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Birdsey J and Sussell AL. Prevalence of obesity, no leisure-time physical activity, and short sleep duration among occupational groups in 29 states. *Journal of Occupational & Environmental Medicine*. 2017; 59(12):1221-1228. <http://dx.doi.org/10.1097/JOM.0000000000001165>

Abstract: OBJECTIVE: The aim of this study was to examine prevalence of obesity (body mass index of 30 or higher), no leisure-time physical activity in the past 30 days (no LTPA), and short sleep duration (averaging less than 7 hours of sleep per 24-hour period) among 22 occupational groups. METHODS: We analyzed 2013 and 2014 Behavioral Risk Factor Surveillance System (BRFSS) data from 29 states, controlling for sex, age, race/ethnicity, and education. RESULTS: By occupation, prevalence ranged from 16.1% to 35.8% for obesity, 11.3% to 28.7% for no LTPA, and 31.4% to 42.9% for short sleep. Only Transportation & Material Moving ranked among the top five occupations for all three risk factors. Obesity and no LTPA varied significantly by sex for several occupations. CONCLUSION: Prevalence of obesity, no LTPA, and short sleep varied by occupation and affected more than one in five U.S. workers

Contreary K, Honeycutt T, Bailey MS, and Mastrianni J. Employment patterns before applying for disability insurance. *Social Security Bulletin*. 2017; 77(4):1-26.

<https://www.ssa.gov/policy/docs/ssb/v77n4/v77n4p1.html>

Finnes A, Enebrink P, Sampaio F, Sorjonen K, Dahl J, Ghaderi A, Nager A, and Feldman I. Cost-effectiveness of acceptance and commitment therapy and a workplace intervention for employees on sickness absence due to mental disorders. *Journal of Occupational & Environmental Medicine*. 2017;

59(12):1211-1220.

<http://dx.doi.org/10.1097/JOM.0000000000001156>

Abstract: OBJECTIVE: The aim of this study was to evaluate cost-effectiveness of Acceptance and Commitment Therapy (ACT) and workplace dialogue intervention (WDI), both as stand-alone interventions and in combination, compared with treatment as usual (TAU), for employees on sickness absence with mental disorders. METHODS: Employees (n = 352, 78.4% females) on sickness absence were randomized to one of four groups. Cost-utility analyses were conducted from a health care perspective and a limited societal perspective. RESULTS: All groups reported significant improvements in health-related quality-of-life (HRQoL) and there were no significant differences in HRQoL or costs between groups. The probability of cost-effectiveness for ACT+WDI was 50% compared with ACT, indicating that both treatment alternatives could be considered equally favorable for decision-makers. TAU and WDI were rejected due to less economic efficiency. CONCLUSION: Adding WDI to ACT cannot be recommended on the basis of our study results

Gaspar FW, Kownacki R, Zaidel CS, Conlon CF, and Hegmann KT. Reducing disability durations and medical costs for patients with a carpal tunnel release surgery through the use of opioid prescribing guidelines. Journal of Occupational & Environmental Medicine. 2017; 59(12):1180-1187. <http://dx.doi.org/10.1097/JOM.0000000000001168> [open access]

Abstract: OBJECTIVE: The impacts of compliance with opioid prescribing guidelines on disability durations and medical costs for carpal tunnel release (CTR) were examined. METHODS: Using a dataset of insured US employees, opioid prescriptions for 7840 short-term disability cases with a CTR procedure were identified. Opioids prescriptions were compared with the American College of Occupational and Environmental Medicine (ACOEM)'s opioid prescribing guidelines for postoperative, acute pain, which recommends no more than a 5-day supply, a maximum morphine equivalent dose of 50 mg/day, and only short-acting opioids. RESULTS: Most cases (70%) were prescribed an opioid and 29% were prescribed an opioid contrary to ACOEM's guidelines. Cases prescribed an opioid contrary to guidelines had disability durations 1.9 days longer and medical costs \$422 higher than cases prescribed an opioid according to guidelines. CONCLUSIONS: The use of opioid prescribing guidelines may reduce CTR disability durations and medical costs

Gomes T, Duesburry J, Theriault ME, Bain D, Singh S, Martins D, and Juurlink DN. Impact of a graduated approach on opioid initiation and loss of earnings following workplace injury: a time series analysis. Journal of Occupational & Environmental Medicine. 2017; 59(12):1197-1201. <http://dx.doi.org/10.1097/JOM.0000000000001187> [open access]

Abstract: OBJECTIVE: The aim of this study was to explore the impact of the Ontario Workplace Safety and Insurance Board's (WSIB's) graduated approach to opioid management on opioid prescribing and disability claim duration.

