47)

MS: multiple sclerosis; N/n: number of participants; SD: standard deviation

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns *(Allocation sequence randomised; no information given about whether allocation sequence was concealed until enrolment and assignment; characteristics balanced between groups after randomisation.)*
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns *(Participants aware of allocation during intervention; people delivering intervention aware of allocation during intervention; no information given on deviations from intervention (including engagement and adherence measures); intention to treat analysis performed.)*
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	High *(Outcome data only available for 70.5% (67/95) participants (24/45 in intervention arm and 43/50 in control arm); no evidence presented that results remain unbiased by missing data; loss to follow-up not balanced between groups so missingness may depend on true value.)*
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Measurement methods and timings did not differ between groups; assessor not blinded to allocation; assessment of outcome could be influenced by knowledge of allocation but unlikely due to use of standardised measurement tool.)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns *(No information given regarding publication of protocol so unable to determine if all outcomes were reported or if there was deviation from planned analysis.)*

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	Not applicable.

Dorstyn, 2019

Bibliographic Reference	Dorstyn, Diana; Roberts, Rachel; Murphy, Gregory; Craig, Ashley; Kneebone, Ian; Stewart, Peter; Chur-Hansen, Anna; Marshall, Ruth; Clark, Jillian; Migliorini, Christine; Work and SCI: a pilot randomized controlled study of an online resource for job-seekers with spinal cord dysfunction.; Spinal cord; 2019; vol. 57 (no. 3); 221-228

Study details

Country/ies where study was carried out	Australia
Study type	Randomised controlled trial (RCT)
Study dates	April 2017 - May 2018
Inclusion criteria	Participants had to: - Have a spinal cord injury or disorder, - Be aged 18-65 years,

	- Be resident in Australia, - Be currently un-employed (with or without previous employment history) or in uncertain employment (casual, contractual or part-time), and seeking full-time and/or permanent employment, - Be proficient in English, - Have completed at least 6 years of formal education, - Have access to a device with internet capability.
Exclusion criteria	- People that had received intervention as part of previous feasibility trial, - People in full-time and/or permanent employment.
Patient characteristics	N=48 adults with spinal cord injury or disorder - Work and SCI: n=25 - Waitlist control: n=23 Age in years [Mean (SD)]: - Work and SCI: 43.0 (10.9) - Waitlist control: 40.7 (11.0) Sex (M/F): - Work and SCI: n=12/n=13 - Waitlist control: n=15/n=8

	Time since diagnosis in years [Mean (SD)][1]: - Work and SCI: 12.5 (12.4) - Waitlist control: 10.7 (13.2) Chronic neurological disorder category: Acquired spinal cord injury [1]Data missing for either 1 or 2 participants. No further detail given.
Intervention(s)/control	Name: Work and SCI. Protocol intervention group: Interventions to support participation in employment (including entering, remaining in, returning to, or leaving employment). Delivery setting: Online. Number/ frequency of sessions: 7 modules. Duration: To be completed at the participant's own pace, but suggestion of 20 minutes a module (excluding activity sheets) and total time of 1 month. Practitioner(s): Not applicable. Programme schedule created by a multi-disciplinary team of spinal cord injury specialists (including rehabilitation psychology and vocational consultants, nursing, occupational therapists, social work, and medicine). Consisted of 1 introductory module; 3 modules covering the job-seeking process, 2 modules covering job interviewing skills, and 1 career development module. Each module was comprised of educational materials and interactive materials. Participants also received weekly coaching emails from the lead researcher to promote engagement with the materials. **Control**

	Name: Waitlist control. Protocol comparison group: Control (waitlist). Delivery setting: Not applicable. Number/ frequency of sessions: Not applicable. Duration: Not applicable. Practitioner(s): Not applicable.
Duration of follow-up	Post-intervention (1 month from baseline)
Sources of funding	Not industry funded
Sample size	N=48 - Work and SCI: n=25 - Waitlist control: n=23

N/n: number of participants; SCI: spinal cord injury; SD: standard deviation

Outcomes

Work and SCI versus Waitlist control: Workplace or volunteering self-efficacy

Job-Procurement Self-efficacy Scale - Polarity - Higher values are better

Outcome	Work and SCI, N = 25	Waitlist control, N = 23
Job-Procurement Self-efficacy Scale at post-intervention Mean scores at follow-up. Mean (SD)	60.9 (17.5)	54.5 (15)

N/n: number of participants; SCI: spinal cord injury; SD: standard deviation

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Allocation sequence randomised; allocation sequence concealed until enrolment and assignment; no statistical analysis presented but paper states characteristics balanced between groups after randomisation.)*
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low *(Participants aware of allocation during intervention; people delivering intervention aware of allocation during intervention; some deviations from intervention due to differing engagement and utilization but consistent with real-life application; intention to treat analysis performed.)*
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	High *(Outcome data only available for 75.0% (36/48) participants (16/25 in intervention arm and 20/23 in control arm); no evidence presented that results remain unbiased by missing data; loss to follow-up not balanced between groups so missingness may depend on true value.)*

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Lack of information provided on measurement methods and timings to determine if different between groups; assessor not blinded to allocation; assessment of outcome could be influenced by knowledge of allocation but unlikely due to use of standardised measurement tool.)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns *(No information given regarding publication of protocol so unable to determine if all outcomes were reported or if there was deviation from planned analysis.)*
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	Not applicable.

Dorstyn, 2022

Bibliographic Reference	Dorstyn, D.; Oxlad, M.; Roberts, R.; Murphy, G.; Potter, E.; Kneebone, I.; Craig, A.; MS JobSeek: A pilot randomized controlled trial of an online peer discussion forum for job-seekers with multiple sclerosis; Journal of Vocational Rehabilitation; 2022; vol. 56 (no. 1); 81-91

Study details

Country/ies where study was carried out	Australia
Study type	Randomised controlled trial (RCT)
Study dates	April 2020 - July 2020 Note: An earlier period (March 2020 - May 2020) was used to recruit peer mentors for the study.
Inclusion criteria	Participants had to: - Be diagnosed with a relapsing-remitting or progressive form of multiple sclerosis, - Be aged 18-64 years, - Be currently un-employed (with or without previous employment history) or in uncertain employment (casual, contractual or part-time), and seeking full-time and/or permanent employment, - Be fluent in English, - Have access to a device with internet capabilities and be computer literate.
Exclusion criteria	- People unable to work for medical reasons.
Patient characteristics	N=29 adults with multiple sclerosis - MS JobSeek: n=14 - Information control: n=15 Age in years [Mean (SD)]: - MS JobSeek: 43.6 (8.4)

	- Information control: 46.8 (10.1) Sex (M/F): - MS JobSeek: n=3/n=11 - Information control: n=4/n=11 Time since diagnosis in months [Mean (SD) not reported] [Median (IQR)]: - MS JobSeek: 118 (54-144) - Information control: 108 (48-216) Chronic neurological disorder category: Progressive neurological diseases
Intervention(s)/control	**Intervention** Name: MS JobSeek Protocol intervention group: Interventions to support participation in employment (including entering, remaining in, returning to, or leaving employment). Delivery setting: Online. Number/ frequency of sessions: Not specified but encouraged to log in at least 1 per week (totalling 8 sessions). Duration: Not specified but suggestion of a minimum 5-10 minutes per session. Practitioner(s): Trained peer mentors and psychologist moderator.

