

IWH Research Alert
June 25, 2021

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***Cai K, Fuller A, Zhang Y, Hensey O, Grossberg D, Christensen R, Shea B, Singh JA, McCarthy GM, Rosenthal AK, Filippou G, Taylor WJ, Diaz-Torne C, Stamp LK, Edwards NL, Pascart T, Becce F, Nielsen SM, Tugwell P, Beaton D, et al. Towards development of core domain sets for short term and long term studies of calcium pyrophosphate crystal deposition (CPPD) disease: a framework paper by the OMERACT CPPD working group. *Seminars in Arthritis and Rheumatism*. 2021; [epub ahead of print].**

<https://doi.org/10.1016/j.semarthrit.2021.04.019>

Abstract: Introduction: Although calcium pyrophosphate deposition (CPPD) is common, there are no published outcome domains or validated measurement instruments for CPPD studies. In this paper, we describe the framework for development of the Outcome Measures in Rheumatology (OMERACT) CPPD Core Domain Sets. Methods: The OMERACT CPPD working group performed a scoping literature review and qualitative interview study. Generated outcomes were presented at the 2020 OMERACT CPPD virtual Special Interest



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Group (SIG) meeting with discussion focused on whether different core domain sets should be developed for different calcium pyrophosphate deposition (CPPD) clinical presentations and how the future CPPD Core Domain Set may overlap with already established osteoarthritis (OA) domains. These discussions informed development of a future work plan for development of the OMERACT CPPD Core Domain Sets. Findings: Domains identified from a scoping review of 112 studies and a qualitative interview study of 36 people (28 patients with CPPD, 7 health care professionals, one stakeholder) were mapped to core areas of OMERACT Filter 2.1. The majority of SIG participants agreed there was need to develop separate core domain sets for "short term" and "long term" studies of CPPD. Although CPPD + OA is common and core domain sets for OA have been established, participants agreed that existing OA core domain sets should not influence the development of OMERACT core domain sets for CPPD. Prioritization exercises (using Delphi methodology) will consider 40 potential domains for short term studies of CPPD and 47 potential domains for long term studies of CPPD. Conclusion: Separate OMERACT CPPD Core Domain Sets will be developed for "short term" studies for an individual flare of acute CPP crystal arthritis and for "long term" studies that may include participants with any clinical presentation of CPPD (acute CPP crystal arthritis, chronic CPP crystal inflammatory arthritis, and/or CPPD + OA).

Al-Bayati AJ, Bilal GA, Esmaeili B, Karakhan A, and York D. Evaluating OSHA's fatality and catastrophe investigation summaries: arc flash focus. Safety Science. 2021; 140:105287. <https://doi.org/10.1016/j.ssci.2021.105287>

Arca M, Donmezdil S, and Durmaz ED. The effect of the COVID-19 Pandemic on anxiety, depression, and musculoskeletal system complaints in healthcare workers. Work. 2021; 69(1):47-54.

<https://doi.org/10.3233/WOR-205014>

Abstract: Background: COVID-19 increased psychological and physical complaints, including anxiety, depression, and pain.

Objective: We aimed to examine anxiety, depression, and musculoskeletal complaints that may occur in healthcare workers



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during the COVID-19 pandemic. Methods: Data were cross-sectional, collected by the online questionnaire method consisted of demographic questions, Generalized Anxiety Disorder (GAD-7), Patient Health Questionnaire (PHQ-9), Nordic Musculoskeletal System Query (NMQ), and Visual Analogue Scale (VAS). Results: Among the groups, the number of doctors in the frontline group, the fear of being infected, the number of tests performed, and personal protective equipment were higher than the second-line group ($p < 0.05$). It was found that 73.4% of the participants had anxiety, 83.5% had depression, and 94.9% had musculoskeletal pain. It was observed that there was no statistically significant difference between the applied scale scores between the groups ($p > 0.05$). About musculoskeletal system complaints of the participants, neck pain presence was determined as 73.4% in the last 12 months, and upper back pain was the highest with 61.4% in the last week. Neck ($p < 0.005$) and upper back pain ($p = 0.04$) parameters in the last seven days of the NMQ scale applied to the participants were found to be statistically significantly higher in the contact group. Conclusions: Anxiety, depression, and musculoskeletal pain of healthcare workers were found to be high. While neck and back pain was the most common in musculoskeletal complaints, it was found that these pains were higher in the frontline group. In this regard, healthcare professionals can be given psychological support and exercise training.

