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June 15, 2018

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***Fan JK, Amick III BC, Richardson L, Scott-Marshall H, and McLeod CB. Labor market and health trajectories during periods of economic recession and expansion in the United States, 1988-2011. *Scandinavian Journal of Work, Environment & Health*. 2018; [Epub ahead of print]. <http://dx.doi.org/10.5271/sjweh.3743>**

Abstract: Objectives We examined associations between labor market and health (LM-H) trajectories in the United States between 1988 and 2011 and whether associations differed across macroeconomic expansion/recession periods. Methods Working-age cohorts, derived from the US Panel Study of Income Dynamics, were followed over time to characterize LM-H trajectories. Poisson regression provided relative risks (RR) with robust 95% confidence intervals (CI) for the association between trajectories, adjusting for demographic and socioeconomic variables. Results LM trajectories ending in unemployment (RR 1.72.5 across periods) or inactivity (RR 2.3-3.2) had a greater risk of worsening health trajectories, compared to stable employment. In contrast, RR for individuals returning to work following an intermediary period of unemployment/inactivity were attenuated across most periods. Stable-employed individuals had the highest probability of remaining in good health, whereas trajectories ending in unemployment or inactivity had the lowest probability. These overall relationships were consistent across macroeconomic periods. Conclusions We found strong and consistent relationships between LM-H trajectories across macroeconomic periods. The attenuated (but not eliminated) risk among individuals returning to work following a period of unemployment/inactivity suggests that health outcomes are not only dependent on the LM end-state, but also on the distinct pattern over time

***Shevchenko A, Pagell M, Johnston D, Veltri A, and Robson L. Joint management systems for operations and safety: a routine-based perspective. Journal of Cleaner Production. 2018; 194:635-644.**
<http://dx.doi.org/10.1016/j.jclepro.2018.05.176>

***Stapelfeldt CM, Momsen AH, Lund T, Gronborg TK, Hogg-Johnson S, Jensen C, Skakon J, and Labriola M. Cross-cultural adaptation, reliability and validity of the Danish version of the readiness for return to work instrument. Journal of Occupational Rehabilitation. 2018; [Epub ahead of print].**
<http://dx.doi.org/10.1007/s10926-018-9790-x>

Abstract: The objective of the present study was to translate and validate the Canadian Readiness for Return To Work instrument (RRTW-CA) into a Danish version (RRTWDK) by testing its test-retest and internal consistency reliability and its structural and construct validity. Cross-cultural adaptation of the six-staged RRTW-CA instrument was performed in a standardised, systematic five-step-procedure; forward translation, panel synthesis of the translation, back translation, consolidation and revision by researchers, and finally pre-testing. This RRTW-DK beta-version was tested for its psychometric properties by intra-class correlation coefficient and standard error of measurement (n = 114), Cronbach's alpha (n = 471), confirmatory factor analyses (n = 373), and Spearman's rank correlation coefficient (n = 436) in sickness beneficiaries from a municipal employment agency and hospital wards. The original RRTW-CA stage structure could not be confirmed in the RRTWDK. The psychometric properties were thus inconclusive. The RRTW-DK cannot be recommended for use in the current version as the RRTW construct is questionable. The RRTW construct needs further exploration, preferably in a population that is homogeneous with regard to cause of sickness, disability duration and age

***Tunis SR, Maxwell LJ, Graham ID, Shea BJ, Beaton DE, Bingham CO, III, Brooks P, Conaghan PG, D'Agostino MA, de Wit MP, Gossec L, March LM, Simon LS, Singh JA, Strand V, Wells GA, and Tugwell P. Engaging stakeholders and promoting uptake of OMERACT core outcome instrument sets. Journal of Rheumatology. 2017; 44(10):1551-1559.**
<http://dx.doi.org/10.3899/jrheum.161273>

Abstract: OBJECTIVE: While there has been substantial progress in the development of core outcomes sets, the degree to which these are used by researchers is variable. We convened a special workshop on knowledge translation at the Outcome Measures in Rheumatology (OMERACT) 2016 with 2 main goals. The first focused on the development of a formal knowledge translation framework and the second on promoting uptake of recommended core outcome domain and instrument sets. METHODS: We invited all 189 OMERACT 2016 attendees to the workshop; 86 attended, representing patient research partners (n = 15), healthcare providers/clinician researchers (n = 52), industry (n = 4), regulatory agencies (n = 4), and OMERACT fellows (n = 11).

