

# SAPC ASM 2025 - Cardiff



## Book of Abstracts

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Abstracts are listed by presentation type, ordered by submission ID number.

The presenting author is underlined.

Presentation format	Pages
Full Oral presentation	1-108
Lightning presentation	109-208
Poster presentation	209-281
Workshop	282-289



## Final category: Full oral

17

### Rethinking continuity in context: introducing the CAP Continuity theory

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#### Abstract - The Problem

Continuity has benefits at individual and organisational levels but is compromised by challenges within healthcare systems internationally. This paper describes a new theoretical framework entitled 'CAP Continuity', which was developed within a realist evaluation exploring continuity in UK general practice for people with mesothelioma. It highlights three key elements of continuity: competence, attitude, and provision. The equally weighted combination of these components in relation to continuity is original.

#### Abstract - The Approach

Nine patient case studies were formed through longitudinal realist interviews. Data were triangulated by also interviewing healthcare professionals (n=12) and close persons (n=9). The analytical approach to the development of the new theoretical framework consisted of three concurrent components: reflexive thematic analysis of the interview transcripts; the development of realist Context-Mechanism-Outcome configurations; and the application of two existing theories (the Burden of Treatment Theory and the Candidacy Framework).

#### Abstract - The Findings

The CAP Continuity framework stipulates that healthcare professionals and patients must be sufficiently competent to provide care or navigate the system to receive such care (competence); each party within the clinician-patient relationship, and the wider healthcare team, requires an attitude that reflects appreciation of the value of continuity (attitude); and the healthcare system must be adequately resourced, both physically and strategically (provision).

#### Abstract - The Implications

The CAP Continuity framework does not seek to replace existing definitions of continuity, but to help integrate such definitions within clinical practice and policy. Though based on data from a UK study, we engaged heavily with the international literature while developing and presenting this theory. It could be applied to contexts beyond mesothelioma, general practice, and the UK, and is potentially relevant to all patients seeking to achieve, and all healthcare professionals keen to deliver, continuity of care.

## **Funding acknowledgement**

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**21**

## **Talking about online activity and mental health with young people in primary care**

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### **Abstract - The Problem**

The number of young people – aged 16-24 - diagnosed with anxiety and depression has increased substantially in the last two decades. Young people are high online users and while being online can be beneficial for mental health, it can also pose risks. Primary care - general practice or talking therapies - provides a setting in which to discuss online activity and its impact on mental health, potentially having a therapeutic or preventative value. The research team have co-created good practice indicators (GPIs) for talking with young people about their online activity during secondary care mental health appointments, but they need to be adapted for primary care. We aimed to explore practitioners' views of talking about online activity and mental health with young people in order to co-develop a specification for a training package and refine the GPIs for use in primary care.

### **Abstract - The Approach**

We interviewed 24 practitioners (GPs, allied health professionals, therapists) using a topic guide and a think-aloud approach to explore the existing GPIs. Interviews were digitally-recorded, transcribed verbatim and analysed using reflexive thematic analysis, with Patient and Public Involvement.

Eleven workshops will be held with key stakeholders (practitioners, young people, parents/guardians) to co-develop adapted GPIs and a training package specification.

### **Abstract - The Findings**

Practitioners explained they were not aware of existing guidance or training, but many had discussed online activity where this was initiated by the young people. Practitioners said that barriers to raising the topic were time, it was not in their 'checklist' and uncertainties about signposting. However, many thought this was an important area for primary care and said they would include such conversations in future appointments. Most practitioners identified training needs in relation to knowledge (topic, structuring a conversation, resources), confidence and skills in helping a young person understand the link between their online behaviour and its impact on mental health. These findings will inform the workshops.

## **Abstract - The Implications**

Findings will help practitioners discuss online activity with young people presenting with mental health concerns by co-producing adapted GPs and a training package specification for use in primary care. Findings will inform future research to create and evaluate the practitioner training and adapted GPs.

## **Funding acknowledgement**

This project was part-funded by the NIHR Bristol Biomedical Research Centre (BRC) (Directors Fund, Archer) and part-funded by the NIHR School for Primary Care Research (Grant 694).

26

## **Learning from end-of-life injectable medication patient safety incidents in primary care: a mixed-methods analysis of nationally reported data**

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## **Abstract - The Problem**

Processes to implement injectable end-of-life symptom control medications in the community are complex and can adversely impact patient safety. Recurring patient safety incident types and their causes remain under-recognised, inhibiting system-wide learning. Our study aimed to understand injectable end-of-life symptom control medication incidents occurring in the community, their contributory factors and the impact on patients/families.

## **Abstract - The Approach**

A mixed-methods analysis was undertaken of nationally reported injectable medication-related patient safety incidents involving adults in the community, between 2017-2022 in England and Wales. A stratified random sample of 2150 incidents were screened for eligibility, with analysis of incident narratives involving end-of-life injectable medications that met the definition of a patient safety incident. We coded what incident types happened, the contributory factors involved, patient impact and harm severity using the recursive and deductive **Patient Safety (PISA)** classification system. We then carried out an iterative thematic analysis to identify relationships between recurring incident types and contributory factors.

## **Abstract - The Findings**

419 patient safety reports detailed injectable medication-related patient safety incidents: 48.2% of incidents (202/419) involved syringe drivers. 59.7% (250/419) of reports described harm to patients, including delays in management and treatment, pain and agitation. The most frequently reported incidents included delayed and inadequate clinical assessments (10.3%, 43/419), prescription issues (8.6%, 36/419) and medication administration issues (49.2%, 206/419). These were problems both in-hours and out-of-hours and often involved multiple services including GPs, pharmacies and community nursing teams. Recurrent, and often interacting, contributory factors included inadequate continuity of care, cognitive issues (distractions and mistakes), poor equipment design (particularly syringe drivers), insufficient staffing levels and failures to follow cross-organisational protocols.

## **Abstract - The Implications**

Interventions to improve injectable end-of-life symptom control care should focus on ensuring timely access to assessments and prescriptions, enhancing continuity of care, mechanisms to ensure rapid visits to administer medication, and improving the usability of syringe driver devices. Community healthcare systems and policy makers need to ensure provision of adequate skill mixes and staffing numbers across teams to provide safe and responsive end-of-life symptom control care.

The study results have directly informed our current qualitative research investigating patients', family caregivers' and professionals' experiences of safe and effective injectable medication care.

## **Funding acknowledgement**

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**28**

## **Demographic and Socioeconomic Disparities in Telemedicine Utilisation Among Individuals with Type 2 Diabetes in Primary Care: A Systematic Review and Meta-Analysis**

Nawwarah Alfarwan, Evan Kontopantelis, Maria Panagioti, Alexander Hodkinson, Lamiece Hassan, Salwa Zghebi

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## **Abstract - The Problem**

**Importance:** Telemedicine has revolutionized the management of type 2 diabetes mellitus (T2DM) in primary care by improving access to healthcare services and enhancing health outcomes. Despite these advancements, it remains unclear whether telemedicine has reduced access inequalities.

**Objective:** To investigate the most important demographic and socioeconomic factors associated with telemedicine use among individuals with T2DM in primary care.

### **Abstract - The Approach**

**Design:** Systematic review and meta-analysis.

**Data sources:** MEDLINE, EMBASE, PsycINFO, Google Scholar, SCOPUS, and CINAHL from inception to December 2023. The reference lists of eligible studies and other relevant systematic reviews were also searched.

**Methods:** We included observational and cohort studies that assessed the effects of telemedicine interventions on individuals with T2DM in primary care. The core outcome were the factors associated with telemedicine use, reported as adjusted odds ratios (AORs) with their 95% confidence intervals for each factor, using a random-effects model. Heterogeneity was quantified using the  $I^2$  statistic, and publication bias was assessed. The protocol for this review was registered at PROSPERO (ID: CRD42024550410).

### **Abstract - The Findings**

**Results:** Of the 3000 records identified, 17 studies involving 71 662 patients were included in the meta-analysis. Female patients had higher odds of using telemedicine than male patients (pooled OR: 1.046; 95% CI: 1.01–1.09). Older adults were significantly less likely to use telemedicine than younger adults (pooled OR: 0.979; 95% CI: 0.98–0.98). Compared to White patients, Black patients were less likely to use telemedicine (pooled OR: 0.55; 95% CI: 0.32–0.94), while no statistically significant differences were observed for Hispanic (pooled OR: 1.075; 95% CI: 0.36–3.24) or Asian patients (pooled OR: 0.56; 95% CI: 0.29–1.06). Patients with higher education levels had greater odds of using telemedicine than those with lower education levels (pooled OR: 1.681; 95% CI: 1.48–1.91).

### **Abstract - The Implications**

This study provides evidence of significant disparities in telemedicine utilisation among men, older adults, black individuals and those with lower levels of education who have T2DM in primary care. Given these groups are among most vulnerable to T2DM, these disparities highlight the critical need for robust guidelines that ensure telemedicine fosters equitable access to healthcare, while preventing further exacerbation of existing health inequalities.

29

### **Cross-sectional study of the association of patient-reported confidence and trust in the health professionals seen at their last consultation with characteristics of English general practices 2023-24.**

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### **Abstract - The Problem**

General practice is becoming more transactional, characterized by triage, with only 45% of consultations being with GPs, around 25% by telephone, and with low continuity. The percentage of general practice patient survey (GPPS) respondents definitely having trust and confidence in the professional they last saw or spoke to fell nationally from 69.2% in 2018-19 to 64.4% in 2023-24.

### **Abstract - The Approach**

We undertook a cross-sectional study to investigate whether percentages of appointments (1) face-to-face or (2) with a general practitioner predict variations between general practices in patient-reported confidence and trust in the professional they saw at their last appointment. We used publicly available data about all English general practices 2023-24, obtained from the GPPS, quality and outcomes framework, NHS Digital appointments data, and General Practice Profiles. Patient population data included IMD2019 score, % aged under 18 years, % white ethnicity, annual appointment rate; practice characteristics included list size, NHS commissioning region, % of patients reporting continuity, % of appointments on the same day or within 1 day, % of appointments with a GP, % of appointments face-to-face; and % of patients reporting that their needs were met at their last appointment. The analysis was a weighted regression, the response rate to the GPPS being used for the weights.

### **Abstract - The Findings**

Confidence and trust increased as % appointments with GPs (beta coefficients and p values -0.05, 0.001), % appointments face to face (0.01, 0.050) increased. It also increased with increases in % white (0.05, 0.001), annual appointment rates (0.46, 0.001), continuity (0.38, 0.001) and % with needs met increased (0.98, 0.001). It was higher in regions outside London. It decreased with increases in IMD (0.05, 0.001) and % under 18 (-0.11, 0.001). The model explained 62% of the variance.

There was no significant association for mean list size or % seen on same day or within 1 day.

### **Abstract - The Implications**

Increasingly transactional general practice (lower levels of face-to-face consultations, consultations with GPs and continuity) is associated with lower confidence and trust in health professionals. This raises concerns about the impact on patient adherence to clinical advice and use of alternatives to general practice (e.g. A&E, private GPs).

### **Funding acknowledgement**

None

## **“Research happens a lot in other settings—so why not here?” A qualitative interview study of stakeholders’ views about advance planning for care home residents’ research participation**

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### **Abstract - The Problem**

Far less research is conducted in care homes compared to other healthcare settings in the UK, despite the high prevalence of cognitive impairment, co-morbidity, and polypharmacy amongst care home residents. The resulting underrepresentation has resulted in a poorer evidence base for health care in care homes. Fewer opportunities to take part in research, as well as assumptions made by others about their interest or wishes, creates challenges for residents’ inclusion in research. Early discussions about research preferences and wishes may be beneficial. This qualitative study aimed to explore stakeholders’ views about how care home residents can be supported to communicate their wishes about research participation.

### **Abstract - The Approach**

Semi-structured interviews were conducted with 25 stakeholders: care home residents (n = 5), relatives (n = 5), care home staff (n = 5), other health and social care professionals who work with care homes (n = 6), and care home researchers (n = 4). Interviews were conducted virtually or face-to-face and data were analysed using thematic analysis.

### **Abstract - The Findings**

Views about resident research participation, the barriers and facilitators to their inclusion, and the role of advance research planning were iteratively organized into three themes: (i) We’re of no value to research; (ii) Research is difficult; and (iii) Advance research planning: good in theory, challenging in practice. Subthemes were also identified, and findings were discussed with a Patient and Public Involvement group for additional reflections.

The development of interventions to facilitate communication that can be adapted to individuals’ requirements are needed to support discussions and decision-making with care home residents about wishes and preferences for future research participation.

Following this work, a communication intervention has been developed to support the communication of care home residents’ research participation wishes and preferences.

### **Abstract - The Implications**

The findings have the potential to inform the development of interventions to support engagement in important discussions about research wishes and preferences for populations who are likely to lose capacity to consent in the future. Doing so may improve recruitment for a population who are underrepresented in research but could benefit greatly from participating and the implementation of research findings within their health and social care setting.

**Talking in Primary Care (TIP): A cluster-randomised controlled trial in UK primary care to assess clinical and cost-effectiveness of communication skills e-learning for practitioners on patients' musculoskeletal pain and enablement.**

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**Abstract - The Problem**

Effective communication can help optimise healthcare interactions. Few interventions have been tested clinically, subjected to cost-effectiveness analysis, or are sufficiently brief for implementation in primary care.

**Abstract - The Approach**

A cluster randomised controlled trial. ISRCTN18010240. General practices in England and Wales randomised to intervention or usual care control (1:1) stratified by practice size and deprivation. Patients and researchers masked to allocation.

Participants: Primary care practitioners (e.g. GPs, nurse practitioners, first-contact physiotherapists) who routinely saw patients with MSK pain.

Intervention arm practitioners received EMPathicO – a brief digital e-learning resource to enhance practitioner communication of clinical empathy and realistic optimism. Control practitioners consulted patients as usual.

Adult (18+) patients consulting participating practitioners face-to-face, by telephone, or video-conference were recruited into 2 groups: those consulting about MSK pain  $\geq 4$  on 11-point scale, and those consulting for any other reason (All-comers). Practitioners were not told which patients participated.

Primary outcomes: MSK pain group co-primaries - pain intensity and patient enablement. All-comers - patient enablement. Analysis was repeated measures over 6 months. Cost effectiveness assessed over 6 months.

**Abstract - The Findings**

53 general practices, 236 practitioners and 1682 patients participated: 806 patients with MSK pain; 876 All-comers. No statistically significant differences were found for primary outcomes: MSK (pain intensity mean difference 0.06, 97.5% CI -0.19-0.31; patient enablement mean difference 0.17, 97.5% CI -0.05-0.40), All-comers (patient enablement mean difference -0.12, 95% CI -0.32-0.07). However, intervention practitioners had significantly higher self-efficacy for communicating empathy and optimism at 8 weeks (empathy mean difference 0.78, 95% CI 0.45-1.10; optimism mean difference 0.98, 95% CI 0.59-1.37) and 34 weeks post-intervention (empathy 0.63, 95% CI 0.32-0.93; optimism 0.75, 95% CI 0.39-1.10). There was no evidence of harms associated with the intervention. For patients with MSK pain, the incremental net monetary benefit at a willingness-to-pay threshold of £20,000 per QALY was £322 (95% CI -£67-£711), with a 95% probability of being cost-effective.

### **Abstract - The Implications**

Brief e-learning for primary care practitioners is safe for patients, significantly increased practitioner self-efficacy and is likely cost-effective. Statistically significant effects on patient health outcomes were not identified. EMPathicO could be rapidly disseminated widely to support practitioners delivering primary care consultations.

### **Funding acknowledgement**

NIHR School of Primary Care

45

### **CASNET2: Evaluation of an Electronic Safety Netting (E-SN) cancer toolkit for the primary care electronic health record**

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### **Abstract - The Problem**

“Safety netting” is a common strategy for managing uncertainty in primary care, particularly where serious diagnoses such as cancer form part of the differential diagnosis. Safety netting includes giving advice on symptom management, when to consult again, and follow-up processes after tests for serious diseases such as cancer, with the intention of minimising delays in diagnosis.

We carried out the CASNET2 study to assess the ability of an electronic safety netting tool built into the primary care patient record computer system to reduce diagnostic delay in patients with cancer.

### **Abstract - The Approach**

CASNET2 is a pragmatic cluster-randomised RCT, where GP surgeries were randomised to “turn on” a safety netting toolkit within the EMIS patient record system at different time points. The toolkit enabled staff to record safety-netting advice and actions for suspected cancer cases, as well as providing reminders for patient follow-up.

Routinely collected data was used to collect information on cancer diagnoses and referrals, and patient outcomes before and after the toolkit introduction were compared to assess its impact on cancer diagnosis. All analyses were adjusted for socio-demographic variables, and cluster assignment.

### **Abstract - The Findings**

We recruited 52 practices to the study, with an eligible population of 442,662 patients, of whom 9,803 received a cancer diagnosis during the study period. The time from first cancer symptom to diagnosis was an average of 25 days (95% CI 20 to 31 days) shorter after the introduction of the safety-netting tool, with the time from first symptom to referral being shortened by an average of 42 days (95% CI 36 to 48 days).

Patients who had the toolkit used as part of their care experienced greater benefits, with time to diagnosis reduced by an average of 32 days (95% CI 25 to 39 days), and time to referral shortened by an average of 53 days (95% CI 45 to 61 days).

### **Abstract - The Implications**

The toolkit evaluated in CASNET2 is available to all GP practices using EMIS software. Our initial results show that the introduction and use of the toolkit results in considerable reductions in time to referral and diagnosis for cancer, with consequent potential for improved clinical outcomes.

### **Funding acknowledgement**

This work is supported by Cancer Research UK, Early Diagnosis Advisory Group (EDAG) grant number C48270/A27880. Neither the funders nor the sponsor have had any role in the study design, data collection, management, analysis or interpretation of data, writing of reports, or the decision to submit reports for publication.

51

### **To refer, or not to refer for suspected cancer? A qualitative study with General Practitioners in England**

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### **Abstract - The Problem**

National Institute for Health and Care Excellence (NICE) guidelines, NG12, specify which signs and symptoms GPs in England should consider for an urgent suspected cancer (USC) referral. However, research suggests that less than half of patients who present to primary care with symptoms included in NG12 are currently referred.

Aim: We aimed to explore the processes and factors underpinning GPs' decision-making regarding USC referrals for patients presenting with symptoms included in NG12.

### **Abstract - The Approach**

Interviews were conducted with 28 GPs from 20 practices across two NIHR Clinical Research Network areas: Greater Manchester and South West Peninsula. The interviews contained two sections, 1.) "Think-aloud" task (GPs viewed 4/24 videos of staged consultation scenarios, half containing NG12-specified symptoms, and discussed their approach aloud), 2.) semi-structured interviews to further explore decision-making. Interviews were analysed using a thematic qualitative approach employing deductive and inductive coding, underpinned by a critical realist perspective.

### **Abstract - The Findings**

*Think-Aloud:* Approximately 1/3 of the time USC referral was not chosen when the scenarios contained NG12-specified symptoms (total 54 viewed), most commonly when patients presented with rectal bleeding (7) or iron deficient anaemia (5). GPs instead proposed faecal immunochemical testing (FIT) either to achieve more decisive information about symptom causation, and so next steps, or because it was a prerequisite for USC referral. Additionally, some GPs did not recommend USC referral for dysphagia (2), post-menopausal bleeding (1) and breast lump (1) due to a perception of the symptoms not indicating cancer, the symptoms indicating an alternative diagnosis, or not having enough information about the patient's preferences.

*Semi-structured Interview:* GP decision-making was influenced by factors in 5 areas: The GP Role, Avoiding Negative Consequences, Organisational Constraints, Sources of Information and General Attitudes to Guidelines. GPs identified multiple factors that influence USC referral from the individual level (e.g. cognitive biases, uncertainty tolerance, guideline familiarity) to the systemic level (e.g. practice culture, continuity of care, healthcare system pressures, and local referral forms not matching national guidance).

### **Abstract - The Implications**

This study highlights key factors impacting on GP decision-making that should be considered when aiming to increase USC referrals in primary care in line with national guidance.

### **Funding acknowledgement**

This study is funded by the NIHR Research for Patient Benefit (RfPB) Programme: Understanding discordance with NICE Suspected Cancer: recognition and referral (NG12) guidance in primary care in England (NIHR204099). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care. The funder had no role in study design, data collection, analysis, interpretations, or writing of the report.

## **How can non-pharmacological interventions help to manage antipsychotic-induced weight gain in people with severe mental illness (SMI)?**

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### **Abstract - The Problem**

Antipsychotics are the main medication used to treat SMI. Second-generation antipsychotics are associated with rapid and potentially significant weight gain, which can have severe consequences such as diabetes. Effective weight management strategies are required.

The overall aim, in this NIHR study, was to conduct a realist review to understand and explain how, why, for whom, and in what contexts non-pharmacological interventions can help to manage antipsychotic-induced weight gain.

### **Abstract - The Approach**

The non-pharmacological management of anti-psychotic weight gain with people with SMI was conceptualised as a complex process. A six-stage realist review, supported by Practitioner (PG) and Lived Experience (LEG) Groups, was conducted to understand this complexity:

1: Focussing: obtaining opinions from PG and LEG.

2: Developing Initial Programme Theories: developing explanations for what needs to be done, how and why, by whom and in what contexts.

3: Developing Search Strategy: refining programme theory with secondary data and finding relevant data for programme theory testing.

4: Selection/Appraisal: screening literature against inclusion and exclusion criteria.

5: Data Extraction/Analysis: analysing data and coding contexts, mechanisms and outcomes in NVivo.

6: Programme Theory Development: refining programme theories based on: key outcomes and strategies needed to trigger these outcomes.

### **Abstract - The Findings**

74 documents were used to produce a programme theory containing 12 context-mechanism-outcome configurations. People with SMI need coordinated, collaborative and holistic support, across both primary and secondary care, including from family and peers. Adaptable interventions tailored to diverse needs, started as soon as possible, are more likely to be effective. The therapeutic relationship is fundamental for identifying and treating coexisting weight gain. Motivational interviewing with collaboratively setting small manageable goals empowers, building a sense of achievement. Peer group-based support and self-monitoring tools are potentially effective interventions.

### **Abstract - The Implications**

Primary care is critical in supporting the physical health of people with SMI. However, currently care is frequently fragmented. New collaborative and adaptable approaches underpinned by early and comprehensive assessment are required. Family, friends, and peers can support goal-setting across diverse populations. A realist evaluation using primary data is currently underway.

### **Funding acknowledgement**

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62

### **Accounting for and explaining 'not doing' within healthcare – Analysing decision-making and documentation practices to address overuse in UK primary care**

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### **Abstract - The Problem**

This study addresses the overuse of healthcare interventions in UK primary care (PC), which can harm patients and strain healthcare systems. Overuse includes unnecessary tests, treatments, referrals, or diagnoses that are unlikely to benefit patients but could cause harm, such as side effects, psychological distress, or financial burdens. Healthcare professionals (HCPs) face challenges balancing necessary care with avoiding overuse, often due to factors like diagnostic uncertainty, fear of complaints, time pressures, patient expectations, and rigid clinical guidelines.

This research explores HCPs' experiences and perceptions of 'not doing', the intentional decision to avoid unnecessary interventions based on patients' medical needs, values, and preferences. It also examines the under-researched area of documenting such decisions. Current professional guidelines

offer limited direction in the documentation of 'not doing', and HCPs are often apprehensive about potential repercussions.

The study aims are to:

1. Explore HCPs' perceptions and experiences of decision-making related to 'not doing.'
2. Investigate HCPs' views on documenting such decisions.
3. Identify measures to support and encourage 'not doing' in PC.

### **Abstract - The Approach**

This study, grounded in social constructivism, uses 40 semi-structured interviews with HCPs, including general practitioners (GPs) and advanced clinical practitioners (ACPs). Participants are recruited through purposive sampling. An interview guide, co-designed with PPI representatives and GP advisors, uses text-based vignettes to prompt discussion.

Interviews conducted via video call are audio recorded, transcribed, and analysed using Reflexive Thematic Analysis (RTA) with NVivo software. This method highlights patterns and variations while ensuring reflexivity and rigour.

### **Abstract - The Findings**

Preliminary findings from 20 interviews include:

- Inconsistent Decision-making Practices: Variability undermines efforts to reduce overuse.
- Patient Expectations: Tangible outcomes are often demanded, complicating advocacy for 'not doing'
- Time and Emotional Burden: Discussions and documentation for 'not doing' take longer and add to the workload.
- Documentation Variability: Differing practices hinder collaboration and trust.

The data collection will be completed by April '25, and the results developed further for the conference.

### **Abstract - The Implications**

Findings could inform strategies for documentation practices that empower HCPs to adopt 'not doing,' improve care, and reduce overuse. The project concludes with disseminating results at a stakeholder workshop to further explore the implications and implementation of the findings.

### **Funding acknowledgement**

The postgraduate researcher is funded by a PhD fellowship from the Healthcare Improvement Studies (THIS) Institute.

65

## **Exploration of current practices of identification and management of Binge Eating Disorder and Bulimia Nervosa in primary care in the United Kingdom: a national survey**

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### **Abstract - The Problem**

A previous review highlighted that a limited knowledge and understanding of BED & BN in primary care professionals may negatively impact the identification and management of BED and BN. Whilst NICE guidelines offer some guidance on identification and management, they assume a general understanding of BED & BN. Currently, it is unknown what, if anything, is actively implemented and used in practice to identify and manage BED & BN in the UK. Hence, this ongoing study explores current practices used in primary care in the UK.

### **Abstract - The Approach**

An online survey was distributed across the UK to all primary care HCPs, individuals with lived experience of BED and BN (LE), and commissioners. Data collection is ongoing (currently with 1301 respondents). Simple random sampling was used to collect data. Data was collected on (a) demographics, (b) screening and identification practices, and (c) referral and treatment practices. The survey was designed with lived experience and stakeholder input. Preliminary data analysis was carried out using descriptive analysis of demographics and close-ended questions. Free-text responses were analysed qualitatively to identify themes. Further analysis will be explored once data collection is finalised.

### **Abstract - The Findings**

Preliminary data was analysed from 133 respondents (1 commissioner, 103 HCPs, 29 LE) most of whom were GPs (73%, N=75) and LE with BN (66%, N=19). On average, 66% of HCPs do not screen for BED & BN. 50% of LE with BED did not have a formal diagnosis. If BED & BN are screened for, the primary screening tool used is SCOFF. However, the screening process lacked clarity and transparency for LE. The most common management method was referral. However, differences between BED & BN were observed. LE reported being primarily managed in ways other than referral to ED services, such as self-help and NHS Talking Therapies, which was deemed inappropriate by LE. The final results will be presented at the conference.

## **Abstract - The Implications**

A lack of active screening and continuous management of BED and BN is reported. The current state of BED and BN identification and management has noticeable gaps and needs urgent focus and coordinated approaches involving all stakeholders to address them.

## **Funding acknowledgement**

SK's PhD project (C062) is funded by the National Institute for Health Research (NIHR) School for Primary Care Research (SPCR)

66

## **Interventions to improve the work-related well-being and retention of primary care practitioners: a systematic review and meta-analysis**

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## **Abstract - The Problem**

### **Background**

Primary care has endured over a decade of underinvestment, staff retention issues, and rising demand, further strained by the Covid-19 pandemic with general practices leading the NHS response. In response, multidisciplinary teams in primary care, including nurses, doctors, paramedics, physiotherapists, and pharmacists, are being established, making their wellbeing and retention a priority.

### **Aims**

This systematic review examines the effectiveness of interventions to improve the wellbeing and retention of primary care practitioners.

## **Abstract - The Approach**

### **Methods**

Searches were conducted across 11 databases and trial registries in April 2023 and updated in October 2024. Interventional studies on improving practitioner wellbeing or retention in primary care were included. Risk of bias was assessed using RoB or Robins tools. A multidisciplinary team handled data selection and extraction, with two reviewers involved throughout. Narrative synthesis and random-effects meta-analyses were performed where feasible. Findings were organised by outcome, study

design, and intervention type using GRADE to evaluate evidence strength. The review protocol was registered in PROSPERO: CRD42023481124.

### **Patient and Public Involvement and Engagement (PPIE)**

An advisory group of 11 primary care practitioners and patients consulted throughout to shape inclusion criteria, data extraction, prioritisation, interpretation, and dissemination.

## **Abstract - The Findings**

### **Results**

These findings will offer valuable insights into enhancing wellbeing, retention, and work environments in primary care. After screening 15,094 citations, 75 studies were included: 23 trials (31%) and 52 observational studies (69%). Practitioner wellbeing was reported in 65 studies (87%), retention in 10 (13%), and burnout was the most common measure (34 studies, 45%). Most interventions (61 studies, 81%) targeted practitioners, with fewer (11 studies, 15%) addressing organisational improvements. Over two-thirds included multiple components, such as education or training (44 studies, 59%), mindfulness or stress reduction (43 studies, 57%), communication skills training (23 studies, 31%), system improvements (16 studies, 21%), mentoring (8 studies, 11%), and workflow enhancements (5 studies, 7%). Analysis of intervention effectiveness is ongoing, with completion expected by February 2025.

## **Abstract - The Implications**

### **Conclusions and Implications**

This is the most comprehensive review of interventions aimed at improving the wellbeing and retention of primary care practitioners to date. While the evidence base is varied, few interventions focused on organisational improvements.

## **Funding acknowledgement**

NIHR School for Primary Care Research (project 597)

69

**The Hidden Workload Study: a national mixed methods study of general practice workload (preliminary results).**

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### **Abstract - The Problem**

When analysing general practice workload, routinely collected NHS data does not capture “hidden” work, such as unplanned contacts, administrative and supervisory tasks, or personal experiences of workload. The Hidden Workload Study aims to accurately describe all tasks undertaken during a clinician’s workday, including direct patient contacts and other tasks, and describe workload in relation to practice demographics.

### **Abstract - The Approach**

All general practice clinicians (e.g. GPs, nurses, pharmacists, physician associates, etc.) in England are eligible for recruitment. Participants record planned work schedules and actual workload (including clinical, administrative, and supervisory tasks) using timers on a randomly allocated workday in Late 2024 or Early 2025. Practice demographic data will be collected from public practice profiles (fingertips.phe.org.uk). 15-20 participants will be interviewed, exploring lived experiences of workload and how local demographics affect workload. Participants will be purposively recruited to include a range of clinical roles and a variety of socio-demographic practice characteristics. Quantitative data will be described in relation to clinical role and practice demographics. Interview recordings will be transcribed, anonymised, and analysed thematically.

### **Abstract - The Findings**

To date, 604 general practice clinicians have been recruited (GP partner:237 [39.2%], salaried GP:135 [22.3%], GP registrar:66 [10.9%], nurse:59 [9.8%], other:107 [17.7%]). 182 participants submitted workload data during Late 2024, and 18 interviews have been completed. Key preliminary findings include GPs each day working one hour longer than planned (e.g., GP partner: 10.7 hours [IQR=10.0, 11.6] vs 9.1 hours [8.5, 10.0]) and spending twice as long on clinical administrative tasks than planned (1.0 hours [0.5, 1.5] vs 2.2 hours [1.3, 3.2]). Early interview themes include the impact of unaccounted for work, team relationships and their effect on workload perceptions, and the direct effect of local communities on workload. We will present further preliminary findings from the remaining 422 participants (69.9%), if completed. Recruitment is ongoing, with final data collection and interviews taking place in Early 2025.

### **Abstract - The Implications**

This study will accurately describe national general practice workload in a real-time fashion, in relation to local demographics, and synthesised with qualitative data from participants. This will form a contemporary analysis of general practice workload, informing future workforce and service provision planning.

## **Funding acknowledgement**

Funding is provided by PACT, RCGP Scientific Foundation Board, and City St George's, University of London.

**74**

## **TOUCAN study – Evaluation of new rapid tests for diagnosing urinary tract infections in primary care settings.**

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### **Abstract - The Problem**

Urinary tract infections are the commonest bacterial infections presenting to primary care, affect half of all women and are responsible for 6 million antibiotic prescriptions annually in the UK. Currently diagnosis relies mainly on symptoms, since urine culture takes too long to produce a result and suffers from contamination in up to 30% of cases, and the only point of care test, dipstick urinalysis, has inadequate sensitivity and specificity. Novel UTI diagnostics are being developed which could provide a point of prescription diagnosis within an hour, however their accuracy has not been assessed in primary care populations.

### **Abstract - The Approach**

TOUCAN is an ongoing prospective diagnostic accuracy platform study designed to allow evaluation of multiple novel UTI diagnostics simultaneously. Women with suspected UTI and symptoms lasting 7 days or less were recruited on presentation to their primary care setting. Up to 3 novel diagnostic tests were performed on their sample in addition to an enhanced central laboratory reference standard. Prescription decision and basic medical history was also collected. Here we report performance of the Sysmex PA-100 PA-AST panel (manufactured by Sysmex-Astrego), which uses a microfluidic approach to deliver information on bacteriuria within 15 minutes and antibiotic susceptibility within 45 minutes.

### **Abstract - The Findings**

877 women have been recruited to the study arm, which will close in February. Full results will be available for presentation. Results from other novel tests performed simultaneously will be used to explore discrepant results.

### **Abstract - The Implications**

Novel UTI diagnostics offer transformative potential for antibiotic stewardship in primary care and pharmacy settings. This study will deliver crucial data on diagnostic performance, the first step in evidence generation required to progress toward implementation.

### **Funding acknowledgement**

This study was funded by the NIHR School for Primary Care Research and NHS England.

**76**

### **Accessible Results: enabling patients with diverse needs to access and understand their blood test results online**

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### **Abstract - The Problem**

NHS England has introduced online patient access to test results, however these results are formatted primarily for clinicians. Patients need to know these results are available, be able to find, understand and know what happens next. This could enhance patient safety and reduce care gaps. If results are not provided in a patient-centred way, it may increase patient anxiety and clinician workload as well as worsening health inequity among those at risk of digital exclusion including older people, minority ethnic groups, and some people with disability. Improving accessibility of test results among different patients is therefore critical to the success of this online results roll-out.

**Aim:** This study aims to develop tools and guidance to assist patients, including those with diverse needs, to access and understand online test results. Study objectives:

- 1) Explore patient/carer and primary care staff views and experiences of online test communication
- 2) Identify barriers/facilitators to online results access for patients with diverse needs
- 3) Co-produce and test prototype tools and guidance to improve accessibility of online blood test results

### **Abstract - The Approach**

Through the person-based approach, the study is currently co-producing a multi-component intervention to enhance the accessibility of online blood test results. The study comprises three work packages (WP), building on a completed systematic review.

WP1: qualitative interviews with 40 patients and 20 staff recruited from six GP practices serving diverse communities in Bristol and Manchester.

WP2: 10 co-production workshops with diverse patient groups and clinicians to develop draft tools and guidance.

WP3: A survey and user-testing of the tools and guidance.

A diverse patient and public involvement and engagement (PPIE) group has been involved in the study from its inception.

### **Abstract - The Findings**

Initial findings show that patients experience several accessibility challenges with online test results, including: not knowing that they can view their test results online, not being able to register/log-in to the online results page, and for those who had received online results, finding the information incomprehensible. A multi-component intervention is currently being co-produced to overcome these challenges.

### **Abstract - The Implications**

Working closely with the NHS App team and other interest-holders our findings are being incorporated into current practice.

### **Funding acknowledgement**

This study was funded by the National Institute for Health Research (NIHR)- Health and Social Care Delivery Research (HSDR) Programme (NIHR159467).

78

### **Use of the FebriDx<sup>®</sup> host response point-of-care-test for upper respiratory tract infections in primary care: a qualitative interview study with patients and clinicians**

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### **Abstract - The Problem**

Rapid combination host response point-of-care tests (POCT<sup>HR</sup>, using  $\geq 2$  biomarkers) have been proposed as a potential way to reduce antibiotic overprescribing. However, there is little understanding of patient and clinician views and experiences of combination POCT<sup>HR</sup> use in primary care for upper respiratory tract infections (URTIs). Our qualitative work aims to explore these views, as part of the RAPID IMMUNE TEST study.

### **Abstract - The Approach**

Qualitative methods are embedded within the RAPID IMMUNE TEST study: a mixed methods feasibility study and diagnostic accuracy assessment of FebriDx<sup>®</sup> within GP surgeries and Pharmacy First pharmacies (n=8) across the NIHR South West Central Research Delivery Network area. Patient recruitment by sites is currently ongoing. Qualitative Academics, clinicians and PPI contributors were involved in the interview topic guide development. Individual semi-structured interviews are being conducted with clinicians managing URTIs (including GPs, nurses, pharmacists and paramedics), and patients (adult and adolescent patients and parents of children) presenting with URTIs, recruited through the RAPID IMMUNE TEST study. Interviews will be audio recorded and transcribed. Data will be analysed thematically using an inductive coding process.

### **Abstract - The Findings**

Interviews will explore participants' views about having the test as part of their appointment, how the test influenced their discussion with the clinician/patient and the treatment selected. We aim to recruit 20 clinicians and 20 patients through purposive sampling to ensure a diverse sample. Recruitment is ongoing across all study sites, with data collection planned to conclude by March 2025, and data analysis completed by May 2025. Sixteen participants (2 clinicians, 14 patients) have been invited to interview, with 4 interviews scheduled so far.

### **Abstract - The Implications**

This qualitative work has the potential to improve understanding of the barriers and enablers to the introduction of POCT<sup>HR</sup> to GP practices and PharmacyFirst for URTIs, determine acceptability of using these tests for clinicians and patients, and the wider logistics of FebriDx<sup>®</sup> use within existing care pathways. These findings could improve appropriate antibiotic prescribing and patient health outcomes by ensuring they receive appropriate treatment for URTIs, and inform future implementation of POCT<sup>HR</sup>. We will also capture novel data from PharmacyFirst clinicians and patients which is a newly implemented treatment pathway.

### **Funding acknowledgement**

This research is funded by the NIHR School for Primary Care Research (SPCR)

79

**Improving communication about menopause for women from South Asian backgrounds: an in-depth qualitative study**

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### **Abstract - The Problem**

Menopause marks a significant biological and psychological transition, yet communication about this life phase can be challenging for South Asian (SA) women living in England. This is compounded by variation in experiences of menopause by culture and ethnicity, which has led to calls to consider psychosocial and cultural mechanisms in menopause in addition to biological and lifestyle explanations.

Our previous study, aimed at determining SA women's research priorities, identified a need for research on communication about menopause. The present research is exploring SA women's experience of communication about menopause with other women, friends, family and General Practitioners. The aim is to uncover their communication preferences and needs. This knowledge will help in improving the delivery of menopause care to SA women.

### **Abstract - The Approach**

Underpinned by the theory of intersectionality, this inclusive qualitative research was co-developed with SA women. To date, we have recruited 48 women across England via community organisations. They have taken part in semi-structured interviews (in-person, online or telephone) in English or a SA language, facilitated by a researcher and community researchers. Data have been transcribed and translated, and are being analysed using Reflexive Thematic Analysis.

### **Abstract - The Findings**

Analysis is underway and will be complete by July 2025. Early findings indicate that SA women have a diverse range of experiences and expectations of communication about menopause. A culture of silence within families and communities, and cultural expectations to endure their experiences without complaint, led to women feeling uncertain of how to approach self-care and medical care. Women reported difficulties in engaging with GPs, in expressing their experiences and preferences, and in accessing menopause hormone therapy. Findings will be disseminated in a collaborative workshop, a postcard exhibition, and an animation in various SA languages.

### **Abstract - The Implications**

The research demonstrates a willingness among SA women to discuss menopause and signals an opportunity to foster open conversations, increase awareness and reduce stigma. It reveals gaps in accessible, culturally sensitive information and tailored health services. There are implications for the broader sociopolitical context, particularly regarding the inclusion of racially minoritised groups in health policy.

### **Funding acknowledgement**

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81

### **An automated robotic process with clinician validation enhances end-of-life registration accuracy.**

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#### **Abstract - The Problem**

End-of-life (EOL) care is associated with high unscheduled hospital admissions rates and avoidable deaths in hospital, which can be improved by earlier EOL registration. We aimed to develop an informatics-based system that supports the accuracy and uptake of the primary care EOL register (EOL\_R).

#### **Abstract - The Approach**

We utilised data from 8 general practices in Wolverhampton, UK, a multiethnic, high deprivation, industrial city. All adults (aged > 18 years, n=39, 079) from participating practices were included. Using data integrated from hospital, community, and primary care sources, a robotic process tool (BOT) identified those not on the existing EOL\_R, for consideration. Those not on the EOL\_R were defined BOT positive if they had any of five EOL process markers. BOT positive patients were assessed by their GP for EOL\_R inclusion. Performance metrics for prediction of subsequent mortality were determined.

#### **Abstract - The Findings**

Of patients not on the EOL\_R, 546 were BOT positive. Of these GPs added 131 (24%) to the EOL\_R. This group had the highest mortality rate (48.1%) compared to those who were already on the EOL\_R at baseline (37.2%); BOT positive but not added to the register by GPs (19.5%); those who were non-registered and BOT negative (0.8%) (p<0.001). The new combined EOL\_R captured 220 (35.5% (sensitivity)) of 619 deaths, compared to 25.4% in the originally registered group. Analysis revealed a high-risk EOL tracker 'digital safety net' group, comprising those initially on the EOL\_R, and all BOT

positive patients (whether they were subsequently added to the EOL\_R or not), which accounted for 48.6% of deaths.

### **Abstract - The Implications**

In support of earlier identification, registration and care planning, a robotic process technique, combined with GP review, yielded higher uptake and accuracy of the EOL\_R, and identified others at-risk for ongoing surveillance. End-of-life care registration is an essential step in providing good palliative care. Previous methods have relied on opportunistic identification and many people who die expectedly are not included on registers. Our new method demonstrates an automated, electronic data driven system with clinician validation. This system improved the uptake and accuracy of end-of-life registration in our cohort.

### **Funding acknowledgement**

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83

### **Integrated therapist and online cognitive behavioural therapy for primary care patients with depression: results of the INTERACT trial**

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### **Abstract - The Problem**

Cognitive behavioural therapy (CBT) is an effective treatment for depression. A key question is how to increase access.

Computerised CBT-based interventions have a modest effect but are not an alternative to individual high intensity CBT as they lack flexibility and are impersonal.

Online CBT using instant messaging is clinically effective. However, existing platforms do not integrate materials to support “homework” between sessions.

We developed a novel approach to delivering CBT that integrated therapist-led sessions and online CBT materials.

The aim of the INTERACT trial was to examine the clinical and cost effectiveness of this approach in reducing depressive symptoms and improving quality of life over 12 months (compared with usual care) for primary care patients with depression.

### **Abstract - The Approach**

We conducted a pragmatic multi-centre randomised controlled trial with two parallel groups. Eligible patients were: aged  $\geq 18$  years; scoring  $\geq 14$  on the Beck Depression Inventory (BDI-II); and met ICD-10 depression criteria.

Participants were individually randomised to either receive integrated CBT (9-12 sessions) or usual GP care (UC). The primary outcome was BDI-II score at 6 months post-randomisation. Secondary outcomes included response and remission (based on BDI-II), other measures of depression and anxiety (PHQ-9/GAD-7) and function (WSAS).

Recruitment target was 434 patients.

### **Abstract - The Findings**

In total, 451 participants from 67 general practices in three sites were randomised.

Primary analyses were of 334 participants (171 integrated CBT; 163 UC). The intervention group had a BDI-II score that was, on average, 4.5 points lower (less depressed) than the UC group at 6 months (difference in means: -4.5 (95%CI: -7.0, -1.9)  $p=0.001$ ). The intervention group had a two-fold increased odds of response ( $\geq 50\%$  improvement in symptoms) and remission (BDI-II score  $< 10$ ), fewer symptoms of depression (PHQ-9) and anxiety (GAD-7), and less functional impairment (WSAS).

Integrated CBT was effective in reducing depressive symptoms in primary care patients with depression. Benefits were also seen for symptoms of anxiety and function.

### **Abstract - The Implications**

Many services switched to providing therapy remotely during the COVID-19 pandemic. There has also been a proliferation of mental health apps. The integrated approach that we have developed is of proven effectiveness. It has the potential to increase access to CBT.

### **Funding acknowledgement**

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**Rapid respiratory microbiological POCTs and antibiotic use in primary care: the RAPID-TEST RCT**

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**Abstract - The Problem**

Antibiotics are prescribed for ~50% of respiratory tract infections (RTIs) in primary care, despite evidence most patients do not benefit. Rapid microbiological point-of-care-tests (POCT<sup>RM</sup>) determine the presence/absence of respiratory pathogens in 15 minutes. Whether POCT<sup>RM</sup> reduce antibiotic prescribing without worsening patient outcomes is not known.

Aim: To investigate whether POCT<sup>RM</sup> (i) reduce same-day antibiotic prescribing for children and adults presenting to primary care with RTIs; (ii) change symptom severity on days 2-4.

