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October 20, 2017

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***Black O, Sim MR, Collie A, and Smith P. Early-claim modifiable factors associated with return-to-work self-efficacy among workers injured at work: are there differences between psychological and musculoskeletal injuries? *Journal of Occupational & Environmental Medicine*. 2017; [epub ahead of print].**

<http://dx.doi.org/10.1097/JOM.0000000000001172>

Abstract: OBJECTIVE: The objective of this study was to investigate modifiable early-injury factors which are associated with self-efficacy to return-to-work (RTW-SE) and explore whether these factors are different for people with psychological or upper-body musculoskeletal (UB-MSK) injuries. METHODS: The study used a sample of workers with a UB-MSK (N = 244) or psychological (N = 113) injury who were off work. Differences between injury types were investigated across variables related to: (1) communication with RTW stakeholders; and (2) components of the job itself. A stratified and multigroup analysis was conducted using structural equation modeling (SEM). RESULTS: Injury-stratified models revealed no significant differences. In a combined model, higher job autonomy and low-stress contact from the RTW coordinator remained significantly associated with higher RTW-SE. CONCLUSIONS: Job autonomy and low-stress contact from the RTW coordinator are possible areas to target to increase self-efficacy among injured workers

***Yang Y, Trope GE, Buys YM, Badley EM, Gignac MA, Shen C, and Jin YP. Glaucoma severity and participation in diverse social roles: does visual field loss matter? *Journal of Glaucoma*. 2016; 25(7):e697-e703.**

<http://dx.doi.org/10.1097/JG.0000000000000353>

Abstract: PURPOSE: To assess the association between glaucoma severity and participation in diverse social roles. DESIGN: Cross-sectional survey. PATIENTS

AND METHODS: Individuals with glaucoma, 50+, with visual acuity in the better eye $>20/50$ were enrolled. They were classified into 3 groups based on visual field loss in the better eye: mild [mean deviation (MD) >-6 dB], moderate (MD, -6 to -12 dB), and severe (MD <-12 dB). The validated Social Role Participation Questionnaire assessed respondents' perceptions of the importance, difficulty, and satisfaction with participation in 11 social role domains (eg, community events, travel). Differences between groups were examined using multivariate linear regression analyses. RESULTS: A total of 118 participants (52% female) were included: 60 mild, 29 moderate, and 29 severe. All social role domains were rated as important by all participants except for education and employment. Women ($P<0.01$), those with a partner ($P<0.01$), and those who were less depressed ($P=0.03$) reported higher scores of perceived importance of participating in social activities. Compared with those with mild glaucoma, individuals with severe glaucoma reported significantly more difficulty participating in community/religious/cultural events ($P<0.01$), travelling ($P<0.01$), and relationships with family members ($P=0.01$). They also reported less satisfaction with travelling ($P=0.01$) and social events ($P=0.04$). CONCLUSIONS: Participation in diverse social roles is valued by individuals with glaucoma. Severe visual field loss impedes involvement in and satisfaction with activities in community/religious/cultural events, travelling, and relationships with family members. Appropriate community and targeted interventions are needed to allow people with severe glaucoma to maintain active social participation—a key component to successful aging

Adeline A and Delattre E. Some microeconomic evidence on the relationship between health and income. Health Economics Review. 2017; 7(1):27.

<http://dx.doi.org/10.1186/s13561-017-0163-5> [open access]

Abstract: This paper examines the association between income, income inequalities and health inequalities in Europe. The contribution of this paper is to study different hypotheses linking self-perceived health status and income, allowing for the identification of different mechanisms in income-related health inequalities. Using data from the Survey of Health, Ageing and Retirement in Europe (15 countries), we take the advantage of the cross-sectional and longitudinal nature of this rich database to make robust results. The analyses (coefficient estimates as well as average marginal effects) strongly support two hypotheses by showing that (i) income has a positive and concave effect on health (Absolute Income Hypothesis); (ii) income inequalities in a country affect all members in a society (strong version of the Income Inequality Hypothesis). However, our study suggests that, when considering the position of the individual in the income distribution, as well as the interaction between income inequalities and these rankings, one cannot identify individuals the most affected by income inequalities (which should be the least well-off in a society according to the weak version of the Income Inequality Hypothesis). Finally, the robustness of this study is emphasized when implementing a generalized ordered probit to consider the

subjective nature of the self-perceived health status to avoid the traps encountered in previous studies

Van Aerden K, Gadeyne S, and Vanroelen C. Is any job better than no job at all? Studying the relations between employment types, unemployment and subjective health in Belgium. Archives of Public Health. 2017; 75:55.