	Secure online discussion forum utilising peer mentors, designed to help job seekers with multiple sclerosis develop a network of social and work-related contacts. Participants were emailed training modules at the start of the study, covering orientation details and safe online communication skills. Peer mentors posted questions or conversation topics to the forum, including their own experiences of returning to work and practical advice to support the process. Participants could communicate through message boards or via private email. The forum was anonymous, and a weekly update email of recent discussions was sent to participants. If participants failed to log on for more than 1 week, the moderator would email a reminder. **Control** Name: Information control. Protocol comparison group: Control. Delivery setting: Online. Number/ frequency of sessions: 7 modules, emailed once at the beginning of the study. Duration: To be completed at the participant's own pace, but suggestion of 20 minutes a module (excluding activity sheets). Practitioner(s): Not applicable. Programme schedule was 1 introductory module and the additional 6 covering workplace facts and statistics for people with multiple sclerosis, resumes, job interviewing, retaining employment and career development options. Each module was comprised included activity sheets and case studies on the practical aspects of returning to work.
Duration of follow-up	Post-intervention (2 months from baseline)
Sources of funding	Not industry funded
Sample size	N=29 - MS JobSeek: n=14

	- Information control: n=15
Other information	Study also reports the recruitment, demographics and training of peer mentors (n=5), for which data have not been extracted nor analysed.

IQR: interquartile range; MS: multiple sclerosis; N/n: number of participants; SD: standard deviation

Outcomes

MS JobSeek versus Information control: Workplace or volunteering self-efficacy

Job Search Self-efficacy Scale - Polarity - Higher values are better

Outcome	MS JobSeek, N = 14	Information control, N = 15
Job Search Self-efficacy Scale at post-intervention Mean scores at follow-up. Standardised Mean (SD)	-0.12 (0.56)	-0.08 (1.28)

MS: multiple sclerosis; N/n: number of participants; SD: standard deviation

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns *(Allocation sequence randomised; no information given about whether*

Section	Question	Answer
		allocation sequence was concealed until enrolment and assignment; no statistical analysis presented but characteristics appear visually balanced between groups after randomisation.)
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low *(Participants aware of allocation during intervention; people delivering intervention aware of allocation during intervention; some deviations from intervention due to differing engagement and utilization but consistent with real-life application; intention to treat analysis performed.)*
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	High *(Outcome data only available for 72.4% (21/29) participants (6/14 in intervention arm and 2/15 in control arm); no evidence presented that results remain unbiased by missing data; loss to follow-up not balanced between groups so missingness may depend on true value.)*
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Lack of information provided on measurement methods and timings to determine if different between groups; assessor not blinded to allocation; assessment of outcome could be influenced by knowledge of allocation but unlikely due to use of standardised measurement tool.)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns *(No information given regarding publication of protocol so unable to determine if all outcomes were reported or if there was deviation from planned analysis.)*
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Section	Question	Answer
Overall bias and Directness	Risk of bias variation across outcomes	Not applicable.

Fure, 2021

Bibliographic Reference	Fure, Silje C R; Howe, Emilie Isager; Andelic, Nada; Brunborg, Cathrine; Sveen, Unni; Roe, Cecilie; Rike, Per-Ola; Olsen, Alexander; Spjelkavik, Oystein; Ugelstad, Helene; Lu, Juan; Ponsford, Jennie; Twamley, Elizabeth W; Hellstrom, Torgeir; Lovstad, Marianne; Cognitive and vocational rehabilitation after mild-to-moderate traumatic brain injury: A randomised controlled trial.; Annals of physical and rehabilitation medicine; 2021; vol. 64 (no. 5); 101538

Study details

Country/ies where study was carried out	Norway
Study type	Randomised controlled trial (RCT)
Study dates	See Howe 2020
Inclusion criteria	See Howe 2020
Exclusion criteria	See Howe 2020
Patient characteristics	See Howe 2020
Intervention(s)/control	See Howe 2020

Duration of follow-up	6 months (12 months from baseline)
Sources of funding	See Howe 2020
Sample size	See Howe 2020

Outcomes

Combined compensatory cognitive training and supported employment versus Usual care: Return to or participation in work or volunteering

Number of participants in employment - Polarity - Higher values are better

Outcome	Combined compensatory cognitive training and supported employment, N = 60	Usual care, N = 56
Number of participants in employment at 6 months follow-up No of events	n = 54 ; % = 90	n = 47 ; % = 84

N/No/n: number of participants

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(See Howe 2020.)*
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns *(See Howe 2020.)*
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns *(Outcome data only available for 87.1% (101/116) participants (53/60 in intervention arm and 48/56 in control arm); no evidence presented that results remain unbiased by missing data; missingness unlikely to depend on true value.)*
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low *(See Howe 2020.)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low *(See Howe 2020.)*
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Indirectly applicable *(See Howe 2020.)*
Overall bias and Directness	Risk of bias variation across outcomes	Not applicable.

Howe, 2020

Bibliographic Reference	Howe, Emilie Isager; Fure, Silje C R; Lovstad, Marianne; Enehaug, Heidi; Sagstad, Kjersti; Hellstrom, Torgeir; Brunborg, Cathrine; Roe, Cecilie; Nordenmark, Tonje Haug; Soberg, Helene L; Twamley, Elizabeth; Lu, Juan; Andelic, Nada; Effectiveness of Combining Compensatory Cognitive Training and Vocational Intervention vs. Treatment as Usual on Return to Work Following Mild-to-Moderate Traumatic Brain Injury: Interim Analysis at 3 and 6 Month Follow-Up.; Frontiers in neurology; 2020; vol. 11; 561400

Study details

Country/ies where study was carried out	Norway
Study type	Randomised controlled trial (RCT)
Study dates	July 2017 - April 2019
Inclusion criteria	Participants had to: - Be diagnosed with mild-to-moderate traumatic brain injury, defined by study as: - Glasgow Coma scale score 10-15 - Loss of consciousness for less than 24 hours - Post-traumatic amnesia for fewer than 7 days, - Be aged 18–60 years, - Be in employment (at least 0.5 whole time equivalent) at the time of injury, - Remain at least 50% sick listed due to post-concussive symptoms 8-12 weeks post-injury.

Exclusion criteria	- People with active substance abuse issues, - People with severe pre-existing neurological and/or psychiatric conditions, - People unable to read of speak Norwegian.
Patient characteristics	N=116 adults with traumatic brain injury - Combined compensatory cognitive training and supported employment: n=60 - Usual care: n=56 Age in years [Mean (SD)]: - Combined compensatory cognitive training and supported employment: 41 (10) - Usual care: 44 (9) Sex (M/F): - Combined compensatory cognitive training and supported employment: n=27/n=33 - Usual care: n=20/n=36 Time since injury in days [Mean (SD)]: - Combined compensatory cognitive training and supported employment: 77 (25) - Usual care: 68 (22)

	Chronic neurological disorder category: Acquired brain injury
Intervention(s)/control	**Intervention** Name: Combined compensatory cognitive training and supported employment. Protocol intervention group: Interventions to support participation in employment (including entering, remaining in, returning to, or leaving employment). Delivery setting: Compensatory cognitive training: outpatient; Supported employment: not specified. Number/ frequency of sessions: Compensatory cognitive training: weekly for 10 sessions; Supported employment: not specified but average of 3 sessions. Duration: Compensatory cognitive training: 2 hours (totalling 20 hours); Supported employment: not specified but maximum of 6 months. Practitioner(s): Compensatory cognitive training: clinical psychologist or doctor trained in technique; Supported employment: employment specialists from Norwegian Labor and Welfare Administration. Compensatory cognitive training: Manualised programme delivered in a group 2-5 people, educating people on common symptoms of brain injury and strategies that could help (for example, those for fatigue, headaches, sleep problems, and cognitive issues). Participants received a treatment manual and homework. Supported employment: Sessions focused on client engagement, employer engagement and on and off the job support. Initial session focused on creating a rapport, establishing patient abilities and limitations, and setting common goals. Subsequent sessions were then tailored to participant needs and goals, focusing on work task adaptations, advice on assistive technology, new learning and alternative approaches. Employers and other collaborators were included in these sessions when appropriate. Participants also received standard Norwegian statutory sick leave follow up. No further details reported. **Control** Name: Usual care (personalised programmes for physical, psychological and cognitive symptoms).

