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DOES CHRONIC SLEEP DEPRIVATION INFLUENCE THE RISK OF DEPRESSION IN YOUNG PEOPLE? A LONGITUDINAL AND GENDER-BASED ANALYSIS OF THE BASUS COHORT STUDY

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Background Chronic exposure to sleep deprivation may increase risk of depression in young people who are particularly vulnerable to changes in sleep and mental health. Sleep deprivation and incident depression may also differ by gender. We investigated the prospective association between cumulative sleep deprivation and subsequent levels of depressive symptomatology among adolescents from a gender perspective.

Methods A longitudinal study of 3071 young people in the British Columbia Adolescent Substance Use Survey (BASUS) cohort with three sleep time and two depression measures (CESD) over 12 months (2011–12). Multivariable linear regression models with sex interaction terms estimated gender-specific associations between self-reported chronic sleep deprivation and changes in depressive symptomatology; post-estimation analysis calculated adjusted mean depression scores for each level of cumulative sleep deprivation.

Results Cumulative sleep deprivation was associated with a monotonic increase in depression scores at follow-up in young women, but no consistent pattern was seen in young men. During follow-up, 15% of young women were chronically sleep deprived and 29% were depressed (CESD ≥ 24). Young women reporting chronic exposure to sleep deprivation had higher CESD scores at follow-up (21.50 points, CI95 19.55–23.45), than those reporting no history (16.59 (CI95 15.72–17.45); associations remained after multivariable adjustment (19.48, CI95 17.59–21.38).

Conclusion Results suggested that chronic sleep deprivation increases the risk of major depression among young women. Mental health promotion for young people should include relevant strategies to ensure young women can achieve recommended amounts of sleep.

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RAPID OVERVIEWS FOR PRAGMATIC TRANSFER OF KNOWLEDGE FROM RESEARCH TO PRACTICE

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Background Today, many more people are surviving sudden cardiovascular events and living longer with cardiovascular disease, thanks to advances in preventive strategies and advanced treatment. Hence, rehabilitation and palliative care interventions have become an important focus for improving the lives of patients living with cardiovascular diseases.

Drawing on ‘review of reviews’ and rapid review methodology, as well as evidence gap maps, we worked with non-academic stakeholders at the Danish Heart Foundation (DHF) to co-produce a contemporary overview to uniquely bring together the evidence for the efficacy of rehabilitation and palliative care across a wide spectrum of cardiovascular

diseases. The overview summarises the current evidence but also identifies where gaps in the evidence exist.

Methods End user feedback was sought on the protocol and at key points in the overview process. Six bibliographic databases were searched for systematic reviews. Only articles published after 2009 were included. Quality of SRs was assessed using the R-AMSTAR tool. A narrative synthesis was performed and a summary of the most recent systematic review (s)/meta-analyses for efficacy of rehabilitation for each of the included CVD conditions presented using accessible graphic visualisations of data (infographics).

Results The overview finds that the evidence for rehabilitation in coronary heart disease and heart failure is well established as well as supervised exercise training in intermittent claudication. Improved access to rehabilitation is needed for these indications. There is a dearth of studies on the efficacy of dietary and smoking interventions in CVD indications. Also, further research is needed on palliative care interventions for heart failure and other life-threatening cardiovascular diseases.

Conclusion A pragmatic, flexible approach to conducting this overview, together with meaningful involvement of end users, facilitated completion of a comprehensive overview to deadline (six months), identified gaps in the evidence, improved accessibility of findings and ensured relevance to real world settings. Limitations included no attempt to search for individual randomised controlled trials (RCTs), to perform updates or undertake *de novo* SRs. We only focused on the effectiveness of rehabilitation and palliative interventions for CVD relative to control and did not consider the relative effectiveness of different components of interventions (for example, type, duration, frequency of exercise training) or settings.

The overview highlights the need to prioritise high quality studies that establish the effectiveness of rehabilitation in cardiovascular indications where there is currently little or no evidence.

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ENGAGING WITH STAKEHOLDERS TO INFORM THE DEVELOPMENT OF A COMPUTER MODEL FOR THE NHS HEALTH CHECK PROGRAMME: WORKHORSE PROJECT

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Background The NHS Health Check Programme (NHS HCP) is a multifactorial ‘risk-reduction’ programme offered to all adults in England aged 40–74. Studies of the NHS HCP suggest that it might be further improved by including additional conditions and by facilitating local commissioning. This project aims to use stakeholder engagement to co-produce and develop a validated open-source/open access, flexible decision support tool to enable local commissioners to quantify the local effectiveness, cost-effectiveness and equity of the NHS HCP.