Participants were given an introduction to knowledge translation and were asked to propose and discuss recommendations for the OMERACT community to (1) strengthen stakeholder involvement in the core outcome instrument set development process, and (2) promote uptake of core outcome sets with a specific focus on the potential role of post-regulatory decision makers. RESULTS: We developed the novel "OMERACT integrated knowledge translation" framework, which formalizes OMERACT's knowledge translation strategies. We produced strategies to improve stakeholder engagement throughout the process of core outcome set development and created a list of creative and innovative ways to promote the uptake of OMERACT's core outcome sets. CONCLUSION: The guidance provided in this paper is preliminary and is based on the views of the participants. Future work will engage OMERACT groups, "post-regulatory decision makers," and a broad range of different stakeholders to identify and evaluate the most useful methods and processes, and to revise guidance accordingly

***Yanar B, Kosny A, and Lifshen M. Perceived role and expectations of health care providers in return to work. Journal of Occupational Rehabilitation. 2018; [Epub ahead of print].**
<http://dx.doi.org/10.1007/s10926-018-9781-y>

Barone Gibbs B, Hergenroeder AL, Perdomo SJ, Kowalsky RJ, Delitto A, and Jakicic JM. Reducing sedentary behaviour to decrease chronic low back pain: the stand back randomised trial. Occupational and Environmental Medicine. 2018; 75(5):321-327.
<http://dx.doi.org/10.1136/oemed-2017-104732>

Abstract: OBJECTIVE: The Stand Back study evaluated the feasibility and effects of a multicomponent intervention targeting reduced prolonged sitting and pain self-management in desk workers with chronic low back pain (LBP). METHODS: This randomised controlled trial recruited 27 individuals with chronic LBP, Oswestry Disability Index (ODI) >10% and desk jobs (sitting \geq 20 hours/week). Participants were randomised within strata of ODI (>10%-<20%, \geq 20%) to receive bimonthly behavioural counselling (in-person and telephone), a sit-stand desk attachment, a wrist-worn activity-prompting device and cognitive behavioural therapy for LBP self-management or control. Self-reported work sitting time, visual analogue scales (VAS) for LBP and the ODI were assessed by monthly, online questionnaires and compared across intervention groups using linear mixed models. RESULTS: Baseline mean (SD) age was 52 (11) years, 78% were women, and ODI was 24.1 (10.5)%. Across the 6-month follow-up in models adjusted for baseline value, work sitting time was 1.5 hour/day ($P<0.001$) lower comparing intervention to controls. Also across follow-up, ODI was on average 8 points lower in intervention versus control ($P=0.001$). At 6 months, the relative decrease in ODI from baseline was 50% in intervention and 14% in control ($P=0.042$). LBP from VAS was not significantly reduced in intervention versus control, though small-to-moderate effect sizes favouring the intervention

were observed (Cohen's d ranged from 0.22 to 0.42). CONCLUSION: An intervention coupling behavioural counselling targeting reduced sedentary behaviour and pain self-management is a translatable treatment strategy that shows promise for treating chronic LBP in desk-bound employees. TRIAL REGISTRATION NUMBER: NCT0224687; Pre-results

Beltagy MS, Pentti J, Vahtera J, and Kivimaki M. Night work and risk of common mental disorders: analyzing observational data as a non-randomized pseudo trial. *Scandinavian Journal of Work, Environment & Health*. 2018; [Epub ahead of print].

