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January 12, 2018

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***Carnide N, Hogg-Johnson S, Cote P, Irvin E, Van ED, Koehoorn M, and Furlan AD. Response: prescription opioid use and the risk of disability. *Clinical Journal of Pain*. 2018; 34(2):190-191.**

<http://dx.doi.org/10.1097/AJP.0000000000000562>

***Konijn AM, Lay AM, Boot CRL, and Smith PM. The effect of active and passive occupational health and safety (OHS) training on OHS awareness and empowerment to participate in injury prevention among workers in Ontario and British Columbia (Canada). *Safety Science*. 2017; [epub ahead of print].**

<http://dx.doi.org/10.1016/j.ssci.2017.12.026>

***McLeod C, Reiff E, Maas E, and Bultmann U. Identifying return-to-work trajectories using sequence analysis in a cohort of workers with work-related musculoskeletal disorders. *Scandinavian Journal of Work, Environment & Health*. 2017; [epub ahead of print].**

<http://dx.doi.org/10.5271/sjweh.3701> [open access]

Abstract: Objectives This study aimed to identify return-to-work (RTW) trajectories among workers with work-related musculoskeletal disorders (MSD) and examine the associations between different MSD and these RTW trajectories. Methods We used administrative workers' compensation data to identify accepted MSD lost-time claims with an injury date between 2010-2012 in British Columbia, Canada. Cox regression analyses were used to investigate differences in time to RTW between MSD. Validated day-to-day calendar measures of four RTW states (sickness absence, modified RTW, RTW, and non-RTW) were grouped into RTW trajectories spanning a one-year period using

sequence analysis. RTW trajectories were clustered using decision rules that identified a shared trajectory structure. Poisson regression with robust standard errors was used to estimate relative risk ratios (RR) with 95% confidence intervals (CI) between MSD and RTW trajectory clusters. Results In a cohort of 81 062 claims, 2132 unique RTW trajectories were identified and clustered into nine RTW trajectory clusters. Half of the workers sustainably returned to work within one month. Workers with back strains were most likely to have trajectories characterized by early sustained RTW, while workers with fractures or dislocations were more likely to have prolonged sickness absence trajectories (RR 4.9-9.9) or non-RTW trajectories (RR 1.4-7.6). Conclusion This is the first study that has characterized different types of RTW trajectories of workers with MSD using sequence analysis. The application of sequence analysis and the identification of RTW trajectories yielded a number of key insights not found using conventional cox regression analysis

Alfers L, Lund F, and Moussie R. Approaches to social protection for informal workers: aligning productivist and human rights-based approaches. International Social Security Review. 2017; 70(4):67-85.
<http://dx.doi.org/10.1111/issr.12153>

Bhandari S and Hallowell MR. Emotional engagement in safety training: impact of naturalistic injury simulations on the emotional state of construction workers. Journal of Construction Engineering and Management. 2017; 143(12):04017090.
[http://dx.doi.org/10.1061/\(ASCE\)CO.1943-7862.0001405](http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001405)

Brophy JT, Keith MM, and Hurley M. Assaulted and unheard: violence against healthcare staff. New Solutions. 2018; 27(4):581-606.
<http://dx.doi.org/10.1177/1048291117732301>

Abstract: Healthcare workers regularly face the risk of violent physical, sexual, and verbal assault from their patients. To explore this phenomenon, a collaborative descriptive qualitative study was undertaken by university-affiliated researchers and a union council representing registered practical nurses, personal support workers, and other healthcare staff in Ontario, Canada. A total of fifty-four healthcare workers from diverse communities were consulted about their experiences and ideas. They described violence-related physical, psychological, interpersonal, and financial effects. They put forward such ideas for prevention strategies as increased staffing, enhanced security, personal alarms, building design changes, "zero tolerance" policies, simplified reporting, using the criminal justice system, better training, and flagging. They reported such barriers to eliminating risks as the normalization of violence; underreporting; lack of respect from patients, visitors, higher status professionals, and supervisors; poor communication; and the threat of reprisal for speaking publicly. Inadequate postincident psychological and financial support compounded their distress

Butler SS. Exploring relationships among occupational safety, job turnover, and age among home care aides in Maine. *New Solutions*. 2018; 27(4):501-523.

