

7th International Work Disability Prevention and Integration Conference (WDPI 2026)

Abstract Booklet: Concurrent Oral Presentations and Symposia

May 12-15, 2026

University of British Columbia Vancouver Campus | Nest Great Hall (2nd floor)

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Concurrent Session 1A. Trades & construction 1

Chair: Lindsey Richardson, University of British Columbia, Canada

Workplace Mental Health in Ontario Canada's Skilled Trades: Strategies for Diversity, Equity, and Inclusion

Behdin Nowrouzi-Kia, University of Toronto, Department of Occupational Science and Occupational Therapy, Canada

Background: Despite ongoing equity, diversity and inclusion (EDI) initiatives, underrepresentation of equity-deserving groups persists in Canada's skilled trades. Barriers such as structural inequities and workplace culture may hinder inclusive practices, and the impact of EDI on worker mental health and well-being is underexplored in this industry.

Objective: This study explored the views of skilled trade employers and workers in Ontario on EDI, organizational culture, and effective strategies for fostering EDI in the skilled trades.

Methods: We used a phenomenological qualitative study approach - involving interviews with 52 electrical workers and employers in a non-unionized electrical industry in Ontario, Canada. We used Braun and Clarke's six-step inductive thematic analysis approach.

Results: Three overarching thematic areas emerged from the analysis. Current organizational culture was the first theme. Participants stated issues such as sexism including verbal abuse and inappropriate language towards women on the job site, and prevalent biases regarding the professional competencies of workers from equity-deserving groups (e.g., women, Indigenous, multiple minority identities). Participants emphasized the importance of workplace leadership in fostering a positive organizational culture and addressing issues that affect an organization's reputation and worker recruitment and retention. The second theme identified was barriers to EDI. The participants identified the lack of work accommodations and a lack of awareness of EDI within their organization. Additionally, they highlighted the need for fair recruitment practices that support the inclusion of people from equity-deserving groups. The third and final theme was strategies to promote EDI. Participants noted the importance of career opportunities for apprentices from equity-deserving groups to gain valuable work experience and qualifications. Participants also supported the creation and implementation of various resources (e.g., maternity leave for pregnant workers).

Discussion: Our findings suggest that both individual and systemic barriers to EDI exist in the electrical sector, including sexism, discrimination and lack of EDI awareness. Strengthening EDI efforts may contribute to positive mental health and well-being outcomes for equity-deserving groups.

Women workers and occupational health practitioners in a typically masculine trade: What are sex/gender dynamics at play in an ergonomic intervention?

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Manual handling tasks are predominantly found in typically masculine trades (TMTs). Consequently, the Integrated Prevention Strategy for Manual Handling (IPSMH), aimed at reducing musculoskeletal disorders through training and workplace modifications, is more likely to be implemented in TMTs. In TMTs, women workers (WWs) and women occupational health and safety (OHS) practitioners can face sex and gender (s/g) dynamics which are situations where women experience a challenge because of sex-related characteristics, gender role, gender identity, gender relation or institutionalized gender. These situations may create inequities, increase women's turnover, and perpetuate their underrepresentation in TMTs.

The objectives were to: 1) identify s/g dynamics for WWs, woman ergonomist, women OHS advisors during IPSMH's implementations, 2) identify strategies adopted by WWs and practitioners to address s/g dynamics.

The study adopted a multiple-case study design (n=4), each case being the implementation of the IPSMH in an organization's department where manual handling is a predominant activity. Semi-structured interviews were conducted with the woman ergonomist implementing the IPSMH in all cases, workers, supervisors and OHS advisors (36 interviews: 22 women, 14 men, approximately 260 minutes per case). All interviews' recordings were transcribed and coded using the thematic analysis method.

Results shed light on seven different s/g dynamics and eight strategies, which may have an impact on the implementation process of the intervention. For instance, results showed that obtaining the supervisor's support played a role on how WWs felt they were perceived and minimized the influence of coworkers' perceptions on women's preventive behavior choices; WWs looked for allies from the maintenance department to accelerate change at their workstation, which also benefited men workers and increased adherence to the

intervention; the leadership style of the OHS advisors either enabled challenging workers' behaviors or inhibited the participation of some workers during training, both of which created a challenge for the ergonomist.

Results provided insights on contextual factors and relational dynamics to better understand why challenges occurred. It highlighted the importance of taking into account s/g issues in the analysis of implementation processes in TMTs to identify efficient or limiting s/g strategies, leading to recommendations for practitioners and employers.

[Inclusive Apprenticeships: Rethinking OHS Training for Workers with Disabilities](#)

Amin Yazdani, Canadian Institute for Safety, Wellness, and Performance, Canada

The skilled trades sector must evolve to accommodate workers with disabilities to foster a more inclusive and equitable workforce. This work investigates the prevalence of self-identified disabilities among skilled trades and explores how persons with disabilities experience occupational health and safety (OHS) training and what accommodations support their training.

Responses from 1,486 apprentices who completed a survey about demographics and learning experiences were analyzed to assess impacts of disability on OHS knowledge, training, workplace injury, worker pain, and learning preferences.

Among respondents, 298 (20.1%) reported at least one disability potentially affecting their apprenticeship. The most reported disability among the participants were diagnosed learning disabilities (14.0%) and difficulty concentrating and remembering (10.9%). Although most (72.1%) indicated their disability did not impact work performance, apprentices with disabilities demonstrated significantly lower confidence in OHS-related knowledge across 11 of 13 measured domains ($p < 0.05$). These apprentices also expressed significantly lower belief in the value of OHS training in four of five categories compared to peers without disabilities ($p < 0.05$).

Injury and pain data revealed that apprentices with disabilities had 1.8 times higher odds (95%CI: 1.35, 2.40, $p < 0.001$) of reporting any workplace injury and 2.01 times higher odds (95%CI: 1.40, 2.87, $p < 0.001$) of reporting a more severe injury requiring first aid, job modifications, or time off. Chronic pain was significantly more prevalent among apprentices with disabilities across all body segments, while short-term pain was significantly more prevalent in all areas except the back.

Learning preferences were consistent across apprentices with and without a disability, with hands-on practice being the most preferred and assigned readings the least preferred in both groups. Qualitative data about recommendations for improving OHS training accommodations centered on three main themes: learning styles, resource accessibility, and physical modifications.

This research presents actionable insights for educators and employers to enhance OHS training and workplace accommodations for apprentices with disabilities that may present challenges in their learning or work. By addressing these needs, stakeholders can support more inclusive training environments, improve retention, and contribute to resolving the skilled trades labor shortage through equitable workforce development.

[Absenteeism in a Brazilian Energy Company \(2021 - 2024\)](#)

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Introduction: Absenteeism is a challenge for occupational health in sectors with high demands, such as the energy industry. Workers are exposed to physical, psychosocial, and organizational stressors that increase the risk of musculoskeletal disorders, respiratory diseases, and mental health conditions. **Objective:** This study evaluated the longitudinal absenteeism due to registered sick leave among workers in a Brazilian energy company, focusing on the most frequent ICD-10 codes that encompassed the frequency of medical certificates and lost workdays. **Methods:** A retrospective longitudinal study was conducted based on the analysis of 3,500 workers at a Brazilian energy company, encompassing a total of 12,487 medical leaves observed between January 2021 and December 2024. Descriptive statistics were performed to measure sick leave medical certificates by year, the number of lost workdays and the ICD-10 code from each document. **Results:** The number of absentee workers with at least one lost day was: 658 in 2021; 3,461 in 2022; 3,213 in 2023, and 2,926 in 2024. The lower number of absentee workers observed in 2021 may be explained by underreporting, as it was the year when the health service began implementing the computerized system for recording medical certificates, which still presented registration failures. Additionally, most employees were working remotely, and many who became ill did not submit medical certificates. The number of lost workdays was 5,469 in 2021; 24,368 in 2022; 20,278 in 2023, and 8,206 in 2024. There was a decrease of 60% in lost days from 2023 to 2024. ICD-10 Chapters with the higher frequency of total lost days were "Diseases of the musculoskeletal system" (24.3%), "injury and other external causes" (12.5%), "Factors influencing health status" (12.3%), "Diseases of the respiratory system" (7.3%), "Diseases of the digestive system" (6.5%), O (6.0%), F (5.8%), B (5.6%), A (3.2%). **Conclusion:** This longitudinal study analyzed absenteeism in a Brazilian energy industry. Musculoskeletal disorders pose the most important impact in workers disability. Since 2023, absenteeism

rates have declined partly due to effective medical assistance protocols and the implementation of the Worker's Health Journey, which introduced preventive programs tailored to workforce profiles. Mapping absenteeism remains crucial for data-driven, strategic, and sustainable occupational health management.

Physical and Psychosocial Correlates of Occupational Physical Injury in the Global Construction Industry: A Scoping Review

Donia Obeidat, University of Toronto, Canada

Background: The construction industry is characterized by exposure to diverse psychosocial and environmental hazards that heighten the risk of work-related injuries and disability. Understanding the interplay of physical and psychosocial determinants is critical for advancing prevention and integration strategies that support worker health and safety across the sector.

Methods: A scoping review was conducted using the PRISMA-ScR framework. Comprehensive searches were performed in PubMed, PsycINFO, Cinahl, and Scopus from June 19 to October 15, 2023, to identify studies examining determinants of occupational injuries among construction workers worldwide.[BN1] The scoping review protocol was pre-registered with the Open Science.

Results: Seventy-seven studies were included, spanning North America (n=29), Africa (n=18), Europe (n=12), Asia (n=9), the Middle East (n=5), and Oceania (n=4). Evidence clustered into three key domains: (1) Workplace physical environment (e.g., exposure to hazards, PPE availability and use, job type, company size); (2) Workplace culture (e.g., psychosocial stressors, gender-related barriers, migrant and ethnic disparities, educational background); and (3) Worker health and aging (e.g., age, obesity, sleep quality, marital status, and physical health). Workers at heightened vulnerability included women, ethnic and migrant workers, and those at younger (<25 years) or older (45–55 years) ages, particularly in smaller companies with limited resources. These groups faced elevated risks of injury, reduced access to treatment, and greater exposure to hazards.

Conclusion: Findings highlight a global gap in research on the implications of psychosocial hazards and social disparities in injury risk within the construction industry. Future research should focus on disability prevention by addressing age-related vulnerabilities, improving integration of marginalized groups, and designing interventions that promote safer and more inclusive workplaces.

Concurrent Session 1B. Chronic disease

Chair: Quentin Durand-Moreau, Division of Preventive Medicine, University of Alberta, Canada

Career trajectories among people with multiple sclerosis in Sweden

Emilie Friberg, Karolinska Institutet, Sweden

Introduction: The negative impact of multiple sclerosis (MS) on employment and income among people with MS (PwMS) has been previously reported. However, there is a lack of insight into changes in career over time among PwMS and whether certain career characteristics are associated with more or less sickness absence and/or disability pension (SADP). Thus, the aim was to assess career trajectories among PwMS and to determine sociodemographic and clinical predictors associated with them.

Methods: A longitudinal register-based study of 1842 PwMS diagnosed during the years 2004 to 2007 were analyzed to determine career trajectory over a 13-year period from 3 years before to 10 years after diagnosis. The odds of changes in career over time was calculated using multinomial logistic regression analysis.

Results: In terms of career trajectories, while a majority of the PwMS remained in occupations of comparable qualification or moved into those of higher qualifications, a substantial proportion entered SADP or left the work force. Older age was associated with leaving work or SADP, higher education was associated with lower odds of SADP and jobs of higher qualification. In the transition from three years before, to the year of diagnosis, more than half of the PwMS (54.5%) remained in occupations requiring a comparable level of qualification. A proportion of PwMS changed to jobs requiring lower levels of qualification (3.2%), while, 4.7% changed to jobs requiring higher levels of qualification. The trajectory in occupation from diagnosis to the fifth year of follow-up showed that about two-thirds of the PwMS remained in the same qualification level this proportion decreased over the follow-up time.

Conclusion: The present study showed long-term career trajectories among PwMS in Sweden, suggesting most PwMS initially maintain their qualification level, although occupational stability decreases over time as the disease progresses. Factors such as education, occupation, and disability level were important predictors of career trajectories over the follow-up.

Living and working with MS: what self-reports reveal about health and employment

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Introduction

People with multiple sclerosis (PwMS) often face declining work participation due to disease progression and symptom burden, despite Sweden's flexible work policies supporting continued employment. Work ability is influenced by symptoms, personal resources, and workplace conditions, including early adjustments. This study examines associations between self-rated health and work participation among PwMS, focusing on individuals with different occupational statuses, including those receiving sickness absence (SA) or disability pension (DP).

Methods

This study used data from a survey linked to Swedish register data, with responses from 4329 PwMS aged 20-50. Participants were categorized into four groups based on self-rated health (EQ-VAS) and employment status: 1) high health and working, 2) low health and working, 3) high health with sickness absence and/or disability pension (SA/DP), and 4) low health with SA/DP. Employment status was defined as "working" (part-/full-time working or other but no SA/DP) or "SA/DP" (having part-time/full-time SA/DP). Odds ratios (OR) and 95% confidence intervals (CI) were calculated to assess associations between group membership and sociodemographic and clinical predictor variables.

Results

Men were less likely than women to be in the SA/DP groups, regardless of health status (high: OR=0.315, CI=0.172–0.579; low: OR=0.436, CI=0.272–0.436). Younger PwMS were also less likely to be in SA/DP. Mild disability (EDSS=0–2.5) was less common in the low health and working or SA/DP groups, but even less frequent in the low health SA/DP group (OR=0.288, CI=0.179–0.463). Depression was more prevalent in the low health groups, both working (OR=1.053, CI=1.036–1.071) or SA/DP (OR=1.048, CI=1.019–1.078). Fatigue was common across all groups, slightly less so in the high health with SA/DP group. Work ability declined across groups compared to the high health and working group: low health and working (OR=0.624, CI=0.574–0.677), high health with SA/DP (OR=0.495, CI=0.433–0.567), and low health with SA/DP (OR=0.331, CI=0.294–0.373).

Conclusions

Although MS-related disability and reduced work ability are linked to lower employment, people with MS often continue working despite invisible symptoms like fatigue and depression. Encouraging employer engagement, tailored adjustments, and mental health resources may play an important role in sustaining employment and quality of life, especially for those continuing to work despite significant health limitations.

Predicting Early Workforce Departure in Systemic Lupus Erythematosus Patients: A Machine Learning Approach to Guide Early Clinical Intervention

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Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease characterized by unpredictable flares and multiorgan involvement, often leading to progressive functional decline. These debilitating symptoms frequently impair work capacity, resulting in premature workforce exit affecting 20-40% of SLE patients. This carries severe socioeconomic and psychological consequences, including reduced quality of life, and increased healthcare dependency. This study aims to develop an interpretable machine learning model to flag high-risk patients before they leave the workforce, enabling timely targeted interventions.

Methods: We analyzed longitudinal data from 1,025 employed SLE patients at the Toronto Lupus Clinic (1996–2024). Patients were categorized into three exclusive outcomes: disability, SLE-mortality, and stable employment (remaining employed or retiring at/after national retirement age). Other exit categories were censored. A Random-Forest classifier selected visit-to-visit disease activity measures, treatment regimens, and organ damage features for a Long Short-Term Memory (LSTM) model. Each visit's data was processed with prior history to create an updated patient health hidden state. First, the final hidden state was used to predict the most likely employment outcome. Then, risk scores were calculated at each visit with sigmoid activation, and alerts were triggered if scores exceeded an optimized threshold. Prediction accuracy and lead time for early detection assessed model effectiveness.

Results: Future disabled patients showed more frequent visits and higher numbers over longer follow-ups, with higher doses of glucocorticoids and antimalarials, greater disease activity, irreversible damage, and more frequent flares (all $p < 0.001$). The model achieved 91% balanced accuracy in predicting the final employment state. More significantly, the early detection system identified 89% of future disability cases with 94% recall, providing a median 28.6-month (IQR: 14.3–42.1) warning before workforce exit and minimizing false alarms.

Conclusions: Predicting workforce exit for SLE patients is critical to preserving independence and quality of life. Our early warning system uses longitudinal visit data to flag most future disability cases 2–3 years in advance. The early risk alarms enable timely workplace accommodations and precision interventions. By transforming reactive care into preemptive action, this model closes a critical gap in chronic disease management, empowering clinicians to intervene before functional decline becomes permanent.

Work Environment and Sustainable Return to Work after Stroke: Experiences of Persons with Mental Fatigue

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Introduction: Fatigue is a common symptom after stroke. To support sustainable return to work, it is crucial to understand how the work environment and tasks can be adapted to address challenges posed by mental fatigue.

Objectives: This study investigates how persons with mental fatigue after stroke perceive their work environment and task demands in relation to their possibilities to return to and remain at work. It also examines whether the degree of mental fatigue and demographic factors influence these perceptions.

Methods: A cross-sectional design was applied, based on ratings and written notes from the therapist-administered Work Environment Impact Scale (WEIS) and questionnaire data from the Work Ability Index (WAI), Mental Fatigue Scale (MFS), and Hospital Anxiety and Depression Scale (HAD). Data collection is ongoing in autumn 2025. The preliminary analysis is based on 39 WEIS assessments and questionnaire responses from participants with experience of working after stroke. Qualitative content analysis and statistical analysis are used.

Results: Preliminary findings indicate that several environmental factors influence how participants with fatigue perceive their possibilities to return to and remain at work. While physical demands were less concerning, cognitive and mental demands exacerbated fatigue. Limited control over schedules and frequent task disruptions were particularly challenging. Mental fatigue unpredictably impaired work ability, leading to conflicts when expectations misaligned. To cope, participants adjusted tasks, structured their environment, and developed routines for accessibility and recovery. Supportive co-workers reduced stress and assisted with task management, whereas leadership changes created uncertainty. Understanding supervisors fostered inclusion, but securing flexible work adjustments remained difficult. Minimizing auditory and visual distractions was considered crucial for conserving energy.

Conclusions: Creating a healthier and more sustainable work environment for persons with post-stroke fatigue requires nuanced understanding and flexible adjustments. Close collaboration with employers is vital to ensure tailored support and continuity, as ongoing and adaptive strategies are often needed throughout the return-to-work process and beyond. Further analysis, including comparative data, will provide more definitive insights into how work environment factors influence perceptions of possibilities to return to and remain at work.

The impact of post stroke fatigue on work and other everyday life activities for the working age population – a registry-based cohort study

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Introduction: Managing everyday activities, including work, in life after stroke is central for a person's health and wellbeing. Fatigue is a common symptom after stroke, subjectively experienced and invisible. There is a need to expand the existing knowledge on post stroke fatigue (PSF) and its influence on everyday life using large-scale data.

Objectives: This study investigated post stroke fatigue, its development over time, and its impact on return to work and other everyday life activities. In addition, the study examined whether post stroke fatigue could predict return to work and functioning in everyday life activities one year after stroke.

Methods: This prospective registry-based study included 2850 patients aged 18 to 63 years and registered in the Swedish Stroke Register during 2017 and 2018. Baseline data and questionnaire data from 3- and 12-month follow-ups were analysed with regard to fatigue and everyday activities, including work.

Results: The mean age of participants was 54 years, and 65% were men. At three months post-stroke, 43% self-reported fatigue; at 12 months, the proportion had increased to 48%. Dependence in complex activities one-year post-stroke was significantly associated with fatigue. The absence of fatigue one year after stroke predicted positive functioning in everyday activities, increasing the likelihood of returning to work by nearly four times (OR = 3.7) and of resuming pre-stroke everyday activities by nearly six times (OR = 5.7).

Conclusion: There is a need to look beyond basic ADL and consider the impact of PSF on everyday life, including work, when planning rehabilitation after stroke for working age people. Additionally, the patient's recovery process should be followed when resuming activities in everyday life, as this can affect the development of post stroke fatigue. Guidelines for stroke rehabilitation need to include the context of everyday life, including complex activities, such as work. Further research is needed to elucidate how PSF can be effectively managed to facilitate people's ability to return to and maintain work and everyday activities.

Concurrent Session 1C. Healthcare experience

Chair: Kimberly Sharpe, Partnership for Work, Health and Safety, University of British Columbia, Canada

Injured workers' experience of using GP care for work-related and non-work-related conditions

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Background

General practitioners (GP) play a vital clinical and administrative role within Australian workers compensation systems in managing work-related injuries. When a worker is injured, GP care for the work-related condition is paid by workers compensation, while care for non-work-related problems are subsidised by public healthcare insurance. As a result, injured workers navigate two healthcare funding systems simultaneously to manage work-related and non-work-related conditions. This study aimed to explore injured workers' experience of using GP services for their work-related and non-work-related conditions.

Method

We used an exploratory qualitative approach using semi-structured interviews to gather insights from the lived experiences of injured workers with accepted workers' compensation claims for musculoskeletal injuries within last five years. Eleven injured workers were recruited through online advertisements and professional networks. A reflexive thematic analysis was conducted with an inductive approach to coding and identifying key themes.

Results

Three key themes emerged from the initial data analysis.

GPs multiple roles: Most of the participants visited the same GP for both work-related and non-work-related conditions. Injured workers described GPs as both caregivers and administrative gatekeepers, and relied on GPs for guidance through the compensation process and advocacy. Injured workers expressed empathy for the administrative demands, given the low fee schedules.

Prioritisation of work-related conditions: Workers prioritised work-related injuries even when they had other serious health conditions, as any clinical care must be approved by worker's compensation system to be funded, which is time-consuming.

Impact of GPs administrative demands: Administrative demands on GPs had negative impacts on injured workers. These demands made it difficult for injured workers to find GPs willing to manage work-related injuries, shifted the focus of the consultations towards paperwork rather than clinical care, and led workers to seek supplementary healthcare from other providers at their own cost. While some participants described strengthened relationships with GPs who advocated on their behalf, many felt that having a workers compensation claim strained their relationship.

Conclusion

GPs administrative demands and workers compensation processes shape how injured workers access and experience GP care for both work-related and non-work-related conditions. Addressing these issues may support worker's recovery.

Barriers and Opportunities in General Practitioners' Stay-at-Work Practices: An Intervention Mapping Approach

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Background:

General practitioners (GPs) play a key role in supporting patients with chronic conditions and disabilities in staying at work and maintaining employment. However, limited knowledge exists regarding the nature of work-related discussions and GPs' actions during routine consultations, as well as GPs' perceptions of their responsibilities in this area.

Objectives:

This study aimed to describe current stay-at-work practices among Danish GPs in relation to workers with musculoskeletal disorders, identify areas for improvement, and propose a relevant training program for GPs.

Methods:

Using principles from Intervention Mapping (steps 1-4), data were collected iteratively through literature reviews, three focus group interviews with GPs (n=10) guided by a case vignette, and consultations with labour market stakeholders. Interview data were analysed inductively using systematic text condensation.

Results:

GPs' practices were shaped by systemic, organisational, and legislative conditions, as well as personal factors such as knowledge, skills, and attitudes toward musculoskeletal disorders and work participation. The GPs acknowledged their role in diagnostic and holistic patient assessments but often positioned themselves as peripheral actors, relying on patients or workplace stakeholders to initiate action. Their direct involvement in processes aimed at facilitating workers staying at work was influenced by interactions with workers, employers, and other professionals. A training program was proposed, combining practical tools with behaviour change techniques to enhance GPs' capacity to support work participation.

Conclusions:

The study highlights diverse perspectives on GPs' roles and responsibilities, alongside structural and legislative barriers. Key challenges include unclear role distribution among stakeholders and a lack of financial incentives for GPs to engage in stay-at-work processes. While training may address some barriers, others, such as systemic constraints and the question of who is best positioned to support patients in staying at work, remain unresolved.

[Injured workers' decisions to use and experiences with cannabis to treat the symptoms of their work-related conditions: A qualitative study from Ontario, Canada](#)

Nancy Carnide, Institute for Work & Health, Canada

Background: Globally, more and more jurisdictions are legalizing cannabis for medical and/or non-medical purposes. Public interest in the therapeutic use of cannabis is also rising. Pain, sleep difficulties, and poor mental health are common reasons reported for using cannabis therapeutically and are also frequently experienced after work-related injuries. Yet, information on workers' experiences with using cannabis after a work-related injury are scarce. Our aim was to explore injured workers' decisions to use cannabis, perceived impacts of use, and their experiences navigating use with return-to-work.

Methods: Participants were recruited from a group of workers in Ontario, Canada with accepted lost-time workers' compensation claims for a physical injury who previously participated in a survey interview on their work experiences after injury. Those who agreed to be recontacted and indicated having used cannabis to treat the symptoms of their work injury were approached for participation. One-on-one semi-structured interviews were conducted with 45 workers and data were analyzed using a thematic analysis approach.

Results: Several themes were identified within each broad area of interest.

Decisions to use cannabis: Cannabis was not often the first or only treatment option employed, and various considerations prompted workers to use cannabis, including challenges in the return-to-work process; concerns about other therapeutic measures; previous experiences with use; and influence of others.

Perceived impacts of use: For many, cannabis use was considered a helping hand in symptom reduction and/or return-to-work, but often with limits, requiring a multi-pronged therapeutic approach. For others, cannabis was found to be ineffective or had undesirable effects.

Navigating use with return-to-work: Workplace drug policies and the safety-sensitive nature of some workers' jobs required workers to evaluate their cannabis use in the context of work. This included scheduling their use away from work, using different products, or discontinuing cannabis use entirely. The impacts of these choices on workers varied.

Conclusions: Injured workers are turning to cannabis as a therapeutic option for a variety of reasons and often consider it one tool in their arsenal to manage the symptoms of their injuries. Although often considered helpful, workers also face some challenges in managing use alongside work.

The role of exercise physiology compared to other physical therapies in return to work among compensated workers with physical injuries

Shannon Gray, Monash University, Australia

Background: Exercise physiology (EP), either alone or in conjunction with other allied healthcare, can assist in injury recovery to help workers build the physical capacity needed for return to work. EP use in workers' compensation is increasing, however the relationship between its use and return to work, especially compared to other physical therapies, is not well explored.