Methods We have adopted the innovative approach of engaging with key stakeholders in four iterative workshops, to co-produce model and scenario specifications. We identified stakeholders using our extensive networks and using the snowballing techniques. In workshop 1, we used the validated Hovmand ‘group model building’ approach to engage stakeholders in a series of pre-piloted, structured, small group

exercises. Our key objectives were to 1) facilitate engagement of stakeholders and modelling teams, 2) develop a shared understanding of the current implementations of the NHS HCP, 3) identify what is working well and less well, 4) identify future hopes for the NHS HCP, and 5) explore features and specifications to potentially include in a useful decision-support tool for stakeholders.

Results Fifteen key stakeholders participated in workshop 1. They spanned all levels: local (NHS commissioners, GPs, academics), third sector organisations and national organisations (including PHE and NICE). This diverse mix of stakeholders provided a rich diversity of perspectives. Stakeholders agreed that there is continued (financial and political) support for the NHS HCP. However, many stakeholders highlighted issues with the lack of data on processes and outcomes, variety in quality of delivery and suboptimal public engagement. Stakeholders' hopes for the programme included maximising coverage, uptake and appropriate referrals, and producing additional evidence on population health, equity and economic impacts. Stakeholders suggested several useful features including focusing on feasible NHS HCP implementations based on good-practice template scenarios, analysis of broader prevention activities at local level, accessible local data, broader economic perspectives and fit-for-purpose outputs. These results then informed the objectives for the second and subsequent project workshops, which will include sharing and refining a prototype user interface, and exploring different scenarios to be evaluated.

Conclusion This project includes innovative approaches to engage with key stakeholders via Hovmand style workshops. These potentially offer an effective participatory method for involving stakeholders in the process of understanding a complex problem, and collaborating in the joint development of a decision-support tool focused on the needs of the final users.

P32 REALISING THE POTENTIAL OF THE WIDER PUBLIC HEALTH WORKFORCE: CAUTIONARY TALES FROM THE EVALUATION OF PROGRAMMES TO EXTEND THE ROLE OF FRONTLINE STAFF

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Rationale After the move of responsibility for public health to local government in 2013, Public Health England estimated there were 15 million people in the wider workforce who could potentially contribute to health improvement. In order to inform future initiatives to develop and extend the public health role of the wider workforce, we analysed data from the evaluation of two programmes designed to enhance the health promotion role of council employees, from a range of occupational groups. We explored the issues that need to be addressed to ensure this potential public health capacity can be appropriately harnessed.

Methods Qualitative data was collected from a) 12 staff focus groups undertaken during evaluation of 'Making Every Contact Count' (MECC) training offered to council staff b) in-depth interviews with 21 neighbourhood housing officers undertaken for the evaluation of a new 'Housing+' service, which required them to provide holistic health and wellbeing advice to council housing tenants. The data was analysed thematically to identify potential barriers and facilitators to the

engagement and development of the wider public health workforce.

Results The sample included staff from ten occupational groups with a wide range of roles and experience. Whilst most staff were positive in principle about engaging with health and wellbeing issues, occupational groups varied in their attitudes to the appropriateness of taking on a specifically health promoting role and a range of barriers and obstacles were identified. Obstacles included a lack of time and opportunity costs; conflict with other roles such as managing complaints and rent arrears; lack of capacity in other services they could refer clients to when urgent needs identified; and a concern they were being expected to replace other overstretched or non-existent community services. The range of views expressed on the feasibility and appropriateness of engaging clients or customers in discussion of health and wellbeing related issues, particularly health-related behaviour, suggested that implementation of training received, and the delivery of an extended role more generally, was likely to be highly variable.

Conclusion If the potential contribution of the wider workforce to maximising population health is to be achieved, the best way to engage staff and develop their role is likely to vary between occupational groups and the opportunity costs, potential unintended consequences and additional training needs must not be underestimated. Effectiveness and cost-effectiveness cannot be assumed in the absence of evaluation of the wider impact of role development in terms of both intended and unintended consequences.

P33 WHAT DO DOCTORS KNOW ABOUT THE CLINICAL COURSE OF RECOVERY FROM COMMUNITY-ACQUIRED PNEUMONIA?

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Background Community-acquired pneumonia (CAP) poses a significant clinical and economic burden in the United Kingdom, with an annual incidence rate of 0.5%–1% in adults. The mortality rate upon hospitalisation ranges between 5%–30%. Return to baseline health following CAP can surpass the expected timelines of recovery, with respect to duration and symptom resolution. Little is known about doctors' knowledge in this area. Therefore, this study provides a previously unexplored qualitative insight into doctors' views and knowledge of the clinical course of recovery in patients with CAP, following discharge.

Methods Ten one-to-one semi-structured interviews were conducted with junior doctors, who had experience in managing patients with CAP. Interviews were recorded and transcribed verbatim. Data was analysed using thematic analysis, with a predominantly inductive approach.

Results Whilst doctors maintained consensus on their proficiency in diagnosis and treatment, their knowledge and awareness of clinical recommendations for post-discharge care were less comprehensive and definitive.

No patient information resources on the recovery process from CAP were mentioned, even though many believed this would be beneficial. Similarly, doctors highlighted a lack of