METHODS: We studied patterns of opioid use and disability claim duration among Ontarians who received benefits through the WSIB between 2002 and 2013. We used interventional time series analysis to assess the impact of the WSIB graduated formulary on these trends. **RESULTS:** After the introduction of the graduated formulary, initiation of short- and long-acting opioids fell significantly ($P < 0.0001$). We also observed a shift toward the use of short-acting opioids alone ($P < 0.0001$). Although disability claim duration declined, this could not be ascribed to the intervention ($P = 0.18$). **CONCLUSION:** A graduated opioid formulary may be an effective tool for providers to promote more appropriate opioid prescribing

Kluve J, Puerto S, Robalino D, Romero JM, Rother F, Stoeterau J, Weidenkaff F, and Witte M. Interventions to improve labour market outcomes of youth: a systematic review of training, entrepreneurship promotion, employment services, and subsidized employment interventions. Campbell Systematic Reviews. 2017; 12.
<http://dx.doi.org/10.4073/csr.2017.12> [open access]

Leineweber C, Bernhard-Oettel C, Peristera P, Eib C, Nyberg A, and Westerlund H. Interactional justice at work is related to sickness absence: a study using repeated measures in the Swedish working population. BMC Public Health. 2017; 17(1):912.

<http://dx.doi.org/10.1186/s12889-017-4899-y> [open access]

Abstract: **BACKGROUND:** Research has shown that perceived unfairness contributes to higher rates of sickness absence. While shorter, but more frequent periods of sickness absence might be a possibility for the individual to get relief from high strain, long-term sickness absence might be a sign of more serious health problems. The Uncertainty Management Model suggests that justice is particularly important in times of uncertainty, e.g. perceived job insecurity. The present study investigated the association between interpersonal and informational justice at work with long and frequent sickness absence respectively, under conditions of job insecurity. **METHODS:** Data were derived from the 2010, 2012, and 2014 biennial waves of the Swedish Longitudinal Occupational Survey of Health (SLOSH). The final analytic sample consisted of 19,493 individuals. We applied repeated measures regression analyses through generalized estimating equations (GEE), a method for longitudinal data that simultaneously analyses variables at different time points. We calculated risk of long and frequent sickness absence, respectively in relation to interpersonal and informational justice taking perceptions of job insecurity into account. **RESULTS:** We found informational and interpersonal justice to be associated with risk of long and frequent sickness absence independently of job insecurity and demographic variables. Results from autoregressive GEE provided some support for a causal relationship between justice perceptions and sickness absence. Contrary to expectations, we found no interaction between justice and job insecurity. **CONCLUSIONS:** Our results underline the need for fair and just

treatment of employees irrespective of perceived job insecurity in order to keep the workforce healthy and to minimize lost work days due to sickness absence

Mailey EL, Rosenkranz SK, Ablah E, Swank A, and Casey K. Effects of an intervention to reduce sitting at work on arousal, fatigue, and mood among sedentary female employees: a parallel-group randomized trial. Journal of Occupational & Environmental Medicine. 2017; 59(12):1166-1171.

<http://dx.doi.org/10.1097/JOM.0000000000001131>

Abstract: OBJECTIVE: The aim of this study was to determine whether individuals who participated in an intervention to reduce sitting at work would report changes in arousal, fatigue, and mood. METHODS: Inactive females with full-time sedentary occupations (N = 49) were randomly assigned to take short, frequent breaks (SBs) or longer, planned breaks (LBs) from sitting each workday for 8 weeks. At baseline and postintervention, participants completed measures of arousal, fatigue, and mood. Within- and between-group changes were examined. RESULTS: SB participants reduced sitting and reported moderate to large improvements in all affective outcomes except calmness (d = -0.44 to -0.82), whereas effect sizes were small for the LB group (d = 0.01 to -0.28). Only changes in negative affect differed between groups (P = 0.045). CONCLUSION: This study suggests that taking short, frequent breaks from sitting may be an effective strategy for improving affective outcomes among sedentary female employees

Meursinge Reynders R, Ladu L, and Di GN. Contacting of authors by systematic reviewers: protocol for a cross-sectional study and a survey. Systematic Reviews. 2017; 6(1):249.