	Protocol comparison group: Control (usual care). Delivery setting: Outpatient. Number/ frequency of sessions: Individual contacts not specified, education group weekly for 4 sessions. Duration: Individual contacts not specified, education group 2 hours (totalling 8 hours). Practitioner(s): Multi-disciplinary team. Individual contacts were according to individual participant needs. Examples include: neuropsychologist to address physical and cognitive rehabilitation needs; occupational therapist to assist with daily schedule and structure; social worker to advise on work barriers, legal rights and possible benefits; physical therapist to treat vestibular symptoms and increase physical activity. Education group sessions included information on brain injury, symptoms, consequences for daily living, and practical advice. Participants also received standard Norwegian statutory sick leave follow up. No further details reported.
Duration of follow-up	Post-intervention (6 months from baseline)
Sources of funding	Not industry funded
Sample size	N=116 • Combined compensatory cognitive training and supported employment: n=60 • Usual care: n=56

MS: multiple sclerosis; N/n: number of participants; SD: standard deviation

Outcomes

Combined compensatory cognitive training and supported employment versus Usual care: Return to or participation in work or volunteering

Number of participants in employment - Polarity - Higher values are better

Outcome	Combined compensatory cognitive training and supported employment, N = 60	Usual care, N = 56
Number of participants in employment at post-intervention No of events	n=51; %=85	n=41; %=73

N/n: Number of participants

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Allocation sequence randomised; allocation sequence concealed until enrolment and assignment; no statistical analysis presented but paper states characteristics mostly balanced between groups after randomisation.)*
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns *(Participants aware of allocation during intervention; people delivering intervention aware of allocation during intervention; no information given on deviations from intervention; intention to treat analysis performed.)*

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low *(Outcome data available for 94.8% (110/116) participants (57/60 in intervention arm and 53/56 in control arm)*
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low *(Measurement methods and timings did not differ between groups; assessor not blinded to allocation; binary outcome measurement so cannot be influenced by knowledge of allocation.)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low *(Protocol registered and published prior to recruitment; measurement outcomes and analysis match protocol.)*
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Indirectly applicable *(Participants' condition does not meet the guideline definition of chronic (3 months since diagnosis or injury) but is within 1 month of the definition.)*
Overall bias and Directness	Risk of bias variation across outcomes	Not applicable.

Appendix E Forest plots

Forest plots for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

No meta-analysis was conducted for this review question and so there are no forest plots.

Appendix F GRADE tables

GRADE tables for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Table 6: Evidence profile for comparison between interventions to support participation in employment and control in adults with acquired brain injury

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Combined compensatory cognitive training and supported employment	Usual care	Relative (95% CI)	Absolute		
Return to or participation in work or volunteering as measured by number of participants in employment at post-intervention (Better indicated by higher values)												
1 (Howe 2020)	randomised trials	serious[1]	no serious inconsistency	serious[2]	serious[3]	none	51/60 (85%)	41/56 (73.2%)	RR 1.16 (0.94 to 1.28)	117 more per 1000 (from 44 fewer to 205 more)	VERY LOW	CRITICAL
Return to or participation in work or volunteering as measured by number of participants in employment at 12 months (Better indicated by higher values)												
1 (Fure 2021)	randomised trials	serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	54/60 (90%)	47/56 (83.9%)	RR 1.07 (0.89 to 1.15)	59 more per 1000 (from 92 fewer to 126 more)	LOW	CRITICAL

CI: confidence interval; RR: risk ratio

1 Serious risk of bias in the evidence contributing to the outcomes as per Cochrane RoB2
2 Population is indirect due to participants' condition not meeting the guideline definition of chronic (3 months since diagnosis or injury) but is within 1 month of the definition.
3 95% CI crosses 1 MID (for RR: 0.8 and 1.25)

Table 7: Evidence profile for comparison between interventions to support for participation in employment and control in adults with acquired spinal cord injury

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Work and SCI**	**Waitlist control**	**Relative (95% CI)**	**Absolute**		
Workplace or volunteering self-efficacy as measured by Job-Procurement Self-efficacy Scale at post-intervention (Better indicated by higher values)												
1 (Dorstyn 2019)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	25	23	-	MD 6.4 higher (2.8 lower to 15.6 higher)	VERY LOW	CRITICAL

CI: confidence interval; MD: mean difference; SCI: spinal cord injury
1 Very serious risk of bias in the evidence contributing to the outcomes as per Cochrane RoB2
2 95% CI crosses 1 MID (0.5x control group SD for: Job-Procurement Self-efficacy Scale = +/-7.15)

Table 8: Evidence profile for comparison between interventions to support for participation in employment and control in adults with multiple sclerosis

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Support for participation in employment**	**Control**	**Relative (95% CI)**	**Absolute**		
Workplace or volunteering self-efficacy as measured by Job-Procurement Self-efficacy Scale at post-intervention (Better indicated by higher values) – Work and MS												

1 (Dorstyn 2018)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	45	50	-	MD 13.85 higher (7.14 to 20.56 higher)	VERY LOW	CRITICAL
Workplace or volunteering self-efficacy as measured by Job-Procurement Self-efficacy Scale at post-intervention (Better indicated by higher values) – MS JobSeek												
1 (Dorstyn 2022)	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	14	15	-	SMD[4] 0.04 lower (0.77 lower to 0.69 higher)	VERY LOW	CRITICAL

CI: confidence interval; MD: mean difference; MS: multiple sclerosis; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per Cochrane RoB2
2 95% CI crosses 1 MID (0.5x control group SD for: Job-Procurement Self-efficacy Scale MD = +/- 9.45)
3 95% CI crosses 2 MIDs (0.5x control group SD for: Job-Procurement Self-efficacy Scale SMD = +/-0.5)
4 Not able to meta-analyse with other mean difference as authors only reported effect as a standardised mean difference

Appendix G Economic evidence study selection

Study selection for: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Please see Supplement 2 for details on search that was undertaken and study selection.

Appendix H Economic evidence tables

Economic evidence tables for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Table 9: Economic evidence tables for cognitive training and supported employment (CCT-SE) intervention in adults with traumatic brain injury (TBI)

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Howe 2022 Norway Cost-effectiveness and cost utility analysis Source of funding: The Research Council of Norway	Intervention: Group-based compensatory cognitive training intervention and individualised supported employment (CCT-SE) -A 10-week program provided by a clinical psychologist and a medical doctor -The group consisted of two to five participants -2-hour weekly sessions -Each session combined psychoeducation and compensatory strategy training	People with mild or moderate TBI defined as Glasgow Coma Scale score of 10–15, loss of consciousness for < 24 hours and post-traumatic amnesia for < 7 days. Economic evaluation alongside an RCT Source of baseline data: RCT (N=116) Source of effectiveness data: RCT (N=116) Source of resource use data: RCT (N=113)	Costs: Intervention, primary care (GP, physiotherapist, psychologist, chiropractor), specialists (neurology, dentistry, ophthalmology, otorhinolaryngology, optometry/orthoptics, informal care, out-of-pocket (naprapathy, osteopathy) and productivity losses Mean healthcare cost per participant at 12 months: Intervention: €3,006	ICERs: €56 per day earlier back to work M1: €108,778/QALY M2: €31,581/QALY M3: €19,260/QALY CCT-SE is preferred to TAU for WTP values per QALY above: M1: €103,512 M2: €32,154/QALY M3: €22,778/QALY. Subgroup analysis: NR	Perspective: Healthcare Currency: Euro Cost year: 2019 Time horizon: 12 months Discounting: NA Applicability: Partially Limitations: Minor Other comments: -From a societal perspective, accounting for productivity losses and informal care, the CCT-SE was more cost-effective than TAU. -The CCT-SE group had significantly lower starting EQ-5D-5L index

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
	-The vocational aspect of the intervention was based on elements of the Individual Placement and Support model and was provided by employment specialists for 6 months -Follow-up was tailored to each participant's needs and included mapping resources, limitations and work tasks, followed by guidance, advice and work task accommodations. Comparator: Treatment as usual (TAU) - An individualised outpatient treatment provided by a multidisciplinary team at a specialized TBI outpatient clinic - The team consisted of a physiatrist, neuropsychologist, physiotherapist,	Source of unit cost data: National sources	Control: €2,025 Difference: €979 (95% CI: -€159 to €1,877), p = ns Primary measure of outcome: Days until return to pre-injury work level and QALYs (EQ-5D-5L, Danish Tariff) Mean number of days to return to work per participant: Intervention: 345 Control: 360 Difference: 16 (95% CI: -68 to 90), p = ns Incremental QALYs per participant over 12 months: 0.009 when adjusted for baseline EQ-5D-5L differences (M1) 0.031 with parallel adjustment[1] for baseline	Sensitivity analysis: NR	values, which could have driven the increased use and costs of healthcare services within that group.

