

WOLFSON INSTITUTE OF POPULATION HEALTH NEWSLETTER ISSUE 83: 1 September 2025

In this issue of our Wolfson Institute of Population Health Newsletter, we celebrate the achievements and work of staff and students in the second half of August.

FROM OUR DIRECTOR

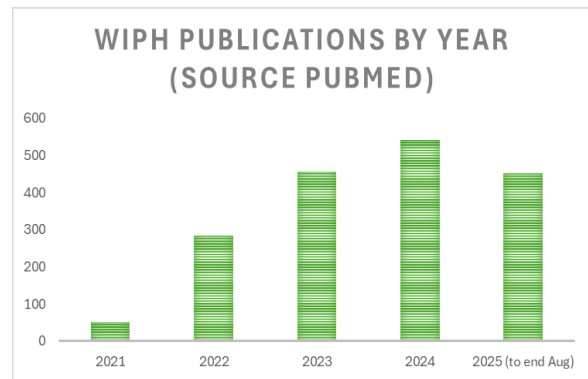
Dear Colleagues

As many of us return from the summer break and prepare for a busy term ahead, I'm pleased to share the latest news from the Institute. As always, we have had a fascinating collection of outputs over the last fortnight including Petra Petrosi's work showing unsaturated lipid reduction in women with Alzheimer's, and the account of Peter Sasieni's role in beating cervical cancer, both of which were widely covered in the press. This newsletter also introduces Mo Talaei, Lecturer in Life Course Epidemiology in the Centre for Preventive Neurology, who describes a fascinating research and teaching career developing after becoming a medical graduate.

I am also pleased to be able to welcome Becks Fisher, Director of Research and Policy at Nuffield Trust, as our new WIPH Honorary Professor of Health Policy and Primary Care. Becks works as a practicing GP in an area of socio-economic disadvantage. She has served on multiple national advisory policy groups, has published widely, and has a particular interest in making general practice more equitable through funding and contract reform and new models of care. Becks is keen to collaborate with WIPH colleagues. She will be supporting undergraduate teaching, and can provide specialised expertise in policy impact, analysing routine health and care data, and complex health care evaluation. Welcome Becks!



As you will all recall from our showcase event in June, WIPH research outputs continue to increase, year on year. It is heartening to see that by the end of August 2025, outputs from our researchers had already reached the same number as we published in the whole of 2023. Well done to all on your contributions to these wonderful statistics.



Finally, a reminder that submissions are still open for the William Harvey Day Poster Competition (deadline Monday 8 September). All our WIPH PhD students and Early Career Researchers are warmly encouraged to apply!

With best wishes

Fiona

MEET WIPH

MEET- Mo Talaei (Lecturer in Life Course Epidemiology, CPN)

How would you describe your roles and responsibilities?

I am currently part of an MRC-funded project looking at the links between early-life exposure to toxic metals and a range of cognitive and cardiorespiratory outcomes, where I lead on data analysis - working closely with postdocs and supporting more advanced methods. Beyond the project, I enjoy running the monthly CPN Early Career Researcher Forum, helping to build a supportive community for our ECRs. I am also the CPN Education Lead, contributing to teaching on the Epidemiology and Statistics module, as well as teaching medical students, which provides me with the opportunity to share my enthusiasm for epidemiology and learning with others.

What has been your greatest professional achievement?

I had to learn genetic epidemiology (a highly technical field) during the COVID-19 pandemic, at a time when in-person support was scarce. Alongside this, I helped to establish the population-based cohort study COVIDENCE-UK, where I managed data and led statistical analyses for nearly 1.5 years alone. Balancing that steep learning curve with such a heavy workload, and seeing it come to fruition in influential outputs, is something I am proud of. In a way, it echoed the very beginning of my research career, when, as a fresh medical graduate, I became the lead investigator of a struggling cohort study. Many thought it wouldn't survive, but I proved otherwise, an early achievement that set the tone for how I approach challenges.

What aspects of your role do you enjoy the most?

I most enjoy engaging with unknowns: scrutinising ideas, turning abstract thoughts into something concrete, and exploring alternative explanations and approaches. I value being in a role where I am constantly learning from challenges and from

collaborators, which keeps the work stimulating and dynamic. I especially value the thought-provoking yet straightforward questions from junior students, as they often spark deeper insights and remind me how curiosity drives discovery. Encouraging this exchange of ideas and creating space for others to grow is something I find deeply rewarding.

What would be your second choice as a profession?

The second choice of a very young version of me was architecture. Then, for a while, it was simply returning to clinical practice. However, for a long time now, my second choice has been health economics.

What do you enjoy doing outside work?

Gardening! I enjoy looking after plants, especially in small spaces like a balcony or compact garden. I also love photography - capturing a good shot can completely make my day, and I sometimes share my favourites on [instagram](#).

Something most people don't know about you?