<http://dx.doi.org/10.1186/s13643-017-0643-z> [open access]

Abstract: BACKGROUND: Synthesizing outcomes of underreported primary studies can pose a serious threat to the validity of outcomes and conclusions of systematic reviews. To address this problem, the Cochrane Collaboration recommends reviewers to contact authors of eligible primary studies to obtain additional information on poorly reported items. In this protocol, we present a cross-sectional study and a survey to assess (1) how reviewers of new Cochrane intervention reviews report on procedures and outcomes of contacting of authors of primary studies to obtain additional data, (2) how authors reply, and (3) the consequences of these additional data on the outcomes and quality scores in the review. All research questions and methods were pilot tested on 2 months of Cochrane reviews and were subsequently fine-tuned. METHODS FOR THE CROSS-SECTIONAL STUDY: Eligibility criteria are (1) all new (not-updates) Cochrane intervention reviews published in 2016, (2) reviews that included one or more primary studies, and (3) eligible interventions refer to contacting of authors of the eligible primary studies included in the review to obtain additional research data (e.g., information on unreported or missing data, individual patient data, research methods, and bias issues). Searching for eligible reviews and data extraction will be conducted by two authors independently. The cross-

sectional study will primarily focus on how contacting of authors is conducted and reported, how contacted authors reply, and how reviewers report on obtained additional data and their consequences for the review. **METHODS FOR THE SURVEY:** The same eligible reviews for the cross-sectional study will also be eligible for the survey. Surveys will be sent to the contact addresses of these reviews according to a pre-defined protocol. We will use Google Forms as our survey platform. Surveyees are asked to answer eight questions. The survey will primarily focus on the consequences of contacting authors of eligible primary studies for the risk of bias and Grading of Recommendations, Assessment, Development and Evaluation scores and the primary and secondary outcomes of the review. **DISCUSSION:** The findings of this study could help improve methods of contacting authors and reporting of these procedures and their outcomes. Patients, clinicians, researchers, guideline developers, research sponsors, and the general public will all be beneficiaries

Michishita R, Jiang Y, Ariyoshi D, Yoshida M, Moriyama H, Obata Y, Nagata M, Nagata T, Mori K, and Yamato H. The introduction of an active rest program by workplace units improved the workplace vigor and presenteeism among workers: a randomized controlled trial. Journal of Occupational & Environmental Medicine. 2017; 59(12):1140-1147.

<http://dx.doi.org/10.1097/JOM.0000000000001121>

Abstract: **OBJECTIVE:** The present study was designed to examine the effects of active rest by workplace units on not only workers' individual vigor but also workplace vigor and presenteeism. **METHODS:** A total of 130 workers performed our active rest (short-time exercise) program for 10 minutes per day during their lunch breaks, three to four times per week for 8 weeks. Subjects from a workplace unit were randomly allocated to the intervention (n = 66) or control (n = 64) groups. The participants' work engagement and Work Functioning Impairment Scale (WFun) were examined at the baseline and after the 8-week intervention period. **RESULTS:** After 8 weeks, the intervention group showed improved "vigor" values in work engagement and WFun (P < 0.05). **CONCLUSION:** These results suggest that the introduction of active rest program by workplace units provides a viable means for improving workplace vigor and presenteeism

Nea FM, Pourshahidi LK, Kearney J, Livingstone MBE, Bassul C, and Corish CA. A qualitative exploration of the shift work experience: the perceived barriers and facilitators to a healthier lifestyle and the role of the workplace environment. Journal of Occupational & Environmental Medicine. 2017; 59(12):1153-1160.

<http://dx.doi.org/10.1097/JOM.0000000000001126>

Abstract: **OBJECTIVES:** The study aimed to understand lifestyle practices among shift workers, including an exploration of workers' perceptions of their workplace environment (WPE). **METHODS:** Fifteen focus groups (FGs) were conducted by two researchers, with a total of 109 participants. A pilot FG was

carried out with both researchers present, to ensure consistency in facilitation. To ensure quality control, both researchers analyzed all data collected. RESULTS: Two overarching themes were observed: barriers to leading a healthier lifestyle, and facilitators to leading a healthier lifestyle. The influence of WPE was central to both themes. CONCLUSION: Investing in employee health is beneficial, particularly among shift workers, who are at an increased health risk. Adopting organizational policies and environmental changes as a core strategy for workplace health promotion may create an environment that makes healthier choices more accessible to all employees

Prakash KC, Neupane S, Leino-Arjas P, von Bonsdorff MB, Rantanen T, von Bonsdorff ME, Seitsamo J, Ilmarinen J, and Nygard CH. Work-related biomechanical exposure and job strain as separate and joint predictors of musculoskeletal diseases: a 28-year prospective follow-up study. American Journal of Epidemiology. 2017; 186(11):1256-1267.