<http://dx.doi.org/10.1186/s13690-017-0225-5> [open access]

Abstract: BACKGROUND: This study focuses on the health impact of the labour market position, since recent research indicates that exposure to both unemployment and precarious employment causes serious harm to people's health and well-being. An overview of general and mental health associations of different labour market positions in Belgium is provided. A distinction is made between employment and unemployment and in addition between different types of jobs among the employed, taking into account the quality of employment. Given the fact that precarious labour market positions tend to coincide with a precarious social environment, the latter is taken into consideration by including the composition and material living conditions of the household and the presence of social support. METHODS: Belgian data from the 1st Generations and Gender Survey are used. A Latent Class Cluster Analysis is performed to construct a typology of labour market positions that includes four different types of waged employment: standard jobs, instrumental jobs, precarious jobs and portfolio jobs, as well as self-employment and unemployment. Then, binary logistic regression analyses are performed in order to relate this typology to health, controlling for household situation and social support. Two health outcomes are included: self-perceived general health (good versus fair/bad) and self-rated mental health (good versus bad, based on 7 items from the Center for Epidemiologic Studies Depression Scale). RESULTS: Two labour market positions are consistently related to poor general and mental health in Belgium: unemployment and the precarious job type. The rather small gap in general and mental health between both labour market positions emphasises the importance of employment quality for the health and well-being of individuals in waged employment. Controlling for the household level context and social support illustrates that part of the reported health associations can be explained by the precarious social environment of individuals in unfavourable labour market positions. CONCLUSIONS: The results from this study confirm that the labour market position and social environment of individuals are important health determinants in Belgium

Alla K, Hall WD, Whiteford HA, Head BW, and Meurk CS. How do we define the policy impact of public health research? A systematic review. Health Research Policy and Systems. 2017; 15(1):84.

<http://dx.doi.org/10.1186/s12961-017-0247-z> [open access]

Abstract: BACKGROUND: In order to understand and measure the policy impact of research we need a definition of research impact that is suited to the task. This article systematically reviewed both peer-reviewed and grey literature for definitions of research impact to develop a definition of research impact that can

be used to investigate how public health research influences policy. **METHOD:** Keyword searches of the electronic databases Web of Science, ProQuest, PubMed, EMBASE, CINAHL, Informit, PsycINFO, The Cochrane Database of Systematic Reviews and Google Scholar were conducted between August 2015 and April 2016. Keywords included 'definition' and 'policy' and 'research impact' or 'research evidence'. The search terms 'health', 'public health' or 'mental health' and 'knowledge transfer' or 'research translation' were used to focus the search on relevant health discipline approaches. Studies included in the review described processes, theories or frameworks associated with public health, health services or mental health policy. **RESULTS:** We identified 108 definitions in 83 publications. The key findings were that literature on research impact is growing, but only 23% of peer-reviewed publications on the topic explicitly defined the term and that the majority (76%) of definitions were derived from research organisations and funding institutions. We identified four main types of definition, namely (1) definitions that conceptualise research impacts in terms of positive changes or effects that evidence can bring about when transferred into policies (example Research Excellence Framework definition), (2) definitions that interpret research impacts as measurable outcomes (Research Councils UK), and (3) bibliometric and (4) use-based definitions. We identified four constructs underpinning these definitions that related to concepts of contribution, change, avenues and levels of impact. **CONCLUSION:** The dominance of bureaucratic definitions, the tendency to discuss but not define the concept of research impact, and the heterogeneity of definitions confirm the need for conceptual clarity in this area. We propose a working definition of research impact that can be used in a range of health policy contexts

Andersen A, Stahl C, Anderzen I, Kristiansson P, and Larsson K. Positive experiences of a vocational rehabilitation intervention for individuals on long-term sick leave, the Dirigo project: a qualitative study. BMC Public Health. 2017; 17(1):790.