**Abstract - The Approach**

Patients  $\geq 12$  months with a RTI where clinician and/or patient believed antibiotic treatment was, or may have been, necessary, presenting to 16 GP practices in SW England. Nasal/throat swab taken. Patients individually randomised to BioFire<sup>®</sup> FilmArray<sup>®</sup> Torch 1 testing (19 viruses, four atypical bacteria); or usual care. No behaviour change training was provided. All patients had BioFire<sup>®</sup> FilmArray<sup>®</sup> at the research laboratory (results not available to clinicians).

**Abstract - The Findings**

552 participants randomised between December 2022-April 2024. 63% female; 86% 16+ years; 95% white ethnicity; 26% chronic lung disease. Outcome data completeness: 548 (99%) antibiotic prescribing; 414 (76%) day 2-4 symptom severity.

POCT<sup>RM</sup> detected no microbes in 52% of intervention group and 51% of control group.

Primary outcome: There was no difference in antibiotic prescribing between intervention and control groups (45% vs 45%, OR 1.00 (0.71-1.41), p-value 0.997), nor between pre-specified subgroups of child vs adult and participant/clinician disagree antibiotics are needed (yes/no). In those with a virus detected by POCT<sup>RM</sup>, antibiotic prescribing was reduced in the intervention group (22% vs 46%, OR 0.35 (0.20-0.63), p-value <0.001).

Secondary outcomes: There was no change in symptom severity on days 2-4 between intervention and control group (difference in means 0.09 (-0.10-0.27), p-value 0.342). Additional secondary outcome data will be available.

### **Abstract - The Implications**

This globally original, large, adequately powered RCT shows no overall change in antibiotic prescribing or patient outcomes with POCT<sup>RM</sup> use. BioFire<sup>®</sup> POCT<sup>RM</sup> should not be recommended in this group of primary care patients. The POCT<sup>RM</sup> tested primarily for viral pathogens and microbes were not detected in ~50% of participants. Further work is needed to understand the utility of multiplex POCT<sup>RM</sup> in safely reducing antibiotic prescribing in primary care.

### **Funding acknowledgement**

This project is funded by the NIHR Efficacy and Mechanisms Evaluation programme (NIHR 131758). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**87**

### **Pragmatic prescribing of opioid medications for chronic pain in people aged over 85**

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### **Abstract - The Problem**

Chronic pain in people over 85 years old, an age-group sometimes termed the 'oldest old', is common and difficult to manage in the presence of multimorbidity, frailty, and polypharmacy associated with ageing. Guidelines encourage a non-pharmacological approach to chronic pain management and consider long-term opioids for chronic pain a potentially inappropriate prescription. As opioids continue to be prescribed to the oldest old for chronic pain, it is important to understand the decision-making processes involved from key stakeholders to enable support to be put in place to optimise the

prescribing of opioids for chronic pain to this cohort. Our study sought to investigate perceptions of adults aged 85 years and older towards opioid use for chronic non-palliative pain.

### **Abstract - The Approach**

Our lay co-applicant and public involvement and engagement group supported the project from conception through to analysis and development of our outputs and future research proposals. Interviews and focus groups were transcribed verbatim, and data analysed using reflexive thematic analysis. Favourable ethical opinion was granted by HRA & REC West of Scotland.

### **Abstract - The Findings**

Thirty-six semi-structured interviews lasting up to one hour were conducted with adults: aged 85 years prescribed long-term opioids (n=12), informal community carers (n=3), staff in residential and nursing care settings (n=9), and healthcare professionals (GPs (n=4), clinical pharmacists (n=7), practice nurse (n=1)) either as individuals or in small groups at participants' request.

Three themes described perceptions towards decision-making around prescribing and use of opioids for chronic pain in the oldest old: Impact beyond pain-relief, Prescribing as a balance; Pragmatic prescribing. Prescribing and taking opioids for chronic pain in the oldest old is a complex decision-making process which depends upon the careful consideration of risks and benefits of opioids for pain relief and quality of life.

### **Abstract - The Implications**

The oldest old are a population with diverse health and care needs which leads to complexities in chronic pain management and individual decision-making that change according to time, place, and person. The use of opioids for chronic pain in this age group may be the last option available to support chronic pain and enable independent functioning; an imperfect treatment for a difficult situation.

### **Funding acknowledgement**

This project was funded by the NIHR School for Primary Care Research (grant reference number: 644)

**88**

### **Prescribing cascades among older community-dwelling adults in Ireland: prescription sequence symmetry analysis of ThinkCascades in a national dispensed prescription database**

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### **Abstract - The Problem**

Prescribing cascades occur when medication is used to treat side-effects of another medication, with older polypharmacy-exposed adults at higher risk. International multidisciplinary clinical expert consensus has recently been achieved on a list of nine clinically important prescribing cascades that may negatively impact older adults. This study examined the prevalence, magnitude, and effect modification of nine prescribing cascades (ThinkCascades list) in a national dispensed prescription database.

### **Abstract - The Approach**

Prescription sequence symmetry analysis (PSSA) was applied to primary care prescriptions for ThinkCascades medications dispensed under the General Medical Services (GMS) scheme in Ireland from 2017 to 2020 (n=533,464). Incident users of both medications in each ThinkCascades dyad aged  $\geq 65$  years were included. A one-year run-in period defined incident use. An observation window of 365 days was employed; varying windows were examined in sensitivity analyses. Sequence ratios were adjusted for secular prescribing trends and reported as adjusted sequence ratios (aSR), with values  $>1$  indicating an increased probability that a prescribing cascade has occurred. Stratified analyses were conducted for sex, age, and individual medication.

### **Abstract - The Findings**

Overall, five prescribing cascades produced significant positive aSRs. The prevalence ranged from 0.4% to 3.2% across the five significant positive signals identified. The strongest signal was identified for the calcium channel blocker to diuretic cascade (aSR 1.93, 95%CI 1.79, 2.09). Positive signals were also identified for the alpha-1 receptor blocker to vestibular sedative (aSR 1.63, 95%CI 1.46, 1.81); SSRI/SNRI to sleep medication (aSR 1.54, 95%CI 1.40, 1.69); antipsychotic to antiparkinsonian (aSR 1.20, 95%CI 1.00, 1.43); and benzodiazepine to antipsychotic (aSR 1.15, 95%CI 1.08, 1.21) cascades.

### **Abstract - The Implications**

This study is the first to describe the prevalence of ThinkCascades, an expert consensus-based list of prescribing cascades, in a national population of older adults. Five clinically relevant prescribing cascades for commonly prescribed medications were identified in a large-scale national sample of older Irish adults. This study highlights prescribing cascades as a potential contributor to complex polypharmacy for older people living with multimorbidity. Adverse drug reactions should be included in the differential diagnosis for older adults presenting with new symptoms in primary care.

### **Funding acknowledgement**

This study was funded by the Health Research Board Ireland Emerging Clinician Scientist Award (HRB-ECSA-2020-002) awarded to Prof Emma Wallace.

## **Examining variations in adherence to guideline-recommended post-acute kidney injury care in UK primary care**

Pearl Mok<sup>1</sup>, [Simon Fraser](#)<sup>2</sup>, Simon Sawhney<sup>3</sup>, Nicholas Selby<sup>4</sup>, Paul Roderick<sup>2</sup>, Matthew Carr<sup>1</sup>, Rachel Elliott<sup>1</sup>, Evan Kontopantelis<sup>1</sup>, Andrew Lewington<sup>5</sup>, Alireza Mahboub-Ahari<sup>1</sup>, Robbie Foy<sup>6</sup>, Tom Blakeman<sup>1</sup>, Darren Ashcroft<sup>1</sup>

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### **Abstract - The Problem**

People discharged from hospital after acute kidney injury (AKI) often have complex health needs. However, despite a decade of initiatives in the UK to raise awareness of AKI, concerns remain that these patients do not receive adequate follow-up and care after transitioning from hospital back into the community. This study examined factors associated with variations in the implementation of recommended post-discharge AKI care.

### **Abstract - The Approach**

Using Hospital Episode Statistics admission data from England, we delineated a cohort of adult patients ( $\geq 18$  years) with a hospital diagnostic code of AKI discharged between 1 January 2017 and 31 March 2021. Using linked primary care data from the Clinical Practice Research Datalink Aurum, we measured adherence to indicators of recommended care covering domains of (1) recording of AKI in primary care, (2) timeliness of post-discharge clinical reviews, (3) monitoring of recovery at 90 days, and (4) guideline-indicated prescribing. We evaluated care quality overall and within subgroups based on demographic, socioeconomic, and clinical characteristics.

### **Abstract - The Findings**

The study cohort comprised 209,222 patients (48.0% females; mean age 74.1 years, SD 15.6), representing 279,187 AKI hospital inpatient episodes. Our findings show that while some form of clinical contact (either in person or remotely) occurred within 30 days of discharge for 72.5% of episodes, only 19.5% had a diagnosis of AKI hospitalisation recorded in the primary care records. These rose to 88.1% and 22.0%, respectively, at 90 days. Variations by demographic and socioeconomic factors were observed.

At around 90 days post-discharge, measurement of serum creatinine for kidney recovery occurred in 34.2% of episodes, blood pressure was recorded in 34.6%, and urine albuminuria testing in only 3.8%. Of people with a guideline indication for a renin-angiotensin system inhibitor based on diabetes or hypertension and proteinuria levels, only 42.1% received a prescription.

### **Abstract - The Implications**

Our findings indicate considerable scope for improving recommended post-discharge AKI care. They highlight a need for the development of concerted implementation strategies spanning primary and secondary care, including clear, case-specific guidance on post-discharge management to primary care teams.

### **Funding acknowledgement**

This study is funded by the NIHR Health and Social Care Delivery Research (HSDR) Programme and the NIHR Greater Manchester Patient Safety Research Collaboration.

93

### **Navigating the route to pelvic floor health: Women's perceptions from the EMPOWER Study**

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### **Abstract - The Problem**

Pelvic floor disorders (PFD), including urinary incontinence, pelvic organ prolapse, and anal incontinence affect up to half UK women, impacting quality of life. Guidelines recommend conservative management, yet only a third of those affected seek help. Suggested reasons include embarrassment, normalisation of symptoms and challenges within primary care. There is little in-depth qualitative research exploring the reasons why women do not seek help. The Royal College of Obstetrics and Gynaecology, Women's Health Strategy and NICE Guidelines have called for further research in this area.

The aim of this study was to investigate women's beliefs and experiences regarding help-seeking to manage and treat PFD symptoms, focussing on those who have not sought help.

### **Abstract - The Approach**

Adult women who self-reported symptoms of PFD were purposefully recruited to participate in semi-structured interviews to investigate their experiences and beliefs regarding accessing help for symptoms, with a particular focus on participants who had not previously sought help. A sample size of up to 30 was planned.

Interview transcripts and field notes were imported into the qualitative software package NVivo 15 to facilitate data management and the development of a coding framework. Qualitative data was analysed thematically.

### **Abstract - The Findings**

30 women, representing a range of symptoms, ages and ethnicities, were interviewed via TEAMs. The duration of the interviews ranged from 30 to 71 minutes (M = 48, S.D.= 11). (Full thematic analysis in progress).

Initial findings suggest the main barrier for women seeking care is lack of knowledge. Most were unaware that symptoms could be treated. Although symptoms were embarrassing in daily life, they were not believed to be serious enough to warrant taking up GP time. Women were not embarrassed or anxious about discussing symptoms with health care professionals. Women believed better public health messaging regarding causes of symptoms and optimal management strategies could empower them to help themselves and seek further help when required.

### **Abstract - The Implications**

Current public health messaging should include clear reliable information about pelvic health, delivered at all stages of women's lives. Simple education has the power to improve quality of life for many women and enable them to make better choices regarding their pelvic health.

### **Funding acknowledgement**

This study has been funded via an NIHR School of Primary Care Research Post-doctoral fellowship for Dr Gillian Campbell

94

### **Primary care practitioners' views and experiences of completing and implementing EMPathicO training in everyday practice: a qualitative study.**

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### **Abstract - The Problem**

Effective practitioner-patient communication can help enhance healthcare interactions, improve self-management and patient outcomes. EMPathicO is a rigorously developed, evidence-based brief (30-120 min) e-learning package for primary care practitioners to enhance communication of clinical empathy and realistic optimism. The Talking in Primary care (TIP) cluster-randomized controlled trial assessed effectiveness and cost-effectiveness of EMPathicO on patients' musculoskeletal pain and enablement. Qualitative interviews with intervention arm practitioners explored their views and experiences of completing and implementing EMPathicO training in subsequent consultations.

### **Abstract - The Approach**

We conducted 23 semi-structured interviews (MS Teams/telephone) with a purposive sample of primary care practitioners across 15 practices (16 initial and 7 follow up interviews), including new and experienced GPs, nurses and physiotherapists. Interviews typically lasted 29 minutes (range 15 to 48). Interview data were thematically analysed to explore views and experiences of completing EMPathicO training during the trial and making changes to subsequent consultations i.e., implementing goals around showing empathy and optimism in everyday practice.

### **Abstract - The Findings**

Completing EMPathicO was perceived as convenient, manageable, informative, and relevant to primary care consultations. Practitioners felt persuaded to make changes to their consultations following the training as they appreciated having the autonomy to set personal goals; felt showing empathy and optimism plays an important role in effective practitioner-patient communication; found their chosen empathy and optimism goals feasible to incorporate into everyday practice without lengthening the consultation, and felt making such changes incurred benefits for both patients and themselves. A dominant viewpoint was that EMPathicO would be particularly helpful to less experienced practitioners and work well embedded into existing training programmes e.g., GP training. Practitioners also reflected on the challenges of showing empathy in everyday practice, finding it more difficult in telephone consultations due to limitations on non-verbal communication. They also felt showing optimism was challenging in some situations.

### **Abstract - The Implications**

Primary care practitioners found completing EMPathicO positive and worthwhile, helping enhance their communication skills. They perceived it provided benefits for patients and themselves. They also felt exploring the feasibility of implementing EMPathicO within GP training and medical education settings would be valuable. If rolled-out, EMPathicO is likely to be well-received by primary care practitioners.

### **Funding acknowledgement**

National Institute for Health Research (NIHR) School for Primary Care Research grant (project number 563)

100

## **Enhancing Understanding of Interventions to Increase Relational Continuity in Primary Care: A Realist Review of Context, Mechanisms, and Outcomes**

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### **Abstract - The Problem**

Relational continuity of care (RCC), which is characterised by an ongoing therapeutic relationship between patients and their primary care providers, is critical for ensuring high-quality care in general practice. Despite its importance, challenges such as staffing shortages, policy shifts, and evolving patient needs often impede its consistent delivery (1, 2). A number of strategies have been implemented to improve relational continuity, but there is a limited understanding of how these strategies work, for whom, and in which contexts they are most effective (3)

This realist review aims to investigate how, why, and under what circumstances relational continuity of care (RCC) is achieved in general practice, and to explore the outcomes it produces for patients, healthcare providers and the wider healthcare system.

### **Abstract - The Approach**

This review will examine the UK and countries with similar primary care systems, characterised by features such as multidisciplinary teams, general/family practice leadership, group practices, a degree of autonomy over practice organisation (e.g., independent contractors), and responsibility for a defined patient list. It will utilise Pawson's five steps for realist reviews to synthesise evidence on the contexts, mechanisms, and outcomes (CMOs) linked with delivering RCC in general practice. These include (1) identifying existing theories, (2) gathering evidence, (3) selecting articles, (4) extracting data, and (5) synthesising findings and drawing conclusions. The review will follow the quality standards for realist synthesis set by the RAMESES criteria. (10, 11)

### **Abstract - The Findings**

We will present the initial programme theory and results of the preliminary literature search. Ultimately, the review will conclude with recommendations for practice and policy, offering actionable insights on

how to design, implement, and adapt RCC interventions to improve relational continuity in general practice. The refined programme theory will guide these recommendations, and it will be shared with healthcare practitioners, policymakers, and researchers to enhance the sustainability and effectiveness of RCC interventions in primary care.

### **Abstract - The Implications**

The findings will provide data to inform future research and refine strategies and policies that support the effective delivery of relational continuity, which in turn may lead to improved patient outcomes and enhanced care experiences.

### **Funding acknowledgement**

NIHR SPCR Primary Care Clinician Career Progression Fellowship

102

### **The association between body mass index and infection risks in people with and without type 2 diabetes using a large English cohort of electronic health records.**

Iain M Carey, Tess Harris, [Umar A R Chaudhry](#), Stephen DeWilde, Elizabeth S Limb, Liza Bowen, Selma Audi, Derek G Cook, Peter H Whincup, Julia A Critchley

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### **Abstract - The Problem**

Observational studies demonstrate U-shaped associations between body mass index (BMI) and infections. People with type 2 diabetes (T2D) have higher BMIs and risk of infections. However, it is unknown whether BMI has the same impact on infection risk in people with and without diabetes. This study aims to describe these associations across different infections using a large English cohort of electronic health records.

### **Abstract - The Approach**

We compared 516,935 people with T2D and 751,909 people without T2D on 01/01/2015 who had BMI measurements during 2011-14 and were matched on age, sex and ethnicity in Clinical Practice Research Datalink. Infections occurring 2015-2019 were collated using Read codes (primary care) and ICD-10 codes (linked hospital data). Poisson regression models estimated incidence rate ratios (IRR) for infections across 12 different BMI categories (reference group was 24-26 kg/m<sup>2</sup>).

### **Abstract - The Findings**

At all BMI levels, people with T2D had higher infection risks in both primary care and those requiring hospitalisations, than people without diabetes. However, the pattern of infection risk at different BMI levels was similar in people with and without T2D. For example, people in the highest BMI category (BMI

>48 kg/m<sup>2</sup>) had a more than double the infection risk compared to the reference BMI group (T2D IRR=2.35, 95%CI 2.26-2.44; non-diabetes IRR=2.52, 95%CI 2.30-2.75). U-shaped associations were seen for infections requiring hospitalisations, which was not explained by age, smoking or co-morbidity and a consistent positive association of infection risk with increasing BMI levels was observed for primary care infections. Of infection types, cellulitis had the strongest trends in relation to high BMI levels (distinctive J-shaped), whereas lower respiratory tract infections and sepsis had high incidence at both high and low BMI levels (most U-shaped).

### **Abstract - The Implications**

Despite infections risks being higher for people with T2D, the association of increasing BMI with higher infection risk is consistent amongst people with and without diabetes. Being underweight also increases risk of infections, requiring hospitalisation. Obesity and T2D are important current and future health burdens of disease with substantial cost implications. Targeted management of infections through prompter diagnoses and earlier treatment could alleviate some of these burdens in higher risk patients according to their BMI.

### **Funding acknowledgement**

This study is funded by the National Institute for Health and Care Research (NIHR) - Research for Patient Benefit Programme (NIHR202213) and supported by the NIHR Applied Research Collaboration South London (NIHR ARC South London) at King's College Hospital NHS Foundation Trust.

105

### **How equitable, diverse and inclusive are UK primary care trials? A systematic review**

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### **Abstract - The Problem**

Randomised Controlled Trials (RCTs) are central to evidence-informed medicine and their findings greatly influence clinical guidelines and pathways. More trials are being delivered in primary care however, for the findings to be generalisable, they should be inclusive of the populations for which the intervention is targeted. The NIHR's INCLUDE project looked to address this by creating a framework to consider inclusivity throughout each step of the trial process, concluding at the end of 2021. The PRO EDI initiative, created by the Trial Forge collaborative looks to improve how equity, diversity and inclusion are handled in evidence synthesis, outlining characteristics about trial participants to guide data extraction. Therefore, using the PRO EDI template, this systematic review aims to address the question "How equitable, diverse and inclusive are UK primary care trials?" and act as a benchmark of inclusivity within primary care RCTs prior to the NIHR mandating that inclusion and addressing health inequalities being a key condition for funding from November 2024 onwards.

### **Abstract - The Approach**

This systematic review will be carried out in accordance with PRISMA guidelines and has been prospectively registered on OSF (<https://doi.org/10.17605/OSF.IO/492GF>). MEDLINE, Embase and the Cochrane Central Register of Controlled Trials (CENTRAL) will be searched to identify any RCT conducted in the UK from January 2022 – September 2024. The search strategy was developed using a combination of medical subject headings (MeSH terms) and free-text terms with support from an experienced information specialist (FS). Covidence will be used to assist in the reviewing of titles and abstracts and subsequent full-text screening which will be conducted by two independent reviewers (MK and JC) with any discrepancies resolved through discussion. Preliminary searches have identified 4471 records for title and abstract screening stage.

### **Abstract - The Findings**

This work is ongoing but we aim to present the prevalence of PRO EDI characteristics of trial participants in the UK primary care setting at the conference.

### **Abstract - The Implications**

We hope to narratively describe the state of inclusivity of trial participants in UK primary care, in the post-INCLUDE framework period and prior to NIHR funding criterion changing.

### **Funding acknowledgement**

Samuel Creavin for his critique during the conception phase.

109

### **PRAMS: Using experience-based co-design to improve access to perinatal mental health care for women in underserved groups.**

Elena Sheldon<sup>1</sup>, Naseeb Ezaydi<sup>2</sup>, Kelly Hobbs<sup>1</sup>, Caroline Mitchell<sup>3</sup>, Julia Thompson<sup>4</sup>, Katie Marvin-Dowle<sup>5</sup>, Helen Miles<sup>6</sup>, Saima Ahmed<sup>6</sup>, Kate Fryer<sup>2</sup>, Laura Sutton<sup>2</sup>, Victoria Silverwood<sup>3</sup>, Danielle Hahn<sup>2</sup>, Dan Hind<sup>2</sup>, Kelly Mackenzie<sup>2</sup>

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### **Abstract - The Problem**

Perinatal mental health (PMH) problems affect 10-20% of women during pregnancy and the first year postpartum, costing the UK £8.1 billion annually. Women from underserved groups, including ethnic minorities and those from socioeconomically deprived areas, face significant inequalities in PMH outcomes and access to psychological interventions. There are widely recognised treatment gaps between primary and secondary mental healthcare, with many women falling between NHS Talking

Therapies and specialist PMH services. Current guidelines do not address how services can overcome access barriers for underserved women with unmet PMH needs.

The PRAMS study aims to develop a bespoke, trauma-informed psychological intervention for underserved women with unmet PMH needs, using a modified Accelerated Experience-Based Co-Design approach.

### **Abstract - The Approach**

This presentation will focus on two of three work packages. Work Package 1 explores healthcare professionals' experiences via an online survey using the validated Pragmatic Context Assessment Tool (pCAT) to local staff with PMH-focused roles and conducted semi-structured interviews with a purposive sample of up to 20 professionals. Analysis involved descriptive statistics of survey responses. We will also present preliminary findings from focus groups conducted with women representing different underserved groups and with lived experience of PMH problems. The Consolidated Framework for Implementation Research and Candidacy Framework was used to understand the barriers to PMH care access and delivery and identify priorities for co-designing the intervention.

Professional stakeholders and underserved women with lived experience of PMH are integral to the methodology and co-design of the intervention itself. Our recruitment strategy for work package two employs Community Research Link Workers to engage underserved women. A Patient and Public Involvement (PPI) panel provides ongoing project guidance and supports research activities. Light, a local peer support charity, serves as a formal collaborator, including a community engagement lead.

### **Abstract - The Findings**

Data analysis will be complete and ready for presentation by the time of the conference.

### **Abstract - The Implications**

This study provides crucial insights into the systemic barriers affecting PMH care access and delivery for underserved women with diverse needs. Our co-designed intervention will address treatment gaps between primary and secondary care pathways for PMH. Results will have broader implications for national policy on reducing PMH inequalities.

### **Funding acknowledgement**

This study is funded by the NIHR Three Schools Mental Health Programme. This report is independent research by the National Institute for Health Research. The views expressed in this publication are those of the author (s) and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health.

## **Development and validation of a risk prediction model for earlier diagnosis of heart failure in primary care (RiskHF)**

Clare Taylor<sup>1</sup>, Maria Vazquez-Montes<sup>2</sup>, Nicholas Jones<sup>2</sup>, Subhashisa Swain<sup>2</sup>, Kathryn Taylor<sup>2</sup>, Clare Bankhead<sup>2</sup>, Julia Hippisley-Cox<sup>2</sup>, Lucinda Archer<sup>1</sup>, Richard Riley<sup>1</sup>, FD Richard Hobbs<sup>2</sup>

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### **Abstract - The Problem**

Heart failure (HF) is a common, costly, and treatable condition with effective therapies to improve patient outcomes if diagnosed early. However, prognosis remains poor with a 'deprivation gap' in survival between the least and most deprived. People diagnosed in the community have a better outlook, but 8 out of 10 patients still receive a first HF diagnosis at the time of hospitalisation. International guidelines recommend natriuretic peptide testing in primary care for people with suspected HF to guide referral for diagnosis.

In this study, we derive and validate clinical risk prediction models ('RiskHF') to identify patients likely to develop HF in the next 12 months, to facilitate earlier diagnosis in primary care.

### **Abstract - The Approach**

An open cohort study was used for model development, carried out using primary care data from the Clinical Practice Research Datalink (CPRD-Aurum) linked to Hospital Episode Statistics (HES) and Office for National Statistics (ONS) mortality data. Patients aged 45 years and over in England from 01/01/2010 to 31/12/2019 without a diagnosis of HF were included. The primary outcome was a diagnosis of HF (in CPRD or HES) in the next 12 months. Predictor variables included patient demographics, HF symptoms, cardiovascular risk factors, co-morbidities, and prescriptions. Cox proportional hazards models were used to derive risk equations for men and women separately. The predictive performance of these models will be evaluated in an external validation dataset (QResearch).

### **Abstract - The Findings**

Of the 7,385,495 patients included in the development cohort, 28,382 (0.4%) were diagnosed with HF within one year of cohort entry (median age 78 years, 48.5% female). Long-term conditions were common prior to HF diagnosis (ischaemic heart disease 25.8%, diabetes 23.7%, AF 21.0%, CKD 24.6% and COPD 15.7%). HF symptoms were coded for 5,548 (19.5%) patients with HF in the 12 months prior to cohort entry (breathlessness 10.4%, exhaustion 2.4%, ankle swelling 9.3%). The risk prediction models, and their performance will be available soon.

### **Abstract - The Implications**

The RiskHF tool could be integrated into GP systems to target patients, particularly underserved groups, for natriuretic peptide testing (if symptomatic) and referral to facilitate diagnosis of HF at an earlier, more treatable stage, and prevent hospital admission.

## **Funding acknowledgement**

This work is funded by a project grant from the British Heart Foundation (PG/22/10860).

**115**

## **Supporting families with unsettled babies: Development of a digital behavioural intervention**

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### **Abstract - The Problem**

Unsettled baby behaviours, such as crying and vomiting, are common but distressing for families and are increasingly attributed to medical causes such as reflux or cows' milk allergy. When inaccurate, such diagnoses can cause unnecessary harm to families and healthcare systems. Existing interventions to support parents are costly and often biased by conflicts of interest from the formula milk industry.

This study aimed to develop a theory-, evidence- and person-based digital behavioural intervention to support parents and reduce inaccurate medicalisation of unsettled baby behaviours.

### **Abstract - The Approach**

The Person Based Approach (PBA) to intervention development was used. UnsettledBabiesOnline was underpinned by a qualitative systematic review and thematic synthesis, creation of a conceptual model, in-depth qualitative interviews and extensive patient and public involvement and engagement (PPIE). Intervention planning was completed through understanding user context, logic modeling, writing of guiding principles and application of behaviour change theory. In the optimisation phase, a diverse sample 25 parents of unsettled babies iteratively refined the intervention through think-aloud interviews. These were analysed using a table of changes and thematic analysis.

### **Abstract - The Findings**

Programme theory suggests that parents of unsettled babies feel guilty and like a 'bad parent' when babies exhibit unsettled behaviour. This drives the search for a medical explanation and may lead to inaccurate diagnoses. Parents also feel helpless and lack high quality information to guide self-management. Parenting self-efficacy is conceptually connected to and has been found to correlate with feelings of guilt, helplessness and uncertainty. Self-efficacy theory and behaviour change theory were therefore used to develop an intervention to meet these parent needs. In think-aloud interviews, parents reported that they found the content engaging, accessible, relatable and useful. Changes were made to the structure, tone and aesthetics in response to user feedback.

### **Abstract - The Implications**

A theory-, evidence- and person-based digital behavioural intervention is presented which supports parents worried about their unsettled baby by building parenting self-efficacy. Parents found the intervention helpful and it has promising potential for clinical practice. Future research is needed to optimise and evaluate this intervention and determine cost and clinical effectiveness.

### **Funding acknowledgement**

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117

### **Can hairdressers act as a bridge between communities and health services, for cardiovascular health promotion in ethnically diverse women? Mixed methods study: Salon and practice mapping and training evaluation.**

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### **Abstract - The Problem**

Cardiovascular disease (CVD) is a significant cause of mortality and morbidity within the United Kingdom, and ethnicity and deprivation are consistent correlates of CVD risk factors, and poor uptake of CVD screening. Hairdressing salons have been successfully used for cardiovascular health promotion in the United States, but UK studies are lacking. Our UK BELONG project is extending to identify and train hairdressers to work in collaboration with local GP practices to promote early detection of CVDs amongst women in three ethnically diverse and deprived neighbourhoods of London.

### **Abstract - The Approach**

We are developing a sampling frame using GIS, online directories and participatory mapping, and are creating an overlapping assessment of GP practices, hair salons, CVD and mortality, Index of Multiple Deprivation (IMD), and ethnic specific densities in Lambeth, Lewisham and Tower Hamlets. This is using publicly available data from Public Health England Fingertips and participating GP practice summary data. Following this, exploration of the training evaluation with selected salons in our study areas using quantitative (e-surveys) and qualitative methodology (evaluation framework analyses) will be carried out.

## **Abstract - The Findings**

From the salon and practice mapping, we have identified 235 total salons and 105 total practices in Lambeth, Lewisham and Tower Hamlets; % of salons in lowest two IMD quintiles (4 & 5) are 59.5, 71.8 and 72.8 respectively. CVD adult risk profiles reveal for Lambeth (n=327,582) prevalence of CVD risk factors include: 50% of individuals being overweight or obese, 9.2% with diabetes, and 9.4% with hypertension; Ethnicity: 7% are of Asian, 24% Black African, and 40% White. Tower Hamlets (n= 310,300) shows similar CVD risk factors: 45.9% being overweight or obese, 8.3% with diabetes, 7.6% with hypertension; Ethnicity: 38% are of Asian, 5% Black African, and 49% White. Our CVD training evaluation for salon staff will highlight the key barriers and enablers for salons to deliver a culturally accessible CVD prevention service model.

## **Abstract - The Implications**

Hairdressing salons are powerful, trusted community assets whom, in partnership with GP practices, could facilitate CVD prevention and health check promotion amongst ethnically diverse women in deprived areas. This research provides greater understanding of innovative health partnerships between primary care and the wider community.

## **Funding acknowledgement**

Study Funding: NIHR Research for Patient Benefit NIHR202769

124

## **GP attitudes towards the potential utility of an AI-augmented clinical decision support tool for hypertension – a cross-country qualitative study**

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## **Abstract - The Problem**

Given the importance of hypertension as a risk factor for cardiovascular disease (CVD), its prevalence in the community, our failure to achieve blood pressure targets for many patients, and the emergence of artificial intelligence (AI)-augmented health technologies, primary care may represent an ideal setting for implementing innovative technologies as tools for blood pressure management.

Using hypertension as a case study, we aimed to explore GPs' attitudes to the opportunities and challenges of using AI-augmented clinical tools for managing high blood pressure.

## **Abstract - The Approach**

This qualitative exploratory study used purposive sampling to promote diversity of views across Australia and UK. Semi-structured interviews were conducted with 22 GPs, recruited through existing research and teaching networks. As part of the interview, two scenarios of potential AI-augmented clinical decision support (CDS) for managing hypertension were discussed. A thematic analysis approach assessed the acceptability of AI-augmented CDS tools for hypertension.

### **Abstract - The Findings**

Our preliminary findings suggest that GP attitudes towards the opportunities and challenges of AI in primary care reflected their pragmatic, patient-centred approach to hypertension management generally. GPs in both countries considered the proposed AI tool broadly acceptable and trustworthy if endorsed by trusted clinical associations and free of vested interests. However, GPs also highlighted that utility of AI CDS for hypertension would be limited if it could not offer efficiencies to the GPs in the distinctive complexities of chronic condition management for their specific patients. There were clear country differences in this theme reflecting a more 'protocolised' approach in the UK. Desired efficiencies included seamless integration into clinical software, and synthesis of patient data in relation to clinical recommendations. Scepticism towards the quality and local applicability of electronic patient records in an AI dataset was also expressed by some GPs, especially in Australia.

### **Abstract - The Implications**

To be taken up, AI CDS technology implementation in primary care will need to address the practical needs of GPs and facilitate the real-time, locally appropriate care of individual patients.

### **Funding acknowledgement**

This project was supported by internal funding scheme: Adelaide-Nottingham Alliance Partnership Seed Fund 2024.

126

### **HbA1c variability and all-cause mortality in Type 1 and Type 2 diabetes: a population-based cohort study using electronic health records**

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### **Abstract - The Problem**

Diabetes is one of the leading causes of death and disability worldwide. It is therefore important to understand characteristics of diabetes that may affect the burden of morbidity and mortality. The importance of diabetes control as measured by average HbA1c is well established and is a focus of diabetes management guidelines. There is growing evidence that not just average level but variability in HbA1c may be important for multiple micro- and macro-vascular outcomes

The aim of this study was to investigate associations between HbA1c variability and all-cause mortality in individuals with diabetes, accounting for average HbA1c level.

### **Abstract - The Approach**

Mean HbA1c and variability score (HVS) were estimated for people aged 31-90 with diabetes (type 1=20,347, type 2=409,821) with 4+ HbA1c measurements recorded in the Clinical Practice Research Datalink in 2011-14 and alive on 1/1/2015. Cox models estimated hazard ratios (HR) for all-cause mortality, ascertained from national linked mortality data during 2015-19. HbA1c level and variability were mutually adjusted for each other and other measured confounders.

### **Abstract - The Findings**

Greater HbA1c variability was associated with younger age, non-white ethnicities (type 1 only), obesity, co-morbidities, and living in deprived areas. During follow-up, 1,043 (5.1%) individuals with type 1 diabetes and 40,723 (9.9%) individuals with type 2 diabetes died. In those with the most HbA1c variability compared to the least (HVS=80-100 vs 0-20), the estimated adjusted HRs for mortality were 2.78(95%CI 2.15, 3.60) in type 1 diabetes and 1.91(1.83, 1.99) in type 2 diabetes.

### **Abstract - The Implications**

Variability in HbA1c was associated with greater subsequent mortality among people living with diabetes, independent from average HbA1c. Future research should investigate whether reducing HbA1c variability in selected patients lowers mortality risk independent of HbA1c level improvements.

### **Funding acknowledgement**

This study is funded by the National Institute for Health and Care Research (NIHR) - Research for Patient Benefit Programme (NIHR202213) and supported by the NIHR Applied Research Collaboration South London (NIHR ARC South London) at King's College Hospital NHS Foundation Trust.

**128**

### **Preparing healthcare services for equitable and informed implementation of Multi-Cancer Detection blood tests**

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### **Abstract - The Problem**

Multi-Cancer Detection blood tests (MCDs; tests to look for cancer-related signals in the blood) could potentially advance cancer diagnosis through screening and for symptomatic patients, pending further evidence of clinical utility and consideration of diagnostic infrastructures. However, evidence about the information and communication needs of the public (particularly under-represented groups), health care professionals (HCPs), policy makers, relevant stakeholders and third sector organisations regarding these tests is lacking. Understanding these needs and developing person-centred communication strategies, training and educational materials will be critical to ensure that HCPs and other stakeholders are appropriately informed for possible implementation of MCD blood tests, and that this new technology does not increase existing cancer inequalities if implemented.

### **Abstract - The Approach**

As part of the wider study, we are conducting a series of qualitative semi-structured key informant interviews with HCPs, policy makers, relevant stakeholders and third sector organisations from across the UK devolved nations (n~25). Through purposive sampling, based on the concept of information power, we are recruiting participants representing primary and secondary care, screening and diagnostic services/pathways, experience of engaging underrepresented groups, those with/without specialist knowledge of MCD blood tests and relevant policy makers (e.g. key individuals from UK public health bodies). Key informants are recruited through established contacts and networks, supplemented with snowballing techniques. Interviews are exploring participant views on the acceptability of MCD blood tests, implementation and management considerations, and participants information, communication and training needs. Interviews are audio-recorded and transcribed verbatim. Transcripts will be analysed using a thematic analysis approach aided by NVivo software.

### **Abstract - The Findings**

Results from the key informant interviews will be presented and discussed, with emphasis placed on findings of likely interest to the SAPC audience, including relevant primary care staff information and communication needs for MCD blood tests.

### **Abstract - The Implications**

Outputs will support a platform to develop and evaluate tailored interventions to address information, communication and training needs of HCPs, policy makers and the public for equitable and informed uptake and delivery of MCD blood tests.

### **Funding acknowledgement**

This work is funded by a Cancer Research UK Early Detection and Diagnosis Primer Award.

**130**

**Evaluating the clinical effects and cost-effectiveness of Testosterone to improve Menopause-related quality of life: a protocol for decentralised trial in UK primary care**

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### **Abstract - The Problem**

About 13 million women in the UK are estimated to be peri-menopausal or menopausal, with Hormonal Replacement Therapy (HRT) being the most effective treatment for managing symptoms. Despite this, many women still experience persistent symptoms. Research indicates that testosterone may enhance libido in post-menopausal women, but its effect on other symptoms remains uncertain. The primary aim of the ESTEEM trial is to investigate, in menopausal women receiving standard HRT, whether testosterone is effective in reducing menopause symptoms beyond altered sexual function.

### **Abstract - The Approach**

The ESTEEM trial is a pragmatic, double-blind, placebo-controlled trial recruiting 416 women already on standard HRT who remain symptomatic. Participants will be randomly assigned to receive testosterone or placebo in a 1:1 ratio, assessing testosterone's superiority over placebo. The primary outcome is the Menopause-Specific Quality of Life-Intervention (MENQOL-I) and will be measured at 3, 6, and 12 months with secondary outcomes, analyzed by intention to treat.

There has been an increasing demand for HRT, including testosterone, among women, leading to a rise in prescriptions. The study will adapt a blended recruitment model, utilizing remote self-referrals and recruitment in primary care, focusing on ethnic and socio-economic diversity.

Secondary outcomes will evaluate the cost-effectiveness and safety of testosterone treatment. A process evaluation will optimize inclusive recruitment and retention strategies, and inform subsequent implementation in primary care by exploring service user/provider experiences and needs.

### **Abstract - The Findings**

The ESTEEM trial is in set-up and aims to recruit participants starting May 2025. Notably, there are significant disparities in access to HRT based on socioeconomic status and barriers for women from ethnic minority communities. The internal pilot phase will evaluate our strategic approach to inclusive recruitment and retention and inform progression to the main phase.

### **Abstract - The Implications**

The ESTEEM trial findings will support best practice standards for Testosterone HRT prescribing, influencing guidelines from organizations like the National Institute for Health and Care Excellence. Ultimately, the trial could lead to a greater understanding of the role of testosterone in managing the menopause, and increased accessibility.

### **Funding acknowledgement**

This trial is funded by the NIHR's Health Technology Assessment Programme (funding reference NIHR159538).

134

### **Defining a theoretical framework for the referral process at the primary-secondary care interface and what constitutes a “good referral”— a systematic scoping review with qualitative content analysis**

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#### **Abstract - The Problem**

*“Referral is a key component of the GP role”*, directly influencing patient experience, health outcomes, and healthcare system costs. Referrals from primary to secondary care may be made for various reasons, including establishing a diagnosis, initiating specialist management, accessing unavailable tests, or seeking expert advice. Current guidance is generic across specialties, advising the inclusion of 'necessary/relevant' information. However, specific primary care guidance could enhance referral quality, benefiting patient outcomes and system efficiency. Our study aims to develop a theoretical framework for high-quality referrals to specialist services, supporting primary care clinicians in optimising referral practices.

#### **Abstract - The Approach**

A scoping review following Arksey and O'Malley's five-stage framework was conducted using EMBASE, CINAHL, and MedLine databases, supplemented by reference checking. Relevant studies published between 1999-2024 were included if they explored primary-secondary care referral processes and were available in English. The data was analysed using qualitative content analysis (Elo et.al. 2008), with emerging themes synthesised into a theoretical framework.

#### **Abstract - The Findings**

From 3,461 search results, 54 relevant studies met inclusion criteria. The most frequent country of origin was the UK (35%), followed by Norway (9%) and Australia (9%). GP referrals to mental health services comprised the largest subset (26%). The most frequent design was audit/QIP (30%).

Preliminary findings identified key themes for constructing a theoretical framework: referral content (complete history, relevant investigations, and physical examinations), referral communication (clear rationale, structured format, guideline use, and appropriate urgency), patient-centred aspects (incorporation of patient understanding and preferences), and barriers (time constraints, limited specialty knowledge).

## **Abstract - The Implications**

The theoretical framework will serve as a quality standard for referrals, ensuring specialists receive essential information without unnecessary delays. Establishing this framework supports adaptable primary care, equipping clinicians with tools to refine referral practices amid evolving healthcare needs. Our findings may inform future policies, referral pathways, and quality improvement initiatives, contributing to sustainable, patient-centred healthcare.

The framework will be applied in an audit of referrals to a local secondary care service and shared with key primary care stakeholders, including Additional Roles Reimbursement staff and ICBs, to drive quality improvement activities. This aligns with the need for adaptable, evidence-based primary care in an evolving healthcare landscape.

## **Funding acknowledgement**

This research received no external funding.

**136**

## **Who raises the topic of mental health in annual review consultations for patients with multiple long-term conditions: A mixed method analysis.**

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## **Abstract - The Problem**

Multiple long-term conditions-multimorbidity (MLTC-M) is associated with poorer quality of life, higher mortality and increased likelihood of experiencing mental health conditions. Those experiencing socioeconomic deprivation (SeD) have higher prevalence and increased severity of MLTC-M, including mental health conditions. NICE guidelines outline that care for this population should include discussion of how disease affects wellbeing, how treatments affect day-to-day life, and by an alertness to the possibility of depression and anxiety. However, little is known about how mental health is incorporated into clinical discussions for patients living with MLTC, who raises the topic, and if this is affected by SeD. This is what we aimed to find out.

## **Abstract - The Approach**

In this mixed methods study we analysed 68 audio recordings of annual review consultations, from 20 GP practices across Britain, for patients living with MLTC, specifically patients living with obesity and hypertension and/or diabetes. Conventional content analysis (CCA) was used to identify and categorise the content of the annual review consultations. We then statistically examined associations between if mental health was discussed, who raised the topic, and (a) SeD and (b) type of consultation (face-to-face vs telephone).

### **Abstract - The Findings**

Overall, mental health was explicitly discussed in 19/68 (28%) of recordings. Of these, in 8/19 (42%) of cases the clinician raised the topic of mental health and the patient in 11/19 (58%) of cases. Clinicians asked ambiguous questions in 13/68 (19%) of recordings, which could implicitly allude to mental health, such as 'how are you doing generally?'. However, no patients in this cohort interpreted these questions as relevant to mental health and either responded by talking about physical health, or giving short generic answers (e.g. 'good, thanks'). Statistical analysis found that neither SeD nor type of consultation affected the likelihood of mental health discussion or by whom it was introduced.

### **Abstract - The Implications**

Although people living with MLTC are likely to experience mental health conditions, explicit questions about mental health are rarely asked by clinicians. This means people with MLTC are at risk of missing opportunities to discuss mental health or receive support. This work has the potential to influence mental health communications teaching for students and professionals.

**140**

### **Did deprivation scores predict longitudinal trends in NHS payments in English general practices across the COVID-19 pandemic? an ecological study.**

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### **Abstract - The Problem**

Previous studies found that population health needs poorly predicted variations in total NHS general practice payments, with practice deprivation scores predicting longitudinal variations only very weakly. Lord Darzi's 2024 report acknowledged a 'shortfall in funding for practices serving more deprived populations'; yet the current Global Sum Allocation (Carr-Hill) Formula includes no specific measurement of deprivation. Our research question asked whether deprivation scores predicted longitudinal variations of average NHS practice payments/patient between 2018-19 and 2022-23, after adjusting for population and organisational factors.

### **Abstract - The Approach**

Our longitudinal ecological study collated published data sets of active English general practices for five financial years, 2018-19 to 2022-23. We excluded, as atypical, practices with fewer than 750 patients or average payments greater than £500/patient. The outcome was average total NHS practice payments per registered patient, after deducting pensions, levies and prescription charge income, and premises reimbursements. We fitted a multilevel mixed effects linear regression model, with practices as the random effects and the time interactions of the seven independent predictors as the fixed effects. Our predictor of interest was the Index of Multiple Deprivation (IMD) score, last updated in 2019 and used for all five years. We adjusted for six non-correlated population and practice variables.