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
	occupational therapist, and social worker - Follow-up involved individual consultations and a TBI education group discussing daily life challenges post-injury. The group met weekly for four 2-hour sessions, with each led by a different professional. Both intervention and TAU was delivered over 6 months.		EQ-5D-5L differences (M2) 0.042 using a change in HRQoL from baseline to 12 months (M3)		

Abbreviations: CCT-SE: Compensatory Cognitive Training and Supported Employment; CI: Confidence Interval; EQ-5D-5L: EuroQol five dimensions questionnaire with 5 levels; GP: General Practitioner; HRQoL: Health Related Quality of Life; ICER: Incremental Cost-Effectiveness Ratio; M: Method; N: Number of People; NA: Not Applicable; NR: Not Reported; NS: Not Significant; QALY: Quality-Adjusted Life Year; RCT: Randomised Controlled Trial; SE: Supported Employment; TAU: Treatment as Usual; TBI: Traumatic Brain Injury; WTP: Willingness to Pay
[1] Baseline and effectiveness outcomes from a single small RCT (N=116), otherwise a well conducted study.
[2] Non-UK study, QALYs estimated using EQ-5D-5L with valuations using Danish tariff.
[3] This approach parallel shifted the observation for the intervention group upwards and equal to the difference at baseline, equal to 0.065.

Appendix I Economic model

Economic model for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

No economic analysis was conducted for this review question.

Appendix J Excluded studies

Excluded studies for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

Excluded effectiveness studies

Table 10: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
Agostini, Francesco, Pezzi, Letizia, Paoloni, Marco et al. (2021) Motor Imagery: A Resource in the Fatigue Rehabilitation for Return-to-Work in Multiple Sclerosis Patients-A Mini Systematic Review. Frontiers in neurology 12: 696276	- Outcomes Systematic review reporting no relevant outcomes. Reports gait biomechanics, quality of life, cognitive function, and psychological impact. Included studies with relevant outcomes were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Alavinia, Seyed Mohammad, Jetha, Arif, Hitzig, Sander L et al. (2021) Development of employment indicators to advance the quality of spinal cord injury rehabilitation care: SCI-High Project. The journal of spinal cord medicine 44(sup1): 118-s133	- Study design (adults) Working group project discussions and results.
Andersson, EE; Johansson, L; Johansson, S (2016) Mild traumatic brain injury: the impact of early intervention on job satisfaction. Brain injury conference: 20160534	- Publication type Conference abstract.
Askari, Sorayya, Kessler, Dorothy, Smyth, Penelope et al. (2022) Evaluating occupational performance coaching to support fatigue management for people with multiple sclerosis: A feasibility study. Clinical rehabilitation 36(9): 1244-1256	- Outcomes No relevant outcomes reported. Reports measures of acceptability, demand, implementation, practicality, fatigue impact and self-efficacy.
Berger, S., Kaldenberg, J., Selmane, R. et al. (2016) Effectiveness of Interventions to Address Visual and Visual-Perceptual Impairments to Improve Occupational Performance in Adults With Traumatic Brain Injury: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 70(3): p1-p7	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Berger, Sue, Kaldenberg, Jennifer, Selmane, Romeissa et al. (2016) Effectiveness of interventions to address visual and visual-perceptual impairments to improve occupational performance in adults with traumatic brain injury: A systematic review. American Journal of Occupational Therapy 70(3): no-specified	- Duplicate
Bloom, Ben, Thomas, Stephen, Ahrensberg, Jette Moller et al. (2018) A systematic review and meta-analysis of return to work after mild Traumatic brain injury. Brain injury 32(1314): 1623-1636	- Publication date Systematic review with 5/14 studies published 2013 onwards, and 9/14 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not

Study	Reason for exclusion
	relevant or had been separately located by the literature search and screened.
Bloom, J.; McLennan, V.; Dorsett, P. (2019) Occupational bonding after spinal cord injury: A review and narrative synthesis. Journal of Vocational Rehabilitation 50(1): 109-120	- Publication date Systematic review with 7/25 studies published 2013 onwards, and 18/25 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Bond, Gary R; Drake, Robert E; Pogue, Jacqueline A (2019) Expanding Individual Placement and Support to Populations With Conditions and Disorders Other Than Serious Mental Illness. Psychiatric services (Washington, D.C.) 70(6): 488-498	- Population Systematic review with studies including participants who are in protocol (1/9 people with chronic neurological disorders) and out of protocol (6/9 people with mental health disorders and 2/9 people with addiction disorders). Studies including participants with chronic neurological disorders were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Brasure, Michelle, Lamberty, Greg J, Sayer, Nina A et al. (2013) Participation after multidisciplinary rehabilitation for moderate to severe traumatic brain injury in adults: a systematic review. Archives of physical medicine and rehabilitation 94(7): 1398-420	- Country Systematic review with 1/12 of the included studies conducted in the UK, 1/12 in Australia, 1/12 in Finland, 8/12 in the US, and 1/12 in Japan. UK, Australian, and Finnish studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Cancelliere, Carol, Kristman, Vicki L, Cassidy, J David et al. (2014) Systematic review of return to work after mild traumatic brain injury: results of the International Collaboration on Mild Traumatic Brain Injury Prognosis. Archives of physical medicine and rehabilitation 95(3suppl): 201-9	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Chini, Giorgia, Fiori, Lorenzo, Tatarelli, Antonella et al. (2022) Indexes for motor performance assessment in job integration/reintegration of people with neuromuscular disorders: A systematic review. Frontiers in neurology 13: 968818	- Population Systematic review with studies including mixed populations of participants with chronic neurological disorders, stroke, lower back pain, and healthy subjects. Studies including participants with chronic neurological disorders were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Coker, Jennifer, Cuthbert, Jeffrey, Ketchum, Jessica M et al. (2019) Re-inventing yourself after spinal cord injury: a site-specific randomized clinical trial. Spinal cord 57(4): 282-292	- Country Study conducted in the US.
Cooper, Douglas B, Bunner, Anne E, Kennedy, Jan E et al. (2015) Treatment of persistent post-concussive symptoms after mild traumatic brain injury: a systematic review of cognitive rehabilitation and behavioral health interventions in military service members and veterans. Brain imaging and behavior 9(3): 403-20	- Publication date Systematic review with 8/19 studies published 2013 onwards, and 11/19 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not