<http://dx.doi.org/10.1186/s12889-017-4804-8> [open access]

Abstract: **BACKGROUND:** The process of returning to work after long-term sick leave can sometimes be complex. Many factors, (e.g. cooperation between different authorities and the individual as well as individual factors such as health, emotional well-being and self-efficacy) may have an impact on an individual's ability to work. The aim of this study was to investigate clients' experiences with an individually tailored vocational rehabilitation, the Dirigo project, and encounters with professionals working on it. The Dirigo project was based on collaboration between rehabilitation authorities, individually tailored interventions and a motivational interviewing approach. **METHODS:** A descriptive qualitative design was used with data collected through interviews. Fourteen individuals on long-term sick leave took part in individual semi-structured interviews. The interviews were analysed using content analysis. **RESULTS:** The analysis showed overall positive experience of methods and encounters with professionals in a vocational rehabilitation project. The positive experiences were

based on four key factors: 1. Opportunities for receiving various dimensions of support. 2. Good overall treatment by the professionals. 3. Satisfaction with the working methods of the project, and 4. Opportunities for personal development. CONCLUSIONS: The main result showed that the clients had an overall positive experience of a vocational rehabilitation project and encounters with professionals who used motivational interviewing as a communication method. The overall positive experience indicated that their interactions with the different professionals may have affected their self-efficacy in general and in relation to transition to work. The knowledge is essential for the professionals working in the area of vocational rehabilitation. However, vocational rehabilitation interventions also need a societal approach to be able to offer clients opportunities for job training and real jobs

Bronchetti ET and Mcinerney M. Does increased access to health insurance impact claims for workers' compensation? Evidence from Massachusetts health care reform. Upjohn Institute working paper 17-277. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research; 2017.

<http://dx.doi.org/10.17848/wp17-277>

Buttorff C, Trujillo AJ, Castillo R, Vecino-Ortiz AI, and Anderson GF. The impact of practice guidelines on opioid utilization for injured workers. American Journal of Industrial Medicine. 2017; [epub ahead of print].

<http://dx.doi.org/10.1002/ajim.22779>

Abstract: BACKGROUND: Opioid use is rising in the US and may cause special problems in workers compensation cases, including addiction and preventing a return to work after an injury. OBJECTIVE: This study evaluates a physician-level intervention to curb opioid usage. An insurer identified patients with out-of-guideline opioid utilization and called the prescribing physician to discuss the patient's treatment protocol. RESEARCH DESIGN: This study uses a differences-in-differences study design with a propensity-score-matched control group. Medical and pharmaceutical claims data from 2005 to 2011 were used for analyses. RESULTS: Following the intervention, the use of opioids increased for the intervention group and there is little impact on medical spending. CONCLUSIONS: Counseling physicians about patients with high opioid utilization may focus more attention on their care, but did not impact short-term outcomes. More robust interventions may be needed to manage opioid use. PERSPECTIVE: While the increasing use of opioids is of growing concern around the world, curbing the utilization of these powerfully addictive narcotics has proved elusive. This study examines a prescribing guidelines intervention designed to reduce the prescription of opioids following an injury. The study finds that there was little change in the opioid utilization after the intervention, suggesting interventions along other parts of the prescribing pathway may be needed

Celik S, Celik K, Dirimese E, Tasdemir N, Arik T, and Buyukkara I. Determination of pain in musculoskeletal system reported by office

workers and the pain risk factors. International Journal of Occupational & Environmental Health. 2017; 31(1):91-111.

<http://dx.doi.org/10.13075/ijomeh.1896.00901> [open access]

Abstract: OBJECTIVES: This research was conducted as a cross-sectional descriptive study aimed at determining the existence of pain in the musculoskeletal system among office workers and the reasons for it. MATERIAL AND METHODS: The sample consisted of 528 office workers. Collection of data was achieved using a questionnaire prepared by the researchers in line with information from the literature. RESULTS: The male and female office workers most frequently complained of pain in the lower back (55.1%), neck (52.5%) and back (53%). It was seen that out of the variables relating to the work environment, those which had the most significant effect on muscular-skeletal system pain were sitting at the desk for a long time without a break, working sitting on a chair that supported only the lumbar area and the arms, having the computer mouse at a distance from the keyboard, having the head inclined at 45 degrees when working, working holding both forearms above the level of the desk, not taking exercise in daily life, and having a moderate or extremely stressful workplace ($p < 0.05$). CONCLUSIONS: The conclusion has been reached in this study that in order for office workers not to suffer musculoskeletal system pain, it is very important that the working environment should be ergonomically arranged and that various measures should be taken to ensure healthy life behavior. Int J Occup Med Environ Health 2018;31(1)