### **Abstract - The Findings**

Our models included 5,728 practices (81.4% of active practices). Between 2018-19 and 2022-23 the median of average adjusted payments/patient increased from £121.47 to £126.81 (4.4%), but IMD scores did not predict longitudinal variations between practices. Time was the main predictor (marginal  $R^2= 0.86$ ; conditional  $R^2= 0.93$ ), but all the remaining variables also predicted: rural location, higher % white ethnicity and higher % with long term conditions predicted steeper increases; larger list sizes, having non-GMS contracts, and higher average payment/patient baselines predicted slower increases. The intra-class coefficient was 0.50.

### **Abstract - The Implications**

The gap in funding between practices in more and less deprived areas persisted between 2018-19 and 2022-23 (across the COVID-19 pandemic). Our findings suggest that the practice funding formula is still failing to correct the relative underfunding of practices serving the most deprived areas and/or populations with higher levels of non-white ethnicity. The current formula should be urgently reviewed and revised.

### **Funding acknowledgement**

No external funding received.

**141**

### **What do patients and clinicians think about relational continuity of care in general practice in the post-Covid era?**

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### **Abstract - The Problem**

Continuity of care, defined as the ongoing relationship between a GP and patient, has traditionally been a key feature of general practice. The benefits include reduced costs, improved patient satisfaction, and better patient outcomes. However, continuity in the UK has declined significantly over the last decade, and efforts are underway to try and reverse this trend. Improvement initiatives assume that both patients and clinicians desire greater continuity. Current proposals often prioritise continuity for specific

patient groups, raising questions regarding the efficacy and fairness of selective continuity. This study explores patient and clinician perspectives on continuity in general practice.

### **Abstract - The Approach**

A qualitative approach was used. Sixteen clinicians were interviewed, and five focus groups held, involving a total of 36 patients. Participants' views and experiences of continuity were explored, including their views on continuity improvement initiatives. Transcripts were thematically analysed, using Haggerty's theory of continuity, to conceptualise and interpret participants' responses. A PPIE (Patient and Public Involvement and Engagement) group met regularly with researchers to provide input and feedback on the study.

### **Abstract - The Findings**

Most patients and clinicians acknowledged the potential benefits of continuity for both individuals and the wider healthcare system. However, opinions were divided: some considered continuity a fundamental aspect of general practice, while others viewed it as a tool best used in specific cases. Participants' perspectives were shaped by their experiences and whether they regarded general practice as a primarily biomedical, transactional service or a biopsychosocial, relationship-based one. Many expressed a resigned pragmatism, believing that while continuity is ideal, it is not feasible for all patients, especially given the broader challenges facing general practice.

### **Abstract - The Implications**

Many patients and young GPs have very limited experience of continuity. Patients with limited experience of continuity tend to consider the benefits of continuity as improved informational continuity rather than the development of a therapeutic relationship. Given the pressures facing access and clinician workload, it is unlikely that patients and clinicians with limited experience of continuity will advocate for something they have limited experience of and think is unrealistic to achieve.

### **Funding acknowledgement**

This study was funded by the NIHR School for Primary Care Research (SPCR). Grant reference number:690

**143**

### **Co-navigating care: A qualitative study exploring the diverse needs of South Asian men with long-term conditions in primary care with emotional distress**

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### **Abstract - The Problem**

People from ethnic minority backgrounds experience higher rates of mental health problems yet have lower rates of mental health service engagement and poorer outcomes. People with long-term physical health conditions (LTCs) are more likely to have comorbid mental health problems leading to poor patient outcomes. South Asians (SAs) are the largest ethnic minority in the UK. This study aimed to explore how SA men with LTCs seek help for emotional distress and understand GPs' experiences of supporting them.

### **Abstract - The Approach**

Ethical approvals obtained.

Qualitative study using semi-structured interviews with 17 SA men with LTCs (diabetes/coronary heart disease) and 18 General Practitioners (GPs) from practices serving SA populations in three UK regions. Interviews with SA men explored experiences of emotional distress, help-seeking behaviours, and perspectives on primary care support. Interviews with GPs explored perspectives on provision of care for this patient group. Reflexive thematic analysis with constant comparison.

A patient advisory group SA men provided input throughout the research process, ensuring cultural relevance.

### **Abstract - The Findings**

Two key themes will be presented: trust and co-navigating care. SA men described mistrust in primary care services due to perceived over-medicalisation of distress, discrimination and cultural disconnection. Instead, they prioritised faith, family, and self-management strategies. 'Co-navigating care' reflects GPs and patients bringing their health beliefs to consultations, requiring mutual respect to negotiate and agree effective management plans.

We developed the '3Cs model' for consultations (Contextualising distress; social determinants of distress & intersectionality, Conceptualising distress; de-medicalising distress, negotiating multiple identities, integrative paradigms of health, Consulting with distress; co-navigating care; culturally safe care, community-centred care). The study highlighted the importance of understanding communities as part of person-centred care, incorporating faith and cultural perspectives.

### **Abstract - The Implications**

Our findings demonstrate the need for a shift in how primary care clinicians identify and manage distress in SA men with LTCs. The 3Cs model has the potential to improve primary care consultations and mental health support for people from SA communities, addressing health inequalities through community-centred approaches to primary care delivery. The co-navigation approach has implications beyond SA populations, providing insights into delivering culturally safe mental healthcare for diverse communities across healthcare settings.

### **Funding acknowledgement**

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**144**

**What helps or hinders GPs and nurses discussing physical activity with patients with heart failure, and referring patients as appropriate to community exercise resources?**

Vincent Singh<sup>1</sup>, John Percival<sup>1</sup>, Olivia Skrobot<sup>2</sup>, Rachel Johnson<sup>2</sup>, Rasha Okasheh<sup>3</sup>, Alyson Huntley<sup>2</sup>

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**Abstract - The Problem**

Nearly 1 million people in the UK live with heart failure (HF). Most people diagnosed with HF are managed in primary care. Physical activity (PA) can increase wellbeing, reduce hospitalisation and improve mortality rates for patients with HF (PWHF). Studies indicate that PWHF want community health care practitioners' reassurance and guidance about PA, but practitioners may be unsure what advice to give or where to refer patients. This study sets out to understand more fully the experiences of primary care healthcare practitioners in discussing PA with PWHF, and the barriers and enablers to doing so.

**Abstract - The Approach**

Qualitative interviews with healthcare practitioners in primary care. Interviewees were recruited through the NIHR Research Delivery Network in 5 English regions. We used purposive sampling to achieve a range of practice location, area deprivation level, professional role and post-qualification experience. Ethical approval was obtained from the NHS Health Research Authority and Health and Care Research Wales.

Semi-structured qualitative interviews were based on a topic guide devised and piloted by the research team. Interviews were conducted via video call, audio recorded, transcribed and anonymised. Analysis by two researchers using an exploratory inductive approach was managed in NVivo. Study design, methods, and emerging themes were discussed with our patient and public involvement (PPI) members to ensure inclusion of issues relevant to patients

**Abstract - The Findings**

Interviews were held with 11 GPs, 10 primary care nurses, two HF specialist nurses and one urgent care practitioner. Four themes emerged: (i) prominence of PA in discussions with PWHF is affected by practitioners' perception of patient interest/ability, and heart failure's low/obscured profile; (ii) scope for discussion of PA with PWHF is advanced by practitioner interest and experience and limited by practitioner uncertainty and organisational constraints, as well as patient anxiety and co-morbidity; (iii) ambiguity about community exercise resources, their use and suitability, impacts the prospect of practitioner referral; (iv) practitioners' suggestions for practice/protocol improvements, which include a

clearer focus on exercise in patient reviews and greater provision of PA information for PWHF at diagnosis.

### **Abstract - The Implications**

Practitioners would welcome education/training to enhance their knowledge and confidence in discussing PA with PWHF.

### **Funding acknowledgement**

We gratefully acknowledge funding from the NIHR School for Primary Care Research (SPCR)

150

### **An intervention to address 'missingness' in primary care: key principles and core activities.**

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### **Abstract - The Problem**

Epidemiological research in Scotland found a cohort of patients missing multiple primary care appointments. These patients were more likely to have multiple long-term health conditions, live in deprived areas, and experience premature mortality. Further work found that this phenomenon, termed 'missingness', has many complex causes: patients not feeling that primary care is "for them"; past experiences causing fears, anxieties or mistrust; competing demands and unmet needs; an inflexible healthcare system; and practical barriers to attendance. We aimed to design an intervention to address these causes and to improve access to primary care for this patient group.

### **Abstract - The Approach**

Findings are drawn from a realist synthesis of 250 papers; interviews with 62 participants including professionals and experts-by-experience; and from coproduction workshops with a Stakeholder Advisory Group. By combining realist principles with the 6SQUiD method of intervention design, we determined what might work to address missingness, for whom, and in what circumstances.

### **Abstract - The Findings**

The complex causes of missingness require a complex suite of intervention activities, underpinned by a change in perspective that we call 'applying a missingness lens.' This means moving from a 'situational' model - improving outcomes for services by changing individual patient behaviours - to prioritising missingness as a cause of poor patient outcomes. This should be embedded in practice through staff development, system change, and the provision of additional resources (time, money, capacity) targeted at missingness work. By identifying missing patients, building a relationship, and assessing their unique

constellation of access issues, services can offer person-centred support to address them. This might include: transport or changing the site of care; personalised contact before or after appointments; prioritising 'missing' patients for flexible forms of access; and addressing relational dynamics through trauma-informed, culturally safe practice. This requires a Missingness Coordinator, tasked with addressing the needs of 'missing' patients and to help embed missingness work in practice.

### **Abstract - The Implications**

Current debates around missed appointments, focused on reducing waste, inefficiency and waiting lists, are likely to worsen access inequalities and further exclude 'missing' patients. Our approach provides an alternative understanding, and charts a route forward for both researchers and practitioners seeking to address access inequalities and poor health outcomes.

### **Funding acknowledgement**

This project was funded by a National Institute of Health Research UK research grant; NIHR study identification 135034.

**151**

### **The Acceptability of Quantum-Inspired Imaging for Remote Monitoring of Health and Disease in Community Healthcare (QUEST)**

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### **Abstract - The Problem**

Health monitoring has traditionally involved patients visiting healthcare facilities however, technology is increasingly used to monitor health outside clinical settings. This has many advantages, but technologies can be expensive, intrusive, and rely on patients to use/wear them. QUEST aims to develop new technologies to continuously and remotely monitor activity and movement for use within healthcare. A variety of technologies are under development (e.g. reflective surfaces, laser, WiFi, radar) and it is crucial to explore their acceptability with stakeholders.

### **Abstract - The Approach**

We recruited 20 members of the public and 19 health professionals (from primary, secondary and social care) to participate in semi-structured interviews or focus groups, either face-to-face or by video call.

Participants were shown videos of two prototype technologies and asked to share their views on how they could be used, benefits and risks/concerns. Interviews and focus groups were recorded, transcribed and the data analysed thematically.

### **Abstract - The Findings**

Participants identified a variety of ways (e.g. detection/alerting, monitoring general health/specific conditions) and settings (e.g. homes, clinical settings) in which QUEST devices could be used. Discussions also focused on whether devices should be used for long- or short-term monitoring and be available to all or targeted at particular groups. Potential benefits of the QUEST devices included real time/early detection, earlier intervention, benefits to patients (health care access, waiting times, convenience, monitoring), potential efficiencies for health professionals and advantages over existing technologies/tests/monitoring (e.g. non-invasiveness). However, areas of concern were expressed relating to data generated by the devices (e.g. accuracy, responsibility for/access to data, interpretation, presentation, privacy) and how the devices would work (e.g. functionality, support systems, responses to detected issues, overlap/integration with existing technology/systems, patient understanding). A range of views were expressed on whether the devices should be provided by the NHS or private companies.

### **Abstract - The Implications**

The results of this study will be considered in the development of the QUEST devices and to inform future directions. The findings highlight issues which are relevant to the development of health technologies that aim to monitor health in the community and their acceptability to the public and health professionals.

### **Funding acknowledgement**

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156

### **Does frequency of bathing impact eczema symptoms? Results of the first Rapid Eczema Trials Project randomised controlled trial**

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### **Abstract - The Problem**

International guidelines vary in recommendations for frequency of bathing with eczema. A lack of high-quality evidence results in patients getting varied advice. This is an important question prioritised by patients in the Rapid Eczema Trials community. Aim: to test whether less frequent bathing improves eczema symptoms compared to daily bathing.

## **Abstract - The Approach**

Online, pragmatic, superiority randomised controlled trial (ISRCTN12016473), co-designed by people with eczema (citizen scientists), healthcare professionals and researchers. The Eczema Bathing Study is the first citizen-science trial to be completed as part of the Rapid Eczema Trials project ([www.RapidEczemaTrials.org](http://www.RapidEczemaTrials.org)).

Online surveys and discussion groups informed the study design to maximise inclusivity and accessibility. The co-design group decided the research question, interventions and comparators, duration of follow-up, and choice and timing of outcome assessments.

Included people with self-report of eczema, 1 year and older in the UK. Excluded people with very mild eczema.

Participants randomised (1:1) to weekly bathing group (bath or shower 1 or 2 times a week) or the daily bathing group (6 or more times a week). It was not possible to mask participants to their randomised allocation. Prior belief was assessed at baseline.

Primary outcome was participant reported eczema symptoms collected weekly over four weeks using POEM (range 0 to 28, higher scores more severe).

## **Abstract - The Findings**

Included 438 people. Daily bathing: 195/218 (89%) and weekly bathing: 193/220 (88%) were included in the primary analysis. Full adherence was reported by 202/278 (73%) of participants.

No clinically important differences in eczema symptoms were detected. Mean [SD] POEM scores at baseline: 14.5 [5.7] in the daily bathing group and 14.9 [6.3] in the weekly bathing group. The adjusted difference in mean POEM score over 4 weeks for weekly versus daily bathing was -0.4 points (95% confidence interval -1.3 to 0.4,  $p=0.30$ ). Sensitivity analysis imputing missing values showed consistent results. No serious unintended effects or harms were reported.

## **Abstract - The Implications**

These results are helpful for people with eczema, giving them the freedom to choose what suits them best. Our citizen scientists have prioritised disseminating this knowledge to primary care professionals to ensure a consistent message is delivered in primary care consultations.

## **Funding acknowledgement**

This abstract is on behalf of the Rapid Eczema Trials Team. Rapid Eczema Trials is funded by the National Institute for Health and Care Research (NIHR) under its Programme Grants for Applied Research Program (NIHR203279). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. The trial was developed with and supported by the UK Dermatology Clinical Trials Network (UK DCTN) . The UK DCTN is grateful to the British Association of Dermatologists and the University of Nottingham for financial support of the Network.

**158**

### **Use of Intervention Mapping to develop Orchid, a new digital tool for reproductive life planning**

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#### **Abstract - The Problem**

Digital health interventions (DHI) should be developed systematically and with end-users to maximise effectiveness. Using the Intervention Mapping (IM) framework we co-developed an interactive, evidence-based digital tool (Orchid) to support people of reproductive age to understand their pregnancy preferences and develop a reproductive life plan (RLP); helping them to prepare for pregnancy, improve pregnancy outcomes, prevent unplanned pregnancies and reduce inequalities in maternal health. Orchid is being piloted in three NHS settings including Primary Care.

#### **Abstract - The Approach**

We used the 6-step IM framework to guide Orchid's development. Step 1: problem mapping by reviewing existing evidence and engagement with our co-development group (21 people, aged 16-45 years, with diverse ethnicities, relationship status, and family sizes, living across the UK). Step 2: defining outcomes and objectives by developing our theory of change. Step 3: iterative co-design of programme content and pathways based on behaviour change theory COM-B. Step 4: refining the tool, pre-testing different formats for web and mobile applications (apps) and developing accompanying leaflets, interview questions and training programme. Step 5: pilot implementation intention in a range of primary and community care settings and a secondary school. Based on our pilot findings on acceptability and feasibility we will proceed to step 6: a full implementation and evaluation plan.

#### **Abstract - The Findings**

The IM framework was a useful tool to guide our method and bring together the evidence base, user preferences and behaviour change techniques. Feedback from the co-development group and web designer were integral to every step and impacted the final design. For example, the group were keen to ensure Orchid is also relevant to men, and suggested methods of recruitment such as text messages from the GP, which we have implemented. The pilot is currently live; findings will be available by the time of the conference.

## **Abstract - The Implications**

The 10-year NHS plan prioritises shifts to prevention and better use of technology. Orchid addresses both; supporting people of all genders in reproductive life planning is an important step with potential to be scaled up nationally as part of these big shifts. Reducing unplanned pregnancies and improving preconception health will have big impacts on maternal health and inequalities.

## **Funding acknowledgement**

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159

## **“Better to be prepared”: understandings of early Advance Care Planning amongst those with long-term conditions, a qualitative interview study in primary care**

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## **Abstract - The Problem**

Historically, healthcare providers only discussed Advance Care Planning (ACP) with patients experiencing advanced illness or frailty. There has been little research on ACP outside of this context. This project aimed to explore how people living with a long-term condition (LTC) understood planning ahead discussions; to explore preferences for how, if at all, ACP should be discussed; and to explore attitudes to including ACP within annual health reviews.

## **Abstract - The Approach**

In-depth interview study. The inclusion criteria were: over 18 years old, registered at participating GP practice, living with cardiovascular disease, diabetes, kidney disease, or chronic obstructive pulmonary disease (COPD). Thematic analysis utilised a critical realist approach. Participants contributed to a respondent checking process. This project received NHS ethics approval (23/PR/0078).

## **Abstract - The Findings**

This study recruited 21 participants: 8 men, age range 61-91, 17 participants living with multiple LTCs. Participants described three different forms of ACP: proactive planning, preparing for change, and facing mortality. The former involved making general preparations for the future (such as lasting power of attorney) whilst in good health. The second type of ACP involved planning for a likely deterioration in health. Participants wanted to receive information about their future. Finally, participants described a type of ACP that involved acknowledging, and planning for, a person's future death. Many participants wanted to discuss dying but others found these discussions potentially distressing. Significantly, participants were open to ACP discussions earlier in life and perceived such discussions as less distressing. Additionally, participants valued proactive healthcare and were open to ACP in this context. Participants discussed how normalising ACP could make ACP less distressing.

## **Abstract - The Implications**

Historically, ACP has been associated with advanced illness. This study suggests that ACP should instead be understood as a broad term encompassing different conversations in different contexts. Our findings suggest that healthcare professionals could discuss ACP earlier with patients, and that ACP could be integrated into routine healthcare and public health. There is increasing awareness of the need for more proactive healthcare. These study findings show that participants valued ACP as one way which supports this. Future research and policy could consider how best to incorporate ACP into long-term healthcare system improvements.

## **Funding acknowledgement**

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**160**

## **Clinical and cost-effectiveness of the Live Well self-management toolkit for people with Parkinson's and their carers – an RCT**

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## **Abstract - The Problem**

Parkinson's is a progressive neurodegenerative disorder causing distressing symptoms, affecting 1/50 people over 65 in the UK and is associated with complex health and social care needs. We developed, through co-design, and tested, through an RCT, the facilitated *Live Well* self-management toolkit for people with Parkinson's and their carers aiming to improve patient outcomes and reduce healthcare utilisation.

## **Abstract - The Approach**

The toolkit contains information about symptoms, therapies, ways to optimise wellbeing, and practical advice. There are personalised sections covering information about themselves, their health and support, the ability to review and track symptoms, and an asset-based wellbeing section to identify health priorities.

Tested in a single-blind RCT in England, participants were community-dwelling, with a Parkinson's diagnosis and randomised 1:1 to receive the *Live Well* with Parkinson's toolkit, supported by a facilitator, or treatment as usual. The primary outcome was health-related quality of life (PDQ-39) at 12-months. Outcomes were analysed using linear mixed models, controlling for baseline scores.

## **Abstract - The Findings**

We recruited 346 participants between January 2022–July 2023 with a mean (SD) age 69(9), 159(46%) women, and 321(93%) white. Data collection was completed in August 2024 with a retention rate of 88% at 12-month follow-up. Our primary outcome showed small improvements in quality of life for intervention participants, which was not statistically or clinically significant (-1.03(-3.03 to 0.97); p=0.31). Our secondary outcomes showed significant improvements in symptoms, using Unified Parkinson's Disease Rating Scale part I and II at both 6- and 12-months (-2.19(-3.95 to -0.43) and -2.61(-4.58 to -0.64), respectively). There were also significant improvements in psychological distress (GHQ-12) (-0.87(-1.71 to -0.03)) and overall health status (EQ-5D-5L VAS) (3.87(0.32 to 7.41)) at 6-months.

At 12-months, intervention group participants had lower health and social care costs (-£1650(-£4152 to £237) mean incremental cost saving per participant excluding the cost of medication), with no significant difference in 12-month QALYs (mean incremental QALYs 0.004(-0.042 to 0.050)), and hence dominates treatment as usual. The average cost of the intervention per participant is £284.44.

## **Abstract - The Implications**

These results highlight that the self-management tool has potential to support cost-effective management of Parkinson's symptoms.

## **Funding acknowledgement**

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161

## **Evaluating the potential impact of FAIRSTEPS primary care interventions on health inequity and cost-effectiveness.**

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## **Abstract - The Problem**

Evidence is lacking for the equity impact and cost-effectiveness of complex primary care interventions aimed at underserved populations. We investigated the likely equity impact and cost-effectiveness of 28 equity interventions for underserved groups created by the FAIRSTEPS study to quantify potential impacts on health inequities and overall net health.

## **Abstract - The Approach**

A simplified distributional cost-effectiveness analysis (DCEA) using existing published data. Searches identified available studies with cost-effectiveness evidence potentially applicable to each FAIRSTEPS

intervention vignette. Quality appraisal was undertaken before cost and Quality-Adjusted Life Year (QALY) information was extracted and inflated to current prices. For each population-group targeted, literature-based estimates of total numbers, and distribution by sex and Index of Multiple Deprivation quintiles for England were made. This data was combined with published values for the distribution of health opportunity cost and baseline distribution of lifetime health, to estimate net health benefits and change in slope index of inequalities for each intervention vignette, at individual and population level.

### **Abstract - The Findings**

Suitable cost-effectiveness evidence was identified for 17/28 vignettes, though study applicability was often partial and/or evidence was required from multiple studies. Study quality was generally medium-low. Evidence gaps were particularly evident for interventions involving staff training or targeting asylum seekers/refugees/migrants. Most vignettes were both cost-effective and equity-generating. Interventions with most equity impact and cost-effectiveness involved community health promotion champions; inclusion health interventions for young people (e.g. sex workers); and weight loss programmes for people with low incomes. Interventions promoting patient transport to GP appointments or breast cancer screening were neither cost-effective nor equity generating. Rankings differed slightly when assessed at individual or population level.

### **Abstract - The Implications**

When cost and QALY data is available, simplified DCEA can provide additional evidence for policymakers to help determine which equity interventions to prioritise. Providing results at individual as well as population level enables decision makers in different health contexts to estimate intervention equity-effectiveness and cost-effectiveness for their own context. Our study may underestimate total equity impacts as it does not consider disparities beyond those in the most deprived socioeconomic quintile. Further research to estimate distributions of baseline health and health opportunity costs across underserved groups is required.

### **Funding acknowledgement**

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**165**

### **Trends in Advice & Guidance versus Direct Referrals in UK primary care between 2015-2023: an electronic health record study**

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### **Abstract - The Problem**

Advice and Guidance (A&G) allows primary care clinicians to seek advice from a specialist, usually electronically. A&G use is being encouraged to reduce compound pressures on the NHS (e.g. waiting lists) although there is little research into patient benefit or potential harms. The aim of our project is to determine the extent of variation in use of A&G versus direct referrals, to inform guidance on best use.

### **Abstract - The Approach**

Using national primary care records (2015-2023), annual prevalence rates for A&G and direct referrals were calculated as a percentage of the registered population. Trends were analysed by age, sex, deprivation, and ethnicity to assess variations over time. A mapping exercise allowed target specialities to be determined in the 14 days prior to an A&G record.

### **Abstract - The Findings**

In a registered population of 16.3 million (50% female), 671,894 (4%; 59% female) and 9.7 million (59%; 46% female) had A&G or direct referral recorded. Annual A&G prevalence rose 17-fold from 0.11% to 1.99% (2015-2023), with the rate doubling between 2019-2020 (0.47%-0.96%) due to the pandemic. Prevalence increased with age (highest in those 65+), while rates were similar across ethnicities and deprivation levels. Direct referral rates (29%-31% pre-2020) dropped to 22% in 2020 but rose to 25% in 2023, being higher in males (29% vs 21% females) and in those aged <5 or 65+. Post-pandemic, referral rates fell in those <45 but increased to pre-pandemic levels in those aged 65+ by 2023. Patterns for deprivation and ethnicity mirrored A&G trends over time. Of 177,526 individuals recorded with A&G in 2023, 25% had a specialty recorded with dermatology, cardiology, and rheumatology the most common.

### **Abstract - The Implications**

A&G use has increased substantially since 2015, driven in part by the pandemic, with the largest annual increases in older adults. Ethnicity and deprivation do not appear to be associated with A&G use. Direct referrals show greater age and sex disparities, being more common in males and in very young or older populations. Our findings highlight shifts in healthcare utilisation and can help to ease compound pressure through targeted service planning and resource allocation.

### **Funding acknowledgement**

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## **The provision of primary-care clinical services in community pharmacies in England: Lessons from a qualitative evaluation of the Community Pharmacy Contractual Framework**

Saoirse Moriarty<sup>1</sup>, Maggie Bradford<sup>1</sup>, [Stephanie Stockwell](#)<sup>1</sup>, Frances Wu<sup>1</sup>, Avery Adams<sup>1</sup>, Manon Richard-Sheridan<sup>1</sup>, Hampton Toole<sup>1</sup>, Lizzie Mills<sup>2</sup>, Jennifer Newbould<sup>1</sup>, Robert Romanelli<sup>1</sup>

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### **Abstract - The Problem**

Community pharmacies are an important pillar of primary care. The goal of this study was to provide novel insights on clinical services under the Community Pharmacy Contractual Framework (CPCF) to identify key influences on service delivery, especially in relation to integration with the wider primary-care ecosystem.

### **Abstract - The Approach**

We conducted a qualitative evaluation composed of interviews with 48 pharmacy staff, 18 other healthcare professionals (HCPs) and wider health system stakeholders, and 8 service users. Three focus groups were also conducted with 27 members of the public. Interview and focus group transcripts were coded against the Consolidated Framework for Implementation Research (CFIR). The work described here focuses on the wider system domain of CFIR.

### **Abstract - The Findings**

The provision of some CPCF clinical services and their integration within primary care is influenced by formal referrals and informal signposting from general practice to community pharmacies. This can impact service volume and a pharmacy's financial viability to deliver services. Referrals for certain services can be suboptimal and, in some cases, relationships between general practice and pharmacy were observed to be strained. Numerous factors appear to affect relationships.

- Local attitudes: HCPs in some cases highlighted limited awareness or understanding of clinical services or the expertise of community pharmacists, and some general practitioners have concerns that these services may inadvertently increase their workload or the complexity of their case mix.
- Competition: commissioning structures can inadvertently place community pharmacies in competition with general practice for services and associated remuneration.
- Poor information technology (IT) interoperability: community pharmacies and general practices often use different IT systems, complicating referrals, communication, and care coordination.
- Cooperation between community pharmacies and other HCPs can be facilitated through aligned incentive structures, dedicated integration roles, and strong local relationships.

### **Abstract - The Implications**

This qualitative study identified various factors that can help better support the integration of community pharmacy clinical services within the primary-care ecosystem, particularly between

pharmacies and general practice, including raising awareness about clinical services to other HCPs; establishing joint commissioning and aligned incentives across primary care to reduce competition and improve collaboration; and investing in IT systems and IT integration to improve referrals and care coordination.

**182**

### **Deprivation and General Practitioners' working lives in England: Repeated cross-sectional study**

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#### **Abstract - The Problem**

Areas of greater socioeconomic deprivation in England have fewer GPs per 1,000 population, higher turnover of GPs, and more problems filling GP vacancies. Addressing these recruitment and retention challenges requires greater understanding of drivers of job pressures, and job satisfaction for GPs working in areas of greater socioeconomic deprivation. We aimed to use responses to the GP Worklife Survey (GPWLS) to examine how area deprivation affects the working lives of GPs.

#### **Abstract - The Approach**

We analysed 8,578 responses to four repeated cross-sectional surveys of GPs in England between 2015 and 2021. We used linear regression to relate the population deprivation ranking of the GP's practice to 14 reported job pressures, 10 domains of job satisfaction, intentions to quit direct patient care, reported income from GP work, and hours worked per week. We used interval regression to relate reported income from GP work to this same deprivation ranking. We adjusted for GP characteristics including employment status, gender, age, and years qualified.

#### **Abstract - The Findings**

Deprivation ranking was significantly associated with higher pressures related to perceived problem patients (difference between lowest and highest deprivation = 0.258 on five-point scale, 95% CI 0.165, 0.350), insufficient resources within the practice (0.229, 95% CI 0.107, 0.351), and finding a locum (0.260, 95% CI 0.130, 0.390). Deprivation ranking was also associated with significantly lower reported annual income (-£5,525, 95% CI -£8,773, -£2,276). There were no statistically significant associations between deprivation ranking and the other outcome measures. Our findings were robust to a range of sensitivity analyses including weighting survey responses to improve representativeness of the sample, and incorporating clustered standard errors at the practice level.

#### **Abstract - The Implications**

Perceived problem patients, insufficient resources, and finding temporary cover are key drivers of GP job pressures in practices serving more deprived populations. GPs in more deprived areas also report lower incomes. These factors should be the target of increased investment and policy interventions to improve

recruitment and retention of GPs in these areas. This is crucial to narrow health inequalities experienced across the socioeconomic spectrum in England.

### **Funding acknowledgement**

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**188**

### **How do referral source and sociodemographic characteristics impact referral decisions, waiting times and number of re-referrals to child and adolescent mental health services?**

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#### **Abstract - The Problem**

There are increasing numbers of referrals to Child and Adolescent Mental Health Services (CAMHS). With this increased demand, there is concern that not all children and young people (CYP) are able to access timely mental health support. In 2022-23, 949,200 CYP were referred to CAMHS and 40,000 children waited at least 2 years for support (Children's Commissioner, 2024). However, there is little research looking at predictors of referral acceptance and access to CAMHS. We explored how referral source and sociodemographic factors impact referral decisions, waiting times and numbers of re-referrals.

#### **Abstract - The Approach**

All episodes of care for CYP (0-18 years) referred to CAMHS from a large NHS Trust between 1994 and 2023 (n=101,356) were analysed. Sociodemographic factors and referral sources were examined for

each episode of care for associations with referral decisions, waiting times and number of re-referrals. Logistic regressions were conducted to estimate the likelihood of acceptance into CAMHS. Inequalities in waiting times were examined using Multiple Linear regressions. Poisson regressions were conducted to examine differences in re-referral rates.

### **Abstract - The Findings**

Of the 101,356 episodes of care, 52.4% were accepted. Primary care accounted for 28% (n=28,351) of referrals. The CAMHS acceptance rate was higher for Emergency Department referrals (OR=2.71, 95% CI = [2.54-2.89], p<0.001) compared to primary care. Referrals from the Youth Justice System had lower odds of acceptance than primary care (OR = 0.57, 95% CI = [0.50, 0.64], p< 0.001). CYP referred through social care were more likely to be re-referred than those referred through primary care (IRR=1.72, 95% CI[1.66,1.78], p<0.001). The mean waiting time for those accepted was 122.8 days (SD=10.37). Older adolescents and females were less likely to experience delays in accessing CAMHS. Referrals from the Emergency Department (unstandardised  $\beta$  =-3.23, SE= 0.027, p<0.001) and educational settings (unstandardised  $\beta$  = -0.38, SE= 0.027, p <0.001) were seen in CAMHS significantly quicker than referrals coming from primary care.

### **Abstract - The Implications**

The study highlights significant sociodemographic and referral source disparities in CAMHS referral acceptance, waiting times, and re-referral rates. The referral source disparities may reflect differences in need. Further work is needed to explore this to ensure accessibility for all CYP.

### **Funding acknowledgement**

None

190

**General practice support for autistic adults: findings from a realist review.**

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### **Abstract - The Problem**

Autistic people face barriers to healthcare, report lower satisfaction with healthcare, and have more unmet health needs than non-autistic people. General practice has a critical role to play in addressing health disparities, yet autistic adults are underserved by primary care services. Furthermore, autistic people are often excluded from research processes, perpetuating stigma, pathologisation and a deficits-based view of autism which can affect the quality of research that is done, and healthcare practice. Our aim is to review existing evidence to understand how, why, and when general practice optimally supports (or not) autistic adults with and without learning disabilities throughout the lifespan.

### **Abstract - The Approach**

We are conducting a theory-driven, realist review in collaboration with stakeholders, following six iterative stages. Our project involves a core team of researchers and autistic patient and public involvement co-applicant, four autistic assistant reviewers, and autistic and non-autistic stakeholders. Assistant reviewers participated in three training sessions, screened titles and abstracts, full texts, and are contributing to data extraction and interpretation.

### **Abstract - The Findings**

12,749 records were identified from seven databases. So far, we have screened 867 full texts and 42 papers have been included. The general practice environment, communication methods, lack of understanding from staff and variable quality of diagnosis and treatment can contribute to increased anxiety, worse health outcomes, and future delayed help-seeking in autistic adults. This delayed help-seeking may be perceived negatively by general practice staff, which in turn may contribute to further anxiety, stigma, and a negative cycle where treatment and support are delayed and outcomes worsened. We found a lack of research on general practice support for autistic adults with learning disabilities.

### **Abstract - The Implications**

Based on the findings, we are producing guidance for 1) general practice on potentially helpful changes to services, and 2) autistic people to help them gain the support they need. This will help to improve access to and engagement with general practice care, and thus improve the health and wellbeing of autistic individuals. The process of conducting this realist review has been enriched through the involvement of autistic assistant reviewers and neurodiverse stakeholders.

### **Funding acknowledgement**

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196

### **Patterns of antipsychotic prescriptions: dosage, duration and restart in people with dementia in UK primary care**

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#### **Abstract - The Problem**

Antipsychotics are frequently prescribed to people with Dementia to manage Behavioural and Psychiatric Symptoms (BPSD), which include agitation, aggression, depression, sleep disturbance, and psychosis. These symptoms significantly impact individuals with dementia, their families, and caregivers. The National Institute for Health and Care Excellence (NICE) recommends prescribing antipsychotics at the lowest dose for the shortest time possible (1-3 months) as these medications are associated with serious risks, including increased mortality, cardiovascular events, sedation, pneumonia, and cognitive decline. Despite these recommendations, antipsychotic discontinuation is rarely documented in clinical practice.

#### **Abstract - The Approach**

Using the IQVIA Medical Research Database, we conducted a cohort study of 9,819 people with dementia aged 60-85 years who received their first antipsychotic prescription between 2000 and 2023. We examined the duration of initial and subsequent treatment episodes, medication dosage changes, discontinuation and restart rates, and variations across patient characteristics.

#### **Abstract - The Findings**

The median duration of initial antipsychotic treatment was 5.4 months, exceeding NICE guidelines of 1-3 months. At one year after treatment was initiated, 51.4% of individuals remained on medication (32.7% on low doses and 9.9% on high doses of haloperidol, olanzapine, quetiapine or risperidone, 9.8% on other antipsychotics). Risperidone was the most common first prescription (38.6%). Across the first year of treatment, people typically stayed on the dose they were on. During this period, individuals aged 60-70 years were more likely to start on high-dose medications (24.4% vs 17.2% for 71-85 years old) and remain on high-dose medications (adjusted transition probability 0.47 vs 0.33 for 71-85 years old at the end of the period). Of the 5,547 individuals eligible to restart treatment after initial discontinuation,

56.3% restarted, with a median restart time of 3.1 months. The median duration of the second treatment episode was shorter than the first at 2.6 months and was similar across groups by sociodemographic characteristics.

### **Abstract - The Implications**

This study provides valuable insights into the patterns of antipsychotic prescribing in dementia, highlighting the ongoing challenges in medication management. It underscores the need for continued efforts to optimise pharmacological approaches in dementia care, balancing symptomatic relief with patient safety and quality of life.

### **Funding acknowledgement**

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**200**

### **The CO-produced Psychosocial Intervention delivered by GPs to young people after self-harm: a feasibility study**

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### **Abstract - The Problem**

Reducing self-harm is a global priority. Rates of self-harm in general practice have been increasing for young people, especially in 13–16-year-olds. General Practitioners (GPs) could intervene early after an episode of self-harm but there are no effective treatments presently available. We developed the GP-led COPING intervention using a combination complex intervention approach for young people 16–25 years across two consultations. COPING aims to help young people avoid future self-harm and encourage GP use in routine practice. We examined the feasibility and acceptability of conducting a fully powered effectiveness trial of COPING in NHS general practice.

### **Abstract - The Approach**

A mixed-methods non-randomised before-after single arm feasibility study in NHS general practices in England. Young people aged 16–25 years who self-harmed in the last 12 months were eligible to receive COPING. Feasibility outcomes were recruitment rates, intervention delivery, retention rates, and completion of follow-up outcome measures. All participants received COPING, with a target of 31 and final follow-up data collection at six months from baseline. The recruitment window was 12 months. Clinical data such as self-harm repetition was collected. A nested qualitative study and national survey of GPs (target n=100) explored COPING acceptability, deliverability, implementation, and likelihood of contamination. Progression criteria for a main future trial were specified a-priori. The study's PPI group contributed to design of participant facing materials, site recruitment, and progression decision-making.

### **Abstract - The Findings**

The recruitment window opened in March 2024 and target participant recruitment for COPING delivery was achieved in October 2024: 39 participants enrolled across 12 sites around England with 40 trained GP Co-Investigators. Clinical data including PHQ-9 and suicidal behaviour questionnaire scores at 8 weeks, 4 and 6 months will be compared to baseline. Recruitment, retention, and attrition rates will be shown. There has been one adverse event. 144 responses to the GP survey were collected. Interviews with participants and GPs have begun and findings will be integrated with quantitative data. The findings against the progression criteria will be highlighted.

### **Abstract - The Implications**

Initial data suggests COPING is acceptable to young people. If COPING progresses to a main trial there is potential for huge benefit to patients, GPs, and the NHS.

### **Funding acknowledgement**

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**Navigating clinical uncertainty when reviewing polypharmacy in general practice: A qualitative interview study of practice-based pharmacists.**

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**Abstract - The Problem**

A key role of pharmacists within general practice is to review patients with polypharmacy. The inherent clinical uncertainty associated with polypharmacy review can make decision-making difficult. Low tolerance of clinical uncertainty could incline pharmacists to avoid making deprescribing interventions and instead make no changes to patients' medication regimens. Little is known about how pharmacists navigate clinical uncertainty or what interventions could support them to effectively review complex polypharmacy in primary care. This study aimed to understand how pharmacists approach reviewing polypharmacy when presented with clinical uncertainty and to explore what factors influence their decision making in this context.

**Abstract - The Approach**

A qualitative interview study was undertaken with 20 practice-based pharmacist participants. Pharmacists were purposively sampled to include a broad range of experience (both in terms of time qualified, additional qualifications and time spent in a general practice setting), ethnicities and geographical locations across England. Interviews were transcribed verbatim and transcripts coded both inductively and deductively using the Hillen et al Uncertainty Tolerance conceptual model. Thematic analysis was undertaken facilitated by NVivo, mapping themes to domains within this Uncertainty Tolerance model.

**Abstract - The Findings**

A new, expanded Uncertainty Tolerance model is proposed for pharmacists encountering clinical uncertainty when reviewing polypharmacy in general practice settings. This encompasses internal cognitive, behavioural and emotional factors: provisional changes include fear of judgement and of being wrong, prescribing etiquette, and trust. Additionally, external moderators of uncertainty tolerance include workplace cultures, informal peer support networks, physical location when providing clinical services, patient behaviour and access to senior colleagues. Patient deference compounded clinical uncertainty in polypharmacy reviews, whereas equitable engagement and shared-decision making reduces this uncertainty.

**Abstract - The Implications**

These findings have implications for the organisation and delivery of pharmacist-led polypharmacy medication reviews in primary care. Workplace cultures which facilitate regular multidisciplinary working also help to mitigate clinical uncertainty. Face-to-face reviews, whilst more time intensive, are perceived as being more valuable and provide greater opportunities to involve patients in shared-

decision making about holistically managing their medicines, as well as helping to work through any uncertainty.

### **Funding acknowledgement**

Tom Kallis is funded through an NIHR-Wellcome 'PhD for Primary Care Clinicians' fellowship.

209

### **Practice level Variability and Assessing the dynamics of Multiple Long-Term Conditions, Polypharmacy, Frailty, and Therapeutic Indicators in General Practice**

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#### **Abstract - The Problem**

Practice-level variability in prescribing practices, and resulting polypharmacy, are a source of unwarranted variation in care that carries significant impact for patients. People living with Multiple Long-Term Conditions (MLTC) often experience polypharmacy and frailty. Rates of multimorbidity and polypharmacy are increasing rapidly.

#### **Abstract - The Approach**

This retrospective cohort study explores the practice-level variability in polypharmacy prevalence over a 20 year period for 637,599 registered patients in the Tayside and Fife regions of Scotland. Prevalence rates for Multiple Long-Term Conditions (MLTC), polypharmacy, frailty, and potentially inappropriate prescribing indicators were analysed across age groups, sex, and socio-economic status.

Data from 01/01/2000 to 31/12/2021 were sourced from the Health Informatics Centre (HIC) which serves as a Safe Haven Trusted Research Environment (TRE). Data was sourced from Scottish Morbidity Records (SMR) linking, Outpatient Appointments (SMR00), Hospital Admissions (SMR01), Psychiatric patients (SMR04), Cancer patients (SMR06), Accident and Emergency (A&E), Prescribing records, biochemistry records, demography records, and death records. All patients in Scotland have a unique patient identifier known as the Community Health Index (CHI) number, which is used across all data sources to link with patient records.

#### **Abstract - The Findings**

The prevalence of MLTC and severe frailty were more frequent at older ages, with a prevalence of 1.6% and 0.8%, respectively in 18-25 year olds, and 57.6% and 8.7%, respectively for people aged  $\geq 85$ .

Prevalence of polypharmacy and STU indicators also increased with age, affecting 7.8% and 0.04%, respectively, of 18-25 year olds, compared to 37.9% and 11.5%, respectively for people aged  $\geq 85$ . Women and people living in areas of relatively higher deprivation, were more likely to experience higher rates of polypharmacy, and higher rates of potentially inappropriate prescribing.

Significant variability in rates of polypharmacy and potentially inappropriate prescribing was noted at the practice level, with 16.5% of practices having higher than expected polypharmacy and 18.2% having higher than expected potentially inappropriate prescribing, while 20% and 24.3% of practices, respectively, were lower for polypharmacy and potentially inappropriate prescribing.

### **Abstract - The Implications**

These findings underscore the need for tailored interventions to address inconsistencies in clinical prescribing practice in the population of patients with MLTC.

**210**

### **Targeting lung cancer screening on those most likely to benefit using biomarkers.**

Frank Sullivan

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### **Abstract - The Problem**

The people who are most likely to benefit from the early detection of lung cancer are the least likely to attend for Low Dose CT screening: the method being recommended by guidelines in several countries, including the UK.

### **Abstract - The Approach**

Using GP Electronic Medical Record data to identify high risk patients, and their multiple morbidities enables invitations, and biomarker testing to be targeted the heaviest smokers, and those with other risk factors in more deprived areas. We have recently (January 2025) published the results of five year follow up of the ECLS trial in Scotland We randomized 12 208 individuals aged 50-75 at high risk of developing lung cancer to either the test or to standard clinical care. Outcomes were ascertained from Register of Deaths and Cancer Registry. Cox proportional hazards models were used to estimate the hazard ratio of the rate of deaths from all causes and lung cancer. Additional analyses were performed for cases of lung cancer diagnosed within two years of the initial test.

### **Abstract - The Findings**

After 5 years 326 lung cancers were detected (2.7% of those enrolled). The total number of deaths reported from all causes in the intervention group was 344 compared to 388 in the control group. There were 73 lung cancer deaths in the intervention arm and 90 in the controls (Adjusted HR 0.789 (0.636, 0.978)). An analysis of cases of lung cancer detected within 2 years of randomization in the intervention group showed that there were 34 deaths from all causes and 29 from lung cancer. In the

control group there were 56 deaths with 49 from lung cancer. In those diagnosed with lung cancer within 2 years of randomization the hazard ratio for all cause mortality was 0.615 (0.401,0.942) and for lung cancer 0.598 (0.378, 0.946).