<http://dx.doi.org/10.1177/1048291117739418>

Abstract: As the U.S. population ages, the number of people needing personal assistance in the home care setting is increasing dramatically. Personal care aides and home health workers are currently adding more jobs to the economy than any other single occupation. Home health workers face physically and emotionally challenging, and at times unsafe, work conditions, with turnover rates ranging from 44 percent to 65 percent annually. As part of a mixed-method, longitudinal study in Maine examining turnover, interviews with 252 home care aides were analyzed thematically. Responses to interview questions regarding the job's impact on health and safety, the adequacy of training, and the level of agency responsiveness were examined. Emergent themes, indicating some contradictory perspectives on workplace safety, quality of training, and agency support, were compared across three variables: job termination, occupational injury, and age. Implications for increasing occupational safety and job retention are discussed

Choi B and Lee S. An empirically based agent-based model of the sociocognitive process of construction workers' safety behavior. *Journal of Construction Engineering and Management*. 2018; 144(2):04017102.

[http://dx.doi.org/10.1061/\(ASCE\)CO.1943-7862.0001421](http://dx.doi.org/10.1061/(ASCE)CO.1943-7862.0001421)

Demou E, Bhaskar A, Xu T, Mackay DF, and Hunt K. Health, lifestyle and employment beyond state-pension age. *BMC Public Health*. 2017; 17(1):971.

<http://dx.doi.org/10.1186/s12889-017-4957-5> [open access]

Abstract: BACKGROUND: The factors influencing one's choice to retire vary, with financial and health considerations being some of the main factors impacting or associated with people's timing of retirement. The aim of the study is to investigate the differences in current health and health-related behaviours, such as smoking, drinking and exercising, between people who kept on working beyond state-pension age and those who retired before or at state-pension age. METHODS: Data from six waves (2003, 2008-2012) of the Scottish Health Survey (SHeS) are used. Descriptive analyses were used to characterise the population. Multivariate logistic regression was undertaken to analyse the relationship between retirement groups and gender, age, deprivation, marital status, housing tenure, general health, longstanding illness, cigarette smoking status, amount of exercise and mental health, using Stata. RESULTS: Reporting poor self-rated health or having a long-standing illness was associated with increased odds of retiring before state pension age (SPA) in groups with a medium deprivation profile in almost all the survey years. For the least deprived there was little evidence of an association between poor health and extended-working-life, while significant associations were observed for the most deprived. An increasing trend was observed for both genders in the number of people

extending their working life. Similar associations between reporting poorer self-rated health and extended working lives were observed for men and women. Distinct gender differences were observed for the associations with reporting poor mental health and no exercise. In the adjusted models, both were significantly associated with retiring at or before SPA in almost every year for women, whereas no significant associations were observed (except in 1 year) for men. **CONCLUSIONS:** This study shows an increasing trend in the number of people extending their working lives and demonstrates significant associations between health and lifestyle behaviours and employment status past SPA. The results suggest that good health - both physically and mentally - along with either a need or a want to stay in employment could be important reasons for continuing to work beyond SPA

Macdonald R and Rotermann M. Experimental estimates of cannabis consumption in Canada, 1960 to 2015. *Economic Insights*. 2017; Dec(77):1-8. [Statistics Canada: Catalogue no. 11-626-X - No. 077]
<http://www.statcan.gc.ca/pub/11-626-x/11-626-x2017077-eng.pdf>

Makkar SR, Williamson A, D'Este C, and Redman S. Preliminary testing of the reliability and feasibility of SAGE: a system to measure and score engagement with and use of research in health policies and programs. *Implementation Science*. 2017; 12(1):149.
<http://dx.doi.org/10.1186/s13012-017-0676-7> [open access]