Canivet C, Nilsson A, Bjork J, Moghaddassi M, and Ostergren PO. Assessment of selection bias due to dropouts in the follow-up of the Scania Public Health Cohort. Scandinavian Journal of Public Health. 2021; 49(4):457-464.

<https://doi.org/10.1177/1403494820919544> [open access]

Abstract: Aims: To investigate potential differences between participants and dropouts in the 2005 follow-up of the Scania Public Health Cohort Study regarding the prevalence of commonly studied health determinants and whether these factors had differential associations with three health outcomes: all-cause mortality and purchase of prescribed cardiovascular or psychotropic drugs during a 10-year follow-up period. Methods: The Scania Public Health Cohort was initiated in 1999/2000, with randomly invited participants aged 18-80 years from the general population (58% participation).



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Questionnaire data from 10,462 participants and 2576 dropouts in the 2005 follow-up (80% participation) were linked to public registers on mortality and purchase of prescribed drugs. Results: Age, male gender, being born abroad, low educational level, low self-rated mental and general health and daily smoking were all related to dropping out. The 10-year mortality was higher among dropouts (13.4% versus 11.9%; age-adjusted hazard ratio 1.6, 95% confidence interval: 1.4-1.8). In 13 out of 18 analyses, similar associations between health determinants and outcomes were found across participants and dropouts. However, being born outside of Sweden was associated with higher risks for all three poor health outcomes among participants, but not so among dropouts. Conclusions: Despite selective participation at follow-up, there was little evidence of selection bias, insofar as estimated associations were generally similar across participants, dropouts and the whole cohort. This finding is important for the assessment of the validity of prospective findings from this cohort and similar ones, where the loss of individuals at consecutive follow-ups of exposure is non-negligible

Choobineh A, Museloo BK, Ghaem H, and Daneshmandi H. Investigating association between job stress dimensions and prevalence of low back pain among hospital nurses. *Work*. 2021; 69(1):307-314.

<https://doi.org/10.3233/WOR-213479>

Abstract: Background: There are a few studies conducted on job stress dimensions and their relationship with Low Back Pain (LBP) among Iranian nurses. Objective: The aim of the current study was to investigate the association between job stress dimensions assessed via Demand-Control-Social Support (DCS) and Effort-Reward Imbalance (ERI) models and prevalence of LBP among Iranian hospital nurses. Methods: In this cross-sectional study, 495 randomly selected nurses of Shiraz University of Medical Sciences (SUMS) participated. Demographic/occupational questionnaire, the Persian version of the Job Content Questionnaire (P-JCQ) and the Persian version of the ERI Questionnaire (P-ERIQ) were used for data collection. Data were analyzed by SPSS software (version 19) using descriptive statistics, independent sample t-test, and logistic regression. Results: The LBP prevalence was found to be 69.9%. The means \pm standard deviations of job stress dimensions were



obtained as follows: decision latitude: 64.67 ± 6.82 , physical job demands: 15.52 ± 2.6 , social support: 23.18 ± 3.65 , psychological job demands: 38.02 ± 4.98 , effort: 8.73 ± 2.62 , reward: 23.12 ± 5.31 , over-commitment: 12.25 ± 3.09 , and effort-reward ratio: 0.86 ± 0.3 . The findings revealed that the work experience (OR = 1.56), psychological job demands (OR = 1.082), and effort-reward ratio (OR = 3.43) were predictors for LBP among the study population. Conclusion: The prevalence rate of LBP among studied nurses was high. About half of nurses had high psychological demands, low decision latitude and low social support. Based on the effort-reward ratio, nurses had experienced high level of stress. Interventional programs and coping strategies for reduction of work-related stress and, subsequently, prevention of LBP are recommended among hospital nurses.