Farnacio Y, Pratt ME, Marshall EG, and Graber JM. Are workplace psychosocial factors associated with work-related injury in the US workforce? National health interview survey, 2010. Journal of Occupational & Environmental Medicine. 2017; 59(10):e164-e171.

<http://dx.doi.org/10.1097/JOM.0000000000001143>

Abstract: INTRODUCTION: Psychosocial hazards in the workplace may adversely impact occupational and general health, including injury risk. METHODS: Among 16,417 adult workers in the 2010 National Health Interview Survey Occupational Health Supplement, weighted prevalence estimates were calculated for work-related injuries (WRI) and any injuries. The association between injury and psychosocial occupational hazards (job insecurity, work-family imbalance, hostile work environment) was assessed adjusting for sociodemographic and occupational factors. RESULTS: WRI prevalence was 0.65% ($n = 99$); any injury prevalence was 2.46% ($n = 427$). In multivariable models job insecurity, work-family imbalance, and hostile work environment were each positively associated with WRI prevalence (odds ratio [OR]: 1.60, 95% CI: 0.97-2.65; OR: 1.69, 95% CI 0.96-2.89; and 2.01, 95% CI 0.94-4.33, respectively). CONCLUSIONS: Stressful working conditions may contribute to injuries. There is need for ongoing surveillance of occupational psychosocial risk factors and further study of their relationship with injury

Gellatly G and Richards E. Recent developments in the Canadian economy: Fall 2017. Economic Insights. 2017; 075:1-9.

<http://www.statcan.gc.ca/pub/11-626-x/11-626-x2017075-eng.pdf>

Glass LS, Blink RC, Bean M, Erdil M, Rosenthal JA, and Taylor T. Utilization review in worker's compensation: current status and opportunities for improvement. Journal of Occupational & Environmental Medicine. 2017; 59(10):1024-1026.

<http://dx.doi.org/10.1097/JOM.0000000000001150>

Gonzalez-Ramirez C, Montanero-Fernandez J, and Peral-Pacheco D. A multifactorial study on duration of temporary disabilities in Spain. Archives of Environmental & Occupational Health. 2017; 72(6):328-335.

<http://dx.doi.org/10.1080/19338244.2016.1246410>

Abstract: The extreme variability of temporary disability duration has a deep effect in public health. We tried to understand what factors duration of disability depends on. Through cohort study with data of temporary disabilities collected by Ibermutuamur from 2008 to 2012, we used statistical multivariate methods. The most reliable and convenient algorithm to predict duration was a categorical classification tree that distinguished between brief and long disabilities, taking into account both medical-biological and socioeconomic factors. The influence of socioeconomic factors in the disability process made numeric predictive models not accurate enough. Some of these socioeconomic factors were isolated and their influences were quantified. In particular, the one we named factor unemployment could explain a huge increase in duration for certain common diagnoses such as anxiety, low back pain, headache, and depression

Gray SE and Collie A. The nature and burden of occupational injury among first responder occupations: a retrospective cohort study in Australian workers. Injury. 2017; [epub ahead of print].

<http://dx.doi.org/10.1016/j.injury.2017.09.019>

Abstract: INTRODUCTION: Workers in first responder (FR) occupations are at heightened risk for workplace injury given their exposure to physical/psychological hazards. This study sought to (1) characterise the occupational risk of injury; (2) determine factors associated with injury; and (3) characterise the burden of injury-related disability in police, ambulance officers, fire/emergency workers, compared with other occupations. METHODS: A retrospective cohort of 2,439,624 claims occurring between July 2003 and June 2012 was extracted from the Australian National Dataset for Compensation-Based Statistics. Cases aged 16-75 years working 1-100 pre-injury hours per week were included. Regression models estimated risk of making a workers' compensation (WC) claim by age, gender, occupation and injury type. Injury burden was calculated using count and time loss, and statistically compared between groups. RESULTS: The risk of making a WC claim among FR occupations was more than 3 times higher than other occupations. Risk of claiming was highest among female FRs and those aged 35-44 years.