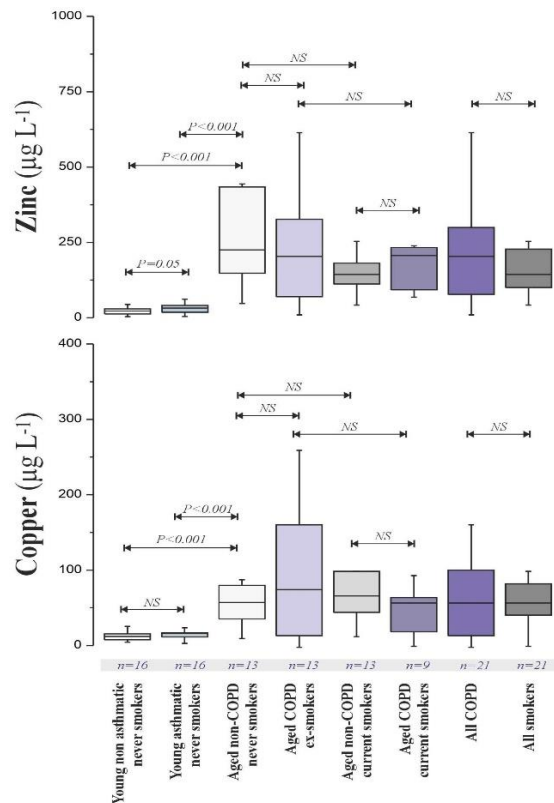
I was once such a big fan of Marlon Brando's Don Corleone in *The Godfather* that I kept a large poster of him on my bedroom wall - the iconic, charismatic image used in the film's poster. The first thing my mum did after I moved out was take it down!



GENERAL INSTITUTE NEWS

Respiratory tract copper concentrations contribute to elevated oxidative stress 17 August (Rosamund Dove. Centre for Primary Care)

Investigating whether increased metal concentrations at the air-lung interface contribute to oxidative stress in the lungs, researchers analysed bronchoalveolar lavage (BAL) samples from young and old never-smokers, young asthmatic never-smokers, older smokers without COPD, and COPD patients (both current and ex-smokers). BAL concentrations of copper and zinc were found to be significantly lower in younger compared with older groups, irrespective of smoking status or disease, and BAL copper was significantly associated with several markers of oxidative stress, all of which were elevated with age. Authors conclude that age-related increases in respiratory tract copper concentrations contribute to elevated levels of oxidative stress at the air-lung interface independently of respiratory disease.



ECR and PPIE collaboration in an AI-in-healthcare project

19 August (Duncan Reynolds. Centre for Primary Care)

NIHR | National Institute for Health and Care Research

AI MULTIPLY

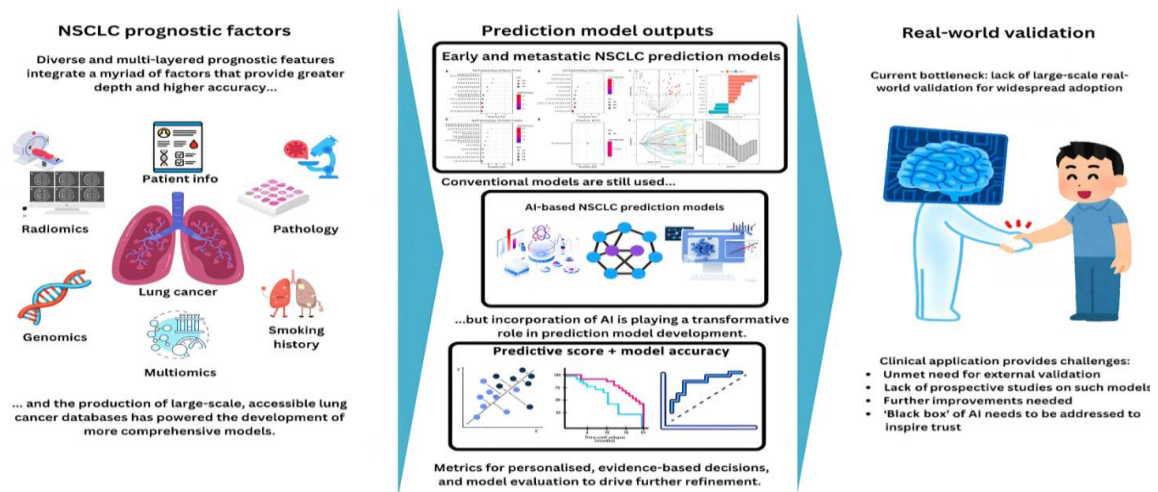


Patient and Public Involvement and Engagement (PPIE), critical to ensure that outcomes align with the needs of patients and the public in healthcare research, is often limited to reactive tasks, potentially inhibiting its influence on key research decisions. These decisions are often made by early career researchers (ECRs). To address this, the AI MULTIPLY consortium introduced twice-monthly *ECRs meet PPIE* sessions, enabling ECRs to present and discuss work in progress and gain targeted input from PPIE members early in the research process. Findings from ethnographic observations and internal surveys from the first 12 sessions show how these helped to embed PPIE contributor voices into an AI-in-healthcare project, and present recommendations to strengthen the PPIE contribution to everyday decision-making in research.