### **Abstract - The Implications**

Further large-scale studies of the role of GP EMRs and biomarkers to target lung cancer screening, in addition to LDCT, are likely to provide additional value

### **Funding acknowledgement**

Chief Scientist Office, Scotland. Oncimmune

**213**

### **How does pain-related distress change over time in people consulting primary care for musculoskeletal pain?**

Hollie Birkinshaw<sup>1</sup>, Beth Stuart<sup>2</sup>, Jonathan Hill<sup>3</sup>, Hazel Everitt<sup>1</sup>, Tamar Pincus<sup>4</sup>, Adam W A Geraghty<sup>1</sup>

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<sup>4</sup>School of Psychology, University of Southampton, Southampton, United Kingdom

### **Abstract - The Problem**

Musculoskeletal (MSK) pain is common in the UK, and often managed in primary care. Low mood is frequently experienced alongside MSK pain, and is commonly diagnosed and treated as depression; yet there is evidence that this may be pain-related distress. Pain-related distress is qualitatively different from depression; rather than a mental health disorder it is a normal and expected reaction to experiencing pain. Pain-related distress has been explored in chronic MSK pain, however, there has been no research exploring how pain-related distress may change in relation to pain duration.

### **Abstract - The Approach**

The aim of this study is to explore how pain-related distress changes over time in people experiencing musculoskeletal pain who presented to primary care. Secondary analysis was undertaken on two existing datasets. The Keele Aches and Pains Study (KAPS) was a cohort study of people consulting their GP for MSK pain, with follow-up timepoints at 2 months and 6 months. The Treatment for Aches and Pains Study (TAPS) was a cluster randomised controlled trial of stratified care for MSK pain, with monthly follow-ups for pain and distress for 6 months. Both datasets have data on pain intensity (0-10 NRS), duration (length of time since no pain), interference (Brief Pain Inventory), and low mood (KAPS = SF-36 Mental Component Score; TAPS = distress due to pain 0-10 NRS). Changes in pain-related distress over time will be explored using descriptive and regression analyses.

### **Abstract - The Findings**

Data analysis was undertaken on 3101 participants in total (KAPS = 1890; TAPS = 1211). Populations were similar in average age (KAPS = 58.3 [16.1]; TAPS = 60.03 [15.3]) and gender (KAPS = 60.6% female; TAPS = 58.9% female). Results from the regression will be presented at the conference.

### **Abstract - The Implications**

Understanding how pain-related distress changes over time is integral to providing effective and holistic care for people with MSK pain. The results from this study will enable healthcare professionals to deliver more personal care by understanding the dynamics of pain-related distress in populations consulting primary care.

### **Funding acknowledgement**

This project is funded by an NIHR School for Primary Care Research Post-Doctoral Fellowship awarded to Hollie Birkinshaw (C110).

**221**

### **Acute Kidney injury and transitions of care between hospital and primary care: A qualitative study using Systems Thinking Methodology"**

Duncan McNab<sup>1</sup>, Kelly Howells<sup>2,3,4</sup>, Mark Jeffries<sup>2</sup>, Caroline Sanders<sup>2</sup>, Robbie Foy<sup>5</sup>, Thomas Blakeman<sup>2</sup>

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### **Abstract - The Problem**

Acute kidney injury (AKI) is a common, harmful and costly medical condition. Individuals affected by (AKI) are at risk of potentially preventable adverse outcomes following hospital discharge, including higher rates of unplanned readmissions and poor long-term health outcomes. The management of patients following an AKI is particularly challenging because many of these interactions occur across the primary and secondary care system interface. We aimed to explore everyday working practices and illuminate key areas within the systems that are important to improve patient care following AKI.

### **Abstract - The Approach**

Qualitative data were collected through individual patient interviews (N=26) and focus groups with healthcare professionals (N=6 ) across primary and secondary care. AKI patients were identified by clinical care teams across six NHS Trusts. These sites also arranged focus groups with staff based in both secondary and primary care. Interviews and focus groups explored management and experience relating to post-discharge care following an AKI. Data were transcribed verbatim, anonymised, and analysed

using The Systems Thinking for Everyday Work (STEW) framework to explore and illuminate variability of how people adapt to system conditions.

### **Abstract - The Findings**

The system was conceptualised as three linked systems: 1. generating a post AKI discharge plan; 2. involving patients in a post-AKI plan; 3. enacting a post AKI-Discharge plan. The STEW analysis highlighted the stress felt by those writing discharge plans caused by demand/capacity mismatches and making decisions with incomplete information; workarounds and trade-offs were employed to maintain safety. Consequently, primary care staff often struggled to implement discharge plans due to limited information and clarity of purpose. Patient knowledge about kidney health and their ability to be involved in post-discharge care was also hugely variable

### **Abstract - The Implications**

Post-AKI care requires clear and timely communication across secondary and primary care. The study highlights the importance of addressing system constraints, variability in work practices, and resource limitations to improve care in primary care settings post-discharge. Key findings relate to development of more explicit discharge summaries, clarity around medicines management and the purpose of further tests are important to improve the transition of post AKI discharge support for this patient population.

### **Funding acknowledgement**

Funding is provided by NIHR Health Services & Delivery Research Programme

**223**

### **Complex Mental Health Difficulties in Primary Care: a scoping review with thematic synthesis**

Kritica Dwivedi, Vyv Huddy, Phillip Oliver, [Chris Burton](#)

University of Sheffield, Sheffield, United Kingdom

### **Abstract - The Problem**

Complex Mental Health Difficulties (CMHD) is an umbrella term for long-term problems with emotions and relationships. It includes diagnoses such as personality disorders, persistent depression and consequences of trauma. People with CMHD often fall between NHS services that focus on either common mental disorders (anxiety, depression) or on psychosis. This means that GPs are often left as the main source of support for people with complex needs. However, while there is a moderately large literature of patient and clinician experience of specialist and community mental health care for CMHD, much less is known about primary care services and CMHD.

**Aim** To understand what is known about primary care for CMHD, from both GP and patient perspectives

### **Abstract - The Approach**

We conducted a systematic scoping review to understand primary care for CMHD from both GP and patient perspectives. We searched: Medline, PsycInfo and Embase, between January 2002-October 2023 for studies reporting GP and patient experiences. Titles and full texts were screened by two reviewers. Thematic synthesis of qualitative studies and narrative synthesis of quantitative studies were undertaken.

### **Abstract - The Findings**

We screened 2209 papers and 33 met inclusion criteria, of which 16 were qualitative studies addressing patient or GP experiences. This presentation will focus on the findings from the thematic synthesis. Three key themes were found: the challenge of recognising CMHD, the work of caring for CMHD in primary care, and patient priorities. GPs recognised CMHD through complexity of diagnoses, of psychosocial issues and of healthcare use. However, they were ambivalent about diagnosis and lacked the resources to make or discuss diagnoses. Working with people with CMHD involved responsibility work, relationship work, and emotional work, under pressured conditions. Patient priorities included addressing stigma, reducing fragmentation and receiving relationship-focused care.

### **Abstract - The Implications**

This is the first systematic scoping review focusing on the experiences of GPs and patients of CMHD in primary care. This scoping review delineates the very real challenges people with CMHD and their GPs face in providing care. It helps set an agenda for work to address gaps in provision and improve outcomes.

### **Funding acknowledgement**

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**226**

### **Development of a blended multidisciplinary education for primary care health workers in Palestine**

David Jewell, Shameq Sayeed, Andrew Ferguson

Family Medicine in Palestine, London, United Kingdom

### **Abstract - The Problem**

In the West Bank of the Occupied Palestine Territories there is a comprehensive structure of primary health care centres. These are staffed by doctors, nurses and other staff none of whom have had formal training in family medicine and for whom there is no prospect of full postgraduate education. A decision was made to develop an educational package to address this need that would be a combination of online and group learning. Critically, and this is the aspect of the programme that is original, it was designed to be taken by workers from different professions together.

The aim of the study was to evaluate the first groups to tackle the programme in order to respond to revise the programme in response to learners' comments.

### **Abstract - The Approach**

Data, both quantitative and qualitative, were gathered by means of an electronic form that those who had completed the course could fill in, and was supplemented by interview data.

Specific questions of importance related to:

Relevance of content

Including whether the level of difficulty was appropriate for different professions

How participants felt the programme had changed their approach to primary care

### **Abstract - The Findings**

Events in Palestine have made it difficult to gather the most recent data.

At the end of the pilot study, the course had been completed by 139 participants, with 97 returning questionnaire data. Those sending data included doctors, nurses, pharmacists, midwives and administrators.

80% reported that the level had been set at the right level for them

93% reported that the material was either 'relevant' or 'very relevant'

Numerous spontaneous comments were made about how the course would influence their daily work.

### **Abstract - The Implications**

A programme to educate different primary care professionals together is feasible, and is welcomed by participants

Successful completion of the project will depend on local involvement and being responsive to their feedback

Participating in the project has led the authors to consider whether the approach should be adopted in other parts of the world to help educate other health professionals (apart from doctors) for primary care

### **Funding acknowledgement**

Family Medicine in Palestine Medical Aid for Palestinians

## **Improving Antenatal Vaccine Uptake in Northern Ireland: Developing an Intervention with PPPIE Insights**

Stephanie McCarron, Lynsey Patterson, [Nigel Hart](#)

Queens University Belfast, Belfast, United Kingdom

### **Abstract - The Problem**

Maternal vaccination against pertussis and influenza is a key public health issue, yet vaccine uptake in pregnancy remains low in the UK and Ireland. A scoping review of 34 studies identified reasons for non-uptake, including low awareness, safety concerns, inconsistent healthcare professional recommendations, and access challenges. In Northern Ireland, the shift towards self-referral to antenatal care has highlighted a gap in early pregnancy information provision, particularly regarding vaccination. To address this, we developed an intervention integrating a visual antenatal timeline, informed by Parent, Patient, and Public Involvement and Engagement (PPPIE).

### **Abstract - The Approach**

The design of the intervention was shaped by a range of feedback, drawing on both qualitative and quantitative insights through PPPIE.

- **Stakeholder Engagement:** Initial feedback was gathered from a Maternity Service Liaison Committees (MSLC), while the Northern Ireland Maternity Forum reached over 3,300 expectant mothers through social media. Sure Start programs and targeted outreach clinics for East Timorese women helped address barriers faced by diverse communities, particularly those from disadvantaged groups.
- **Data Collection and Refinement:** Contributors views were collected via surveys, social media discussions, in-person workshops, and translator-assisted consultations. The intervention's digital and written timeline was subsequently refined to reflect PPPIE feedback.

### **Abstract - The Findings**

- Service users expressed strong support for the antenatal timeline, endorsing its potential to clarify vaccine information and support decision-making.
- Participants requested digital accessibility features such as QR codes, mobile app integration, and information in email format.
- Ethnic minority groups preferred visual resources over text-heavy materials, emphasizing the need for content that is culturally inclusive.
- Challenges included limited awareness of self-referral pathways among East Timorese women and late antenatal bookings (>10 weeks), which reduced the potential for engagement with antenatal timeline information

### **Abstract - The Implications**

This PPPIE-informed intervention demonstrates the importance of inclusive, accessible communication strategies in addressing barriers to maternal vaccination. The findings have influenced Public Health

Agency decision-making in Northern Ireland and have highlighted the need for targeted, interactive approaches to enhance vaccine uptake across diverse maternity populations. Future research should explore scalable interventions to ensure equitable access to vaccines.

### **Funding acknowledgement**

This research was funded by the Research and Development Division of the Public Health Agency, Northern Ireland (R&D PHA, NI).

**233**

### **Incidence of suicide within two years of a first diagnosis of depression, anxiety, or mixed anxiety and depression: a cohort study in primary care**

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#### **Abstract - The Problem**

Suicide remains a major public health concern worldwide, yet primary care research is limited. Most evidence comes from secondary care, where only a small subset of people are reviewed, limiting generalisability. Many who die by suicide never see secondary services, nearly all consult their GP within a year of death. We estimated suicide rates within two years of a first primary care diagnosis of depression, anxiety, or mixed anxiety and depression, aiming to guide clinical and public health strategies.

#### **Abstract - The Approach**

Using the Clinical Practice Research Datalink Aurum, we included adults aged 18+ in England who had their first ever diagnosis of depression, anxiety, or mixed anxiety and depression from 1999–2018. First diagnoses at least six months post-registration were identified via diagnostic codes or PHQ-9/GAD-7 scores. Individuals were followed up for up to two years, with suicide deaths confirmed via ONS linkage. We calculated suicide rates and used Poisson regression to estimate adjusted incidence rate ratios (aIRR) by sex, age, and deprivation.

#### **Abstract - The Findings**

The cohort included 1,454,102 individuals: 883,598 with depression, 337,755 with anxiety, and 232,749 mixed. Overall, 0.1% (1,439) died from suicide within two years. The highest rate was among older men with a first mixed diagnosis (156.43 per 100,000 PYAR at 70+). For women, the highest was for those aged 60–69 with a first mixed diagnosis (51.49 per 100,000). Men's rate after a first depression diagnosis was five times women's (aIRR 4.99; 115.85 vs 23.83). Women newly diagnosed with anxiety aged 50–59 had over three times (aIRR 3.26) the rate of those diagnosed aged 18–29.

## **Abstract - The Implications**

The first recorded diagnosis of depression, anxiety, or mixed anxiety and depression in primary care will often represent the initial clinical contact and management, and these data demonstrate the elevated but varied suicide rates in the subsequent two years. The risks for men aged 70+ and women aged 50–59 with new anxiety-related diagnoses requires better understanding. Further research should explore how life events, co-morbidities, and diagnostic practices contribute to risk soon after diagnosis. Understanding these dynamics can inform targeted suicide prevention strategies, refine clinical management, and guide policy in primary care.

## **Funding acknowledgement**

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**236**

## **Adapting lung cancer screening for older adults: insights from the Lung Health Check-Plus (LHC-Plus) study**

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## **Abstract - The Problem**

Lung cancer is the UK's leading cause of cancer-related mortality, frequently diagnosed at advanced stages. Early detection is critical, yet 40% of cases occur in individuals aged 75 and older—an age group currently excluded from the UK's Targeted Lung Health Check (TLHC) programme. Preliminary findings from North Manchester show that low-dose CT (LDCT) screening in adults aged 75-80 can detect more early-stage cancers and achieve treatment outcomes similar to younger populations. This innovation project, funded by the Greater Manchester Cancer Alliance, evaluates the benefits and risks of expanding screening criteria and explores how older adults, who are potentially frailer, make screening decisions.

## **Abstract - The Approach**

This study assesses the feasibility, acceptability, and outcomes of lung cancer screening in those aged 75-80. It develops a “screening fitness” assessment, integrating frailty and comorbidity scoring to minimise harms. Ever-smokers aged 75-80, identified as high-risk, are invited for an enhanced Lung Health Check (LHC-Plus+), combining cancer risk assessment with screening fitness measures. Using a mixed methods approach co-designed with public input, the study explores attitudes, experiences, and decision-making via surveys and semi-structured interviews.

## **Abstract - The Findings**

Recruitment targets 2000 participants, with 1000 expected to complete LHC-Plus+ assessments and at least 500 undergoing LDCT. Early findings reveal insights into screening attitudes, experiences, facilitators, and barriers. These will be presented at the conference, illustrating how a personalised screening approach resonates with this population and how decision-making is influenced by health status, perceived risks, and family or primary care support.

### **Abstract - The Implications**

This project demonstrates how extending screening to older adults can address disparities in early detection while supporting adaptable practices. Findings will inform national policy discussions on TLHC expansion and contribute to the development of a screening fitness tool for informed decision-making. Additionally, the study enhances understanding of screening decisions, supporting proactive discussions between patients, their families/carers, TLHC teams and primary care professionals. By tailoring screening strategies to older adults, this project exemplifies person-centred approaches to improve equity in early cancer detection and minimise harms.

**238**

### **How can we involve parents to keep children safe in general practice? A scoping review of interventions across healthcare**

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### **Abstract - The Problem**

There have been international calls for greater collaborative partnerships with parents to develop patient safety initiatives. Our previous study exploring the family role within paediatric patient safety incidents identified parents can contribute towards and mitigate unsafe outcomes relating to medications, diagnosis and assessment and communication.

We have identified healthcare safety interventions and initiatives that have purposefully involved parents to mitigate safety issues.

### **Abstract - The Approach**

A search strategy in five databases identified articles about interventions relating to the top safety incidents we have previously identified involving children (in English, year 2000 onwards, from primary and secondary care). Additional articles were identified via grey literature and reference searches. Two GP researchers double screened all titles/abstracts (n=5844) and selected full texts (n=132) for eligibility.

Data were charted for variables including the safety issue addressed and intervention description. We classified level of parental involvement in different ways using the Patient and Family Involvement framework.

### **Abstract - The Findings**

Following screening, 93 articles were included, primarily from North America and Western Europe. Only 14% (n=13) of interventions related to primary or community care, often focusing on antibiotic prescribing (n=7). Many studies addressed multiple safety areas, but most commonly communication, e.g., between parents and staff (n=55,59%) and medication issues, e.g., dosing errors (n=51,55%).

A broad range of interventions are described, predominantly involving 'educating parents' through training/teaching (n=21,23%), 'providing written information or instructions', e.g., handouts/booklets (n=20,22%), or 'standardising a process', e.g., checklists (n=19,20%). Unique initiatives with strong parental engagement included having a family advisor in the care team and a family peer-to-peer support service. Fewer than half of interventions were about parents taking a more active role in care decisions (n=38,41%) or how their perspectives were integrated into intervention development (n=35,38%).

### **Abstract - The Implications**

There is scope for greater parental involvement when designing and implementing paediatric safety interventions, particularly within primary care. Parents are commonly the only target of safety interventions as a single component solution to a complex wider system issue, and few initiatives involve them at the design stage or beyond. We outline recommendations around how parents can become active partners with care teams to re-design patient safety in primary care.

### **Funding acknowledgement**

This project is funded by the Scientific Foundation Board of the Royal College of General Practitioners (grant no. SFB 2022- 12).

**242**

### **Primary care practitioners' perspectives on the delivery of workplace wellbeing interventions: A meta-synthesis.**

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### **Abstract - The Problem**

The high levels of burnout and turnover among healthcare practitioners in primary care, exacerbated by the Covid-19 pandemic, represent a critical challenge. In response, various interventions have been developed to reduce occupational stress, promote wellbeing and improve retention. However, findings are inconsistent, and the interventions vary significantly in terms of their theoretical underpinnings, design, mode of delivery, and implementation context. Given this variation, there is a need to synthesise these findings and identify key factors that influence the design, delivery, and effectiveness of wellbeing interventions.

### **Abstract - The Approach**

To conduct a meta-synthesis of practitioner wellbeing and retention interventions in primary care, exploring their mechanisms, key stakeholder experiences, barriers, facilitators, and theoretical underpinnings to inform their design and implementation.

Searches were conducted across 11 databases and trial registries in April 2023 and updated in October 2024. We included qualitative and mixed-method evaluations of practitioner wellbeing and retention interventions in primary care, as well as process evaluations of interventions primarily evaluated quantitatively. The quality of included studies was assessed using the CASP tool for qualitative research. Meta-ethnography was employed to synthesise findings, generating an overarching understanding beyond individual studies, with analyses underpinned by behaviour change theories.

### **Abstract - The Findings**

After screening 15,094 citations, 29 studies were included in the meta-synthesis - 14 qualitative evaluations (48%) and 15 mixed-method evaluations (52%). Of these, 13 targeted individual practitioners (45%), 6 focused on teams (21%), and 10 addressed organisational improvements (34%). Common intervention types included mindfulness training, support groups, enhanced supervision, performance-based incentives, leadership skills, and workload management. Qualitative analysis, underpinned by behaviour change theories, is ongoing, with completion expected by April 2025.

### **Abstract - The Implications**

This review will provide a comprehensive overview of primary care practitioners' experiences of wellbeing and retention interventions, offering valuable insights into the feasibility, appropriateness and acceptability of these interventions in primary care settings. The findings will inform future intervention design and implementation, helping to address key challenges in primary care practitioner wellbeing and retention.

### **Funding acknowledgement**

This research is jointly funded by the NIHR School for Primary Care Research and the Greater Manchester Patient Safety Research Collaboration.

**247**

### **CAM-Pain-Q: Views on Care Needs for Musculoskeletal Pain in Children and Young People**

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### **Abstract - The Problem**

Musculoskeletal pain is common in children and young people but remains under-researched and sub-optimally managed in healthcare. This study explores the views of children and young people, their parents/guardians and healthcare professionals towards musculoskeletal pain management and information needs.

### **Abstract - The Approach**

Thirteen children and young people (age range 8-17 years, 7 female, 5 male, 1 non-binary), who had consulted UK primary care for musculoskeletal pain within the three months prior to contacting the study were recruited. They kept a 3-week pain diary, and subsequently participated in semi-structured online interviews, 11 of them along with parents/guardians. Six focus groups were held with 17 relevant healthcare professionals, including GPs, physiotherapists, occupational therapists and practice nurses. Data were thematically analysed.

### **Abstract - The Findings**

CYP and parents reported difficulty communicating about pain due to the subjectivity of experience and having the 'right words' and language. They described varied experiences of consultations, referral and management, and unmet information and management needs. HCPs reported varied patient (and family) characteristics such as socioeconomic status and parents' own pain history, necessitating different management advice styles. They raised concerns about limitations of what can be offered in primary care for pain in CYP, and discussed the influence of patient and family experiences on expectations of healthcare and the impact of pain. HCPs also described difficulty in ensuring CYP and parents understood the information and advice provided, and challenges in signposting to information and resources.

### **Abstract - The Implications**

Findings indicate unmet communication, information and management needs in this population, and suggest resources are needed for CYP, parents and HCPs to facilitate meaningful clinical consultations to better meet the care needs of this patient group. The results will inform the development of information and management resources for children and young people with musculoskeletal pain.

### **Funding acknowledgement**

This study is part of an NIHR funded programme grant and is also supported by Versus Arthritis

**249**

### **The At-Risk Registers Integrated into primary care to Stop Asthma crises in the UK (ARRISA-UK) cluster randomised controlled trial: initial findings**

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### **Abstract - The Problem**

Despite long-standing guidelines, incentivised primary care management and continued development of effective treatments, around four people die from asthma every day in the UK and tens of thousands attend emergency departments or are hospitalised due to asthma attacks annually. Most of these “asthma crisis events” should be preventable with improved care, including better patient management and support in primary care.

### **Abstract - The Approach**

The ARRISA-UK cluster-randomised controlled trial investigated whether, compared to usual asthma care, a GP practice-level intervention decreased the proportion of ‘at-risk’ asthma patients experiencing asthma crisis events over 12 months. The intervention involved identification of patients at-risk of asthma crisis events using a validated algorithm, adding alerts to their electronic records, and web-based individual and team training of practice staff to develop and support implementation of practice-wide actions in response to alerts. Anonymised routine data, with linkage of primary and secondary care records, were used to capture asthma-related crisis events (primary outcome), prescriptions and other processes of care.

### **Abstract - The Findings**

Two-hundred and seventy GP practices across England, Scotland and Wales, covering nearly 11,000 at-risk asthma patients who had not declined data sharing for research, were randomised. Of 139 intervention practices, 128 (92%) engaged with all aspects of the intervention. Due to difficulties with records linkage, primary outcome data were available from only 185 (67%) practices (6207 patients). In a complete case analysis adjusted for baseline crisis events, fewer patients experienced asthma crisis events in the intervention (185/2959, 6.3%) compared to the control arm (235/3248, 7.2%), odds ratio 0.82 (95% CI 0.66 to 1.03). However, with the reduced sample size this did not reach statistical significance ( $p=0.088$ ). There were some indications of improved care (e.g. increased prednisolone prescribing), but none reached statistical significance.

### **Abstract - The Implications**

The ARRISA-UK intervention was successfully implemented across a range of GP practices and may have led to a clinically important reduction in asthma crisis events potentially resulting from improvements in some aspects of asthma care. However, this large-scale, long-running primary care trial was fraught with difficulties and ultimately underpowered to demonstrate statistical significance. Ongoing analyses are determining cost-effectiveness and exploring subgroups of practices and patients that may have benefitted.

### **Funding acknowledgement**

The ARRISA-UK trial was fully funded by the NIHR Health Technology Assessment (HTA) programme, Grant number 13/34/70. This abstract presents independent research commissioned by the NIHR. The views and opinions expressed by authors are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the NIHR Evaluation, Trials and Studies Coordinating Centre, the HTA programme or the Department of Health.

**254**

**Supporting primary care to implement supported self-management of asthma. What can we learn from practice self-report at the end of the IMP2ART trial.**

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**Abstract - The Problem**

Supported self-management of asthma is an evidence-based and guideline-recommended intervention that improves asthma care, but is poorly implemented. IMP<sup>2</sup>ART is a UK-wide cluster randomised trial aimed at improving implementation in primary care practices compared to usual care. Implementation strategies included patient, health care professional and organisational strategies such as education modules, audit and feedback, consultation template and twelve months of facilitation by a trained respiratory nurse.

We aimed to understand uptake of the implementation strategy and identify any associations between practice contextual factors and implementation. We also aimed to gain insight into facilitators and barriers to change in this multifaceted trial.

**Abstract - The Approach**

A total of 144 GP practices were randomised to implementation and control arms. Trial participation ended after 24 months. Implementation practices were surveyed on the use, helpfulness and adaptation of implementation strategies at an end-of-trial meeting or by email. Practice context, including deprivation, size, quality indicators, and training status were collected at baseline and end of trial and analysed to examine associations with implementation strategy use. We used thematic analysis on free-text qualitative data to enhance understanding.

### **Abstract - The Findings**

At publication of this abstract 33 implementation practices had completed end of trial visits, 16 had not responded to follow up requests, and the rest were awaited. No consistent association was found between use of strategies and practice context, the large majority reporting finding the interventions helpful. When practices did not use interventions, explanations due to national or regional context were commonly cited. Qualitative data highlighted that IT challenges, recall problems and high staff turnover impacted the uptake of implementation strategies.

### **Abstract - The Implications**

This analysis of end-of-trial data showed no association between contextual factors and uptake, but did highlight the impact national contexts such as the formation of primary care networks can have on interventions and their uptake. Furthermore, it provided insights which may be useful for future trials and self-management implementation initiatives.

### **Funding acknowledgement**

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255

### **Experiences of people with eczema on navigating primary care with Topical Steroid Withdrawal**

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### **Abstract - The Problem**

Topical corticosteroids (TCS) are effective and safe treatments for most people with eczema and widely used in primary care. Topical steroid withdrawal (TSW) is of considerable interest to the eczema community, but there is varying understanding amongst healthcare professionals (HCPs) and patients about the condition. This study aimed to provide insight to contribute to a greater shared understanding of TSW.

### **Abstract - The Approach**

As part of a larger qualitative study, a network of people with eczema, patient organisations, and HCPs was built to consider multiple perspectives. Semi-structured online interviews were then conducted with people who self-identify with TSW in the UK. Participants were recruited through social media

posts in collaboration with Scratch That. Interviews were audio-recorded and transcribed verbatim. Data were analysed in NVivo using Inductive thematic analysis due to the exploratory nature of the study. Our network of collaborators helped interpret findings.

### **Abstract - The Findings**

Eighteen interviews were completed, revealing four key findings. 1) Lack of understanding and misinformation about TCS and TSW: Individuals reported receiving conflicting advice on using TCS and were previously unaware of possible side effects with topical preparations. 2) Severe impact on quality of life due to skin and non-skin-related symptoms affecting family, work, and psychological wellbeing. 3) Variety of experiences with TSW: including differences in triggers, onset, symptoms, severity and duration. 4) Disengagement with healthcare providers and services: Individuals reported negative interactions when seeking care for TSW, including being laughed at and feeling gaslit. Some withdrew from seeking care entirely or avoided mentioning TSW. Many individuals sought information and support elsewhere, which may not be evidence-based.

### **Abstract - The Implications**

Individuals self-identifying as having TSW report highly varied experiences with major impact on their lives. They do not feel supported in primary care consultations, and some are disengaging from health services, therefore receiving no effective treatment or monitoring. Individuals require more support from health services and further work is needed to improve understanding of TSW for all. The next stage of our research will involve interviews with HCPs. Once completed, we will compare perspectives and make recommendations to build better shared understanding and inform further research.

### **Funding acknowledgement**

This study is funded by the NIHR School of Primary Care Research.

256

### **Development of an Implementation Package for the Health Catch-UP! Migrant Health Screening Tool in Primary Care: A Person-Based Approach Study**

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### **Abstract - The Problem**

Global migration has steadily risen, with 16% of the UK population born abroad. Migrants face unique health risks, including higher rates of infectious and non-communicable diseases, compounded by significant healthcare barriers. While UK Public Health guidelines recommend screening at-risk migrants, primary care often falls short, exacerbating health disparities. The Health Catch-UP! tool was developed

as a digital, multi-disease screening solution to identify at-risk migrants and offer individualised screening. This qualitative study employs the Person-Based Approach (PBA) to develop and optimize an implementation package for this novel digital screening tool for migrants in primary care.

### **Abstract - The Approach**

This iterative intervention development study is guided by the person-based approach (PBA). Through engagement with migrants and primary healthcare professionals via participatory workshops, focus groups and think-aloud interviews, the study aims to co-create a comprehensive Health Catch-UP! implementation package. The package will encompass delivery models, healthcare professional support materials, and patient resources, developed through iterative refinement based on user feedback and behavioural theory. The study involves three linked phases: 1) planning phase: formation of an academic-community coalition and co-creation of guiding principles, logic model and intervention planning table, 2) intervention development phase: participatory workshops to co-produce prototype implementation materials and 3) intervention optimisation phase: think aloud interviews to iteratively refine the final implementation package. An embedded mixed-methods evaluation will allow shared learning from this methodology within the migrant health context.

### **Abstract - The Findings**

Preliminary work includes the successful formation of an academic-community coalition, co-produced guiding principles, logic-model, intervention planning table and agreed values for evaluation (valuing contributions and diversity, creating safe spaces, support, and empowerment). To ensure materials are acceptable, feasible, and engaging for target users, our guiding principles focus on improving migrant understanding of preventative healthcare, reflecting migrant population diversity, and fostering trust. For PHCPs, the focus includes enhancing knowledge/awareness, communication skills, reducing stigma and workload, and embracing workforce diversity. Two migrant participatory workshops co-produced prototype materials sharing lived experience and key messages "free, safe and inclusive".

### **Abstract - The Implications**

Successful completion will contribute to the evidence base for migrant health interventions, offering practical implementation tools and methodological insights for healthcare systems addressing challenges in serving diverse migrant populations.

### **Funding acknowledgement**

This work was supported by Wellcome Trust PhD Programme for Primary Care Professionals through the School Primary for Care Research 2023 (JC)

**257**

**Academic Primary Care Workforce: An investigation of current capacity and the views of all grades regarding facilitators and barriers to academic primary care careers.**

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### **Abstract - The Problem**

The UK faces a persistent shortage of general practitioners (GPs), worsened by recruitment and retention issues. The visibility and strength of the healthcare academic workforce are key to attracting non-academic clinicians to clinical practice. Data from the Medical Schools Council Clinical Academic Database reveals that academic general practice accounts for just 1% of the academic workforce, the lowest among clinical specialties. The data also highlights underrepresentation of ethnic minorities and women, particularly at senior levels.

The aim of this study for SAPC is to describe the size and characteristics of the primary care academic workforce and explore the barriers and facilitators to pursuing an academic career in primary care, with a focus on underrepresented groups.

### **Abstract - The Approach**

This mixed-methods observational study involves three workstreams:

A quantitative digital structured survey on the current capacity and funding of the UK academic primary care workforce.

A semi-structured digital survey for Heads of Departments and Heads of Teaching to identify institutional barriers to career progression.

A semi-structured digital survey for early and middle-grade primary care academics on their training and career progression.

The study focuses on challenges faced by primary care academics from underrepresented groups, including women and ethnic minorities. Surveys were distributed through regional SAPC conferences, funding bodies, and academic networks. Data will be analysed using basic quantitative and thematic analysis, with chi-squared tests to explore associations where relevant.

### **Abstract - The Findings**

Previous research (since 2003) shows that unclear academic pathways, uncertain training durations, funding shortages, and workforce integration challenges contribute to the low academic presence in primary care compared to other specialties. Data collection is ongoing, with responses from Heads of

Departments and Heads of Teaching currently being submitted, and the early/middle-grade survey launched at the SAPC conference. Submissions will close in March, followed by data analysis.

### **Abstract - The Implications**

Academic primary care is underrepresented compared to other specialties, with notable gender and ethnic disparities. This affects the ability to attract doctors to primary care, where a workforce crisis is ongoing. The survey results aim to inform UK academic workforce policy, helping address these challenges.

### **Funding acknowledgement**

N/a

**258**

### **Collaborative and co-Ordinated action for Medication Safety (COMS): Using experience-based co-design to develop interventions for improving General Practice and Community Pharmacy collaboration**

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### **Abstract - The Problem**

Poor communication is a key causal factor of medication safety incidents, particularly at care interfaces. In primary care, collaboration between community pharmacy (CP) and general practice (GP) staff is essential but hindered by multiple barriers. This study applied an Experience-Based Co-Design (EBCD) approach, incorporating Systems Thinking for Everyday Work (STEW), to develop interventions for improving collaboration and communication on medication safety across the GP-CP interface.

### **Abstract - The Approach**

Two online EBCD workshops were conducted with 21 participants, including patients and primary care staff (general practitioners, general practice pharmacists/pharmacy technicians, receptionists, community pharmacists/pharmacy technicians). In Workshop 1, participants listened to the accounts of healthcare staff (based on excerpts from our previous study) and reflected on medication safety touchpoints across the GP-CP interface, prioritising key issues and intervention ideas. Workshop 2 focused on discussing the feasibility and development of these interventions. Workshops were audio-recorded, transcribed, and thematically analysed.

### **Abstract - The Findings**

Four priority areas for intervention were identified by participants; these were: understanding roles and building relationships, communication tools, lack of patient/medication information to make decisions on safe/prompt supply of medicines and shared learning on medication safety issues and their prevention. Five key interventions were suggested including: development/modification of an electronic tool for two-way communication between GP and CP; interprofessional education; co-location of general practices and community pharmacies; centralisation and sharing of patient records and a toolkit for improving medication safety across the GP-CP interface. Participants agreed that a toolkit to address key communication and collaboration issues arising at multiple touchpoints should be prioritised for development particularly as it would establish a '*common ground for doing things*'. Discussions led to refinement of ideas for toolkit resources leading to production of a toolkit blueprint.

### **Abstract - The Implications**

This study led to the co-development of a toolkit blueprint to improve collaboration and communication of medication safety issues across the GP-CP interface. The EBCD approach ensured alignment with daily practice, increasing the likelihood of successful implementation. Further research is required to refine toolkit resources, establish an implementation pathway, and evaluate its effectiveness to support national adoption and improvements in medication safety.

### **Funding acknowledgement**

This study was funded by the NIHR SPCR Funding Round 6-IV.

**264**

### **Do clinical practice guidelines enable adaptable primary care? A systematic review of the consideration of sex and gender dimensions in NICE clinical guidelines**

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### **Abstract - The Problem**

Primary care is the first point of contact for most health concerns, managing a wide range of conditions which can present differently according to patient's sex and gender. Yet, despite evidence of sex and gender differences in disease risk, presentation, and treatment response, these factors are often

overlooked in clinical guidelines. A lack of clear, evidence-based guidance places additional pressure on already overburdened primary care services. This study examines the extent to which NICE clinical guidelines—many of which directly and indirectly inform primary care practice—integrate sex and gender considerations and identifies opportunities to enhance adaptability in frontline care.

### **Abstract - The Approach**

A systematic review of 197 non sex-specific NICE guidelines assessed whether they referenced sex or gender beyond pregnancy and childbirth. Secondary outcomes included how sex and/or gender were considered in disease risk, presentation, investigations, management, and the composition of guideline committees and chairs.

### **Abstract - The Findings**

Of the 197 non sex-specific NICE clinical guidelines (as of July 2024), 120 mentioned sex or gender-related terminology, but only 81 included considerations beyond pregnancy and childbearing. Many of these guidelines cover conditions frequently diagnosed and managed in primary care, such as cardiovascular disease, mental health conditions, and chronic pain. However, only 4 (2%) referenced sex/gender differences in disease pathophysiology, 18 (9%) in disease presentation, 29 (15%) in investigations, and 38 (19%) in epidemiology. Committee leadership was predominantly male (76%), and guidelines chaired by women more frequently incorporated sex and gender considerations.

### **Abstract - The Implications**

Without explicit guidance, primary care clinicians must bridge the gap between evidence and practice, making real-time decisions about sex and gender differences without an adequate evidence base or satisfactory clinical practice guidelines. To ensure primary care remains adaptable to the needs of all patients, systematic integration of sex and gender-disaggregated research into clinical guidelines is critical. The Wellcome funded 'Medical Science Sex and Gender Equity' (MESSAGE) project has co-designed a sex and gender policy framework to support this shift at the funding, regulatory and research level. MESSAGE call on NICE to lead a large-scale consultation to identify key evidence across primary care-relevant conditions, ensuring adaptable, equitable, and evidence-based practice.

### **Funding acknowledgement**

This work was supported by Wellcome grant number 225472/Z/22/Z.

265

### **Social and Ethical Aspects of Remote and Hybrid Care in the Special Allocation Scheme in general practice (SEARCH): A mixed methods feasibility study**

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### **Abstract - The Problem**

The 'Special Allocation Scheme' (SAS) provides GP services to patients who have been de-registered from their practice for reported aggressive or violent behaviour. SAS patients are likely to be offered remote services, partly because they are often placed in 'out of area' SAS practices that cover large geographical areas. There is currently extremely limited evidence available on how SAS services are provided, who these patients are, their potential (digital/remote care) support needs, and how this service can best be organised for patients and staff.

The SEARCH project aims to build a solid evidence base on the delivery of primary care via the SAS, with a focus on a) generating insights on the accessibility, inclusivity, and quality of remote and in-person SAS care and b) developing and piloting approaches for the safe, ethical, and meaningful involvement of this seldom heard group in broader research and service development

### **Abstract - The Approach**

This is a mixed methods feasibility study, involving a national scoping survey and ethnographic methods (interviews and observations) in three case study sites to generate real-world insights into the possibilities and challenges associated with remote and in-person options for accessing and delivering SAS services. We adopt an Empirical Ethics approach throughout, iteratively reflecting on what 'good care' and 'good research' looks like in the context of SAS.

### **Abstract - The Findings**

This WIP presentation will a) report on progress in scoping where, how, by whom, and at what scale are SAS services delivered in England, reflecting on the feasibility of collecting data from a diverse set of providers with no centralised data sets or information sharing channels, and b) share early ethnographic observations on how patients and providers experience in-person and/or remote care, highlighting ethical and practical complexities of the SAS context. We will also share learning on inclusive, trauma informed research practices in this context.

### **Abstract - The Implications**

Whilst remote solutions can improve access to primary care for some, they are not suitable for every patient population and can widen health inequalities. This presentation provides early insights into the results of a novel study in a critically under-researched population with clear practical and ethical implications for practice staff.

### **Funding acknowledgement**

This project is funded by the National Institute for Health Research School for Primary Care Research (NIHR SPCR 717)

**Using the Primary care Academic Collaborative (PACT) to explore the characteristics and unmet health needs of older housebound patients (the CHIP study)**

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**Abstract - The Problem**

Older housebound patients are an under-researched group who face challenges accessing primary healthcare and have complex health needs. In the UK, around 340,000 people aged ≥85yrs are housebound - set to double by 2041. Studies outside the UK have shown that housebound patients have more mental and physical health problems and more unmet health need, yet numbers of UK home visits are falling. There are minimal published data on the characteristics of housebound people in the UK. We examined socio-demographic and clinical characteristics, quality of care and high-risk prescribing in older (≥65yrs) housebound and non-housebound patients.

**Abstract - The Approach**

HCPs from six regions in England were recruited through the 'Primary care Academic Collaborative' (PACT). Each HCP identified 20 housebound cases (≥1 home visits) and 20 non-housebound controls (≥1 GP surgery consultations), matched by age/gender. An electronic health records search identified potential patients, and eligibility determined by notes review. Routinely collected data (e.g. age, gender, ethnicity, Cambridge Multimorbidity Score, QOF indicators, high risk prescribing indicators) were extracted using pre-prepared searches. Association with houseboundness was modelled using logistic regression.

**Abstract - The Findings**

Data were collected on 401 cases and 401 controls (mean age 84 years, 67% female) from 24 practices. Being housebound was associated with greater medical complexity: mean number LTCs 4.5 cases, 3.4 controls, adjusted odds ratio (aOR) 1.26 (95%CI=1.19-1.33, p<0.0001); mean Cambridge Multimorbidity Score 3.5 cases, 2.2 controls, aOR 1.47 (95%CI=1.38-1.58, p<0.0001). Housebound patients were more likely (p<0.05) to have anxiety/depression, painful condition(s), diabetes, AF, constipation, stroke/TIA, COPD, heart failure and dementia. Being housebound was associated with having ≥1 high-risk prescribing indicator(s) (16% cases, 5% controls, aOR 2.64 (95%CI=1.55-4.48), p<0.0001). Aspects of quality of care appeared worse in housebound patients, with diabetics less likely to have had a diabetes review (p=0.002).

**Abstract - The Implications**

Using a novel approach, we have collected a rich bespoke dataset on older housebound patients and matched controls. Mental and physical health conditions, medical complexity, high-risk prescribing, and unmet care targets, were more common in housebound patients. This study indicates housebound patients are complex and have unmet healthcare needs, providing evidence to policymakers that primary healthcare for these individuals is suboptimal.

### **Funding acknowledgement**

Care of Housebound patients in Primary care (CHiP study) was funded by the Royal College of General Practitioners (RCGP) Scientific Foundation Board (SFB 2019-14) and Dr Duncan's NIHR Doctoral Research Fellowship (NIHR301824). The views expressed are those of the authors and not necessarily those of the NIHR, the Department of Health and Social Care or the RCGP.

**272**

### **Improving cancer diagnosis pathways in primary care through development of a communication tool for GPs, nurses and patients with anxiety and depression**

Sarah Morgan-Trimmer<sup>1</sup>, Penny Xanthopoulou<sup>1</sup>, Rachel Winder<sup>1</sup>, Samuel Merriel<sup>2</sup>, David Hunt<sup>1</sup>, Sarah Dean<sup>1</sup>, Christian Von Wagner<sup>3</sup>, Cristina Renzi<sup>3</sup>, Sophia Harmer<sup>3</sup>, [Gary Abel](#)<sup>1</sup>

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#### **Abstract - The Problem**

Findings from the 'Spotting Cancer amongst Comorbidities' (SPOCC) study show that patients with anxiety and/or depression are less likely to be referred for cancer investigations via the urgent referral pathway and more likely to be diagnosed with cancer through an emergency route compared to people without such conditions. These patients also report difficulties accessing and using primary care, including communicating and prioritising symptoms, which may contribute to the higher rate of emergency cancer diagnoses experienced.

#### **Abstract - The Approach**

As part of the SPOCC programme we are developing and testing a communication tool for patients with pre-existing anxiety/depression, to improve the quality of consultations and appropriate referral for cancer investigations. Intervention mapping, supported by PPI input, was used to develop the communication tool. An online vignette study has tested the tool with patients, with GP testing ongoing. A feasibility study will be conducted in 4-8 general practices serving different populations (in terms of socio-economic status and ethnicity profile). Around 400 patients with anxiety/depression will be offered the tool prior to a booked consultation. Semi-structured interviews will be conducted with 30 patients and 16 GPs/nurses about their experiences and perceptions of the tool; anonymised completed tools will be analysed using summary statistics and qualitative content analysis; and data on rates of tool completion for different groups of patients (e.g. age, gender) at each practice will be collected.

## **Abstract - The Findings**

The developed tool can be completed online or on paper prior to a GP/nurse consultation, and provides brief space for patients to describe their symptoms and priorities for the consultation. It also includes a brief tick-box list of symptoms that may indicate cancer. This tool is then used during the consultation to facilitate communication of symptoms and joint prioritisation of multiple symptoms (if more than one). The online vignette study indicated broad acceptability for patients. Early findings from the feasibility study will be reported at the conference.

## **Abstract - The Implications**

Early-stage feasibility testing of the tool will indicate potential to improve experience of primary care and the cancer investigation pathways for patients with anxiety and/or depression, and also reduce costs for the NHS.

## **Funding acknowledgement**

This work used data provided by patients and collected by the NHS as part of their care and support. The study is funded by the NIHR Programme Grants for Applied Research (PGfAR) SPOTting Cancer among Comorbidities (SPOCC) programme: supporting clinical decision making in patients with symptoms of cancer and pre-existing conditions (NIHR201070).

275

## **Drug-induced postural hypotension: understanding cumulative risk of medications in primary care**

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## **Abstract - The Problem**

Postural hypotension (PH) affects around one third of older adults - the commonest cause in older people is medications. PH is linked with serious complications including falls, cardiac events and stroke, but it is largely neglected in primary care. Drugs causing PH may have a cumulative effect when used in combination. Our previous study identified distinct clusters of prevalent prescriptions in general practice that might contribute to a cumulative risk of PH, including cardiovascular and psychoactive drug-combinations. Therefore, we examined the association between beta-blockers and antidepressants and the combined risk of incident PH in older adults aged  $\geq 60$  in UK primary care.