<http://dx.doi.org/10.5271/sjweh.3733> [open access]

Abstract: Objectives The aim of this study was to examine the status of night work as a risk factor for common mental disorders (CMD). Methods A cohort study with three data waves was conducted on populations of social and healthcare employees for a duration of eight years (total N=46 010). Data were analyzed as a non-randomized pseudo trial to examine (i) whether moving from non-night work to night work is associated with the development of CMD, (ii) the extent to which moving back to non-night work biases this association and (iii) whether moving from night to non-night work is associated with the recovery from CMD. Results According to logistic regression with generalized estimating equation and without bias-correction, changing to night work was not associated with the odds of acquiring CMD [odds ratio (OR) 1.03, 95% confidence interval (CI) 0.82-1.30]. However, night workers with CMD had higher odds of recovery from CMD when changing to non-night work compared to continuing night work (1.99, 95% CI 1.20-3.28). When night workers developed CMD, the odds of moving back to non-night work increased by 68%. In analyses corrected for this bias, changing from non-night to night work was associated with a 1.25-fold (95% CI 1.03-1.52) increased odds of acquiring CMD. Conclusions A change from non-night to night work may increase the risk of CMD, while moving back from night to non-night work increased recovery from CMD

Borgh M, Eek F, Wagman P, and Hakansson C. Organisational factors and occupational balance in working parents in Sweden. *Scandinavian Journal of Public Health*. 2018; 46(3):409-416.

<http://dx.doi.org/10.1177/1403494817713650> [open access]

Abstract: BACKGROUND: Parents with small children constitute a vulnerable group as they have an increased risk of sick leave due to stress-related disorders compared to adults without children. It has been shown that mothers and fathers to small children together spend more time in paid work than any other group, which could create negative stress and an experience of low occupational balance. AIM: The aim of this study was to examine associations between organisational factors and occupational balance among parents with small children in Sweden. METHODS: Data were collected by a survey including questions about occupational balance, organisational factors and age, sex, employment rate, work position, monthly household income, number of children

at home, separation/divorce last five years and overtime. The total number of parents included in this study was 718 (490 mothers and 228 fathers). Logistic regression models were applied to examine the odds ratios for occupational balance in relation to organisational factors. RESULTS: Parents who experienced positive attitudes towards parenthood and parental leave among colleagues and managers were more likely to experience high occupational balance than parents who experienced negative or neutral attitudes. Having a clear structure for handover when absent from work was also strongly associated with high occupational balance. CONCLUSIONS: The result of the present study indicates that some organisational factors could be important for the occupational balance of parents with small children

Bourbonniere AM and Mann DR. Benefit duration and return to work outcomes in short term disability insurance programs: evidence from temporary disability insurance program. Journal of Occupational Rehabilitation. 2018; [Epub ahead of print].

<http://dx.doi.org/10.1007/s10926-018-9779-5>

Abstract: Purpose The Workforce Innovation and Opportunity Act strengthens the vocational rehabilitation program's focus on providing early intervention services to keep workers with disabilities in the workforce. At the same time, some have suggested that short-term disability insurance (STDI) programs may hold promise as an early intervention service, helping people with disabilities stay in the labor force and avoid needing longer-term benefits. Rhode Island is one of five states with a mandatory STDI program. We examine the extent to which Rhode Island STDI claimant characteristics are correlated with partial return-to-work (PRTW) benefit receipt and certain STDI benefit receipt duration measures. Methods Our study used administrative data from 2011 to 2014 to explore Rhode Island's STDI program-called the Temporary Disability Insurance program-and regression analysis to estimate the correlations of interest. Results Regression adjusted estimates revealed that claimants opting to receive PRTW benefits earned more and received benefits for fewer weeks than claimants opting to not receive PRTW benefits. We also observed significant correlations between duration of benefit receipt and claimant characteristics such as diagnosis and treating healthcare provider specialty. Conclusions Findings suggest that STDI claimants with certain characteristics are more likely to receive benefits for a long duration or not receive PRTW benefits, signaling that they might benefit from early Vocational Rehabilitation supports and services that would allow them to remain productive members of the workforce and avoid long term benefit receipt

Brennan-Olsen SL, Solovieva S, Viikari-Juntura E, Ackerman IN, Bowe SJ, Kowal P, Naidoo N, Chatterji S, Wluka AE, Leech MT, Page RS, Sanders KM, Gomez F, Duque G, Green D, and Mohebbi M. Arthritis diagnosis and symptoms are positively associated with specific physical job exposures in lower- and middle-income countries: cross-sectional results from the

World Health Organization's Study on global AGEing and adult health (SAGE). BMC Public Health. 2018; 18(1):719.