Clinical prediction models for non-small-cell lung cancer

20 August (Soumya Arun. Centre for Cancer Screening, Prevention and Early Diagnosis)

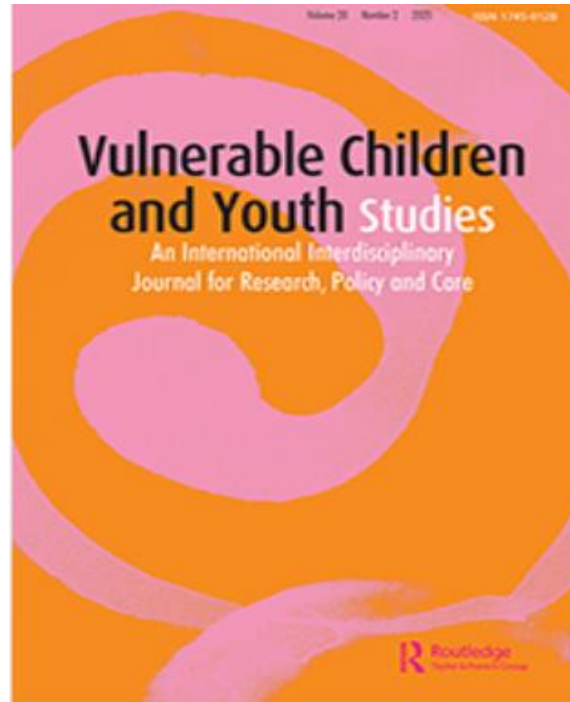
A new review presents a comprehensive landscape of clinical prediction models (CPMs) in non-small-cell lung cancer (NSCLC). Prediction models, developed using multimodal patient data, allow oncologists to make evidence-based decisions on patient treatment options, but their clinical application brings challenges, including an unmet need for external validation and a lack of prospective modelling. Authors say the models have potential to assist in personalised treatment selection, supporting oncologists in perceiving future risk factors or issues associated with a specific targeted therapy for an individual patient, ultimately optimising treatment to precise, personalised options for individuals diagnosed with NSCLC.



Out of the shadows: Mental health consequences of child marriage

20 August (Fiona Samuels. Centre for Public Health and Policy)

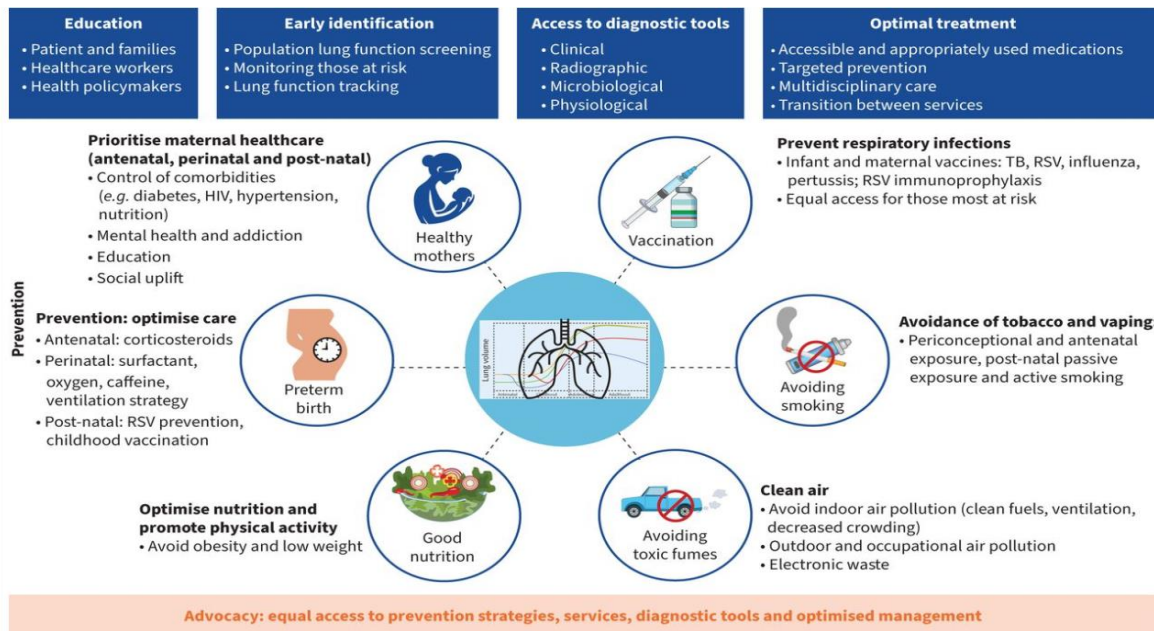
Child marriage is a global issue, with 23 girls married every minute. The impacts of this practice on the physical and reproductive health of girls and women are well documented, but the psychological and mental health challenges facing girls, women, and boys married early have been largely overlooked. A collection of 14 papers on the mental health consequences of child marriage, co-edited by Fiona Samuels and entitled 'Out of the Shadows', brings together a body of work, including new analyses examining the burden in new settings and in intersecting populations, and innovative arts-based approaches to providing psychosocial support, which advance our understanding of burden faced by those married young.