Abstract: **BACKGROUND:** Few measures of research use in health policymaking are available, and the reliability of such measures has yet to be evaluated. A new measure called the Staff Assessment of Engagement with Evidence (SAGE) incorporates an interview that explores policymakers' research use within discrete policy documents and a scoring tool that quantifies the extent of policymakers' research use based on the interview transcript and analysis of the policy document itself. We aimed to conduct a preliminary investigation of the usability, sensitivity, and reliability of the scoring tool in measuring research use by policymakers. **METHODS:** Nine experts in health policy research and two independent coders were recruited. Each expert used the scoring tool to rate a random selection of 20 interview transcripts, and each independent coder rated 60 transcripts. The distribution of scores among experts was examined, and then, interrater reliability was tested within and between the experts and independent coders. Average- and single-measure reliability coefficients were computed for each SAGE subscales. **RESULTS:** Experts' scores ranged from the limited to extensive scoring bracket for all subscales. Experts as a group also exhibited at least a fair level of interrater agreement across all subscales. Single-measure reliability was at least fair except for three subscales: Relevance Appraisal, Conceptual Use, and Instrumental Use. Average- and single-measure reliability among independent coders was good to excellent for all subscales. Finally, reliability between experts and independent coders was fair to excellent for all subscales. **CONCLUSIONS:** Among experts, the scoring tool was

comprehensible, usable, and sensitive to discriminate between documents with varying degrees of research use. Secondly, the scoring tool yielded scores with good reliability among the independent coders. There was greater variability among experts, although as a group, the tool was fairly reliable. The alignment between experts' and independent coders' ratings indicates that the independent coders were scoring in a manner comparable to health policy research experts. If the present findings are replicated in a larger sample, end users (e.g. policy agency staff) could potentially be trained to use SAGE to reliably score research use within their agencies, which would provide a cost-effective and time-efficient approach to utilising this measure in practice

Meyers AR, Al-Tarawneh IS, Wurzelbacher SJ, Bushnell PT, Lampl MP, Bell JL, Bertke SJ, Robins DC, Tseng CY, Wei C, Raudabaugh JA, and Schnorr TM. Applying machine learning to workers' compensation data to identify industry-specific ergonomic and safety prevention priorities: Ohio, 2001 to 2011. Journal of Occupational & Environmental Medicine. 2018; 60(1):55-73. <http://dx.doi.org/10.1097/JOM.0000000000001162>

Abstract: OBJECTIVE: This study leveraged a state workers' compensation claims database and machine learning techniques to target prevention efforts by injury causation and industry. METHODS: Injury causation auto-coding methods were developed to code more than 1.2 million Ohio Bureau of Workers' Compensation claims for this study. Industry groups were ranked for soft-tissue musculoskeletal claims that may have been preventable with biomechanical ergonomic (ERGO) or slip/trip/fall (STF) interventions. RESULTS: On the basis of the average of claim count and rate ranks for more than 200 industry groups, Skilled Nursing Facilities (ERGO) and General Freight Trucking (STF) were the highest risk for lost-time claims (>7 days). CONCLUSION: This study created a third, major causation-specific U.S. occupational injury surveillance system. These findings are being used to focus prevention resources on specific occupational injury types in specific industry groups, especially in Ohio. Other state bureaus or insurers may use similar methods

Michie S, Thomas J, Johnston M, Aonghusa PM, Shawe-Taylor J, Kelly MP, Deleris LA, Finnerty AN, Marques MM, Norris E, O'Mara-Eves A, and West R. The Human Behaviour-Change Project: harnessing the power of artificial intelligence and machine learning for evidence synthesis and interpretation. Implementation Science. 2017; 12(1):121. <http://dx.doi.org/10.1186/s13012-017-0641-5> [open access]