<http://dx.doi.org/10.1093/aje/kwx189>

Abstract: We investigated how work-related biomechanical exposure and job strain in midlife separately and jointly predicted back and degenerative musculoskeletal diseases (MSDs). A total of 6,257 employees participated in the Finnish Longitudinal Study on Aging Municipal Employees (FLAME) in 1981 and were followed up for 28 years. Risk ratios and the relative excessive risk due to interaction and 95% confidence intervals were modeled for separate and joint prediction estimates, respectively. After adjustment for confounders, job strain predicted degenerative MSDs among women after 4 and 11 years of follow-up. After 11 years, both exposures predicted both types of MSDs among men. Joint exposure predicted both types of MSDs after 4 years among women (for back MSDs, risk ratio (RR) = 1.58, 95% confidence interval (CI): 1.15, 2.18; for degenerative MSDs, RR = 1.59, 95% CI: 1.21, 2.07) and men (for back MSDs, RR = 1.50, 95% CI: 1.05, 2.15; for degenerative MSDs, RR = 1.61, 95% CI: 1.16, 2.22) and both types of MSDs after 11 years (for back MSDs, RR = 1.72, 95% CI: 1.21, 2.43; for degenerative MSDs, RR = 1.68, 95% CI: 1.25, 2.46) among men only, but the relative excessive risk due to interaction was not significant throughout. However, after 28 years, the separate and joint exposures did not predict MSDs. Workplace interventions should be focused on reducing job strain along with biomechanical exposure for possible prevention of MSDs in working life and around the time of retirement, but there may be other pathways of onset of MSDs in old age

Salzmann-Erikson M. Work life and family life collide: online support for new fathers. Workplace Safety and Health. 2017; 65(6):248-252.

<http://dx.doi.org/10.1177/2165079916666546>

Abstract: The purpose of this investigation was to analyze online discussions about parental leave in relation to the work lives and private lives of new fathers. A netnographic study of nearly 100 discussion threads from a freely accessible online forum for fathers was conducted. Data were coded, sorted, and

categorized by qualitative similarities and differences. The results of the study indicate that new fathers seek Internet forums to discuss work-related topics. Parental leave can provoke worries and anxiety related to management and co-worker attitudes which can create concern that they should be back at work. The results are presented in two categories: (a) attitudes expressed by employers and colleagues and (b) leaving work but longing to be back. The phenomenon of parental leave for fathers is more complex than simply "for" or "against" attitudes. Fathers can use Internet forums to discuss their experiences, fears, and anxiety and provide reasonable accommodations for both work and family life

Slaughter SE, Zimmermann GL, Nuspl M, Hanson HM, Albrecht L, Esmail R, Sauro K, Newton AS, Donald M, Dyson MP, Thomson D, and Hartling L. Classification schemes for knowledge translation interventions: a practical resource for researchers. BMC Medical Research Methodology. 2017; 17(1):161.

<http://dx.doi.org/10.1186/s12874-017-0441-2> [open access]

Abstract: BACKGROUND: As implementation science advances, the number of interventions to promote the translation of evidence into healthcare, health systems, or health policy is growing. Accordingly, classification schemes for these knowledge translation (KT) interventions have emerged. A recent scoping review identified 51 classification schemes of KT interventions to integrate evidence into healthcare practice; however, the review did not evaluate the quality of the classification schemes or provide detailed information to assist researchers in selecting a scheme for their context and purpose. This study aimed to further examine and assess the quality of these classification schemes of KT interventions, and provide information to aid researchers when selecting a classification scheme. **METHODS:** We abstracted the following information from each of the original 51 classification scheme articles: authors' objectives; purpose of the scheme and field of application; socioecologic level (individual, organizational, community, system); adaptability (broad versus specific); target group (patients, providers, policy-makers), intent (policy, education, practice), and purpose (dissemination versus implementation). Two reviewers independently evaluated the methodological quality of the development of each classification scheme using an adapted version of the AGREE II tool. Based on these assessments, two independent reviewers reached consensus about whether to recommend each scheme for researcher use, or not. **RESULTS:** Of the 51 original classification schemes, we excluded seven that were not specific classification schemes, not accessible or duplicates. Of the remaining 44 classification schemes, nine were not recommended. Of the 35 recommended classification schemes, ten focused on behaviour change and six focused on population health. Many schemes (n = 29) addressed practice considerations. Fewer schemes addressed educational or policy objectives. Twenty-five classification schemes had broad applicability, six were specific, and four had elements of both. Twenty-three schemes targeted health providers, nine targeted both patients and providers and one targeted policy-makers. Most classification