## **Abstract - The Approach**

Self-controlled case series using routinely collected primary care data from IQVIA Medical Research Database (IMRD). We examined records from over 21,000 older adults in UK primary care between 1 Jan 2000 to 31 Dec 2018. In 41,005 older people with a diagnosis of PH, 10,051 were prescribed a beta-blocker; 8,899 were prescribed a Selective Serotonin Reuptake Inhibitor (SSRI); 8,313 were prescribed a

Tricyclic Antidepressant (TCA). Risk of PH was examined individually during risk-periods (90-days pre-prescription; day 1-28; 29-56; 57+) versus periods without drug exposure. A separate risk period was defined for overlapping time between two drugs in the analysis. Conditional Poisson regression was used to calculate incident rate ratios (IRRs).

### **Abstract - The Findings**

We found an increased risk of PH within the first 28 days for all drugs individually. Risk of PH was highest with SSRIs (IRR 4.03, 95% CI: 3.38-4.80), followed by beta-blockers (IRR 3.16, 95% CI: 2.45-4.08) and TCAs (IRR 2.22, 95% CI: 1.74-2.84). There was a striking combined risk of PH when two drugs were initiated within 56 days of each other. Combined beta-blockers and SSRIs resulted in an 8-fold increased risk (IRR 8.56, 95% CI 4.22-17.35) and combined beta-blockers and TCAs resulted in a 5-fold increased risk (IRR 4.91, 95% CI 1.50-16.10).

### **Abstract - The Implications**

Guidelines to manage drug-induced PH in general practice are limited. The greatest risk of PH was associated with initiation of two drugs within eight weeks of each other. Clinicians should avoid initiating beta-blockers & antidepressants together in older people. Staggering prescriptions & monitoring for postural symptoms could improve outcomes.

### **Funding acknowledgement**

Dunhill Medical Trust Research Training Fellowship [RTF/1906/131].

**276**

### **Preliminary process evaluation findings - patient experiences of 'ActivateYourHeart', an online cardiac rehabilitation package for chronic angina.**

Penny Ralph<sup>1</sup>, Nefyn Williams<sup>1</sup>, Sally Singh<sup>2</sup>, Susanna Dodd<sup>1</sup>, Sophie Hennessy<sup>1</sup>, Ben Hardwick<sup>1</sup>, Rui Duarte<sup>1</sup>, Gregory Lip<sup>1</sup>, Deirdre Lane<sup>1</sup>, Kate Jolly<sup>3</sup>, Michael Fisher<sup>4</sup>, Ian Jones<sup>5</sup>, Dick Thijssen<sup>5</sup>, Erica Morgan<sup>6</sup>, Terence Comerford<sup>6</sup>

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### **Abstract - The Problem**

Angina is chest pain caused by restricted blood flow to the heart, especially on exertion. Cardiac rehabilitation has been shown to reduce risk and improve outcomes but is not offered as part of current management of angina due to insufficient evidence of its effectiveness. The ACTIVATE study is a multi-site, randomised controlled trial exploring the effectiveness of 'ActivateYourHeart' a web-based intervention. An on-going concurrent process evaluation explores the trial and intervention

implementation, acceptability and usability. Process evaluation provides a broad and deep understanding of trial outcomes, particularly where the 'real world' experiences of participants may impact on the study. This aids the identification of influences, impacts, barriers and facilitators, exploring factors such as context, causes, differences and similarities, fidelity and quality.

## **Abstract - The Approach**

### **Participants / setting**

Adult patients with chronic stable angina predominantly recruited from primary care / GP practices across England and Wales.

### **Intervention**

'ActivateYourHeart is a web-based cardiac rehabilitation package involving educational, lifestyle and behavioural change components, utilising goal setting and remote access to healthcare professional advice. Intervention patients without web access were offered an alternative paper-based booklet.

### **Methods**

Mixed methods process evaluation embedded in a pragmatic RCT. Using semi-structured qualitative interviews with intervention patients (n=30) exploring experiences, implementation, barriers and facilitators using a realist framework. Descriptive data on website usage and remote interactions with healthcare professionals will also be explored. Purposive sampling is being utilised to focus on underserved patients (e.g. women, BAME - Black, Asian and minority ethnic, low socio-economic status) and those without internet access or devices.

## **Abstract - The Findings**

Data collection is ongoing however preliminary findings indicate patients perceive the intervention is acceptable and usable. Several patients suggested the intervention was adaptable, flexible and relevant to their needs, and that they felt more informed about their condition. Barriers to accessing 'ActivateYourHeart' included issues around setting up initial access to the web version of the intervention, difficulty in making time and balancing conflicting priorities.

## **Abstract - The Implications**

This process evaluation will provide insights on implementing and adapting a tailorable patient-led remotely delivered intervention. Lessons learnt will support implementation and delivery to a diverse range of populations, facilitating improved access and equity in long-term angina management.

## **Funding acknowledgement**

National Institute for Health Research's Health Technology Assessment Programme, grant number 131015

## **Understanding the barriers and facilitators affecting the use of remote consultations among marginalised communities: a mixed-methods systematic review**

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### **Abstract - The Problem**

Consultations in a remote format are increasingly seen as a potential tool to address some of the current issues in the UK National Health Service (NHS), including increased demand from patients and pressure on the workforce. There is, however, a growing body of evidence that suggests remote consultations may create new and exacerbate existing inequalities in primary care. Marginalised groups in particular face inequalities in both primary care and cancer diagnosis overall, but it remains unclear how these populations experience remote consultations when accessing primary care for suspected cancer symptoms. The aim of this study is to conduct a mixed methods systematic review to understand the factors affecting the use of remote consulting among marginalised groups.

### **Abstract - The Approach**

This mixed methods systematic review will be conducted using a convergent integrated approach, combining quantitative and qualitative data. Searches of peer-reviewed literature will be undertaken in Medline (via Ovid), Embase, PsychINFO (via ProQuest) and CINAHL (via EBSCOhost). There will be no time limit on the searches. The quality of articles will be assessed using the Mixed Methods Appraisal Tool (MMAT). Data extracted will include specific details about the study population and participant characteristics, including how the authors defined and measured their study population, study methods, setting, the format of remote consultation, symptoms, and context. Data will be analysed using mixed-methods framework synthesis.

### **Abstract - The Findings**

This study will result in a deeper understanding of the barriers to and facilitators of remote consulting among marginalised populations. This will feed into the next phase of the study, which will consist of interviews with marginalised groups and focus groups with general practice teams across Wales and Northwest England. Ultimately, the aim is to develop a set of guidelines or an intervention to improve remote consultations for marginalised groups.

### **Abstract - The Implications**

With the move towards remote consulting in primary care, this study is highly relevant in potentially ensuring that the benefits of remote consultation can be experienced by all when accessing primary care, as well as contributing to the improvement of early cancer diagnosis.

### **Funding acknowledgement**

This PhD studentship is jointly funded by North West Cancer Research and Tenovus Cancer Care

## **Intrauterine devices and gynaecological malignancies - an umbrella review of systematic reviews and meta-analyses**

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### **Abstract - The Problem**

This study addresses the need for comprehensive evidence on the association between intrauterine devices (IUD) usage and gynecological and breast cancer risks. Despite IUD being widely recognized as a safe and effective contraceptive, its potential impact on cancer risk remains a concern. The work aims to synthesize current evidence through an umbrella review and meta-analysis, providing a clearer understanding of these associations.

### **Abstract - The Approach**

We conducted a systematic review of PubMed, Cochrane Library, and Ovid databases, focusing on systematic reviews and meta-analyses examining IUS use in relation to gynecological and breast cancers. The study adhered to PRISMA guidelines for screening and data extraction. A random-effects meta-analysis was employed to synthesize data from 17 included articles and their 32 primary sources.

### **Abstract - The Findings**

Our analysis revealed a significant decreased risk of gynecological cancers among IUD users. Specifically, we found reduced risks for cervical cancer (OR: 0.63, 95% CI 0.48-0.82), endometrial cancer (OR: 0.41, 95% CI 0.31-0.54), and ovarian cancer (OR: 0.71, 95% CI 0.59-0.86), all with  $p < 0.001$ . Notably, no statistically significant association was found between IUD use and breast cancer risk (OR: 1.00, 95% CI 0.70-1.41,  $p = 0.99$ )

### **Abstract - The Implications**

These findings have significant implications for women's health and contraceptive counselling. The reduced risk of gynecological cancers associated with IUS use provides additional benefits beyond contraception, potentially influencing decision-making for both healthcare providers and patients. While the protective effect against cervical, endometrial, and ovarian cancers is encouraging, the lack of association with breast cancer risk is reassuring. This comprehensive analysis contributes valuable evidence to inform clinical practice and patient education regarding the long-term effects of IUS use on cancer risk.

### **Funding acknowledgement**

None

## **Women and health care professional's experiences of discontinuing hormone replacement therapy (HRT): a systematic review**

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### **Abstract - The Problem**

Hormone Replacement Therapy (HRT) is commonly used in the management of menopausal symptoms, in particular vasomotor symptoms (VMS). In England in 2023/24, 1.8 million women over age 40 were prescribed HRT, double that seen in 2020/21. Eventually most women will stop HRT. A resurgence of VMS and development of new VMS upon discontinuation of HRT is common which can lead to some women restarting.

### **Abstract - The Approach**

This systematic review addresses the questions 'What are the experiences of women stopping HRT and the health care professionals (HCP) advising them and why do women restart HRT?'. Relevant studies were identified using searches of five major electronic databases. Studies were included if they assessed women with experience of stopping, or subsequently restarting, HRT or assessed the HCPs advising them. Quantitative and qualitative designs were included with the former including both interventional and observational studies. Quality appraisal was undertaken using Mixed Methods Appraisal Toolkit (MMAT).

### **Abstract - The Findings**

Searches identified 9444 reports which, after duplicate removal and screening resulted in 74 included reports from 70 studies accounting for 33,543 women (62 studies) and 2943 HCPs (8 studies). The majority of reports were quantitative (90.5%) and most were undertaken in North America (45.7%) or Europe (27.1%).

Average age of participants was  $65.5 \pm 6.8$  years. The most commonly reported reasons for discontinuation were fear of risks/side effects, HCP recommendation and experience of side effects. The most common side effects upon discontinuation were vasomotor symptoms, psychological symptoms and general menopausal symptoms.

Four randomised controlled trials evaluated tapered versus abrupt discontinuation; the majority found no significant difference at first evaluation after stopping HRT. Studies (n=25) report a broad range of restarting HRT 2-69%. The most common reason for restarting was symptom recurrence. HCPs commonly cited health risks as their reason to recommend discontinuation. For those stopping HRT, 90-91% of HCPs recommended a tapered approach although the duration of, and approach to, tapering varied.

## **Abstract - The Implications**

This is the first review to provide insight into the global experience of HRT discontinuation from patient and HCP perspectives. The findings will guide further research to establish the most acceptable approach of discontinuation that minimises symptom resurgence.

295

## **Technostress, technosuffering, and relational strain: results of a multi-method qualitative study of how remote and digital work affects staff in UK general practice**

[Francesca Dakin](#)<sup>1</sup>, Nina Hemmings<sup>2</sup>, Trish Greenhalgh<sup>1</sup>

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### **Abstract - The Problem**

Since 2020, the use of remote and digital technologies has gone from intermittent use to routine practice. This has driven the development of new routines and working styles. The policy assumption has been that technology-enabled work can improve labour productivity and patient convenience, though studies of remote and digital access to UK general practice have not demonstrated clear efficiency gains, and indicate worsening workforce job satisfaction, stress, confidence, morale, and increased staff turnover.

### **Abstract - The Approach**

We aimed to build a more nuanced understanding of the impact of digitalisation on the UK primary care workforce and produce a theoretical framework to understand *why* many staff are currently so troubled and how this can impact the resilience and effectiveness of the team and the organisation. The project was a multi-sited, qualitative case study in UK general practice. Using longitudinal ethnography by researchers-in-residence, we followed 12 practices in England, Wales, and Scotland for 28 months (2021-2023). This core dataset was supplemented by workshops and stakeholder interviews. Data analysis applied theories from the sociology of work and socio-technical change, including Ragu-Nathan et al's concept of technostress, Gill's concept of workplace suffering, Edmondson's psychological safety, and elements of Gittel's relational coordination.

### **Abstract - The Findings**

Staff made significant efforts to adapt to and embed digital services into their work. When technologies work well, they can offer improved convenience, efficiency, more comprehensive patient care, and workplace fulfilment for staff. However, for many clinical and administrative staff, compromises and frictions embedded in digitalised workplace routines and processes could also lead to job dissatisfaction, worsened wellbeing and misalignments with professional values and identities. We found that this workplace suffering caused relational strain between team members, impacting team cohesiveness and coordination.

### **Abstract - The Implications**

The digitalisation of working routines in UK general practice poses a unique challenge to the workforce, risking technostress, technosuffering, and increased relational strain within and between teams. To embed the benefits of digitalisation, we must first improve practice teams' readiness for change by strengthening practices' relational structures, enabling the determination of locally appropriate configurations of digital tools with adequate time and resources to adapt working routines.

### **Funding acknowledgement**

Project funded by a doctoral studentship (NIHR SPCR) and a HSDR grant (NIHR). FD is now funded by the NIHR SPCR and the NIHR ARC

**297**

### **Improving safety and Treatment precision for Acute COPD Exacerbations (TRACE): Feasibility of point-of-care testing in community pharmacies to provide targeted treatment of COPD exacerbations. A qualitative study.**

Timothy Harries<sup>1</sup>, Mona Bafadhel<sup>1</sup>, Richard Russell<sup>1</sup>, Alison Wright<sup>1</sup>, Hiten Patel<sup>2</sup>, Dilip Joshi<sup>1</sup>, Patrick White<sup>1</sup>

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### **Abstract - The Problem**

Treatment of acute exacerbations of COPD (AECOPDs) accounts for 11% of primary care antibiotic prescriptions in England. Up to 40% of COPD patients may be prescribed repeated oral corticosteroids (OCS). Adverse effects of these drugs include antimicrobial resistance (antibiotics) and fractures, diabetes, osteoporosis (OCS). In the absence of objective markers, the decision to prescribe is reliant on symptoms and examination, without corroboration from tests. Drug rescue packs are usually issued without clinical assessment and obtained directly from the pharmacist. Use of point-of-care blood tests (POCTs) of C-reactive protein (CRP) and blood eosinophil count can decrease prescriptions of antibiotics & OCS by 22% and 33% respectively, with no evidence of harm. A pharmacy-based POCT assessment pathway has the potential to improve targeted treatment of AECOPDs. This study aimed to explore the opinions of community pharmacists, GPs and practice nurses about the feasibility and acceptability of a POCT assessment pathway for AECOPDs.

### **Abstract - The Approach**

Semi-structured interviews were undertaken with pharmacists, GPs and practice nurses across London and the South-East of England. Facilitators and barriers to implementing the POCT assessment pathway within community pharmacies were explored. Data analysis is based on a thematic approach.

### **Abstract - The Findings**

16 participants (11 community pharmacists, 4 GPs, 1 practice nurse) were interviewed. All supported the intervention and its feasibility from pharmacist and general practice perspectives. Pharmacists were enthusiastic about expanding their clinical scope. They felt confident that the COPD initiative would fit

within their current role, in alignment with the Pharmacy First program. POCTs for disease risk assessment are an established intervention in community pharmacies. GPs and practice nurses felt that the POCT pathway was appropriate and would be willing to support their pharmacist colleagues. Key contextual factors for implementing the POCT pathway included: Patient education (including consideration of behavioural changes required of patients), Clinical demand (time required for assessment & reimbursement of pharmacists), Effective communication (data sharing and safety-netting between pharmacists and GPs, data storage).

### **Abstract - The Implications**

Pharmacists, GPs and other practice clinicians consider the development and implementation of a POCT assessment pathway for AECOPDs in pharmacies to be feasible and acceptable, with the potential to improve medication stewardship for patients.

### **Funding acknowledgement**

We gratefully acknowledge the support of the Dunhill Medical Trust Academy Ignition Fund.

## Final category: Lightning

18

### **Investigating the Efficacy of Student-Developed Resources in Improving Undergraduate Medical Student Knowledge About Digital Consultations and Consultation Type Suitability**

Aisia Lea, Christine Johnson

University of Nottingham, Nottingham, United Kingdom

#### **Abstract - The Problem**

Digital consultations (describing telephone, video, and written consultations) are increasing in prevalence across both primary and secondary care, with the introduction of virtual wards and online questionnaires. Currently, around one-third of primary care consultations are delivered digitally. This, alongside the GMC's Good Medical Practice stating that practitioners should have an understanding of different consultation types and be able to offer the most suitable consultation type to a patient, highlights the importance of educating undergraduate medical students about digital consultations, how and when to use them. This project sought to identify understanding of digital consultations and their provision by students at the University of Nottingham Medical School.

#### **Abstract - The Approach**

Two multi-media toolkits covering digital consultations and choosing a suitable consultation type were developed by a final-year medical student and shared with 28 students from years 2 to 5 of the medicine course. Students were asked to complete a mixed qualitative-quantitative questionnaire pre- and post-toolkit completion, sharing their perceptions of digital consultations, perceived confidence in delivering a digital consultation, and knowledge of factors which will impact the suitability of certain consultation types for different patient groups.

#### **Abstract - The Findings**

After completing the toolkits, there were statistically significant increases in confidence in delivering a digital consultation, confidence in choosing a suitable consultation type, and confidence in the knowledge of factors which may influence the suitability of a consultation type for a particular patient after completing the toolkits (all with p values less than 0.0005). Students felt that the consultations were relevant and useful to their learning and would improve their future practice. These toolkits are now included in recommended resources for students undertaking their primary care placements in the clinical phase of the course.

#### **Abstract - The Implications**

The importance of this research shows that medical students are underconfident in their understanding of the factors that impact consultation type suitability for patients and would like further teaching on this. Student-developed resources can be beneficial in provision of interactive teaching on the subject of

digital consultations and give students the beneficial opportunity to practice in their own time, as well as being exposed to consultation types they may not see whilst on placement.

### **Funding acknowledgement**

The research conducted during this project was made possible by the National Institute of Health Research School of Primary Care Research internship.

**30**

### **De-medicalising gluten-free products through a subsidy card scheme: a qualitative study of service users**

Abubakar Sha'aban<sup>1</sup>, Francesca Mazzaschi<sup>1</sup>, Elizabeth Doe<sup>1</sup>, Beti-Jane Ingram<sup>2</sup>, Alison Jones<sup>3,4</sup>, Emma Williams<sup>5</sup>, Heather O'Sullivan<sup>5</sup>, Andrew Evans<sup>5</sup>, Adrian Edwards<sup>1</sup>, Natalie Joseph-Williams<sup>1</sup>

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#### **Abstract - The Problem**

Coeliac disease requires a strict gluten-free diet to prevent complications. In the late 1960s, Gluten free foods (GFF) became available on prescription to support adherence when these foods were scarce in shops. Today, gluten-free foods are more accessible in large supermarkets, making it easier for patients to obtain them without prescriptions. In 2019, Hywel Dda University Health Board introduced the GFF subsidy card (to be spent at supermarkets) as an alternative to prescriptions, the method still used by other health boards in Wales. This study aimed to explore individuals' perspectives on a new subsidy card scheme for GFF, identify key barriers and facilitators, and provide recommendations to enhance the scheme's implementation and effectiveness.

#### **Abstract - The Approach**

A qualitative approach was employed, involving in-depth interviews with people with coeliac diseases and parents of children with coeliac disease. Participants included current users of the subsidy card, those relying on prescriptions, and individuals who opted out of the card scheme. Semi-structured interviews were conducted online via Zoom by two researchers and audio recorded. An interview schedule guided the discussions, ensuring that key topics were thoroughly explored. The schedule was developed in collaboration with stakeholders, including our Public Partner, to ensure the questions were accurate, accessible, and aligned with patient priorities. Interviews were transcribed verbatim, and the transcripts were imported into NVivo for analysis.

#### **Abstract - The Findings**

Six key themes and 18 subthemes emerged from the interviews. Participants using the subsidy card valued its flexibility, variety of products, and convenience over the prescription system. Challenges included managing card balances, limited retailer acceptance, and geographical disparities. Non-users appreciated the potential for increased choice and mostly showed interest in switching but some raised concerns about inflation, potential misuse, and possible increased taxpayer burden. Most participants view the subsidy card as an acceptable alternative to GFF prescriptions.

### **Abstract - The Implications**

To improve the subsidy card uptake, recommendations include enhancing digital tools for balance management, Inflation-adjusted card value reviews, expanding retailer partnerships, promoting safer food practices, targeted communication, and ensuring prescription continuity for those who prefer it. These measures can optimise the scheme's impact and better support individuals with coeliac disease.

### **Funding acknowledgement**

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**31**

### **Recruiting and engaging young people in the Acne Care Online Randomised Controlled Trial: early challenges and lessons learned**

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### **Abstract - The Problem**

Acne is common among teenagers and young adults, often negatively affecting physical and mental health. We have developed the Acne Care Online digital behaviour change intervention to support acne self-management amongst this group, and to improve acne-related quality of life. We are currently evaluating its effectiveness in a randomised trial employing multiple recruitment routes. Despite

extensive planning and iteration, we have experienced challenges with setting up recruitment routes, and also with participants' early engagement with Acne Care Online. We reflect on these challenges and how we have tried to understand and address them.

### **Abstract - The Approach**

Recruitment of 13-25 year-olds with acne is underway, with participants randomised to Acne Care Online or existing online NHS webpages. We aim to recruit n=588 participants by September 2025; half from primary care mailouts/SMS, and the remainder through school and college mailouts, social media advertising, and opportunistic community pharmacy recruitment. Alongside quantitative usage data, early qualitative interviews with participants (n=7 to date) has explored engagement with Acne Care Online, focusing on barriers to effective engagement, especially amongst those with minimal use. Initial rapid analysis of interview field notes identified recurring issues, with further in-depth thematic analysis planned.

### **Abstract - The Findings**

Recruitment is progressing well (n=288) with primary care mail-outs yielding highest numbers. However, primary care recruitment to date has provided limited representation of young men, under 16s and people from lower socioeconomic backgrounds. Other routes demonstrate greater potential for diverse recruitment but not without challenges: targeted social media advertising is costly, and setting up school/college and pharmacy recruitment is time-consuming. Whereas school recruitment is proving valuable in recruiting 13-15 year-olds engagement from school recruits is lower, and community pharmacy recruitment remains very limited despite significant efforts. Early insights from usage data and participant interviews indicated the need for minor changes to the presentation of initial online pages and the timing and wording of reminder messages to maximise effective engagement.

### **Abstract - The Implications**

Setting up multiple trial recruitment routes has proven challenging and time-consuming, but appears to be maximising diversity of participant characteristics. The minor changes indicated from early process interviews have improved engagement.

### **Funding acknowledgement**

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**38**

### **Patients' perceptions of primary care consultations: is empathy under threat? A nested qualitative study.**

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### **Abstract - The Problem**

Effective communication between primary care practitioners (PCPs) and patients can improve satisfaction with care, reduce symptoms, and enhance quality of life. However, this can be challenging in the current clinical environment. We aimed to explore patients' experiences of primary care consultations, with a focus on the communication of clinical empathy and realistic optimism.

### **Abstract - The Approach**

We interviewed patients attending their PCP who had agreed to take part in a multi-centre cluster-randomised trial of EMPathicO (a brief e-learning package for practitioners on communicating empathy and optimism). Semi-structured telephone interviews were conducted with 71 participants from 29 practices, within 7-14 days of their consultation. Purposive sampling ensured diversity in trial arm (e-learning or usual care – patients and interviewers blinded to allocation), consultation modality, PCP seen, ethnicity, age, gender, and reason for consulting. Participants were asked about their views and experiences of empathy and optimism during their consultation. Interviews were transcribed verbatim and analysed using the Framework Method.

### **Abstract - The Findings**

Mapping and interpretation of the data suggest patients' perceptions of feeling cared for are not just shaped by experiences within the consultation, but by wider systemic factors. Most participants described experiencing positive consultations with their PCP. Behaviours construed as central to convey empathy were active listening and giving time to talk about symptoms, concerns, and expectations. Receiving reassurance and discussion around next treatment steps fostered a sense of optimism that action was being taken to help improve their symptoms and quality of life. However, participants described broader contextual factors that could diminish feelings of being cared for, such as difficulties in accessing appointments, or uncertainties around processes and waiting times for referral to secondary care services. Empathy, optimism and interpersonal continuity of care were highly valued, and participants commonly expressed a preference to wait for longer for a routine consultation with a PCP they had previously seen.

### **Abstract - The Implications**

Patients highly value empathy and optimism in primary care consultations but find this is impinged on by uncertainties and challenges beyond the consultation e.g. around accessing appointments. Future work must consider system pressures that are a threat to maintaining empathy and good communication within primary care.

## **Funding acknowledgement**

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49

## **Critical reflections on building sustainable public involvement in research**

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### **Abstract - The Problem**

Public involvement (PI) ensures research reflects community priorities by incorporating real-life perspectives. However, PI can sometimes be tokenistic, lacking meaningful engagement or empowerment of the public.

The Consortium to Research Individual, Interpersonal and Social Influences in Pain (CRIISP) is a collaborative research programme exploring how thoughts, feelings, relationships, and lifestyle affect chronic pain (<http://criisp.uk>). CRIISP's PI strategy prioritises inclusivity, ensuring people with chronic pain and caregivers actively shape the research. This strategy is embedded in a 4-year programme, with all PI activity costed into the grant application. A PI work package, co-led by public contributors (PCs) with lived pain experience, supports collaboration and inclusivity.

### **Abstract - The Approach**

To engage diverse communities, accessible advertisements were shared through equality organisations, women's and community groups, pain charities, networks, and social media. A CRIISP website video detailed PC roles, supported by university networks to manage recruitment. Thirty-six PCs were recruited and allocated to Work Package Development Groups (WDGs) based on interests, experience, gender, age, and ethnicity.

Feedback on the PI network and PC roles was gathered through meeting notes, self-reports, annual surveys (years 1 and 2), and a year 3 online workshop. Key lessons addressed recruitment, retention, and collaboration. Clear communication maintained engagement through regular meetings, emails, newsletters, secure MS Teams channels, and tailored tutorials. Flexible, individualised support—including one-to-one sessions—helped retain PCs, especially during changing circumstances.

### **Abstract - The Findings**

Thirty-six public contributors were recruited and allocated to WDGs. Key lessons from feedback addressed recruitment, retention, and support of PCs, and optimising collaborative working. Clear communication with PCs was crucial to maintain engagement and was achieved through our regular meetings, emails, newsletters, use of secure MS Teams channels, and tailored tutorials. Retention was ensured through flexible, individualised support for changing circumstances, while additional one-to-one's were needed to respond to particular concerns.

### **Abstract - The Implications**

Having two PCs as co-investigators leading PI activity has been instrumental to CRIISP's success. PCs are embedded across the programme, supported to collaborate effectively within WDGs. Ongoing feedback and responsive support have fostered sustainable engagement.

This model offers valuable insights for other research teams to enhance public involvement in their work.

### **Funding acknowledgement**

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52

### **Fostering effective communication in simulated maternity emergencies: A mixed methods evaluation of interprofessional learning between medical and midwifery students**

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### **Abstract - The Problem**

The findings of the Ockenden report identified a poor working environment and communication skills between healthcare practitioners working in maternity services, which contributed to adverse obstetric outcomes. It also highlighted a culture of 'us and them', a cultural divide that can influence communication, collaboration and ultimately, patient safety. The aim was to investigate the effect of an interprofessional learning (IPL) session between medical and midwifery students on their communication skills and relationships with each other including simulated patients.

### **Abstract - The Approach**

Mixed methods. Two studies, the first, an online survey was completed by 4<sup>th</sup> year medical students and 1<sup>st</sup> year midwifery students. We examined student perceptions of communication skills and interprofessional relationships. The second, in-depth, semi-structured interviews with students, staff and simulated patients involved in the sessions. Their attitudes, perceptions, views and experiences of the IPL session were analysed thematically.

### **Abstract - The Findings**

58 medical students and 24 midwifery students completed the survey. Nearly all students better understood what was expected of their, and of other, professional roles and felt valued by the team. There was a perceived improvement in communication skills and interprofessional relationships. Of the 27 interviewees, all reflected the value of the session, with some students finding the session challenging, although students became more comfortable and confident throughout. The themes of professional responsibility, communication, decision making, support and confidence came to the fore. Some practical concerns detailing scheduling and student numbers were identified.

### **Abstract - The Implications**

Following the Ockenden report and several other high-profile obstetric failures, this work is timely. Medic-midwifery student IPL using simulated scenarios demonstrated the benefit of learning crucial interprofessional and patient communication skills. Students also better understood professional responsibilities, decision making and mutual respect in emergency scenarios. It gave students, the rare insight of simulated patients being able to give feedback augmenting with their own experiences and impressing upon students the value of taking their concerns into account. Improvements in working relationships and communication, facilitated by undergraduate simulations in obstetric care is likely to contribute to better obstetric outcomes. Undergraduate providers should consider incorporating medic-midwifery IPL into their programmes.

### **Funding acknowledgement**

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58

### **The implementation challenge of computerised clinical decision support systems for the detection of disease in primary care: Systematic review and recommendations**

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### **Abstract - The Problem**

Early detection of diseases in primary care is crucial for timely treatment and better outcomes. Complex care demands and limited resources can make early detection challenging. Clinical decision support

systems (CDSS) aim to improve the diagnostic process. However, barriers to implementation have so far prevented their effective use.

This systematic review aimed to identify barriers for the implementation of CDSS for disease detection in primary care and use this to develop recommendations for implementation.

### **Abstract - The Approach**

We searched MEDLINE, EMBASE, Scopus, Web of Science and Cochrane databases. Included studies reported barriers to the implementation of CDSS for the detection of undiagnosed, prevalent diseases in primary care. Two independent researchers undertook screening and data extraction. The QuADS tool was used for quality assessment. Data on barriers and facilitators were synthesised using an inductive-deductive approach based on the Theoretical Domains Framework. This was used to identify solutions via the Behaviour Change Wheel.

### **Abstract - The Findings**

10498 titles and abstracts were screened, and 768 full texts were assessed. We included 99 studies describing 85 tools, mostly in high-income countries. Most studies (66, 66.7%) applied qualitative methods and described CDSS implemented in pilot studies (64, 64.7%). Included studies had very limited stakeholder involvement or theoretical underpinning.

We identified 2563 unique barriers and facilitators to implementation. Barriers were spread across the Theoretical Domains Framework including technical and workflow implementation issues at practice level, wider healthcare system issues, problems with the usability of systems, PCPs' and patients' attitudes and beliefs, a lack of skills and knowledge, and social barriers.

Implementation recommendations for development teams involve selecting appropriate conditions for CDSS, ensuring usability, engaging stakeholders and testing CDSS prior to implementation. Primary care teams need to clarify responsibilities, provide training and support patients. Underlying barriers across healthcare systems will need to be addressed at policy level.

### **Abstract - The Implications**

The range and scale of the barriers and complexity of recommendations highlight implementation challenges for CDSS in primary care. Although recommendations can be used to improve implementation, our findings emphasise the need to carefully reflect on the feasibility of CDSS in primary care at the point of design and development.

### **Funding acknowledgement**

This study was funded by a Cancer Research UK programme grant ('CANDETECT: Accelerating detection of upper gastro-intestinal (UGI) cancers using a multi-cancer early detection platform in primary care'. EDDPGM-May22\100002). SES is supported by Barts Charity (G-001520; MRC&U0036).

## **Understanding risk stratification of patients with chronic kidney disease (CKD) risk in primary care: a qualitative study**

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### **Abstract - The Problem**

Chronic kidney disease (CKD) is a common condition affecting up to 10% of adults in England. If CKD progresses to end stage-renal disease (ESRD) it can have significant impacts on health-related quality of life and be very costly for the healthcare economy. Early intervention to delay or prevent progression to ESRD, and reduce cardiovascular risk is important. However, this needs to be balanced against the potential for over-diagnosis, adding increased burden to both patients and primary care teams.

We aimed to explore the ideas, concerns and expectations of GPs, pharmacists and practice nurses in England on the risk stratification of patients with CKD in primary care.

### **Abstract - The Approach**

We conducted 26 semi-structured interviews with a purposive sample of GPs, pharmacists and practice nurses across Wessex, Leeds and South London. Practices in different socio-economic areas, with ethnic diversity, and of different sizes, and a range of practitioners (age, gender, ethnicity and years of experience) were included.

We also conducted 4 focus groups with GP practice teams, including practice managers, administration staff, care co-ordinators, pharmacists, and social prescribers, to explore the views of the wider practice team on the process of risk stratification. Interview and focus group data are currently being thematically analysed to explore barriers and enablers to risk stratification in primary care. Normalisation process theory provided the theoretical lens for the study, informing design, data collection methods and analysis

### **Abstract - The Findings**

Initial analysis suggests a universal awareness of the diagnostic criteria for CKD as described by NICE. Coding was commonly perceived as valuable for health professionals, but less helpful for patients. A common concern was about the term CKD causing anxiety to patients. Time pressures and lack of incentivisation were seen as key barriers to diagnosing and risk stratifying CKD. Improved pathways, guidelines, education, testing processes, integrated technology/automation, incentivisation and community-based clinics were described as means for improved care.

### **Abstract - The Implications**

Co-development of integrated systems incorporating primary, community and secondary care, in collaboration with charities and patient groups, are an essential means of improving patient care. The results of this study are already informing UK system change and impacting on national guideline development.

### **Funding acknowledgement**

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63

### **Supporting discharge to primary care from Early Intervention in Psychosis services: a qualitative case study approach**

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#### **Abstract - The Problem**

Early Intervention in Psychosis (EIP) services offer up to 3 years' treatment in the community to people with a first episode of psychosis. Service users (SUs) are then discharged to primary care or community mental health teams; the majority to primary care. There is limited research on SU experiences of the transition from EIP to primary care and the roles of care providers in supporting discharge.

#### **Abstract - The Approach**

Longitudinal, case study approach. Ethics and HRA approvals gained. Semi-structured interviews conducted with SUs at point of discharge or shortly after discharge from EIP (x16); follow up interviews conducted after 6-11 months (x12). Care providers identified by SUs and interviewed with SU consent (x14)

8 SUs formed into case studies, with interviews with 1-3 care providers for each.

Interviews conducted online or by telephone, digitally-recorded and transcribed with consent. Thematic analysis conducted using principles of constant comparison within and across cases.

Patient and public involvement key at all stages, including contributing to data analysis.

## **Abstract - The Findings**

SUs describe strong relationships with their EIP care coordinators and some describe involvement in the decision to discharge. SUs discharged to primary care report little support in the early post-discharge period and perceive primary care to be inaccessible. This can lead to reluctance to approach primary care when they need support.

Care providers, including EIP care coordinators, psychiatrists, psychologists and third sector providers, highlight the need for relationship-based care and gaps in communication across SU support networks. We were unable to recruit GPs, which may be reflective of their lack of relationship with SUs in EIP services.

Third sector organisations and peer support can play an important role in supporting SUs after discharge. Family carers can play a 'case manager' role, but their expertise is not felt to be valued by healthcare professionals.

## **Abstract - The Implications**

This study highlights the need for improved collaboration between SUs, carers and healthcare practitioners during and after transition from EIP. We suggest that there should be a joint consultation between SU, carer, EIP care coordinator and GP at point of discharge.

## **Funding acknowledgement**

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**67**

## **Interventions for improving adherence to acne treatments: a systematic review of randomised controlled trials**

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### **Abstract - The Problem**

Acne is very common, affecting over 90% of adolescents. Current UK guidelines recommend topical treatments as the first-line therapy for mild-to-moderate acne, but treatment adherence is low. This is attributed to the challenge of maintaining consistent application over several weeks and the potential for skin irritation. Interventions to improve adherence include educational interventions, medication reminders, additional appointments and combination products. We aim to assess the effectiveness of these strategies, to inform the Acne Care Online digital intervention supporting self-management of acne.

### **Abstract - The Approach**

We conducted a systematic review of randomized controlled trials (RCTs) of interventions to improve adherence to acne treatments. We searched MEDLINE, PubMed, Embase, PsycINFO and CINAHL, without language restrictions, from inception until 2 June 2023. The population included participants aged 13 to 25 with acne. We excluded studies of oral isotretinoin only, or interventions for acne scarring or hyperpigmentation. Eligible interventions included medicinal or behavioural approaches to improve adherence to acne treatment, while comparators included standard care. The main outcome was adherence to acne treatment, and risk of bias was assessed using the RoB 2 tool.

### **Abstract - The Findings**

A total of 10 RCTs met the eligibility criteria, comprising 769 participants in 5 countries. Most studies recruited via dermatology clinics (n=5) and primary care clinics (n=1). All acne treatments were topical medications, predominantly adapalene 0.1%/benzoyl peroxide 2.5% (n=4) or adapalene gel (n=2). Adherence interventions included educational interventions (n=5), text message reminders (n=3) and combining products to improve tolerability of the main topical (n=2). The adherence outcome was mostly measured at 12 weeks (n=7), using either medication event monitoring systems (n=5) or self-reported number of days adherent (n=4).

In general, reporting of the design and conduct of the trials was poor, and sample sizes were small. Meta-analysis was not possible due to variation in the interventions and outcome measurement, and the high risk of bias of the studies.

### **Abstract - The Implications**

Combining products to improve tolerability of the main topical treatment, and educational interventions, may improve adherence to acne treatments, but higher quality randomised trials are needed to confirm this.

### **Funding acknowledgement**

This study is funded by the NIHR Programme Grant for Applied Research (NIHR 202852)

## Long-term consequences of a *Cryptosporidium hominis* outbreak in Östersund, Sweden: an estimation of costs of production loss

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### Abstract - The Problem

In 2010, ~27,000 inhabitants (45%) of Östersund, Sweden, suffered from gastroenteritis during a *Cryptosporidium hominis* outbreak. Sequelae are common a decade after the outbreak, possibly affecting work capacity. We aim to elucidate the long-term economic impact of the outbreak and present an estimation of the costs of production loss for 2011-2019.

### Abstract - The Approach

Shortly after the outbreak, a randomly selected cohort of inhabitants of Östersund (n=1524 of all ages and an additional n=500 aged 0-5 years) was surveyed about possible cryptosporidiosis symptoms by postal questionnaire. The response rate was 69.4% (n=1404). A case was defined as a respondent reporting new diarrhoea episodes during the outbreak, others were defined as non-cases. All respondents were included in a retrospective, incremental cost analysis. Net days of sickness benefit and childcare benefit for each year 2011-2019 were retrieved from the Swedish Social Insurance Agency. Population and salary statistics were collected from Statistics Sweden. Possible differences between cases and non-cases in numbers of individuals claiming benefit days were assessed with  $\chi^2$  tests. We used Mann-Whitney U-tests to examine whether cases claimed more sickness benefit (for those aged 18-67 years during the study period) or childcare benefit (for those aged 0-11 years) compared to non-cases. Results were extrapolated to calculate the costs for the entire population.

### Abstract - The Findings

We collected data for 600 cases and 804 non-cases and included eligible individuals in the respective analyses. During 2011-2019, more cases received sickness benefit compared to non-cases (142/346 (41.0%) of cases vs 125/399 (31.3%) of non-cases ( $p=0.006$ )), and cases claimed 8946 sickness benefit days per 100 participants, whereas non-cases claimed 4538 days ( $p=0.003$ ). The number of individuals claiming childcare benefit days did not differ (205/240 cases vs 247/299 non-cases,  $p=0.279$ ), neither was there a difference in the number of claimed childcare benefit days: 2976 days/100 cases vs 3218 days/100 non-cases ( $p=0.778$ ).

For 2011-2019, the incremental cost was ~33.5 million SEK (~2.5 million £) in sickness benefit, and adjusted to the entire population, it resembles a cost of ~1.7 billion SEK (~125 million £).

### **Abstract - The Implications**

A *Cryptosporidium hominis* outbreak can burden society with high, long-lasting costs. This emphasizes the importance of adequate preventive measures.

70

### **Reconsidering the "dragon behind the desk" - a focussed ethnography of GP reception work in eight English general practices.**

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### **Abstract - The Problem**

In 1985 Arber and Sawyer published their seminal 'dragon behind the desk' paper describing the discretionary rationing power of General practice receptionists. This revealed deep hostility by patients and the public to receptionists' 'officious' filtering and inquisitive questioning of the legitimacy of requests to see the doctor. Much has changed in the primary healthcare landscape since Arber and Sawyer's study was published, notably the digitalisation of appointment systems and triage. We are in the midst of a crisis in general practice, and the 'unacceptable' delays patients experience when trying to get a GP appointment are a key marker of this. Our paper revisits Arber and Sawyer's ideas, challenging and updating this earlier work by drawing on rich qualitative data to understand how people obtain appointments with their General Practitioner (GP).

### **Abstract - The Approach**

Our focussed ethnography in eight English general practices explored everyday interactions between receptionists and patients/the public. We observed waiting and reception areas, interviewed 70 staff and 74 patients and examined practice documents pertaining to access.

### **Abstract - The Findings**

Our analysis reveals important shifts in receptionist work surrounding appointment systems. Receptionists are positioned as ever, in the classic 'street level bureaucrat' role, but they have a range of new strategies to manage patient interactions. This paper explores how they manage patient requests to access the GP. While receptionists are still seen as gatekeepers and remain a target for hostility we show how they mitigate this by performing other roles, such as 'patient ally', or 'powerless slaves' of digital systems.

## Abstract - The Implications

The problem of access is the many different access systems and their disparate digital forms, rather than the receptionist 'dragon' or the GPs she protects. We provide a more nuanced understanding of reception work, highlighting strategies that receptionists use that can mitigate patient hostility. We also provide an important critique of digitalised access systems and the use of alternative providers of care (e.g. Pharmacy First and the Additional Roles Reimbursement Scheme). Together these findings can inform practice-level decision making about access systems and staffing, and will also challenge key health policy rhetoric about digitalisation and the redirection of patients who want GP appointments.

## Funding acknowledgement

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75

## Ethnic minority patients' experiences of clinical communication with General Practitioners in the United Kingdom: a meta-synthesis of qualitative evidence

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## Abstract - The Problem

**Background:** Health inequalities disproportionately affect people from ethnic minority backgrounds in the United Kingdom (UK), particularly individuals from Black and Asian backgrounds. Primary care is usually where patients access health services in the UK. The quality of communication between patients and general practitioners (GPs) can affect patient experience and their health outcomes. These experiences can be poorer for minoritized patients. A comprehensive review with details of ethnic minority patients' communication experience with GPs does not yet exist.

**Purpose:** To synthesise the qualitative evidence on ethnic minority patients' experiences of clinical communication with GPs in the UK.

## Abstract - The Approach

**Methods:** A SPIDER strategy was used to systematically search the CINAHL Plus, EMBASE, PsycINFO, PubMed, ASSIA, and Web of Science for qualitative evidence describing ethnic minority patients' relevant experiences with GPs. The Critical Appraisal Skills Programme checklist for qualitative studies

was used to assess the quality of included studies. A meta-ethnographic approach was undertaken to synthesize the data.

### **Abstract - The Findings**

**Results:** Thirty-seven studies were included, reflecting the experiences of more than 1,125 ethnically minoritized individuals. Three inter-related metaphors were developed to form the 'on PAR' model about patients' experiences of communicating with GPs: (i) 'Perceiving' GP communication through one's lens of health, illness, and care; (ii) Concerns with 'Alignment' between GP and patient characteristics; and (iii) Efforts to build a 'Relationship' with the GP.

**Conclusions:** The 'on PAR' model recognizes that ethnic minority patients' experiences with GPs can vary individually and may not be attributed solely to patients' ethnicity.

### **Abstract - The Implications**

**Implications:** Findings may inform communication education for training doctors, GPs in particular, with regard to providing tailored care to diverse ethnic minority patients.

### **Funding acknowledgement**

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77

### **The Specialist Generalist: Specialty Teaching from a Primary Care Perspective**

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### **Abstract - The Problem**

Medical students often learn clinical specialties in secondary care, despite many specialty-related conditions being diagnosed and managed in primary care.

This approach may reduce preparedness for practice<sup>1</sup>, overlooking specialty care delivered by general practitioners. With declining primary care curriculum space<sup>2</sup> and workforce shortages<sup>3</sup>, teaching specialty conditions in primary care could showcase GPs' expertise and inspire students to pursue GP careers.

Consequently, three specialty-based primary care workshops were devised for the MBBS specialties year.

Our aim is to evaluate the impact of teaching specialty care delivered by GPs on medical students' knowledge and skills, and their perception of general practice.

### **Abstract - The Approach**

A scoping review revealed limited literature on primary care specialty-based teaching evaluations. Students completed pre- and post-workshop online surveys which collected quantitative data on student perceptions of achieved learning outcomes using a 5-point Likert scale; and qualitative data, analysed using constructivist grounded theory, coded by two authors and audited by a third, creating themes. Semi-structured interviews with students, triangulated with tutor input, were undertaken to provide deeper insights.