Dabbagh A, MacDermid JC, Grewal R, and Walton DM. The role of perceived job exertion and age as moderators of the relationship between gender and upper extremity musculoskeletal disability and pain in injured workers. Journal of Occupational Rehabilitation. 2021; [epub ahead of print].

<https://doi.org/10.1007/s10926-021-09989-0>

Abstract: Purpose This cross-sectional study aimed to determine if age and perceived job exertion (PJE) moderate the effect of gender on upper extremity (UE) disorders in injured workers. Methods We sampled a consecutive cohort of patients attending a specialty clinic for injured workers with UE musculoskeletal problems. We measured UE disability and pain using the Quick Disability of the Arm, Shoulder, and Hand (QDASH). Participants reported their PJE on a Global Rating of Change scale ranging from 1 (minimal perceived exertion) to 15 (maximal perceived exertion). Linear regression was used to explore the effect of gender on QDASH. We probed the moderating role of age and PJE using floodlight regression and identified the Johnson-Neyman (JN) region of age and PJE, where the effect of gender on QDASH becomes significant at the 95% level. Results We analyzed 418 participants, of whom 44% were women. The effect of gender on QDASH was significant for women aged 49 or younger (JN-region border: Age = 48.5, effect = 4.4, SE = 2.2, $p = 0.05$). Women workers with UE disorders younger than 49 years old report higher levels of pain and disability than do men. After the age of 49 years, both men and women workers experience a similar worsening



of UE pain and disability with increasing age. Pain and disability increase with increased perceived job demands similarly for both men and women workers. Conclusions Women younger than 49 years had higher levels of UE pain and disorders than men. Both men and women workers reported higher UE disability with an increase in their PJE.

Danesh MK, Garosi E, and Golmohamadpour H. The COVID-19 Pandemic and nursing challenges: a review of the early literature. Work. 2021; 69(1):23-36.

<https://doi.org/10.3233/WOR-213458>

Abstract: BACKGROUND: The COVID-19 pandemic has put health systems under unprecedented pressure, challenging their workforce, especially nurses. OBJECTIVE: The current paper presented a review of the early literature concerning emerging nursing challenges during the early stages of the COVID-19 pandemic. METHODS: A systematic search of the published literature between January and May 2020 was carried out in Medline, Science Direct, and Google Scholar to identify relevant quantitative and qualitative studies. RESULTS: Twenty-two original articles were retrieved, the majority of which were survey studies from China. Synthesis of the evidence resulted in four overarching themes including "being physically and mentally drained in the face of fear and uncertainty," "shortage of personal protective equipment and usability issues," "psychosomatic disturbances among nurses," and "moderators to mitigate nurses' challenges." CONCLUSIONS: Providing care for demanding COVID-19 patients, nurses experienced a gruelling situation, during which a significant amount of psychological and physical distress was inflicted to them. However, receiving proper support from their organization and society could improve the condition substantially. Further research is required to explore the impact of the COVID-19 pandemic on nurses, especially from Western countries

Dufour R, Juster RP, and Geoffrion S. Effect of gender roles and workplace violence on the professional quality of life and wellbeing at work among child protection workers. Annals of Work Exposures and Health. 2021; 65(3):277-290.