<http://dx.doi.org/10.1186/s12889-018-5631-2> [open access]

Abstract: BACKGROUND: In higher income countries, work-related squatting and heavy lifting have been associated with increased arthritis risk. Here, we address the paucity of data regarding associations between arthritis and work-related physical stressors in lower- and middle-income countries. METHODS: Data were extracted from the Study on global AGEing and adult health (SAGE) Wave 1 (2007-10) for adults (aged ≥ 50 years) from Ghana, India, Russia and South Africa for whom detailed occupation data was available ($n = 21,389$; 49.2% women). Arthritis cases were identified using a symptom-defined algorithm (current) and self-reported doctor-diagnosis (lifetime). A sex-specific Job Exposure Matrix was used to classify work-related stressors: heavy physical work, kneeling/squatting, heavy lifting, arm elevation and awkward trunk posture. Using the International Standard Classification of Occupations, we linked SAGE and the Job Exposure Matrix. Logistic regression was used to investigate associations between arthritis and work-related stressors, adjusting for age (10 year age groupings), potential socioeconomic-related confounders, and body mass index. Excess exposure risk due to two-way interactions with other risk factors were explored. RESULTS: Doctor-diagnosed arthritis was associated with heavy physical work (adjusted odds ratios [OR] 1.12, 95%CI 1.01-1.23), awkward trunk posture (adjusted OR 1.23, 95%CI 1.12-1.36), kneeling or squatting (adjusted OR 1.25, 95%CI 1.12-1.38), and arm elevation (adjusted OR 1.66, 95%CI 1.37-2.00). Symptom-based arthritis was associated with kneeling or squatting (adjusted OR 1.27, 95%CI 1.08-1.50), heavy lifting (adjusted OR 1.33, 95%CI 1.11-1.58), and arm elevation (adjusted OR 2.16, 95%CI 1.63-2.86). Two-way interactions suggested excess arthritis risk existed for higher body mass index, and higher income or education. CONCLUSIONS: Minimization of occupational health risk factors is common practice in higher income countries: attention should now be directed toward reducing work-related arthritis burden in lower- and middle-income countries

Buscariolli A, Kouvonen A, Kokkinen L, Halonen JI, Koskinen A, and Vaananen A. Human service work, gender and antidepressant use: a nationwide register-based 19-year follow-up of 752 683 women and men. Occupational and Environmental Medicine. 2018; 75(6):401-406.

<http://dx.doi.org/10.1136/oemed-2017-104803>

Abstract: OBJECTIVES: To examine antidepressant use among male and female human service professionals. METHODS: A random sample of individuals between 25 years and 54 years of age ($n=752\ 683$; 49.2% women; mean age 39.5 years). Information about each individual's filled antidepressant prescriptions from 1995 to 2014 was provided by the Social Insurance Institution. First, antidepressant use in five broad human service categories was compared with that in all other occupations grouped together, separately for men and women. Then, each of the 15 human service professions were compared with all

other occupations from the same skill/education level (excluding other human services professions). Cox models were applied and the results are presented as HRs for antidepressant use with 95% CIs. RESULTS: The hazard of antidepressant use was higher among men working in human service versus all other occupations with the same skill/occupational level (1.22, 95% CI 1.18 to 1.27), but this was not the case for women (0.99, 95% CI 0.98 to 1.01). The risks differed between professions: male health and social care professionals (including medical doctors, nurses, practical nurses and home care assistants), social workers, childcare workers, teachers and psychologists had a higher risk of antidepressant use than men in non-human service occupations, whereas customer clerks had a lower risk. CONCLUSIONS: Male human service professionals had a higher risk of antidepressant use than men working in non-human service occupations. Gendered sociocultural norms and values related to specific occupations as well as occupational selection may be the cause of the elevated risk

Carroll P, Witten K, Calder-Dawe O, Smith M, Kearns R, Asiasiga L, Lin J, Kayes N, and Mavoia S. Enabling participation for disabled young people: study protocol. BMC Public Health. 2018; 18(1):712.