### **Abstract - The Findings**

Survey response rates were 50-60% for all three workshops. Quantitative survey results demonstrate perceived improved clinical knowledge and skills, greater understanding of primary care's scope and interface with secondary care. Qualitative results illustrate a deeper understanding of the role of GPs in providing specialty-based care and patient journeys; an increased respect or appreciation of GPs; and the importance of patient-centred care. Some students reported minimal change in perception after the workshops due to their existing comprehensive understanding of the GP role. Interviews are completed and findings will be shared at SAPC ASM 2025.

### **Abstract - The Implications**

All three workshops have been positively received with improved understanding of GP scope of practice in providing specialty-based care. Whilst encouraging, it highlights the current lack of visibility of primary care perspectives in the curriculum and student understanding of the primary-secondary care interface.

Primary care specialty teaching can enhance understanding of the GP's role, expertise, and primary-secondary care interface, helping students better grasp patient journeys and experiences. This may inspire them to pursue GP careers. Additional integration and evaluation within other specialties may promote this further.

**82**

### **An in-depth exploration of key stakeholder perspectives to establish context for implementing ThinkCancer!, a novel behaviour intervention.**

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### **Abstract - The Problem**

Primary care is a complex environment, therefore establishing a comprehensive understanding of context is vital to delivering and implementing multifaceted interventions successfully. ThinkCancer! is a novel behaviour intervention delivered to whole practice teams via three workshops which aim to expedite cancer diagnosis by reducing referral thresholds and refining safety netting practices. ThinkCancer! was initially trialled in a feasibility study before advancing to a large randomised controlled trial with 94 participating practices from across Wales and parts of England. The aim was to explore key

stakeholder perspectives on ThinkCancer! and establish a deeper understanding of the context in which it is being delivered, by gathering background knowledge and experiences to inform how best to implement ThinkCancer! within General Practice.

### **Abstract - The Approach**

Qualitative data was collected via semi-structured interviews with a purposive sample of a variety of key stakeholders in the field of primary care and cancer. A semi-structured approach encouraged the stakeholders to talk organically and in-depth about their experiences of current practice in terms of safety netting and referrals and, their perspectives of training needs and the feasibility of implementing educational interventions within primary care. Interview data was analysed using the Framework method which facilitates a teamwork approach and allows for multiple members of the research team and the ThinkCancer! Patient Advisory Group to be involved in interpretation of the data.

### **Abstract - The Findings**

A deep exploration of the data illuminates the context in which ThinkCancer! is being delivered, giving insight into the barriers and facilitators to early diagnosis and the acceptability and implementation of the intervention. Examining viewpoints from a variety of stakeholders allows for a more intricate and comprehensive understanding of how educational interventions such as ThinkCancer! may be best implemented within primary care.

### **Abstract - The Implications**

The findings allow for an in-depth understanding of the challenges faced by primary care which could inform how ThinkCancer! can be best implemented successfully. Successful implementation could facilitate earlier cancer diagnosis by serving to reduce the primary care interval and improve outcomes for patients.

### **Funding acknowledgement**

Cancer Research Wales and North West Cancer Research

**84**

### **An analysis of applications to the National Specialist Training Programme in General Practice Ireland from 2021-2024**

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### **Abstract - The Problem**

Ireland has one of the lowest levels of General Practitioners (GP) per population in the European Union (87/100,000). An estimated increase of 75% -142% in GP trainee recruitment is required to address this staffing crisis. In response, the number of places on the National Specialist Training Programme in General Practice (NSTPGP) has expanded to 350 annually, a 35% increase since 2022. This study aims to establish trends in applications to the NSTPGP including (1) the number and demographic profile of applicants and the location of their primary medical qualification (PMQ) and (2) a comparison of application rates among graduates of the six Irish Medical Schools.

### **Abstract - The Approach**

This quantitative cross-sectional study analysed anonymised applicant data over 4 years. Descriptive analyses, chi square testing, student t tests and Pearson's correlation tests were conducted.

### **Abstract - The Findings**

There was a total of 3671 applicants, of which 1834 (50%) were female. The location of applicants' PMQ was:  $N=1321$  (36.2%) Republic of Ireland (ROI),  $N=432$  (11.8%) EU (EU/EEA/ UK and excluding ROI), and  $N=1913$  (52.1%) non-EU. Significantly, more male applicants earned their PMQ from non-EU medical schools ( $N=1066$ , 56.7%,  $p<0.01$ ). Among the six ROI medical schools, graduate application rates differed significantly as a percentage of their total class size, ranging from 18.8%-37.8% ( $p<0.01$ ). 55% of all applicants from ROI medical schools who applied to the NSTPGP accepted a position on the programme. Nationally, between 2021-2024, 15% ( $N= 739$ ) of all medical school graduates from ROI medical schools accepted a position on the NSTPGP.

### **Abstract - The Implications**

Despite an increase in the number of training positions available on the NSTPGP in recent years, there was no corresponding increase in the number of applicants from ROI medical schools. By contrast, the number of applicants who graduated from other EU/EEA/ UK or non-EU medical schools has grown substantially to 73.5% in 2024. There are also significant differences observed in application rates between the six ROI medical schools. This study demonstrates substantive changes in applications trends to the NSTPGP. Further research should explore the underlying factors that motivate applications to Irish GP training and how best to continue to enhance recruitment to the programme.

### **Funding acknowledgement**

N/A

91

### **ThinkCancer! - Reaching over 1 million patients and accessing patient records via VPNs in primary care**

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### **Abstract - The Problem**

The UK's five-year relative cancer survival is below the European average, with higher mortality rates compared to other high-income countries, with over 70% of cancers diagnosed in primary care. ThinkCancer! is a pragmatic phase III randomised controlled trial designed to promote earlier cancer diagnosis in primary care teams, with permission to collect patient data with implied consent. To optimise data collection and reduce the workload of the study on primary care teams, records will be accessed virtually, allowing searches to be automated and reducing the burden.

### **Abstract - The Approach**

Initial recruitment focused on Wales and Northwest England before expanding further into England to accelerate recruitment to reach a target of 76 general practices. To identify patients with new cancer diagnoses in these practices, the trial team collaborated with ViPC, a primary care IT company, to develop a specialised search tool. This tool automates data collection, including information on patient co-morbidities, and can be run virtually via a Virtual Private Network (VPN) or directly within practices. Virtual access to patient records maximises efficiency and ensures optimal use of charitable funding by minimising the need for site visits.

### **Abstract - The Findings**

Recruitment efforts exceeded expectations, with 99 practices recruited, reaching a combined practice population of over one million patients. Baseline data collection has commenced, with the use of ViPC searches reducing time constraints. More advanced searches and VPN access will be introduced at follow up collection, with their impact expected by late 2025.

### **Abstract - The Implications**

Recruitment target was exceeded, with a final total of 99 practices recruited into the study. This is a great win for a clinical trial in primary care and highlights the potential reach of a trial focusing on promoting earlier cancer diagnosis. This level of patient reach will hopefully impact the population within the trial and lead to earlier cancer diagnosis for those presenting with symptoms in primary care. We hope that by using VPNs and specific software searches for practice systems, these can influence future studies on larger scales how to access patient data within minutes, reducing the need for site visits as well as reducing the burden on practice staff.

### **Funding acknowledgement**

Funded by Cancer Research Wales in collaboration with North West Cancer Research.

96

### **How best to teach clinical speciality topics to medical students in Primary Care: A systematic review and narrative synthesis**

Roaa Albedaery, Katie Scott, Emma Metters, Jacqueline Driscoll, Lucy Baxter, Lucy Williams, Rachel Fowden-Hulme, [Agalya Ramanathan](#), Umar Chaudhry, Judith Ibisson

### **Abstract - The Problem**

Medical students typically learn clinical specialties through secondary care placements, but many specialty-related conditions initially present to and are managed by primary care teams. Primary care thus provides an important context for learning specialty medicine. However, primary care curriculum space has declined, falling short of recommendations for balanced teaching. Focusing specialty teaching solely in secondary care leaves students underprepared for undifferentiated presentations, holistic practice, and overlooks primary care's role in managing such cases. Integrating specialty education into primary care may also encourage students to pursue general practice careers.

This review explores the methods and effectiveness of teaching clinical specialties to medical students in primary care.

### **Abstract - The Approach**

A systematic review adhering to PRISMA guidelines (PROSPERO ID:CRD42023456757), was conducted. Five databases were searched for studies evaluating clinical specialty teaching within primary care or co-delivered by primary and specialty educators. The quality of studies was assessed using the CASP (qualitative) and JBI (quantitative) checklists, and the results were narratively synthesised using ESRC guidance. Thematic analysis was used to draw themes from the narrative synthesis.

### **Abstract - The Findings**

Twenty-three articles from 17,055 screened met the inclusion criteria.

Teaching methods included interactive workshops, expert patient involvement, MDT meetings, role-playing, and e-learning, delivered in varied settings such as clinics and care homes. Developed by primary care professionals with secondary care input, this approach enhanced collaboration, efficiency and educator satisfaction.

Six themes were constructed: broad case mix, patient-centred care, experiential learning, MDT collaboration, continuity of care, and skill improvement. Primary care's diverse case-mix exposed students to specialty-related conditions, fostering a deeper understanding of complex patients. Experiential and patient-centred learning improved clinical skills, while continuity of care supported long-term patient relationships. Students reported improved knowledge, communication, confidence, and high satisfaction. MDT teaching provided valuable insights into collaborative working.

### **Abstract - The Implications**

Integrating specialty teaching into primary care promotes student satisfaction and skill development whilst fostering improved understanding of the patient journey, complexity, and collaborative working. This has the potential to address both educational gaps and inspire students to pursue careers in general practice.

Primary care offers a feasible and valuable setting for specialty teaching, strengthening the footprint of primary care in medical curricula.

98

### **Improving access to general practice for people with severe and multiple disadvantage: a realist review**

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#### **Abstract - The Problem**

Severe and multiple disadvantage (SMD) is the experience of homelessness, substance use, violence and abuse, and poor mental health in various combinations. In England, 2.3 million adults (5.2% of the population) face two or more of these, causing a high burden of mortality, multi-morbidity and frailty. Despite this, people with SMD encounter significant barriers to accessing general practice.

We aimed to identify effective interventions or aspects of routine care in general practice to improve access to general practice for people with SMD. We sought to provide tailored recommendations based on the evidence to enhance access for this group.

#### **Abstract - The Approach**

We used a realist review approach as both general practice and access to services for people with SMD are complex; bringing them together requires a nuanced understanding of the mechanisms at play.

We used substantive theories of access to general practice and with input from people with lived experience, developed these into an initial programme theory. We searched databases and sought literature from relevant networks, including qualitative, quantitative, mixed-methods and grey literature. We included full texts with relevant data that could inform program theory development.

Our analysis considered various contexts in which general practice is provided, including specialist outreach. This enabled understanding of how and why certain approaches work within specific contexts to inform recommendations.

#### **Abstract - The Findings**

There is much to learn from trauma-informed approaches used in community organisations in improving access to general practice for people with SMD. Promising mechanisms include building on trusted relationships in the community with collaboration and outreach activities; explicitly dismantling prejudice, stigma and inequity; empowering patients with advocacy, choice and respect; and investing in peer involvement opportunities in service design and delivery.

Achieving cultural shift in general practice will require disruption, education and investment.

## **Abstract - The Implications**

This realist review deepens our comprehension of the various factors that either promote or hinder access to general practice for people with SMD. Understanding these is vital to better design general practice that challenges the inverse care law and includes people with the greatest need for care. These strategies could also offer insights into improving access to general practice for other marginalised groups.

## **Funding acknowledgement**

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**101**

## **Eczema, acne and psoriasis in skin of colour: primary care experiences in the United Kingdom**

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## **Abstract - The Problem**

Skin of colour (SOC) refers to a broad range of skin types characterised by individuals with darkly pigmented skin. Differences in skin structure and function mean the appearance of common inflammatory dermatoses such as eczema, acne and psoriasis can vary in different skin tones. SOC remains under-represented in medical education and research, and healthcare professionals are often ill-equipped to diagnose and manage conditions in darker skin tones.

There is little research on the experiences of individuals with SOC in our primary healthcare system. The aim of this study is to explore the experiences of eczema, acne and psoriasis in UK adults with differing skin tones and ethnic backgrounds. Specifically, there will be a focus on individuals' perception of their clinicians' understanding and confidence diagnosing and managing their condition, experiences of perceived misdiagnosis or delayed diagnoses, and experiences of dyspigmentation and treatment preferences.

## **Abstract - The Approach**

This is a mixed-methods study consisting of an online cross-sectional survey followed by one-to-one interviews.

The survey will be used to collect quantitative data on the experiences of individuals of all skin tones with eczema, acne or psoriasis. Individuals will be recruited online via advertisements promoted by partner organisations and patient charities. Participants will complete the Dermatology Life Quality

Index, and a sample size of 70 is estimated to detect a minimal clinically important difference of 4 points at 80% power.

Participants for the interviews will be purposively sampled from the survey respondents, aiming for 20 participants to achieve data saturation. Data will be collected via semi-structured one-to-one online interviews with participants identifying as having SOC.

### **Abstract - The Findings**

Ethical approval is awaited. Data collection is anticipated to start in February 2025.

### **Abstract - The Implications**

Patients from ethnically diverse backgrounds often face inequality when accessing primary care services for a multitude of reasons. The aim of this study is to give patients with SOC a voice, exploring their lived experiences of common inflammatory skin conditions within the UK healthcare system. The findings can be used as a focus in future educational initiatives to help train competent clinicians and improve the care of patients of all skin tones, as well as highlighting future research areas.

### **Funding acknowledgement**

This study has received a £300 grant from the British Association of Dermatologists Skin Diversity Subcommittee (SDSC).

**103**

### **Patient-led interventions to manage symptoms and episodes of atrial fibrillation: A Mixed Methods Study (PALP-AF)**

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### **Abstract - The Problem**

Atrial fibrillation (AF) is the commonest cardiac arrhythmia, affecting 1.4 million adults in England. Up to 25% experience paroxysmal AF, with episodes of rhythm disturbance between periods of normal sinus rhythm. AF is associated with reduced health-related quality-of-life (HRQoL), psychological and physical symptoms, including anxiety, palpitations, dyspnoea, fatigue or cognitive decline. AF carries future risks of stroke and heart failure. Reducing AF episodes may reduce progression to permanent AF or complications.

Lifestyle interventions are an essential component of AF management, but implementation is poorly articulated in clinical guidelines. Participation in cardiac rehabilitation can improve functional and HRQoL outcomes with AF, but it is not routinely offered. Interventions to encourage exercise alongside weight loss, smoking cessation and alcohol reduction reduce episodes and progression of AF. However, little patient-facing guidance exists to support delivery of, or self-help with, these interventions. Additionally, there is uncertainty over the positive and negative impacts of different durations and intensities of exercise in different AF populations. Whether exercise choices can be individualised to optimise benefits is unknown.

This review aims to synthesise the evidence base for effective lifestyle interventions in AF to inform co-design of a self-help and exercise-based resource for patients.

### **Abstract - The Approach**

Umbrella review: searches of Medline, Embase, CINAHL, Cochrane database, PsycINFO and Epistemonikos were conducted in May 2024. Titles, abstracts and full texts for reviews were screened independently by two authors using Covidence (Veritas Health Innovation, Melbourne, Australia).

### **Abstract - The Findings**

After deduplication, 1,165 records were screened and 1,041 excluded during title/abstract screening. 124 full texts were reviewed and 59 excluded, thus 65 reviews were included. Data extraction is ongoing. Emerging self-help themes, developed within patient and stakeholder groups, include: 1) Safe exercise strategies for athletes and non-athletes, 2) Alcohol, smoking and caffeine use, 3) Obesity, diet, weight management, diabetes and sleep apnoea, 4) Anxiety, stress, depression and acupuncture, 5) Medication adherence, anticoagulation, behavioural and educational interventions, patient self-management, digital interventions, 6) Hypertension. Full results will be presented at the conference.

### **Abstract - The Implications**

Findings from this umbrella review are informing the co-design of a self-help resource for people with AF.

### **Funding acknowledgement**

NIHR School for Primary Care Research grant no: 706

**106**

### **Improving Familial Hypercholesterolaemia Screening in Primary Care: An Updated Systematic Review and Meta-Analysis of Systematic Screening Methods for Identification of FH.**

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### **Abstract - The Problem**

Familial Hypercholesterolaemia (FH) is a greatly underdiagnosed and treatable genetic lipid disorder which significantly increases risk of premature cardiovascular disease. The prevalence of monogenic FH is estimated to be 1 in 250-350, but currently is largely unascertained.

To evaluate the effectiveness of systematic screening methods to improve identification of FH in primary care.

### **Abstract - The Approach**

Seven databases [Cochrane, PubMed, Ovid, CINAHL, ProQuest, Web of Science, Scopus], and relevant grey literature were searched from March 2020 to November 2024. Studies involving adults aged  $\geq 18$  years using routine electronic medical records (EMR) were eligible. Meta-analysis of FH prevalence was conducted using Stata 18. A sensitivity analysis was also conducted to assess FH prevalence across study population subgroups. All other outcomes were reported using narrative synthesis. Risk of bias and quality of studies were assessed using the ROBINS-I and GRADE tools, respectively.

### **Abstract - The Findings**

831 records were screened. No randomised, controlled studies were identified. From full-text review, eight eligible studies out of 56 (14.3%) were identified. All included studies used automated FH case-identification from EMR with a moderate risk of bias. All studies were conducted in high or upper-middle-income countries.

Meta-analysis and sensitivity analyses results are currently being finalised.

Overall, novel or hybrid screening methods appeared to yield higher detection rates for FH, compared to use of standard criteria alone. Ingoe et al's use of the FAMCAT algorithm combined with the novel 'CDRC Composite' and genetic testing determined a higher FH prevalence (43%), compared to Brett et al's use of the TARB-Ex screening tool alone (26%). Qureshi et al found the FAMCAT 2 tool exceeded other criteria to detect FH, DR 45.8% (95% CI 27.9% to 64.9%) with sensitivity of 68.8% (95% CI 41.3% to 89.0%). A hybrid diagnostic model identified FH with higher clinical and genetic detection rates DR 25.0% (95%CI 16.30-35.8). Jasani et al determined FH prevalence to be highest in those with LDL-C exceeding 220mg/dL, using Simon Broome (52%;  $p=0.29$ ) and DLCN criteria (46%,  $p<0.001$ ).

### **Abstract - The Implications**

Incorporating automated case-finding from EMR with clinical follow-up in primary care can enhance FH identification. Pathways incorporating genotyping showed better detection rates.

### **Funding acknowledgement**

NIHR In Practice Fellowship (Dr Aya Ayoub); NHS Race & Health Observatory

**Delivering a more inclusive and diverse research environment through community pharmacies – Taking the innovative trial design from PRINCIPLE and PANORAMIC one step further**

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**Abstract - The Problem****Problem:**

The introduction of the Pharmacy First Service (PFS) in 2024 with the aim to free up GP appointments for patients who need them most and reduce health inequities had dramatically changed primary care in the UK. However, the PFS has raised concerns amongst some research active GP practices about the potential impact on recruiting participants for primary care-based clinical trials. With pharmacists in England now managing seven common conditions (sore throat, uncomplicated urinary tract infections, acute otitis media and shingles), patients are less likely to visit their GP, potentially leading to reduced recruitment at GP sites for conditions covered by the PFS.

**Aim:**

To integrate community pharmacies to complement 'traditional' GPs research sites for primary care clinical trials. Including pharmacies as research sites, we can enhance clinical research recruitment through improved access and, at the same time, reach a broader, more diverse and representative patient population for some conditions.

**Abstract - The Approach****Approach:**

The PFS presents an opportunity to widen access and participation to clinical research for underserved communities. The PRINCIPLE and PANORAMIC UK-wide trials demonstrate that with innovative trial design that enable diverse patient recruitment pathways, clinical trials in primary care can achieve more representative inclusion and diversity of populations, especially among underserved communities. The evolving role of community pharmacists positions community pharmacies as potential research sites in the future. Pharmacies are embedded within all communities regardless of deprivation, race or religion, therefore, they are well placed to promote equity in research participation.

**Abstract - The Findings**

**Progress:**

We are working to develop a framework for establishing pharmacies as research sites. This initiative aims to identify and address barriers, including regulatory, operational, and training challenges, and to build a robust evidence base to support the integration of pharmacies into the clinical research in primary care.

**Abstract - The Implications****Implication:**

By integrating pharmacies into the wider research ecosystem, we could minimise ethnic, geographic and socioeconomic barriers that often exclude underserved populations from participating in research. Enhancing research equity through community pharmacies is a key step in combating the decades of health inequalities in the UK.

110

**PREVALENCE AND DEMOGRAPHIC VARIATION OF CHRONIC RESPIRATORY DISEASES IN A LARGE ENGLISH PRIMARY CARE DATABASE**

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**Abstract - The Problem**

Chronic respiratory diseases (CRDs), including asthma, chronic obstructive pulmonary disease (COPD), bronchiectasis, obstructive sleep apnoea (OSA), and interstitial lung diseases (ILD) contribute significantly to morbidity and mortality in England. There is also growing recognition of the overlap between CRDs, particularly Asthma COPD Syndrome (ACOS). Electronic health record (EHR) databases are an important data source to study the epidemiology of these diseases. This study aimed to describe the prevalence, co-prevalence and sociodemographic variation of CRDs in a large, nationally representative, English primary care database and contextualise these by comparison with prevalence estimates from other epidemiological sources.

**Abstract - The Approach**

This cross-sectional study used Clinical Practice Research Datalink (CPRD) Aurum (individual patient level data from 738 English general practices) to calculate and describe the prevalence of five CRDs by age, sex, ethnicity, IMD deprivation quintile, and smoking status. Logistic regression was used to assess how these varied by sociodemographic characteristics when controlling for the others. These were systematically compared to prevalence estimates from other electronic health records (EHRs), self-reported doctor diagnosed cases, and population screening studies.

**Abstract - The Findings**

17.5% of our sample (14,254,404) had any CRD. Asthma (15.59%) and COPD (2.47%) had the highest lifetime prevalence. OSA (1.08%), bronchiectasis (0.45%), and ILDs (0.15%) were less common. Co-occurrence of <sup>3</sup> 2 CRDs was identified in 1.9%. Overlap between conditions was highest for asthma in those with COPD. CRD prevalence increased with age, increasing deprivation and positive smoking status. Comparisons with other literature showed that CPRD estimates were slightly higher than other EHRs and in surveys of self-reported doctor diagnosis. By comparison, screening type studies generally reported higher prevalence estimates, particularly for OSA. Appropriate comparator sources were not available for self-reported doctor diagnosis of bronchiectasis or ILD.

### **Abstract - The Implications**

CRDs are relatively common conditions and there is evidence of co-occurrence between them, particularly overlaps with asthma. Increasing age, deprivation and smoking increase the risk of most CRDs. CRD prevalence in primary care EHRs closely match other sources, though screening type studies indicate that some remain undiagnosed, particularly OSA. Sociodemographic variations may reflect true variation in prevalence or systematic differences in clinical presentation, diagnosis methods, and coding practices.

119

### **Lessons learned from the experiences of patients with long-term conditions: recommendations for enhancing the undergraduate medical curriculum**

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### **Abstract - The Problem**

Despite the recognised importance of involving patients in medical education, their role in medical curriculum design is under-documented. Patients with long-term conditions (LTCs) provide a unique and informed perspective, derived from repeated interactions with healthcare professionals, which could significantly enhance curriculum development. This study aims to explore the views of patients with LTCs on the attributes medical students require to deliver high-quality, patient-centred care, offering an original perspective grounded in patient experience.

### **Abstract - The Approach**

A qualitative study where ten urban and rural patients with LTCs, recruited from primary care and secondary care, underwent semi-structured telephone interviews. These were transcribed verbatim and analysed thematically using Braun and Clarke's six-phase framework, facilitated by NVIVO software.

### **Abstract - The Findings**

Five key themes emerged from the analysis, highlighting areas where care for patients with LTCs could be improved: advocacy; compassion; acknowledgement of patient individuality; recognition of their expertise; and the benefits of continuity of care.

## **Abstract - The Implications**

The study highlights the critical need to integrate patient perspectives into medical curriculum design. Incorporating these insights can refine medical training to ensure future healthcare professionals are equipped to provide holistic, compassionate, and effective care for patients with LTCs. These findings can influence educational policies and contribute to more patient-centred healthcare delivery.

## **Funding acknowledgement**

The Scottish Medical Education Research Consortium (SMERC) funded this study.

122

## **Experience of HPV primary screening utilising self-testing: a cross-sectional survey of 'Let's test for HPV' study participants in Aotearoa New Zealand**

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## **Abstract - The Problem**

A multi-region pilot study (Let's test for HPV) ran in primary care in Aotearoa New Zealand during 2022-2023 to inform the national roll-out of HPV primary screening incorporating the universal offer of self-testing. This follow-on research was conducted to enable Let's test for HPV participants to share their experience of HPV primary screening utilising self-testing.

## **Abstract - The Approach**

Data were collected via an online survey during Sept-Nov 2023. Questions focussed on five main aspects of the screening pathway: information provision, self-sample collection, receipt of results, follow-up for an HPV detected result and future screening intent. Data were analysed using descriptive statistics and thematic analysis.

## **Abstract - The Findings**

The pilot study enrolled 3311 participants, 95% chose to use the self-test. Of 2349 people invited to take part in the survey, 969 (41%) completed or partially completed, with 921 people included in analyses. Respondent characteristics broadly reflected those of the main study group, with inclusion of 176 Māori (19%) and 95 (10.3%) participants with HPV detected. Participants mostly felt well-informed and chose the self-taken HPV test for reasons including comfort, convenience and privacy. The experience of self-sampling was acceptable and welcomed by most, and they would opt to screen this way again. Despite feeling well informed, participant comments indicated that key messages about HPV, the new test and meaning of results are not yet universally understood. Around 15% of respondents identified something in the pathway they disliked, found unclear or felt could be improved. People with HPV detected mainly understood next steps and felt supported, but some lacked clarity or had

reservations about their recommended follow-up. Most participants (92.4%) intend to screen again expressing a preference for self-sampling at home (48.2%) or at their practice (33.5%).

### **Abstract - The Implications**

The shift from cytology-based screening to HPV testing, particularly self-testing, is recognised as a pro-equity change for cervical screening in New Zealand for under- or un-screened people. Our findings highlight practical considerations for screen-takers that could support their delivery of an informed and affirming cervical screening experience.

### **Funding acknowledgement**

Te Whatu Ora Health New Zealand, GRACI General Research Grant, University of Otago

129

### **Carers' experiences and perspectives of depression and anxiety in people with dementia: an interview study**

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### **Abstract - The Problem**

Depression and anxiety are clinically significant non-cognitive symptoms in people with dementia (PwD) which can lead to marked changes in patient behaviour, contributing to carer burden and negative patient outcomes. Medicines management is a key role for carers and can be especially challenging in PwD. This qualitative study aimed to understand carers' experiences and perspectives of the pharmacological management of depression and anxiety in PwD in order to identify facilitators and barriers to the successful management of these symptoms.

### **Abstract - The Approach**

Carers were recruited across Northern Ireland through Alzheimer's Society and East Belfast Community Development Agency (EBDCA) using purposive and snowball sampling. The interview topic guide was developed based on published literature and through discussion within the research team and piloted with two volunteers. Participant recruitment commenced in November 2023. Semi-structured interviews were conducted either face-to-face, online or via the telephone and written informed consent was obtained from all participants. Interviews were audio-recorded, transcribed verbatim and analysed using inductive thematic analysis, which is ongoing.

### **Abstract - The Findings**

To date, 12 interviews have been conducted. Initial findings have highlighted that carers continue to have trust in the medication prescribed despite symptoms persisting: *"...she is still on the medication... but she can still have bouts of depressive episodes, maybe crying without really any reason..."* [CI01].

Carers often felt they received inadequate information or counselling about the medication prescribed: *“The only information was within the box, you know the [patient] information leaflet”* [CI02]. Carers thought the management of depression and anxiety lacked priority compared to cognitive symptoms: *“Really dementia is always there but [...] the things that we are really dealing with on a day-to-day basis and are making life miserable are the depression and anxiety, so perhaps we should have been treating those more prominently”* [CI04]. Carers expressed their desire to be more engaged in decision-making: *“I think being listened to [...] being understood by these people [healthcare professionals] really helped”* [CI12].

### **Abstract - The Implications**

This study will provide in-depth and authentic insights into carers’ lived experiences of managing anxiety and depression in PwD and will inform further qualitative work with key stakeholders, such as general practitioners and pharmacists.

**137**

### **The role of social networks in self-management after an episode of acute kidney injury or for people living with chronic kidney disease: a narrative synthesis**

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### **Abstract - The Problem**

Chronic kidney disease (CKD) is a growing global health issue, with increasing prevalence. To assist in reducing disease progression and illness burden it is recognised that people living with CKD employ self-management strategies. It is recognised that self-management is often complex and requires support of the social network to be successful. At present there is little known about the impact of social networks for people living with CKD.

### **Abstract - The Approach**

A comprehensive literature search was conducted across multiple databases, focusing on studies published between 2009-2024. A narrative synthesis was undertaken focussing on social network involvement in care for patients with non-end stage kidney disease. Data was collected using aspects of thematic synthesis, with a thematic framework being developed.

### **Abstract - The Findings**

13 papers were included, which included a total of 538 participants. 10 of the 13 studies only included people living with CKD stage 3-5.

The synthesis found four key themes:

- The burden of kidney disease uncertainty,
- Everyday challenges of managing CKD,
- Social Isolation and its impact,
- The role of Peer Support.

### **Abstract - The Implications**

The impact of diagnostic and prognostic uncertainty has been found to affect people living with all stages of CKD and has a serious impact on people's mental health and anxiety levels. The studies showed that SNM were key in assisting people living with CKD to being able to understand and interpret their illness, assisting it to be assimilated into their everyday lives.

The studies are highlighted the challenges of navigating complex healthcare systems, with conflicting information given to people living with CKD and SNM. This led to difficulty accessing support, and engaging healthcare professionals to provide or direct support, and where healthcare professional support was lacking, SNM support became more important into engaging in self-management behaviours.

People living with CKD and SNMs reported feeling isolated as one of the challenges of CKD. Some of this isolation arose from a lack of societal awareness of CKD and its implications.

Understanding the role of SNMs in supporting people living with CKD and developing mechanisms to support self-management is key to be able to assist in reducing the impact of CKD.

### **Funding acknowledgement**

The primary author (presenting author) has funding from NIHR DCAF scheme.

**139**

### **Falls prevention in Primary Care: co-production of a multi-factorial falls prevention checklist for community dwelling adults**

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### **Abstract - The Problem**

The risk of falling in adulthood increases with age. One in three adults aged 65 and over, living at home, will fall at least once a year. Falls can result in physical injury, loss of independence, distress and mortality. Many actions to prevent falls from happening do not require medical expertise and the social prescribing (SP) workforce in primary care are well placed to recommend such preventative action. Whilst clinical guidelines recommend the use of multifactorial/multidomain falls prevention risk assessment tools and preventative individually tailored action, no such tool currently exists for use by SPs.

### **Abstract - The Approach**

We undertook a three-step co-production process to develop a falls prevention checklist for use by SPs in primary care. A scoping review highlighted the relevant topics to be included in the checklist. A total of six focus groups, including role play, were then conducted with SP practitioners and patient representatives, leading to further refinement of the checklist content and the identification of training plan for its use.

### **Abstract - The Findings**

We co-produced a prototype version of a falls prevention and action planning checklist with an accompanying training plan, with SPs and patient representatives. This standardised tool contains 15 falls risks with respective evidence-based actions to reduce or eliminate those risks.

### **Abstract - The Implications**

Further research is required to evaluate the acceptability, feasibility and effectiveness of the co-produced prototype falls prevention checklist for use by non-clinical SP staff.

**147**

### **Actionable strategies to support decarbonisation in general practice: A qualitative study of stakeholders' views.**

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### **Abstract - The Problem**

The National Health Service (NHS) in England has set a target to reach net zero by 2040. A better understanding is required of the impact of decarbonisation initiatives in general practice, and how different factors can facilitate or inhibit their introduction and maintenance. This qualitative study aimed to understand key stakeholders' views and experiences of how to reduce barriers to change and promote facilitators to general practices when undertaking actions to decarbonise.

### **Abstract - The Approach**

Key stakeholders (n=35) were identified at a local, regional and national level across the UK to participate in semi-structured interviews. For this study, stakeholders were referred to as 'context setters' and defined as individuals with a broad range of roles who have a recent personal interest or influence in decarbonisation. Questions were designed based on a systematic review and previous

findings from a survey with general practice staff which aimed to describe current levels of interest and action around decarbonisation in general practice teams, alongside awareness and use of decarbonisation resources currently available.

### **Abstract - The Findings**

This is an ongoing study. Findings that will be reported include identifiable and actionable strategies including policies and plans that can be implemented at a local, regional and national level to support decarbonisation in general practice. In addition, the level of interest and influence individual stakeholders have in supporting the implementation and sustainability of actions to decarbonise general practice will be discussed.

### **Abstract - The Implications**

This study addresses gaps in research and is identifying strategic and contextual factors that are key to facilitating and implementing actions for decarbonisation in general practice. The findings highlight the importance of understanding where stakeholders 'sit' in relation to their level of interest and influence when developing strategies for driving initiatives to achieve the NHS Net Zero target.

### **Funding acknowledgement**

NIHR

148

### **A Realist Evaluation of the National New to Practice GP Fellowship Programme**

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### **Abstract - The Problem**

There remains a recruitment and retention crisis in General Practice. One of the greatest drops in GP numbers is worryingly those in the first five years of their careers. The New To Practice GP Fellowship programme in England was commissioned as an innovative education and support intervention to help address the recruitment and retention of newly qualified GPs in the primary care workforce. It funded time away from clinical practice for newly qualified GPs for up to 2 years as part of their continued professional development. In 2024 the decision was made to cease funding the programme with no planned alternative. There has yet to be any work evaluating this programme nationally.

### **Abstract - The Approach**

Using a realist evaluation to improve understanding of how, why and in what context the new to practice GP fellowship programme impacts on those involved, and to what extent this could influence the GP workforce crisis. A mixed-methods approach combined data from asynchronous online focus groups, realist interviews, and a survey built using theoretical domains framework. Participants were invited from across all 42 primary care training hubs in England to encourage representation from all local fellowship schemes. Recruitment included those who designed and ran the schemes as well as those that took part.

### **Abstract - The Findings**

Analysis is ongoing but will be completed by the time of the ASM. At the time of submission focus groups and interviews are complete and iterative analysis continues. The survey tool is being built to gather a breadth of perspectives on the mid-range theory so far. Key components of the refined program theory will be presented as they relate to the GP workforce. This will include specific context-mechanism-outcome configurations that have been developed as a result.

### **Abstract - The Implications**

The workforce crisis in General Practice is ongoing, and we need creative approaches to try and tackle this. Retention of early career GPs will need a combination of strategies, and education is likely to be one of these. Lessons from the current fellowship programme will help to inform decisions about the design and implementation of future educational interventions.

### **Funding acknowledgement**

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**149**

### **Workload in the clinical encounter in general practice is higher in deprived areas compared with affluent areas of Scotland: A cross-sectional analysis using a new consultation workload index.**

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### **Abstract - The Problem**

The disparity in health needs between affluent and deprived areas is typically described in terms of population-level health or system-level demand. There is limited evidence on differences in need at the level of the individual consultation.

Consultation workload – the volume and complexity of work involved in a single patient encounter – is influenced not only by patients' health status, but also by the number and nature of problems that the patient wishes to discuss.

The aim of this study was to construct a novel consultation workload index, and use it to assess differences between consultations in deprived and affluent areas.

### **Abstract - The Approach**

The study used data from a postal survey of 4,611 patients who had recently consulted a GP in affluent and deprived areas of Scotland. Demographic and health information was collected, and patients were asked about the number and nature of the problem(s) discussed in their recent consultation.

A novel consultation workload index (CWI) was constructed from the summation of the following binary variables:

- i. Whether or not the patient had a disability of limiting long-term condition;
- ii. Whether they had discussed two or more problems in the consultation;
- iii. Whether the consultation involved a 'complex' problem (defined as both physical and psychosocial in nature).

We checked for overlap between these variables using crosstabulation and Spearman's correlation. The CWI was then used to compare groups of consultations between deprived and affluent areas, stratified by consultation modality.

### **Abstract - The Findings**

From 4,611 distributed surveys, 761 (16%) responses were received. Over half (54%) of consultations in deprived areas had a high or very-high consultation workload, compared with a quarter (26%) in affluent areas ( $p < 0.001$ ). Telephone consultations were more common in deprived areas ( $p < 0.001$ ), with 40% of very-high workload consultations conducted by telephone, compared with 25% in affluent areas.

### **Abstract - The Implications**

The CWI provides a new, consultation-level metric for quantifying workload in primary care. The disparity in consultation workload between affluent and deprived areas demonstrated here adds to our understanding of the Inverse Care Law. Resource allocation in primary care should consider such differences in consultation-level workload.

### **Funding acknowledgement**

Economic and Social Research Council (ES/T014164/1)

**153**

**The epidemiology of co-morbidity in the United Kingdom Heart Failure population: a retrospective cohort study**

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### **Abstract - The Problem**

**Background:** Co-morbidity is highly prevalent in individuals with heart failure and is associated with worsened prognosis. However, comprehensive prevalence data is scarce.

**Aim:** To describe co-morbidity epidemiology in adults with heart failure in the United Kingdom (UK) using a national English electronic health record database (Clinical Practice Research Datalink).

### **Abstract - The Approach**

**Design and setting:** Retrospective, population-based, longitudinal cohort study. Morbidity cases were defined through updated established code lists.

**Method:** The study used a heart failure sample of 680 110 adult patients (i.e., aged  $\geq 18$  years). Patient data from General Practice were analysed between January 2004 to January 2024. Co-morbidity was defined as an individual with heart failure being diagnosed with another long-term condition and recorded in the patient's medical records.

### **Abstract - The Findings**

**Results:** In the UK heart failure population, the most prevalent conditions were hypertension (60.7%); chronic respiratory conditions including chronic obstructive pulmonary disease and asthma (35.6%); diabetes mellitus (27.7%); prior myocardial infarction (26.8%); stroke (24.0%); and transient ischemic attack (10.9%).

### **Abstract - The Implications**

**Conclusion:** Co-morbidity in the UK heart failure population is common. These findings support the need for expert generalist care for heart failure patients and discussion in multidisciplinary team meetings,

including broad cardiovascular treatment and prevention alongside support for respiratory diseases and mental health.

### **Funding acknowledgement**

The study received funding from the European Union's Horizon Europe research and innovation programme under grant agreement number 101080905, and UK Research and Innovation grant award with reference number 10073472.

**154**

### **Understanding older Peoples' Perspectives of Postural hypotension: findings from the UPPP study**

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### **Abstract - The Problem**

Postural hypotension (PH) is common, affecting around one-third of community-dwelling older people. It is associated with significant health burdens including increased risks of falls, fractures, stroke, cardiac events and cognitive decline. Primary care interventions to minimise adverse outcomes associated with PH include targeted medication reviews, increasing hydration, reducing alcohol consumption and fall-risk advice. However, PH is under-diagnosed and under-recorded in primary care, appearing in just 1% of primary care records. Potential reasons include poor symptom recognition by patients and medical professionals, asymptomatic cases and patient under-reporting. We have previously explored healthcare professional perspectives, identifying GP under-detection of PH predominantly due to lack of time, training and/or poorly standardised methods of measurement and coding. Older peoples' perspectives of PH are large unexplored and are essential to understand how detection and management can be improved.

### **Abstract - The Approach**

The aim of this study is to explore older peoples' views and their understanding of how PH may present, its perceived importance, and associated risks. To achieve this aim, we are conducting 20 semi-structured interviews in London and Devon with people aged  $\geq 65$  who have a diagnosis of PH or are at high-risk of PH (due to polypharmacy, diabetes, Parkinson's disease or frailty) between January and April 2025. Purposive sampling will ensure maximum variation in age, sex, ethnicity, clinical condition, deprivation, geographical location, and ability. Topic guides were developed with a multidisciplinary advisory group including public contributors. Data will be analysed using reflexive thematic analysis.

### **Abstract - The Findings**

We will discuss strategies for increasing PH awareness, reporting of symptoms, the acceptability of potential interventions to improve detection of PH (including home monitoring) and self-management strategies. Preliminary findings suggest that older people's understanding of PH varies but more accessible information across different socio-demographic groups is warranted. Alternative methods for disseminating information about and testing for PH are needed for this population. Particularly a focus on home-based care is desired.

### **Abstract - The Implications**

Interventions to increase detection and management of PH in general practice are required with greater awareness needed by healthcare professionals and patients. This study will inform future intervention development to increase the detection of PH and at-risk patients in general practice.

### **Funding acknowledgement**

This research is funded by the National Institute for Health and Care Research (NIHR).

**163**

### **Co-producing a social media advertising campaign to engage young people in acne research**

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### **Abstract - The Problem**

Acne Care Online is a digital intervention to support acne self-management for young people aged 13-25. A randomised trial of the intervention is currently recruiting via social media, primary care, schools/colleges and pharmacies.

Initial figures show that, in comparison to other recruitment routes, social media has attracted more participants in underserved communities, particularly those who are ethnically diverse, male, or treatment naïve. However, recruitment via this route has yielded fewer participants than anticipated.

### **Abstract - The Approach**

During development of the intervention, targeted Facebook and Instagram adverts set up by the research team successfully recruited young people for an advisory group and for qualitative interviews to inform and optimise intervention content.

After initially recruiting 46 trial participants from 85 sign-ups and 7020 link clicks, the campaign did not recruit anyone after 10 weeks despite running for a further 4 weeks.

Initially, advertising settings and materials were adjusted with limited success. Meetings were then held with public contributors, content creators, communications experts and marketing agencies to co-produce an advertising strategy. This has an emphasis on; a) using social media typically used by young people such as TikTok and Instagram stories, b) creating videos designed to engage previously under-represented groups. The team explored options of using influencer marketing and paying for advertising companies to 'train' AI algorithms used by social media platforms to optimise the targeting.

### **Abstract - The Findings**

Two strategies to engage young people were devised: 1) Asking social media influencers to advertise the study on their own accounts using their own words to engage with followers, and 2) Working with a young male content creator to develop videos to be distributed via social media by an advertising company. Challenges included; finding appropriate young people to create the videos, and designing 'calls to action' to attract young people without including intervention content in the advertising materials. Recruitment results from these strategies will be presented.

### **Abstract - The Implications**

Reporting this social media strategy will inform recruitment campaigns for future trials, particularly those involving young people. There are wider implications for research involvement, engagement and dissemination on the use of social media for public involvement, recruitment and dissemination of research.

### **Funding acknowledgement**

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167

### **UK national guidance recommends outpatient clinic letters be written directly to patients, not GPs. Is rheumatology embracing this approach and if not, why not?**

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### **Abstract - The Problem**

Annually, primary care receive over two million outpatient clinic letters from rheumatology. UK national guidance recommends clinic letters be written directly to patients, with GPs copied in, rather than directly to GPs. Anecdotally, uptake of this approach is low but evidence is scant and outdated. We investigated current approaches and perspectives, barriers and enablers, using rheumatology as an exemplar.

### **Abstract - The Approach**

UK-wide mixed methods study, including surveys and qualitative interviews. Adult rheumatology patients and healthcare professionals (HCPs) were recruited via eight NHS/HSC sites, social media and patient and professional organisations. Survey data were analysed using descriptive statistics and content analysis. Qualitative interviews were audio-recorded and analysed using rapid qualitative techniques. Our five-member patient partner group informed the study design and conduct.

### **Abstract - The Findings**

Survey completion rates varied per question. 200/299 HCPs (67%) write clinic letters directly to GPs, with patients copied in, and 35/299 (12%) write to GPs only. Conversely, 396/620 patients (64%) would prefer clinic letters be written to them. Only 1/620 did not want letters.

HCPs who write directly to patients (64/299, 21%), believe it has multiple benefits, including improved patient understanding. HCPs who do not, express various concerns, including that clinic letters will lack nuanced medical information and actions for GPs will be missed. Patients want medical terms to be used in clinic letters and to see what information is shared with their GP. HCPs expressed uncertainty about how clinic letters are processed by, and a desire to know how to meet the needs of, primary care. With support, 91/200 HCPs who currently write to GPs (46%) would try writing directly to patients.

### **Abstract - The Implications**

Writing directly to patients is expected to help patients engage in shared decision-making and supported self-management. Our findings are relevant to other outpatient specialties and are being used to inform updates to national guidance. We are developing resources to support HCPs to adopt the approach of writing directly to patients, while also enhancing the efficiency and effectiveness of communication with primary care. Primary care clinician and administrative staff perspectives on clinic letters have not recently been studied. We are seeking further funding to address this gap.

### **Funding acknowledgement**

This work was funded by the British Society for Rheumatology and the authors would like to thank the Society for its help and support.