<https://doi.org/10.1093/annweh/wxaa099>

Abstract: Exposure to workplace violence puts child protection



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workers at risk for adverse occupational outcomes. While previous studies have identified protective and risk factors, individual differences in gender roles have yet to be explored. Moving beyond sex, the present study aims to examine the ways in which gender roles influence exposure to workplace violence, professional quality of life, and wellbeing at work among child protection workers. A randomized sample stratified by sex of 301 Canadian child protection workers (male: 15.6%, female: 84.4%) completed validated questionnaires of gender roles, professional quality of life, and wellbeing at work. We assessed mean differences using analyses of covariances controlling for clinical experience and type of work. We then assessed the moderating effect of gender roles on other variables through hierarchical multiple linear regressions. Androgyny (high masculinity and high femininity) was associated with higher scores on positive indicators of professional quality of life and wellbeing at work. However, gender roles showed no significant moderating effect on the relationship between exposure to violence, professional quality of life, and wellbeing at work. Results suggest that androgyny could be related to potential psychosocial benefits for child protection workers

Faetani L, Ghizzoni D, Ammendolia A, and Costantino C. Safety and efficacy of mesotherapy in musculoskeletal disorders: a systematic review of randomized controlled trials with meta-analysis. Journal of Rehabilitation Medicine. 2021; 53(4):jrm00182.

<https://doi.org/10.2340/16501977-2817> [open access]

Abstract: OBJECTIVES: To conduct a systematic review of randomized controlled trials about the safety (number and severity of adverse events) and efficacy (pain reduction and functional improvement) of mesotherapy in musculoskeletal disorders, and to compare them with other therapeutic options, in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) statement. METHODS: A search of PubMed, Cochrane Library and Scopus database resulted in an initial total of 16,253 records. A total of 931 articles were included in the study. A final total of 7 articles, published from 1 Jan 1999 until 30 Apr 2020 were selected. Two independent reviewers selected potentially relevant studies based on the inclusion criteria for full-text reading.



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They evaluated the methodological quality of each study and included only studies of high methodological quality, according to the Physiotherapy Evidence Database scale. RESULTS: Seven studies were included in the meta-analysis, and visual analogue scale scores before and after mesotherapy were considered. A statistically significant reduction in visual analogue scale score in the mesotherapy group was reported in comparison with the control group in all except 1 of the trials. Mesotherapy was found to be a safe procedure with mild and temporary side-effects, such as nausea, fatigue, numbness, sweating, headache, ecchymosis, bleeding, pain and local reaction at the injection site. CONCLUSION: Mesotherapy proved to be more effective than systemic therapy in the treatment of local pain and functional limitations caused by a variety of musculoskeletal conditions. However, because of the heterogeneity of the analysed studies in terms of injected drugs, administration technique, associated treatments, frequency and total number of sessions, more randomized controlled trials are needed, comparing a standardized mesotherapy protocol with a systemic treatments

Gaspar FW, Thiese MS, Wizner K, and Hegmann K. Guideline adherence and lost workdays for acute low back pain in the California workers' compensation system. PLoS ONE. 2021; 16(6):e0253268.

<https://doi.org/10.1371/journal.pone.0253268> [open access]

Abstract: CONTEXT: The use of clinical-practice guidelines is a suggested method for improving health outcomes by the earlier provision of necessary and effective medical interventions. OBJECTIVE: To quantify the influence of adherence to guideline-recommended interventions in the first week of treatment for an initial low back pain (LBP) injury on lost workdays. METHODS: In a retrospective cohort of California's workers' compensation claims data from May 2009 to May 2018, 41 diagnostic and treatment interventions were abstracted from the medical claims for workers with acute LBP injuries and compared with guideline recommendations. Lost workdays within 1-year post-injury were compared by guideline adherence using quantile regressions. RESULTS: Of the 59,656 workers who met the study inclusion criteria, 66.1% were male and the average (SD) age was 41 (12) years. The median number (IQR) of lost workdays was 27 (6-146)



days. In the first week of treatment, 14.2% of workers received only recommended interventions, 14.6% received only non-recommended interventions, and 51.1% received both recommended and non-recommended interventions. Opioid prescriptions fell 86% from 2009 to 2018. Workers who received only guideline-recommended interventions experienced significantly fewer lost workdays (11.5 days; 95% CI: -13.9, -9.1), a 29.3% reduction, than workers who received only non-recommended interventions. The percentage of workers receiving only recommended interventions increased from 10.3% to 18.2% over the 9 years. **CONCLUSION AND RELEVANCE:** When workers received guideline-recommended interventions, they typically returned to work in fewer days. The majority of workers received at least one non-recommended intervention, demonstrating the need for adherence to guideline recommendations. Fewer lost workdays and improved quality care are outcomes that strongly benefit injured workers