Study	Reason for exclusion
	relevant or had been separately located by the literature search and screened.
Cunningham, Rebecca and Uyeshiro Simon, Ashley (2022) Interventions for Instrumental Activities of Daily Living Among Adults With Multiple Sclerosis: A Systematic Review. The American journal of occupational therapy: official publication of the American Occupational Therapy Association 76(2)	- Outcomes Systematic review reporting no relevant outcomes. Reports participation in and performance of independent activities of daily living. Included studies with relevant outcomes were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Donker-Cools, Birgit H P M, Daams, Joost G, Wind, Haije et al. (2016) Effective return-to-work interventions after acquired brain injury: A systematic review. Brain injury 30(2): 113-31	- Publication date Systematic review with 2/12 studies published 2013 onwards, and 10/12 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Duijts, S.F.A., Van Egmond, M.P., Spelten, E. et al. (2014) Physical and psychosocial problems in cancer survivors beyond return to work: A systematic review. Psycho-Oncology 23(5): 481-492	- Study design (adults) Systematic review (adult population) with no included randomised controlled trials or systematic reviews of randomised controlled trials. Therefore no studies were checked against protocol.
Dunn, Jennifer A, Hackney, Jonathan J, Martin, Rachelle A et al. (2021) Development of a Programme Theory for Early Intervention Vocational Rehabilitation: A Realist Literature Review. Journal of occupational rehabilitation 31(4): 730-743	- Study design (adults) Systematic review (adult population) with 2/37 randomised controlled trials, 5/37 mixed methods studies, 5/37 prospective cohort studies, 18/37 qualitative studies, 2/37 surveys, and 5/37 literature reviews. Randomised controlled trials, mixed methods studies and systematic reviews were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Fiani, Brian, Runnels, Juliana, Taylor, Ashley et al. (2021) Prevalence of sports-related spinal injury stratified by competition level and return to play guidelines. Reviews in the neurosciences 32(2): 169-179	- Study design (adults) Non-systematic literature review.
Foster, Erin R, Carson, Lisa G, Archer, Jamie et al. (2021) Occupational Therapy Interventions for Instrumental Activities of Daily Living for Adults With Parkinson's Disease: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 75(3)	- Intervention Systematic review with studies investigating interventions aimed at physical function, improving activities of daily living, cognitive functioning, and individualised occupational therapy programmes, and not interventions for support to access employment. Therefore no studies were checked against protocol criteria.
Fure, Silje Christine Reistad, Howe, Emilie Isager, Andelic, Nada et al. (2023) Workplace Factors Associated With Return to Work After Mild-to-Moderate Traumatic Brain Injury. The Journal of head trauma rehabilitation 38(1): e1-e9	- Outcomes No relevant outcomes reported. Reports work-related predictors of return to work.
Garrelfs, Sander F, Donker-Cools, Birgit H P M, Wind, Haije et al. (2015) Return-to-work in	- Publication date

Study	Reason for exclusion
patients with acquired brain injury and psychiatric disorders as a comorbidity: A systematic review. Brain injury 29(5): 550-7	Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Gelauff, Jeannette M, Rosmalen, Judith G M, Carson, Alan et al. (2020) Internet-based self-help randomized trial for motor functional neurologic disorder (SHIFT). Neurology 95(13): e1883-e1896	- Intervention Unguided education and self-help website aimed at educating patients about functional neurological disorders, and not an intervention for support to access employment.
Gormley, Mirinda, Devanaboyina, Monika, Andelic, Nada et al. (2019) Long-term employment outcomes following moderate to severe traumatic brain injury: a systematic review and meta-analysis. Brain injury 33(1314): 1567-1580	- Publication date Systematic review with 15/38 studies published 2013 onwards, and 23/38 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Houlihan, Bethlyn Vergo, Brody, Miriam, Everhart-Skeels, Sarah et al. (2017) Randomized Trial of a Peer-Led, Telephone-Based Empowerment Intervention for Persons With Chronic Spinal Cord Injury Improves Health Self-Management. Archives of physical medicine and rehabilitation 98(6): 1067-1076e1	- Country Study conducted in the US.
Howe, Emilie Isager, Andelic, Nada, Fure, Silje C R et al. (2022) Cost-effectiveness analysis of combined cognitive and vocational rehabilitation in patients with mild-to-moderate TBI: results from a randomized controlled trial. BMC health services research 22(1): 185	- Outcomes No relevant outcomes reported. Reports cost-effectiveness outcomes only.
Hugos, C.L., Chen, Z., Chen, Y. et al. (2019) A multicenter randomized controlled trial of two group education programs for fatigue in multiple sclerosis: Short- and medium-term benefits. Multiple Sclerosis Journal 25(2): 275-285	- Country Study conducted in the US.
Inge, K.J., Graham, C.W., Erickson, D. et al. (2016) Improving the employment outcomes of individuals with traumatic brain injury: The effectiveness of knowledge translation strategies to impact the use of evidence-based practices by vocational rehabilitation counselors. Journal of Vocational Rehabilitation 45(1): 107-115	- Country Study conducted in the US.
Inge, Katherine J, Graham, Carolyn W, McLaughlin, James W et al. (2017) Evaluating the effectiveness of Facebook to impact the knowledge of evidence-based employment practices by individuals with traumatic brain injury: A knowledge translation random control study. Work (Reading, Mass.) 58(1): 73-81	- Country Study conducted in the US.
Khan, F., Amatya, B., Ng, L. et al. (2013) Multidisciplinary rehabilitation after primary brain tumour treatment. Cochrane Database of Systematic Reviews 2013(1): cd009509	- Study design (adults) Systematic review (adult population) with no included randomised controlled trials or systematic reviews of randomised controlled trials. Therefore no studies were checked against protocol.
Koerts, Janneke, Konig, Miriam, Tucha, Lara et al. (2016) Working capacity of patients with	- Publication date

Study	Reason for exclusion
Parkinson's disease - A systematic review. Parkinsonism & related disorders 27: 9-24	Systematic review with 3/13 studies published 2013 onwards, and 10/13 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Kornblith, Erica, Posecion, Lainie, Abrams, Gary et al. (2021) Long-term effect of cognitive rehabilitation regardless of prerehabilitation cognitive status for veterans with TBI. Applied Neuropsychology: Adult 28(4): 436-448	- Country Study conducted in the US.
Kreutzer, JS, Marwitz, JH, Sima, AP et al. (2018) Efficacy of the resilience and adjustment intervention after traumatic brain injury: a randomized controlled trial. Brain injury 32(8): 963-971	- Country Study conducted in the US.
Kumar, K Suresh, Samuelkamaleshkumar, Selvaraj, Viswanathan, Anand et al. (2017) Cognitive rehabilitation for adults with traumatic brain injury to improve occupational outcomes. The Cochrane database of systematic reviews 6: cd007935	- Publication date Systematic review with 2/9 studies published 2013 onwards, and 7/9 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Lamore, K., Dubois, T., Rothe, U. et al. (2019) Return to work interventions for cancer survivors: A systematic review and a methodological critique. International Journal of Environmental Research and Public Health 16(8): 1343	- Study design (adults) Systematic review with 3/10 randomised controlled trials, 3/10 non-randomised controlled studies, 3/10 observational studies, and 1/10 qualitative study. Randomised controlled trials were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Leaviss, Joanna, Davis, Sarah, Ren, Shijie et al. (2020) Behavioural modification interventions for medically unexplained symptoms in primary care: systematic reviews and economic evaluation. Health technology assessment (Winchester, England) 24(46): 1-490	- Publication date Systematic review with 8/59 studies published 2013 onwards, and 51/59 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Levack, W.M.M. and Fadyl, J.K. (2021) Vocational interventions to help adults with long-term health conditions or disabilities gain and maintain paid work: An overview of systematic reviews. BMJ Open 11(12): e049522	- Population Systematic review with studies including participants who are in protocol (5/26 participants with chronic neurological disorders) and out of protocol (11/26 participants with mental health disorders, 4/26 people with intellectual or developmental disabilities, and 6/26 people with any long-term health condition or disability). Studies including participants with chronic neurological disorders were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Lindsay, S. and Cagliostro, E. (2020) A web-based intervention for youth with physical disabilities: Comparing the role of mentors in 12-And 4-week formats. Journal of Medical Internet Research 22(1): e15813	- Population Mixed population. Includes participants in protocol (8/27 young people with Duchenne's muscular dystrophy and other neuromuscular