schemes were intended for implementation rather than dissemination.
CONCLUSIONS: Thirty-five classification schemes of KT interventions were developed and reported with sufficient rigour to be recommended for use by researchers interested in KT in healthcare. Our additional categorization and quality analysis will aid in selecting suitable classification schemes for research initiatives in the field of implementation science

Sultan-Taieb H, Parent-Lamarche A, Gaillard A, Stock S, Nicolakakis N, Hong QN, Vezina M, Coulibaly Y, Vezina N, and Berthelette D. Economic evaluations of ergonomic interventions preventing work-related musculoskeletal disorders: a systematic review of organizational-level interventions. BMC Public Health. 2017; 17(1):935.

<http://dx.doi.org/10.1186/s12889-017-4935-y> [open access]

Abstract: BACKGROUND: Work-related musculoskeletal disorders (WMSD) represent a major public health problem and economic burden to employers, workers and health insurance systems. This systematic review had two objectives: (1) to analyze the cost-benefit results of organizational-level ergonomic workplace-based interventions aimed at preventing WMSD, (2) to explore factors related to the implementation process of these interventions (obstacles and facilitating factors) in order to identify whether economic results may be due to a successful or unsuccessful implementation. METHODS: Systematic review. Studies were searched in eight electronic databases and in reference lists of included studies. Companion papers were identified through backward and forward citation tracking. A quality assessment tool was developed following guidelines available in the literature. An integration of quantitative economic results and qualitative implementation data was conducted following an explanatory sequential design. RESULTS: Out of 189 records, nine studies met selection criteria and were included in our review. Out of nine included studies, grouped into four types of interventions, seven yielded positive economic results, one produced a negative result and one mixed results (negative cost-effectiveness and positive net benefit). However, the level of evidence was limited for the four types of interventions given the quality and the limited number of studies identified. Our review shows that among the nine included studies, negative and mixed economic results were observed when the dose delivered and received by participants was low, when the support from top and/or middle management was limited either due to limited participation of supervisors in training sessions or a lack of financial resources and when adequacy of intervention to workers' needs was low. In studies where economic results were positive, implementation data showed strong support from supervisors and a high rate of employee participation. CONCLUSION: Studies investigating the determinants of financial outcomes of prevention related to implementation process are very seldom. We recommend that in future research economic evaluation should include information on the implementation process in order to permit the interpretation of economic results and enhance the generalizability of

results. This is also necessary for knowledge transfer and utilization of research results for prevention-oriented decision-making in occupational health and safety

Sun S, Gerberich SG, and Ryan AD. The relationship between shiftwork and violence against nurses: a case control study. Workplace Safety and Health. 2017; 65(12):603-611.

<http://dx.doi.org/10.1177/2165079917703409>

Abstract: This study investigated the potential relationship between shiftwork and work-related physical assault (PA) against nurses who are at high risk of violence globally. Nurses (6,300), randomly selected from the licensing database and working in Minnesota, were surveyed regarding PA experiences. Through a nested case-control study, nurses who reported a PA in the previous 12 months and controls who were randomly selected from their assault-free working months, respectively, identified exposures experienced during the month prior to the assault month (cases) and the random non-PA months (controls). Comparing case and control exposures, shiftwork was examined relevant to PA. Among 310 cases and 946 controls, most worked 8 hours or less (87%, 88%) during day shifts (44%, 70%). Multivariable analyses (odds ratios [ORs] and 95% confidence intervals [CIs]) revealed increased risk of PA for nurses working evening (OR = 1.55, 95% CI = [1.05, 2.27]), night (OR = 3.54, 95% CI = [2.31, 5.44]), and rotating day and evening (OR = 2.88, 95% CI = [1.22, 6.80]) shifts, which provides a basis for intervention opportunities

Di Thiene D, Helgesson M, Alexanderson K, La Torre G, Tiihonen J, and Mittendorfer-Rutz E. Risk of disability pension in first and second generation immigrants: the role of age and region of birth in a prospective population-based study from Sweden. BMC Public Health. 2017; 17(1):931.