Objective: To compare duration of compensated work absence (return to work proxy) between injured workers based on their use of physical therapies with or without EP.

Methods: Retrospective cohort study utilising workers' compensation claims, payments and services data from the Australian states of Victoria and South Australia. Time loss, physical injury claims accepted 1st January 2018-31st December 2021 with at least one physical therapy service (physiotherapy, chiropractic, osteopathy, EP) in the 31 days prior to 730 days after claim acceptance were included. Compensated work absence duration in the two years post-claim acceptance was calculated using payments data. Propensity score matching ("nearest" neighbour) matched those with and without EP service use by age, sex, nature and location of main injury, jurisdiction, and number of other physical therapies used. Volume and time to first service for physical therapies was compared between cohorts. Linear regression determined the association of EP with time loss duration.

Results: There were 6579 people in each cohort. In both, males, those aged 45-54 years, musculoskeletal and connective tissues diseases, and trunk injuries were most common. The median number of EP services per worker was 9 (IQR 4-19) and median time to first service was 142 days (IQR 56-287 days). T-tests found the time to first service and number of other physical therapies were not significantly different between cohorts, however injured workers who used EP had significantly longer time loss duration. Linear regression showed utilising EP was associated with a longer duration of compensated time loss ($\beta = 89.56$ [81.17-97.95], $p < .001$, $R^2 = 0.032$).

Conclusions: The duration of time loss was significantly longer among those who used EP services compared to a matched cohort. However, time to first EP service suggests delayed uptake and potentially only among more complicated cases.

Factors influencing trust in work disability-related welfare state institutions: a systematic literature review

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Background: Trust in welfare state institutions responsible for assessing functional capabilities, determining eligibility for sickness benefits, and supporting return to work (RTW) is essential for workers. Trust fosters open communication, engagement, adherence to RTW advice and ultimately sustained work participation. Therefore, it is important to identify the factors that influence trust in these institutions. This systematic literature review aimed to identify factors influencing institutional trust in work disability-related welfare state institutions.

Method: We conducted a systematic search in PubMed, PsycInfo and Web of Science for studies published between January 2004 and July 2024. Study quality was appraised with the Hawker checklist. Barriers and facilitators were categorized across four different levels: individual, interpersonal, organizational, and system level.

Results: Six studies were included that described barriers and facilitators for worker's institutional trust. Previous experiences with the institution and political views, were identified as factors that could influence institutional trust on the individual level. At the interpersonal level, a lack of understanding between the professional and the worker, negative public narratives about the welfare state institutions, conflicting views of significant others, and a bad relationship with professionals were reported as barriers for institutional trust. Facilitators included respectful treatment and supportive relationships with professionals. At the organizational level, the transparency or clarity of information and procedures were identified as important factors. At the system level, perceptions of the welfare system to be malevolent or overly complex reduced trust.

Conclusion: Understanding the multilevel factors that influence institutional trust highlights the complex and layered nature of trust in work disability settings. This perspective can inform trust-sensitive approaches and interventions to support (re)integration of workers with health problems and help sustain their participation in the labour market.

Concurrent Session 1D. Symposium: Workplace stigma, discrimination and disclosure: Challenges and solutions for sustainable employment

Evelien Brouwers, Tilburg University, The Netherlands

Marc Corbiere, Université du Québec à Montréal, Canada

Naomi de Leng, Tilburg University, The Netherlands

Philippe Sterkens, Ghent University, Belgium

Janske van Eersel, Tilburg University, The Netherlands

Monique Gignac, Institute for Work & Health, Canada

Stigma and discrimination in the workplace remain underestimated yet powerful barriers to sustainable employment for people with (mental) health conditions. Workplace stakeholders (e.g., line managers, HR personnel, coworkers) often hold stigmatizing attitudes that result in exclusion rather than inclusion of workers with health problems. This symposium aims to highlight mechanisms through which stigma and discrimination undermine sustainable employment; present empirical evidence and innovative approaches to support disclosure in different professional contexts; and discuss practical strategies to reduce stigma and empower employees and employers in making informed choices. Evelien Brouwers will introduce the topic and identify research gaps, followed by a series of presentations from Canadian and Dutch researchers.

Wednesday May 13, 1:30 – 3:00 pm

Concurrent Session 2A. Trades & construction 2

Chair: Nancy Carnide, Institute for Work & Health, Canada

Accommodating work for sick-listed workers in sectors with limited availability of work accommodations: a qualitative study from the employer perspective

Bibi de Mul, University Medical Center Groningen, The Netherlands

Background

Employers in many OECD countries, including the Netherlands, carry primary responsibility for facilitating return-to-work (RTW) and providing work accommodations for sick-listed workers, a task often perceived as complex. This complexity can be even greater in occupational contexts where opportunities for work accommodations are limited, for example, due to physically demanding work or relatively homogeneous job tasks with little variation, such as in the construction and elderly care sectors. To better understand this context, this study aims to examine how employer representatives (e.g., HR-professionals and supervisors) experience providing work accommodations, which factors facilitate or hinder this process, and what employer representatives need to better support sick-listed workers during RTW.

Methods

We conducted semi-structured interviews with HR-professionals (n=8) and supervisors (n=2), and two focus groups with employer representatives from the construction (n=4) and elderly care (n=8) sectors in the Netherlands. All interviews and focus groups were recorded, transcribed, and thematically analyzed.

Results

Responsibility for providing work accommodations is often placed with HR-professionals, while supervisors' involvement ranged from minimal to primary responsibility in the RTW process. Facilitators included shared responsibility between worker and employer, effective collaboration between organizational stakeholders, and employers' knowledge and experiences in offering work accommodations. Reported barriers included insufficient information about workers' health problems (mainly due to privacy regulations), legislative and organizational constraints, and workers' disagreement about the suitability of provided accommodations. Employer representatives further emphasized that the effectiveness of accommodations, and their contribution to sustainable RTW, depended on their temporary or permanent nature, their alignment with workers' backgrounds, experiences and values, and their fit within the broader team and organizational context.

Conclusions

Employers in sectors with limited opportunities for work accommodations experience substantial barriers for providing work accommodations. Strengthening collaboration and communication between HR-professionals and supervisors, and embedding responsibility for work accommodations into clear organizational disability-related policies and practices may better support sustainable RTW. To further support supervisors' role, providing practical tools, such as structured conversation guides, examples of feasible

accommodations, and best practices, may help them initiate and structure conversations with sick-listed workers and identify suitable accommodations, thereby further contributing to more sustainable outcomes.

[Burnout and beyond: Understanding precarity, job satisfaction and turnover among electricians in Ontario, Canada](#)

Maryam Shahzad, University of Toronto, Canada

Background: Skilled trades workers, including electricians, face unique occupational challenges and persistent labour shortages, with nearly 300,000 jobs going unfilled in Ontario. Apprentices and non-unionized workers are particularly vulnerable, given their more precarious employment conditions, fewer protections and limited access to support. Despite emerging recognition of burnout, job satisfaction and intent to leave (ITL) in other sectors, little empirical research has examined how these factors interact within the skilled trades, a critical workforce for economic and infrastructure sustainability.

Objective: To assess the prevalence of burnout, job satisfaction and ITL among electricians in Ontario, Canada and explore how outcomes vary across sociodemographic and occupational groups, with attention to precarious and marginalized employment contexts.

Methodology: A cross-sectional survey was conducted with 73 electricians, recruited in partnership with the Ontario Electrical League between 2021 and 2023. Burnout was measured using the Copenhagen Burnout Inventory, while job satisfaction and psychosocial work factors were assessed using an adapted NIOSH Generic Job Stress Questionnaire. Associations between burnout, satisfaction, and ITL were analyzed using multivariate logistic regression, with subgroup analyses comparing apprentices, licensed workers, unionized, and non-unionized participants.

Findings: Overall, 13.7% of participants reported ITL within the next five years. Burnout was common (31.8%) but was not independently associated with ITL. Higher job satisfaction was protective (OR = 0.58, 95% CI [0.34, 0.96]). Apprentices demonstrated markedly elevated risk, with more than six times higher odds of ITL (OR = 6.59, 95% CI [1.48, 38.47]). Job satisfaction was especially influential for licensed and non-unionized workers: each additional unit of reported job satisfaction was associated with 53% and 47% lower odds of ITL respectively (OR = 0.47, 95% CI = [0.21, 0.86] $p = 0.022$; OR = 0.53, 95% CI = [0.30, 0.86], $p = 0.014$ respectively).

Conclusion: Electricians in precarious employment situations, particularly apprentices, may face disproportionate risks of leaving the trade. Job satisfaction emerged as a critical protective factor in retention, suggesting that strategies such as mentorship, improved psychosocial supports, and stronger workplace protections are essential. These findings have important implications for sustainability, and workforce protection considerations in the skilled trades.

[Human Factors and Policy Gaps in Canada's Maritime Safety Regulations for Tugboat Seafarers](#)

Fazle Sharior, Memorial University of Newfoundland, Canada

Tugboats are essential to Canada's coastal and inland marine sectors, yet their crews face multiple occupational hazards. Hazardous environments, aging vessels, and fragmented safety oversight continue to drive preventable injuries and fatalities at sea, contributing to work disability. This policy analysis examines how recent Canadian regulatory efforts address these risks, and we identify several gaps that still limit the prevention of work-related disability and the promotion of safe work integration. We reviewed Transportation Safety Board marine accident investigation reports from the past decade, relevant occupational health and safety legislation, and conducted a comparative analysis of Canadian and U.S. towing-vessel regulations. We employ the analytical lens of human factors to assess how regulatory gaps contribute to cognitive, organizational, and operational factors that lead to accidents. Our preliminary findings reveal persistent regulatory deficiencies in the Canadian tug sector, particularly for vessels under 15 gross tonnage. Despite the 2024 Marine Safety Management System Regulations (SOR/2024-133), which mandate a documented Safety Management System (SMS) for Class 4 vessels, transitional exemptions and the voluntary nature of earlier programs leave many operators without enforceable standards for inspection, fatigue management, crew training, and certification. Case studies from 2015 - 2025 repeatedly reveal fatigue, inadequate emergency drills, and maintenance failures that elevate the risk of occupational injury and long-term work disability. In contrast, the U.S. tugboat safety regulatory regime imposes mandatory inspections that offer a model for possibly more consistent prevention of safety accidents that may lead to work-related disabilities. Strengthening Canadian oversight and embedding human-factors principles in marine policy would align with international good practices, reduce maritime occurrences, and better protect the health and safety of tugboat seafarers.

What facilitates or prevents successful return-to-work in the Canadian construction sector?

Kimberly Sharpe, Partnership for Work, Health and Safety, University of British Columbia, Canada

Background: The burden of work-related injury is significant in construction. Successful return-to-work (RTW) after work injury for construction workers is often challenging and may include additional barriers compared to other types of work. We undertook a qualitative study in the Canadian provinces of British Columbia, Alberta, Manitoba and Ontario to identify barriers and facilitators to RTW in construction.

Methods: We conducted 62 key informant interviews with RTW professionals in the workers' compensation system, construction employers, health and safety association representatives, labour representatives and construction workers, as well as four focus groups with workers' compensation policy and program managers. The data was analyzed using Template Analysis, a type of thematic analysis using both a priori and a posteriori codes.

Results: Barriers and facilitators were identified across several domains, including social norms, government legislation, social welfare system, and worker and workplace characteristics. RTW facilitators were workers' compensation professionals and employers who display empathy for workers, are flexible in the RTW process, knowledgeable about construction work demands, and who engage workers early and often in disability management. Further, union representatives were important advocates for workers navigating the healthcare and workers' compensation system. Timely access to healthcare and healthcare providers familiar with construction work were integral in supporting RTW. Barriers to RTW were related to the nature and organization of the construction industry, and injured worker characteristics. RTW barriers were the physicality of construction work, the seasonal and episodic nature of construction contracts, transient worksites, large dynamic worksites with multiple subcontractors, and the preponderance of small firms. The organization of labour, including the role of union halls, influences RTW. For some workers unable to return to their pre-injury positions, there were additional barriers to RTW retraining, including limited transferable skills, poor English proficiency, lower educational attainment and criminal records.

Discussion: This research demonstrates the need for tailored approaches to RTW in construction that account for the nature and organization of work and worker characteristics. Findings from this study, especially those that relate to modifiable RTW features, provide guidance for compensation and health care providers, employers and workers in supporting successful RTW in construction.

Development and evaluation of an organizational-level return-to-work intervention to support supervisors in accommodating work for sick-listed workers

Raun van Ooijen, University Medical Center Groningen, The Netherlands

Background

Supervisors have a key responsibility in providing work accommodations that enable sustainable return-to-work (RTW). Many encounter difficulties in fulfilling this responsibility, particularly in sectors that involve physically demanding work and offer limited job flexibility. We developed an organizational-level intervention to strengthen supervisors' self-efficacy and access to support, thereby enhancing their capacity to provide suitable accommodations. This study aims to evaluate its effectiveness and implementation.

Methods

We used an effectiveness-implementation hybrid design. The intervention combined a web-based platform, structured support from an organization-based RTW expert, and a learning community for interested stakeholders. The platform offers practical tools across themes that were indicated to be important for supervisors (legislation and roles; support and guidance; task/job modifications; and anecdotes on RTW experience). Eight Dutch elderly care organizations participated. Effectiveness was assessed using a difference-in-differences design using sickness-absence records in elderly care. The primary outcome was the proportion of sick-listed workers achieving full RTW at 12 months; secondary outcomes were supervisors' attitudes, self-efficacy, and perceived social influence (questionnaires). Implementation was examined through supervisor questionnaires and stakeholder interviews; questionnaire data were analyzed descriptively, and qualitative data thematically.

Results

Between February 2024 and February 2025, eight organizations participated, of which one partially implemented the intervention and two discontinued their participation. At baseline, the analytic cohort consisted of 932 sick-listed workers (> 4 weeks) in intervention organizations and 35,983 in the control group. Difference-in-differences estimates indicated higher RTW proportions in intervention organizations (a 0.046 increase at 12 months compared to 0.56 at baseline) and shorter absence duration (11 days fewer compared to 312.2 days at baseline), both statistically significant at the 5% level, relative to controls. Direct platform use by supervisors was limited.

However, RTW experts did explore the platform, engaged in the learning community, and provided structured guidance. Qualitative findings indicated that organizations were more attentive to initiating accommodations.

Conclusions

An organizational-level intervention that links supervisors to structured RTW expertise, including a supportive platform with practical tools, can improve RTW outcomes and strengthen accommodation practices. Future implementation should emphasize the structured support role of the RTW expert to further strengthen supervisors in providing work accommodations.

Concurrent Session 2B. Chronic disease & cancer

Chair: Karen Nieuwenhuijsen, Amsterdam UMC, Department of Public and Occupational Health, Amsterdam Public Health Research Institute, University of Amsterdam, The Netherlands

Acceptability and Feasibility of a Primary Care Return to work Intervention for Breast Cancer Survivors

Karine Bilodeau, University of Montreal, Canada

Introduction:

Returning to work (RTW) after breast cancer presents significant challenges for many women. Persistent side effects, uncertainty about work capacity, and lack of workplace support often hinder this transition. Post-treatment support is essential to facilitate recovery and reintegration. To address this gap, our team developed a supportive RTW intervention delivered in primary care for breast cancer survivors.

Aim:

To evaluate the acceptability and feasibility of a primary care-based intervention designed to support RTW after breast cancer treatment.

Methods:

A pilot study using a qualitative approach was conducted. The intervention consisted of three one-hour virtual sessions led by a nurse practitioner (NP) in Montreal, Canada. It focused on symptom management, functional recovery, RTW barriers, employer collaboration, and shared decision-making. A peer support component paired participants with trained patient partners. Recruitment feasibility was assessed using administrative data. Semi-structured interviews were conducted with participants, NPs, and patient partners. The interview guide was based on Sekhon et al.'s acceptability framework, exploring affective attitude, burden, intervention coherence, perceived effectiveness, and self-efficacy. Transcripts were analyzed using iterative content analysis.

Results:

The study achieved its recruitment target (100%) but experienced a 50% dropout due to unforeseen circumstances. Four NPs and two patient partners were trained. Twelve interviews were conducted: six with participants, four with NPs, and two with patient partners. The intervention's structure, duration, format, and NP support were well received. Participants reported increased knowledge about the RTW process, feeling supported, improved navigation of resources, and better RTW planning. However, implementation challenges were noted, including limited access to medical records, scheduling constraints, and resource availability in primary care.

Conclusion:

This pilot study highlights the promising potential of a primary care-based intervention to support breast cancer survivors in their RTW journey. The high level of acceptability and feasibility observed underscores the relevance of integrating such tailored support into post-treatment care. In a context where interventional studies on RTW remain scarce, this initiative stands out as an innovative, patient-centered approach that bridges oncology and primary care, paving the way for future research on tailored RTW support strategies for cancer survivors.

Return-to-work barriers for sick-listed employees with cancer compared to employees on sick leave with musculoskeletal disorders and common mental disorders

Ida Goplen Gulliksen, Oslo Metropolitan University, Department of Rehabilitation Science and Health Technology, Norway

Aim: Research focusing on return-to-work (RTW) barriers after a cancer diagnosis is scarce. This might be a problem because this group faces numerous challenges due to treatment burden, which necessitates tailored approaches. In this study, we therefore aimed to identify the obstacles to returning to work for cancer survivors, compared to those on sick leave due to musculoskeletal disorders (MSD) and common mental disorders (CMD).

Methods: A large-scale interview study was conducted through structured telephone interviews with 245 participants. Participants were recruited through three sub-organisations from the Norwegian Cancer Society and the Norwegian Labour and Welfare Service. To be eligible, participants were required to have been on sick leave for a minimum of six months and a maximum of 1.5 years, exceeding 50% of their total working time. Analysis of barriers was conducted through deductive content analysis, following the terminology of the WHO's International Classification of Functioning, Disability and Health (ICF).

Results: Preliminary findings indicate that barriers related to "Services, systems, and policies" (environmental factors) and "Mental function" (body functions) were most frequently reported among sick-listed employees with both cancer, MSD and CMD. Although all three groups report most barriers within the same two ICF components, the specific challenges on a more detailed level of ICF differed. Sick-listed employees with cancer reported treatment-related RTW barriers such as mental fatigue, poor memory, and difficulty concentrating under "Mental function." In contrast, barriers within "Services, systems, and policies" include a lack of information and poor coordination for return to work after treatment. For those with musculoskeletal disorders and common mental disorders, barriers within "Mental function" were more often linked to, for example, depressive symptoms, anxiety, and stress. Furthermore, for those with MSD and CMD, environmental barriers include difficulties navigating the system and long waiting times.

Conclusion: This study revealed that although many RTW barriers are similar between cancer survivors and other frequent diagnoses in sick leave, some of these are closely linked to the disease and especially the treatment burden after a cancer diagnosis.

[Exploring the work experiences of employees living with prolonged incurable cancer and their employers: a qualitative study](#)

Michiel Greidanus, Amsterdam UMC, The Netherlands

Purpose An increasing number of people are living longer with incurable cancer. While no longer curable, many seek meaningful ways to participate in society, particularly through work. This study explores the role of work and the work-related experiences of employees living with prolonged incurable cancer, as well as how their employers experience and navigate this situation

Methods An exploratory qualitative study was conducted using in-depth interviews with 20 employees living with incurable cancer for over one year and 5 employers who currently or recently supervised such an employee. Data were analyzed using conventional content analysis.

Results Participating employees (85% female) had lived with incurable cancer for a mode of 4 years (range: 2-10 years). Work was described as a source of meaning, stability, structure, and social connection. Although many wished to remain active in paid employment, physical and emotional limitations – combined with employer expectations – often made this challenging. Volunteering emerged as a meaningful and more flexible alternative. Employers adopted either a human-centered or organization-centered approach, influenced by factors such as time since diagnosis and the characteristics of the employee, employer and organization.

Conclusion Employees with prolonged incurable cancer often wish to remain part of society through work, while volunteering offering a meaningful alternative when paid work is no longer feasible. Employers continuously navigate the balance between human compassion and organizational demands. Tailored support for both employees with prolonged incurable cancer and their employers is essential to prevent unnecessary and involuntary exits from the labor market. During the WDPI conference, concrete implications for practice will be outlined by presenting the specific support needs of employees living with prolonged incurable cancer and their employers, directly derived from our findings.

[Feasibility of the PLACES intervention aimed at enhancing the work participation of unemployed and/or work disabled cancer survivors: a qualitative study among stakeholders](#)

Fenna van Ommen, Amsterdam UMC, The Netherlands

Background:

Unemployed and/or work-disabled cancer survivors face significant challenges in returning to paid employment, while evidence-based interventions remain scarce. The PLACES intervention, based on Individual Placement and Support (IPS), provides individualized support tailored to cancer survivors seeking paid employment. We aimed to: (1) explore experiences of stakeholders, including cancer survivors, coaches, and professionals from the Dutch Social Security Agency (SSA) and reintegration organization responsible for its implementation and funding, and (2) investigate the feasibility of PLACES, addressing barriers and facilitators for sustainable implementation.

Methods:

A qualitative study was conducted using semi-structured interviews with cancer survivors who received PLACES and focus groups with other stakeholders (i.e., coaches, SSA and reintegration professionals). Data were analyzed using conventional content analysis guided by Bowen's feasibility framework, addressing acceptability, demand, implementation, practicality, adaptation, integration, expansion, and limited efficacy.

Results:

Seven cancer survivors, six coaches, ten SSA professionals, and two reintegration professionals participated. Survivors emphasized recognition and acknowledgment of their situation and valued coaches' ability to adapt to their personal preferences. A strong coach-participant relationship was important for successful outcomes. Both those who did and did not secure paid employment reported gains in self-knowledge, confidence in work ability, acceptance of changed capacities, and restored work-life balance.

Coaches observed that most IPS principles work well for this group, though some adaptations are needed for cancer-related limitations. Coaches considered survivors to be very assertive, self-reliant and motivated. Better integration with healthcare would be desirable to fully align with IPS principles.

SSA professionals acknowledged PLACES' added value and expressed enthusiasm for broader application, but noted challenges related to procedural complexity and procurement. They indicated that alternative funding structures and forthcoming SSA policies could support structural embedding, conditional on effectiveness of the intervention.

The reintegration organization emphasized that PLACES aligns seamlessly with their services and provides valuable support for cancer survivors distanced from the labor market in gaining work experience and developing skills.

Conclusions:

PLACES is found to be feasible and acceptable across stakeholders, with indications of perceived positive psychosocial and vocational outcomes. To enable sustainable implementation, alignment with SSA procedures and better integration with healthcare are required.

Concurrent Session 2D. Symposium: From risk to reintegration: Rethinking injury and return-to-work pathways for im/migrant and precarious workers

Daniel Côté, Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), Canada

Jessica Dubé, Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), Canada

Basak Yanar, Institute for Work & Health, Canada

This symposium will explore the complexity of return-to-work (RTW) processes for workers with temporary or permanent im/migrant status in precarious employment who have sustained occupational injuries. These individuals—whether temporary foreign workers, asylum seekers, international students, or recent permanent immigrants—are overrepresented in high-risk, low-protection sectors and often face barriers long before an injury occurs, including unsafe conditions, fear of reprisal, and limited access to OHS prevention. These challenges are compounded by language barriers, limited knowledge of occupational health and safety (OHS) rights, and institutional misrecognition of structural and migration-related vulnerabilities. Grounded in qualitative and ethnographic research, the presentations in this symposium will examine how injury and rehabilitation pathways unfold when employment precarity intersects with cultural and systemic disjunctures.

Wednesday May 13, 4:00 – 5:30 pm

Concurrent Session 3A. Precarious work

Chair: Ute Bültmann, University Medical Center Groningen/University of Groningen, The Netherlands

Co-Designing Culturally Responsive Research: A Participatory Methodology for Engaging Marginalized Workers in Workplace Injury and Compensation Research

Sarah Anderson, Monash University, Australia

Background:

Culturally and racially marginalised workers, including those with limited language proficiency, face heightened workplace injury risk yet remain underrepresented in injury surveillance and compensation data. Traditional research approaches fail to capture these experiences due to language barriers, cultural differences, and mistrust of formal systems. There is a critical need for research methods that are culturally responsive and participatory, ensuring marginalised workers can share their experiences authentically and safely.

Aim:

To describe the development and application of a participatory, culturally responsive qualitative methodology designed to engage marginalised workers. Drawing on two case studies involving migrant workers in healthcare and workers with limited language proficiency accessing compensation systems, a methodological framework adaptable for research with other marginalised worker populations will be discussed.

Methods:

The methodology was co-designed with a migrant worker advocacy organisation. Two complementary approaches were developed. First, a community ambassador model where trained community members conduct semi-structured interviews in participants' preferred languages within culturally safe contexts. Ambassadors receive research training and recruit approximately 20 participants through convenience and snowball sampling. Second, a multi-method approach combining worker interviews with focus groups involving interpreters and system staff, alongside policy reviews. Both approaches employ collaborative co-analysis workshops where researchers and community partners jointly analyse data, grounding findings in lived experience. This participatory design reduces fear of formal research, honours cultural knowledge, and ensures community ownership.

Results:

Early results (data collection complete in 2025) are demonstrating effectiveness in engaging hard-to-reach populations. Results will present the methodological framework, implementation challenges and solutions, recruitment strategies, ethical considerations in community-partnered research, and the role of co-analysis in ensuring cultural validity. Comparative insights across case studies highlight the methodology's adaptability.

[Contributing to decent work for people in a vulnerable position on the labor market: a multi-actor analysis of success factors and challenges](#)

Hanneke van Heijster, Tilburg University, The Netherlands

Participation and inclusion of people in a vulnerable position on the labor market (e.g., due to a disability) is an important aspect of the Sustainable Development Goals of the United Nations. Being excluded from work reduces societal participation and financial stability, and can increase feelings of loneliness and insecurity. When people in a vulnerable position do find work, it is often low-wage and physically demanding, negatively impacting long-term physical and mental health. Therefore, it is important not only important to understand how people in a vulnerable position on the labor market can transition to work, but also how they can access decent work, work that provides safe working conditions, a fair income, and work-life balance. This study aims to understand how Labor Market Intermediaries (LMI's) contribute to the transition from inactivity to decent work for vulnerable jobseekers by supporting both jobseekers and employers.