Abstract: BACKGROUND: Behaviour change is key to addressing both the challenges facing human health and wellbeing and to promoting the uptake of research findings in health policy and practice. We need to make better use of the vast amount of accumulating evidence from behaviour change intervention (BCI) evaluations and promote the uptake of that evidence into a wide range of contexts. The scale and complexity of the task of synthesising and interpreting this evidence, and increasing evidence timeliness and accessibility, will require

increased computer support. The Human Behaviour-Change Project (HBCP) will use Artificial Intelligence and Machine Learning to (i) develop and evaluate a 'Knowledge System' that automatically extracts, synthesises and interprets findings from BCI evaluation reports to generate new insights about behaviour change and improve prediction of intervention effectiveness and (ii) allow users, such as practitioners, policy makers and researchers, to easily and efficiently query the system to get answers to variants of the question 'What works, compared with what, how well, with what exposure, with what behaviours (for how long), for whom, in what settings and why?'. METHODS: The HBCP will: a) develop an ontology of BCI evaluations and their reports linking effect sizes for given target behaviours with intervention content and delivery and mechanisms of action, as moderated by exposure, populations and settings; b) develop and train an automated feature extraction system to annotate BCI evaluation reports using this ontology; c) develop and train machine learning and reasoning algorithms to use the annotated BCI evaluation reports to predict effect sizes for particular combinations of behaviours, interventions, populations and settings; d) build user and machine interfaces for interrogating and updating the knowledge base; and e) evaluate all the above in terms of performance and utility. DISCUSSION: The HBCP aims to revolutionise our ability to synthesise, interpret and deliver evidence on behaviour change interventions that is up-to-date and tailored to user need and context. This will enhance the usefulness, and support the implementation of, that evidence

Nexo MA, Cleal B, Hagelund L, Willaing I, and Olesen K. Willingness to pay for flexible working conditions of people with type 2 diabetes: discrete choice experiments. BMC Public Health. 2017; 17(1):938.

<http://dx.doi.org/10.1186/s12889-017-4903-6> [open access]

Abstract: BACKGROUND: The increasing number of people with chronic diseases challenges workforce capacity. Type 2 diabetes (T2D) can have work-related consequences, such as early retirement. Laws of most high-income countries require workplaces to provide accommodations to enable people with chronic disabilities to manage their condition at work. A barrier to successful implementation of such accommodations can be lack of co-workers' willingness to support people with T2D. This study aimed to examine the willingness to pay (WTP) of people with and without T2D for five workplace initiatives that help individuals with type 2 diabetes manage their diabetes at work. METHODS: Three samples with employed Danish participants were drawn from existing online panels: a general population sample (n = 600), a T2D sample (n = 693), and a matched sample of people without diabetes (n = 539). Participants completed discrete choice experiments eliciting their WTP (reduction in monthly salary, euro/month) for five hypothetical workplace initiatives: part-time job, customized work, extra breaks with pay, and time off for medical consultations with and without pay. WTP was estimated by conditional logits models. Bootstrapping was used to estimate confidence intervals for WTP. RESULTS: There was an overall WTP for all initiatives. Average WTP for all attributes was

34 euro/month (95% confidence interval [CI]: 27-43] in the general population sample, 32 euro/month (95% CI: 26-38) in the T2D sample, and 55 euro/month (95% CI: 43-71) in the matched sample. WTP for additional breaks with pay was considerably lower than for the other initiatives in all samples. People with T2D had significantly lower WTP than people without diabetes for part-time work, customized work, and time off without pay, but not for extra breaks or time off with pay. CONCLUSIONS: For people with and without T2D, WTP was present for initiatives that could improve management of diabetes at the workplace. WTP was lowest among people with T2D. Implementation of these initiatives seems feasible and may help unnecessary exclusion of people with T2D from work

O'Connor AM, Tsafnat G, Gilbert SB, Thayer KA, and Wolfe MS. Moving toward the automation of the systematic review process: a summary of discussions at the second meeting of International Collaboration for the Automation of Systematic Reviews (ICASR). *Systematic Reviews*. 2018; 7(1):3.