<http://dx.doi.org/10.1186/s12889-017-4944-x> [open access]

Abstract: BACKGROUND: In several countries, immigrants have higher disability pension (DP) rates than natives. Reasons for this are poorly understood. The aim of this study was to investigate if the risk of diagnosis-specific DP differed in first, second, and second/intermediate generation immigrants compared to natives, in general and across regions of birth, and stratified by age. METHODS: A population-based prospective cohort study of all 3,507,055 individuals aged 19-50 years and living in Sweden in 2004 with a 6-year follow-up period. Hazard ratios (HR) and 95% confidence intervals (CI) for mental and somatic DP were estimated by Cox regression for first, second, and second/intermediate generation immigrants compared to natives, across regions of birth and stratified by age. RESULTS: After multivariate adjustment, HRs for both mental and somatic DP were higher at follow-up in the first generation compared to natives: mental HR 1.17 (CI 1.12-1.22) and somatic 1.15 (1.09-1.22) for individuals <35 years; 1.74 (1.69-1.79) and 1.70 (1.66-1.74) \geq 35 years (median), respectively. Immigrants born in Europe outside EU25, and countries outside Europe had particularly elevated HRs. Also in the second generation, HRs were higher in mental 1.29 (1.21-1.37) and somatic DP: 1.30 (1.19-1.42) in those <35 years;

and 1.18 (1.10-1.27); and 1.10 (1.03-1.17) for those ≥ 35 years, respectively. Among second generation immigrants there were no strong differences in HRs between regions of birth. CONCLUSIONS: Compared to natives, the risk of DP was higher in first and second generation immigrants. Higher estimates were seen for immigrants from Europe outside EU25 and from the rest of the world in the first generation. No considerable differences in estimates regarding mental or somatic DP diagnoses were found

Turner S, D'Lima D, Hudson E, Morris S, Sheringham J, Swart N, and Fulop NJ. Evidence use in decision-making on introducing innovations: a systematic scoping review with stakeholder feedback. Implementation Science. 2017; 12(1):145.

<http://dx.doi.org/10.1186/s13012-017-0669-6> [open access]

Abstract: BACKGROUND: A range of evidence informs decision-making on innovation in health care, including formal research findings, local data and professional opinion. However, cultural and organisational factors often prevent the translation of evidence for innovations into practice. In addition to the characteristics of evidence, it is known that processes at the individual level influence its impact on decision-making. Less is known about the ways in which processes at the professional, organisational and local system level shape evidence use and its role in decisions to adopt innovations. METHODS: A systematic scoping review was used to review the health literature on innovations within acute and primary care and map processes at the professional, organisational and local system levels which influence how evidence informs decision-making on innovation. Stakeholder feedback on the themes identified was collected via focus groups to test and develop the findings. RESULTS: Following database and manual searches, 31 studies reporting primary qualitative data met the inclusion criteria: 24 were of sufficient methodological quality to be included in the thematic analysis. Evidence use in decision-making on innovation is influenced by multi-level processes (professional, organisational, local system) and interactions across these levels. Preferences for evidence vary by professional group and health service setting. Organisations can shape professional behaviour by requiring particular forms of evidence to inform decision-making. Pan-regional organisations shape innovation decision-making at lower levels. Political processes at all levels shape the selection and use of evidence in decision-making. CONCLUSIONS: The synthesis of results from primary qualitative studies found that evidence use in decision-making on innovation is influenced by processes at multiple levels. Interactions between different levels shape evidence use in decision-making (e.g. professional groups and organisations can use local systems to validate evidence and legitimise innovations, while local systems can tailor or frame evidence to influence activity at lower levels). Organisational leaders need to consider whether the environment in which decisions are made values diverse evidence and stakeholder perspectives. Further qualitative research on decision-making practices that highlights how and why different types of evidence come to count

during decisions, and tracks the political aspects of decisions about innovation, is needed