A qualitative multiple case study design is applied, focusing on three Dutch LMI's supporting people in a vulnerable position on the labor market. For each case, data is collected through focus groups with LMI professionals, interviews with people in a vulnerable position, and interviews with employers. Topics concern challenges and success factors in the transition to work for people vulnerable position, each actor's position. The Ability-Motivation-Opportunity framework and Psychology of Working Theory (PWT) serve as analytical frameworks, focusing on lived experiences and the influence of contextual factors (economic, political and social) in those experiences.

At the conference, findings will be presented, focusing on both differences and similarities between actors. For instance, LMI's often perceive employer motivation as a key barrier, whereas employers emphasize policy implementation complexity. The study contributes by combining both demand and supply side of the labor market, providing an integral view of challenges surrounding participation of groups in a vulnerable position on the labor market. In addition, applying the AMO framework and PWT offers insights into systemic challenges and institutional roles in fostering inclusion of people in a vulnerable position in work.

[Turning “bad jobs” into “good jobs”: Expanding conceptions of and possibilities for flexibilized labour to support return-to-work and stay-at-work for disadvantaged populations](#)

Lindsey Richardson, University of British Columbia, Canada

Background: Scholarship on precarious work has long documented how the transformation of work has negatively impacted the socioeconomic security as well as physical and mental health, particularly for return-to-work and stay-at-work outcomes among vulnerable populations. The predominant valence of this research has been justifiably negative. However, mostly absent from this literature are examinations of how features of modern job structures could be leveraged to support labour market access and broader well-being. This study reconceptualizes so called “bad jobs” to examine whether and how features of precarious work can have salutary

functions, particularly for populations who are commonly excluded from the labour market because they do not meet symbolic standards of employability.

Methods: Drawing on 169 longitudinal qualitative interviews among 44 people with lived and living experience of drug use and barriers to labour market participation in Vancouver, Canada, we investigate experiences of low-barrier economic opportunities possessing hallmarks of precarious work that nevertheless encourage labor market participation and attendant physical and mental health benefits. Using a realist evaluation and flexible coding approaches.

Results: We find that: (1) at the micro-level, relational interactions that reinforce dignity improve worker self-efficacy; (2) at the meso-level, cultural adjustments that redefine what types of work are possible for whom, alongside job structure changes (e.g., functional flexibility around scheduling), accommodated worker constraints and capabilities; and (3) at the macro-level, balancing opportunities with institutional regulations (e.g., preserved eligibility for income supports), supported labour market entry and sustained engagement with economic opportunities.

Conclusion: Grouping all characteristics associated with precarious work as deleterious can be overly reductive when thinking about how the transformation of work impacts individual socioeconomic and overall well-being. We posit that elements of workplace precarity – lacking formal contracts, set-schedules, guaranteed hours, minimum wage – can instead be conceptualized as the flexibilization of workplace procedures, policies, and priorities that have the potential to support return-to-work and stay-at-work outcomes for workers otherwise excluded from labour market participation.

[Towards a multi-level typology for employer engagement: the impact of engagement clusters on hiring people with disabilities](#)

Renate Bosman, Tilburg University, The Netherlands

Introduction: People with disabilities (PwD) face significant challenges entering the labour market. Employers play an essential role in improving access to decent work for people with disabilities, often referred to as employer engagement. While previous research has primarily focused on the use of active labour market policies (ALMP) by employers, the role of organisational practices is often neglected. However, ALMP as well as the organisational context are important. The Contextual Strategic HRM Framework and Institutional Theory explain that external factors, such as institutional pressures (e.g., quotas for recruiting PwD), or customer experiences may shape HRM practices and employment outcomes, like the employment of PwD.

Methodology: This study aims to develop a multi-level typology of employer engagement, considering both organisational engagement (e.g., implementing inclusive HR policies) and social policy engagement (e.g., employers' utilisation of government measures). A latent class analysis was conducted using data from 1,468 organisations included in the Labour Demand Panel collected by The Netherlands Institute for Social Research.

Results: Four distinct clusters of employer engagement clusters emerged from the analysis. The majority of employers (60%) were classified as disengaged employers, characterized by minimal organisational efforts and sparse use of policy tools. In contrast a small group of invested employers (7.4%) demonstrated a high-engagement profile, combining organisational practices with an active application of social policy measures. In-house adapters (22.0%) primarily focused on organisational engagement with selective policy use. Meanwhile, institutional opportunists (10.6%) demonstrated similar levels of policy engagement as in-house adapters but implemented few internal organisational changes. Post-hoc analyses revealed significant differences between clusters, including variations in the employment rates of PwD. Specifically, invested employers and in-house adapters demonstrated relatively higher rates of employment among PwD compared to the other clusters.

Conclusion: Rather than treating employer engagement as a policy engagement construct, this typology highlights the nuanced and multi-dimensional nature of engagement practices. By doing so, we offer new directions for research and policy aimed at improving labour market inclusion. For example, future research can investigate the needs of the different employer classes to facilitate a better fit with social policy.

[Determinants of different forms of labor underutilization in the Netherlands: A nationwide study](#)

Bo Krause, University Medical Center Groningen; University of Groningen, The Netherlands

Introduction: Labor shortages and population ageing increasingly put pressure on the sustainability of the labor market. At the same time, many working-age individuals have underutilized labor capacity, that is, they are unemployed, underemployed, or available to work but not in the labor force. These groups represent a potential source of additional labor supply and are a target of policy

interventions. Yet, evidence on determinants of different forms of labor underutilization is limited. This study examines the associations between sociodemographic and health-related factors and different forms of labor underutilization.

Methods: Data from the 2024 nationwide Labor Force Survey (LFS), a rotating panel survey of sociodemographic, health, and work factors, was used (n=65,224). Three forms of labor underutilization were distinguished: time-related underemployment, unemployment, and the potential labor force. LFS data was linked on prescription data to classify chronic conditions potentially affecting labor force participation. Multinomial regression analysis was applied, using workers without labor underutilization as the reference group.

Results: Younger individuals, those with a middle or lower education, and individuals born outside Europe or with parents born outside Europe were more likely to have any form of labor underutilization. Females were more likely to be time-related underemployed (OR: 2.02; 95% CI: 1.85-2.20). Self-reported limitations were associated with all three forms of labor underutilization (OR: 1.20; 95% CI: 1.05-1.36 for time-related underemployment; OR: 1.94; 95% CI: 1.71-2.20 for unemployment; and OR: 2.60; 95% CI: 2.22-3.05 for the potential labor force). Self-perceived health was associated with unemployment and the potential labor force. Among chronic health conditions, depression (OR: 1.30; 95% CI: 1.08-1.56) and anxiety (OR: 2.22; 95% CI: 1.60-3.08) were associated with unemployment. No clear pattern was observed for other chronic conditions.

Discussion: Policy interventions to enhance labor supply should be tailored to specific forms of labor underutilization, as the characteristics of affected individuals differ across groups. Women, younger and lower-educated individuals, those with a migration background, and people with health limitations or poor mental health appear most affected. Future research should quantify the amount of underutilized labor potential within these groups to identify where interventions may be most promising.

Concurrent Session 3B. Age & gender

Chair: Emma Irvin, Institute for Work & Health, Canada

The Impacts of Perinatal Loss on Work: Adapting a Work Productivity Loss Instrument

Jacynthe L'Heureux, University of British Columbia, Canada

Perinatal grief following a loss before, during or after pregnancy is a complex experience with wide-ranging and lasting impacts on physical and mental health, daily life, and employment. Evidence suggests that perinatal loss can result in long-term consequences, including reduced work productivity, an elevated risk of workplace accidents and psychological distress at work, and adverse health outcomes—intensified by inadequate workplace policies and support systems.

Despite growing recognition of these impacts, few studies have directly measured how perinatal grief affects work and employment outcomes. These knowledge gaps leave employers and policymakers ill-equipped to support grieving Canadians in returning to work, maintaining employment, and staying engaged in the workforce.

This research had three objectives: (1) to review existing literature on methods used to measure the impact of perinatal loss and grief on work, productivity, and employment outcomes; (2) to examine the work-related impacts of perinatal loss from the perspective of individuals with lived experience; and (3) to inform the adaptation of a work productivity loss instrument for use in this context.

A systematic search of Ovid Medline, Ovid CINAHL, Embase, PsycInfo, and EconLit (2014–2025) yielded 8,392 records. Of these, 66 abstracts were retained for full-text review, with 22 studies meeting inclusion criteria. Notably, no studies employed validated instruments to measure productivity loss—highlighting a critical gap and the need for a context-specific tool co-developed with affected individuals.

To address objectives two and three, 26 semi-structured interviews were conducted until thematic saturation was reached. Using a phenomenological approach, five overarching themes were identified, including shifting identity, extensive productivity loss, and altered workplace interactions. Thematic analysis revealed four key priorities for adapting a productivity loss instrument: questionnaire content, situating, framing, and administration.

This work lays the foundation for evidence-informed policies and practices aimed at minimizing workforce detachment, safeguarding employability, and promoting health and well-being following perinatal loss. Findings will inform the development of supportive workplace policies, accommodations, and labour legislation, ultimately enhancing economic security, stability, and health outcomes for families across Canada.

How Psychosocial work Factors Shape the Work Impairment of menopausal women

Karen Nieuwenhuijsen, Amsterdam UMC, Department of Public and Occupational Health, Amsterdam Public Health Research Institute, University of Amsterdam, The Netherlands

Introduction

Menopausal symptoms are prevalent and can adversely affect women's functioning in the workplace. Psychosocial work factors may influence the association between menopausal symptoms and work impairment, pointing to groups of women who may be vulnerable to experience work impairments during menopause. Studies looking into this are lacking so far. This study aims to examine the relation between menopausal symptoms and work impairment, and whether psychosocial work factors moderate this association.

Methods

Data from the Lifelines cohort were used, including 9,490 peri- and postmenopausal women. The questionnaire included menopausal symptoms (Greene Climacteric Scale), psychosocial work factors (COPSOQ and VBBA), and work impairment (WPAI). A two-stage modeling strategy was employed: (1) logistic regression was utilized to estimate the probability of reporting any work impairment, and (2) a generalized linear model was applied to evaluate the severity of impairment among those reporting any impairment. Interaction terms were included to examine whether psychosocial work factors moderated the association between menopausal symptoms and work impairment.

Results

A greater number of menopausal symptoms was associated with both an increased likelihood ($OR = 3.04$, 95% CI: 2.84–3.26) and greater severity ($Exp(\beta) = 1.18$, 95% CI: 1.15–1.20) of work impairment. Interaction analyses revealed that job demands moderated the association between menopausal symptoms and the severity of impairment, such that the association was stronger among women experiencing high job demands ($Exp(\beta) = 1.23$, 95% CI: 1.18–1.29) compared to those with low job demands ($Exp(\beta) = 1.15$, 95% CI: 1.12–1.19). No moderating effect of work pace, influence at work, job autonomy, job insecurity, social support from colleagues, and social support from supervisors was found.

Conclusion

Menopausal symptoms are associated with the occurrence and severity of work impairment, but of all psychosocial work factors measured in this study, only job demands moderate this relationship. While targeting women with high job demands for preventive efforts may have a stronger effect on work impairments of menopausal women, women with lower job demands can also benefit.

The relevance and usefulness of the European Menopause and Andropause Society (EMAS) guidelines on menopause in the workplace in a Norwegian context. Results of a Delphi study

Una Ørvim Sølvik, University of Bergen, Norway

Background

Menopausal symptoms can significantly affect women's ability to perform at work, posing challenges to productivity, well-being, and inclusion. The European Menopause and Andropause Society (EMAS) has developed 24 workplace guidelines aimed at helping managers, employers, and employees provide a supportive and inclusive work environment for women experiencing menopausal symptoms.

Aim

This study assesses the relevance and applicability of the EMAS guidelines from the perspective of Norwegian female employees; identifies which recommendations they considered are most important to implement; and investigates whether these consensus opinions are affected by menopausal stage, menopausal complaints, social support and work environment.

Methods

A three-round Delphi study was conducted between September and December 2024, involving female employees from both the public and private sectors. In Round 1, participants provided socio-demographic data, employment information, menopausal stage, symptom severity, and social support outside work. In each round, participants rated the importance of each EMAS recommendation to support their work performance using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

Results

In total, 352, 289, and 230 participants completed Delphi rounds 1, 2, and 3, respectively. Participant characteristics were similar across Delphi rounds, and in the final Delphi Round 74% of participants were aged 45–60, 62% were in peri- or postmenopause states, and 74% worked in the public sector. While Delphi results show that the EMAS guidelines were broadly accepted (e.g., none of the recommendations were rated as unimportant), study participants prioritized nine recommendations as being most important to

implement. Two recommendations were directed at women (e.g., consulting healthcare providers), three were directed at employers (e.g., providing training for sensitive conversations), and four were directed at managers (e.g., fostering an inclusive culture). Responses varied minimally by menopausal stage, symptom severity, sector, and social support.

Conclusion

The EMAS guidelines are deemed relevant by Norwegian women irrespective of their menopausal stages, menopause symptom severity, social support, and workplace contexts. Nine EMAS guidelines can be prioritized for implementation.

Who Stays, Who Leaves, and Who Returns? Employment Trajectories of Middle-aged and Older Adults in Canada using CLSA Data

Jenyo Banjo, University of British Columbia, Canada

Background: As more adults work later in life – often beyond traditional retirement age – understanding employment patterns among older Canadians is critical for workforce planning and support. This study examined socio-demographic and health correlates of distinct employment trajectories in a national sample of middle-aged and older adults.

Methods: We used data from the first three waves (2010-2015, 2015-2018, and 2018-2021) of the Canadian Longitudinal Study on Aging (CLSA), a population-based cohort of over 50,000 Canadians aged 45 and older.

Participants were grouped into five predefined employment trajectories: remained working, stopped working, returned to work, fluctuated in and out of work, and remained not working. We conducted multinomial regression (reference: remained working) to identify the associated socio-demographic and health factors, including age, sex/gender, marital status, race/ethnicity, education, residence, household income, self-rated health, perceived future financial insecurity, and caregiving responsibilities.

Results: Among the 35,547 participants in the study sample, 38.5% remained working, 36.9% remained not working, 19.7% stopped working, 2.4% returned to work, and 2.4% fluctuated in and out of work.

Preliminary findings showed that women, older individuals, those with lower education or income, rural residents, individuals in poorer health, and high-intensity caregivers (i.e., 20+ hours/week of caregiving) were more likely to stop working, fluctuate in and out of employment, or remain not working compared to counterparts that remained working. For example, women had higher odds of stopping work (Odds Ratio=1.45; 95% Confidence Interval: 1.32 to 1.59), fluctuating in and out of work (1.29; 1.06, 1.56), or remaining not working (2.13; 1.93, 2.35) than men. Adults aged 55 to 64 years had higher odds of stopping working (4.57; 4.13, 5.06), fluctuating in and out of work (1.90; 1.55, 2.33), or remaining not working (10.52; 9.18, 12.06) compared to those aged 45-54 years. High-intensity caregivers also had higher odds of remaining not working (1.25; 1.05, 1.49) than non-caregivers.

Conclusions: Employment trajectories among older adults are correlated with many personal factors and broader systemic influences. Our findings underscore the need for targeted supports for workers who are women, over 55 years, and those in poor health or caregiving.

Concurrent Session 3C. Measurement & validation

Chair: Peter Smith, Institute for Work & Health, Canada

Development and content validity of the musculoskeletal self-management questionnaire (MSK-SMQ)

Nathan Hutting, HAN University of Applied Sciences, The Netherlands

Background

Persistent musculoskeletal conditions are leading causes of disability worldwide and often restrict people's ability to work and participate in society. Self-management is recommended to help individuals take an active role in managing their condition, thereby supporting function, participation, and sustainable employability. However, the systematic use of validated questionnaires to assess self-management skills remains limited in clinical and occupational settings. Existing instruments are condition-specific or cover only partial aspects of self-management, making it difficult to evaluate patients' abilities and progress across diverse populations and work contexts.

Objective

To develop a generic, comprehensive questionnaire to evaluate self-management skills in people with persistent musculoskeletal conditions that can be used in clinical practice, research, and occupational health to support work participation.

Methods

The Musculoskeletal Self-Management Questionnaire (MSK-SMQ) was developed through a rigorous multi-stage process guided by international experts and literature on self-management. The initial 24-item questionnaire was refined through five feedback rounds. Content validity was evaluated in three international panels consisting of patients with lived experience, healthcare professionals, and researchers/academics (n = 91; 23 countries). Participants assessed item relevance, clarity, and essentiality using the Content Validity Index (I-CVI, S-CVI) and Content Validity Ratio (CVR).

Results

Overall content validity was excellent. The scale-level CVI was 0.96 for relevance and 0.97 for clarity, with item-level CVIs ranging from 0.91–1.00. The mean CVR was 0.51 (range 0.14–0.87). Although three items were rated as non-essential (CVR < 0.29), they were retained with refined wording to align with the theoretical framework. Based on participant feedback, the questionnaire was revised, including modifications to the introductory statement and scoring system (4-point to 5-point Likert scale).

Conclusions

The MSK-SMQ demonstrates excellent content validity and provides a generic, practical tool to assess self-management skills in people with musculoskeletal conditions. Its broad applicability makes it suitable for healthcare, research, and occupational health contexts. By enabling structured assessment of self-management, the MSK-SMQ can support personalized care, inform interventions, and promote sustainable work participation for individuals living with musculoskeletal pain.

Navigating self-direction during the RTW transition towards a new employer: a qualitative study

Marie-Louise Klerkx, HAN University of Applied Sciences, The Netherlands

Background. Self-direction plays a well-recognized role in return-to-work (RTW) trajectories with one's current employer. However, the role of self-direction in a career transition trajectory toward a new employer (RTW-NE) is less understood. Such transitions are complex for all stakeholders involved: sick-listed employees, employers, and occupational health professionals (OHPs). Particularly when the process is initiated externally and involuntary. For example when returning to a previous job is no longer feasible due to health limitations and an employer is not able to offer alternative work. Self-direction may be experienced as significantly limited by the sick-listed employee.

Objective. This study explores the experiences with self-direction within the RTW-NE trajectory and aims to identify what is needed in competencies to enhance employees' self-direction and clarify how the workplace can provide support.

Methods. Interview data were collected in the Netherlands through two focus groups with long-term sick-listed employees who were or had been in the transition towards a new employer (total n=12), two focus groups with diverse OHPs (total n=6), and one focus group with employer representatives (n=4). Focus groups were transcribed ad verbatim and analyzed using thematic analysis.

Results. All three perspectives emphasized the importance of self-direction of the employee and highlight the complexity at the initial stages of an RTW-NE trajectory. Once employees acknowledge the need for vocational redirection, they become more open to envisioning their future, identifying opportunities, and engaging in necessary, sometimes mandatory, activities. Tailored guidance and transparent communication can be understood to facilitate this process. According to all stakeholders, workplaces and OHPs can further support employees by providing clear and consistent information about the RTW-NE process, fostering trust and respect, and maintaining a balance between recovery and preparing to RTW.

Conclusions. Navigating an RTW-NE trajectory through self-direction requires a set of critical conditions and specific employee competencies that enable the employee's self-directed actions. Moreover, workplaces play a crucial role in empowering employees throughout this transition by information, trust and safeguarding time to recover. Together, these conditions can help employees move toward new work with a new employer.

Co-producing workplace solutions for employees with chronic musculoskeletal disorders: insights from the JOINTWORKS developmental study

Glykeria Skamagki, University of Birmingham, United Kingdom

Background:

Chronic musculoskeletal disorders (CMSDs) are a leading cause of work disability and sickness absence worldwide, particularly in ageing workforces. Although self-management resources are widely available, few are tailored to the workplace context or co-produced with employees and employers. The JOINTWORKS project, funded by the NIHR, aims to develop workplace interventions that enable employees with CMSDs to remain in work safely and productively.

Methods:

Using a participatory co-design approach, JOINTWORKS engaged employees with CMSDs, occupational-health professionals, employers, and policymakers through structured workshops and interviews (n = 47 participants to date). Data were analysed thematically to identify barriers, facilitators, and priority areas for workplace intervention. These findings were synthesised into a prototype “Work-Ability Support Framework” linking organisational, environmental, and psychosocial factors influencing sustained work participation.

Results:

Stakeholders consistently highlighted four core needs:

1. flexible job design and workload adjustments;
1. 2.manager education and early communication pathways;
2. 3.psychological support to reduce stigma and fear of disclosure; and
3. 4.access to credible, digital self-management resources that integrate with occupational-health services.

The resulting framework emphasises shared responsibility between employee, line manager, and organisation. Co-production fostered trust and revealed low-cost, high-impact opportunities for workplace adaptation, including digital signposting, peer-support mechanisms, and proactive ergonomic review systems.

Discussion:

This developmental phase demonstrates that co-production is feasible and effective in identifying modifiable organisational factors underlying work disability. The next stage will refine the framework into an implementable intervention and evaluate feasibility across diverse sectors. JOINTWORKS offers a scalable, evidence-informed model for preventing work disability in people with CMSDs by embedding self-management, communication, and inclusive leadership practices directly within workplaces.

[Validating the Work Environment Impact Questionnaire \(WEIQ\): A Tool for Measuring Self-Perceived Work Ability](#)

Moa Yngve, Linköping University, Department of Health, Medicine and Caring Sciences, Sweden

Introduction: Over the past decades, work disability prevention has highlighted the importance of reliable assessments to capture employees’ experiences. Work ability emerges from a dynamic relationship between the individual, the work tasks and the work environment. To reduce sick leave and optimise work production, valid tools for assessing self-experienced work ability are essential. The Work Environment Impact Questionnaire (WEIQ) is a newly developed questionnaire designed to be a time-efficient assessment of self-perceived work ability in relation to the person’s specific workplace environment. The WEIQ comprises 32 items that measures different work environment aspects, across four domains: physical and organisational prerequisites, work tasks, social relations and motivational aspects.

Purpose: The purpose was to assess the measurement properties of the Work Environment Impact Questionnaire (WEIQ).

Methods: A cross-sectional survey study was conducted with 288 respondents from three different workplaces involving assisted living personnel, vocational rehabilitation personnel and personnel at a research institute. Measurement properties of the WEIQ were examined using Rasch Measurement Theory (RMT).

Results: The WEIQ demonstrated good scale-to-sample targeting and strong reliability (0.92). Item fit statistics were largely satisfactory, and threshold ordering improved after collapsing the two lowest response categories. Challenges were observed with local dependence in 7.6% of item correlations and differential item functioning in four items.

Conclusions: This initial validation suggest that the WEIQ is a promising tool for capturing employees’ perspectives on how their work environment impacts their work ability, supporting its practical applicability in its current form. At the same time, the findings reflect both progress and persistent challenges in developing robust measures of employee interaction with the work environment. Although the measurement properties were acceptable, additional exploration of unidimensionality across diverse workplaces and with larger sample sizes is warranted.

Concurrent Session 3D. Symposium: Hospital-based participation in integrated care – What are successful interventions and key ingredients to enhance work participation?

Margot Joosen, Tilburg University, The Netherlands

Paul Kuijer, Amsterdam UMC, The Netherlands

Olivier Nachtergaele, Academic Medical Hospital Louvain, Belgium

Behdin Nowrouzi-Kia, University of Toronto, Canada

Work disability prevention has traditionally focused on workplace-based interventions or post-discharge rehabilitation programs. However, a new wave of innovation is reshaping the landscape: Hospital-Based Participation Integrated Care (H-PIC), care that embeds work participation planning into acute and specialist hospital care pathways. In H-PIC, the hospital is in the lead to secure participation-directed care before a person leaves the hospital. The goal is to ensure that treatment and recovery plans align with the person's personal preferences, needs, and values. This early integration bridges the gap between medical treatment and real-world participation, reducing the risk of long-term disability and supporting timely employability. This symposium will bring together five front-runners who are pioneering and evaluating H-PIC interventions. Each will present a unique perspective, creating a panoramic view of this emerging approach. Together, the speakers will define what H-PIC is and how it differs from conventional care and vocational rehabilitation; showcase innovative programs, highlighting different clinical settings (e.g., oncology, orthopedic and trauma surgery); identify the essential components ("key ingredients") that make these interventions effective; discuss implementation challenges, including hospital-employer communication, financing, and interprofessional coordination; and explore opportunities for cross-country collaboration, research, and scaling.

Thursday May 14, 13, 11:00 am – 12:30 pm

Concurrent Session 4A. Mental health & psychological injury 1

Chair: Iris Arends, University Medical Center Groningen/University of Groningen, The Netherlands

Defining and identifying the drivers of secondary psychological injury in Australians with workers' compensation claims: a mixed-methods study

Shannon Gray, Monash University, Australia

Background: The prevalence of mental ill health in workers with workers' compensation claims for physical injury represents a growing concern for governments, employers and workers. However, definitions for these so-called "secondary psychological injuries" vary considerably.

Objectives: Define, identify and describe the key drivers of secondary psychological injury (SPI) in Australians with workers' compensation claims.

Methods: A mixed-methods approach was utilised. First, a targeted literature review using purposive searching of international academic and grey literature that described SPI or mental ill health during a workers' compensation claim was conducted. Then, a series of focus groups were conducted between May and August 2025, including a range of stakeholders from the Australian workers' compensation sector. Findings of focus groups were narratively synthesised. Investigators then incorporated findings of literature and focus groups to build a working definition of SPI.