Horn L, Spronken M, Brouwers EPM, de Reuver RSM, and Joosen MCW. Identifying return to work self-efficacy trajectories in employees with mental health problems. Journal of Occupational Rehabilitation. 2021; [epub ahead of print]. <https://doi.org/10.1007/s10926-021-09979-2>

Abstract: Purpose Return to work self-efficacy (RTW-SE) is a strong predictor of return to work (RTW) in employees with mental health problems (MHPs). However, little is known about the development of RTW-SE during the RTW process. In this study, we aimed to identify RTW-SE trajectories in the year following sick leave in employees with MHPs and provided a description of the trajectories in terms of personal and work characteristics, and RTW status. Methods This multi-wave study included 111 employees with MHPs. RTW-SE was measured at baseline, and at 3, 6, and 12 months follow-up with the RTW-SE scale for employees with MHPs. Results Latent class growth analysis revealed six trajectories. In three trajectories employees had increasing RTW-SE scores, namely (class 1) low start, moderate increase, (class 3) moderate start, small increase and (class 5) moderate start, steep increase. The other trajectories were defined by (class 2) persistently high, (class 6) persistently low, and (class 4) decreasing RTW-SE scores over time. Employees across the various trajectories differed significantly with respect to RTW



status, and personal and work characteristics measured at baseline, including age, gender, and type of MHP. Less favorable trajectories (class 4 and 6) were characterized by higher age, a higher prevalence of anxiety disorder and lower RTW rates. The most favorable trajectory (class 2) was characterized by a higher proportion of stress-related disorders and less major depression diagnoses. Conclusions Large heterogeneity exists in terms of RTW-SE trajectories in employees with MHPs and significant differences were found across the trajectories regarding personal and work characteristics, and RTW status. Insights into RTW-SE trajectories and their attributes are important to advance more effective and personalized RTW treatment for employees with MHPs

Huang YH, Chang WR, Cheung JH, Lee J, Kines P, and He Y. The role of employee perceptions of safety priorities on safety outcomes across organisational levels. *Ergonomics*. 2021; 64(6):768-777.

<https://doi.org/10.1080/00140139.2020.1859139>

Abstract: Research has shown that safety climate predicts safety outcomes in various occupational settings. One important component of safety climate is employees' perceived priorities of safety in an organisation relative to other operational demands (e.g. productivity or efficiency). The relationships between three dimensions of employee perceptions of safety priorities (company, supervisor, worker), employee safety behaviour and self-reported injury outcomes were examined in the current study. Survey data were collected from 858 field workers (a response rate of 89%) at a TV-cable installation company. Results showed that all three dimensions of employee perceptions of safety priorities had significant and unique positive relationships with employee safety behaviour. Furthermore, safety behaviour was a significant mediator of the relationship between the three types of perceived safety priorities and missed work days due to workplace injury. The results showed the value of addressing employee perceptions of safety priorities across organisational levels when trying to improve workplace safety and reduce costly injuries. Practitioner Summary: The study examined relationships between the three different organisational levels of employee perceptions of safety priorities and employee safety behaviour and injury outcomes. The results demonstrated the value



of addressing employee perceptions of safety priorities held by different levels of management as well as the worker level to improve workplace safety and reduce costly injuries. Abbreviations: AIC: Akaike Information Criterion; BIC: Bayesian Information Criterion; CFA: confirmatory factor analysis; CFI: comparative fit index; CI: confidence interval; NAICS: the North American Industry Classification System; RMSEA: root mean square errors of approximation; SB: safety behavior; SD: standard deviation; SE: standard error; SIC: the standard industrial class; SP: safety priority

Lindsay S, Cagliostro E, Leck J, and Stinson J. Career aspirations and workplace expectations among youth with physical disabilities. *Disability and Rehabilitation*. 2021; 43(12):1657-1668.