Ambulance officers had the greatest risk of upper-body MSK injuries and fire and emergency workers the greatest risk of lower-body MSK injuries. The risk of mental health conditions was elevated for all FR occupations but highest among police officers. The total burden of injury (expressed as working weeks lost per 1000 workers) differed significantly between groups and was highest amongst police. **DISCUSSION AND CONCLUSIONS:** First responders record significantly higher rates of occupational injury claims than other occupations. Using a national population based dataset, this study demonstrates that not only are first responders exposed to significantly higher rates of occupational injury than all other occupations combined, but they experience differential injury patterns depending on their occupation. This suggests that among FR occupations injury prevention efforts should reflect these differences and be targeted to occupation-specific patterns of injury

Hakkarainen P, Sund R, Arffman M, Koski S, Hanninen V, Moilanen L, and Rasanen K. Working people with type 1 diabetes in the Finnish population. BMC Public Health. 2017; 17(1):805.

<http://dx.doi.org/10.1186/s12889-017-4723-8> [open access]

Abstract: **BACKGROUND:** The incidence of type 1 diabetes is increasing worldwide. Since so little is known about work life of individuals with type 1 diabetes, we examined incidence and prevalence trends of type 1 diabetes among working-aged Finns. We also investigated the employment rate and how workers with type 1 diabetes perceive their health and work ability, and their intended retirement age. **METHODS:** We analyzed changes in the incidence, prevalence, and employment rate using nationwide multi-register-based FinDM data, and estimated a Self-Rated Health, Work Ability Score, and inquired about retirement intentions of 767 working individuals with type 1 diabetes in a cross-sectional survey. All estimates were compared to the corresponding data of the Finnish general population. **RESULTS:** The average annual age-standardized incidence rate of type 1 diabetes among men aged 18-39 was 29 per 100,000/year; the incidence rate has increased by 33% from 1992 to 2007. Among women, the incidence remained at 16 per 100,000/year. Among working-aged (18-64) people, the age-standardized prevalence of type 1 diabetes increased by 39% among women and 33% among men. Two out of every three working aged individuals with type 1 diabetes were in the labor force; this is about 10% lower than in the Finnish population. The average age-standardized employment rate among those individuals with type 1 diabetes belonging to the labor force was 82%, compared to 84% in the general population. Working individuals with type 1 diabetes rated their health and work ability as being slightly lower than the general working population, but nonetheless, there were no significant differences in retirement intentions. **CONCLUSIONS:** Between 1992 and 2007, the number of working-aged people and workers with type 1 diabetes increased by 35%. Most workers with type 1 diabetes manage as well at work as the general population. Special attention should be paid to workers with

type 1 diabetes when they are diagnosed and/or report moderate or poor work ability

Nghiem SH and Connelly LB. Convergence and determinants of health expenditures in OECD countries. *Health Economics Review*. 2017; 7(1):29. <http://dx.doi.org/10.1186/s13561-017-0164-4> [open access]

Abstract: This study examines the trend and determinants of health expenditures in OECD countries over the 1975-2004 period. Based on recent developments in the economic growth literature we propose and test the hypothesis that health care expenditures in countries of similar economic development level may converge. We hypothesise that the main drivers for growth in health care costs include: aging population, technological progress and health insurance. The results reveal no evidence that health expenditures among OECD countries converge. Nevertheless, there is evidence of convergence among three sub-groups of countries. We found that the main driver of health expenditure is technological progress. Our results also suggest that health care is a (national) necessity, not a luxury good as some other studies in this field have found

Nieuwenhuijsen K, Schoutens AMC, Frings-Dresen MHW, and Sluiter JK. Evaluation of a randomized controlled trial on the effect on return to work with coaching combined with light therapy and pulsed electromagnetic field therapy for workers with work-related chronic stress. *BMC Public Health*. 2017; 17(1):761.