**168**

### **Ensuring discharge communication meets the needs of continuing expert generalist GP care: A qualitative study**

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#### **Abstract - The Problem**

The increasing standardisation of discharge summaries has been described as insufficiently supportive for patients with complex care, who are at higher risk of avoidable harm from suboptimal communication. Standardised letter templates can constrain contextual and narrative information that is critical for the continuing advanced generalist care of these patients. To mitigate this issue and succinctly tailor their communication, summary authors must understand the recipients' perspective and the practicalities of community post-discharge care. This interprofessional understanding across the primary-secondary care interface urgently needs improvement. This study aims to explore how GPs practically use information, with a novel focus on their expert generalist skillset, in order to shape new understanding of what discharge communication should look like.

#### **Abstract - The Approach**

Fifteen semi-structured interviews of GPs and GP registrars qualitatively explored the practice of post-discharge expert generalism. Purposive sampling selected GPs with a range of generalist experience. Data collection sought detailed descriptions of the challenges of caring for patients with complex needs, including the role of discharge summaries, and perspectives on mock vignettes. GPs approaches to resolving these challenges were thematically analysed using the tenets of expert generalism as a deductive coding framework.

#### **Abstract - The Findings**

Analysis has identified the new concept of 're-generalisation' after hospital discharge, a process where GPs holistically reorientate complex patient care back to the community context and make new shared decisions. This requires nuanced understanding of the rationale of decisions made in hospital, which is often ineffectively communicated in an 'unspoken language' in discharge summaries. This 'loss of knowledge work' negatively affects care quality, safety and efficiency for complex scenarios such as anticoagulation dilemmas, occult cancer concerns and multifactorial symptoms, which require an expert generalist interpretivist approach.

### **Abstract - The Implications**

For GPs to effectively deliver the advanced generalist community care needed for complex scenarios, we urgently need to ensure they have access to the information necessary to support left shift of autonomy and practice recently called for by Darzi. This study will inform the professional development support measures needed for discharge summary authors, as well as prompts within summary templates, to mitigate the limitations of standardisation and improve quality and safety.

### **Funding acknowledgement**

Dr Nicholas Boddy is supported by an NIHR In-Practice Fellowship.

**170**

### **A scoping review of how the Candidacy Framework has been applied in research on general practice**

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### **Abstract - The Problem**

Access to general practice is a pervasive health services concern. A tendency to conceptualise access narrowly in terms of supply of appointments may frustrate understanding and identification of better solutions. The Candidacy Framework offers an alternative conceptualisation of access as a dynamic and contingent process. We aimed to identify how the Candidacy Framework has been applied in research on general practice.

### **Abstract - The Approach**

We conducted a scoping review involving a search across four databases to identify general practice articles that cited and applied the Candidacy Framework. Eligible articles underwent data extraction and a descriptive analysis of findings.

### **Abstract - The Findings**

Of 12759 records screened, 73 studies published between November 2007 and October 2024 were included in the review. The Candidacy Framework was predominantly applied to designing research or supporting interpretation of research findings. 67 papers explicitly used at least one of the seven features of candidacy; 'navigation' was most mentioned and 'operating conditions' least. Candidacy appeared particularly helpful for: (1) exploring healthcare staff-patient interactions; (2) understanding barriers and enablers to accessing care; and (3) exploring complex access challenges faced by disadvantaged groups. Critiques of the Candidacy Framework focused on its perceived linearity, a lack of acknowledgement of the potential for multiple candidacies, and need for more emphasis on contextual influences beyond local operating conditions.

### **Abstract - The Implications**

Our review shows the value of the Candidacy Framework to the study of general practice, though the framework may also benefit from further customisation for the general practice context. Given the concern about access to general practice at multiple levels, use and maturing of the Candidacy Framework may be helpful to find actionable, equity-focused solutions.

### **Funding acknowledgement**

This project was supported by the Health Foundation's award to The Healthcare Improvement Studies (THIS) Institute. The Health Foundation is an independent charity committed to bringing about better health and healthcare for people in the UK.

**173**

### **'I want the opportunity to be considered': does advance research planning have a role in supporting inclusive research in primary care?**

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### **Abstract - The Problem**

Cognitive impairment is an important determinant in health care, impacting people with conditions such as dementia, stroke, mental health conditions or at the end of life. These populations have amongst the highest care needs in primary care, yet they are often excluded from research due to the complex ethical and legal issues surrounding research involving adults with impaired capacity to consent. Improving the inclusion of under-served groups is a priority area for policymakers and research funders. An innovative new approach is needed to support inclusion of this under-served population.

### **Abstract - The Approach**

Advance care planning enables people to plan ahead for their care should they lose capacity. This approach could be adapted for research. Advance research planning (ARP) is a process in which people are encouraged to think, discuss and express their preferences about taking part in research and who should be involved in participation decisions, and (optionally) documenting these preferences in an

‘advance research directive’. Whilst ARP has been introduced in other countries, it has not previously been explored in the UK or in primary care which could play a key role in supporting ARP discussions and utilise this approach when recruiting to primary care studies.

As part of the CONSULT research programme, we conducted a mixed-methods study (CONSULT-ADVANCE) to explore the acceptability and feasibility of introducing ARP in the UK with researchers, practitioners, and the public.

### **Abstract - The Findings**

An online survey with 327 stakeholders (public n=277, professionals n=50) found high levels of support for ARP. Semi-structured interviews with purposively sampled participants (n=27) identified six main themes relevant to primary care: 1) opportunities to engage with ARP; 2) using ARP to inform participation decisions; 3) optimising ARP timing; 4) modes for recording preferences; 5) minimising unintended consequences; and 6) ensuring safeguarding and addressing inequalities.

### **Abstract - The Implications**

Supplemented by additional work exploring international experiences of ARP, the study findings will help to inform the introduction of ARP in the UK. Facilitative strategies include integrating it in existing care and research pathways, supported by the range of tools and resources the CONSULT programme has developed to support researchers to conduct research involving adults with impaired capacity to consent.

### **Funding acknowledgement**

This research was funded by Health and Care Research Wales as part of an NIHR Advanced Fellowship (NIHR-FS(A)-2021)

174

### **A qualitative feasibility study exploring the views of general practitioners in England (UK), on the meanings and values of normal, ordinary and natural dying in primary palliative care.**

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### **Abstract - The Problem**

Over the past 35 years, the World Health Organisation has defined that palliative care regards dying as a ‘normal’ process. With the recent debates on legalising assisted dying in the UK, interest in what is normal – or its synonyms ‘ordinary’ or ‘natural’ – about dying is growing rapidly. These concepts are also being explored as a key element in improving openness, confidence and familiarity with dying needed for better palliative care. Commonsense dictionary definitions describe dying as an expected (‘normal’, ‘ordinary’) process of life that everyone will experience, which does not involve anything made by

human ('natural'). However, conceptualisation of normal, ordinary and natural in healthcare settings involves complex interplay of clinico-socio-cultural factors, which is not adequately represented by their commonsense dictionary definitions. In this regard, concepts of normal, ordinary and natural dying have not been empirically explored in palliative care contexts. Good understanding of these fundamental concepts is salient for primary palliative care where most 'normal' dying are expected to occur, and for general practitioners (GPs) who have the responsibility of ensuring good palliative care in this setting. Therefore, this study aims to explore GPs' views on the meanings and values of normal, ordinary and natural dying in primary palliative care in England.

### **Abstract - The Approach**

Qualitative feasibility study using interpretive approach. Twenty GPs in primary palliative care in England (UK) recruited via social media and professional networks. Semi-structured interviews to gather their views on meanings and values of the concepts of our interest. Reflexive thematic analysis to generate recurring themes.

### **Abstract - The Findings**

This is in progress. We will present one of the key themes identified from the study, which is range of subjective and heterogeneous, even obscure, understanding of normal, ordinary and natural dying concepts that are inadequately represented by their commonsense dictionary definitions.

### **Abstract - The Implications**

Findings will imply the current sub-optimal understanding of the meanings and values of normal, ordinary and natural dying concepts in UK primary palliative care. They will therefore adduce the need for more empirical studies on this matter, and help us assess the scope of further research needed for these potentially key concepts in improving the quality of primary palliative care.

### **Funding acknowledgement**

This study is funded by the Royal College of General Practitioners Scientific Foundation Board (RCGP SFB)

175

### **Understanding the potential of assistive technology (AT) in people with chronic obstructive pulmonary disease (COPD) to support independence and wellbeing: A qualitative study**

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### **Abstract - The Problem**

Assistive technology (AT) includes adaptive, physical equipment, digital technology, electronic equipment and innovative digital infrastructure and is being prioritised as a cost-effective way of supporting independence, health and wellbeing amongst people living with long-term conditions. For people living with COPD there is great potential for benefit from AT but considerable unmet need, and the evidence on how to meet these needs is lacking.

### **Abstract - The Approach**

Using qualitative methodology, in-depth interviews to understand AT service provision were conducted. Using purposive sampling, diverse perspectives were sought from people with COPD, their carers, health and social care professionals. A photovoice activity was conducted among a small number of interviewees to gain additional insight into experiences of AT. Thematic analysis was conducted. The WHO strategic action framework to improve access to AT comprising the “four Ps” (With ‘People’ who need AT in the centre, ‘Policy’ defines the space in which ‘Products’ ‘Personnel’, ‘Provision’ operates) was used to organise and understand the findings.

### **Abstract - The Findings**

42 participants were interviewed. (1) ‘People’ with COPD, their carers highlighted the negative impact of COPD and how AT was helpful but also aspects that were unhelpful. Their journey to accessing AT was convoluted which led to frustration; (2) ‘Policy’: policymakers to consider the burden of costs associated with respiratory healthcare and the benefits of a focus on prevention through AT; (3) ‘Products’: simple accessible information, with consideration of people for whom English is not their first language, on the range of AT available is needed; (4) ‘Personnel’: the lack of trained personnel to carry out assessments to ensure an individual receives AT that is appropriate and timely leads to delays resulting in situations where AT becomes inappropriate for use. (5) ‘Provision’: A streamlined process for people and personnel through collaborative working in areas of referral, assessment, and AT supply, and involving health and social care teams is needed to improve the accessibility of AT.

### **Abstract - The Implications**

The study sheds light on the current AT service provision, the challenges, and how service provision might be improved. The findings could help stimulate the development of better opportunities for people to access appropriate, acceptable and timely AT.

### **Funding acknowledgement**

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**178**

**An exploration of institutional, organisational and professional factors that influence the implementation of decarbonisation actions in general practice: a longitudinal qualitative study**

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### **Abstract - The Problem**

The National Health Service (NHS) has set a target to reach net zero by 2040. Greater understanding is required of the impact of decarbonisation initiatives in general practice, and how different factors can facilitate or inhibit their introduction and maintenance. This longitudinal qualitative study aims to address this knowledge gap.

### **Abstract - The Approach**

We recruited 12 practices (four from each of three Integrated Care System (ICS) areas in England) with diverse characteristics, from the participants in a survey exploring awareness / current activity in relation to decarbonisation.

Participating practices committed to developing a Green Action Plan (GAP) comprising 3-5 agreed and measurable decarbonisation actions to be implemented over the subsequent 12 months.

A baseline workshop was held with each participating practice team to support the development of their GAP. A video presentation summarised decarbonisation resources available and provided examples of potential actions and this was followed by a facilitated, recorded discussion. A further recorded meeting was held two weeks later to confirm the practice's GAP and explore the process of its development.

Subsequent data collection points were at 2 weeks and 3, 6, 9 and 12 months and comprised facilitated discussion with key members of the practice teams. Topic guides were iteratively developed for each time point and data analysis ran concurrently. Framework analysis was used, informed by Normalisation Process Theory and the Theoretical Domains Framework.

### **Abstract - The Findings**

The study is on-going with the 12m data collection scheduled to start in May 2025. Findings from the first 6 months' data collection indicate that external factors influence the ability to engage with decarbonisation initiatives, with physical environment playing a key part. This includes building ownership status affecting energy consumption, and road infrastructure impeding active transport. Within practices, staff go above and beyond to engage, for example taking home items for recycling such as empty milk cartons. Both positive and negative emotions were expressed in relation to engaging in the action plans and a sense of being overwhelmed when considering decarbonisation initiatives was common.

### **Abstract - The Implications**

This study will provide insights to inform policy- and practice-level strategies to support general practice to decarbonise.

### **Funding acknowledgement**

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**181**

### **Quantifying cost and health-related quality of life outcomes in different multimorbidity trajectories: a systematic review**

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#### **Abstract - The Problem**

Multimorbidity - the presence of multiple long-term conditions (MLTCs) - is a major global public health issue and most current healthcare systems are unsuited for populations with high multimorbidity prevalence. Little existing work has explored economic burdens and health-related quality of life (HRQoL) impacts of MLTCs over time, and health economic evaluations and longitudinal MLTC studies have been highlighted as key research priorities. Understanding incremental cost and HRQoL impacts as individuals follow different multimorbidity trajectories is critical to create future primary care health systems which are sustainable, person-centred and adequately resourced for people with MLTCs.

This systematic review will comprehensively describe the evidence on healthcare resource use and costs, and HRQoL impacts of different trajectories of multimorbidity development.

#### **Abstract - The Approach**

The review protocol is designed according to the PRISMA 2020 statement. A multi-stranded systematic search strategy identified studies of multimorbidity trajectories exploring healthcare resource use and costs (direct or indirect) and/or HRQoL over time.

Four databases (Embase, MEDLINE, CINAHL, Web of Science) searched; limited to peer-reviewed original, English language, longitudinal, quantitative, human studies published on/after 2010. Population: adults with/without LTCs at baseline, developing MLTCs during the study period, for whom longitudinal healthcare cost and/or HRQoL data are recorded.

Reference screening and data extraction will be completed by two reviewers. Outcome measures include healthcare costs and HRQoL changes associated with different multimorbidity trajectories.

Studies will be quality-assessed using a tool adapted from the Critical Appraisal Skills Programme cohort studies checklist. Data synthesis will use a Synthesis Without Meta-analysis approach. PROSPERO registration: CRD42024537258.

### **Abstract - The Findings**

Preliminary results demonstrate significant heterogeneity in multimorbidity trajectory studies and under-representation of low and middle income country settings. Cost studies demonstrate 20-35 fold higher healthcare expenditure in highest risk multimorbidity trajectory groups compared to lowest risk. Longitudinal HRQoL research reports that differential quality of life outcomes in HIV+ cohorts are largely driven by accrual of MLTCs over time.

### **Abstract - The Implications**

This systematic review will synthesise evidence in this important, under-researched area of cost and HRQoL impacts of multimorbidity trajectories, providing essential context to inform future healthcare optimised for people with MLTCs, and informing novel MLTC trajectories research.

### **Funding acknowledgement**

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**183**

### **Early cancer detection in community pharmacies in deprived areas – an online survey.**

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### **Abstract - The Problem**

Many early symptoms of cancer share characteristics with symptoms of benign diseases. Patients may self-medicate using over-the-counter medication. Community pharmacies are accessible healthcare providers, increasingly delivering diverse patient care, and have a potential role in early cancer detection.

Community pharmacy staff participation in research is low in England, and there is limited evidence about their usual practice when offering over-the-counter medication to treat potential undiagnosed cancer symptoms.

### **Abstract - The Approach**

We have undertaken an online survey (Qualtrics, Provo, UT) of customer-facing staff members from community pharmacies in England to explore their current practice when dispensing over-the-counter medication to treat potential cancer symptoms. The recruitment strategy was revised following the initial survey distribution within three Local Pharmaceutical Committees and was extended directly to all community pharmacies in England. Survey distribution was supported by professional organisations and social media recruitment. Ethical approval was provided by the University of Exeter Medical School Ethics Committee.

### **Abstract - The Findings**

All community pharmacies in England (n=10216) were approached. 368 survey responses were received, and 259 completed individual surveys from 233 pharmacies are being analysed after data cleaning. Rurality and deprivation data were matched to 253 responses. 73% of respondents are female, and 48% of respondents work as community pharmacist. 63% of respondents have up to 10 years of professional work experience, and 37% have more than 10 years of experience. 64% work for independent pharmacies, and 36% work for large multiple commercial chain pharmacies. 18% of responses are from rural, and 72% of responses are from urban pharmacies, representing all Indices of Multiple Deprivation quintiles. 94% always or very often, 6% sometimes or rarely ask about symptoms when customers purchase over-the-counter medication.

We will examine variation in respondents' propensity to ask about symptoms and actions taken according to the characteristics of the responders and their respective community pharmacy.

### **Abstract - The Implications**

Data analysis is currently underway and preliminary descriptive data are presented in the abstract. The survey findings will be presented in full at the conference and will inform future research directions. The recruitment process experience reflects the literature on low research participation of community pharmacy staff.

### **Funding acknowledgement**

This study is funded by the National Institute for Health and Care Research (NIHR) School for Primary Care Research (project reference 602).

**185**

**Promoting equitable continuity of care through development of a new tool: a grassroots Deep End project**

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### **Abstract - The Problem**

Good continuity of care (CoC) is associated with reduced mortality and hospital admissions, and improved clinician satisfaction. Disadvantaged populations tend to have worse continuity, creating an “inverse continuity law” where those who need it most are least likely to receive it.

There is a need for a reliable and accessible measure of continuity. Whilst several tools exist, they are not currently integrated within electronic health records (EHR). We aim to develop and assess the effectiveness of a new continuity tool including patient characteristics and integrated within EHR.

### **Abstract - The Approach**

This is a collaborative project co-led by Deep End GPs and academics. We are developing a continuity tool, which will be tested and refined in six Deep End practices. A stakeholder event, engaging clinicians, practice staff and community members, will explore the barriers and enablers to continuity and the usefulness of the tool. A “think aloud” approach will capture clinician feedback. The interviews will be transcribed and analysed thematically using a cyclical approach, with tool refinements made and tested in subsequent interviews.

### **Abstract - The Findings**

We have built a ‘continuity community of practice’, comprising GPs from six Deep End practices wanting to promote continuity. We have developed a modified version of the ‘Usual GP Tool’ (part of the RCGP continuity toolkit), which measures continuity, using the usual provider of care (UPC) and St Leonards Indicator of Continuity of Care (SLICC) scores. Our modified version includes continuity metrics for: (i) protected characteristics (e.g. age, gender, ethnicity, number of long-term conditions); and (ii) practices using a ‘microteams’ model (where each patient is assigned to a small number of clinicians). The stakeholder event and the initial clinician interviews will be complete by the summer.

### **Abstract - The Implications**

Developing a tool that is accessible and useful to Deep End clinicians may help them to measure, understand and improve CoC for those that need it the most. Our tool which provides metrics on protected characteristics, may address issues of continuity equity and the “inverse continuity law”. Once refined, we will integrate this tool into the EHR and share it more widely, to align with the national priority to promote and increase continuity of care.

## **Community Health and Wellbeing Workers: Piloting a community outreach programme in three settings in England, 2021 to 2024**

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### **Abstract - The Problem**

In 2021, three localities in England independently commissioned Community Health and Wellbeing Worker (CHWW) pilot programmes with the aim of enhancing preventive public health within primary care. The service was modelled on the Brazilian Family Health Strategy, where lay health workers serve as frontline primary care staff. The intervention followed four key principles: 1) Comprehensiveness: support to all household members, regardless of characteristics or conditions; 2) Hyperlocality: recruitment prioritises local connections and cultural competence; 3) Universality: CHWWs serve around 150 households on an ongoing basis; 4) Integration: the service is integrated into primary care and other local services.

### **Abstract - The Approach**

A mixed-methods comparative case study process evaluation was conducted by a PhD research student at the University of Liverpool from 2021 to 2024, with support from NIHR ARC North West Coast and Imperial College London. Data were collected through participant observation of steering group meetings, interviews, focus groups, and secondary productivity and impact data. The Consolidated Framework for Implementation Research was used to identify and interpret contextual factors that influenced implementation. Higher-level programme theory was developed through case study comparison.

### **Abstract - The Findings**

The case studies provided comprehensive evidence of implementation processes and determinants. Insights were gained into commissioners' motivations for adopting the innovation and the role of national partnerships in promoting fidelity to the service model. At the Inner Setting level, organisational culture and mission alignment were key determinants for integration, as were access to SystmOne and the presence of a GP service champion. Absence of robust data collection, failure to gather impact data meaningful to system partners, and challenges in obtaining consent for participation. Two out of three programmes were not recommissioned, likely due to inadequate assessment of programme impact, resource constraints, and a lack of interest in the model among local partners.

### **Abstract - The Implications**

Several practical recommendations were developed for sites implementing the service model, focussing on workforce development, supervision, and outreach. This is significant because, as of early 2025, there are 26 sites across the UK implementing this model. The study also has implications for the dissemination and adoption of innovations, and the related issues of sustainability and cost-effectiveness.

## **Funding acknowledgement**

NIHR Applied Research Collaboration North West Coast

**191**

### **SPLaT\_ER – Is Long Covid diagnosed and coded in children’s primary care electronic healthcare Records?**

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#### **Abstract - The Problem**

Evidence and experience indicate that some children develop Long Covid, describing severe symptoms that impact daily functioning. Research on Long Covid in children, especially using UK primary care electronic healthcare records (EHR), is limited. Understanding the relationship between EHR coding and symptoms reported by children and caregivers is crucial for understanding how well EHR indicate disease burden and can be relied on to plan support services.

#### **Abstract - The Approach**

SPLaT\_ER is a retrospective EHR study nested in a cohort recruited from primary care, SPLaT-19\_C. The subset of this cohort consenting for future contact were invited to participate. A list of COVID-19/ Long Covid SNOMED-CT healthcare codes were compiled using previously published lists (128 codes in total). The NIHR West Midlands Research Delivery Network extracted codes from participants’ EHR using a bespoke reporting tool. Extracted data was collated and linked to existing data held from questionnaire responses in the SPLaT-19\_C cohort study.

#### **Abstract - The Findings**

441 text invitations were sent, and data was extracted for 57 consenting participants. COVID-19 or Long Covid codes were recorded in 44 (77.2%) participants’ EHR, 14 participants had multiple codes recorded. Two participants had Long Covid associated codes recorded but only one also had an acute COVID-19 code.

Of the 128 potential codes, only seven different codes were present in the children’s EHR, five were COVID-19 associated codes and two were Long Covid associated codes. Of all recorded codes extracted, 76.8% indicated a positive test result.

Analyses are in progress to further describe the data (including demographics), and to assess concordance between self-report and the EHR; results will be available to present at SAPC.

## **Abstract - The Implications**

In this study 3.5% of children had a Long Covid code in their records, similar to childhood Long Covid prevalence estimates reported by others. Caution needs to be exercised due to the low numbers of participants and risk of selection bias. Despite these limitations, there is evidence that childhood Long Covid is being recognised by primary care clinicians and recorded in their EHR. This data may prove useful in using EHR to define the epidemiology of Long Covid in children and therefore in planning services.

## **Funding acknowledgement**

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**192**

## **Determining the Prevalence of Prodromal Symptoms of Parkinson's disease: A Systematic Review**

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## **Abstract - The Problem**

Parkinson's disease (PD) affects 1–2% of individuals over 60-years-old, with a lifetime risk of 2.7%. As life expectancy increases, the prevalence is expected to rise. Early identification remains challenging due to the highly variable presentation of prodromal symptoms. Understanding the prevalence and clustering of these symptoms in primary care could facilitate earlier diagnosis and intervention, ultimately improving outcomes for people with Parkinson's (PwP).

This systematic review aims to inventory prodromal features reported prior to PD diagnosis, characterise common symptom clusters, and report prevalence of individual symptoms and/or clusters.

## **Abstract - The Approach**

Six databases were searched until September 2024. Observational studies reporting on the prevalence of prodromal features preceding PD diagnosis were included, while studies focusing exclusively on genetic, medication-induced parkinsonism, or mimicking conditions were excluded.

Title, abstract and full text screening were conducted independently by two reviewers. Data extraction and risk of bias assessment were performed by one reviewer and verified by a second. Critical appraisal tools appropriate to study types were used to assess risk of bias.

A summary table will detail prodromal symptoms and clusters temporally associated with PD diagnosis, considering the demographic and clinical course observed. Results will be narratively synthesised, with meta-analysis to pool adjusted prevalence estimates where feasible.

### **Abstract - The Findings**

From 26 studies (14 case-control, 3 cross-sectional, and 9 cohort), where data was obtained from primary (5), secondary (9), community (8) care settings, and electronic health records (4). Several prodromal symptoms and clusters were identified, including neuropsychiatric disturbances and gastrointestinal symptoms. Analysis is ongoing but by July 25 a summary table detailing the prevalence of prodromal symptoms and clusters associated with PD and their pathophysiological mechanisms will be finalised. Forest plots will illustrate effect sizes of prevalent symptoms prior to PD diagnosis from individual studies. Based on the findings, prodromal symptoms/clusters will be classified as common, occasional, or lacking sufficient evidence.

### **Abstract - The Implications**

This review will quantify the prevalence and variability of prodromal PD features, aiding earlier diagnosis and improved care for PwP. Insights will also guide research into neurodegeneration onset and strategies to slow disease progression.

### **Funding acknowledgement**

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193

### **Let's dance: improving physical activity for autistic adults through dance.**

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### **Abstract - The Problem**

Physical activity is beneficial for physical and mental health. However, autistic adults face multiple barriers to engagement with physical activity, contributing to lower participation rates compared to non-autistic adults, and less favourable views about physical activity. Recreational dance has similar benefits to other types of physical activity. It can be non-competitive, can be done independently with

few resources, and in several settings: at home; in social settings; and in dance classes. Dance could be a sustainable hobby and could have widespread referral via social prescribing. However, little is known about autistic adults' experiences of dance and how best to support them to engage in dance. Our project addresses this evidence gap by exploring autistic adults' experiences of dance and developing practical resources to support engagement, including through social prescribing.

### **Abstract - The Approach**

We are conducting an online survey study to explore experiences of dance in autistic adults aged 18 and over. The survey comprises open and closed questions about the benefits, barriers, and facilitators to dance engagement. Data will be analysed thematically and with descriptive statistics. Autistic adults are involved in this project from the design stage through to aiding interpretation of the results, and dissemination. We are also working with stakeholders including GPs, link workers, and dance providers.

### **Abstract - The Findings**

Our findings will highlight the benefits, barriers and facilitators that are specific to autistic adults' experiences of dance. These are likely to relate to sensory experiences, communication differences, social experiences, stimming (repetitive behavioural and sensory experiences) and joy.

### **Abstract - The Implications**

We will use the findings to develop resources to support: 1) autistic adults to learn more about different types of dance and how it may be beneficial for them; 2) dance providers to make classes and studios more accessible; and 3) link workers to refer autistic adults to different types of dance (in different settings) via social prescribing. We expect the outputs to positively impact the physical and mental health of autistic adults, to support autistic adults to flourish, and to increase awareness and acceptance of autistic people's experiences.

### **Funding acknowledgement**

This research is funded by the National Institute of Health Research (NIHR) School for Primary Care Research. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

**199**

### **Identifying and responding to reproductive coercion in general practice**

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### **Abstract - The Problem**

Reproductive coercion (RC) infringes on individuals' rights to make autonomous and informed reproductive choices, affecting decisions about pregnancy, contraception, and abortion. This study aims

to explore how general practice identifies and supports victim-survivors of RC as well as examine perspectives on provider-perpetrated coercion and proposes strategies for managing biases in reproductive care delivery.

### **Abstract - The Approach**

This study employed a qualitative approach, conducting semi-structured interviews with 25 participants, including general practitioners (GPs) (n=10), practice nurses (n=6), and key informants (n=9) such as domestic violence workers and social workers. Data were analysed using reflexive thematic analysis.

### **Abstract - The Findings**

The findings reveal that RC often manifests subtly in general practice, making identification challenging. Participants identified "red flags" beyond physical indicators, such as ambivalent decision-making, contraceptive non-adherence, and somatic complaints. Screening perspectives varied, with the primary challenge being post-screening support and resource constraints. Coercive medical practices were reflected upon across interpersonal to structural realms, from nuanced to overt, and from unintentional to intentional actions. The distinction between acting in patients' best interests and genuinely adopting a patient-centred approach was emphasised, underscoring the importance of recognising individual biases and employing proactive strategies to mitigate them.

### **Abstract - The Implications**

This research underscores the complexities of responding to RC within general practice, aiming to empower providers to navigate these intricacies with sensitivity, empathy, and a commitment to reproductive justice. Addressing RC requires a multifaceted approach, including improved screening strategies, enhanced post-screening support, and mitigation of provider biases. Ultimately, fostering a healthcare environment free from coercion is crucial for safeguarding individuals' autonomy and dignity in reproductive decision-making.

### **Funding acknowledgement**

This research was supported by the Monash International Tuition Scholarship and Monash Graduate Research Scholarship

**202**

### **Experiences of carers of people with Parkinson's and cognitive impairment: a qualitative interview study**

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### **Abstract - The Problem**

Cognitive impairment is a well-recognised and common complication of Parkinson's disease, associated with significant clinical impact and increased carer distress. Carers provide a vital role in helping maintain quality of life in people with Parkinson's and cognitive impairment (PwP-CI). However, a lack of adequate carer support can lead to carer breakdown and avoidable primary care costs. The iSupport-PD project aims to adapt a globally available digital intervention for dementia (iSupport) for carers of PwP-CI. The current study aimed to explore the challenges faced by this group to inform intervention adaptation.

### **Abstract - The Approach**

Thirty-three semi-structured and think-aloud interviews were conducted with 31 carers of PwP-CI. Participants were recruited through charities, social media, and via the networks of our Patient and Public Involvement group. Purposive sampling was used to recruit diverse carers. Interviews were recorded, transcribed and analysed using reflexive thematic analysis.

### **Abstract - The Findings**

Carers shared how the role can be isolating, due to their reduced social life, an inability to get time away from the PwP-CI, or not feeling understood by health professionals or family and friends. Changes to the PwP-CI's character and communication made some feel they have 'lost' the person they care for. Carers were often reluctant to ask for help, out of fear of being judged or seen to be complaining, or out of respect for the PwP-CI's wishes. Carers experienced enduring feelings of frustration, guilt and overwhelm in the face of challenging behaviours (e.g. aggression, changes in judgement) or having to take on the 'cognitive load'. Increased caring responsibilities led some carers to neglect their own health and well-being needs and many felt uncertain about their future.

### **Abstract - The Implications**

Cognitive impairment added additional challenges for carers on top of managing an already complex and progressive condition, making this target at particular risk of physical and mental health problems. Findings informed guiding principles, outlining how the specific needs of carers of PwP-CI will be addressed in the digital intervention.

### **Funding acknowledgement**

This project is funded by the NIHR Research for Social Care programme (NIHR204259). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**Understanding current practice and barriers to the optimisation of heart failure treatment whilst preserving renal function: a cross-sectional survey of UK health care professionals**

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**Abstract - The Problem**

Heart failure can be treated successfully, but the drugs used can lead to kidney damage. This study aimed to 1) understand the current role responsibilities and practices of care health professionals, and 2) to identify barriers and facilitators to optimising treatment of patients with heart failure while preserving renal function.

**Abstract - The Approach**

A purposive sample of healthcare professionals (general practitioners, nurses, and pharmacists) working in the National Health Service (NHS) in the United Kingdom completed an online questionnaire. The questionnaire included questions exploring clinical actions to optimise heart failure treatment whilst preserving renal function as well as barriers and facilitators to doing this.

**Abstract - The Findings**

A total of 221 participants completed the questionnaire: 116 (52.5%) were GPs, 75 (33.9%) were nurses, and 30 (13.6%) were pharmacists. Overall, the overall mean percentage who optimised HF vs renal function care was 53.4%. This varied by role, with GPs reporting almost two-thirds of their patients were optimised, pharmacists reporting just over half, and nurses just over a third. Of all healthcare professionals GPs felt most capable and had the most opportunity to optimise HF treatment whilst preserving renal function. Management issues were most frequently cited challenges, followed by patient-related factors and then environmental issues.

**Abstract - The Implications**

This survey provides an overview of the roles, responsibilities and practices of primary care health professionals in terms of heart failure caseload as well as the barriers and facilitators to optimising the treatment of patients with heart failure while preserving renal function.

**Funding acknowledgement**

Funding is from the NIHR Programme Grants for Applied Research reference number: NIHR202349

## **IMproving Prophylactic Antibiotic use for Recurrent urinary Tract infection (IMPART): mixed-methods study to address evidence gaps and develop a decision aid.**

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### **Abstract - The Problem**

Recurrent UTIs (rUTIs) cause significant morbidity and healthcare costs. Research suggests women would like more information on rUTI prevention. Integrating shared decision-making (SDM) into routine clinical practice is recommended by NICE and could improve rUTI preventive management discussions. Therefore, we aim to develop an evidence-based patient decision aid (PtDA) to improve SDM in this context.

### **Abstract - The Approach**

We adhered to the NICE standards for PtDA development. Work-package (WP) 1a involves evidence syntheses of the effectiveness of preventive rUTI treatments using a network meta-analysis. WP1b aims to understand the views of patients and clinicians using a qualitative evidence synthesis (QES). WP2 uses routinely collected data to understand the characteristics of women with rUTIs and to estimate the risk of antimicrobial resistance (AMR) with prophylactic antibiotic use using the target trial methodology. WP3 involved five focus group interviews (n=25) with women with rUTIs and interviews with 15 primary care healthcare professionals (HCPs) to understand their decisional needs. WP4 involves early user-testing, via 'Think aloud' interviews, of a prototype PtDA informed by the earlier work-packages.

### **Abstract - The Findings**

This study is ongoing but will be completed by the conference date including a prototype PtDA. Our work to date demonstrates:

**WP1:** rUTIs have significant impact on women's lives and women would like more information on non-antibiotic prevention.

**WP2:** significant numbers of women have rUTIs (n=92,213) and use prophylactic antibiotics (n=26,862). Prophylactic antibiotics increase the risk of AMR on urine culture, including multi-drug resistance (absolute risk increase = 6.9% and numbers needed to harm = 14.6).

**WP3:** there is significant stigma associated with rUTIs and HCPs find prophylactic antibiotic de-prescribing challenging. Both patients and HCPs feel a PtDA could improve SDM for rUTI prevention and this WP provides important information to support its development and use in primary care.

The network meta-analysis is almost complete and early-user testing of the prototype PtDA is planned for early 2025.

### **Abstract - The Implications**

This research provides evidence to address key gaps in the context of rUTIs and integrates systematic reviews, routine population-scale epidemiological data and patient / clinician decision needs to develop an evidence-based PtDA to support SDM and improve care in this field.

### **Funding acknowledgement**

This work was supported by the Welsh Government through Health and Care Research Wales (NIHR-FS-2021-LS to Leigh Sanyaolu).

206

### **Preventing anxiety and depression in people with inflammatory rheumatological conditions: a qualitative study**

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### **Abstract - The Problem**

Anxiety and depression are frequently comorbid with inflammatory rheumatological conditions (IRCs) which adversely impacts physical health outcomes and quality of life.

The aim of this study was to explore perspectives of people with IRCs about prevention of anxiety and depression.

### **Abstract - The Approach**

Ethical approval gained from Keele University Research Ethics Committee. A qualitative study using semi-structured interviews with a range of people with IRCs recruited by social media and charity organisation mailing lists. Iterative approach to data generation and analysis.

A Patient and Public Involvement and Engagement (PPIE) group has contributed to study design and interpretation of data.

### **Abstract - The Findings**

Data collection and analysis are ongoing. Twelve people with IRCs (5 Axial Spondyloarthritis, 4 Rheumatoid Arthritis, 1 Polymyalgia Rheumatica, 1 Systemic Lupus Erythematosus, 1 Psoriatic Arthritis) have been interviewed.

Initial analysis suggests that the 'journey to diagnosis' when living with pain and uncertainty can cause distress, therefore the timing of providing ongoing support is important to consider. Support given to adapt to the diagnosis was limited: participants described a need for knowledge to reduce uncertainty and anxiety. People with IRCs described the importance of peer-support to help adapt to the new diagnosis and possibly reduce anxiety and depression.

Participants described little discussion of their mental health in primary and secondary care consultations about the IRC.

### **Abstract - The Implications**

Based on early findings, preventative interventions for people with IRCs should consider the context of the diagnosis (time, journey, condition) and provide ongoing support at follow-up appointments to achieve prevention of anxiety and depression.

Providing a menu of services in primary care that will help patients adapt to their condition and maintain good mental health could help prevent anxiety and depression in people with IRCs.

### **Funding acknowledgement**

This project is funded by the National Institute for Health and Care Research (NIHR) School for Primary Care Research (C003). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**212**

### **Risk of Dementia in Individuals with Mood Disorders: A Matched Cohort Study**

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### **Abstract - The Problem**

Dementia is a major cause of disability and death among older adults, challenging health and social care systems globally. Small studies suggest lithium, used for depression and bipolar disorder, may reduce dementia risk, but they have limitations. Our research examines the association between mood disorders and dementia risk in a large UK population, comparing dementia incidence in those with bipolar disorder, recurrent depression, and mania to those without. Future work will evaluate the protective effect of lithium.

### **Abstract - The Approach**

We conducted a matched cohort study (1, January 1998 to 31, December 2023) of routine primary care electronic health records from CPRD Aurum, linked with secondary care records. We randomly matched 277,626 individuals aged 18 and over with diagnoses of mood disorders, with 1,744,488 individuals without mood disorders (controls), by age, sex, general practice, and calendar-time. Dementia incidence rates were calculated per 1000 person-years, and Cox proportional hazards regression determined hazard ratios (HR) for dementia in those with mood disorders compared to controls.

### **Abstract - The Findings**

In this study (median follow-up of 7.66 years), 168,502 (60.7%) patients were women, with a mean age of 43.1 years (SD 15.9). Among individuals with mood disorders (77,319 bipolar disorder, 179,649 recurrent depression, and 20,658 mania), 13,719 (4.5%) developed dementia. The overall dementia incidence rate was 7.88 vs. 2.95 per 1,000 person-years in individuals with mood disorders vs controls (HR: 3.11, 95% CI 3.06-3.18). In analyses by type of mood disorder, incidence rate (per 100,000 person-years) for bipolar disorder was 7.71 vs 2.11 in controls (HR 4.5, 95% CI 4.32-4.69); recurrent depression was 7.62 vs 2.84 (HR 3.12, 95% CI 3.05-3.19); and mania was 10.59 vs 3.74 (HR 3.41, 95% CI 3.22-3.61). Dementia incidence rates were notably higher for all mood disorders among individuals aged over 55.

### **Abstract - The Implications**

This large UK primary care cohort study provides confirmatory and contemporary evidence of significantly higher incidence of dementia in individuals with mood disorders. Findings highlight the need for targeted risk-reduction strategies and interventions in individuals with mood disorders. There is ongoing work to explore the potential protective effects of lithium on dementia, offering valuable insights for treatment and prevention.

### **Funding acknowledgement**

This study was funded by the National Institute for Health and Care Research (NIHR) School for Primary Care Research (grant reference number 703). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**214**

**Exploring the role of community pharmacy in providing advice and support for people with Long Covid: a qualitative study**

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### **Abstract - The Problem**

Long Covid affects an estimated 2 million people across the UK. Symptoms of Long Covid vary and can have a significant impact on a person's daily life, affecting their physical, cognitive, and psychological wellbeing. People living with Long Covid (PwLC) can experience uncertainty around symptom management and the prospect of recovery. People may experience difficulties accessing primary care. Community pharmacies could provide a suitable and more accessible alternative for PwLC seeking advice about symptom management. Pharmacy staff supported the COVID-19 vaccine rollout, and the Royal Pharmaceutical Society acknowledge the role that pharmacists could play in supporting people with Long Covid. We aim to explore the role of community pharmacy in supporting the management of people living with Long Covid and develop training resources for pharmacy staff.

### **Abstract - The Approach**

Qualitative research using semi-structured interviews with PwLC and community pharmacy staff are on-going. Interviews with PwLC explore how they self-manage symptoms, seek advice and support, and engage with community pharmacy teams. Interviews with community pharmacy staff explore their knowledge and understanding of Long Covid, and their attitudes about their potential role in supporting PwLC.

Ethics obtained from Keele University Research Ethics Committee (Ref:0791). Patient Advisory and Expert Advisory Groups have been involved in all aspects of the research. Co-investigators TB and GJ have lived experience of Long Covid and are supporting data collection and analysis.

### **Abstract - The Findings**

14 interviews have been completed at time of abstract submission (PwLC [n=8]; pharmacy staff [n=6]). Early findings suggest that PwLC regularly attend their community pharmacy but do not frequently discuss or seek advice about Long Covid. PwLC suggest that pharmacy staff could offer advice on symptom management, guidance on over-the-counter medication and supplements, or signposting to support groups. Pharmacy staff report varied understanding of Long Covid and limited contact with PwLC. They feel that training on identification and signposting to appropriate and evidence-based resources would be useful. Participants expressed concerns about capacity in community pharmacies to take on additional work.

### **Abstract - The Implications**

Working with the Centre for Postgraduate Pharmacy Education, we will use findings to inform the development of a co-produced training resource for community pharmacy staff to better support PwLC.

### **Funding acknowledgement**

This study/project is funded by the NIHR [RfPB Reference NIHR205384]. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**215**

### **The impact of income on people living with arthritis' use of strategies to manage the out-of-pocket costs of healthcare and medicines in Australia.**

Jane Desborough<sup>1</sup>, Louise Hardy<sup>2</sup>, Elisabeth Huynh<sup>1</sup>, Aidan Hickey<sup>1</sup>, Anne Parkinson<sup>1</sup>, Jillian Kingsford Smith<sup>1</sup>, Danielle Butler<sup>1</sup>, Kamania Butler<sup>1</sup>, Cam Donaldson<sup>1</sup>, Fiona Hodson<sup>3</sup>, Samar Ibrahim<sup>1</sup>, Hsei-di Law<sup>1</sup>, Charles Maskell-Knight<sup>1</sup>, Andini Pramono<sup>1</sup>, Julie Veitch<sup>1</sup>, Leanne Watts<sup>1</sup>

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#### **Abstract - The Problem**

Australia's universal healthcare scheme aims to optimise access to healthcare through reducing out-of-pocket costs (OOPC) for those who can least afford them. Understanding the strategies people living with arthritis (one of the most prevalent chronic conditions in Australia) use to manage OOPC, and how these differ between income groups in this population, provides important understanding of the true impact of these policies across socioeconomic tiers.

#### **Abstract - The Approach**

We surveyed people living with arthritis (n=760) and compared the strategies that they used to manage OOPC across six income brackets: 1. \$0-18,000, 2. \$18,001-\$45,000, 3. \$45,001-\$80,000, 4. \$80,001-120,000, 5. \$120,001-\$180,000, and 6. >\$180,000. Data were analysed using multiple logistic regression models adjusting for income and other demographics with odds ratios (OR) reported. A chi-squared test assessed the overall significance of covariates.

#### **Abstract - The Findings**

Income was significantly associated with the decision to pay for healthcare expenses in lieu of basic living expenses (chi<sup>2</sup>=28.10, p=0.00), with those earning \$18,001-\$45,000 equally likely to make this trade-off as the lowest income group (OR=0.92, p= 0.78), whereas those in the highest three income brackets were less likely (OR range: 0.24-0.5, p<0.1). There was also a significant association between income and the decision to pay for basic living expenses in lieu of health expenses (chi<sup>2</sup>=14.97, p=0.01), with people in the highest income bracket almost 3 times less likely than those in the lowest income bracket to make this decision (OR=0.34, p=0.05).

### **Abstract - The Implications**

Our findings indicate that due to OOPCs, people in the lowest income brackets, the priority group for policies aimed at reducing OOPCs, are foregoing key aspects of care and some basic human necessities. These findings highlight policy gaps in achieving equity of health financing in Australia.

### **Funding acknowledgement**

This research is funded the Australian Research Council, Discovery Early Career Researcher Award #DE220100663, The Real Price of Health: Experiences of Out-of-Pocket Costs in Australia

222

### **The Hormone Effect (T.H.E) project - Co-design of a digital data collection tool to capture lived experience of hormonal contraception.**

Rebecca Mawson

University of Sheffield, Sheffield, United Kingdom

### **Abstract - The Problem**

Contraception is widely used across the UK with 26% of women aged 16 to 49 using hormonal methods, yet 12% of users will discontinue the method within 6 months. With increasing unplanned pregnancy and abortion rates in the UK, we need to explore reasons for lack of engagement with hormonal contraception. Despite research confirming that physiology can cause differential experiences of side effects, no further studies offer greater clues about what type of contraceptive might suit one individual more than another. Abortion rates are at their highest levels with a 14% decrease in the use of hormonal contraception due to hesitancy and fear of side effects. Vast numbers of contraception users feels they are not listened to and have their side effects normalised by healthcare practitioners.

### **Abstract - The Approach**

This project used co-design and community participation to assess the feasibility and usability of a digital data collection tool for capturing self-reported hormonal contraception effects in users from underserved/under-represented populations.