Impact of child and adolescent health on adult respiratory health

20 August (Seif Shaheen. Centre for Preventive Neurology)

A review of the longitudinal evolution of common childhood respiratory diseases across the lifespan examines studies relating preterm birth, childhood asthma, low lung function and bronchiectasis to respiratory health in adolescents and adults. Findings show that the negative impact of preterm birth on future respiratory health is now quantified, that recent data describe asthma trajectories of relapse, early-onset adult-remitting, and early-onset persistent childhood asthma, and that there is a negative impact of chronic productive cough, breathlessness and lower lung function on both future respiratory and cardiovascular health and all-cause mortality. Authors say their review emphasises the importance of childhood respiratory health and the need for interventions to reduce or manage disease burden, which require a whole-of-society approach across the life course.



Evidence on global public health cancer strategies

20 August (Suzanne Scott. Centre for Cancer Screening, Prevention and Early Diagnosis)

BMC Global and Public Health



BMC Part of Springer Nature

Introducing a new collection of papers on *Implementation of cancer strategies in primary care: Addressing global disparities*, an [editorial](#) describes the content as a reminder of the pioneering work that helps generate context-specific cancer strategies for reducing inequities in cancer care. The collection includes work covering the importance of timeliness of presentation in determining health outcomes, how help-seeking is measured, screening as a critical step in the cancer diagnostic process, and evidence to help reduce barriers to cancer screening for women.

Lipid profiling shows unsaturated lipid reduction in women with Alzheimer's

20 August (Petra Priotsi. Centre for Preventive Neurology)

Results from a [study](#) published in *Alzheimer's & Dementia* show that Omega fatty acids could protect against Alzheimer's disease in women. Analysis of blood lipids found a noticeable loss of unsaturated fats (such as those containing omega fatty acids) in the blood of women with Alzheimer's disease compared with healthy women. Researchers (Petra Priotsi, joint senior author) found no significant difference in the lipid molecule composition of men with Alzheimer's disease compared with healthy men, which suggests lipids have a different role in the disease according to sex. This could explain why more women are diagnosed with the disease in later life. Researchers say the work shows a statistical indication that

there is a causal link between Alzheimer's Disease and fatty acids, but a clinical trial is needed to confirm the link. The results were widely covered in the press.



Dispensing general practices issue shorter prescription lengths

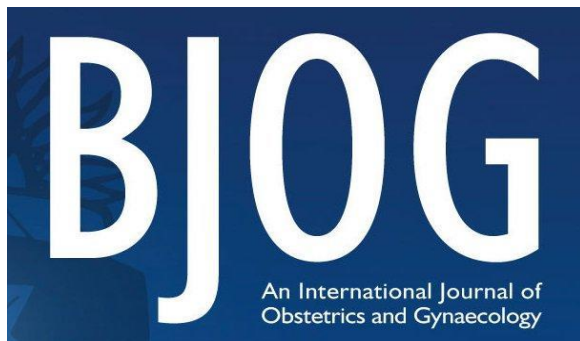
21 August (Ian Holdroyd, Liam Loftus, Cameron Appel, John Ford. Centre for Primary Care)

General practices with in-house dispensaries are paid to dispense medications directly to patients. Investigating the impact of practice dispensing status, a cross sectional study compares prescription lengths for 7 drugs with fixed dosing regimens prescribed by dispensing practices v non-dispensing practices in England. Results indicate that dispensing practices prescribed shorter average lengths for all drugs studied, with desogestrel showing the largest difference (21.9 days shorter). Dispensing practices were associated with shorter prescription lengths, increasing the number of prescriptions issued over time and the associated dispensing fee. Authors say the absence of clear guidance on prescription lengths probably contributes to this, and that central bodies should consider providing explicit recommendations to optimise prescription durations.



Inequalities in preterm births in England

22 August (Iona Hinds, Jennifer Jardine, Dominik Zenner, Matina Iliodromiti. Centre for Public Health and Policy)



RESEARCH ARTICLE | Open Access

Inequalities in Preterm Birth in England: A Retrospective National Cohort Study Focusing on Deprivation and Ethnicity, Using Routinely Collected Maternity Hospital Data

Iona Hindes , Buthaina Ibrahim, Jennifer Jardine, Dominik Zenner, Stamatina Iliodromiti

First published: 22 August 2025 | <https://doi.org/10.1111/1471-0528.18331>

Funding: This study was supported by NIHR School for Primary Care Research (C007), THIS Institute and the Health Foundation (Project ID 2401832), and Tommy's National Preterm Birth Research Centre (Project ID: 8758081).

Dominik Zenner and Stamatina Iliodromiti jointly supervised the project and share last authorship.