<https://doi.org/10.1080/09638288.2019.1671505>

Abstract: **PURPOSE:** Youths with disabilities have lower employment rates than youths without disabilities, which are often a result of inaccessible environments, employer's lack of knowledge about people with disabilities and discriminatory attitudes. Exploring youths' career aspirations is important because it can prompt or hinder career planning, and contribute to youths' preparation for adult life. The purpose of our study was to explore the career aspirations and workplace expectations of youths with physical disabilities. **METHOD:** We drew on qualitative discussion forum data from a larger study focusing on employment preparation e-mentoring intervention for youths with physical disabilities. Our sample comprised 44 youths aged 15-25 years (mean age 18.9, 47% female) with physical disabilities. We analyzed the data using a qualitative, content analysis approach. **RESULTS:** Youths described several areas that helped to develop their occupational capacity including self-advocacy, pursuing post-secondary education, volunteering/co-op, family support, and social networks. Areas where youths anticipated encountering occupational constraints involved: transportation, attitudes and discrimination, physicality of work and self-care, communication skills, and finding work or volunteer positions. Youths' expectations for the workplace included: disability disclosure and requesting accommodations, and a respectful environment. **CONCLUSIONS:** Our findings highlighted that youths with physical disabilities had diverse career aspirations that are shaped by various occupational



capacities and constraints. Implications for rehabilitation Youth with physical disabilities may need further support with accessing and navigating public transportation independently to gain employment, and also developing their communication skills, specifically how to disclose their condition to employers and coping with potential discrimination. Clinicians and educators should help youth with disabilities to gain exposure to a variety of career options (including STEM) while supporting them to find accessible positions that are compatible with their abilities. Clinicians and educators could consider helping to foster self-advocacy skills among youth with disabilities which are needed to disclose their condition and request accommodations

Maxner A, Gray H, and Vijendren A. A systematic review of biomechanical risk factors for the development of work-related musculoskeletal disorders in surgeons of the head and neck. Work. 2021; 69(1):247-263.

<https://doi.org/10.3233/WOR-213474>

Abstract: BACKGROUND: Previous studies have shown high rates (47-72%) of self-reported work-related musculoskeletal disorders (WRMDs) in surgeons of the head and neck. Physical requirements in the workplace, individual factors (e.g. poor posture, obesity) and psychosocial factors have been identified as risk factors. Establishing biomechanical risk factors may help prevent further development of WRMDs in this population. OBJECTIVE: The purpose of this critical review was to source studies that identified the biomechanical risk factors for WRMDs in this surgical sub-specialty. METHODS: Searches were conducted of Medline, CINAHL, and AMED databases from 1980 until September 2018. RESULTS: A total of 182 article were identified. Exclusion criteria lead to 163 full-text articles being screened, generating a total of 6 articles for review. The aims of the included studies varied significantly. Surgeons spend the majority of operating time in static, asymmetrical positions. Surgical loupes/headlamps significantly increased cervical spine loading. Articulated surgical arm supports provided optimal ergonomic conditions. Performing surgical operations with the surgeon in standing or sitting had no effect on task performance or demand. Physical fatigue was also measured in both positions. CONCLUSIONS: A combination of equipment-based and



patient/surgeon position-based factors predispose surgeons to biomechanical risk factors. Studies of greater methodological quality are required

Migliore A, Butterworth J, Pavlak J, Patrick M, and Aalto S. Tracking metrics that matter for scaling up employment outcomes. Journal of Vocational Rehabilitation. 2021; 54(3):273-278.

