P29 DOES CHRONIC SLEEP DEPRIVATION INFLUENCE THE RISK OF DEPRESSION IN YOUNG PEOPLE? A LONGITUDINAL AND GENDER-BASED ANALYSIS OF THE BASUS COHORT STUDY

1,2 AI Conklin*, 3 CA Yao, 1,4 CG Richardson. 1 Faculty of Pharmaceutical Sciences, University of British Columbia, Vancouver, Canada; 2 Centre for Health Evaluation and Outcome Sciences, Providence Healthcare Research Institute, Vancouver, Canada; 3 School of Public Health and Population, University of British Columbia, Vancouver, Canada

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 15.72–17.43); 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.

P31 ENGAGING WITH STAKEHOLDERS TO INFORM THE DEVELOPMENT OF A COMPUTER MODEL FOR THE NHS HEALTH CHECK PROGRAMME: WORKHORSE PROJECT

1 L Hysen*, 1,2 M Guzman-Castillo, 1,3 C Kypriodemos, 1,4 B Collins, 1,3 E Schwalter, 1,3 C Capewell, 1,3 A Boland, 1,3 R Dickson, 1,4 M O’Flaherty, 1,2,3 L Williams. 1 Public Health and Policy, University of Liverpool, Liverpool, UK; 2 Health Services Research, University of Liverpool, Liverpool, UK

Background The NHS Health Check Programme (NHSCHP) is a multifactorial ‘risk-reduction’ programme offered to all adults in England aged 40–74. Studies of the NHSCHP 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 NHSCHP.

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 Hymand ‘group model building’ approach to engage stakeholders in a series of pre-piloted, structured, small group