<http://dx.doi.org/10.1186/s12889-018-5652-x> [open access]

Abstract: BACKGROUND: Participation in community life is vital for health and wellbeing, promoting a sense of belonging, networks of social support and opportunities for physical activity. Disabled young people have lower levels of mobility and participation in recreational activities (physical, social and cultural), education and employment, than their peers without disabilities. This has implications for their health and wellbeing and life course opportunities. Previous research on the participation levels of disabled young people has primarily relied on parent/caregiver reports and been oriented to home and school environments. This study investigates how physical and social environmental factors cohere to support or restrict the everyday mobility and participation of disabled young people. METHODS/DESIGN: The study is located in Auckland, Aotearoa/New Zealand (NZ). Participants comprise 35 young people aged 12-25 years with mobility, vision or hearing impairments. A mixed-methods research design combines objective (global positioning systems, accelerometers, geographical information systems) and self-report measures (travel diaries, and questionnaires) to assess young people's mobility and levels of participation in leisure/educational and employment activities with in-depth interviews exploring their everyday experiences of inclusion/exclusion, and factors enabling or constraining community participation. Parents/caregivers and disability sector key informant viewpoints on the community participation of disabled young people have also been gathered through in-depth interviews. Follow-up workshops with young people and parents/caregivers will identify pathways to increase participation and challenge current disabling practices. DISCUSSION: This study looks beyond barriers in the physical environment to the interplay of personal, social and physical factors that enable or constrain the community participation of

disabled young people. In keeping with the study's overarching goal of increasing opportunities for effective community participation and full citizenship of disabled young people, research methods were applied flexibly - negotiated and adapted to maximise each young person's participation in light of their abilities and preferences

Farrants K, Marklund S, Kjeldgard L, Head J, and Alexanderson K. Sick leave among people in paid work after age 65: a Swedish population-based study covering 1995, 2000, 2005 and 2010. *Scandinavian Journal of Public Health*. 2018; 46(3):297-305.

<http://dx.doi.org/10.1177/1403494817731487> [open access]

Abstract: AIMS: Extending working life into older age groups is discussed in many countries. However, there is no knowledge about how this affects rates of sick leave. The aim of this work was to investigate rates of sick leave among people in paid work after retirement age and if such rates have changed over time. METHODS: Swedish nationwide register data on people aged >65 years and living in Sweden in 1995, 2000, 2005 and 2010 were analysed. All people with a sufficiently high work income to be eligible for public sick leave benefits were included. The proportions in paid work and compensated rates of sick leave for people aged 66-70 and ≥ 71 were analysed by sex, educational level, country of birth, living area, and employment type and sector. RESULTS: The percentage of people in paid work at ages 66-70 years increased from <10% in 1995 to 24% in 2010 and among those aged ≥ 71 years from 2.7% in 1995 to 3.5% in 2010. The rates of sick leave among working people aged 66-70 years were 3.3% in 1995 and 2.4% in 2010 and for people aged ≥ 71 years the rates of sick leave were 2.2% in 1995 and 0.2% in 2010. Women had higher rates of sick leave than men in 2005 and 2010, but lower in 1995 and 2000. In 2010, the rates of sick leave were similar between employees and the self-employed, and higher among employees in the public sector than among employees in the private sector. CONCLUSIONS: Rates of sick leave among workers aged >65 years were lower in 2010 than in 1995, despite much higher rates of labour market participation in 2010

Fosse E, Helgesen MK, Hagen S, and Torp S. Addressing the social determinants of health at the local level: opportunities and challenges. *Scandinavian Journal of Public Health*. 2018; 46(20_suppl):47-52.

<http://dx.doi.org/10.1177/1403494817743896>

Abstract: AIMS: The gradient in health inequalities reflects a relationship between health and social circumstance, demonstrating that health worsens as you move down the socio-economic scale. For more than a decade, the Norwegian National government has developed policies to reduce social inequalities in health by levelling the social gradient. The adoption of the Public Health Act in 2012 was a further movement towards a comprehensive policy. The main aim of the act is to reduce social health inequalities by adopting a Health in All Policies approach. The municipalities are regarded key in the implementation of the act.