<http://dx.doi.org/10.1186/s13643-017-0667-4> [open access]

Abstract: The second meeting of the International Collaboration for Automation of Systematic Reviews (ICASR) was held 3-4 October 2016 in Philadelphia, Pennsylvania, USA. ICASR is an interdisciplinary group whose aim is to maximize the use of technology for conducting rapid, accurate, and efficient systematic reviews of scientific evidence. Having automated tools for systematic review should enable more transparent and timely review, maximizing the potential for identifying and translating research findings to practical application. The meeting brought together multiple stakeholder groups including users of summarized research, methodologists who explore production processes and systematic review quality, and technologists such as software developers, statisticians, and vendors. This diversity of participants was intended to ensure effective communication with numerous stakeholders about progress toward automation of systematic reviews and stimulate discussion about potential solutions to identified challenges. The meeting highlighted challenges, both simple and complex, and raised awareness among participants about ongoing efforts by various stakeholders. An outcome of this forum was to identify several short-term projects that participants felt would advance the automation of tasks in the systematic review workflow including (1) fostering better understanding about available tools, (2) developing validated datasets for testing new tools, (3) determining a standard method to facilitate interoperability of tools such as through an application programming interface or API, and (4) establishing criteria to evaluate the quality of tools' output. ICASR 2016 provided a beneficial forum to foster focused discussion about tool development and resources and reconfirm ICASR members' commitment toward systematic reviews' automation

Olsen HM, Brown WJ, Kolbe-Alexander T, and Burton NW. Flexible work: the impact of a new policy on employees' sedentary behavior and physical activity. *Journal of Occupational & Environmental Medicine*. 2018; 60(1):23-

28.

<http://dx.doi.org/10.1097/JOM.0000000000001190>

Abstract: OBJECTIVE: The aim of the study was to assess change in physical activity (PA) and sedentary behavior (SB) in office-based employees after the implementation of a flexible work policy that allowed working at home. METHODS: A total of 24 employees (62% female; 40 +/- 10 years) completed an online questionnaire 4 weeks pre- and 6 weeks post-implementation of the policy. Changes in PA and SB were assessed using Wilcoxon signed rank test. RESULTS: There were no changes in PA after the introduction of the flexible work policy ($Z = -0.29$, $P > 0.05$). Sitting time increased on days the employees worked at home ($Z = -2.02$, $P > 0.05$) and on days they worked at the office ($Z = -4.16$, $P > 0.001$). CONCLUSIONS: A flexible work policy may have had a negative impact on sedentary behavior in this workplace. Future work is needed to explore the potential impact on workplace sitting time

Pedersen P, Nielsen CV, Andersen MH, Langagergaard V, Boes A, Jensen OK, Jensen C, and Labriola M. Comparing multidisciplinary and brief intervention in employees with different job relations on sick leave due to low back pain: protocol of a randomised controlled trial. BMC Public Health. 2017; 17(1):959.

<http://dx.doi.org/10.1186/s12889-017-4975-3> [open access]

Abstract: BACKGROUND: Low back pain (LBP) is a common problem that affects the lives of many individuals and is a frequent cause of sickness absence. To help this group of individuals resume work, several interventions have been studied. However, not all individuals may profit from the same intervention and the effect of a given intervention on return to work (RTW) may depend on their work situation. The aim of this study is to evaluate whether employees on sick leave due to LBP and with poor job relations will benefit more from a multidisciplinary intervention, while patients with strong job relations will benefit more from a brief intervention. METHODS: The study is designed as a randomised controlled trial with up to five years of follow-up comparing brief intervention with brief intervention plus multidisciplinary intervention. Employees, aged 18-60 years, are included in the study from March 2011 to August 2016 if they have been on sick leave for 4-12 weeks due to LBP with or without radiculopathy. They are divided into two groups, a group with poor job relations and a group with strong job relations based on their answers in the baseline questionnaire. Each group is randomised 1:1 to receive the brief intervention or brief intervention plus multidisciplinary intervention. The brief intervention comprises a clinical examination and advice offered by a rheumatologist and a physiotherapist, whereas the supplementary multidisciplinary intervention comprises the assignment of a case manager who draws up a rehabilitation plan in collaboration with the participant and the multidisciplinary team. The primary outcome is duration of sickness absence measured by register data. Secondary outcomes include sustainable RTW and questionnaire-based measures of functional capacity. Outcomes will be assessed at one, two and five years of

follow-up. **DISCUSSION:** This trial will evaluate the effect of brief and multidisciplinary intervention on RTW and functional capacity among employees on sick leave due to LBP with poor or strong job relations. This will indicate whether work-related characteristics should be considered when providing treatment of LBP patients in the health care sector. **TRIAL REGISTRATION:** Current Controlled Trials ISRCTN14136384 . Registered 4 August 2015