Study	Reason for exclusion
	disabilities [no further details reported] and 2/27 young people with spina bifida), unclear (4/27 young people with other disabilities [no further details reported]) and out of protocol (13/27 young people with cerebral palsy). Results not presented separately for target population.
Ma, Zechen, Dhir, Priya, Perrier, Laure et al. (2020) The Impact of Vocational Interventions on Vocational Outcomes, Quality of Life, and Community Integration in Adults with Childhood Onset Disabilities: A Systematic Review. Journal of occupational rehabilitation 30(1): 1-21	- Country Systematic review with 1/17 studies conducted in France, 14/17 in the US, 1/17 in Japan and 1/17 Hong Kong. French studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Man, David Wai Kwong; Poon, Wai Sang; Lam, Chow (2013) The effectiveness of artificial intelligent 3-D virtual reality vocational problem-solving training in enhancing employment opportunities for people with traumatic brain injury. Brain injury 27(9): 1016-25	- Country Study conducted in Hong Kong.
Mangone, Massimiliano, Agostini, Francesco, de Sire, Alessandro et al. (2022) Effect of virtual reality rehabilitation on functional outcomes for return-to-work patients with Parkinson's disease: An umbrella review of systematic reviews. NeuroRehabilitation 51(2): 201-211	- Outcomes Systematic review reporting no relevant outcomes. Reports measures of gait biomechanics. Included studies with relevant outcomes were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Mani, Karthik; Cater, Bryan; Hudlikar, Akshay (2017) Cognition and return to work after mild/moderate traumatic brain injury: A systematic review. Work (Reading, Mass.) 58(1): 51-62	- Publication date Systematic review with 5/30 studies published 2013 onwards, and 25/30 published pre-2013. Studies published 2013 onwards were checked against protocol criteria – 1 was identified as potentially relevant and retrieved for further screening.
Manoli, Romina, Delecroix, Helene, Daveluy, Walter et al. (2021) Impact of cognitive and behavioural functioning on vocational outcome following traumatic brain injury: a systematic review. Disability and rehabilitation 43(18): 2531-2540	- Publication date Systematic review with 8/15 studies published 2013 onwards, and 7/15 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Martin Ginis, Kathleen A, Shaw, Robert B, Stork, Matthew J et al. (2018) Pilot study of a training program to enhance transformational leadership in Spinal Cord Injury Peer Mentors. Spinal cord series and cases 4: 34	- Outcomes No relevant outcomes reported. Reports measures of personal self-efficacy, mentor supportiveness and mentors' use of transformational leadership.
McGonagle, A.K.; Beatty, J.E.; Joffe, R. (2014) Coaching for workers with chronic illness: Evaluating an intervention. Journal of Occupational Health Psychology 19(3): 385-398	- Country Study conducted in the US.
Meyer-Moock, Sandra, Raths, Susan, Strunk, Katharina et al. (2022) Strengthening the occupational and social participation of multiple sclerosis patients - design of a multicenter,	- Publication type Study protocol.

Study	Reason for exclusion
parallel-group randomized controlled trial (MSnetWork-study). BMC neurology 22(1): 472	
Mills, Ana L and Kreutzer, Jeffrey S (2016) Theoretical Applications of Positive Psychology to Vocational Rehabilitation After Traumatic Brain Injury. Journal of occupational rehabilitation 26(1): 20-31	- Study design (adults) Non-systematic literature review.
Nastasi, Julie Ann and Harris, Linda (2021) Evidence for Occupational Therapy Interventions Supporting Work and Social Participation for Adults With Multiple Sclerosis: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 75(4)	- Country Systematic review with 2/4 of the included studies conducted in Australia and 2/4 in Iran. Australian studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Nazarov, Soja, Manuwald, Ulf, Leonardi, Matilde et al. (2019) Chronic Diseases and Employment: Which Interventions Support the Maintenance of Work and Return to Work among Workers with Chronic Illnesses? A Systematic Review. International journal of environmental research and public health 16(10)	- Publication date Systematic review with 5/15 studies published 2013 onwards, and 10/15 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
O'Connor, Maureen K, Mueller, Lisa, Kwon, Eunice et al. (2016) Enhanced vocational rehabilitation for Veterans with mild traumatic brain injury and mental illness: Pilot study. Journal of rehabilitation research and development 53(3): 307-20	- Country Study conducted in the US.
Ottomanelli, L, Smith, T, Cotner, B et al. (2023) Achieving Competitive, Customized Employment through Specialized Services for Veterans with Spinal Cord Injuries (SCI). Archives of physical medicine and rehabilitation 104(3): e9	- Publication type Conference abstract.
Ottomanelli, Lisa, Barnett, Scott D, Goetz, Lance L et al. (2015) Vocational rehabilitation in spinal cord injury: what vocational service activities are associated with employment program outcome?. Topics in spinal cord injury rehabilitation 21(1): 31-9	- Country Study conducted in the US.
Ottomanelli, Lisa, Goetz, Lance L, Barnett, Scott D et al. (2018) Predictors of employment outcomes among supported employment program participants with spinal cord injury. Journal of Vocational Rehabilitation 49(2): 139-148	- Country Study conducted in the US.
Pascual, Juan Silvestre G and Duffau, Hugues (2022) The need to consider return to work as a main outcome in patients undergoing surgery for diffuse low-grade glioma: a systematic review. Acta neurochirurgica 164(10): 2789-2809	- Intervention Systematic review with studies investigating surgical resection, and not interventions for support to access employment. Therefore no studies were checked against protocol criteria.
Powell, Janet M; Rich, Timothy J; Wise, Elizabeth K (2016) Effectiveness of Occupation- and Activity-Based Interventions to Improve Everyday Activities and Social Participation for People With Traumatic Brain Injury: A	- Publication date Systematic review with 1/19 studies published 2013 onwards, and 18/19 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not

Study	Reason for exclusion
Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 70(3): 7003180040p1-9	relevant or had been separately located by the literature search and screened.
Probyn, Katrin, Engedahl, Martin Stav, Rajendran, Devan et al. (2021) The effects of supported employment interventions in populations of people with conditions other than severe mental health: a systematic review. Primary health care research & development 22: e79	- Population Systematic review with studies including participants who are in protocol (1/10 people with chronic neurological disorders) and out of protocol (5/10 people with mental health disorders, 3/10 people with addiction disorders, 1/10 people with musculoskeletal disorders and 1/10 with unemployed young people). Studies including participants with chronic neurological disorders were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Pusswald, Gisela, Mildner, Christa, Zebenholzer, Karin et al. (2014) A neuropsychological rehabilitation program for patients with Multiple Sclerosis based on the model of the ICF. NeuroRehabilitation 35(3): 519-27	- Intervention Neuropsychological rehabilitation program for functional training, and not an intervention for support to access employment.
Radford, Kate, Sutton, Chris, Sach, Tracey et al. (2018) Early, specialist vocational rehabilitation to facilitate return to work after traumatic brain injury: the FRESH feasibility RCT. Health technology assessment (Winchester, England) 22(33): 1-124	- Population Participants' condition does not meet the guideline definition of chronic (3 months since diagnosis or injury). Recruitment and intervention within 8 weeks of traumatic brain injury.
Radomski, M.V., Anheluk, M., Bartzen, M.P. et al. (2016) Effectiveness of Interventions to Address Cognitive Impairments and Improve Occupational Performance After Traumatic Brain Injury: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 70(3): p1-p9	- Publication date Systematic review with 3/37 studies published 2013 onwards, and 34/37 published pre-2013. Studies published 2013 onwards were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Radomski, Mary Vining, Anheluk, Mattie, Bartzen, M Penny et al. (2016) Effectiveness of Interventions to Address Cognitive Impairments and Improve Occupational Performance After Traumatic Brain Injury: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 70(3): 7003180050p1-9	- Duplicate
Roels, E H, Aertgeerts, B, Ramaekers, D et al. (2016) Hospital- and community-based interventions enhancing (re)employment for people with spinal cord injury: a systematic review. Spinal cord 54(1): 2-7	- Country Systematic review with 1/15 of the included studies conducted in UK, 1/15 in Canada, 11/15 in the US, 1/15 in Bangladesh and 1/15 in China. UK and Canadian studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Saltychev, Mikhail, Eskola, Merja, Tenovuo, Olli et al. (2013) Return to work after traumatic brain	- Study design (adults) Systematic review (adult population) with 8/80 randomised controlled trials, 2/80 non-