Results: A total of 22 pieces of literature (21 academic papers, 1 report) representing 19 studies published between 2000 and 2024 were included. "Secondary psychological injury" was not often used as a specific term, with published literature typically referring to psychological distress and depressive symptoms. A total of 33 stakeholders were interviewed in 14 focus groups. Most were from claims management organisations (n=11), with others representing workplace rehabilitation providers (n=7), government regulators (n=6), healthcare providers (n=5), employers (n=2) and trade unions (n=2). Stakeholders offered similar definitions of SPI but had varying opinions on whether diagnosis was necessary. Injured worker uncertainty in the claim process, and lack of control (e.g., over personal finances) were pointed to as key contributors to SPI. The workers' line manager and insurance claims manager were pointed to as key stakeholders. SPI was characterised by the new onset of psychological symptoms or the exacerbation of pre-existing psychological symptoms, after a workers' compensation claim begins. It has multiple contributing factors, including worker psychological and social characteristics. It may be triggered by a specific event during the claim, or by the accumulation of exposure to contributing factors.

Conclusions: This is the first attempt to formally define SPI in Australia. This combined definition will enable more consistent risk screening and monitoring.

Results from a stepwise eHealth intervention with the Participatory Approach on return to work of sick-listed workers with stress-related complaints

Trees T. Juurlink, Amsterdam UMC location Vrije Universiteit Amsterdam, Department of Public and Occupational Health, The Netherlands

Background:

Stress-related long-term absenteeism is a worldwide growing concern. As the probability of eventual return to work (RTW) declines with longer absence, early intervention is necessary. Previous research showed that an eHealth intervention was effective on first RTW, but not on lasting RTW for employees with distress. Another study on the Participatory Approach (PA; a step-wise process to reach consensus on obstacles and solutions to enable RTW) found that the PA was effective on lasting RTW, but only for employees with a positive attitude towards RTW despite symptoms. In the present study the effective elements are combined. In addition, both the eHealth and PA are tailored based on the perceived relation between complaints and work relatedness. The aim is to evaluate the effectiveness of the intervention on lasting RTW.

Methods:

Employees between 2 – 12 weeks absent with distress (measured with a distress screener) are randomized receiving either the intervention (eHealth + PA) or usual care. The PA is only provided in case of persistent absenteeism. Primary outcome is lasting RTW, defined as full RTW (4 consecutive weeks). Secondary outcomes are (severity of) stress-related symptoms, total number of absenteeism days, RTW self-efficacy and self-reported health.

Findings:

Currently, preliminary results (n=39) show a mean distress score of 17.7 [SD 6.03] and 11.3 mean completed eHealth sessions [SD 4.04]. The study is still ongoing, and data collection and analysis are expected to be finished in March 2026. The final results including all outcomes will be presented. It is anticipated that employees in the intervention group (eHealth + PA) tailored to perceived work-relatedness of complaints will demonstrate a significant improvement in lasting RTW and the secondary outcomes, compared to employees in the usual care group.

Discussion:

Employees absent due to distress are at high risk of prolonged absence and adverse economic impact. In this study a tailored approach supporting RTW via eHealth and the consensus-driven problem-solving of the PA are examined, to optimize both the initiation and sustainability of RTW. The tailored approach and integration of perspectives are anticipated to improve empowerment and engagement of employees in their RTW path.

Exploring the complex: investigating the association between factors and return to work for work-related chronic pain and concurrent psychological injuries in British Columbia, Canada

Harman Sandhu, Partnership for Work, Health and Safety, University of British Columbia, Canada

Introduction

Work-related chronic pain and psychological injuries are becoming more common, and this results in more time lost from work. Workers with these injuries, when occurring concurrently, experience greater challenges in RTW, and current approaches to recovery and rehabilitation may not be as effective. This study investigates differences in return-to-work (RTW) outcomes among different injury types (psychological, chronic pain, and concurrent psychological with chronic pain) and examines the role of individual and employer factors in the ability to RTW.

Methods

Workers' compensation claims data via WorkSafeBC were used to identify workers (n=414,507) with an accepted time-loss claim due to work-related psychological injury, chronic pain, concurrent psychological injury with chronic pain, or other injury types occurring between 2012 and 2019, with 3 years of follow-up (1095 days). Descriptive analysis was used to analyze differences in time to RTW outcomes. Multivariable logistic regression models were used to analyze the role of covariables in the ability to RTW, stratified by injury type.

Results

Descriptive statistics reveal substantial differences in days to RTW after injury for the injury types (psychological: median=399 days [IQR:67 – 1095 days], chronic pain: median=1095 days [IQR:327 – 1095 days], concurrent psychological and chronic pain: median=1095 days [IQR: 1095 – 1095 days], other: median=21 days [IQR:7 – 83 days]). In the multivariable logistic regression models, characteristics such as younger age, larger firm size, and having modified RTW increased the likelihood of RTW across injury types, while other

variables, such as variable shift vs fixed shift (psychological: OR=2.57 [95%CI:2.29,2.88], chronic pain: OR=0.98 [95%CI:0.92,1.05], concurrent psychological and chronic pain: OR=0.90 [95%CI:0.71,1.15]) and pre-claim highest quintile wage vs lowest (psychological: OR=1.13 [95%CI:0.94,1.37], chronic pain: OR=1.86 [95%CI:1.68,2.06], concurrent psychological and chronic pain: OR=1.33 [95%CI:0.89,1.99]) had varying injury-specific effects.

Conclusion

These findings reveal large differences in the distribution of disability days across all injury types. Various factors exacerbated the delay in RTW, and these also differed across injury types. Workers with concurrent psychological and chronic pain injuries warrant further investigation into how they can be further supported to promote earlier RTW outcomes, as over 75% of the cohort did not RTW within three years.

Clusters of transdiagnostic symptoms are associated with return to work (RTW): a latent class analysis

Friso Muntinghe, University Medical Center Groningen, The Netherlands

Background: Pain, fatigue, psychological, cognitive, and vegetative symptoms, sleep disturbances, and problems with mobility have been identified as transdiagnostic symptoms in sick-listed workers. It is known that combinations of transdiagnostic symptoms are associated with clinical health outcomes.

Objective: We sought to identify clusters of transdiagnostic symptoms in sick-listed workers and the association of these clusters with work outcomes in terms of sickness absence duration.

Methods: Transdiagnostic symptoms were identified in the electronic health records of 25,434 workers sick-listed from April 2019 – March 2020 by using regular expression (regex). Latent-class analysis was performed to identify clusters of transdiagnostic symptoms. The duration of sickness absence was measured for all clusters and differences in sickness absence duration between clusters were tested for significance using the Kruskal-Wallis test.

Results: Five clusters of transdiagnostic symptoms were identified: 1) few symptoms (n=9,828), 2) psychological symptoms (n=5,532), 3) psychological symptoms, fatigue, sleep disturbance and cognitive symptoms (n=4,016), 4) pain and psychological symptoms (n=3,563), 5) fatigue, pain, psychological symptoms and vegetative symptoms (n=2,495). Sickness absence duration was significantly longer for the clusters 3 (median 180 days), 4 (median 190 days) and 5 (median 214 days) as compared to 124 days and 140 days for the clusters 1 and 2 respectively ($p < 0.001$).

Conclusion: Five clusters of transdiagnostic symptoms were identified. The cluster with fatigue, pain, psychological symptoms and vegetative symptoms, and the cluster with psychological symptoms, fatigue, sleep disturbance and cognitive symptoms were associated with the longest sickness absence durations. Occupational health professionals could consider early interventions to facilitate return to work, when sick-listed workers present with these clusters of transdiagnostic symptoms.

How can we support workers with musculoskeletal pain in physically demanding jobs to stay at work? Results from an intervention mapping process.

Mette Jensen Stochkendahl, University of Southern Denmark, Department of Sports Science and Clinical Biomechanics, Center for Muscle and Joint Health, Denmark

BACKGROUND

Workers with musculoskeletal (MSK) pain in physically demanding jobs often face challenges in staying at work and maintaining employment. Individually tailored and flexible workplace solutions are recommended, but their implementation depends on the quality of dialogue between the worker and their manager, as well as the worker's ability to safely disclose their condition.

AIMS

This project aimed to systematically develop an intervention program that supports workers with MSK pain in physically demanding jobs to stay at work, by fostering dialogue and collaboration between workers and managers.

METHODS

We followed steps 1-4 of Intervention Mapping (IM) to identify barriers to staying at work, create a logic model of change, develop theory-based change methods, and design an intervention program. In each step, we iteratively collected data from literature reviews, five focus group interviews with workers and managers from physically demanding jobs, two workshops, two electronic surveys of workers (n=2,119), and discussions with a stakeholder panel comprising 13 representatives from the Danish labour market. All data sources were weighted equally during synthesis.

RESULTS

Staying at work with MSK pain is conditional on workers' and managers' knowledge of MSK conditions and mutual trust, their skills, level of self-efficacy, outcome expectations, managers' perception of worker vulnerability, workplace culture, and organisational and systemic factors. The logic model of change informed the development of intervention components targeting individual- and organisational-level determinants, supported by behaviour change techniques. These were compiled into a blueprint of the intervention program, which consisted of a digital information platform, nine tools for workers, managers and occupational health and safety representatives (OHS) to facilitate workplace dialogue and collaboration, and a training course for OHS.

CONCLUSIONS

Collaborating with stakeholders and involvement of end-users in the development process ensured relevance, appropriateness and acceptability of the content for Danish workplaces. However, the program's level of complexity and the need for organisational changes are potential barriers to widespread implementation. While the program offers a valuable starting point to address individual-level barriers, overcoming organisational and systemic barriers requires managerial commitment and broader legislative or societal change.

Concurrent Session 4B. Novel & emerging technology

Chair: Amin Yazdani, Canadian Institute for Safety, Wellness, and Performance, Canada

Evaluating an AI-based self-management app supporting sick-listed individuals with musculoskeletal disorders: rationale and protocol for the SmaRTWork randomised controlled trial

Lene Aasdahl, Norwegian University of Science and Technology, Norway

Background

Many people leave the workforce prematurely due to musculoskeletal disorders (MSDs). Clinical guidelines recommend supported self-management as part of MSD treatment. However, health professionals often lack the time and training to provide such support, and adherence to self-management is often poor. mHealth solutions, such as smartphone apps, can deliver personalised digital tools and increase adherence to self-management strategies. We have recently shown that an artificial intelligence (AI)-based app for individuals with low back pain reduced pain-related disability, although the clinical effect remains uncertain. In the current study, intervention mapping was used to advance the intervention and implement this in the SmaRTWork app that supports individuals sick listed due to MSDs. The aim of this randomized controlled trial is to evaluate the effectiveness of the SmaRTWork intervention as an add-on to usual care on return-to-work compared to usual care alone for individuals sick-listed due to MSDs.

Methods

A total of 300 individuals aged 20-60 years, sick-listed for up to 12 weeks due to back, neck or widespread pain, will be randomized to: 1) SmaRTWork in addition to usual care, or 2) usual care alone. The SmaRTWork app provides weekly, individually tailored self-management plans by matching the participant's health information and sick leave status to targeted educational messages, tailored physical activity advice, and instructed exercise recommendations. In addition, participants with specific problems regarding work accommodations, workplace conflicts, large caregiver responsibilities, financial difficulties, or expectations of not returning to their previous workplace, will be offered contact with a caseworker at the social insurance office. The primary outcome is time to sustainable return-to-work, defined as one month without receiving sickness benefits, assessed over a 12-month registry-based follow-up.

Results

Recruitment of participants will begin early in 2026. At the conference, the rationale and protocol of the trial will be presented.

Relevance

This study will enhance our knowledge about the potential effect of mHealth-supported self-management in the return-to-work process, and is relevant for clinicians, policymakers, researchers, and patients.

Developing a Dedicated Evaluation Framework for Large Language Models Applied in Healthcare Safety

Siyuan Zhang, Institute of Science Tokyo, Japan

Introduction

Large language models (LLMs) have shown strong potential for identifying healthcare risks through clinical document analysis, and thus for reducing adverse events and patient harm. However, dedicated evaluation frameworks for LLMs' performance in healthcare safety remain lacking. While computer science typically evaluates LLMs on capabilities like hallucination detection and mathematical reasoning, these paradigms do not address medical domain requirements such as clinical safety, domain-specific accuracy, and risk consequences. This study aims to develop an evaluation framework tailored to healthcare safety needs for LLMs.

Methods

This study will develop an evaluation framework for LLMs in healthcare safety by integrating general quality dimensions (coherence, relevance, factual consistency, usefulness) with domain-specific dimensions (risk coverage, causal reasoning, priority judgment). We will validate the framework using expert-annotated medical adverse event reports as the gold standard, testing multiple mainstream LLMs under standardized prompting conditions. Framework validity will be examined through three perspectives: practical feasibility of applying the dimensions, discriminant validity across model performance differences, and construct validity via dimension correlations. Additionally, healthcare professionals will test the framework workflow and provide feedback to ensure real-world operability and practical value.

Expected results

This study expects to validate framework effectiveness in three ways. First, inter-rater reliability across dimensions should reach moderate levels ($\text{Kappa} > 0.6$), demonstrating operability. Second, LLM performance differences on domain-specific dimensions should exceed those on general dimensions, supporting discriminant validity. Third, correlation analyses should show moderate correlations among general dimensions ($r = 0.5$ to 0.7) and reasonable association patterns for domain-specific dimensions.

Newer models should perform better on general dimensions, though domain-specific performance may vary. Some models may identify risks comprehensively yet fail to accurately judge priority or underlying mechanisms. Healthcare professionals should validate framework usability and identify critical dimensions for decision-making. However, results may reveal limitations in evaluating latent risks requiring deep expertise and subjectivity in the causal reasoning dimension for complex cases.

Conclusion

This study proposes the first systematic framework for evaluating LLMs applied in healthcare safety, integrating safety engineering, human factors engineering, and generative AI. The framework assists healthcare institutions in selecting and deploying LLMs, provides evidence for reducing safety risks, and guides responsible application.

[The effectiveness of exoskeletons in secondary and tertiary prevention of work-related musculoskeletal disorders for physically impaired individuals of working age: a systematic literature review and meta-analysis](#)

Monika A. Rieger, University Hospital Tuebingen, Institute of Occupational and Social Medicine and Health Services Research, Germany

Occupational exposure to ergonomic risk factors is highly prevalent worldwide (Hulshof et al., 2021a) and increases the risk for musculoskeletal disorders (MSD) (Hulshof et al., 2021b). Studies showed e.g. a high fraction of occupational ergonomic factor-attributable low-back pain globally (Chen et al. 2023) or a high amount of impairment by work-related MSDs (WMSDs) based on compensation claims (Collie et al., 2024). Exoskeletons as assistive technologies may facilitate return to work and serve as an early intervention strategy. Although exoskeletons may reduce acute physical stress and strain, evidence for their effectiveness as secondary and tertiary prevention is lacking (Steinhilber et al., 2020).

Therefore, a comprehensive literature review should provide insights regarding the effectiveness of exoskeletons as secondary or tertiary prevention in symptomatic workers during (simulated) work (tasks) reducing WMSD-related outcomes.

This ongoing systematic review follows PRISMA guidelines (PROSPERO protocol: CRD420251107394) and the German guideline “Good Practice in Occupational Epidemiological Systematic Reviews (GPAR)” (Seidler A et al., 2025). Search strings were prepared for MEDLINE (PubMed), CINAHL (EBSCO), and CENTRAL (Ovid). The inclusion criteria were defined according to PICO principles: working-age population with physical impairments, comparing any type of exoskeleton with no exoskeleton or other workplace interventions for secondary/tertiary prevention, and reporting outcomes related to WMSD symptoms. In the study selection process, titles and abstracts of all selected studies will be screened. After removing duplicates, full-text screening will be conducted based on the predefined inclusion criteria.

Risk of bias will be assessed independently by two reviewers using the Cochrane RoB 2 tool, in line with GPAR recommendations. Following data extraction, intervention effects will be calculated using random-effects model. Means and SDs will be pooled according to Cochrane Handbook guidelines (Higgins et al., 2024). These procedures will be applied if at least two comparable studies are available; otherwise, only a systematic review without meta-analysis will be performed.

Results of this research project will be available at the time of the conference and will provide insights into the current state of evidence regarding exoskeletons as potential measure for secondary and tertiary prevention, i.e. for reducing WMSD-related outcomes and facilitate return to work.

Beyond Mechanics: do Beliefs Shape Exoskeleton Use at Work?

Daniek van Laar, University Medical Center Groningen, The Netherlands

Background:

Occupational exoskeletons (OEX) are promoted as a promising solution to reduce physical load and prevent work-related musculoskeletal disorders (WRMSDs) [1]. Many workers are at risk of developing or sustaining WRMSDs, which they often attribute directly to physical tasks like lifting [2]. However, this premise is not beyond debate. Despite decades of research, evidence causally linking occupational load to MSDs is limited [3]. Ergonomic messaging can sometimes unintentionally reinforce these beliefs, potentially leading to nocebo effects where negative expectations influence health. However, research is mainly focussed on biomechanics and psychological aspects such as nocebo and placebo effects have not yet been studied in OEX use, although likely relevant in this context [4].

Methods:

A three-week A-B-A experimental design was used with 52 novice OEX users and four types of passive OEX. Participants were assigned to one of three instruction groups: (1) detailed OEX risks/uncertainties, (2) OEX benefits, or (3) neutral instructions. After a baseline week (A), participants wore an OEX during the intervention week (B), followed by a reversal week (A). Support levels were randomized during the intervention week. Daily and weekly questionnaires assessed reassurance, fatigue, and perceived support (among others).

Hypothesis: a nocebo effect is expected (lower reassurance and higher perceived discomfort in intervention week) in the risk-focussed group and a placebo effect is expected (higher perceived OEX support, productivity, acceptability) in the benefit-focused group.

Results:

Preliminary results (n=11, facility workers) suggest that cautionary instructions about OEX may increase reported fatigue during OEX wear, while positive instructions show reduced perceived safety when not wearing the OEX - both patterns could indicate a potential nocebo effect. No clear evidence of placebo effects was observed. Full results will be presented at the conference.

Discussion:

This is the first study to systematically explore placebo and nocebo effects in OEX use, employing a novel approach. Findings will advance understanding of biopsychosocial factors in OEX wear and highlight the potential of OEX to enhance work sustainability and health in physically demanding occupations.

References:

- [1] De Looze et al. (2016)
- [2] Reneman et al. (2024)
- [3] De Bruin et al. (2024)
- [4] De Bock et al. (2022)

Concurrent Session 4C. Approaches to RTW 1

Chair: Elin Karlsson, Linköping University, Sweden

The Progressive Goal Attainment Program for increasing work participation of workers with long-term health problems: A qualitative feasibility study

Mariska de Wit, Amsterdam UMC location University of Amsterdam, Public and Occupational Health, Coronel Institute of Occupational Health, The Netherlands

Background

Cognitions and perceptions, such as catastrophic thoughts and fear-avoidance beliefs, can have a negative impact on work participation of workers with health problems. It is very important to influence these factors in order to help workers to maintain work or return to work after sick leave. The Progressive Goal Attainment Program (PGAP) aims to reduce inhibiting cognitions and perceptions, strengthen positive cognitions and perceptions, and promote work participation. The goal of this qualitative study was to evaluate the feasibility of PGAP.

Methods

PGAP was offered to workers who were partially or fully absent from work due to long-term mental or physical health problems. PGAP providers were occupational health practitioners from an occupational health service (OHS) in the Netherlands. Through online interviews, we explored the experiences of 15 workers who participated in PGAP and 4 PGAP providers who delivered the program. The questions were based on Bowen's feasibility model, which describes eight domains of feasibility: acceptability, demand,

implementation, practicality, adaptation, integration, expansion and limited efficacy. Qualitative content analysis was conducted to code the interviews.

Results
The PGAP participants and providers were generally very satisfied with PGAP and considered it feasible. The interviewees were satisfied with the acceptability of PGAP, including its content and structure, and its suitability for workers with long-term health issues. In terms of demand and expansion, both participants and providers agreed that the OHS should continue offering PGAP to workers. With respect to limited efficacy, positive effects, such as a more positive mindset and increased activity participation, including work, were observed. Regarding implementation, the participants valued the weekly sessions. The timing of PGAP initiation and the alignment between providers and clients were identified as key factors influencing successful implementation.

Conclusions
Both PGAP participants as PGAP providers in this study considered the implementation of PGAP in the OHS feasible. Future studies should demonstrate whether the implementation of PGAP is also (cost-)effective in increasing work participation.

Operationalization of a strategic decision-making program for return-to-work coordinators

Marie-Michelle Gouin, Université de Sherbrooke, Canada

Introduction: Return to work (RTW) coordinators are key to facilitating RTW process given their role in promoting cooperation between RTW stakeholders. To assist them in negotiations, a theory-based strategic decision-making (Strat-DM) program was developed, based on a scoping review, a mapping review and a strategic decision-making framework.

Objective: To explore the plausibility of Strat-DM logic program from the perspective of the RTW coordinator.

Methodology: Part of a larger study, we used a development research design. A consensus method was used with eleven (n=11) experts, purposively selected to represent RTW coordinators from employers (n=4), insurers (n=3) and health care (n=3). One expert in negotiation also participated (n=1). The method includes two steps (Gervais et Pépin, 2002). First, participants were invited to complete an agreement questionnaire on the necessity, sufficiency and the formulation of 40 affirmations assessing the plausibility of the theory-based program (i-e, prerequisite condition for Strat-DM; intended effects (ultimate, intermediate and immediate), activities and one resource). Non-consensual affirmations (i-e, agreement score ≤85%) were analyzed in the second step, which included a series of three-hour web consensus group with the same experts.

Results: Nearly half of the affirmations in the agreement questionnaire (19/40) did not achieve consensus. In the first step, the program's prerequisite condition ("Access to a safe workplace (physically and psychologically)"), the ultimate effect ("Promote the RTW") and one of the intermediate effects ("Positive attitude towards the RTW") constituted the main disagreement and received the largest number of proposals (n=27/50) for modifications. In the second step, experts agreed that a safe workplace is not a prerequisite but can be discussed throughout the RTW process. The prerequisite condition that has reached consensus is: "Stakeholders' commitment in the decision-making process". The safety issue was integrated into the ultimate effect of the Strat-DM. The intermediate effect "Positive attitude towards the RTW" was consensually withdrawn since it was not deemed necessary contrary to what was found in literature.

Conclusion: Assessing the plausibility of the theory-based Strat-DM program with experts in the field was necessary. The Strat-DM is now aligned with actual practices and is ready to be implemented.

Integrating Occupational Therapy in Primary Care to Support Recovery and Return to Work: How Acceptable Is It to Family Medicine Groups

Quan Nha Hong, Université de Montréal, Canada

Context: Work-focused rehabilitation provided by occupational therapists (OTs) contributes to recovery and sustainable return to work (RTW) for individuals with common mental disorders (CMDs). In Canada, however, these services are often inaccessible to patients without private insurance, leading to delayed referrals and inequities. Family physicians, legally responsible for prescribing sick leave, frequently report limited expertise in evaluating work capacity and coordinating RTW. Integrating OTs into family medicine groups (FMGs) offers an innovative strategy to improve access to evidence-based services, support physicians, and intervene earlier.

Objective: This study aims to assess the acceptability of implementing a work-focussed OT program in university-affiliated FMG in Quebec (Canada). The program, based on the principles of the recovery-oriented approach and the Therapeutic Return to Work program, has three components: (1) consultative/preventive support to guide physicians' decisions on sick leave and RTW; (2)

coordination of health, insurance, and workplace services; and (3) individualized rehabilitation and recovery support for patients without insurance coverage.

Methods: We conducted a multiple mixed methods case study in three FMGs (urban and semi-rural). In each FMG, pre-implementation acceptability was documented using 1) an 8-item Likert-scale acceptability questionnaire completed by the FMG team members and 2) a focus group with FMG team members. Data were analyzed using thematic analysis guided by the Theoretical Framework of Acceptability and the Consolidated Framework for Implementation Research.

Results: Preliminary findings from the two FMGs suggest high acceptability in both cases. Quantitative and qualitative data highlighted the value of OT interventions in improving daily functioning and scheduling, both seen as critical to RTW. Challenges experienced in both cases were similar: clarifying the OT role and determining optimal referral timing. OTs working in both FMGs emphasized the added value of collaboration with family physicians and earlier patient access to optimize recovery trajectories.

Innovation and Significance: This project is among the first in Canada to integrate OTs directly into an FMG-type setting to deliver both recovery- and RTW-oriented interventions. It addresses a critical gap in equitable access to evidence-based rehabilitation for CMD-related work disability. Findings will help identify conditions for successful integration of such programs and inform future large-scale evaluations.

[Feasibility of IGLOo: A multi-level workplace intervention supporting return to work and work accommodations](#)

Fehmidah Munir, Loughborough University, United Kingdom

Background: Stress, depression, and anxiety are leading causes of long-term sick leave and often co-occur with other health challenges. In the UK, employers and managers play a central role for supporting return-to-work (RTW) but practices are inconsistent. We tested the feasibility of IGLOo, a multi-level, multi-component workplace intervention supporting employees with a mental or physical condition to return to and remain in work.

Method: A feasibility trial was conducted with nine organisations, of which four received the intervention and five acted as controls. In intervention sites, senior leaders and human resources staff were trained on best practice implementation. Employees and managers accessed a six-step online toolkit with guidance, checklists, and conversation resources. Employees also received three remote coaching sessions. Feasibility was assessed using stop-go criteria. Outcomes included sick leave duration, sustained work attendance, and surveys/interviews on mental health, work outcomes, support, and accommodations.

Results: We recruited 91 senior leaders and HR professionals (intervention only), 113 workers (43 intervention, 70 control) and 83 managers (20 intervention, 63 control) to the study. Employee and manager twelve-month study retention met amber stop-go criteria, with 70.5% of employees and 69.2% of managers completing the study. Toolkit engagement was moderate (30- 42% accessed all components). Exploratory analyses suggested that although control employees returned more quickly, intervention employees were more likely to return and remain in work. Intervention managers reported greater RTW competencies, especially in providing accommodations. Qualitative findings indicated the toolkit increased awareness of accommodations, encouraged requests, and was useful across diverse roles and health conditions.