Rathbone J, Albarqouni L, Bakhit M, Beller E, Byambasuren O, Hoffmann T, Scott AM, and Glasziou P. Expediting citation screening using PICO-based title-only screening for identifying studies in scoping searches and rapid reviews. *Systematic Reviews*. 2017; 6(1):233.

<http://dx.doi.org/10.1186/s13643-017-0629-x> [open access]

Abstract: **BACKGROUND:** Citation screening for scoping searches and rapid review is time-consuming and inefficient, often requiring days or sometimes months to complete. We examined the reliability of PICO-based title-only screening using keyword searches based on the PICO elements-Participants, Interventions, and Comparators, but not the Outcomes. **METHODS:** A convenience sample of 10 datasets, derived from the literature searches of completed systematic reviews, was used to test PICO-based title-only screening. Search terms for screening were generated from the inclusion criteria of each review, specifically the PICO elements-Participants, Interventions and Comparators. Synonyms for the PICO terms were sought, including alternatives for clinical conditions, trade names of generic drugs and abbreviations for clinical conditions, interventions and comparators. The MeSH database, Wikipedia, Google searches and online thesauri were used to assist generating terms. Title-only screening was performed by five reviewers independently in Endnote X7 reference management software using OR Boolean operator. Outcome measures were recall of included studies and the reduction in screening effort. Recall is the proportion of included studies retrieved using PICO title-only screening out of the total number of included studies in the original reviews. The percentage reduction in screening effort is the proportion of records not needing screening because the method eliminates them from the screen set. **RESULTS:** Across the 10 reviews, the reduction in screening effort ranged from 11 to 78% with a median reduction of 53%. In nine systematic reviews, the recall of included studies was 100%. In one review (oxygen therapy), four of five reviewers missed the same included study (median recall 67%). A post hoc analysis was performed on the dataset with the lowest reduction in screening effort (11%), and it was rescreened using only the intervention and comparator keywords and omitting keywords for participants. The reduction in screening effort increased to 57%, and the recall of included studies was maintained (100%). **CONCLUSIONS:** In this sample of datasets, PICO-based title-only screening was able to expedite citation screening for scoping searches and rapid reviews by reducing the number of citations needed to screen but requires a thorough workup of the potential synonyms and alternative terms. Further research which

evaluates the feasibility of this technique with heterogeneous datasets in different fields would be useful to inform the generalisability of this technique

Smith B, Shatte A, Perlman A, Siers M, and Lynch WD. Improvements in resilience, stress, and somatic symptoms following online resilience training: a dose-response effect. Journal of Occupational & Environmental Medicine. 2018; 60(1):1-5.

<http://dx.doi.org/10.1097/JOM.0000000000001142> [open access]

Abstract: OBJECTIVE: To determine if participation in an online resilience program impacts resilience, stress, and somatic symptoms. METHODS: Approximately 600 enrollees in the meQuilibrium resilience program received a series of brief, individually prescribed video, and text training modules in a user-friendly format. Regression models tested how time in the program affected change in resilience from baseline and how changes in resilience affected change in stress and reported symptoms. RESULTS: A significant dose-response was detected, where increases in the time spent in training corresponded to greater improvements in resilience. Degree of change in resilience predicted the magnitude of reduction in stress and symptoms. Participants with the lowest resilience level at baseline experienced greater improvements. CONCLUSION: Interaction with the online resilience training program had a positive effect on resilience, stress, and symptoms in proportion to the time of use

Spitters HPEM, van Oers JAM, Sandu P, Lau CJ, Quanjel M, Dulf D, Chereches R, and van de Goor LAM. Developing a policy game intervention to enhance collaboration in public health policymaking in three European countries. BMC Public Health. 2017; 17(1):961.