Examining socioeconomic and ethnic inequalities in 2018-21 preterm (<37wks) birth rates in England, a retrospective cohort study uses electronic health data on >1.5 million singleton livebirths. Findings show that the rate of preterm birth was 6.30% v 5.05% in women living in the most deprived v in those in the least deprived areas. The preterm birth rate was 5.74% in white women v 6.09% and 5.89% respectively in S. Asian and Black women. Researchers conclude that deprivation and ethnicity remain key drivers of inequalities in preterm birth, and that prevention strategies need to address socioenvironmental and structural determinants of preterm birth in areas of high deprivation and minority ethnicity groups.

Beating cervical cancer – the role of Peter Sasieni

22 August (Peter Sasieni. Centre for Cancer Screening, Prevention and Early Diagnosis)

Recounting the history and success of the HPV vaccine in an editorial in The Times, Tom Whipple highlights the role of Peter Sasieni. Following a 1990's conference presentation in which Peter argued that cervical cancer is caused by HPV, the audience was asked who agreed with his premise – not a single hand was raised in support. Half a career later, in 2021 Sasieni analysed cancer rates in the first cohort of vaccinated women: 'I told my colleague, you've got to check this, it seems too good to be true. It was a joyous moment.' Last year, Scotland found not a single cervical cancer case in vaccinated women. Whipple concludes: *Cancer is hard. It doesn't have a silver bullet. Except, just this once, it does. And the stories told by science are so much more compelling, serendipitous and joyful than those of its detractors.*



TOM WHIPPLE

Joyful story of how we're beating cancer will outshine antivaxers

Sometimes this disease does have a simple cause and, more importantly, a single nemesis: a vaccine

Tom Whipple | Friday August 22 2025, 4.17pm, The Times

18 month deadline for baby food manufacturers to cut sugar and salt

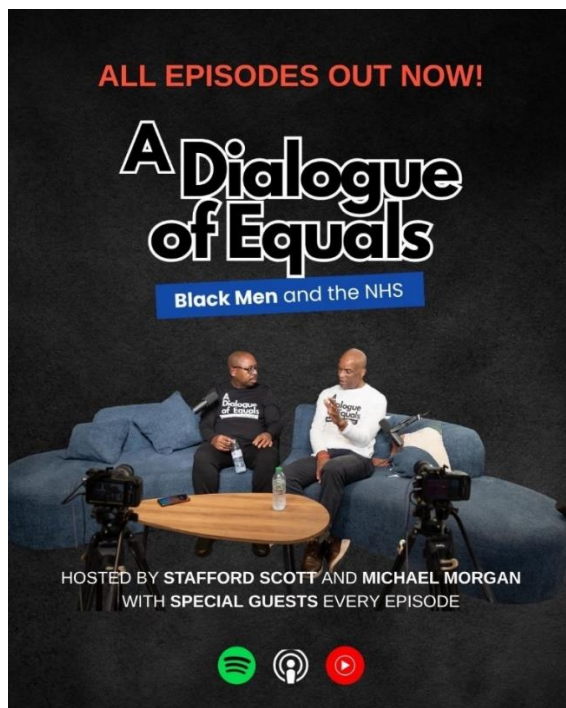
22 August (Kawther Hashem. Centre for Public Health and Policy)

New government guidelines have given baby food manufacturers 18 months to cut sugar and salt in their products, but the guidelines issued are disappointingly voluntary. Kawther Hashem from the WIPH Research and Action on Salt and Obesity Unit told the Independent: “Our research has consistently shown excessive levels of sugars in commercial baby foods. These long-overdue voluntary guidelines are a step in the right direction, but they must not be the final word. If we’re serious about protecting our youngest children, these guidelines must be made mandatory. We urge the government to closely monitor progress and act swiftly if companies fail to change.”



New Podcast 'A Dialogue of Equals: Black Men & the NHS'

22 August (Sara Papparini. Centre for Public Health and Policy)



A new audio/video podcast, 'A dialogue of equals: Black Men & the NHS' is a community-led series born out of a collaboration involving Tottenham Rights, The Haringey's Black Men's Health Group, NELLO, Studio Wood Green Media, and Sara Papparini. In the first podcast of its kind in the UK, the 6 episodes cover issues of structural racism, health inequalities, mental health, cancer, diabetes, and healthy living, all through the voices and experiences of Black men sharing their stories and perspectives in conversation with healthcare professionals and advocates. The podcast raises awareness of health issues in the community and aims to inform better research and better services.

Noncancer-Related Mortality in Randomized Clinical Trials

25 August (Jiayao Lei, Stephen Duffy, Peter Sasieni. Centre for Cancer Screening, Prevention and Early Diagnosis)

To understand the impact of screening on noncancer-related (off-target) mortality, researchers investigate whether there are differences in noncancer-related mortality between the screening and control arms of randomised clinical trials (RCTs). Results from a meta-analysis of 17 RCTs (8 colorectal, 3 prostate, 3 lung, 2 breast, 1 multiple cancers) including 1,305,924 participants show that allocation to cancer screening was not associated with an increase in noncancer-related mortality. Overall increase in off-target mortality was 0.2%, but the difference was not statistically significant. Authors say their findings emphasize the importance of evaluating targeted and off-target mortality separately, rather than relying solely on all-cause mortality.