Conclusions: Despite recruitment challenges, the IGLOo intervention is feasible to deliver and shows promise for supporting sustainable RTW. Insights from this study will inform a future trial and highlight policy implications for embedding structured support and accommodations in organisational practice. At the conference, we will discuss how the toolkit influenced employee awareness and managers' confidence in providing accommodations.

[Bridging Clinical and Work-Directed Support: Effectiveness and Implementation Process of an 18-Month Return to Work Program for Employees with Mental Disorders](#)

Fiona Starke, Federal Institute for Occupational Health and Safety; Maastricht University, Germany

Background:

Mental disorders (MDs) frequently impair individuals' ability to work, leading to long-term sickness absence. Multimodal clinical and work-directed interventions aiming at sustainable return to work (RTW) are scarce, and their implementation and effectiveness remain underexplored. We evaluated the effectiveness and implementation process of an 18-month RTW intervention ("RTW-PIA") consisting of three modules - individual RTW sessions, RTW aftercare group, web-based aftercare - designed to support employees with MDs in achieving sustainable RTW.

Methods:

A randomized controlled trial was conducted in five German psychiatric outpatient clinics. The sample included 484 employees, aged 20–60, diagnosed with a MD. The intervention group (n=240) received RTW-PIA plus Care as Usual (CAU); controls (n=244) received CAU only. Primary outcome was sustainable RTW, defined as ≤ 6 weeks of sickness absence within 12 months after full RTW. Secondary outcomes included mental functioning, quality of life, RTW self-efficacy, job satisfaction, severity of mental illness, and work ability, measured at baseline and 6, 12, 18, and 24 months. Intention-to-treat analyses used logistic regression and growth curve modeling. Process indicators (fidelity, dose delivered/received, reach, satisfaction, context), based on Linnan and Steckler's framework, were assessed from intervention participants and therapists.

Results:

About 24.6% received the full RTW-PIA minimum dose. Effect evaluation indicated no significant effect of RTW-PIA on sustainable RTW (OR=1.39, 95%CI [0.90–2.14], $p=0.138$) compared to CAU, though mental functioning improved significantly over 24 months ($p=0.023$). Participant satisfaction was high across modules, despite numerous suggestions to improve their organization. While the manualized RTW aftercare groups showed high fidelity (87%), therapist focus groups revealed delivery challenges. Recommendations included less protocolized, biweekly aftercare groups to foster participant interaction, aligning the individual RTW sessions with participants' actual RTW timelines, and better integration of the 12-month web-based aftercare.

Conclusions:

While RTW-PIA did not significantly increase sustainable RTW rates, it improved mental functioning - crucial for long-term work participation. The process evaluation highlighted several areas for refinement. Integrating process and effect evaluations offers valuable insights to optimize RTW interventions for employees with MDs. Future pilot studies on data collection and therapists training (e.g., role play) to deliver less protocolized RTW sessions are recommended.

Concurrent Session 4D. Symposium: More than just a colour? Studying and addressing racism in work disability management

Arif Jetha, Institute for Work & Health, Canada
Stephanie Premji, McMaster University, Canada
Basak Yanar, Institute for Work & Health, Canada

Industrialized labour markets are characterized by growing racial diversity among workers. Despite policies that mandate employment equity, there remains significant occupational segregation according to race and ongoing systemic disadvantage. Racialized workers are exposed to the most unsafe and precarious working conditions, and face more frequent, severe, and disabling occupational injuries and illnesses when compared to white workers which can underly health and social inequities. We know little about the role of racism in access to workers' compensation and return-to-work and we lack evidence to address racial inequities in the prevention and management of work disability. The objectives of this symposium are to raise awareness on the importance racism in research on work disability; examine the state of science on racism in WD; and engage in a critical discourse on how researchers can unpack racial inequities and inform practical strategies that address racism in work disability prevention and management.

Thursday May 14, 13, 1:30 – 3:00 pm

Concurrent Session 5A. Mental health & psychological injury 2

Chair: Peter Smith, Institute for Work & Health, Canada

Co-creating a peer-based suicide prevention strategy in the construction industry: from leadership roundtable to pilot implementation

Kim Cullen, Memorial University of Newfoundland, Canada

Background: Suicide rates among construction workers are 2–4 times higher than national averages, driven by work-related stressors, stigma, and limited access to mental health supports. In Newfoundland and Labrador, industry partners and researchers initiated a sector-wide strategy to address these challenges collaboratively.

Objectives: To co-design and implement a workplace mental health and suicide prevention strategy through a leadership roundtable, task force governance, pilot training program, and province-wide worker engagement.

Methods: A leadership roundtable with industry and advocacy stakeholders identified four priority action areas: education, resource access, policy advocacy, and data gaps. A multi-stakeholder task force was then established to adapt a three-tiered peer-led model (General Awareness Training, safeTALK, ASIST) for the construction sector. Pilot implementation at four worksites combined quantitative outcome evaluation (suicide literacy, preparedness, self-efficacy, likelihood to act) with qualitative process evaluation (interviews and open-ended surveys). A parallel engagement initiative is extending consultation with workers across the province to inform scale-up.

Results: Among 271 workers trained, significant pre-post improvements were observed across all outcome measures ($p < 0.001$). Qualitative themes emphasized leadership engagement, high participant acceptance, and logistical challenges in smaller workplaces. Ongoing engagement highlights the need for tailored delivery models and sustained reinforcement to support culture change.

Conclusions/Implications: Co-created, sector-specific strategies can drive sustainable mental health and suicide prevention initiatives in high-risk industries. Leadership engagement, peer-led models, and worker voice are critical to embedding programs into existing safety structures and scaling their impact.

Evaluating the Effectiveness of an Online Opioid Self-Assessment Program

Andrea Furlan, University Health Network, Canada

In North America, opioid-related harms are leading cause of drug-related mortality among workers, with significant lost productivity reported among 55,000 workers' compensation claimants suffering from low back pain. Early opioid prescriptions are linked to longer disability durations compared to other treatments, and persistent pain from work-related injuries contributes to absenteeism and lower health-related quality of life. Despite national guidelines, inconsistent opioid prescribing persists, highlighting the need for educational interventions to fill knowledge gaps among prescribers. The Online Opioid Self-Assessment Program has been designed to meet the educational needs of opioid prescribers, medical students, residents, fellows, and educators and to increase familiarity with the 2017 Canadian Opioid Guideline. This program is self-paced, takes approximately 3 hours, and is CME-accredited. The program integrated interactive cases with reference-based educational materials, self-assessment quizzes, and curated resources across six domains related to opioids and is available on the website (<https://opioidassessment.ca/>). Consent was obtained before enrollment. Study participants completed demographic questions, a 10-item pre-test, the 3-hour module, and a 10-item post-test from a validated question bank. The primary outcome was change in knowledge assessment scores. Participant characteristics were described, secondary analyses examined learning domain-level performance, and collecting feedback from the participants. Quantitative data were analyzed using descriptive statistics and t-tests; qualitative feedback was thematically coded. A total of 1,599 individuals registered, the majority were medical students (40%), residents (12%), and family physicians (9%), with representation from all provinces, primarily Ontario (75%). Among participants, 270 consented and completed both pre-and post-tests. Their mean knowledge scores from post-test increased from $45.8 \pm 4.9\%$ to $87.3 \pm 2.1\%$ ($\Delta = 41.5$, $p \leq 0.05$). Improvements were observed across all domains, notably tapering ($\Delta = 39 - 42\%$) and prevention of opioid use disorder ($\Delta = 37 - 39\%$). 70% of both learners and prescribers reported intent to change clinical practice. Feedback from participants emphasized strengthened opioid knowledge confidence, improved communication skills, and value of tailored, interactive digital learning. Early opioid prescribing prolongs work disability and worsens chronic pain outcomes. Online CME platforms like Opioid SAP can meaningfully support national opioid stewardship and improve workers' health and quality of life.

A Systematic Review of Common Mental Disorders and Sustainable Return-to-Work

Zoe Can, Sheffield University Management School, The University of Sheffield, United Kingdom

Common mental disorders (CMDs) are a prominent cause of workplace sickness absence globally. Helping those with CMDs return to work (RTW) is of critical importance, as the benefits of work, such as income and purpose, can be missed out on by absentees, and absences are associated with high economic costs. Within RTW research, there has been increasing recognition of long-term outcomes and sustainable RTW (SRTW), as many returnees appear to face challenges after re-entering the workplace. The IGLOO model provides a framework for categorising resources which can support SRTW across five levels: individual, group, leader, organisation, and overarching context.

This mixed-methods systematic review explored how SRTW outcomes are affected by post-RTW IGLOO level resources. It also examined which methods have been utilised to explore this subject and how SRTW for people with CMDs has been defined in existing research. The review began in 2024. Out of 2,507 identified papers, 29 journal articles published since 2005 met the inclusion criteria. These included being a quantitative, qualitative, or mixed-methods study, and examining post-RTW influences on SRTW in cases of CMD absence. Two reviewers independently screened articles and completed data extraction. The results were then constructed and presented using narrative synthesis.

The results of this review showed that various resources across IGLOO levels can impact SRTW outcomes. For example, worker perceptions, colleague support, manager understanding and attitudes, and work accommodations were influential. There was a lack of research into the overarching context level, and minimal quantitative investigation into group or leader-level resources and outcomes other than absence recurrence. Finally, the review identified a lack of a unified definition of SRTW for people with CMDs. Through these findings, the review provides a detailed understanding of how returnees with CMDs can be supported post-RTW. It also reveals priorities for future research and further refines the definition of SRTW for individuals with CMDs.

[Presumptive coverage policies and compensation of work-related mental health conditions in Canada: a retrospective time series study](#)

Quentin Durand-Moreau, Division of Preventive Medicine, University of Alberta, Canada

Introduction. Since 2012, almost all Canadian jurisdictions have implemented some presumptive coverage policies for work-related mental health conditions, mostly targeting post-traumatic stress disorder (PTSD). Using federal data provided by the Association of Workers' Compensation Boards of Canada (AWCBC), we examined whether the implementation of presumptive coverage was associated to the number of compensated cases of mental health conditions.

Methods. Provincial/Territorial level aggregated data on mental health lost-time claims (LTC) were obtained from the AWCBC, for the period 2001-2019. We categorized mental health diagnoses in 5 groups: PTSD, anxiety, adjustment disorders, depression and other mental health conditions. The all-cause total number of LTC served as a denominator. Independent variables included for each jurisdiction: unemployment rate, physicians per 100,000 inhabitants, union coverage, proportion of tertiary (i.e. service) workers, percent of women in the workforce and proportion of workers covered by a workers' compensation board. Multivariate regression analyses and interrupted time series were conducted.

Results. In our fully adjusted model, when a presumptive coverage policy was implemented, the incidence rate ratio (IRR) as a proportion of all-cause LTC was 2.076 (95% CI 1.463 – 2.946) for all mental health conditions, 3.059 (95%CI 1.888-4.957) for PTSD, and 1.665 (95%CI 1.321-2.098) for non-PTSD mental health conditions. The effect of independent variables was mostly non-significant or minor, except for union coverage, which was associated with an IRR of 1.309 (95%CI 1.068-1.604) for PTSD, and 0.851 (95%CI 0.759-0.954) for non-PTSD mental health conditions. Interrupted-time series showed a statistically significant immediate effect of the implementation of presumptive coverage policies, stronger for PTSD (+243%, $p=0.002$) than for non-PTSD (+48%; $p=0.002$), and a statistically significant change in slope for all mental health LTC after implementation (+11.4%; $p=0.004$)

Conclusion. The implementation of mental health presumptive coverage effect was associated with large and significant increase the number of accepted compensation claims for PTSD between 2001 and 2019. Even though such policies are mostly directed towards PTSD, these changes are also associated with a significant increase in the proportion of non-PTSD mental health claims.

[Assessing the return-to-work mode of sick-listed precarious workers with mental health issues using the REMODE-tool](#)

Yvonne Suijkerbuijk, Amsterdam UMC, department of Public and Occupational Health, Amsterdam Public Health Research Center, The Netherlands

Background

Mental health issues are highly prevalent among precarious workers, often resulting in sickness absence, work disability, and unemployment. For these workers, return to work (RTW) is more challenging, as they often lack a job to return to and have limited access to occupational health care. Perceptions and attitudes about RTW are important determinants of work resumption and can be categorized into three modes within the RTW-process: the expectant, ambivalent-uncertain, and active RTW-mode. To identify these modes among precarious workers, we developed the REturn-to-work MODe Evaluation (REMODE)-tool for occupational health professionals. A series of studies were conducted to evaluate the psychometric properties of REMODE. In the current study we focus on its feasibility, implementation and effectiveness.

Methods

In two qualitative interview studies, a quantitative vignette study and an ongoing longitudinal mixed method feasibility study we evaluated the inter-rater reliability, content-, construct-, and face-validity, usability, usefulness, acceptability and inter-item consistency of REMODE. Both workers' and occupational health professionals' perspectives were assessed. In the current study Dutch occupational health professionals are using REMODE as part of routine care over a three-month period. Afterwards they complete a questionnaire based on the NOMAD-NL and the Technology Acceptance Model. Additionally, we will analyze routine outcome data about RTW-interventions and examine the implementation process using log data and supplementary interviews with professionals.

Results
REMODE demonstrated good psychometric properties, including high inter-rater agreement on the RTW-mode (ICC 0.87, Kw 0.75), excellent inter-item consistency (Cronbach's Alpha 0.92), and good content-validity (Scale-CVI 0.83) and usability (SUS 76). Both workers and professionals considered REMODE relevant and valuable for use in occupational health care, particularly for selecting appropriate RTW-interventions. A refined version of REMODE, including items with the strongest psychometric properties and minor textual improvements, is now being evaluated in a feasibility study. Results from this study are expected by the end of 2025.

Conclusions
REMODE is a valuable tool for occupational health professionals to identify the RTW-mode in precarious workers with mental health issues. This insight supports them in providing tailored RTW-support. A refined version of REMODE is currently undergoing evaluation, and the results will be presented at WDPI 2026.

Concurrent Session 5B. Accessibility & inclusion

Chair: Shannon Gray, Monash University, Australia

Sociodemographic, clinical, and work factors and disclosure of multiple sclerosis in the workplace

Jessica Dervish, Karolinska Institutet, Sweden

Introduction
Whether to disclose a Multiple Sclerosis (MS) diagnosis, as well as to whom, can be a complex decision, shaped by various factors. However, little research has explored disclosure patterns among people with MS (PwMS). Therefore, this study examines to whom PwMS choose to disclose their diagnosis in the workplace and the factors that impact disclosure.

Methods
A web-based survey was conducted in 2021 among individuals aged 20–50 years listed in the Swedish MS Registry. Responses were linked to individual-level data from nationwide registers. Of the 4,412 (52%) participants who responded, 86% completed the question: “Have you told the following people in your workplace about your MS diagnosis?” Response options were: Yes; No, but I will; No; and Not applicable/do not have (e.g., for self-employed individuals or others for whom the question was not relevant). Participants also answered additional questions about their work, health, and overall life situation. Descriptive statistics were used to summarize sociodemographic, clinical, and work characteristics of the sample.

Results
The majority of PwMS had disclosed their diagnosis to at least some degree (85%). The most frequent disclosure pattern was to both managers and co-workers (42%), followed by disclosure to managers, co-workers, and HR (30%). A smaller proportion disclosed only to their co-workers or manager (9%, or 3%, respectively). Among those who disclosed, most were women, aged 40–49 years, had mild disease severity, higher education, and were born in Sweden. Disclosure was more common among those with stable employment, where 87% had disclosed their diagnosis compared to those with time-limited positions, where 70% had done so. Further, the prevalence of disclosure was lower among those born outside of Sweden (75%) compared to 86% among those born in the country. In addition, the prevalence of disclosure increased with higher disability.

Conclusion
The findings indicate that PwMS to a high extent choose to disclose their diagnosis in the workplace, particularly to those they interact with closely. Additionally, sociodemographic, health-related, and work-related factors impact disclosure decisions.

Sheltered Employment, Absolute Accommodation, and the Limits of CRPD Jurisprudence: Insights from the African Disability Protocol

Yohannes Zewale, Addis Ababa University, Ethiopia

This paper argues that the African Disability Protocol (ADP) recalibrates employment equality for persons with disabilities through four interlinked normative innovations that depart from prevailing jurisprudence of the Convention on the Rights of Persons with Disabilities (CRPD).

First, the ADP renders public-sector disability employment quotas mandatory and attaches an enforcement mechanism in the form of a “buy-out” measure. Employers that fail to meet quota thresholds may be required to pay a calibrated levy into a ring-fenced disability inclusion fund. The fund supports workplace accessibility, individualized accommodations, assistive technologies, skills development, and supported placement. The buy-out mechanism is designed not as a substitute for compliance but as a cost-internalization tool,

accompanied by public reporting, oversight by organizations of persons with disabilities (OPDs), and escalating contributions until compliance or restoration is achieved.

Second, the ADP articulates reasonable accommodation without an undue-burden defense, an uncommon position in international and comparative disability law. This approach reframes accommodation as a non-derogable employment obligation rather than a cost-contingent exception. However, the paper notes the absence of robust empirical evidence demonstrating that the removal of undue-burden defenses consistently accelerates inclusive employment outcomes across diverse labor markets, particularly in lower- and middle-income contexts.

Third, the ADP safeguards against the misuse of the principle of “equal pay for equal work” as a justification for denying accommodations or productivity adjustments, affirming the compatibility of wage equality with individualized workplace supports. Fourth, while endorsing inclusion, Unlike the CRPD, the ADP does not confine employment exclusively to the open labor market. It permits tightly regulated sheltered employment for workers with high support needs, subject to fair remuneration, periodic review, and individualized transition pathways toward open employment.

The paper develops design parameters for effective quota buy-out schemes—including transparent formulas, escalation and sunset clauses, mixed financing models, and independent audits with OPD participation—and proposes anticipatory inclusion budgeting within human-resource systems. It concludes by assessing the transferability of the ADP model to other regional instruments and national legal systems, identifying contexts in which its approach to quotas, accommodation, wage equality, and sheltered employment may enhance inclusion, and contexts where adjustment is required to align with proportionality, fiscal capacity, and anti-segregation principles.

[Organizational perspectives on the changing landscape of support and accommodation provision to workers with disabilities: A qualitative study](#)

Monique Gignac, Institute for Work & Health, Canada

Background & Objectives: Workplaces have undergone considerable changes in recent years with COVID-19 adjustments to work arrangements, greater emphasis on equity, diversity, and inclusivity, increased recognition of psychosocial work factors, the rise of artificial intelligence, and other changes. Yet, the impact of these changes on support and accommodation provision to workers with chronic and episodic conditions is unclear. In this study, we examined emerging issues in disability support processes from the perspectives of workplace support providers.

Methods: Thirty-one participants were interviewed from diverse employment sectors that included jobs with flexibility in their location (e.g., government, finance) and jobs that required in-person work or were safety sensitive (e.g., healthcare, education, construction, utilities, public safety, transportation, manufacturing). Participants were human resource professionals, disability managers, union representatives, OHS professionals, and managers. Thirty-nine percent had lived experience of a physical and/or mental health/cognitive disability. Participants were recruited through on-line advertising, newsletters, and stakeholder networks. Semi-structured interviews and qualitative content analysis framed data collection and analyses.

Findings: Five themes emerged. Three themes were common across in-person/safety sensitive jobs and jobs with flexibility in their work location, although there were nuances in how themes were manifested: 1) an increased prominence of support requests for mental health and neurodiversity that added complexity to support provision; 2) the importance of culture in support processes, encompassing not only organizational culture, but also occupational norms and racial/ethnic cultural perceptions; and 3) a greater formalization of support processes and more willingness among the groups involved to work together (e.g., union and management). A fourth theme emerged for office-related jobs with requests for fully remote work often acting as a catalyst for broader organizational examinations of workplace support processes. A fifth theme for safety-sensitive jobs highlighted increased attempts to more formally recognize health and disability at work and create or enhance support provision despite its complexity.

Conclusions: Recent changes to the landscape of work have created new issues for support providers of workers with disabilities. Although participants were committed to enhancing support provision, there was recognition of complexity and widening gaps in expectations for support intervention that were not easily addressed.

[Enabling individuals with intellectual disability to establish and maintain a foothold in competitive work](#)

Carin Nyman, Karolinska Institutet, Sweden

Background: The Convention on the Rights of Persons with Disabilities constitutes the right to work on an equal basis with others, including the opportunity to earn a living through work. A group that continues to be marginalized in the labor market are individuals

with intellectual disability (ID). Despite a large proportion having mild or moderate severity in ID, as well as a potential work ability for competitive work, they often meet stigmatizing attitudes and lack adequate support to partake in working life. In addition, knowledge about determinants that may impact labor market entry and integration, and best praxis for interventions and support, is scarce. The objective was to examine the proportion of gainful employment and what determinants can enable individuals with ID to establish and maintain competitive work.

Methods: Individuals who completed upper secondary vocational education between 2001-2010 were followed with respect to gainful employment from 2011 until 2020, using unique data from the Halmstad University Register on Pupils with Intellectual Disability (N=12,788) and data from the longitudinal integrated database for health insurance and labor market studies. Descriptive statistics and logistic multivariable regression analysis, yielding Odds Ratios (ORs) with 95% confidence intervals (CI), for the impact of sociodemographic, educational, and work-related factors, were estimated.

Results: About one-third of the individuals had entered the labor market at the end of 2020, giving a 10% increase during the follow-up, and about one-fifth had been gainfully employed during the entire follow-up period. There was a marked gender difference, with men being twice as likely as women to enter the labor market and remain integrated (i.e., gainfully employed) during the follow-up, OR 2.06 (1.78-2.58). Other significant determinants were graduation from a national education program, OR 3.40 (3.06-3.86) and OR 2.91 (2.40-3.54) for men and women, respectively, parents' educational attainment, and country of birth. Wage subsidies to employers showed a decreased prevalence during the follow-up, with a slightly greater decrease for women.

Conclusions: Enabling health, social, and economic advantages and reducing marginalization through labor market integration for individuals with ID requires measures addressing prevention and integration efforts on a structural and organizational level.

[Not Business as Usual: Redefining Disability Inclusion at UBC through the Centre for Workplace Accessibility](#)

Leah Watson, University of British Columbia, Canada

At many institutions, disability support is often limited to formal processes that respond only after barriers have impacted employees, typically requiring extensive medical documentation. At the University of British Columbia (UBC), the Centre for Workplace Accessibility (CWA) offers a distinct and proactive model that goes beyond traditional approaches.

The CWA works in partnership with UBC's Human Resources and other departments toward a shared goal of creating an inclusive, barrier-free workplace for all staff and faculty. Workplace accessibility is an iterative process that requires ongoing and collective attention. Despite these efforts, some barriers remain and require individualized accommodation. The CWA focuses on providing flexible, low-barrier support at any stage of the employee lifecycle, whether before, during, or independently of traditional Return to Work (RTW) and accommodation programs. This means employees can access assistance early or at any point in their work journey, not only when formally requesting or requiring accommodation. By minimizing the need for medical documentation and expediting accommodation timelines wherever possible, the CWA reduces barriers and fosters a culture of trust and dignity.

In addition to offering resources such as an ergonomic equipment demonstration program and a centralized Workplace Accommodation Fund, the CWA advances disability inclusion literacy and community-building initiatives. With training and programs like Disability at Work 101, a Body-Doubling Writing Group, and a panel discussion about Invisible Disability in the Workplace, the CWA strives to move beyond the traditional accommodation model toward systemic accessibility embedded in university culture.

The CWA's work aligns with the objectives of both the Accessible British Columbia Act and the Accessible Canada Act by proactively identifying and removing barriers, and promoting equitable opportunities for all employees. Through integrated service delivery, collaboration, and innovative programming, the CWA sets UBC apart from other post-secondary institutions and strives for meaningful inclusion.

Outcome goal: This presentation will share insights from the CWA's implementation, including successes, challenges, and lessons, that may inform other organizations working to develop or enhance accessible, inclusive, and supportive workplace programs.

Concurrent Session 5C. System design

Chair: Ellen MacEachen, University of Waterloo, Canada

Navigating Discomfort: The Role of Negative Affect in Requesting Workplace Accommodations for Employees with Disabilities in the United States

Shengli Dong, Florida State University, United States of America

Workplace accommodations are critical to both the inclusion and retention of people with disabilities (PWDs) within organizations. Even with certain legal protections in place, such as the Americans with Disabilities Act (ADA), many PWDs remain hesitant to request work accommodations (Baldrige & Veiga, 2001; Frank & Bellini, 2005). While self-efficacy, outcome expectancy, and positive affect have been previously explored as key psychosocial factors in accommodation requests (Dong et al., 2016), the role of negative affect has received little to no attention. As the accommodation request process can be emotionally laden, especially considering the discrimination and stigma that PWDs experience in the workplace, investigating the effect of negative affect is important for understanding such workplace dynamics. Drawing on Social Cognitive Theory (SCT) (Bandura, 1986) and Social Cognitive Career Theory (SCCT) (Lent et al., 1994), this paper examines how negative affect influences intentions to request workplace accommodations. We propose that negative affect reduces accommodation request intentions both directly and indirectly, by lowering both self-efficacy and outcome expectancy measures. The participants in this study consisted of 714 individuals with disabilities recruited through national and state agencies serving PWDs across the United States. Participants in this study met the following criteria: (a) they are persons with disabilities, (b) they are 18 years of age or older, and (c) they needed workplace accommodations in the past 3 months before taking the survey study. Using a refined Structural Equation Model (SEM), along with Confirmatory Factor Analysis (CFA), this study uncovered significant negative effects from negative affect on both self-efficacy and outcome expectancy in relation to request intentions. Moreover, negative affect exerted a significant positive effect on request intention. Negative affect tends to make PWDs feel less capable and less optimistic, and as such, lowers accommodation request intention. But negative affect also seems to push people to act initially due to the emotionally laden stress in the accommodation process. The study contributes to the enhanced understanding of the emotional dimensions of accommodation requests and offers insights for policy, management practices, and workplace inclusion initiatives for those living with disabilities.