<http://dx.doi.org/10.1186/s12889-017-4720-y> [open access]

Abstract: BACKGROUND: Chronic work-related stress is quite prevalent in the working population and is in some cases accompanied by long-term sick leave. These stress complaints highly impact employees and are costly due to lost productivity and medical expenses. A new treatment platform with light therapy plus Pulsed Electro Magnetic Fields (PEMF) in combination with coaching was used to assess whether more positive effects on return to work, stress, work-related fatigue, and quality of life could be induced compared to coaching alone. METHODS: A placebo-controlled trial was executed after inclusion of 96 workers, aged 18-65 with work-related chronic stress complaints and who were on sick leave (either part-time or full-time). Participants were divided into three arms at random. Group 1 (n = 28) received the treatment and coaching (Intervention group), group 2 (n = 28) received the treatment with the device turned off and coaching (Placebo group) and group 3 (n = 28) received coaching only (Control group). The data were collected at baseline, and after 6, 12 and 24 weeks. The primary outcome was % return to work, and secondary outcomes were work-related fatigue (emotional exhaustion and need for recovery after work), stress (distress and hair cortisol), and quality of life (SF-36 dimensions: vitality, emotional role limitation, and social functioning). RESULTS: Eighty-four workers completed all measurements, 28 in each group. All groups improved significantly over time in the level of return to work, as well as on all secondary outcomes. No statistical differences between the three groups were found either on the primary

outcome or on any of the secondary outcomes. CONCLUSIONS: Light therapy with Pulsed Electro Magnetic Fields PEMF therapy has no additional effect on return to work, stress, fatigue, and quality of live compared to coaching alone. TRIAL REGISTRATION: NTR4794 , registration date: 18-sep-2014

Olofsson T, Petersson IF, Eriksson JK, Englund M, Nilsson JA, Geborek P, Jacobsson LTH, Askling J, and Neovius M. Predictors of work disability after start of anti-TNF therapy in a national cohort of Swedish patients with rheumatoid arthritis: does early anti-TNF therapy bring patients back to work? Annals of the Rheumatic Diseases. 2017; 76(7):1245-1252.

<http://dx.doi.org/10.1136/annrheumdis-2016-210239>

Abstract: OBJECTIVES: To examine predictors of work ability gain and loss after anti-tumour necrosis factor (TNF) start, respectively, in working-age patients with rheumatoid arthritis (RA) with a special focus on disease duration. METHODS: Patients with RA, aged 19-62 years, starting their first TNF inhibitor 2006-2009 with full work ability (0 sick leave/disability pension days during 3 months before bio-start; n=1048) or no work ability (90 days; n=753) were identified in the Swedish biologics register (Anti-Rheumatic Treatment In Sweden, ARTIS) and sick leave/disability pension days retrieved from the Social Insurance Agency. Outcome was defined as work ability gain $\geq 50\%$ for patients without work ability at bio-start and work ability loss $\geq 50\%$ for patients with full work ability, and survival analyses conducted. Baseline predictors including disease duration, age, sex, education level, employment, Health Assessment Questionnaire, Disease Activity Score 28 and relevant comorbidities were estimated using Cox regression. RESULTS: During 3 years after anti-TNF start, the probability of regaining work ability for totally work-disabled patients was 35% for those with disease duration < 5 years and 14% for disease duration ≥ 5 years (adjusted HR 2.1 (95% CI 1.4 to 3.2)). For patients with full work ability at bio-start, disease duration did not predict work ability loss. Baseline disability pension was also a strong predictor of work ability gain after treatment start. CONCLUSIONS: A substantial proportion of work-disabled patients with RA who start anti-TNF therapy regain work ability. Those initiating treatment within 5 years of symptom onset have a more than doubled 3-year probability of regaining work ability compared with later treatment starts. This effect seems largely due to the impact of disease duration on disability pension status

Powell BJ, Stanick CF, Halko HM, Dorsey CN, Weiner BJ, Barwick MA, Damschroder LJ, Wensing M, Wolfenden L, and Lewis CC. Toward criteria for pragmatic measurement in implementation research and practice: a stakeholder-driven approach using concept mapping. Implementation Science. 2017; 12(1):118.