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Roles of “Experts by experience” in the SCRIPT study

25 August (Krystal Warmoth. Centre for Primary Care)



Exploring the involvement and perceptions of ‘experts by experience’ (individuals with lived experience in social care research) in the SCRIPT study, researchers analysed data from semi-structured interviews and focus groups. Results show that experts by experience made significant contributions and offered unique perspectives, with input that improved the relevance of research, helped shape study design, and ensured that the research was more applicable to practice. They were seen as equal partners, and their involvement led to positive changes in team dynamics and attitudes. The results highlight potential for co-production to enhance research capacity, improve service delivery, and influence future research practices, and reinforce the need for experts by experience to be recognised as essential, equal contributors in research teams.

Evaluating economic and clinical impacts of anaemia management strategies

26 August (Hiro Farabi, Florian Tomini. Centre for Evaluation and Methods)

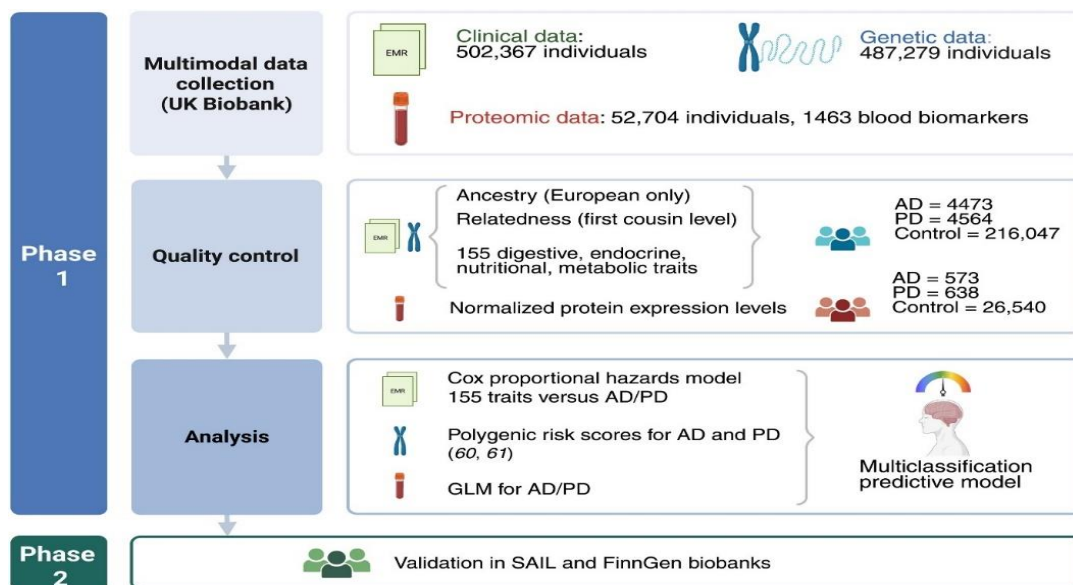
A systematic review of 11 studies assesses the cost-effectiveness of a range of anaemia treatments, with a view to informing UK healthcare. Findings showed that restrictive transfusion thresholds and Patient Blood Management interventions, especially intravenous iron, demonstrate favourable cost-effectiveness and potential for NHS cost savings, but the cost-effectiveness of erythropoiesis stimulating agents remains uncertain due to high costs and limited utility evidence.



Gut-brain nexus: Mapping multimodal links to neurodegeneration

27 August (Alastair Noyce. Centre for Preventive Neurology)

A biobank-scale study mapping links between factors involved in the gut-brain axis and the development of Alzheimer's and Parkinson's Disease (AD/PD) identifies several disorders associated with increased AD/PD risk before diagnosis, with variation in the strength and timing of associations across conditions. Findings show that polygenic risk scores reveal lower genetic predisposition for AD/PD in individuals with co-occurring disorders, and that the proteomic profile of AD/PD cases was influenced by comorbid gut-brain axis disorders. Researchers say their multimodal prediction models outperform single-modality paradigms in disease classification, and that this work opens avenues for therapeutic targeting and early diagnosis.