<https://doi.org/10.3233/JVR-211136>

Pitts G, Custer M, Foister RD, and Uhl T. The hand therapist's role in the prevention and management of upper extremity injuries in the modern mass production industrial setting. Journal of Hand Therapy. 2021; [epub ahead of print].

<https://doi.org/10.1016/j.jht.2021.04.019>

Abstract: BACKGROUND: This case study presents the role of an onsite hand therapist (Certified Hand Therapist, Occupational Therapist, Physical Therapist) in an industrial setting and the services that can be provided in this comprehensive care model. Onsite hand therapists can impact on Occupational Safety and Health Administration (OSHA) first aid programs and can provide state of the art treatment for the injured worker in both a direct and indirect capacity. PURPOSE: The purpose of this case study article is to review the many potential services the hand therapist can offer to facilitate the return-to-work of injured employees and provide employers with a proactive case management and state-of-the-art ergonomic prevention, improving profit margins and facilitating safe work environments. STUDY DESIGN: A Case Study design demonstrating the diverse and positive impact of hand therapy on the mass production industrial setting. METHODS: Novel to this approach is a description of outcome instruments (QuickDASH) administered in a periodic manner to understand the trajectory of change in patient-level disability throughout the rehabilitation process. The Optimal Screening for Prediction of Referral and Outcome (OSPRO-YF) is utilized to help predict the functional outcome for the injured worker. Case studies on common upper extremity pathologies will be discussed, demonstrating the benefits of onsite hand therapy with enhanced treatment and case management. RESULTS: The utilization of the QuickDASH and the OSPRO-YF creates a process



to determine the progression of injured workers in therapy, the trajectory of change in patient-level disability and to observe when changes occurred. An example of the periodic assessment approach is described in a case study to identify when the most significant change occurred and creating a mechanism to determine if patients were progressing as expected. **CONCLUSIONS:** Inherent in this case study process is a fluidity in which the therapist can monitor patient progress and adjust the rehabilitation process that benefits both the patient and the industrial setting. A hierarchical functional level system is presented to describe an appropriate intervention strategy to coincide with a patient's progression of wound healing which can be provided by a hand therapist with specialized knowledge

Stahl C, Karlsson N, Gerdle B, and Sandqvist J. Predictive validity of general work ability assessments in the context of sickness insurance. Journal of Rehabilitation Medicine. 2021; 53(4):jrm00177.

<https://doi.org/10.2340/16501977-2798> [open access]

Abstract: Objective: The activity ability assessment is a Swedish method for assessing general work ability, based on self-reports combined with an examination by specially trained physicians, and, if needed, extended assessments by occupational therapists, physiotherapists and/or psychologists. The aim of this study was to analyse the predictive validity of the activity ability assessment in relation to future sick leave. Design: Analysis of assessments in 300 case files, in relation to register data on sick leave. Subjects: People on sick leave (n =300, 32% men, 68% women; mean age 48 years; assessment at mean sick leave day 249). Methods: Univariate and multivariate statistics. Results: Self-rated work ability was the only factor with predictive value related to future sick leave. Physicians' evaluations lacked predictive value, except where the person had a limitation in vision, hearing or speech that was predictive of future decisions by the Social Insurance Agency. No sex differences were identified. Conclusion: The predictive value of the activity ability assessment for future sick leave is limited, and self-rated work ability is more accurate compared with an extensive insurance medical assessment. Self-rated work ability may be more holistic compared with insurance medicine assessments, which may be overly focused on individual factors. A practical implication of this is that the inclusion



of contextual factors in assessment procedures needs to be improved.

Too LS, Leach L, and Butterworth P. Cumulative impact of high job demands, low job control and high job insecurity on midlife depression and anxiety: a prospective cohort study of Australian employees. Occupational and Environmental Medicine. 2021; 78:400-408.