Study	Reason for exclusion
injury: Systematic review. Brain injury 27(1314): 1516-27	randomised controlled trials and 70/80 observational studies. Randomised controlled trials were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
San Martin Valenzuela, C., Moscardo, L.D., Pascual, J.L. et al. (2020) Effects of dual-task group training on gait, cognitive executive function and quality of life in people with Parkinson's disease: results of randomized controlled DUALGAIT trial. Archives of physical medicine and rehabilitation	- Outcomes No relevant outcomes reported. Reports measures of gait biomechanics, executive cognitive function and quality of life.
Sargenius Landahl, Kristina, Schult, Marie-Louise, Borg, Kristian et al. (2021) Comparison of attention process training and activity-based attention training after acquired brain injury: A randomized controlled study. Journal of rehabilitation medicine 53(10october): jrm00235	- Population Mixed population. Includes participants in protocol (12/57 people with traumatic brain injury) and out of protocol (45/57 people with cerebral palsy). Results not presented separately for target population.
Scheenen, Myrthe E, Visser-Keizer, Annemarie C, de Koning, Myrthe E et al. (2017) Cognitive Behavioral Intervention Compared to Telephone Counseling Early after Mild Traumatic Brain Injury: A Randomized Trial. Journal of neurotrauma 34(19): 2713-2720	- Population Participants' condition does not meet the guideline definition of chronic (3 months since diagnosis or injury). Recruitment and intervention within 4-10 weeks of traumatic brain injury.
Silvaggi, Fabiola, Leonardi, Matilde, Raggi, Alberto et al. (2020) Employment and Work Ability of Persons With Brain Tumors: A Systematic Review. Frontiers in human neuroscience 14: 571191	- Study design (adults) Systematic review (adult population) with no included randomised controlled trials or systematic reviews of randomised controlled trials. Therefore no studies were checked against protocol.
Smallfield, Stacy and Heckenlaible, Cindy (2017) Effectiveness of occupational therapy interventions to enhance occupational performance for adults with Alzheimer's disease and related major neurocognitive disorders: A systematic review. American Journal of Occupational Therapy 71(5): 1-9	- Population Systematic review including participants out of protocol (participants with Alzheimer's disease, various dementias, neurocognitive disorder and Creutzfeldt-Jakob disease). No studies checked against protocol criteria as did not include any participants with chronic neurological disorders included in protocol.
Stimmel, Marnina (2020) Feasibility of an intervention to address loss of employment for women with multiple sclerosis. Dissertation Abstracts International Section A: Humanities and Social Sciences 81(8a): no-specified	- Country Study conducted in the US.
Stimmel, Marnina B, Cohen, Jenna N, Schneider, Shonna J et al. (2020) A neuropsychologically-based intervention with increased follow-up support for employed women with multiple sclerosis: a pilot randomized controlled trial. Clinical rehabilitation 34(10): 1292-1302	- Country Study conducted in the US.
Stimmel, Marnina B, Cohen, Jenna N, Seng, Elizabeth K et al. (2023) A neuropsychologically based employment intervention for women with multiple sclerosis: A quasi-randomized controlled trial. Journal of the International	- Country Study conducted in the US.

Study	Reason for exclusion
Neuropsychological Society : JINS 29(4): 388-396	
Sullivan, Katherine W, Solomon, Nancy Pearl, Pramuka, Michael et al. (2015) Computer-based cognitive rehabilitation research in a military treatment facility: Recruitment, compliance, and lessons learned. Work (Reading, Mass.) 50(1): 131-42	- Country Study conducted in the US.
Tarconish, E., Lombardi, A., Madaus, J. et al. (2021) Available supports and resources for postsecondary students with traumatic brain injury: A systematic review of the literature. Journal of Vocational Rehabilitation 55(1): 15-26	- Country Systematic review with all studies conducted in the US. Therefore no studies were checked against protocol.
Tate, R.L., Genders, M., Soo, C. et al. (2019) Preparing Adolescents for Life after School (PALS) Project: A Randomised Controlled Trial of a Coaching Intervention for Young People with Acquired Brain Injury. Brain Impairment 20(1): 37-48	- Outcomes No relevant outcomes reported. Reports measures of satisfaction with life, child and adolescent participation, and changes in mood.
Thomas, Roger E, Alves, Jorge, Vaska Mlis, Marcus M et al. (2017) Therapy and rehabilitation of mild brain injury/concussion: Systematic review. Restorative neurology and neuroscience 35(6): 643-666	- Country Systematic review with 2/14 of the included studies conducted in the UK, 2/14 in Canada, 1/14 in Australia, 1/14 in Sweden, 7/14 in the US, and 1/14 in the US and China. UK, Canadian, Australian and Swedish studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Thomas, Sarah, Thomas, Peter W, Kersten, Paula et al. (2013) A pragmatic parallel arm multi-centre randomised controlled trial to assess the effectiveness and cost-effectiveness of a group-based fatigue management programme (FACETS) for people with multiple sclerosis. Journal of neurology, neurosurgery, and psychiatry 84(10): 1092-9	- Outcomes No relevant outcomes reported. Reports measures of fatigue severity, quality of life, self-efficacy for managing fatigue, changes in mood, disease impact and health state values.
Trenaman, L M, Miller, W C, Escorpizo, R et al. (2014) Interventions for improving employment outcomes among individuals with spinal cord injury: a systematic review. Spinal cord 52(11): 788-94	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Trexler, Lance E; Parrott, Devan R; Malec, James F (2016) Replication of a Prospective Randomized Controlled Trial of Resource Facilitation to Improve Return to Work and School After Brain Injury. Archives of physical medicine and rehabilitation 97(2): 204-10	- Country Study conducted in the US.
Triegaardt, Joseph, Han, Thang S, Sada, Charif et al. (2020) The role of virtual reality on outcomes in rehabilitation of Parkinson's disease: meta-analysis and systematic review in 1031 participants. Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology 41(3): 529-536	- Outcomes Systematic review reporting no relevant outcomes. Reports measures of motor function, balance and co-ordination, cognitive function and mental health, and quality of life and activities of daily living. Included studies with relevant outcomes were checked against protocol criteria and were either not relevant or

Study	Reason for exclusion
	had been separately located by the literature search and screened.
Tripette, J., Murakami, H., Ryan, K.R. et al. (2017) The contribution of Nintendo Wii Fit series in the field of health: A systematic review and meta-analysis. PeerJ 2017(9): e3600	- Population Systematic review including participants who are in protocol (12/68 people with chronic neurological disorders) and out of protocol (19/68 studies with elderly participants, 8/68 people with chronic (excluding neurological) conditions, 8/68 healthy participants, 6/68 adults with stroke, 6/68 children with developmental delay, 4/68 people with orthopaedic disorders, 3/68 people with cerebral palsy, 1/68 people with addiction, and 1/68 study people with dementia). Studies including participants with chronic neurological disorders were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Turner-Stokes, Lynne, Pick, Anton, Nair, Ajoy et al. (2015) Multi-disciplinary rehabilitation for acquired brain injury in adults of working age. The Cochrane database of systematic reviews: cd004170	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Vikane, E, Hellstrom, T, Roe, C et al. (2016) Efficacy of a multidisciplinary outpatient treatment for patients with mild traumatic brain injury: a randomized controlled intervention trial. Brain injury conference: 20160617	- Publication type Conference abstract.
Vikane, Eirik, Hellstrom, Torgeir, Roe, Cecilie et al. (2017) Multidisciplinary outpatient treatment in patients with mild traumatic brain injury: A randomised controlled intervention study. Brain injury 31(4): 475-484	- Publication type Thesis.
Vitturi, Bruno Kusznir, Rahmani, Alborz, Dini, Guglielmo et al. (2022) Work Barriers and Job Adjustments of People with Multiple Sclerosis: A Systematic Review. Journal of occupational rehabilitation	- Study design (adults) Systematic review (adult population) with 3/48 randomised controlled trials, 37/48 cross-sectional studies and 8/48 cohort studies. Randomised controlled trials were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Welsby, Ellana; Berrigan, Sonja; Laver, Kate (2019) Effectiveness of occupational therapy intervention for people with Parkinson's disease: Systematic review. Australian occupational therapy journal 66(6): 731-738	- Outcomes Systematic review reporting no relevant outcomes. Reports measures of perception of occupational performance, activities of daily living, global functioning, mobility, quality of life, and upper limb function. Included studies with relevant outcomes were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Wendebourg, Maria Janina, Feddersen, Lena Katharina, Lau, Stephanie et al. (2016) Development and Feasibility of an Evidence-Based Patient Education Program for Managing Fatigue in Multiple Sclerosis: The "Fatigue	- Intervention Cognitive-behavioural group therapy to manage fatigue in multiple sclerosis, and not an intervention for support to access employment.