Primary caregivers' QoL varies by severity and control of children's asthma

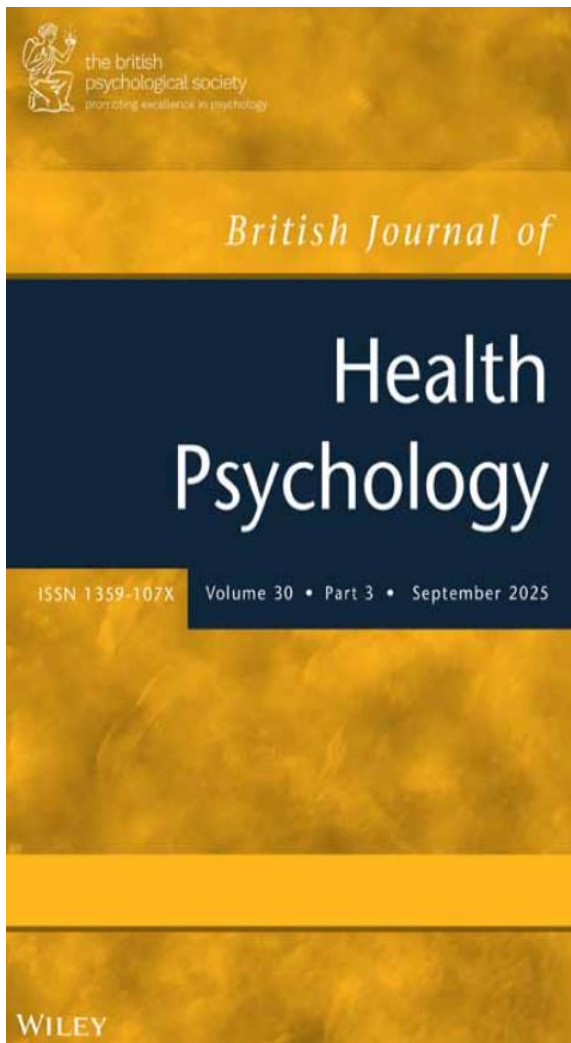
27 August (Florian Tomini, Boby Mihaylova. Centre for Evaluation and Methods)

Examining quality of life (QOL) of primary caregivers of children with asthma, a review and meta-analysis of 13 studies finds that, while caregivers of healthy children had the highest scores and those of children with severe persistent asthma reported lower scores, QOL was also higher among caregivers of children with good asthma control v those with poor control. Authors say their findings suggest that caregiver support should be a routine consideration in paediatric asthma care.



Active components in complex interventions for people with multiple long-term health conditions

27 August (Jamie Ross, Steph Taylor. Centre for Primary Care)

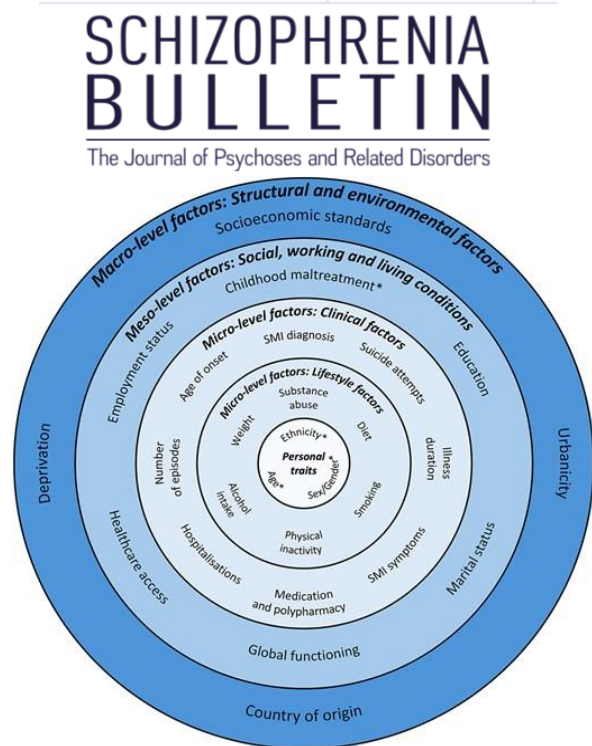


To understand the active components of complex interventions to manage people with multiple long-term conditions (M-LTCs), a systematic review explores which behavioural change techniques (BCTs) are associated with effective complex interventions. From RCTs evaluating behaviour change intervention effectiveness in people with M-LTCs, researchers synthesised data on intervention characteristics, effectiveness, and BCTs, and created a BCT 'index of potential'. The exercise identified 17 BCTs with potential to improve outcomes, such as behavioural goal setting, monitoring outcomes, problem solving and providing information about health and emotional consequences. Interventions designed for people with both physical and mental LTCs were more likely to contain BCTs with higher potential. Authors conclude that interventions for those living with M-LTCs should incorporate relevant BCTs with a high index of potential, and use mechanisms of action to identify other BCTs to include alongside these.