“See no evil, hear no evil”: Claim suppression laws and enforcement across Canadian jurisdictions

Stephanie Premji, McMaster University, Canada

Background. Claim suppression typically refers to actions by employers that hinder the appropriate reporting of work injuries or illnesses to workers' compensation. Employers generally engage in claim suppression because of experience rated premium plans, whereby similar employers are compared to each other and issued rebates or assessed surcharges for lower- or higher-than-average workers' compensation costs. While several Canadian jurisdictions have introduced legislation to address claim suppression, concerns about its persistence remain.

Objective. As part of a community-engaged project, our team of researchers and injured worker advocates systematically investigated the laws, policies, resources, interventions and statistics on claim suppression across Canada's provinces and territories, with the objective of understanding how existing laws are constituted and applied.

Methods. For each jurisdiction, we analyzed relevant documents and literature such as workers' compensation Acts and summary legislation and policy documents. In addition, we interviewed key informants in different jurisdictions (total of 9 interviews thus far), to better understand the applied regulatory context and discuss existing initiatives. Lastly, we obtained data on enforcement through freedom of information requests.

Results. All jurisdictions, except for the Northwest Territories, Nunavut and the Yukon, had experience rating systems and all but New Brunswick, Prince Edward Island, Quebec, and Newfoundland and Labrador, had claim suppression legislation. Available penalties amounts were typically low and other consequences for employers absent or minimal. Only Ontario had an explicit intent requirement to establish claim suppression. Interviews revealed the limited scope of existing laws relative to the range of actions encompassing claim suppression, as well as the overall lack of enforcement by workers' compensation authorities. Data obtained through freedom of information requests revealed that only 147 claim suppression penalties were levied from 89 employers across the country over the last 10 years.

Conclusion. Rather than protect injured or ill workers, existing laws, as constituted and applied, appear to be shielding employers who suppress workers' compensation claims. The social and economic costs of claim suppression are significant, negatively impacting

workers and their families, shifting the cost of work injuries and illnesses to society, and affecting workers' compensation data, with implications for prevention priorities and actions.

Associations between social insurance literacy and perceived justice and perceived fairness in a work disability claim setting

Dirk Vervenne, University Medical Center Groningen, The Netherlands

Purpose Successful completion of processes within the social insurance system is dependent on both the individual characteristics of the work disability applicant as well as system characteristics of the social insurance system. It is this interaction between individual abilities and system-side factors that together constitutes social insurance literacy (SIL). Many individuals do not have sufficient knowledge and abilities to successfully interact with the social insurance system, which in turn could lead to feelings of injustice or unfairness. The purpose of this study was to examine the associations between SIL and perceived justice and perceived fairness among clients applying for work disability benefits.

Methods A cross-sectional survey study was conducted among clients applying for work disability benefits in the Dutch social insurance system. This group consists of clients with long-term work disability, including clients with >1 year of sickness absence. Data on the four domains of SIL (Individuals' ability to obtain; to understand; to act; and System comprehensibility) were collected, as well as data on perceived justice and perceived fairness. Data were then analyzed using multivariable linear regression.

Results A sample of 168 respondents was included. Of the four distinct SIL domains, SIL System was found to be significantly associated with both fairness [$B=0.57$, $SE=0.08$] and justice [$B=0.71$, $SE=0.09$]. In addition, clients' self-reported ability to act on information was found to be significantly associated with perceived justice [$B=0.25$, $SE=0.12$]. No associations were found between both the ability to obtain and understand information, and the outcomes of justice and fairness.

Conclusion System comprehensibility was found to be stronger associated with perceived justice and fairness than clients' abilities to obtain, understand and act on information. Improving the ability of the system to provide comprehensible information may be an effective way to improve perceptions of justice and fairness among clients applying for work disability benefits.

Workers' Voice: Reimagining workers' compensation through participatory computational modelling with injured workers

Alex Collie, Monash University, Australia

Background: Historically, Australian workers have not been actively engaged in the design and operation of workers' compensation systems. This has led to a misalignment between their experiences and preferences and system rules, processes and practices. The Workers' Voice project, funded by the Australian Research Council, was created to identify user-driven priorities for system reform, and test these within simulated computational models of workers compensation systems. This presentation will provide a summary of key findings from the project and next steps involved in testing solutions identified by injured workers.

Methods: Phase 1 of the project involved a multi-method approach of collecting insights from over 600 injured workers and their key informants (family members, friends, supporters) via surveys, text and graphical submissions, in-depth interviews, and co-design workshops. In Phase 2, computational system dynamics and agent-based models were developed to represent 'current state' workers' compensation systems in Australia. Model development included multiple iterative steps of collaboration between the modelling team, injured worker lived experience advisors and compensation scheme practitioners, through direct consultation and distribution of a model validation survey.

Results: Phase 1 highlighted seven key challenges for workers. Workshops with lived experience advisors generated potential systemic solutions to three of these challenges: the use of medical evidence during claims, claim manager communication, and financial impacts of claiming. Phase 2 established two validated computational models which effectively replicate process and outcomes data (eg, return to work rates, customer satisfaction, claim duration) from existing Australian compensation systems. The solutions identified in Phase 1 are now being tested in the models developed in Phase 2. The impact of these solutions will be illustrated through modelled user "system journeys" detailing exposure to system processes and injured worker outcomes including satisfaction and work capacity.

Conclusions: This presentation will illuminate how workers can be engaged in the design and development of workers' compensation system policy, and how potential solutions to persistent system challenges can be assessed in simulated policy experiments.

Evaluating a novel workplace health and safety program in Ontario, Canada: Early insights from a researcher-policymaker partnership

Suhail Marino, Partnership for Work, Health and Safety, University of British Columbia, Canada

Background: The Health and Safety Excellence program (HSEp) is a new voluntary incentive initiative designed for a diverse range of firms, providing Ontario employers a structured roadmap to strengthen workplace health and safety through the development and integration of comprehensive OHS practices. A key feature of the program is that it offers an overall structure for firms to engage in OHS while allowing flexibility in terms of program progression, topic selection and implementation requirements. Firms are supported by third-party providers to implement their chosen OHS topics.

Aim: Our aim was to understand firm experiences in the HSEp to identify early areas of achievement and provide actionable recommendations to policymakers that support program improvement and enhance the firm experience.

Methods: We conducted a five-year mixed-method evaluation of the HSEp. This research reports qualitative insights from years 1 and 2, gathered through structured interviews with 76 participants representing 71 firms. Data were analyzed thematically to identify barriers and successes experienced during participants' first year in the program, with interim results shared with administrators to inform real-time program adaptation.

Results: We observed early successes in firms' efforts to improve disability management as a result of their participation in the program. Firms recognized the importance of adopting a proactive rather than reactive approach. Many participants identified their most significant change as the formalization of their health and safety programs including having written standards such as for accommodations and return-to-work (RTW). Others highlighted improvements in education, training, and communication. Health and safety activities were deliberately integrated into broader business operations to engage employees and encourage consideration of safety in everyday decision-making. Key barriers and facilitators to the program structure were identified, which were shared with policymakers, leading to swift adjustments to the program.

Conclusion: Close collaboration between researchers and administrators led to tangible improvements, including more direct engagement with firms for topic completion and targeted financial support for firm program implementation. These findings highlight the value of providing timely feedback to program administrators, enabling responsive improvements when implementing new workplace interventions, ultimately supporting employers to enhance worker health and safety and RTW.

Concurrent Session 5D. Symposium: Realist evaluation in the context of return to work research

Sandra Brouwer, University of Groningen, The Netherlands

Nicole Snippen, University of Groningen, The Netherlands

Josephine Bokermann, University of Groningen, The Netherlands

Elmi Zwaan, Amsterdam Public Health Research Institute, The Netherlands

Realist evaluation is increasingly applied as a research methodology, including within the field of work and health. This theory-driven approach aims to identify the mechanisms through which programs or interventions produce outcomes, and how these mechanisms are influenced by different contextual factors. By examining what works, for whom, and under what circumstances, realist evaluation provides valuable insights into how and why interventions or programs function. These insights can be used to refine interventions and inform implementation and policy decisions. This symposium offers participants the opportunity to deepen their understanding of the theoretical foundations of realist evaluation, illustrated with practical examples, and to explore the opportunities and challenges of applying this approach in work and health research.

Concurrent Session 6A. Psychosocial work environment

Chair: Chair: Peter Smith, Institute for Work & Health, Canada

Assessing the psychosocial work environment with combined self-reporting and observer-rated methods – development and evaluation of a multi-source tool

Haitze de Vries, University Medical Center Groningen, The Netherlands

Background

The psychosocial work environment is an important predictor of workers' health and well-being, as well as adverse work outcomes such as sick leave. Although many self-rated instruments have been used for decades to measure psychosocial work environment, the objectivity of these self-assessments has been questioned. For a more comprehensive assessment, it is important to incorporate also observations from professionals. The aim of the study was to develop a multi-source tool for assessing the psychosocial work environment and to pilot test its feasibility and utility in occupational health practice.

Methods

The Danish Psychosocial Work Environment Questionnaire (DPQ) was used as the starting point for developing the multi-source tool. This self-rated instrument was translated and adapted to the Dutch context, and its measurement properties were assessed in an online panel study (n=1500). In collaboration with occupational health professionals (OHPs), the DPQ was further adapted into a digital observer-rated version. Mixed methods were used to evaluate the feasibility and utility of the prototype multi-source tool. The evaluation focused on acceptability, accessibility, practicability, appropriateness, comprehensibility and satisfaction.

Results

Cross-cultural translation of the DPQ occurred without major difficulties, keeping all items and domains. Most scales showed satisfactory Cronbach's alphas (>0.7), indicating good internal consistency. The multi-source tool starts with a workers' self-rating of the five domains of psychosocial work environment, which output is shown in spider webs. After discussing the content of the spider webs, the OHP can come to objectified scores of the psychosocial work environment by consulting other sources of information such as a formal description of the position, an interview with the employer and a workplace investigation. OHPs confirmed the usefulness of the DPQ as the base for a new tool to assess psychosocial work environment in their daily practice. OHPs and their clients rated feasibility and utility as good and they were satisfied with the possibilities of the tool.

Conclusions This multi-source tool may help OHPs to arrive at a more objective assessment of the psychosocial work environment. It might contribute to better working environments by identifying obstacles in psychosocial working conditions and pointing out directions for interventions.

Exploring Organizational Initiatives and Conditions for a Favorable Psychosocial Work Environment in Swedish Primary Healthcare

Elin Karlsson, Linköping University, Sweden

The psychosocial work environment in the healthcare sector is widely recognized as challenging due to, for instance, high workload, stress, and poor work-life balance. These factors indeed contribute to negative health outcomes for healthcare professionals. In Sweden, primary healthcare face similar issues. There have been attempts to address them although these efforts primarily have focused on individual-based interventions, indirectly placing the responsibility on the individual worker, such as stress management courses. Research on organizational initiatives remains limited, despite their greater potential for achieving long-term, sustainable improvements for healthcare workers' psychosocial work environment.

Aim: The purpose of this study was to explore characteristics of primary healthcare units where organizational initiatives to improve the psychosocial work environment have been successfully carried out.

Methods: A multiple case approach was used, allowing various cases to be investigated and enabling identification of similarities and common patterns across the units. To identify cases where organizational initiatives to improve the psychosocial work environment had been made, representatives of the Swedish Association of Local Authorities and Regions were contacted, who facilitated communication with a national network comprising occupational health and safety strategists with knowledge of different successful workplaces nationwide. In total, 15 interviews were conducted with healthcare professionals and managers from four primary healthcare units. Data was analyzed through an inductive content analysis.

Results: Four main categories and 16 subcategories were identified, capturing key factors that contribute to a favorable psychosocial work environment in primary healthcare through organizational initiatives. The main categories were Engaged leadership, Open workplace climate, Conditions for improvement, and Structured work organization. For instance, participants described how an open climate in which everyone's voice was important, contributed to a safe and creative environment that spurred innovations.

Conclusion: This study identifies key characteristics of primary healthcare units that contribute to creating a favorable psychosocial work environment in Swedish primary healthcare. These elements promote inclusivity, balanced change processes, and staff involvement in decision-making. The findings underscore the need for further research on managerial challenges and effective strategies for staff recruitment and retention.

Developing workplace health interventions using the 6QuID approach: lessons from a longitudinal case study

Jillian Manner, University of Edinburgh, United Kingdom

Workplace stress and wellbeing remain a significant public health concern, particularly in high-pressure environments such as contact (call) centres. These organisations are frequently cited as having sub-optimal working conditions, often resulting in poor health outcomes and high turnover. Compared to desk-based workers in other settings, contact centre employees sit more, move less, and face greater risks of negative occupational health outcomes, including depression and anxiety. Organizational culture factors, such as strict work schedules and productivity pressures, further restrict opportunities to engage in health behaviours and to participate in workplace health promotion programmes. While such interventions are commonly introduced to improve employee wellbeing and business outcomes, they are seldom designed to align with organizational context and culture, limiting their effectiveness and sustainability. This is particularly problematic in organizations like contact centres, where cultural and structural barriers are substantial.

This study aimed to address these challenges by applying the Six Steps in Quality Intervention Development (6SQuID) framework, integrating the socioecological model (SEM) and Schein's organizational culture model, to co-produce and implement a workplace wellbeing intervention in a UK-based contact centre. A longitudinal case study approach was employed, involving workshops and focus groups. Through structured workshops, managers identified key organisational and cultural factors influencing wellbeing and collaborated to co-produce a theory of change, theory of action, and action plan. The subsequent implementation of the action plan resulted in positive perceived changes in workplace culture, employee wellbeing, and organizational practices. Findings also highlighted enhanced engagement, stronger managerial support, and greater alignment of workplace structures with employee health and wellbeing.

To our knowledge, this is the first study to explicitly integrate ecological and organizational culture factors into workplace wellbeing intervention development using the 6SQuID framework. The study underscores the importance of embedding ecological and cultural considerations into intervention design to ensure effectiveness and sustainability. Findings provide a model for organizations seeking to systematically address workplace wellbeing, demonstrating the value of 6SQuID and co-production in facilitating structural and cultural change.

Supporting heavy vehicle transport leaders to more effectively address psychosocial hazards: Evaluation of a pilot training intervention using implementation science principles

Bronwen Otto, La Trobe University, Australia

Background: Work-related musculoskeletal and mental health disorders (WMSDs and MHDs) are two highly prevalent and costly work health and safety (WHS) problems worldwide. Both risks are influenced by exposure to work-related psychosocial hazards, aspects of the design and management of work. Extensive evidence supports a knowledge to practice gap in risk management of WMSDs and WMHDs. Previous studies have suggested a lack of necessary knowledge and skills about psychosocial hazards in workplace leaders may be a key factor contributing to this knowledge to practice gap. Workplace leaders in positions of formal authority are uniquely positioned to influence work design of multiple workers. Improving leaders' work design knowledge and skills has been highlighted as a promising approach for more effective management of WMSDs and WMHDs. Additionally, there is a need for comprehensive real-world evaluation research that considers 'what works for whom and why?'

Aims: To (1) understand changes in participants' knowledge, skills and beliefs about psychosocial hazards, (2) evaluate the Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) of the pilot training intervention, utilising the RE-AIM framework, and (3) identify changes needed for intervention upscaling.

Methods: Data was collected from surveys conducted at three time points (n=12), interviews (n=6) and completed risk assessments (n=4), and qualitative and quantitative analysis was conducted. Development of survey items was informed by the Capability, Opportunity, Motivation-Behaviour (COM-B) model and Theoretical Domains Framework (TDF).

Results: Participants' knowledge ($x^2(2)$, $p = .008$) and skills ($z = -2.060$, $p = .039$; $z = -2.226$, $p = .026$) improved from baseline to four-months' post-intervention. Key challenges and opportunities were highlighted with conducting real-world research.

Implications: Findings suggest this pilot intervention is worth expanding, and will be used to inform design and evaluation of a future practical resource tailored for supervisors and managers in this industry.

Significance: WMSDs and WMHPs are two of the largest WHS challenges for workplaces globally. The study targets the heavy vehicle transport industry, a complex sociotechnical environment with high rates of these disorders.

Innovation: This study applies principles of implementation science, integrating behaviour change theory with a structured evaluation framework.

Building on positive psychology to foster employer engagement in the return-to-work of sick-listed employees: A co-creative approach to critical incident technique

Isha Rymenans, Tilburg University, The Netherlands

Background: After one year of sickness absence, sick-listed employees in the Netherlands are expected and guided to seek new employment when returning to their own employer (i.e., 'first track reintegration') is not considered feasible anymore. These 'second track' trajectories often hold negative connotations because of stigma and lacking success rates. Principles from positive psychology such as elevation, i.e., the motivational impact of uplifting examples, may help to enhance employer engagement in the return-to-work (RTW) of individuals with work disabilities.

Purpose: To foster employers' engagement and hiring behavior related to RTW, our project aims to develop an inspiration platform using co-creative methods. We explore how key moments during second track trajectories can be enriched by positive psychology principles and how these can be translated into practice.

Methods: In the first co-creation phase we develop an empathetic understanding of employers' and employees' needs regarding second track trajectories. Semi-structured interviews are conducted with employers, employees and stakeholders (e.g., occupational physicians, reintegration coaches) who have experienced successes with second track reintegration. Using critical incident technique, participants draw timelines and identify key moments that have positively shaped the reintegration trajectory. Through reflective analysis we identify best principles from positive psychology that successfully contributed to these key moments.

Results and conclusions: Preliminary results reveal that the first contact with new employers is perceived as positive when employees feel heard and reassured that they can determine their own RTW pace (i.e., combatting institutional, legal pressures). During the onboarding in these RTW trajectories, employers should provide the right amount of work demands and dedicate attention to individual-level and team-level strengths alignment when agreeing on tasks and working hours. Also, a supportive working environment is crucial, in which the role of co-worker support must not be overlooked. These insights will provide an empirical foundation for further developing an inspiration platform for employers to experience more positive attitudes, competence and know-how when hiring sick-listed employees. Theoretically, our study bridges insights between occupational rehabilitation, positive psychology and Human Resource Management literature.

Concurrent Session 6B. Health professionals

Chair: Angela de Boer, Amsterdam UMC, The Netherlands

A paradox in Eldercare: High Occupational Pride but Poorer Health among Assistant Nurses

Sara Larsson Fällman, University of Borås, Faculty of Caring Science, Work Life and Social Welfare, Sweden

Introduction

Assistant nurses (ANs) constitute the largest occupational group in Sweden and play a crucial role in eldercare. They receive formal vocational training at the upper-secondary level and, within eldercare, perform a wide range of delegated medical tasks, such as medication administration, urinary catheterization, blood sampling, and tube feeding. However, their working conditions are often challenging, and ANs have the highest sickness absence in the Swedish labor market. Despite their central role in eldercare, previous research has largely focused on registered nurses, leaving ANs comparatively understudied.

Aim

The aim was to examine psychosocial work environment, stress and self-rated health (SRH) among ANs in eldercare compared to the general population. It further explores how ANs experience their working conditions.

Methods

A concurrent mixed methods design was applied. Quantitative data was collected through a survey (N = 626) using the Copenhagen Psychosocial Questionnaire (COPSOQ). Results were compared to national reference values. In addition, one study-specific item assessed occupational pride. Thirty semi-structured interviews provided qualitative insights.

Results

Compared with the reference group, ANs reported significantly higher levels of work pace and conflicting demands and rated their supervisors' leadership skills lower. Despite this, they reported high levels of meaning at work and occupational pride, measured with the study-specific item, was strikingly high (mean = 8.2/10; median = 10). Nevertheless, ANs scored higher on stress and rated their SRH significantly lower than the general population. Interviews illustrated these findings: ANs described minute-controlled work in a high pace, often performing tasks they felt overqualified for, while simultaneously expressing pride and meaning in contributing to older persons' wellbeing.

Conclusion

ANs in elder care experience a paradox: strong occupational pride, high meaning at work and engagement coexist with high stress and poorer SRH. These findings emphasize the urgent need for preventive strategies and sustainable working conditions in eldercare—a challenge shared internationally.

Are newly graduated physiotherapists ready to practice in work rehabilitation? Insights from educators and graduates

Christian Longtin, McGill University, Canada

Background: Physiotherapists play a central role in supporting the rehabilitation and return-to-work of individuals with work-related musculoskeletal disorders. Despite this, growing evidence indicates that entry-level physiotherapy education may not sufficiently prepare graduates to address the complexities of work disability management. To better understand the scope and adequacy of current work rehabilitation training, this presentation integrates findings from two complementary studies examining work rehabilitation education across Quebec physiotherapy programs.

Objectives: To (1) develop a partner-informed set of work rehabilitation competencies for physiotherapists; (2) assess how these competencies and broader work rehabilitation content are integrated into entry-level physiotherapy curricula in Quebec; and (3) explore recent graduates' perceived preparedness to practice in work rehabilitation.

Methods: A consensus-building process with engaged partners was used to develop work rehabilitation competencies. A cross-sectional survey was conducted with educators from all Quebec physiotherapy programs to assess how these competencies are integrated into curricula and to evaluate student preparedness. Subsequently, 25 recent physiotherapy graduates (6 months to 3 years post-graduation) participated in a mixed methods study involving surveys and semi-structured interviews exploring their perceived preparedness to practice in work rehabilitation.

Results: Seven partner-endorsed work rehabilitation competencies were developed. Findings revealed convergent evidence of important gaps in work rehabilitation training. The curriculum survey showed limited instructional time (median 5.5 hours), partial integration of competencies, and a reliance on didactic teaching methods. Educators reported low student preparedness for competencies involving navigation of compensation systems, collaboration with stakeholders, and supporting the return-to-work process. These areas were also identified by recent graduates as where they felt least prepared. Graduates further emphasized the impact of role ambiguity in work rehabilitation, limited applied learning opportunities, and exposure to stigma toward injured workers as key barriers to preparedness.

Conclusion: This research highlights critical gaps in physiotherapy education that limit graduates' preparedness to practice in work rehabilitation. Findings underscore the need for structured integration of work rehabilitation competencies, greater use of experiential learning strategies, and curricular reforms to address stigma and role clarity. Together, these findings lay the foundation for developing targeted strategies to enhance physiotherapy training and ultimately improve care for injured workers.

Sustainable Employability Profiles of Mental Healthcare Professionals: A Person-Centered Capability Approach

Naomi de Leng, Tilburg University, The Netherlands

Mental healthcare sectors worldwide face growing workforce shortages due to rising demand for care, high turnover, and sickness absence. These challenges threaten access to mental health services, care quality, and workforce well-being, making the study of the sustainable employability of this workforce crucial. Previous research highlights the importance of factors such as autonomy, organizational support, job crafting, and psychological capital in maintaining a healthy and motivated workforce.

To better understand the risks and needs of this sector, this study identified profiles of sustainable employability among mental health professionals (MHPs) and examined how membership in each of these profiles can be predicted by well-known factors such as autonomy, organizational support, job crafting, and psychological capital. Sustainable employability profiles were created based on the Capability Approach, which emphasizes the extent to which workers can realize important work aspects. Realizing important work aspects has been found helpful in increasing occupational well-being (e.g., work engagement, job satisfaction, life satisfaction), and decreasing work disability (e.g., burnout symptoms, sickness absence rates).

Using survey data amongst 614 Dutch MHPs, we identified four profiles. In the first profile MHPs valued many aspects of their work but lacked the necessary conditions to realize them. The second profile valued aspects of their work to a lesser extent, whilst also having limited opportunities to realize them. A third profile was considered a risk group that reported (very) high valuing of work aspects, but severely restricted opportunities, and also reported poorer health indicators compared to the other groups. A final profile valued many work aspects and could realize them better than the other groups and reported more favorable health indicators.

Hierarchical regression models showed that predictors of subgroup membership included perceived organizational support, autonomy, high-involvement HRM practices, psychological capital, job crafting, and appreciation from colleagues.

In conclusion, despite valuing many aspects at work, many MHPs lack the conditions to realize them. Organizational support, participative decision-making, and investments in personal resources – especially for those at risk - may help prevent work disability and promote sustainable employability of this workforce.

Absence trends across publicly-funded hospital and health service workers in Victoria, Australia

Emma Doust, Monash University, Australia

Background

Healthcare workers are critical to the functioning of health systems, yet their wellbeing remains vulnerable, particularly in the aftermath of the COVID-19 pandemic. This ongoing strain poses risks to workforce sustainability, patient care and broader health system performance. Tracking patterns of leave over time can support monitoring of workforce health and organisational dynamics, and can inform future workplace health promotion, illness prevention, and administrative planning.

Aim

This study explores both sick leave (for when a worker is temporarily ill) and annual leave (for rest/vacation) trends across the Victorian public health service workforce. Differences between worker gender, age, labour category, geographic location, and department were also examined.

Methods

Aggregated leave data over a 13-year period (2012 - 2024) was obtained from the Victorian Public Sector Commission, which covers nearly all employees at publicly-funded hospital and health services in Victoria. The data represents a workforce that expanded from approximately 83,000 full-time equivalents (FTE) in 2012 to approximately 130,000 FTE in 2024. Joinpoint regression analysis was used to examine trends over time, and negative binomial regression was used to explore differences between groups.

Results

The accumulated annual leave balance increased from 16.6 days per FTE in 2012 to 20.6 days in 2024, with larger increases seen since 2019 aligning with the timing of the COVID-19 pandemic. Sick leave taken remained relatively stable, ranging between 9.2 and 10.2 days per FTE. Female gender and increasing age were associated with higher levels of both sick leave taken and annual leave balances. Relative to administration and clerical workers, doctors had both the lowest sick leave taken (IRR 0.36 [0.34 - 0.39]) and the lowest annual leave balances (IRR 0.56 [0.54 - 0.58]).

Conclusion

This study suggests that public healthcare workers in Victoria, Australia have been taking less annual/vacation leave since the COVID-19 pandemic, posing a potential risk to workforce health and wellbeing, and patient care. Further research is needed to provide insights into the barriers to taking leave and inform strategies that help support workforce wellbeing and sustainability.