<https://doi.org/10.1136/oemed-2020-106840>

Abstract: Objective: There is a lack of evidence concerning the prospective effect of cumulative exposure to psychosocial job stressors over time on mental ill-health. This study aimed to assess whether cumulative exposure to poor quality jobs places employees at risk of future common mental disorder. Methods: Data were from the Personality and Total Health Through Life project (n=1279, age 40-46 at baseline). Data reported on the cumulative exposure to multiple indicators of poor psychosocial job quality over time (ie, a combination of low control, high demands and high insecurity) and future common mental disorder (ie, depressive and/or anxiety symptom scores above a validated threshold) 12 years later. Data were analysed using logistic regression models and controlled for potential confounders across the lifespan. Results: Cumulative exposure to poor-quality work (particularly more secure work) on multiple occasions elevated the risk of subsequent common mental disorder, independent of social, health, verbal intelligence and personality trait confounders (OR=1.30, 95% CI 1.06 to 1.59). Conclusions: Our findings show that cumulative exposure to poor psychosocial job quality over time independently predicts future common mental disorder-supporting the need for workplace interventions to prevent repeated exposure of poor quality work.

Wizner K, Gaspar FW, Biggio A, and Wiesner S. Occupational injuries in California's health care and social assistance industry, 2009 to 2018. Health Science Reports. 2021; 4(2):e306.

<https://doi.org/10.1002/hsr2.306> [open access]

Abstract: Background and aim: The health care and social assistance industry has one of the highest rates of non-fatal occupational injuries and illnesses, both in California and nationally. In the coming years, the health care industry will face added pressure as both the



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population and workforce age. The aim of this study is to identify targeted populations that may benefit from interventions to prevent future injuries, keep the workforce healthy, and decrease injury-related costs. Methods: This retrospective study analyzed California workers' compensation claims from 2009 to 2018 in the health care and social assistance industry. Results: Across the four industry subgroups, the highest number of claims came from hospitals (n = 243 605; 38.9%), followed by ambulatory care (n = 187 010; 29.9%), nursing/residential care (n = 133 206; 21.3%), and social assistance (n = 62 211; 9.9%). Nursing/residential care settings reported the highest proportion of both lifting injuries (15.8%) and low back injuries (16.9%) as compared to the other settings. Across all settings within California, nurses had the highest proportion of injuries (22.1%), followed by aides/assistants (20.4%), services staff (13.2%), administrative staff (11.0%), and technicians (10.3%). Thirty-five of California's counties had an increasing rate of population-adjusted claims during the study period. Conclusion: This study found that while hospitals have the highest number of injuries, ambulatory care employee injuries are increasing. Employees involved in non-patient care tasks, such as those working in facility service roles, would likely benefit from additional injury prevention interventions.

Zivkovic S, Milenovic M, Krstic II, and Veljkovic M. Correlation between psychosocial work factors and the degree of stress. Work. 2021; 69(1):235-245.

<https://doi.org/10.3233/WOR-213473>

Abstract: Background: Psychosocial risks and work-related stress are one of the most complex, most significant and most challenging problems that organizations around the world are facing. Stress negatively affects all participants in the organization and significantly contributes to negative health consequences and economic outcomes. Objective: With timely identification and adequate assessment of psychosocial risks, it is possible to create healthy workplaces and healthy organizations where employees are satisfied and motivated. The paper will present the results of the research of psychosocial risks on a large sample of respondents in the Republic of Serbia. Methods: A questionnaire was distributed to 1,212 participants of which 1,140 answered all the questions asked. Data from the questionnaire were analyzed using multiple regression



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analysis, Kolmogorov-Smirnov test, Spearman's correlation coefficient and Pearson's chi-square test (χ^2). Results: The results of multiple regression analysis showed that all psychosocial risks taken together are statistically significantly ($p < .001$) and explain 24% of the variance of the criteria. Conclusions: Psychosocial risks identified as statistically significant predictors are Labor Demands, Interpersonal Relations, Lack of Support, Work Role and Job Uncertainty. All predictors are statistically significant predictors at the level .01.

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