Factors Associated with Physical Multimorbidity in Severe Mental Illness

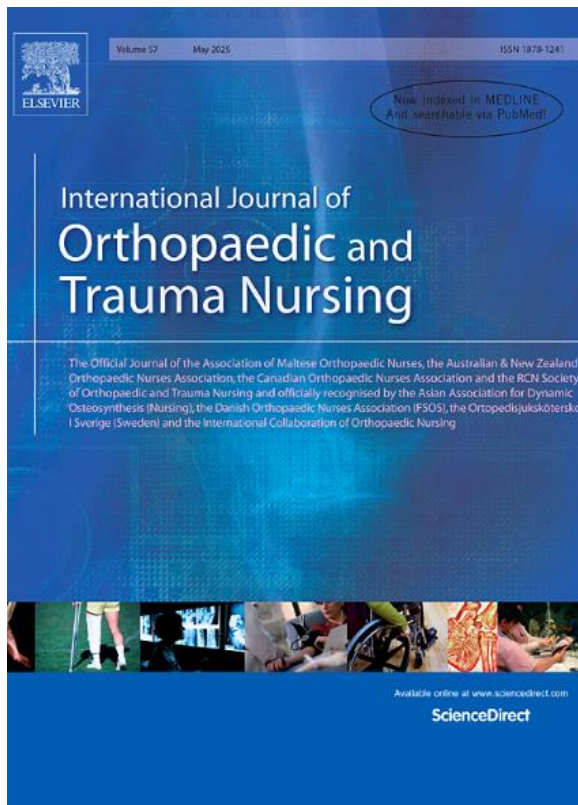
28 August (Erin Lawrence, Abigail Thomson, Laura Havers, Federica Biotti, Monica Acosta Pereira, Mark Freestone, Irene Gonzalez-Calvo, Kam Bhui, Georgina Hosang. Centre for Psychiatry and Mental Health)

People with severe mental illness (SMI) have reduced life expectancy, largely due to physical multimorbidity (MM). A systematic review of 30 studies identifies the psychosocial and demographic factors associated with MM in SMI. Findings show that the strongest predictors of MM were childhood maltreatment, female gender, older age, and ethnicity (for Black Caribbean groups v White British groups). Authors note that some factors (eg. education) are modifiable, and could inform risk prevention strategies for premature mortality. They recommend that future research should use consistent definitions of MM for cross-study comparisons and assess additional risk factors, their interactions, and underlying mechanisms.



Sleep quality and delirium intervention in orthopaedic surgery patients

28 August (Yaser Mokhayeri. Centre for Preventive Neurology)



To evaluate the effectiveness of a nurse-led multicomponent intervention on sleep quality and delirium incidence in 96 patients undergoing surgery for orthopaedic trauma, researchers conducted a double-blind randomised controlled clinical trial. The intervention, including a pharmacological pain management protocol, complementary therapies, and inspiratory muscle training, resulted in positive effects on sleep quality and length of hospital stay, but did not significantly influence postoperative delirium. Authors suggest that further research is needed to evaluate the effects of multimodal individualized interventions on quality of life, 90- and 180-day mortality, delayed neurocognitive recovery within 30 days, and postoperative neurocognitive disorder up to 1yr following surgical procedures.

2025 Update of the 2019 ESC/EAS Guidelines for managing dyslipidaemias

29 August (Boby Mihaylova. Centre for Evaluation and Methods)

Updates to the 2019 *ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk* address changes in recommendations for dyslipidaemia treatment based on new evidence published to 31 March 2025. These include recommendations on: CV risk estimation with implementation of the new SCORE2 and SCORE2-OP risk prediction algorithms; LDL cholesterol-lowering therapies including new agents (bempedoic acid and evinacumab) specifically for patients with homozygous familial hypercholesterolaemia; lipid-lowering therapy during index hospitalization of ACS; Lp(a); drug treatment in patients with hypertriglyceridaemia; statin therapy in primary CV disease prevention for people with human immunodeficiency virus infection; statin therapy for patients with cancer at high or very high



chemotherapy-related CV toxicity risk;
and for dietary supplements.



Adolescent mental well-being in selected regions of Tanzania

29 August (Fiona Samuels. Centre for Public Health and Policy)



In Tanzania 23% of the population is aged 10-19, but programmes to address adolescent mental health challenges are absent. A cross sectional survey to investigate determinants of mental well-being among 489 adolescents in urban and rural Tanzania used a self-administered questionnaire to collect data on sociodemographic characteristics and status, violence, and mental well-being. Findings show that the majority of adolescents exhibited good mental health, but social conditions such as hunger, exposure to parental violence, and maternal headship of household were negatively associated with well-being. Authors say that early, targeted interventions addressing these factors are critical to safeguarding adolescent mental health and preventing long-term consequences on both physical and psychological well-being, which may affect future life opportunities.

Troubleshooting social prescribing and the arts in East London

29 August (Maria Turri, Yumeng Wang. Centre for Psychiatry and Mental Health)

Investigating social prescribing of the arts in Tower Hamlets and Hackney, researchers conducted interviews with community artists and primary care link workers. Findings showed that both groups lacked reciprocal knowledge. Lack of quality assurance standards for community arts organisations was perceived as a barrier to consistent referral by link workers, and the shortage and instability of funding for community arts organisations made the model precarious, but both artists and link workers supported the idea of integrating community arts engagement into healthcare. Authors suggest that to support community arts organisations to deliver creative health requires stable funding, a system of quality assurance, and evaluation that accounts for a context specific non medicalised approach, and implementation of virtuous referral pathways grounded in reciprocal knowledge.



FIGURE 2: Configuration of the referral pathways in social prescribing.



Many thanks to all who so enthusiastically contribute. Please send any news items for the next newsletter to j.a.mackie@qmul.ac.uk