Experiences and needs of physiotherapists and exercise therapists regarding the management of working people with complaints of the arm, neck and shoulder (CANS): A focus group study.

Nathan Hutting, HAN University of Applied Sciences, The Netherlands

Background

Non-traumatic complaints of the arm, neck and/or shoulder (CANS) are prevalent musculoskeletal conditions that substantially affect work participation. In the Netherlands, up to 37% of the working population reports CANS annually, leading to productivity loss and prolonged sick leave. Despite various available interventions, the management of working people with CANS remains complex. Understanding how physiotherapists (PTs) and exercise therapists (ETs) approach this challenge, and what they need to improve practice, is crucial for optimizing work-focused care.

Objective

To explore the experiences and needs of PTs and ETs regarding the management of working patients with CANS, with particular attention to self-management support and work participation.

Methods

An exploratory qualitative study using three online focus groups was conducted with 27 purposively sampled Dutch PTs and ETs (mean age 43 years; mean professional experience 20 years). Semi-structured group interviews were audio- and video-recorded, transcribed verbatim, and analyzed thematically following Braun and Clarke's framework.

Results

The analysis revealed four main themes. Therapists emphasized the importance of a thorough assessment, combining psychosocial and work-related factors and illness beliefs with physical examination. They consistently addressed patients' work, discussing workload, job autonomy, and working conditions. Although colleagues were generally seen as supportive, therapists found it difficult to help patients strengthen their workplace social networks. Supporting self-management was considered essential, with a strong focus on building a therapeutic alliance, enhancing body awareness, and stimulating problem-solving skills and assertiveness. At the same time, many therapists felt insufficiently trained in coaching techniques and in conducting meaningful conversations with patients. Finally, participants underlined the value of multidisciplinary collaboration, for example with occupational health professionals, but reported limited opportunities to establish or access such networks, particularly in smaller or solo practices.

Conclusions

Managing working people with CANS is challenging for both PTs and ETs. Therapists expressed a need for further training in coaching, motivational interviewing, and supporting self-management, as well as stronger collaboration with other professionals. Developing structured professional networks and workplace-oriented strategies may enhance the quality and effectiveness of CANS management, ultimately supporting sustainable work participation.

Concurrent Session 6C. Approaches to RTW 2

Chair: Kim Cullen, Memorial University of Newfoundland, Canada

Return to Daily Life Activities including Work and Sports after Total and Unicompartmental Knee Arthroplasty with a Personalized eHealth Care Program - Results of the Multicentre ACTIVE Randomized Controlled Trial

Paul Kuijer, Amsterdam UMC - Public & Occupational Health, The Netherlands

Introduction: After knee arthroplasty, there is little guidance on return to daily life activities including work and sport, despite the importance of these outcomes for patients in working-age. eHealth programs could provide perioperative guidance to patients, facilitating an earlier recovery. This study evaluated whether a personalized eHealth care program enhances return to daily life activities, including work and sports, compared to usual care among working-age knee arthroplasty patients in the Netherlands.

Methods: The multicenter randomized controlled ACTIVE trial was conducted across eleven Dutch hospitals and clinics. Eligible patients were working-age patients on the waiting list for a primary total- or unicompartmental knee arthroplasty, employed at least eight hours a week, and willing to return to work. Patients were randomized 1:1 into the intervention or control group. The intervention group

received an eHealth care program in addition to usual care, including an eHealth application with activity tracker, goal attainment scaling and a one-time case-manager consultation. The control group received usual care. The primary outcome was the self-reported PROMIS-Physical Functioning. Kaplan-Meier curves and a multi-level longitudinal Cox proportional hazard model were used for analysis.

Results: From October 2020 through January 2023, 145 patients were randomized in the intervention (54% female, mean age 58 years) and 142 in the control group (51% female, mean age 59 years). Median time to resume the self-selected six out of eight daily life was 52 days (IQR 32–84) in the intervention group, compared to 75 days (IQR 36–137) in the control group (HR 1.6, 95%CI 1.3–2.0). No confounders or effect-modifiers were found.

Discussion: The personalized eHealth care program reduced the time to return to self-selected daily life activities by 23 days compared to usual care. Given the worldwide rising prevalence of knee osteoarthritis, especially among working-age patients with high expectations regarding performance of knee-demanding activities, this intervention could enhance perioperative care to support recovery.

Conclusion: The personalized eHealth care program reduced the median time to resume self-selected daily life activities by 23 days compared to usual care.

Small and medium enterprises: challenges in accommodating workers for sustainable return to work

Romain Rives, Institut de recherche Robert-Sauvé en santé et en sécurité du travail, Canada

Return-to-work (RTW) practices are not well known in small and medium-sized enterprises (SMEs). The aim of this presentation is to describe challenges for disability management in different SME contexts and identify levers for the application of known principles for sustainable RTW.

A descriptive qualitative design was used. The participants included in the study were volunteering disability management stakeholders involved in SMEs in Quebec. Individual semi-structured interviews were conducted with executives or managers responsible for RTW in eight SMEs. Next, two heterogeneous focus groups were conducted with sixteen representatives of external stakeholders (mutual and insurance representatives, and rehabilitation professionals). Interview guides, based on the objectives and previous knowledge, were used. Verbatims were recorded and transcribed. Their content was coded and analyzed by two professionals, using a grid to highlight the areas of convergence and divergence between the workplace and external stakeholders' representatives. Disagreements between professionals were resolved with the help of a researcher.

The results show that disability management practices focused on the medical-administrative management of absences. Practices promoting RTW, generally known to the managers participating, remain informal and vary depending on the context of each company. The use of temporary assignments appears to be a major challenge for SME. The limited availability of positions can make it difficult to consider the abilities of the worker and respect his functional limitations. Collaboration between the worker and their immediate supervisor in choosing, implementing, and monitoring solutions appears to be a real lever. The support of external resources, such as rehabilitation professionals and mutual insurance companies was appreciated when available. Stakeholders agreed that, in general, companies with fewer than 100 employees, having fewer human resources, could benefit of an increase access to external services to guide them in implementing knowledge about work accommodations.

The results suggest that SME workplaces need guidance on respecting functional limitations when implementing and monitoring temporary assignments. The challenges of managing disabilities in SMEs invite stakeholders and governing bodies to engage in systemic thinking about the possibilities of implementing collaborative mechanisms to better support SMEs.

The SHINE Study - Delivering health and wellbeing services through the supply chain

Jo Yarker, Affinity Health at Work, United Kingdom

Health and wellbeing services (HWS) enhance employee wellbeing, work engagement, productivity and retention. Yet only around 45% of UK workers have access to such services, with provision particularly scarce in small and medium-sized enterprises (SMEs). This contributes to inequalities, as employees in SMEs are less likely to benefit from health promotion, mental health prevention or occupational health support. Previous initiatives (e.g. Fit for Work Service, Workplace Wellbeing Charter) have had limitations, and sustainable approaches remain underexplored.

This study aims to develop and evaluate a new model in which large enterprise organisations (LEOs) extend multi-component HWS into their SME supply chains. We will assess effectiveness, cost-effectiveness and SME decision-makers' willingness to purchase such services.

A prospective matched-control cluster design will involve nine intervention and nine matched control SMEs within the supply chains of three LEOs: Jaguar Land Rover, Hampshire and Isle of Wight Health Care Board, and Transport for London.

The intervention, delivered by the LEO, includes awareness-raising, health promotion, prevention of mental ill health, and manager training in health and wellbeing conversations. Health and wellbeing champions within SMEs will be supported by a qualified health and work advisor to facilitate delivery, develop communications and organise activities.

Effectiveness and cost-effectiveness will be assessed at 12 and 18 months, with work engagement as the primary outcome. A process evaluation will identify implementation barriers and facilitators. A discrete choice experiment will explore SME decision-makers' valuation of HWS and willingness-to-pay. The study is guided by an Expert, Stakeholder and Patient/Public Group.

Pilot work indicates that SME leaders want to support workforce health but do not know where to start, SME employees are open to services from large enterprise partner organisations. Research is ongoing and early insights will be shared.

Findings will provide new evidence on extending HWS into SMEs via LEO supply chains – an approach not previously trialled in the UK or internationally. Results will inform policy and practice on improving access to workplace health support, reducing inequalities, enabling employees with physical and mental health conditions to remain in work, and strengthening employer engagement in health and wellbeing.

Lessons learned from the WAVE trial in the UK

Karen Walker-Bone, Monash University, Australia

Background: Given the severe economic and health consequences of worklessness to individuals and societies, early intervention has become a major target for work disability prevention. We conducted an early intervention trial of the effectiveness of a light-touch, stepped care vocational advice intervention to facilitate return-to-work amongst people off sick for more than 2 weeks but less than 6 months for any reason.

Methods: The WAVE trial was a multi-centre, two-arm, superiority, pragmatic, randomised controlled trial conducted in 10 general practices in England with an internal pilot. Participants were randomised (1:1) to usual care with /without vocational advice provided by trained vocational support workers (non-healthcare professionals). The principal outcome measure was days of sickness absence. Pre-trial power calculations suggested a sample size of 720 was required.

Results: The internal pilot and main trial commenced in 2020-21, just as the UK was hit by the COVID-19 pandemic. With both work and healthcare severely disrupted, the pilot suggested feasibility but the trial was eventually stopped May 2023 after recruitment of 130 participants, resulting from almost 8000 individual invitations. Among 125 participants with outcome data, we showed small additional benefits of the intervention over usual care (mean days absence=37.9 (SD=48.8) vs usual care=42.7 (SD=57.7), IRR=0.913, 80%CI=(0.653, 1.276)) with preliminary health economic evaluation suggesting lower work-productivity losses at six-months after intervention (£5513.84, SD=£7101.43) compared to usual care (£6146.21, SD=£8431.88).

Conclusion: Many lessons were learned. Primary care in the UK was radically altered as a result of the pandemic and, in particular the process of sickness certification became on-line without requirement to see, or speak to, a GP. Recruitment processes for the planned trial were enormously disrupted. At the same time, many non-essential workers were furloughed on 80% pay. Despite these major difficulties, we found a signal of benefit for this light-touch vocational advice intervention in terms of sick days, costs and other secondary outcome measures. A fully powered future RCT with full health economic analysis is indicated.

Concurrent Session 6D. Symposium: Inclusive Perspectives on Work Disability Prevention and Return-to-Work: A Latin American Dialogue in Spanish

Marjorie Zúñiga, Justice of the Supreme Court of Colombia (Corte Suprema de Justicia)

Catalina Copete, Occupational Medicine Consultant, Colombia

Diana Cuervo, National Disability Board (Junta Nacional de Calificación de Invalidez), Colombia

Monica Vargas, Researcher, Colombia

Work disability prevention and return-to-work (RTW) strategies have long been explored in predominantly English-speaking scientific forums, often limiting access and active participation for professionals from Spanish-speaking and lower-middle-income countries. This symposium aims to bridge that gap by offering a fully Spanish-language session focused on Latin American experiences in disability prevention and labor reintegration. The symposium will feature speakers from Colombia and Peru, with plans to expand participation to

additional Spanish-speaking countries. The goal is to foster inclusive dialogue on legal, social, and occupational health approaches to work disability prevention, tailored to regional contexts.

Friday May 15, 9:00 – 10:15 am

Concurrent Session 7A. Chronic disease: Covid

Chair: Emilie Friberg, Karolinska Institutet, Sweden

Work Disability in Long COVID: Identifying profiles of workers using Latent Class Analysis

Marianne Balem, Université de Sherbrooke, Canada

Introduction: Long COVID (LC) can affect work ability. Although previous studies have addressed symptoms and return-to-work, none have examined work ability in relation to job leeway among LC workers. This study aimed to explore the person-environment interaction by identifying profiles of LC workers based on work ability, job leeway, and employment status, and by examining their relation to symptom severity.

Methods: LC patient followed in specialized Quebec post-COVID clinics who expressed interest were invited to participate. Eligible participants were ≥ 18 years old, employed at the time of SARS-CoV-2 infection, and had completed clinical follow-up. Consenting participants completed an online survey on sociodemographic characteristics, employment status, LC symptom severity, perceived work ability (Work Ability Score), and job leeway (Job Leeway Scale). Latent class analysis (LCA) identified clusters based on perceived work ability, job leeway, and employment status. Covariates, including symptom severity, were used to describe the clusters.

Results: The sample included 160 participants, predominantly women (77.5%) with a mean age of 49.8 years. LCA identified five clusters. Cluster 1 (27%) included primarily working participants (93.6%) with high perceived work ability (mean=7.7/10), high job leeway (mean=3.5/5), and mainly moderate (51%) or severe (40%) symptoms. Clusters 2 (21%) and 5 (15%) comprised unable to work or no longer employed (100% and 78%), with low perceived work ability (mean=0.5/10 and 3.2/10), low job leeway (mean=0.5/5 and 2.1/5), and severe symptoms (94% and 69%). Clusters 3 (21%) and 4 (17%) had similar perceived work ability (mean=4.8/10 vs. 5.7/10) and severe symptoms (68% and 58%), but differed sharply in job leeway (mean=1.1/5 and 4.5/5) and proportion working (39% and 88%).

Discussion: Findings reveal heterogeneous work outcomes among LC workers. Some maintained high perceived work ability and continued working despite moderate-to-severe symptoms, whereas others, characterized by severe symptoms and low job leeway, experienced work disability. Employment outcomes varied even among those with similar perceived work ability and symptom severity, highlighting the potential role of higher job leeway in supporting work participation.

Conclusion: Job leeway plays a critical role in sustaining work participation among LC workers. Workplace adaptations enhancing job leeway are urgently needed to support return-to-work.

Barriers and Facilitators of Work Participation among Individuals with Long COVID

Marie-France Coutu, Université de Sherbrooke, Canada

Introduction: Long COVID (LC) can lead to significant work disability. Its incidence is estimated at 10% of SARS-CoV-2 cases, affecting over 65 million people worldwide. Despite this burden evidence regarding effective work interventions remains limited, leaving a critical blind spot in LC care. As part of a larger study, we examined the barriers and facilitators to return to work among a LC sample.

Methods: Patients followed in specialized Long COVID clinics in Quebec who expressed interest were invited to participate in this study. Eligible participants were ≥ 18 years old, employed at the time of SARS-CoV-2 infection, and had completed active clinical follow-up. Consenting participants completed the short web survey version for LC of the Quebec National Institute of Public Health. This survey included an open-ended question on barriers and facilitators of return to work. Responses were coded and thematic analysis was performed using the Work Disability Paradigm as the guiding conceptual framework.

Results: The sample included 161 participants, predominantly women (77.5%), with a mean age of 49.8 years. A total of 150 participants provided an answer regarding barriers and facilitators to return to work. Half of the sample had returned to work, although most were not performing regular duties. Factors across all four system of the Work Disability Paradigm were reported. The fluctuating nature of the condition across time was described as a major challenge, while stability was identified as a facilitator. Both physical and psychological demands were reported as barriers, with additional mention of environmental demands such as noise and light.

Commuting was reported as a major difficulty, making work from home and extended progressive return to work valuable strategies. Long delays in accessing medical and rehabilitation services were identified as a major barrier, along with stigma. Existing disability management norms, which were not adapted to the LC context, were perceived as a significant barrier.

Discussion and conclusion: Overall, achieving a balance between personal capacities, available resources and job demands was necessary to allow some form of return to work. LC appears to have unique characteristics, underscoring the need for caution in the return-to-work process.

Productivity losses due to acute COVID-19 disease and post COVID-19 condition: Results from the longitudinal Lifelines COVID-19 Cohort

Guilherme Monteiro Sanchez Dalla Riva, University Medical Center Groningen, The Netherlands

Introduction: One of the most substantial impacts of COVID-19 has been on productivity loss, with those affected being either unable to work or working with complaints. However, a comprehensive valuation of productivity losses across different dimensions is still lacking, especially comparing its acute COVID-19 and its chronic form, post COVID-19 condition (PCC). Considering their diverse symptomatology, it is important to investigate across the distribution of duration and intensity of symptoms for both conditions. This study thus aims to quantify productivity losses associated with COVID-19 and PCC across three domains: absenteeism, presenteeism, and unpaid work.

Methods: Data from adult workers in the Lifelines COVID-19 cohort, a sub-cohort of the Lifelines general population cohort in the Netherlands from 2020-2022, was used. A sample of 10,417 participants were categorized into three distinct groups: acute COVID-19, PCC, and a control group without COVID-19. Productivity losses were assessed with the iMTA Productivity Costs Questionnaire (iPCQ) and monetized using the friction cost method with a period of 120 days. We applied a two-step quantile regression to estimate the association of acute COVID-19 and PCC with productivity losses.

Results: Average total productivity losses were 34% higher for the acute COVID-19 group and 75% higher for the PCC group compared to those without COVID-19. When examining the losses across the distribution, both COVID-19 groups were associated with higher losses at lower quantiles, with 203% and 227% higher losses for the acute COVID-19 and PCC groups respectively. However, at higher quantiles acute COVID-19 was negatively associated with productivity losses, while PCC remained associated with greater losses (-52%, 28% at the 90th quantile respectively). Losses in unpaid work showed the strongest association with PCC, with 84% higher losses at the 90th quantile compared to the control group.

Discussion: Acute COVID-19 is associated with high productivity losses at lower quantiles, which, considering the number of afflicted, represents high societal costs. PCC, whilst representing a smaller group, is associated with persistent productivity losses, especially in unpaid work. This study stresses the high personal and societal cost of acute COVID-19 and PCC and the importance of unpaid work in PCC and productivity studies.

Are there differences in the return-to-work process for workers who acquired COVID-19 at work compared to workers who sustained a non-COVID-19 work-related injury or illness?

Peter Smith, Institute for Work and Health, Canada

Purpose: To determine if rates of return-to-work (RTW) at 18 months post injury/infection differed between workers with an absence from work due to COVID-19 compared to those with non-COVID injuries and illnesses, and to examine if differences in RTW are explained by different factors in the RTW process

Methods: A survey conducted among 1,000 respondents with an accepted workers' compensation claims, 18 months after their claim submission; 607 respondents had a work-related COVID-19 infection. Potential outcome mediation models examined the impact of factors at the individual, workplace, healthcare provider and system level on differences in RTW, adjusting for a range of confounders.

Results: Risk differences in RTW at 18 months suggested that approximately 12 more respondents with COVID-19 infections were at work per 100 respondents compared to those with non-COVID-19 infections. Generally, RTW process factors explained relatively little of these differences. Exceptions were differences in self-rated health and disagreements with the workers' compensation agency, which explained between 12% and 21% of the total differences in RTW across claim types.

Conclusion: While RTW following a work-related COVID-19 infection provided a novel situation for workers' compensation agencies and workplaces to deal with, in this study we observed better RTW outcomes at 18 months for COVID-19 infections compared to other types

of injuries and illnesses occurring over the same time period. The results of our study suggest that factors identified as important for RTW at the workplace and healthcare provider level, may not be generalizable to the context of COVID-19 infections.

Concurrent Session 7B. Global perspectives

Chair: Desai Shan, Memorial University, Canada

Broken Bodies, Silent Voices: Disability in Nepali Labour Migration

Smriti Khanal, Nepal Unity Hospital, Nepal

Labour migration is an important part of Nepal's economy. Around four million Nepali citizens work abroad, mainly in the Middle East and Malaysia, and send home more than 31% of the country's total income through remittances worth over USD 4.1 billion each year. However, many migrant workers face unsafe working conditions, limited legal protection, and poor access to health or disability support.

This qualitative study explored how and why Nepali migrant workers experience workplace injuries and disabilities while working abroad. A total of 75 male participants aged 20 to 49 years were purposively selected at Tribhuvan International Airport and nearby lodges in Kathmandu. About two-thirds had worked in Middle Eastern countries such as Qatar and Saudi Arabia, while the rest had worked in Malaysia. Sixty percent were below 30 years old, half had only primary or no education, and 46% reported at least one workplace accident. Semi-structured interviews lasting about 40 minutes were recorded, translated, and analyzed thematically to identify major causes and outcomes of work-related injuries.

The study found seven main risk factors: unsafe job practices, high production pressure, lack of safety equipment, heat exposure above 41 °C, long working hours (11–13 hours daily), limited employer support, and language barriers that prevented understanding of safety instructions. Workers in small private companies had two to three times higher accident rates than those in large firms. Injuries ranged from minor cuts to serious fractures, amputations, and paralysis. Most participants had borrowed around USD 3,400 to migrate and did not receive compensation or rehabilitation after injury.

The findings show that weak regulation, economic pressure, and limited language skills make Nepali migrant workers highly vulnerable to disability and financial hardship. The study recommends stronger bilateral labour agreements, universal accident insurance, and multilingual safety training to improve protection. These steps would support safer employment and align with the WDPI 2026 goal of promoting fair, healthy, and inclusive workplaces for all.

Prevalence, Patterns, and Consequences of Occupational Injuries Among Nepalese Workers: A Mixed-Method Cross-Sectional Study

Santosh Neupane, Justice and Dignity Foundation, Nepal

Workplace injuries represent a significant but under-documented public health challenge in Nepal, where over 80% of the labor force is employed in informal and high-risk sectors such as construction, manufacturing, transport, and agriculture. This study aimed to quantify the prevalence, patterns, and long-term consequences of occupational injuries, as well as their socio-economic implications among Nepalese workers.

A mixed-method cross-sectional design was employed between March and October 2024 across four provinces. A total of 1,236 workers were surveyed using stratified random sampling. Quantitative data were collected through structured questionnaires assessing injury types, treatment, disability duration, and economic loss, while qualitative interviews (n = 28) with employers, trade union representatives, and clinicians explored systemic barriers to prevention and rehabilitation.

These Results revealed that 18.4% of participants experienced at least one workplace injury within the previous 12 months. The prevalence was highest among construction workers 27.9%, followed by transport 21.6% and manufacturing 17.3%. Among those injured, 23.3% developed long-term disabilities lasting ≥6 weeks, including chronic musculoskeletal pain 34.1, impaired grip strength 21.5%, and reduced mobility 18.0%. Median workdays lost per injury was 7 days IQR = 3–18, with 58.1% reporting income loss exceeding one month's wages.

Only 16.2% of all workers had received formal occupational safety training in the preceding year, while personal protective equipment use remained low (helmets = 28.7%, gloves = 31.4%, eye protection = 9.6%). The economic and psychosocial burden was considerable: 41.4% incurred medical expenses exceeding NPR 20,000, and 24.7% of injured workers screened positive for moderate to severe depression, compared to 12.1% of non-injured peers (p < 0.001).

Findings highlight systemic gaps in workplace safety culture, weak enforcement of labor laws, and limited access to rehabilitation services. Strengthening Nepal's occupational health framework through mandatory safety training, PPE subsidies, national injury reporting systems, and integration of physiotherapy and mental health support into post-injury care could substantially mitigate the long-term impact of workplace injuries and disabilities.

Disability Benefits Due to Ischemic Heart Diseases: A Study Using National Data from Brazil (2013–2023)

Lucas Santos, Hospital das Clínicas, Faculty of Medicine, University of São Paulo (HCFMUSP), Brazil

Introduction: Ischemic heart diseases (IHD) are conditions characterized by the accumulation of atherosclerotic plaques in the coronary arteries, which reduce oxygen flow to the myocardium. These diseases have a significant global impact on morbidity and mortality and are among the leading causes of work-related disability. In Brazil, there is a public social security system that covers approximately 76 million workers. The objective of this study was to present the number of social security benefits granted due to work incapacity caused by ischemic heart diseases in Brazil between 2013 and 2023.

Methods: An ecological study was conducted using data from the Anuário Estatístico da Previdência Social (Social Security Statistical Yearbook) from 2013 to 2023. Disability benefits granted due to ICD-10 codes I20–I25 (ischemic heart diseases) were analyzed. Data were stratified by beneficiary sex (male/female), duration of incapacity (temporary/permanent), and type of benefit (work-related or non-work-related).

Results: During the study period, a total of 27,565,771 benefits were granted, of which 1,739,805 (6.31%) were due to circulatory diseases, and 344,001 (1.24%) were due to ischemic heart diseases. Within the diagnostic group analyzed, ICD-10 code I21 (acute myocardial infarction) was the most frequent cause (37.88%) and the third most common code among circulatory disease-related benefits. Males predominated (76.45%). Temporary incapacity accounted for 85.36% of benefits, and non-work-related benefits represented 99.25% of the total.

Conclusions: The main group of beneficiaries consisted of men affected by non-work-related ischemic heart diseases whose work incapacity was temporary. The approximately 15% of benefits granted for permanent disability represent a significant socioeconomic impact, reflecting the long-term loss of workforce capacity and increased social security and healthcare costs. Although few cases were classified as work-related, identifying the primary affected groups is essential for guiding preventive actions in occupational health services and informing public policies aimed at protecting workers' health and reducing costs for the Social Security system.

Work Disability in Brazil's Sugarcane Industry: A Decade of Trends and Inequalities Between Manual and Mechanized Workers (2014–2023)

João Silvestre Silva-Junior, University of São Paulo Medical School, Brazil

Background: The sugarcane industry plays a major economic role in Brazil but exposes workers to challenging and often harmful conditions, particularly among manual cane cutters. In recent decades, mechanization has reshaped production dynamics, reducing manual labor and changing the profile of occupational risks. However, the implications of this transition for work-disability patterns remain underexplored.

Objective: To analyze the characteristics and trends of temporary disability benefits granted to Brazilian sugarcane agroindustry workers between 2012 and 2021, comparing manual and mechanized work processes.

Methods: An ecological study was conducted using publicly available secondary data on formal employment and social-security benefits from the National Social Security Institute (INSS). Workers were classified according to work type (manual vs. mechanized). Annual incidence rates and relative risks (RR) were calculated for different benefit types (work-related and not) and the main causes of disability were identified according to the International Classification of Diseases (ICD-10).