Study	Reason for exclusion
Management in MS" Program (FatiMa). International journal of MS care 18(3): 129-37	
Wendebourg, Maria Janina, Heesen, Christoph, Finlayson, Marcia et al. (2017) Patient education for people with multiple sclerosis-associated fatigue: A systematic review. PloS one 12(3): e0173025	- Publication type Systematic review with 1/10 studies published 2013 or later, and 9/10 published pre-2013. Studies published 2013 or later were checked against protocol criteria – 1 was identified as potentially relevant and retrieved for further screening.
Westerhof-Evers, Herma J, Visser-Keizer, Annemarie C, Fasotti, Luciano et al. (2017) Effectiveness of a Treatment for Impairments in Social Cognition and Emotion Regulation (T-ScEmo) After Traumatic Brain Injury: A Randomized Controlled Trial. The Journal of head trauma rehabilitation 32(5): 296-307	- Intervention Compensatory strategy training aimed at maintaining and improving social relationships, and not an intervention for support to access employment.
Wheeler, Steven; Acord-Vira, Amanda; Davis, Diana (2016) Effectiveness of Interventions to Improve Occupational Performance for People With Psychosocial, Behavioral, and Emotional Impairments After Brain Injury: A Systematic Review. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 70(3): 7003180060p1-9	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.
Wheeler, Steven, Davis, Diana, Basch, Jamie et al. (2022) Education and Skills Training Interventions for Adults With Traumatic Brain Injury (TBI) (Dates of Review: 2013-2020). The American journal of occupational therapy : official publication of the American Occupational Therapy Association 76(suppl2)	- Country Systematic review with 1/7 of the included studies conducted in Switzerland, 1/7 in the Netherlands, and 5/7 in the US. Swiss and Dutch studies were checked against protocol criteria and were either not relevant or had been separately located by the literature search and screened.
Yu, Chih-Huang and Mathiowetz, Virgil (2014) Systematic review of occupational therapy-related interventions for people with multiple sclerosis: part 1. Activity and participation. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 68(1): 27-32	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol
Yu, Chih-Huang and Mathiowetz, Virgil (2014) Systematic review of occupational therapy-related interventions for people with multiple sclerosis: part 2. Impairment. The American journal of occupational therapy : official publication of the American Occupational Therapy Association 68(1): 33-8	- Publication date Systematic review with all included studies published before 2013. Therefore no studies checked against protocol.

Excluded economic studies

See supplement 2 for excluded studies across all reviews.

Appendix K Research recommendations – full details

Research recommendations for review question: What is the effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

K.1.1 Research recommendation

What is the effectiveness and cost-effectiveness of interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering?

K.1.2 Why this is important

Employment and volunteering offer important opportunities for meaningful activity for people with chronic neurological disorders, and can provide significant cognitive, psychological, social, and economic benefits to the individual. Employment and volunteering also provide opportunities for the person with a chronic neurological disorder to practice their rehabilitation in an applied setting, with feedback from this helping to inform their ongoing rehabilitation plan. Increasing participation in employment and volunteering also delivers benefits to families and carers, local communities, employers and the wider economy. In order to maximise these opportunities it is important that there is evidence to inform the type of interventions and, or adjustments that would be effective and cost effective in supporting people with chronic neurological disorders to enter, return to, remain in or leave employment.

K.1.3 Rationale for research recommendation

Table 11: Research recommendation rationale

Importance to 'patients' or the population	Being able to stay in work, return to work or have a supportive plan for leaving work and identifying other meaningful occupation is an important part of an individual's journey following diagnosis of chronic neurological disorder. While some people are able to return to work or volunteering with small adjustments, some will need additional help or specialist interventions through a vocational rehabilitation approach.
Relevance to NICE guidance	There is a limited research evidence base to determine the best methods to support people with chronic neurological disorders to enter, remain in, return to or leave employment or volunteering with the aim of improving workplace or volunteering outcomes, self-efficacy and satisfaction for people with chronic neurological disorders.
Relevance to the NHS	Robust evaluation of best models of care delivery and appropriate settings to help people with chronic neurological disorders to remain in, return to or leave employment would help guide optimal service design and delivery of outcomes most important to this populations. Additionally, given the potential differences in outcomes and costs between various interventions or approaches, there may be differences in their cost effectiveness.

National priorities	High
Current evidence base	This evidence review showed a paucity of evidence in the area of supporting people to enter, remain in, return to or leave employment and volunteering. Only 1 trial showed an important benefit in highlighted outcomes at post-intervention, and this study did not report any follow-up data to prove the longevity of effects. Other identified trials failed to show any short-term or long-term benefits.
Equality considerations	This evidence review identified several populations with no trials reporting data for interventions or approaches for supporting people to enter, remain in, return to or leave employment and volunteering: There were no trials reporting data for interventions supporting participation in employment or volunteering for children and young people with chronic neurological disorders; adults with acquired peripheral nerve disorders; adults with functional neurological disorders.

K.1.4 Modified PICO table

Table 12: Research recommendation modified PICO table

Population	Adults and children with rehabilitation needs due to the following chronic neurological disorders: • Acquired brain injury • Acquired spinal cord injury • Acquired peripheral nerve disorders • Progressive neurological diseases • Functional neurological disorders
Intervention	• Interventions to support participation in employment (including entering, remaining in, or returning to employment). • Interventions to support participation in volunteering (including entering, remaining in, or returning to volunteering).

Comparator	Interventions compared with others in the same group or:
	• Placebo (placebo or sham)
	• Control (no intervention, waitlist, standard rehabilitation care alone, or 'usual care')
	• The same intervention (as listed under 'intervention') but varied in terms of:
	  ○ Frequency
	  ○ Intensity
	  ○ Timing
	  ○ Setting

Outcome	• Return to or participation in work or volunteering • Stability of employment

	• Absenteeism from the workplace or volunteering • Workplace or volunteering self-efficacy • Personal goal attainment • Patient satisfaction • Cost-effectiveness (including resource use measurements and QALY estimations using a validated preference-based measure such as the EQ-5D or SF-6D)
Study design	• Experimental study with random assignment to intervention and control groups. • Experimental study with non-random assignment to intervention and control groups (quasi-randomised controlled trials, non-randomised controlled trials and prospective and retrospective cohort studies)
Timeframe	Long term
Additional information	Due to the heterogeneity of the chronic neurological disorder population, if multiple conditions or disorders are recruited, researchers should ensure analysis is stratified by sub-group (that is, acquired brain injury, acquired spinal cord injury, acquired peripheral nerve disorders, progressive neurological diseases, and functional neurological disorders).

EQ-5D: EuroQol 5-dimensions; SF-6D: short-form 6-dimension; QALY: quality-adjusted life years