The SODEMIFA project aimed to study the development of the new public health policy, with a particular emphasis on its implementation in municipalities. **METHODS:** In the SODEMIFA project, a mixed-methods approach was applied, and the data consisted of surveys as well as qualitative interviews. The informants were policymakers at the national and local level. **RESULTS:** Our findings indicate that the municipalities had a rather vague understanding of the concept of health inequalities, and even more so, the concept of the social gradient in health. The most common understanding was that policy to reduce social inequalities concerned disadvantaged groups. Accordingly, policies and measures would be directed at these groups, rather than addressing the social gradient. **CONCLUSIONS:** A movement towards an increased understanding and adoption of the new, comprehensive public health policy was observed. However, to continue this process, both local and national levels must stay committed to the principles of the act

Hansen AK, Madsen IEH, Thorsen SV, Melkevik O, Bjorner JB, Andersen I, and Rugulies R. Does workplace social capital protect against long-term sickness absence? Linking workplace aggregated social capital to sickness absence registry data. Scandinavian Journal of Public Health. 2018; 46(3):290-296.

<http://dx.doi.org/10.1177/1403494817721672> [open access]

Abstract: AIMS: Most previous prospective studies have examined workplace social capital as a resource of the individual. However, literature suggests that social capital is a collective good. In the present study we examined whether a high level of workplace aggregated social capital (WASC) predicts a decreased risk of individual-level long-term sickness absence (LTSA) in Danish private sector employees. **METHODS:** A sample of 2043 employees (aged 18-64 years, 38.5% women) from 260 Danish private-sector companies filled in a questionnaire on workplace social capital and covariates. WASC was calculated by assigning the company-averaged social capital score to all employees of each company. We derived LTSA, defined as sickness absence of more than three weeks, from a national register. We examined if WASC predicted employee LTSA using multilevel survival analyses, while excluding participants with LTSA in the three months preceding baseline. **RESULTS:** We found no statistically significant association in any of the analyses. The hazard ratio for LTSA in the fully adjusted model was 0.93 (95% CI 0.77-1.13) per one standard deviation increase in WASC. When using WASC as a categorical exposure we found a statistically non-significant tendency towards a decreased risk of LTSA in employees with medium WASC (fully adjusted model: HR 0.78 (95% CI 0.48-1.27)). Post hoc analyses with workplace social capital as a resource of the individual showed similar results. **CONCLUSIONS:** WASC did not predict LTSA in this sample of Danish private-sector employees

Johnsen TL, Eriksen HR, Indahl A, and Tveito TH. Directive and nondirective social support in the workplace: is this social support

distinction important for subjective health complaints, job satisfaction, and perception of job demands and job control? *Scandinavian Journal of Public Health*. 2018; 46(3):358-367.

<http://dx.doi.org/10.1177/1403494817726617> [open access]

Abstract: AIMS: Social support is associated with well-being and positive health outcomes. However, positive outcomes of social support might be more dependent on the way support is provided than the amount of support received. A distinction can be made between directive social support, where the provider resumes responsibility, and nondirective social support, where the receiver has the control. This study examined the relationship between directive and nondirective social support, and subjective health complaints, job satisfaction and perception of job demands and job control. **METHODS:** A survey was conducted among 957 Norwegian employees, working in 114 private kindergartens (mean age 40.7 years, SD = 10.5, 92.8% female), as part of a randomized controlled trial. This study used only baseline data. A factor analysis of the Norwegian version of the Social Support Inventory was conducted, identifying two factors: nondirective and directive social support. Hierarchical regression analyses were then performed. **RESULTS:** Nondirective social support was related to fewer musculoskeletal and pseudoneurological complaints, higher job satisfaction, and the perception of lower job demands and higher job control. Directive social support had the opposite relationship, but was not statistically significant for pseudoneurological complaints. **CONCLUSIONS:** It appears that for social support to be positively related with job characteristics and subjective health complaints, it has to be nondirective. Directive social support was not only without any association, but had a significant negative relationship with several of the variables. Nondirective social support may be an important factor to consider when aiming to improve the psychosocial work environment. **TRIAL REGISTRATION:** Clinicaltrials.gov: NCT02396797. Registered 23 March 2015

Salonen L, Blomgren J, Laaksonen M, and Niemela M. Sickness absence as a predictor of disability retirement in different occupational classes: a register-based study of a working-age cohort in Finland in 2007-2014. *BMJ Open*. 2018; 8(5):e020491.