Results: A total of 70,339 temporary disability benefits were granted during the period, 75% to manual and 25% to mechanized workers. The mean annual incidence was 28.8 per 1,000 workers in manual activities and 25.3 per 1,000 in mechanized ones. The overall RR was 1.14, indicating a 14% higher risk among manual workers. For work-related benefits (B91), the RR reached 1.71. Musculoskeletal disorders (MSDs) were the leading causes of disability—more prevalent among manual workers (33.7%) than mechanized (24.6%). Among B91 cases, dorsalgia (M54) accounted for 19% of manual-worker benefits, while wrist and hand fractures (S62) were most common among mechanized workers (13%). A general downward trend in benefit incidence was observed over the study period.

Conclusion: Although overall disability-benefit rates declined, substantial disparities persist between occupational groups. Manual workers remain more exposed to MSDs, while mechanized workers face a higher risk of traumatic injuries. Reducing these inequalities

requires stronger enforcement of rural-safety regulations, ergonomic improvements, targeted training, and prevention programs tailored to the specific conditions of Brazil's sugarcane sector.

Concurrent Session 7C. Healthcare 1

Chair: Sandra Brouwer, University of Groningen, The Netherlands

Key Factors and Process indicators Influencing Implementation of eHealth Interventions to Improve Work Participation: Preliminary findings from a Scoping Review

Han Anema, Public & Occupational Health, Amsterdam UMC (AUMC), The Netherlands

Background

Sustained work participation is essential for health and well-being. Nevertheless, it remains particularly complex for individuals with chronic diseases or disabilities. eHealth interventions show promising results in improving work participation but implementation of these interventions in daily practice remains challenging. Understanding factors influencing successful implementation of these eHealth interventions improving work participation is therefore critical.

Objectives

This scoping review aims to identify and synthesize the evidence on process indicators and factors influencing the implementation of eHealth interventions targeting work participation among individuals with a chronic disease or disabilities.

Methods

A comprehensive search was conducted up to May 7, 2025, in PubMed, EMBASE, Scopus, and CINAHL. Eligible studies reported process outcomes and barriers, and facilitators for implementation. Screening combined a machine learning tool for reordering data (ASReview) and systematic screening (in Rayyan). Process outcomes were classified using established implementation outcome frameworks.

Results

Out of 35,540 records, 82 full-text articles were included. After full-text review, 31 studies met eligible criteria and were included. Preliminary results indicate that reach, acceptability, and adherence were the process outcomes most frequently reported. Furthermore, a vast majority of users were satisfied with the interventions, mostly because of perceived usefulness and user friendliness of the interventions. Additionally, usage of most eHealth interventions was high. Frequently reported barriers for use were lack of time and technical issues.

Conclusions

At the conference, we will present the full results from this scoping review. We will provide an overview of process indicators and key factors for the use of eHealth interventions aimed at enhancing work participation among individuals with a chronic disease or disability.

The results of this review can be used for guiding future tailored and successful implementation, especially in occupational and insurance medicine settings.

Accessibility, Safety, and Effectiveness of Telerehabilitation for Public Service Personnel with Posttraumatic Stress Injuries

Brandon Krebs, University of Alberta, Canada

Introduction: Public safety personnel (PSP) are regularly exposed to stress and occupational trauma, which can result in the development of posttraumatic stress injuries (PTSI) and leave them unable to work. The COVID-19 pandemic caused a shift in the policies regarding the delivery of PTSI rehabilitation to accommodate care via telerehabilitation (mainly videoconference, but some telephone-based care).

Methods: The present study employed an Interpretive Description design to explore the lived experiences of PSP, clinicians, and decision-makers regarding the safety, accessibility, and effectiveness of PTSI telerehabilitation. Interpretive Description was selected as a design due to its ability to produce findings that can inform practice and policy. For recruitment, we used purposive and convenience sampling techniques, aiming to maximize variation. Our final sample consisted of 34 participants: 12 PSP, 14 clinicians, and eight decision-makers. Semi-structured interview data were analyzed using an integrated, team-based approach based on Braun and Clarke's reflexive thematic analysis.

Results: Three themes were generated: (1) Responding to the uniqueness of individuals and their contexts; (2) Prioritizing different elements of safety at different times; and (3) Facets of care that lead to perceptions of credibility. Our comprehensive approach to data collection and analysis also enabled us to co-construct a framework that provides a multi-layered view of factors to consider when using telerehabilitation. This framework integrates the dimensions of quality of care into our findings, providing a perspective on health service delivery and policy regarding telerehabilitation at the micro-, meso-, and macro-levels.

Conclusions: While telerehabilitation offers accessibility and flexibility, its application necessitates a nuanced, person-centred approach. Clinicians need to tailor the mode and manner of delivery to PSP, and decision-makers should consider policies that support a hybrid model of care, therefore balancing PSP preference and the potential need for in-person interventions to address avoidance, safety, and facilitate crucial components of care. Additionally, based on our findings, we recommend considering the dimensions of quality of care: Trajectory and Timing, Flexibility to Adapt, Presence, and Trustworthiness. This will help navigate the decision-making process when using telerehabilitation in practice and for developing and implementing policies and processes that guide its use and evaluation.

[An Integrated Risk Management Approach for Patients and Employees in Rural Hospitals in Oregon: A Total Worker Health® Intervention](#)

Katia Costa-Black, Oregon Institute of Occupational Health Sciences, Oregon Healthy Workforce Center, OHSU, United States

Rural hospitals face unique challenges in managing occupational and patient safety due to limited resources, workforce shortages, and geographic isolation. This study presents a cluster randomized controlled trial (RCT) conducted in six rural hospitals across Oregon to evaluate the effectiveness and implementation process of a novel safety intervention titled Safety Integration Stewards (SAINTS). Grounded in the Total Worker Health® (TWH) framework, SAINTS aims to integrate patient and worker safety through a participatory, system-level prevention approach.

Preliminary research conducted at a pilot site demonstrated promising 12-month outcomes, including improvements in leading safety indicators and a significant reduction in patient-assist injury rates. Building on these findings, the SAINTS program was designed with four core components: (1) active engagement of health care workers and safety stewards; (2) application of Social Network Analysis (SNA) to identify peer-recognized safety leaders, enhancing the credibility and influence of change agents; (3) targeted training in safety leadership to empower stewards with practical tools and strategies for safe patient handling and mobility; and (4) implementation of iterative Quality Improvement (QI) cycles to identify and address safety barriers.

This multi-site trial assessed both the effectiveness and scalability of the SAINTS intervention using mixed methods, including quantitative injury and safety climate metrics, as well as qualitative process evaluations. Data analyses incorporated results from baseline interviews and staff surveys to describe initial conditions, perceived safety culture, and interdepartmental collaboration within participating hospitals. The study's design allows for rigorous comparison across intervention and control sites, while also capturing contextual factors that influence implementation success in rural settings. In conclusion, by integrating patient and worker safety efforts, SAINTS represents a shift toward holistic risk management in healthcare environments. The use of SNA to identify informal leaders and the emphasis on steward-driven QI cycles are innovative strategies that may enhance sustainability and cultural change in such a high-risk work environment. Findings from this trial—including baseline qualitative and survey results—will inform future adoption of TWH interventions, thus contributing to the growing body of evidence on system-level changes and on integrated safety approaches to prevent both patient and employee incidents in rural healthcare settings.

[Changes in publicly insured general practitioner \(GP\) consultation durations and care plans before and after workplace injury among workers receiving workers' compensation](#)

Preeti Maharjan, Monash University, Australia

Background

General practitioner (GP) services in Australia are funded by the Medicare Benefits Scheme (universal public health insurance scheme). However, for work-related injuries, GP services are funded by an employer-funded workers' compensation scheme. This study examined changes in publicly-funded GP service use before and after workplace injury in those with accepted workers' compensation claims, focusing on four consultation duration types and use of GP-provided mental health and chronic disease management plans.

Materials and Methods

A retrospective cohort data linkage study containing publicly-funded GP services for 3755 injured workers with long (104+ weeks) workers' compensation scheme claims in New South Wales, Australia. We used interrupted time series analysis comparing the monthly rates (per 1000 workers) of six GP service types, for 12 months before to 24 months after injury. Acute and long-term step and trend

changes were compared to those observed in a control group of 10,113 individuals from the community without workers' compensation claims.

Results

Injured workers had 1600 more GP services per 1000 workers per year post-injury compared to community control. Post-injury, the monthly rate of consultations increased 45% (IRR: 1.45, 95% CI: 1.32, 1.59) for consultations lasting 6 to 20 minutes, with up to a 137% (IRR: 2.37, 95% CI: 1.35, 4.20) increase for consultations lasting 40 to 60 minutes. Monthly GP mental health care and chronic disease management plan rates increased by 84% (IRR: 1.84, 95% CI: 1.17, 2.93) and 20% (IRR: 1.20, 95% CI: 0.78, 1.86), respectively. Following an initial acute increase, the monthly post-injury rate decreased, with slopes varying between 3% to 9%.

Conclusions

All types of publicly funded GP consultations temporarily increased during initial months following injury, regardless of workers' compensation status. Injured workers continued accessing healthcare above pre-injury levels, likely due to delayed claim acceptance or increased care needs.

Concurrent Session 7D. Symposium: Knowledge transfer and exchange approaches for occupational injury and work disability prevention

Emma Irvin, Institute for Work & Health, Canada

Marie-France Duranceau, Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), Canada

Knowledge transfer and exchange (KTE) is a process of exchange between researchers and knowledge users designed to make relevant research information available and accessible for use in decision-making about practices, programs and policies. Funders of work disability research expect KTE plans in funding applications. Knowledge users challenge work disability prevention researchers to provide high quality knowledge/evidence about a range of often complex interventions. The messages stemming from research often require transfer/translation to diverse audiences including policy makers, scientists, practitioners, employers and workers. The objective of this symposium is to present and discuss the KTE approaches by research institutes from different jurisdictions and a scoping review of the literature on KTE approaches. After a brief introduction of KTE definitions and terminology, Emma Irvin will describe the comprehensive approach to KTE at the Institute for Work & Health and Marie-France Duranceau will describe the Institut de recherche Robert-Sauvé en santé et en sécurité (IRSST) KTE approach. Marie-France and Emma will also briefly present on the KTE approach used by the National Research Centre for the Working Environment (NFA) and the partnership between the three institutes, and Emma Irvin will describe a scoping review of KTE approaches in occupational health and safety and disability management.

Friday May 15, 1:00 – 2:15 pm

Concurrent Session 8A. Remote work

Chair: Robert Macpherson, Partnership for Work, Health and Safety, University of British Columbia, Canada

Workers' compensation claim submission, mental health, and nature of injury among Injured Workers in Northwestern Ontario

Vicki Kristman, EPID@Work Research Institute, Department of Health Sciences, Lakehead University, Canada

Introduction: The decision to submit a workers' compensation claim may affect an individual's mental health (MH). Those with MH injuries may be less likely to submit a claim. Claim submission is an important decision which could reflect access to compensation information, health care, or other characteristics. We explored the relationships between claim submission, current MH, and nature of injury among injured workers in Northwestern Ontario.

Methods: We used cross-sectional baseline data from the Northwestern Ontario Workplace and Worker Health Study to examine the association between self-reported claim submission and MH condition (depression, anxiety, post-traumatic stress disorder (PTSD), and burnout) assessed at baseline. We used logistic regression to estimate odds ratios (ORs) and 95% confidence intervals adjusting for age, sex, and nature of injury.

Results: Six hundred ninety-three injured workers participated in the study. Sixty-five percent did not submit a claim after their injury. Twenty-six percent had no MH condition, 26.6% experienced burn out alone, and 26.6% had at least two MH conditions. Controlling for age and sex, we found that workers with depression (OR=2.03, 95% CI: 1.26-3.28), anxiety (OR=2.02, 95% CI: 1.25-3.26), PTSD (OR=1.96, 95% CI: 1.22-3.17), and burnout (OR=2.45, 95% CI: 1.35-4.43) were less likely to submit a claim than those without the corresponding

MH disorder. However, when controlling for the nature of injury, workers with depression, anxiety, and PTSD were no less likely to submit a claim. Those with burnout (OR=1.93, 95% CI: 1.04-3.58) were less likely to report submitting a claim than those without burnout, controlling for age, sex, and nature of injury. Those indicating a MH injury were 7.2 (95% CI: 4.48-11.67) times less likely to submit a workers compensation claim.

Conclusions: Workers experiencing MH injury are unlikely to submit claims to the workers' compensation system. This may reflect lower approval rates for MH claims or difficulties filing them while experiencing MH conditions. Coping with an injury without compensation may lead to burnout. Compensation systems need to improve policies to enhance claim submission from workers experiencing workplace MH injuries.

Work participation of employees within the Dutch government

Josephine A. Engels, School of Organization and Development, Han University of Applied Sciences, The Netherlands

Background

Work participation should be a natural part of working life, yet this is not always the case, especially for employees with health issues. To better understand potential barriers, a project was initiated by the League and the Dutch government's Unions in collaboration with Han University of Applied Sciences.

Aim

The study aimed to gain insight into factors influencing work participation, the values and goals employees wish to realize at work, and the opportunities and challenges in their social and physical contexts.

Method

In 2025, surveys were conducted among employees, executives, and Human Resource (HR) and Occupational Health (OH) professionals within the Dutch government. The Capability Approach (Sen, 1999) provided the theoretical framework and informed the List of Work Capabilities (LWC), comprising seven work capabilities. Questionnaires for executives and professionals were adapted to reflect their role in supporting employees.

Results

A total of 667 questionnaires were analyzed: 597 from employees, 36 from executives, and 34 from HR/OH professionals. Employees showed broad demographic diversity, while the other groups were less diverse. Employees rated their work as meaningful, scoring highest on capabilities related to skills, workplace contacts, and payment. Learning opportunities and involvement in decision-making were perceived as more challenging. Employees with health issues (55%) reported more difficulties in task realization and greater friction with other activities compared to their healthier colleagues. Social support from colleagues was perceived as high, while support from executives and significant networks was considered limited. Executives expressed strong motivation and placed high value on employee development, workplace contacts, and meaningfulness of work, drawing on their experience with health-related challenges. HR/OH professionals, however, reported limited influence, often mediated through executives, and perceived their impact on physical context and employee development as small.

Conclusion

Future research within the Dutch government should consider employees' perceived work values, with particular attention to those with health issues, and address the role of contextual support from executives and professionals.

Challenges of using telework for employment integration and retention of people living with disabilities: A qualitative study

Quan Nha Hong, Université de Montréal, Canada

Background. People living with disabilities (PLWD), who represents nearly 25% of the Canadians, often face disparities such as less employment opportunities. Indeed, according to the Statistics Canada 2022 Canadian Survey on Disability, the employment rate of PLWD was only 62%, compared to 78% for those without disabilities. Telework has been suggested as an accommodation strategy to foster social inclusion of PLWD, offering advantages such as better professional-personal life balance and increased autonomy. However, few PLWD has been able to benefit from it. The COVID-19 pandemic brought telework into the spotlight to support social distancing, and it has since become an integral feature of modern work reality. Following this new reality, this study aimed to better understand the challenges to the use of telework to support employment integration and retention of PLWD.

Methods. A qualitative descriptive research was conducted in partnership with Moelle épinière et motricité Québec, a non-profit organisation offering employment services for PLWD, and a patient partner. Three groups of participants were recruited: 1) PLWD who

teleworked in the past year, 2) employers who have hired PLWD and offered them telework, and 3) employment advisors (EA) and social integration advisors (SIA) from the non-profit organisation. Data was collected through online focus groups and semi-structured interviews. The interview guide included questions on the challenges PLWD encountered in telework. A thematic analysis was carried out in NVivo 13.

Results. Twenty-three participants were recruited: seven teleworkers, six employers, six EAs and four SIAs. Challenges to telework among PLWD included: environment accessibility, employment market accessibility, work-needs conciliation, invisibility, isolation, and no “one size fits all”. Facilitators were identified to respond to these challenges: telework setup adaptation, raise awareness about and use of government support measure, encourage collaboration (e.g., regular meetings), favour dialogue and personalised work support, have social resources at work, support disabled workers’ work integration upon hiring, and raise awareness about PLWD’s work situation.

Conclusion. A better understanding of the challenges encountered by PLWD in telework is necessary to raise awareness to their reality, to inform the development of work disability prevention programs, and to favour their employment integration and retention.

How are teleworkers covered for injury and illness? The case of online school teachers

Ellen MacEachen, University of Waterloo, Canada

Telework significantly increased in the aftermath of COVID-19 lockdowns. In Canada, only 7% of workers worked from home in 2016 but this more than tripled to 22% in 2023. However, it is unclear how working conditions for the same job differ when work is conducted in-person versus remotely and online, and how work injury is considered when working from home. Our study examined Canadian schoolteachers to understand online versus in-person teaching work and health conditions. We used qualitative research methods to examine their day-to-day work and how they experienced the conditions of telework. Focus groups and semi-structured interviews about online teaching took place in 2023 and 2024 with 47 teachers and tutors who teach from kindergarten to Grade 12, and 9 key informants, including school administrators, policy and legal experts. Using situational analysis, we identified key areas where synchronous online teaching conditions diverted from traditional classroom teaching and blurred boundaries relating to workplace illness and injury. In this presentation, we present teachers and key informant’s experiences and understandings of at-home work injury, and review telework laws and policies in Canada and Europe as they relate to coverage for illness and injury arising from at-home conditions. We conclude with insights about telework regulation for fair workers’ compensation/sick leave coverage.

Concurrent Session 8C. Healthcare 2

Chair: Mette Jensen Stochkendahl, University of Southern Denmark, Department of Sports Science and Clinical Biomechanics, Center for Muscle and Joint Health, Denmark

“System is a struggle from Day 1”: Social determinants of negative mental health impacts and ongoing negative experiences in Australian workers’ compensation

Samineh Sanatkar, Monash University, Australia

Background: Secondary psychological injuries are a growing concern within Australian workers’ compensation schemes: two in five Australian workers with compensable musculoskeletal injury report moderate or severe psychological distress during their claim. This study sought to (1) identify positive and negative experience patterns that workers directly attributed to workers’ compensation claims features; and (2) more deeply understand social determinants that negatively impacted mental health and experiences during a workers’ compensation claim.

Method: Australians with accepted workers compensation claims were recruited through social media, community and government organisations. All participants (N = 533, Median age = 45-54 years, 58.3% women) first completed a survey examining demographic, health, and claim information, the nature and quality of experiences with claim stakeholders and processes, and suggested areas for improvement. A subgroup of 20 participants stratified by claim experiences, state of residence, claim type, and gender was invited to an in-depth one-on-one interview to elaborate on their experiences.

Results: Most respondents (n = 503, 94%) reported negative mental health impacts due to their claims experience. Of those, about half (n = 279, 55%) further reported negative experiences throughout their workers’ compensation claim, with the remainder reporting varying or positive experience patterns. Hierarchical logistic regression including demographic characteristics (age, gender), claim characteristics (work-related injury or illness, claim status, claim duration), and impacts of claim stakeholders and processes explained 40% of the variation in compensation claims experiences. Negative interactions with insurers (OR = 5.22 , 95% CI [1.89, 14.42]), delays in

claim approval (OR = 4.12, 95% CI [1.88, 8.99]), and male gender identity (OR = 0.45, 95% CI [0.23, 0.90]) were significantly associated with negative compensation claim experiences. Qualitative analysis of survey and interview responses from injured workers whose mental health was negatively impacted corroborated claim-related sources of stress and revealed negative consequences from illness or injury during their compensation claim.

Conclusion: Findings suggest that modifying interactions with insurers and more efficient claim review with more rapid decision making, may improve worker experiences during their claim and reduce the risk of secondary psychological injury.

Interprofessional communication and collaboration in occupational health: current practices and experiences

Nicole Snippen, University Medical Center Groningen, The Netherlands

Background: Diverse occupational health professionals with distinct roles and responsibilities are involved in the return-to-work (RTW) process of sick-listed workers. Interprofessional collaboration among these professionals is increasingly encouraged to optimize the use of each professional's expertise and better meet the needs of both workers and employers. This study aimed to gain insight into current practices and experiences regarding interprofessional communication and collaboration among occupational health professionals.

Methods: A mixed-method study was conducted among occupational physicians, insurance physicians and labor experts involved in the Dutch RTW process. The survey assessed experiences with communication and collaboration, satisfaction, perceived challenges and success factors. Interviews with a purposively selected sample provided in-depth information about experiences, barriers, and success factors.

Results: In total, 181 professionals completed the survey, of whom 16 participated in an interview. While experiences with interprofessional communication and collaboration were mixed, professionals considered it important that such collaboration is structurally embedded. Professionals were often dissatisfied with the quality of information exchange. Time and workload constraints were perceived as important barriers to collaboration. Moreover, differences in roles and levels of involvement across RTW phases can lead professionals to experience a lack of shared goals and imbalanced power dynamics. Reported success factors for interprofessional collaboration included mutual respect, trust, and an understanding of each other's roles, expertise and needs, as well as personal contact and investing time in relationship-building.

Conclusions: Occupational health professionals recognize the importance of interprofessional communication and collaboration in the RTW process, but in practice it remains challenging. To improve collaboration, more structural opportunities for interprofessional interaction and reflection are needed to build mutual trust, gain a better understanding of each other's roles, expertise and needs, and develop a sense of shared goals. Furthermore, an organizational culture that explicitly values interprofessional collaboration is essential, one that provides sufficient time and opportunities to engage in meaningful communication and collaboration. Strengthening these conditions can enable professionals to make more effective use of each other's expertise, which in turn may lead to better support and more sustainable RTW outcomes for sick-listed workers.

Temporal dynamics of (anticipatory) job loss-related-grief reactions and quality of job search among sick-listed employees

Janske van Eersel, Tilburg University, The Netherlands

Background

Employees on extended sick leave face structured timelines that can lead to job termination. This creates conditions for grief reactions related to both anticipatory and actual job loss. While grief can impact daily functioning, its relationship with job search behaviour over time remains unexplored. This study examined reciprocal associations between job loss-related grief reactions, job search intensity, and job search quality.

Methods

This longitudinal study followed 549 sick-listed employees across up to five measurement points. Participants entered the study at different stages of their sick leave, resulting in varying measurement sequences. Participants completed measures of anticipatory grief reactions, post-loss grief reactions, job search intensity, and job search quality. Cross-lagged panel models of increasing complexity were tested to examine reciprocal relationships, with the final model controlling for work status (working internally, externally, or not working) and perceived health.

Results

Preliminary results show that anticipatory grief reactions significantly predicted post-loss grief reactions ($\beta = .33$ from T3 to T4; $\beta = .35$ from T1 to T4), confirming Hypothesis 1. Job search intensity and quality showed bidirectional reinforcement at some but not all time points, providing partial support for Hypothesis 2. Contrary to Hypothesis 3, grief reactions positively predicted job search intensity at T2 ($\beta = .11$, $p = .032$) and T5 ($\beta = .22$, $p = .001$), and job search quality at T2 ($\beta = .13$, $p = .047$), rather than impairing job search behaviour as expected.

Discussion

The positive association between grief and search behaviour could reflect compensatory coping strategies, where individuals intensify job search efforts to regain control or avoid confronting emotional distress. Results suggest that interventions might consider both addressing grief reactions and supporting adaptive job search behaviours. Further research is needed to understand the mechanisms underlying this relationship and develop targeted support strategies for this population.

Use of VR to reduce time to (lasting) return to work of sick-listed cabin crew with mental health complaints

Karen Nieuwenhuijsen, Amsterdam UMC, Department of Public and Occupational Health, Amsterdam Public Health Research Institute, University of Amsterdam, The Netherlands

Introduction: In cases of mental health related sickness absence, graded return to work (RTW) is the standard intervention. However, this approach is not always feasible in high-performance occupations, where employees are required to be 100% fit to perform their job. In such roles—e.g. surgeons, pilots, and fire fighters—employees cannot gradually resume their core tasks, leading to prolonged sickness absence. This study explores the use of Virtual Reality (VR) as a novel form of in vitro exposure therapy to support a graded RTW process in high-performance jobs, potentially reducing sickness absence duration.

Methods: A randomized controlled trial (RCT) is conducted with flight cabin crew of a Dutch airline, all on sick leave due to mental health complaints. Participants are randomly assigned to either a control group (care as usual: guidance by occupational physician and psychologist) or an intervention group (care as usual plus a virtual visit to the workplace using VR-glasses). The primary outcome is time to (lasting) RTW, based on register data from the Occupational Health Service 12 months after baseline. Secondary outcomes include stress complaints, self-efficacy, work anxiety, and attitudes towards RTW, assessed via questionnaires at baseline and 4 months follow-up. Cox and linear regression analyses are performed to test effects of the intervention on primary and secondary outcomes. Alongside the RCT, a process evaluation is conducted using data logs and interviews with psychologists that guide the VR-sessions.

Results: Data collection is planned to start in October 2025.

Discussion: At the conference we will present the intervention and the first preliminary results. Additionally, we will discuss the implications of the findings as well as strengths and limitations of the research design. This innovative VR intervention may offer a promising approach for workers in high-performance jobs to ease the return-to-work process and reduce sickness absence.

Concurrent Session 8D. Symposium: Rethinking disability, work reintegration and pension policies: A global perspective for inclusive transitions

Cristiane Gallasch, Universidade do Estado do Rio de Janeiro, Brazil

João Silvestre Silva-Junior, University of São Paulo Medical School, Brazil

Diana Cuervo, National Disability Board (Junta Nacional de Calificación de Invalidez), Colombia

Gerald Méndez, Medical Board for Work Disability Assessment, Ministry of Labor and Social Security, Costa Rica

This symposium will explore the intersection of disability, work reintegration, and public/private pension policies across multiple global contexts. As demographic changes, chronic illness prevalence, and aging trends shift the labor landscape, the urgency to reform disability-related benefits and return-to-work (RTW) systems becomes a worldwide concern. The session aims to foster comparative dialogue among global stakeholders, highlighting diverse national experiences and offering concrete strategies for policy innovation. It will also examine the equity gaps and legal frameworks that shape transitions between work, disability, and retirement—especially in low- and middle-income countries.