<http://dx.doi.org/10.1186/s12889-017-4963-7> [open access]

Abstract: BACKGROUND: One of the key elements to enhance the uptake of evidence in public health policies is stimulating cross-sector collaboration. An intervention stimulating collaboration is a policy game. The aim of this study was to describe the design and methods of the development process of the policy game 'In2Action' within a real-life setting of public health policymaking networks in the Netherlands, Denmark and Romania. METHODS: The development of the policy game intervention consisted of three phases, pre intervention, designing the game intervention and tailoring the intervention. RESULTS: In2Action was developed as a role-play game of one day, with main focus to develop in collaboration a cross-sector implementation plan based on the approved strategic local public health policy. CONCLUSIONS: This study introduced an innovative intervention for public health policymaking. It described the design and development of the generic frame of the In2Action game focusing on enhancing collaboration in local public health policymaking networks. By keeping the game generic, it became suitable for each of the three country cases with only minor changes. The generic frame of the game is expected to be generalizable for

other European countries to stimulate interaction and collaboration in the policy process

Ullucci PA, Jr., Scott J, and Silverman B. A novel approach to reducing workers compensation costs in a multicenter hospital system. Journal of Occupational & Environmental Medicine. 2018; 60(1):74-76.

<http://dx.doi.org/10.1097/JOM.0000000000001170>

Abstract: OBJECTIVE: To evaluate the efficacy of an injury prevention and monitoring program implemented by athletic trainers to reduce workers compensation costs in a hospital system with multiple centers and locations. METHODS: A retrospective analysis of workers compensation claims (ie, lost days, light days, and incurred costs) was performed to compare injury data from 2 years before to 2 years after the start of the program. RESULTS: The program significantly reduced the organization's incurred costs by 46.7% (P = 0.031) and light days by 44% (P = 0.022). Lost days were found to decrease by 37%, however, this decrease was not statistically significant (P = 0.078). CONCLUSIONS: Athletic trainers, using their knowledge of anatomy, biomechanics, ergonomics, injury management, and rehabilitation, can effectively prevent and reduce workers compensation costs in a multicenter hospital system

Wennerholm C, Bromley C, Johansson A, Nilsson S, Frank J, and Faresjo T. Two tales of cardiovascular risks-middle-aged women living in Sweden and Scotland: a cross-sectional comparative study. BMJ Open. 2017; 7(8):e016527.

<http://dx.doi.org/10.1136/bmjopen-2017-016527> [open access]

Abstract: OBJECTIVES: To compare cardiovascular risk factors as well as rates of cardiovascular diseases in middle-aged women from urban areas in Scotland and Sweden. DESIGN: Comparative cross-sectional study. SETTING: Data from the general population in urban areas of Scotland and the general population in two major Swedish cities in southeast Sweden, south of Stockholm. PARTICIPANTS: Comparable data of middle-aged women (40-65 years) from the Scottish Health Survey (n=6250) and the Swedish QWIN study (n=741) were merged together into a new dataset (n=6991 participants). MAIN OUTCOME MEASURE: We compared middle-aged women in urban areas in Sweden and Scotland regarding risk factors for cardiovascular disease (CVD), CVD diagnosis, anthropometrics, psychological distress and lifestyle. RESULTS: In almost all measurements, there were significant differences between the countries, favouring the Swedish women. Scottish women demonstrated a higher frequency of alcohol consumption, smoking, obesity, low vegetable consumption, a sedentary lifestyle and also more psychological distress. For doctor-diagnosed coronary heart disease, there were also significant differences, with a higher prevalence among the Scottish women. CONCLUSIONS: This is one of the first studies that clearly shows that Scottish middle-aged women are particularly affected by a worse profile of CVD risks. The profound differences in CVD risk and outcome frequency in the two populations are likely to have arisen from

differences in the two groups of women's social, cultural, political and economic environments

*IWH authored publications.