<http://dx.doi.org/10.1186/s13012-017-0649-x> [open access]

Abstract: BACKGROUND: Advancing implementation research and practice requires valid and reliable measures of implementation determinants, mechanisms, processes, strategies, and outcomes. However, researchers and

implementation stakeholders are unlikely to use measures if they are not also pragmatic. The purpose of this study was to establish a stakeholder-driven conceptualization of the domains that comprise the pragmatic measure construct. It built upon a systematic review of the literature and semi-structured stakeholder interviews that generated 47 criteria for pragmatic measures, and aimed to further refine that set of criteria by identifying conceptually distinct categories of the pragmatic measure construct and providing quantitative ratings of the criteria's clarity and importance. **METHODS:** Twenty-four stakeholders with expertise in implementation practice completed a concept mapping activity wherein they organized the initial list of 47 criteria into conceptually distinct categories and rated their clarity and importance. Multidimensional scaling, hierarchical cluster analysis, and descriptive statistics were used to analyze the data. **FINDINGS:** The 47 criteria were meaningfully grouped into four distinct categories: (1) acceptable, (2) compatible, (3) easy, and (4) useful. Average ratings of clarity and importance at the category and individual criteria level will be presented. **CONCLUSIONS:** This study advances the field of implementation science and practice by providing clear and conceptually distinct domains of the pragmatic measure construct. Next steps will include a Delphi process to develop consensus on the most important criteria and the development of quantifiable pragmatic rating criteria that can be used to assess measures

Rantanen J, Lehtinen S, Valenti A, and Iavicoli S. A global survey on occupational health services in selected international commission on occupational health (ICOH) member countries. BMC Public Health. 2017; 17(1):787.

<http://dx.doi.org/10.1186/s12889-017-4800-z> [open access]

Abstract: **BACKGROUND:** The United Nations General Assembly (UNGA), the International Labour Organization (ILO), the World Health Organization (WHO), the International Commission on Occupational Health (ICOH), and the European Union (EU) have encouraged countries to organize occupational health services (OHS) for all working people irrespective of the sector of economy, size of enterprise or mode of employment of the worker. The objective of this study was to survey the status of OHS in a sample of countries from all continents.

METHODS: A questionnaire focusing on the main aspects of OHS was developed on the basis of ILO Convention No. 161 and several other questionnaire surveys used in various target groups of OHS. The questionnaire was sent to 58 key informants: ICOH National Secretaries. **RESULTS:** A total of 49 National Secretaries responded (response rate 84.5%), from countries that employ 70% of the total world labour force. The majority of the respondent countries, 67%, had drawn up an OHS policy and implement it with the help of national occupational safety and health (OSH) authorities, institutes of occupational health or respective bodies, universities, and professional associations. Multidisciplinary expert OHS resources were available in the majority (82%) of countries, but varied widely in quantitative terms. The average OHS coverage of workers was 24.8%, with wide variation between countries. In

over two thirds (69%) of the countries, the content of services was mixed, consisting of preventive and curative services, and in 29% preventive only. OHS financing was organized according to a mixed model among 63% and by employers only among 33% of the respondents. CONCLUSIONS: The majority of countries have drawn up policies, strategies and programmes for OHS. The infrastructures and institutional and human resources for the implementation of strategies, however, remain insufficient in the majority of countries (implementation gap). Qualitatively, the content and multidisciplinary nature of OHS corresponds to international guidance, but the coverage, comprehensiveness and content of services remain largely incomplete due to a lack of infrastructure and shortage of multiprofessional human resources (capacity gap). The estimated coverage of services in the study group was low; only a quarter of the total employed population (coverage gap)

Stevens ML, Lin CC, de Carvalho FA, Phan K, Koes B, and Maher CG. Advice for acute low back pain: a comparison of what research supports and what guidelines recommend. Spine Journal. 2017; 17(10):1537-1546. <http://dx.doi.org/10.1016/j.spinee.2017.05.030>