<http://dx.doi.org/10.1136/bmjopen-2017-020491> [open access]

Abstract: **OBJECTIVES:** The objective of the study was to examine diagnosis-specific sickness absences of different lengths as predictors of disability retirement in different occupational classes. **DESIGN:** Register-based prospective cohort study up to 8 years of follow-up. **PARTICIPANTS:** A 70% random sample of the non-retired Finnish population aged 25-62 at the end of 2006 was included (n=1 727 644) and linked to data on sickness absences in 2005 and data on disability retirement in 2007-2014. **MAIN OUTCOME MEASURES:** Cox proportional hazards regression was utilised to analyse the association of sickness absence with the risk of all-cause disability retirement during an 8-year follow-up. **RESULTS:** The risk of disability retirement increased with increasing lengths of sickness absence in all occupational classes. A long

sickness absence was a particularly strong predictor of disability retirement in upper non-manual employees as among those with over 180 sickness absence days the HR was 9.19 (95% CI 7.40 to 11.40), but in manual employees the HR was 3.51 (95% CI 3.23 to 3.81) in men. Among women, the corresponding HRs were 7.26 (95% CI 6.16 to 8.57) and 3.94 (95% CI 3.60 to 4.30), respectively. Adjusting for the diagnosis of sickness absence partly attenuated the association between the length of sickness absence and the risk of disability retirement in all employed groups. **CONCLUSIONS:** A long sickness absence is a strong predictor of disability retirement in all occupational classes. Preventing the accumulation of sickness absence days and designing more efficient policies for different occupational classes may be crucial to reduce the number of transitions to early retirement due to disability

Sewdas R, van der Beek AJ, de Wind A, van der Zwaan LGL, and Boot CRL. Determinants of working until retirement compared to a transition to early retirement among older workers with and without chronic diseases: results from a Dutch prospective cohort study. *Scandinavian Journal of Public Health*. 2018; 46(3):400-408.

<http://dx.doi.org/10.1177/1403494817735223> [open access]

Abstract: AIM: The ageing society and recent policy changes may lead to an increase of older workers with chronic diseases in the workforce. To date, it is unclear whether workers with chronic diseases have specific needs while employed. The aim of this study is to explore the differences in determinants of working until retirement compared to a reference group who have transitioned to early retirement among workers with and without chronic diseases. **METHODS:** Dutch workers aged 57-62 years (n = 2445) were selected from an existing prospective cohort study, 'STREAM'. The potential determinants were categorized into: individual, health, work-related and social factors. Logistic regression analyses were performed to determine the associations between these determinants and working until retirement - once for workers with and once for those without chronic diseases. To test differences, we included an interaction term between the determinant and the covariate 'having a chronic disease yes/no' in the analyses of the total population. **RESULTS:** In total, 1652 (68%) persons were employed from 2011 to 2013. The majority of the determinants appeared to be similar for workers with or without a chronic disease; the interaction terms for these determinants and the covariate 'having a chronic disease' showed a p-value higher than 0.05, except for one individual factor (i.e. mastery) and one work-related factor (i.e. autonomy), which showed a p-value below 0.05. Higher mastery and higher autonomy were statistically significantly associated with working until retirement for those with chronic diseases, whereas they were not for those without chronic diseases. **CONCLUSIONS:** Differences between workers with and without chronic diseases may exist for working until a statutory retirement age. Interventions aimed at encouraging work participation of older workers should make a distinction between the two groups. Autonomy at

work and mastery were found to be factors that may promote work participation until higher age, specifically for older workers with chronic diseases

*IWH authored publications.