Abstract: BACKGROUND: Advice is widely considered an effective treatment for acute low back pain (LBP); however, details on what and how to deliver this intervention is less clear. PURPOSE: We assessed and compared clinical trials that test advice for acute LBP with practice guidelines for their completeness of reporting and concordance on the content, method of delivery, and treatment regimen of advice interventions. DESIGN/SETTING: Systematic review. METHODS: Advice randomized controlled trials were identified through a systematic search. Guidelines were taken from recent overviews of guidelines for LBP. Completeness of reporting was assessed using the Template for Intervention Description and Replication checklist. Thematic analysis was used to characterize advice interventions into topics across the aspects of content, method of delivery, and regimen. Concordance between clinical trials and guidelines was assessed by comparing the number of trials that found a statistically significant treatment effect for an intervention that included a specific advice topic with the number of guidelines recommending that topic. RESULTS: The median (interquartile range) completeness of reporting for clinical trials and guidelines was 8 (7-9) and 3 (2-4) out of nine items on the Template for Intervention Description and Replication checklist, respectively. Guideline recommendations were discordant with clinical trials for 50% of the advice topics identified. CONCLUSION: Completeness of reporting was less than ideal for randomized controlled trials and extremely poor for guidelines. The recommendations made in guidelines of advice for acute LBP were often not concordant with the results of clinical trials. Taken together, these findings mean that the potential clinical value of advice interventions for patients with acute LBP is probably not being realized

Tseli E, Grooten WJA, Stalnacke BM, Boersma K, Enthoven P, Gerdle B, and Ang BO. Predictors of multidisciplinary rehabilitation outcomes in patients with chronic musculoskeletal pain: protocol for a systematic review and meta-analysis. Systematic Reviews. 2017; 6(1):199.

<http://dx.doi.org/10.1186/s13643-017-0598-0> [open access]

Abstract: BACKGROUND: Chronic musculoskeletal pain is a major public health problem. Early prediction for optimal treatment results has received growing attention, but there is presently a lack of evidence regarding what information such proactive management should be based on. This study protocol, therefore, presents our planned systematic review and meta-analysis on important predictive factors for health and work-related outcomes following multidisciplinary rehabilitation (MDR) in patients with chronic musculoskeletal pain. METHODS: We aim to perform a synthesis of the available evidence together with a meta-analysis of published peer-reviewed original research that includes predictive factors preceding MDR. Included are prospective studies of adults with benign, chronic (> 3 months) musculoskeletal pain diagnoses who have taken part in MDR. In the studies, associations between personal and rehabilitation-based factors and the outcomes of interest are reported. Outcome domains are pain, physical functioning including health-related quality of life, and work ability with follow-ups of 6 months or more. We will use a broad, explorative approach to any presented predictive factors (demographic, symptoms-related, physical, psychosocial, work-related, and MDR-related) and these will be analyzed through (a) narrative synthesis for each outcome domain and (b) if sufficient studies are available, a quantitative synthesis in which variance-weighted pooled proportions will be computed using a random effects model for each outcome domain. The strength of the evidence will be evaluated using the Grading of Recommendations, Assessment, Development and Evaluation. DISCUSSION: The strength of this systematic review is that it aims for a meta-analysis of prospective cohort or randomized controlled studies by performing an extensive search of multiple databases, using an explorative study approach to predictive factors, rather than building on single predictor impact on the outcome or on predefined hypotheses. In this way, an overview of factors central to MDR outcome can be made and will help strengthen the evidence base and inform a wide readership including health care practitioners and policymakers. SYSTEMATIC REVIEW REGISTRATION: PROSPERO CRD42016025339

Valley MA and Stallones L. Effect of mindfulness-based stress reduction training on health care worker safety: a randomized waitlist controlled trial. Journal of Occupational & Environmental Medicine. 2017; 59(10):935-941.

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Abstract: OBJECTIVE: The study assessed the impact of mindfulness training on occupational safety of hospital health care workers. METHODS: The study used a randomized waitlist-controlled trial design to test the effect of an 8-week mindfulness-based stress reduction (MBSR) course on self-reported health care worker safety outcomes, measured at baseline, postintervention, and 6 months

later. RESULTS: Twenty-three hospital health care workers participated in the study (11 in immediate intervention group; 12 in waitlist control group). The MBSR training decreased workplace cognitive failures ($F [1, 20] = 7.44, P = 0.013$, (Equation is included in full-text article.)) and increased safety compliance behaviors ($F [1, 20] = 7.79, P = 0.011$, (Equation is included in full-text article.)) among hospital health care workers. Effects were stable 6 months following the training. The MBSR intervention did not significantly affect participants' promotion of safety in the workplace ($F [1, 20] = 0.40, P = 0.54$, (Equation is included in full-text article.)). CONCLUSIONS: Mindfulness training may potentially decrease occupational injuries of health care workers

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