### **Abstract - The Findings**

There has been active engagement in the co-design process, there is a clear need for apps for women health. The use of an app is something most individuals of reproductive age can do via a smart phone and offer a discrete and personalised way of engaging with health needs. So far, the underserved communities we work with are keen to develop more women's health technologies to reduce inequalities caused by stigma, shame and patriarchal medical interactions with healthcare providers.

## **Abstract - The Implications**

FemTech (Female technology) is one of the fastest-growing areas of digital health. However, commercial companies rather than academic institutes drive much of the innovation. Our project presents a unique and vital academic contribution to this rapidly evolving field. By developing our proposed technology within an academic institution, we can create an open-source resource that others can use to understand hormonal effects further. Using a self-reported data collection tool would be the first time we will have explored the lived experience of hormonal contraception in real-life settings, opening up new avenues for understanding and improving women's health.

## **Funding acknowledgement**

This has been funded by South Yorkshire Digital Health Hub.

**224**

## **Systematic review of the differences between trial-eligible and trial-ineligible patients in real-world populations**

Michael Holder<sup>1</sup>, Katherina Schmidt-Mende<sup>2</sup>, Kieran Sweeney<sup>3</sup>, Daniel Morales<sup>1</sup>, Bruce Guthrie<sup>3</sup>

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<sup>3</sup>University of Edinburgh, Edinburgh, United Kingdom

## **Abstract - The Problem**

Clinical guidelines are created using the best available evidence, which usually takes the form of meta-analyses of randomised controlled trials (RCTs). However, there are concerns about the external validity and generalisability of RCTs, due to a history of disproportionate or complete exclusion of certain groups from trials, such as women, older people, and people with co-morbidities and multimorbidity, casting doubts on whether guidelines can be applied universally. The aim of this study was to find differences between people who are eligible and ineligible for RCTs in physical health conditions when the eligibility criteria are applied to a population with the same condition.

## **Abstract - The Approach**

The protocol was registered on PROSPERO (CRD42023415960). We undertook a search of MEDLINE and EMBASE. Title/abstract screening, full-text review, data extraction and risk-of-bias assessment were all undertaken by two reviewers independently. When the same comparison was made for three or more different trials, the median and interquartile ranges (IQR) were calculated for means or medians of continuous variables (e.g., age) and proportions of binary variables (e.g., sex) and compared using Wilcoxon signed-rank test. Variation in age and sex were assessed using linear regression, adjusted for condition, trial setting, trial funding, date of publication and risk of bias.

## **Abstract - The Findings**

Fifty studies were included in the analysis, examining 127 unique trials in 53 different comparison populations. There was no difference between the median age of the trial-eligible compared with the trial-ineligible ( $p=0.866$ ), but women were disproportionately ineligible ( $p=0.009$ ). Certain co-morbidities were more common in the trial-ineligible, such as cancer ( $p=0.041$ ) and anaemia ( $p=0.024$ ), while hypertension and regular statin prescriptions were less common in the trial-ineligible ( $p=0.35$  and  $p<0.001$ ). The trial-ineligible had more severe manifestations of the trial disease ( $p=0.028$ ), were more likely to experience serious adverse events ( $p=0.035$ ), and less likely to experience treatment response ( $p<0.001$ ), but there was no difference in the proportion who died ( $p=0.616$ ). Variation in age and sex is in progress.

### **Abstract - The Implications**

Women are disproportionately ineligible for clinical trials. Trials often recruited people at higher cardiovascular risk, but people ineligible for trials were more likely to experience adverse outcomes and less likely to experience treatment benefits.

### **Funding acknowledgement**

Dr Holder was supported by NHS Education for Scotland and the Wellcome Trust Multimorbidity Programme for Healthcare Professionals (223499/Z21/Z). The funders had no role in the development of study design, data collection and interpretation, or writing of the final report.

**230**

### **Using AI to predict progression of respiratory tract infection from sounds captured on a smartphone**

Nick Francis<sup>1</sup>, Jackie Seely<sup>1</sup>, Kate Martinson<sup>1</sup>, George Rizos<sup>2</sup>, Evelyn Zhang<sup>2</sup>, Anna Barney<sup>1</sup>, Atiyeh Alinaghi<sup>1</sup>, Cecilia Mascolo<sup>2</sup>

<sup>1</sup>University of Southampton, Southampton, United Kingdom. <sup>2</sup>University of Cambridge, Cambridge, United Kingdom

### **Abstract - The Problem**

Respiratory tract infections (RTI) are one of the most common disease known to humans and a common reason for presenting in primary care and antibiotic prescribing. Most RTI are self-limiting, but patients worry about getting worse and there are no reliable prognostic tools. Researchers have been exploring the audio recordings to predict outcomes in patients with COPD, pneumonia and COVID-19, with mixed results, but have primarily used a single audio recording. We hypothesised that respiratory sounds may be useful in predicting disease progression for RTI and that longitudinal data may improve prediction over single recordings. This study aims to explore the feasibility of conducting a larger observational study.

### **Abstract - The Approach**

We recruited two cohorts through general practices and media awareness campaigns to provide clinical and audio data via a smartphone app: 1) adults without RTI to provide baseline data, and further data if

they develop an RTI, and 2) adults who currently have an RTI for 7 days or less. Participants provided consent and demographic and clinical data through the app. Cohort 1 participants provided audio (breathing, speaking, coughing) data at baseline and again if they developed symptoms of an RTI. Cohort 2 participants were asked to provide audio and clinical data daily until they had recovered. Deep learning models that had been pre-trained on publicly available data were used to analyse the audio data.

### **Abstract - The Findings**

As of 20<sup>th</sup> January, we had recruited 242 cohort 1 and 194 cohort 2 participants. At present, only 27% of the cohort 2 participants provided data on more than one day. We have already been able to achieve a sensitivity of 74.3% for detecting RTI from the audio data. Data collection and analysis continues. Up to date analyses will be presented at the conference.

### **Abstract - The Implications**

We have identified that getting participants to record data daily for the duration of their RTI is challenging and are conducting a stakeholder event to explore ways of addressing this. However, early results are encouraging for detecting RTI and warrant further investigation into this approach.

### **Funding acknowledgement**

Part of this work is funded through project "RELOAD: REspiratory disease progression through LOngitudinal Audio Data machine learning", awarded by UKRI through the call "UKRI AI innovation to accelerate health research".

**239**

### **From Hospital to Home: A Retrospective Analysis of Care Utilisation and Errors for Older Adults Following Hospital Discharge**

Rachel Spencer, Annabelle Long

University of Warwick, Coventry, United Kingdom

### **Abstract - The Problem**

Discharge from hospital can be risky for older patients with multi morbidity and polypharmacy. A quarter of older patients experience potentially preventable adverse events following a hospital discharge, many due to ineffective communication. This work is part of an interventional study to improve communication between older patients/informal carers and GP's following discharge (GP-MATE). We present novel findings from our baseline cohort including insights not found in routinely collected data.

### **Abstract - The Approach**

Data were collected direct from electronic health records by a clinician research team as part of a feasibility study of GP-MATE. CAG approval was granted to view notes without patient consent. Seven general practice sites in Warwickshire contributed records for patients aged  $\geq 65$  discharged in the year Oct 22- Oct 23 from admissions  $\geq 1$  day in length.

### **Abstract - The Findings**

This retrospective cohort (n= 264) had a mean age of 77.4 years. 53% were male and 80% were white (England average = 81%). The median stay in hospital was 3 days. 69% were emergency admissions. 25% were readmitted within three months (14% within one month). Three quarters of readmissions were related to the original admission (as judged by the academic clinician reviewers). Almost 20% required an ambulance call out, half these led to an A&E visit. A further 10% visited A&E. Two thirds had an appointment related to the admission with their practice within three months of admission and almost a quarter had two or more. Economic costing will be presented.

61% of the discharge summaries contained an action for primary care to complete, nearly half of which were medication changes. The overall error rate was 21%. Harms were rare.

### **Abstract - The Implications**

This cohort study highlights how commonly older people need further intervention following a hospital admission. Directly attributable readmissions occur long past the standard 1 month cut off, despite high levels of input from general practice. Our results highlight the general practice workload for this cohort. Potential for error and harm in primary care remains but, tentatively, shows some improvement to our previous work a decade ago. This cohort will be used to compare to those who use the GP-MATE tool.

### **Funding acknowledgement**

"Rachel Spencer [Advanced Fellowship, NIHR301328] is funded by the NIHR for this research project. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR, NHS or the UK Department of Health and Social Care."

**240**

### **AI-guided point of care ultrasound to diagnose deep vein thrombosis in primary care**

Kerstin Nothnagel

University of Bristol, Bristol, United Kingdom

### **Abstract - The Problem**

Deep vein thrombosis (DVT) affects 1–2 per 1000 people annually. Diagnosing DVT typically requires specialist hospital scans, which can be challenging for elderly patients, those with chronic conditions, or mobility issues. AI-assisted point-of-care ultrasound (POCUS) with handheld probes offers a potential solution, enabling non-expert operators to perform scans in primary care settings. This study evaluates the accuracy and feasibility of AI-guided DVT diagnosis outside hospital settings.

### **Abstract - The Approach**

A diagnostic accuracy study was conducted in primary care. Healthcare Assistants (HCAs) used AI-guided handheld ultrasound probes to scan patients with suspected DVT. Specialists remotely assessed scan quality, and adequate scans were analysed for diagnostic accuracy. The reference standard was NHS sonographer-conducted scans.

### **Abstract - The Findings**

This is preliminary data, as the analysis is still ongoing:

Data collection has been completed, with 520 eligible scans being analysed. Each scan is being assessed for image quality (ACEP scoring) and classified as either compressible or incompressible.

39.7% of scans were indeterminate.

27.1% were of insufficient quality.

28 scans were classified as DVT-positive, with 31.2% of scans suitable for remote proximal DVT exclusion, achieving sensitivity and specificity rates of 92.9% and 32.5%, respectively. Confirmed analysis results will be presented at the July conference.

### **Abstract - The Implications**

AI-guided DVT diagnostics could improve access for patients with mobility issues or chronic conditions by enabling faster diagnosis and reducing complications. In this study, only a third of scans were suitable for remote diagnosis, with the rest requiring NHS sonographer follow-up.

Several factors contributed to this, including limited training (HCAs received only one hour before recruitment) and time constraints during scanning. Additionally, Avgerinos et al. demonstrated that communication between operators and remote reviewers could improve scan suitability, increasing it to 84%.

Further research is needed to assess real-world feasibility. Despite challenges, AI-guided diagnostics could lower NHS costs by reducing referrals and, if optimised, significantly improve DVT diagnosis in primary care.

#### Patient and Public Involvement (PPI)

PPI shaped study materials, lay summaries, and interview questions, ensuring patient-centred and ethical research.

#### Funding acknowledgement

This 3-year PhD project has been funded by the SPCR. Additional funding for the project's realisation has been provided by RCF Type II funding, ICB BNSSG additional funding, and funding from the Senior Investigator Award. Furthermore, the study was adopted by the CRN, allowing to utilise their resources for participant recruitment.

**241**

#### **Improving engagement in primary care with green social prescribing for older patients living in deprived areas: Development of a digital toolkit ("Deep Green").**

Bruce Mason<sup>1</sup>, Tricia Tooman<sup>1</sup>, Stewart Mercer<sup>1</sup>, Maria Wolters<sup>1,2</sup>, Sue Lewis<sup>1</sup>, Katie Hawkins<sup>3</sup>, Ian Mackenzie<sup>4</sup>, Helen Frost<sup>1</sup>

<sup>1</sup>University of Edinburgh, Edinburgh, United Kingdom. <sup>2</sup>OFFIS Institute for Information Technology, Oldenburg, Germany. <sup>3</sup>The Access Practice, Edinburgh, United Kingdom. <sup>4</sup>NHS Lothian, Edinburgh, United Kingdom

#### **Abstract - The Problem**

Health inequalities are widening in the UK. In Scotland there is a 25-year gap in healthy life expectancy between the most and least deprived deciles of the population. Green Social Prescribing (GSP) is a key policy response, but its provision is inconsistent. Targeting patients living in deprived areas for referral to GSP holds potential to mitigate health inequalities by improving the health and wellbeing of this group. We aimed to address this through developing and testing a 'digital toolkit' to support referral to GSP in primary care with a focus on addressing inequalities in provision based on age and deprivation.

#### **Abstract - The Approach**

We used a mixed methods approach, based on MRC guidelines for developing and evaluating complex interventions. The toolkit development was informed by a systematic review, a co-design workshop and

stakeholder interviews to identify contextual factors. Thematic analysis of the review and interview data used a socio-ecological framework to identify issues at personal, institutional and policy levels.

### **Abstract - The Findings**

For the review, we screened 4,303 papers and included 33. Key stakeholders participated in a workshop (n=20) and qualitative interviews (n=20). Key findings from the review and stakeholder data included the need for multiple pathways for GSP, practical education about GSP, monitoring outcomes, and addressing funding issues. Key barriers for practitioners were lack of awareness of GSP options, time to explain GSP for complex patients, and difficulty monitoring patients. The main barrier for providers was inconsistent funding. Facilitators for GSP in primary care included link workers, adoption of a 'green ethos' and 'champions' in the practice, and provision of accessible evidence-based information on GSP to share with patients.

### **Abstract - The Implications**

There is enthusiasm for GSP as a holistic approach but there are concerns about implementation, lack of information about available options, difficulties integrating GSP into a medical consultation and perceptions that patients and clinicians might be resistant. A link worker is a key facilitator to enable GSP for people with complex needs. Providing a toolkit of resources for GSP may facilitate referral to nature-based activities if there is a strongly supportive policy context and sustainable funding for referral.

### **Funding acknowledgement**

The authors are supported by the Advanced Care Research Centre (ACRC), which is funded by Legal and General PLC (as part of their corporate social responsibility (CSR) programme, providing a research grant to establish the independent Advanced Care Research Centre at University of Edinburgh). The funder had no role in the conduct of the study, interpretation, or the decision to submit for publication.

**244**

### **Feasibility and acceptability of UTI research in care homes: research staff, care home staff and resident views on the DISCO UTI study**

Abi Moore<sup>1</sup>, Gail Hayward<sup>1</sup>, Margaret Glogowska<sup>1</sup>, Chris Butler<sup>1</sup>, Mark Lown<sup>2</sup>, Beth Stuart<sup>3</sup>, Alastair Hay<sup>4</sup>, Mike Moore<sup>2</sup>, Paul Little<sup>2</sup>, Kristin Veighey<sup>2</sup>, Mandy Wootton<sup>5</sup>, Elizabeth Miles<sup>2</sup>, Chris Wilcox<sup>2</sup>, Nick Francis<sup>2</sup>

<sup>1</sup>University of Oxford, Oxford, United Kingdom. <sup>2</sup>University of Southampton, Southampton, United Kingdom. <sup>3</sup>Queen Mary University of London, London, United Kingdom. <sup>4</sup>University of Bristol, Bristol, United Kingdom. <sup>5</sup>Public Health Wales, Cardiff, United Kingdom

### **Abstract - The Problem**

The diagnosis and treatment of urinary tract infection (UTI) is common for care home residents. However, establishing an accurate diagnosis is challenging in this population. Many care homes are research naïve. The DiagnoSing Care hOme UTI Study (DISCO UTI) aimed to assess both feasibility and acceptability of conducting a prospective cohort study of UTI in care home residents.

### **Abstract - The Approach**

We conducted semi-structured interviews with care home staff, participating residents and consultees who were involved in DISCO UTI. We also carried out a focus group with research staff who had delivered the study in the care homes. Interviews were audio-recorded and transcribed verbatim. Thematic analysis was facilitated by NVivo software.

### **Abstract - The Findings**

Care home residents thought that the research question was important, and they valued the opportunity to help people like themselves in the future. Those with personal experience of UTI were particularly motivated to participate. Care home staff agreed that UTI was a highly relevant topic. Providing urine samples was acceptable for most participants, and many said they would have been happy to give more urine samples and blood samples if needed.

Research staff identified various challenges in carrying out research in the care home setting. There was a high administrative burden associated with getting in touch with potential consultees. They described communication challenges including the need for research samples not being handed over between staff and care home staff forgetting to notify the team about possible UTI episodes. They said it had been important to be aware of the daily routine in the home, and there was a risk that residents were not available for site visits if they were in activities. Not having a dedicated, private space to carry out research tasks was a particular issue in smaller care homes.

### **Abstract - The Implications**

DISCO UTI was acceptable to both participants and care home staff, and research was welcomed in this setting. When planning research in care homes it is important to consider physical space, communication between the care home staff and research team, and to appreciate that research tasks are likely to take longer than they would in an clinical setting.

### **Funding acknowledgement**

This study is funded by the National Institute for Health Research School for Primary Care Research (Grant 578). Additional support is provided by Abigail Moore's Wellcome Trust Doctoral Fellowship Grant, RCGP Scientific Foundation Board Grant and the NIHR Healthtech Research Centre in Community Healthcare.

245

**Maternal anaemia during pregnancy is associated with an increase in the risk of offspring congenital heart disease: a case-control study using linked electronic health records in England**

Cynthia Wright Drakesmith, Manisha Nair, Margaret Smith, Clare Bankhead, Duncan Sparrow  
University of Oxford, Oxford, United Kingdom

### **Abstract - The Problem**

Congenital heart disease (CHD) affects 1-2% of the population worldwide and is a major cause of child mortality and morbidity. While 30% of cases are attributed to genetic causes, environmental factors influencing CHD remain largely unknown. Our previous research in murine models has demonstrated maternal iron deficiency anaemia as a risk factor for CHD in offspring. We have therefore used Electronic Health Records to examine the association between maternal anaemia in early pregnancy and congenital heart disease (CHD) in offspring.

### **Abstract - The Approach**

This study employed a matched case-control study design and included women in England pregnant between January 1998 - October 2020 who also had a haemoglobin measurement recorded in the first 100 days of pregnancy. Data was extracted from the Clinical Practice Research Datalink (CPRD) GOLD database using the CPRD Pregnancy Register and Mother-Baby Link. There were 2,776 cases with a child diagnosed with CHD matched to 13,880 controls, women without a child diagnosed with CHD. Anaemia was classified as haemoglobin below 110g/l following the World Health Organisation definition. We used conditional logistic regression analysis and adjusted for possible maternal demographic and health-related confounders.

### **Abstract - The Findings**

123 (4.4 %) of cases and 388 (2.8%) of controls had anaemia. After adjusting for potential confounders, the odds of giving birth to a child diagnosed with CHD was 47% higher among mothers with anaemia (adjusted OR 1.47, 95% CI 1.18,1.83,  $p<0.001$ ).

### **Abstract - The Implications**

This observed association between maternal anaemia in early pregnancy and increased risk of offspring CHD supports our recent findings in a murine model. Further studies in larger datasets allowing better adjustment for confounding are needed to validate these findings.

### **Funding acknowledgement**

British Heart Foundation (FS/17/55/33100, FS/SBSRF/22/31022, RE/18/3/34214); the Medical Research Council (MR/W029294/1); the National Institute for Health and Care Research (NIHR00172).

**246**

### **Health Inequalities: An investigation into health care student preferences for pedagogical approaches**

Lucy Baxter, Achele Agada, Halia Shah, Sonia Elks, Judith Ibison

### **Abstract - The Problem**

Health inequalities have been increasingly prioritised in postgraduate healthcare education in recent years(1), but representation in undergraduate education is patchy in form and content. Some studies suggest opportunistic exposure to cases or isolated lectures can leave students feeling disengaged and lacking understanding, or even perpetuate harmful stereotypes(2). Others suggest as a topic it is perceived as a non-essential piece of professionalism training(3).

This study is designed to identify how students at City St George's across the healthcare courses would prefer to learn about health equity.

This is a mixed methods study. We will collect quantitative data with a digital survey, informed by the literature and student colleagues, which will allow us to sample a large population of students. We will use descriptive frequency analysis of this data and it will guide our questions for the focus groups. Our focus groups will collect deeper qualitative data which will be analysed using reflective thematic analysis, with topic guides developed by the existing literature and the responses to the survey.

Preliminary surgery data has shown a wide range of student opinions and experiences. We will produce a final report detailing a summary of our findings which we will be distributing to all healthcare course leads. This will be complete by May 2025. Our question to ASME attendees is how can the findings in this report be utilised to inform future curriculum reform to ensure Health Equity is fully and appropriately included in student learning.

### **Abstract - The Approach**

This is a mixed methods study. We will collect quantitative data with a digital survey, informed by the literature and student colleagues, which will allow us to sample a large population of students. We will use descriptive frequency analysis of this data and it will guide our questions for the focus groups. Our focus groups will collect deeper qualitative data which will be analysed using reflective thematic analysis, with topic guides developed by the existing literature and the responses to the survey.

### **Abstract - The Findings**

Preliminary survey showed a wide range of student opinions and experiences.

### **Abstract - The Implications**

We will produce a tool to support integration of Health Equity into curriculums.

### **Funding acknowledgement**

We received a student staff partnership grant from the university for this

**250**

**Communiversy- A participatory and peer research training approach to improve physical activity in communities with high socio-economic deprivation.**

Tracy Ibbotson<sup>1</sup>, Bhautesh Jani<sup>1</sup>, Sara Macdonald<sup>1</sup>, Jane Cowie<sup>2</sup>, Nic Dickson<sup>1</sup>, Susan Grant<sup>1</sup>, Hannah Scobie<sup>1</sup>

<sup>1</sup>University of Glasgow, Glasgow, United Kingdom. <sup>2</sup>Annexe Communities, Glasgow, United Kingdom

### **Abstract - The Problem**

Our upcoming project is designed to address one of the most pressing challenges in public health: low levels of physical activity in communities with high socioeconomic deprivation, using a community participatory and peer research training approach. This project aims to establish the Partick Communiversality partnership between the Partick Annexe community and the University of Glasgow to co-design a case study to investigate barriers to physical activity in the local community. This presentation highlights evaluation of an innovative approach of involving under-represented groups as peer researchers.

### **Abstract - The Approach**

Peer researchers from the local community were recruited through three information sessions at the Annexe and will participate in an induction and four training workshops at the University over three months. Arts-based methods will be used to co-design a case study of physical activity in Partick community.

### **Abstract - The Findings**

Information Sessions will introduce the concept of physical activity interventions, the importance of public involvement, and the role of peer researchers, encouraging local engagement.

Training Sessions will cover topics such as research ethics, arts-based methods, scenario development and data analysis.

A community participatory research approach, informed by the research training, will be used to co-design a case study of physical activity in the local community. This will include:

- a review of the literature that focuses on causes of low physical activity.
- mapping local service provision for exercise and physical activity
- translate findings from the literature review, using arts-based materials to produce materials that are accessible for the local community.
- co-design recruitment materials, and data collection tools to record the most important motivators/demotivators for physical activity.

### **Abstract - The Implications**

Beyond the immediate research outcomes, our work is designed to have lasting benefits for the community and beyond. By empowering individuals from areas of socioeconomic disadvantage to attain research skills and involve them in the design of future research initiatives, we aim to create a sustainable impact. This approach has the potential to foster a sense of research ownership and

engagement within communities, improving physical activity levels and reducing health disparities in the longer term.

### **Funding acknowledgement**

NIHR PDG Developing Innovative, Inclusive and Diverse Public Partnerships

252

### **Exploring the role of primary healthcare professionals in quality approving information and advice in peer online support groups: qualitative interview study**

Bethan Treadgold<sup>1</sup>, John Campbell<sup>1</sup>, Neil Coulson<sup>2</sup>, Jeffrey Lambert<sup>3</sup>, Emma Pitchforth<sup>1</sup>

<sup>1</sup>Exeter Collaboration for Academic Primary Care, University of Exeter Medical School, Exeter, United Kingdom. <sup>2</sup>Lifespan & Population Health, University of Nottingham, Nottingham, United Kingdom. <sup>3</sup>Department for Health, University of Bath, Bath, United Kingdom

#### **Abstract - The Problem**

The use of health-related peer online support groups (e.g., discussion forums and social media groups) to aid self-management of health issues has become increasingly popular. However, there is growing concern from healthcare professionals and users of peer online support groups, regarding the accuracy and safety of user-generated content, and the potentially detrimental impact of misinformation on health outcomes. The aim of this study was to explore the role of primary healthcare professionals in quality approving information and advice in peer online support groups.

#### **Abstract - The Approach**

We conducted online semi-structured qualitative interviews with healthcare professionals who had experience in engaging with or otherwise signposting patients to, peer online support groups, as well as members of the public who had experience of seeking information and advice from peer online support groups. Interviews were audio-recorded, transcribed, and analysed using reflexive thematic analysis.

#### **Abstract - The Findings**

18 interviews were conducted. Healthcare professionals and users of peer online support groups highlighted the value in medical experts being involved in moderating information and advice. Users of peer online support groups noted feeling reassured in knowing that medical experts had overseen content, for quality purposes. Healthcare professionals emphasised that dedicated time within contractual hours, payment, and training are required for medical experts to become more actively engaged with peer online support groups. Users of peer online support groups expressed the preference in medical experts being engaged as and when common topics arise, rather than overseeing every discussion. It was perceived to be important that peer online support groups remain as a safe space for users to freely discuss matters.

#### **Abstract - The Implications**

Primary healthcare engagement with peer online support groups can promote patient safety and improved self-management of health. Emerging findings could inform career opportunities for primary healthcare, with quality assurance of online health information being a current gap in provision.

### **Funding acknowledgement**

This study was funded by the UK National Institute for Health and Care Research (NIHR) School for Primary Care Research (C079). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**259**

### **Embedding patient voice throughout the research cycle: reflections from the BADGER study on the value of engaging different patient groups**

Rosie Harrison, Alice Faux-Nightingale, Claire Burton, John Haines, Clare Jinks, Natalie Knight, Kayleigh Mason, Victoria Welsh

Keele University, Keele, United Kingdom

#### **Abstract - The Problem**

Best practice is to embed Public and Patient Involvement and Engagement (PPIE) throughout the research cycle and is often a requirement of funding applications. PPIE groups are typically small in number, and may struggle to recruit a diverse range of people leading to over-representation of some voices and the continued absence of others within healthcare research.

#### **Abstract - The Approach**

We developed a PPIE strategy in BADGER which engages with different PPIE groups across the research cycle, with the aim of ensuring our study processes reflect a wide range of perspectives and our dissemination materials are accessible and relevant for the diverse needs of the public. The impact of PPIE work is monitored throughout this mixed-methods study.

#### **Abstract - The Findings**

In addition to our lay co-applicant, who is an active member of the study team, we have a Research User Group who meet regularly and have informed the study processes, patient facing documents and will inform the analysis and dissemination.

We are holding six 'community conversations' over the study with two community groups, consisting of people from diverse ethnic and socio-economically disadvantaged backgrounds. These sessions have informed data collection strategies including terminology to use with patients, and future sessions will inform dissemination materials to meet the diverse information and communication needs of these communities.

We will hold two discrete engagement events with a community group consisting of a younger demographic, and a stand at a research roadshow event open to the general public. These sessions will inform the content and delivery of our dissemination materials through gaining perspectives from a wider population.

Interim progress has demonstrated the benefit of gaining perspectives from different PPIE groups in informing study processes, such as symptoms and conditions to explore in electronic health records, and improving the accessibility of patient materials. Future PPIE work aims to co-create dissemination materials accessible to the public.

### **Abstract - The Implications**

Developing early relationships with a range of PPIE groups has embedded diverse patient input throughout this mixed-methods study. Research can benefit from embracing new approaches to PPIE, including synthesising input from different groups and different engagement activities, to help primary care meet the needs of a diverse population.

### **Funding acknowledgement**

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**261**

### **Exploring the work of healthy living: developing a taxonomy of prevention burden through secondary analysis of qualitative data.**

Hamish Foster, Sara Macdonald, David Blane, Catherine O'Donnell

University of Glasgow, Glasgow, United Kingdom

### **Abstract - The Problem**

Non-communicable disease (NCD) prevalence is increasing. Modification of health behaviours (e.g., smoking/diet) could reduce NCDs but current policies/interventions for health behaviours rely on theories which fail to consider wider socioeconomic factors (e.g., poverty). No existing theoretical framework articulates the work (e.g., cognitive, cultural) required of individuals to contend with socioeconomic factors when making healthy behavioural change.

A new theory that incorporates the work required of individuals to live in a way that prevents NCDs could enhance policies/interventions by embedding the socioeconomic influences of healthy living. The purpose of this qualitative research is to conduct the first stage of developing a new theoretical framework with which to examine the work of preventing NCDs – Burden of Prevention Theory (BOPT).

### **Abstract - The Approach**

This initial development work aims to build a BOPT taxonomy, describing and classifying the work done by individuals to make and sustain healthy change within wider structural contexts and prevent NCDs. Particular attention will be paid to socioeconomic deprivation where prevention burden is likely to be greatest.

This work involves secondary analysis of around 50 interviews/focus-groups purposively sampled from four pre-existing qualitative datasets. Each prior research project, for which the data were collected, focussed on perspectives of primary care patients and the public around health living and socioeconomic contexts.

Reflexive thematic analysis will be used to re-analyse the data. Generated themes and constructs will be mapped using Normalisation Process Theory, a sociological implementation theory used to understand the processes by which change is embedded and sustained.

### **Abstract - The Findings**

Preliminary findings highlight types of work that are rarely considered in policies/interventions for health behaviours at the level of the individual. For example, relational work with carers/relatives involved in significant long-term changes and the cognitive load and time required to consider and enact alternative healthier options.

### **Abstract - The Implications**

The research will generate a new taxonomy of prevention burden which systematises the 'burden of prevention' felt by individuals or communities and refocuses policy/interventions on the underlying socioeconomic drivers for healthy living. This new theoretical framework can then be empirically tested in future work to investigate health behaviours or evaluate related policies/interventions.

### **Funding acknowledgement**

HF is supported by Royal College of General Practitioners Scientific Foundation Board (reference: SFB-2023-03) for this work. Remaining co-authors receive no funding for this work.

**262**

## **Understanding the Significance of Places and Communities for Social Prescribing: State of the Art and Future Directions**

Emilie McSwiggan<sup>1</sup>, Eddie Donaghy<sup>1</sup>, Jackie Gulland<sup>1</sup>, Amy O'Donnell<sup>2</sup>, Stewart Mercer<sup>1</sup>

<sup>1</sup>University of Edinburgh, Edinburgh, United Kingdom. <sup>2</sup>Newcastle University, Newcastle, United Kingdom

### **Abstract - The Problem**

Social prescribing is a community-oriented approach to health, using local assets to address people's needs. However, the nature and scope of community resources varies considerably from place to place.

It is therefore important to understand what characteristics of communities are particularly relevant for social prescribing outcomes, and the impact of place-based differences.

### **Abstract - The Approach**

We conducted a state-of-the-art literature review to identify social prescribing research on the characteristics of places and communities. We conducted two searches: the first, across four academic databases, searched for all prior literature reviews on social prescribing. From these, we created a timeline, outlining key characteristics of each review, and identifying those with a 'partial' or 'complete' focus on place; synthesising their findings to draw out key themes. The second search was an exploratory search for primary studies on social prescribing which had an emphasis on place, with findings summarised descriptively.

### **Abstract - The Findings**

An overview timeline of 81 literature reviews was created. None had a 'complete' focus on concepts of place or community in relation to social prescribing, but 24 were 'partially' engaged. Thematically, these reflected several different perspectives, including: the healing or health-creating characteristics of places; the ways in which socially disadvantaged people engage with places; the effect of deprivation on places and communities; and the role of place within social prescribing systems. Some also advanced alternative concepts of place or community - for example, as digital, rather than physical, locations.

In addition, eight primary studies were found, which further supported these themes. Three studies in specific local areas enabled the particular features of those communities - such as a spirit of community cohesion, or a weaker or stronger voluntary sector - to be brought to light, and understood in the context of social prescribing.

### **Abstract - The Implications**

Given considerable variation in community resources across the UK, it is important to understand the impact this might have on social prescribing outcomes; particularly as this variation may be shaped by the same socioeconomic forces which also lead to health inequalities. This review reflects emerging approaches to the role of place or community for social prescribing, and suggests where future research could usefully expand our understanding.

### **Funding acknowledgement**

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## **Sustainable Healthcare: Understanding patient engagement and perceptions in general practice**

Florence Karaba<sup>1,2,3</sup>, Ana Raquel Nunes<sup>1</sup>, Olivia Geddes<sup>1</sup>, Nicky Thomas<sup>1</sup>, Helen Atherton<sup>3</sup>, Rachel Spencer<sup>1</sup>, Frederik Dahlmann<sup>1</sup>, Helen Twohig<sup>2</sup>, Jeremy Dale<sup>1</sup>

<sup>1</sup>University of Warwick, Coventry, United Kingdom. <sup>2</sup>Keele university, Newcastle, United Kingdom.

<sup>3</sup>University of Southampton, Southampton, United Kingdom

### **Abstract - The Problem**

There is growing recognition of the importance of primary care in addressing climate change. As the first point of contact in the healthcare system, general practice is at the forefront in responding to climate change related threats to community health. Efforts by general practice toward supporting the NHS net zero targets require considering patients' views to understand their concerns and ensure decarbonisation initiatives are supported by patients and their communities. However, little is known about patients' views on this topic. This study is designed to address this gap.

### **Abstract - The Approach**

Cross-sectional survey with patients randomly recruited from 12 general practices (in three ICS areas in England). To ensure that the sample captured the views of patients underserved by research, we also recruited from 24 community and faith groups in the vicinity of the participating practices.

The survey examines perceptions and attitudes towards the role of general practices in reducing greenhouse gas emissions and potential consequences of such actions.

### **Abstract - The Findings**

The response rate to the survey varied by practice. We will report on 186 responses received from 6 practices (i.e. exclude for the purposes of this presentation practices that produced less than 10 responses).

Findings indicate that 88% of respondents agreed that the government should do more to reduce greenhouse gas emissions, while only 52% felt that their general practice should do more (67% agreed the NHS should do more). This may signify that participants support decarbonisation in principle but not at the expense of the healthcare they receive. This is also supported by responses to a free-text survey question highlighting concerns over the diversion of limited resources from patient care, given ongoing staff shortages and long appointment waiting times.

### **Abstract - The Implications**

The findings underscore patient concerns about how decarbonisation initiatives may impact their care. These views need to be considered when balancing sustainability goals with patients' care needs and experience.

### **Funding acknowledgement**

This study was supported by the National Institute for Health Research (NIHR), grant number: 153231

**266**

### **Community Alternatives to aCute Hospitalisation for Older People who have Fallen (CAAtCH-falls)**

Sara McKelvie

University of Southampton, Southampton, United Kingdom

### **Abstract - The Problem**

Falls affect 30% of older adults in community settings, often contributing to conveyance to hospital for assessment and can lead to unplanned admissions. Primary and Community Health service providers are increasingly offering Community Alternatives to aCute Hospitalisation (CAAtCH) Assessment teams such including Urgent Community Response, Hospital at Home and Virtual wards. This study aims to understand what are the optimal components for acute community assessments of non-traumatic falls.

### **Abstract - The Approach**

This study plans to use a Realist Approach to understand "*What is required to implement a CAAtCH complex intervention for older people who fall at home; what works for whom, why and in what circumstances?*" The realist literature review and synthesis of the published and grey literature will allow examination of what is known to work for urgent community assessments for older people that have fallen. A further mixed methods study will investigate which CAAtCH interventions are available and accessible for older people who require an urgent falls assessment in the UK, informed by the Levesque (2013) Accessibility of Health Services framework. We plan to interview upto 30 participants who have service, operational and management leadership roles in CAAtCH services as key stakeholders. We will conduct a parallel national survey of staff participants in CAAtCH services based on themes from the literature review.

### **Abstract - The Findings**

This research study is currently in progress. The literature review has developed Context-Mechanism-Outcome configurations which will be tested further during the mixed methods data collection. Initial theories suggest accessibility and availability of CAAtCH services are affected by differences in rural-urban location, day-night provision and clinician-patient awareness of CAAtCH services.

## **Abstract - The Implications**

An increased focus on Primary and Community based management plans, has increased the need for this study to critically examine CAATCH-services for older people who have fallen. Understanding the current provision and gaps may help policy makers and services providers to plan for adaptable community based interventions targeting the needs of an ageing population.

267

## **Understanding the acceptability and implementation of HEPA filtration units in care homes: the AFRI-c trial process evaluation**

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## **Abstract - The Problem**

AFRI-c was a cluster randomized controlled trial (RCT) investigating the clinical and cost-effectiveness of portable high-efficiency-particulate-air (HEPA) filtration units in reducing respiratory infections in care home residents. This paper will report the findings from the AFRI-c mixed methods process evaluation which aimed to understand acceptability, fidelity, and implementation of the intervention, and contribute to the interpretation of effectiveness findings.

## **Abstract - The Approach**

Qualitative remote and face-to-face interviews were carried out with care home staff, residents, and relatives at AFRI-c sites. We purposively sampled homes for variation in terms of care home size (number of residents), type (nursing/residential), and index of multiple deprivation. Data analysis used reflexive thematic analysis and drew on normalisation process theory. Quantitative data was collected through staff and resident self-reported questionnaires on topics such as satisfaction with care home environment, and adherence to the intervention. Data analysis included descriptive and regression analysis where appropriate. Triangulation was used to integrate the qualitative and quantitative findings.

## **Abstract - The Findings**

HEPA air filter units did not interfere with everyday life or work within the home, and they were often 'forgotten' about. However, there were some concerns about cold air in the qualitative interviews. Participants in the intervention arm were more likely to be satisfied with the care home environment, but this was not statistically significant. Some staff reported feeling 'safer' in rooms with air filters. Self-reported fidelity to the intervention was high. We did not find evidence that the intervention changed infection control and prevention strategies. While staff felt it was a priority to prevent respiratory infections, residents had different attitudes, more concerned about their overall quality of care. Data

collection practices varied across the homes, and it is possible that this led to milder respiratory episodes being missed.

### **Abstract - The Implications**

HEPA air filters were generally acceptable within the care home setting. However, the AFRI-c study found that the HEPA filtration units did not prevent respiratory infections. Data collection practices may explain the low event rate in the AFRI-c trial. Preventing infections is an important priority for staff, but may be less important for residents and consultees.

### **Funding acknowledgement**

This work was funded by the National Institute for Health and Social Care (NIHR) Public Health Research (PHR) Programme NIHR129783.

**271**

### **Improving the Quality of Primary Care using Practice Based Research Networks: a scoping review**

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### **Abstract - The Problem**

Practice Based Research Networks (PBRNs) are research networks within primary care fostering collaborative relationships among clinicians and researchers, enabling rapid output of high-quality research to improve healthcare services. However, studies examining the impact of research networks has predominantly been conducted within hospital settings. This review examines the research conducted on the role of PBRNs in improving primary care quality, since strengthening primary care boosts the overall healthcare system

### **Abstract - The Approach**

The five-stage Scoping Review Framework by Arksey & O'Malley was used with recommendations from Levac et al. to identify relevant studies. The databases searched were Google, Google Scholar, PubMed, and EMBASE. Data extracted from the studies were charted before thematic analysis was conducted using guidelines by Braun & Clarke.

### **Abstract - The Findings**

The study's reviewed commonly observational and descriptive methods, and the most frequent study location was the USA. Thematic analysis revealed a general theme of 'Improved Patient Care' throughout all studies. This theme was further subdivided into two themes focusing on the role of PBRNs in clinical practice ('Improved Health Outcomes'), and their role in research (Identifying Gaps in Care & Knowledge). These subthemes were further divided into categories 'Evidence-based medicine' (EBM), 'Interdisciplinary care', 'Preventive care' and 'Guiding future research & policies'.

### **Abstract - The Implications**

PBRNs boost primary care, enhancing quality of care by implementing EBM in clinical practice, fostering collaborative skills and guiding research to address gaps identified in projects. However, many challenges need to be further investigated to utilise it in strengthening primary healthcare.

### **Funding acknowledgement**

We would like to thank Medisec Ireland for supporting this study's first author with the Medisec Ireland Student Research Bursary. We would also like to thank the Health Research Board, the Ireland East Hospital Group, and University College Dublin's College of Health & Agricultural Sciences, and School of Medicine.

**274**

### **Practitioners' perspectives on implementation of acute virtual wards: A scoping review**

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### **Abstract - The Problem**

Virtual wards provide a promising alternative to traditional 'bedded care' by facilitating early discharges and delivering acute care at home. They focus specifically on patients needing acute care, which would traditionally necessitate an in-hospital stay. Understanding clinicians' beliefs and attitudes is crucial for successful implementation and operation of Virtual wards. This scoping review explores practitioners' perspectives on the implementation of virtual wards.

### **Abstract - The Approach**

A total of 18 studies were included in the final analysis from the 201 studies identified initially through searches in PubMed, Cochrane, CINAHL, and Embase databases (2015–2024) following PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidelines. Thematic analysis was conducted using Braun and Clarke's framework to identify key insights.

### **Abstract - The Findings**

Thematic analysis revealed key themes related to implementation, quality of care, technology, training, and awareness. These themes highlight the challenges influencing the adoption and considerations for the operational success of virtual wards.

### **Abstract - The Implications**

Virtual wards demonstrate significant potential for delivering acute care efficiently and sustainably. However, challenges related to service design, patient safety, technology integration, and workforce training must be addressed to ensure their successful implementation and long-term efficacy.

### **Funding acknowledgement**

We would like to acknowledge support from University College Dublin's (UCD) School of Medicine, College of Health and Agricultural Sciences, and Summer Student Research Awards (SSRA) programme. Additionally, we extend our gratitude for funding support provided to study investigators received through the Dr Mary J. Farrell Scholarship, the UCD Clinical Research Centre, and the Health Research Board.

**278**

### **Characterising polypharmacy in home care services in the UK; a feasibility cohort study**

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### **Abstract - The Problem**

Polypharmacy, commonly defined as the concurrent use of five or more medications, is a growing concern in older adults and associated with increased risks of adverse drug reactions, hospital admissions, and mortality. Individuals receiving care at home often experience high levels of medication burden due to multiple long-term conditions, frailty, and functional dependency. Despite the increasing emphasis on community-based care, limited evidence exists on how home care is documented in UK primary care records or how reliably polypharmacy can be described in this setting. This feasibility study aimed to assess the potential for using routine electronic health records to characterise patients receiving home care and their medication patterns over time.

### **Abstract - The Approach**

A cohort was constructed using CPRD Aurum data comprising adults with recorded home care documentation. Follow-up began from the first home care record and continued until death, transition to residential care, transfer out, or administrative censoring. Polypharmacy was defined as the concurrent use of five or more medications based on prescription issue dates and durations, assessed

using longitudinal prescribing data. Medication use was summarised at multiple time points to reflect temporal patterns in prescribing. Descriptive analyses were conducted to summarise patient demographics, home care recording patterns, and the frequency of polypharmacy over time, including following transitions out of and returns to home care.

### **Abstract - The Findings**

Patients with recorded home care were generally in older age groups, with variation observed by age, sex, and region. A greater proportion appeared to be aged 75 and over. Gender distribution and regional coverage were broad, with some regions contributing larger patient groups. Patterns of polypharmacy were summarised at multiple time points, including around changes in care status. The number of concurrent medications varied across individuals and over time, and descriptive categorisations were used to support interpretation of prescribing trends.

### **Abstract - The Implications**

This approach highlights the potential for using routinely collected data to explore medication use in home care settings. The findings may support safer prescribing practices and inform approaches to medication management among older adults receiving home care, and may offer insights for policy and practice.

### **Funding acknowledgement**

This study is funded by the National Institute for Health and Care Research (NIHR) Newcastle Patient Safety Research Collaboration (PSRC). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

**279**

### **The Cost of a Fit Note: An Analysis of Economic Loss From English Primary Care Issued Fit Notes**

Ben Williamson

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### **Abstract - The Problem**

Macroeconomic challenges dominate the policy landscape, with lacklustre growth and unimpressive productivity widely acknowledged as fundamental challenges. The poor health of workers and a 'sick note culture' have been suggested as responsible for these economic headwinds. This project represents the first attempt to analyse the economic loss to society from Fit Note certificates issued by clinicians working in English Primary Care. There are no directly comparable studies in the literature.

### **Abstract - The Approach**

Using aggregate-level open-source data both human capital and friction cost methods are used to analyse the period April 2021 to December 2023. Temporal and regional variation is considered in the context of an evolving policy landscape. Sensitivity analysis has been conducted.

### **Abstract - The Findings**

This analysis estimates the annual loss incurred from Fit Notes issued by English Primary Care to be £14.0 billion in FY21-22 and £14.2 billion in FY22-23 (April 21 adjusted). Monthly estimates range from £434 million to £2.16 billion.

### **Abstract - The Implications**

These estimates demonstrate the magnitude of the ill health burden assessed by Primary Care clinicians in England. These figures underline the importance of the issue of Fit Notes and this work contributes to the wider policy discussion around certification of fitness for work, a salient topic across the political spectrum. Policymakers must ensure that the ill health responsible for the burden of Fit Notes remains a priority, but efforts to reduce these costs should also extend beyond health into related policy areas such as reforming statutory sick pay, reviewing disability assessment and optimising housing and transport.

### **Funding acknowledgement**

I am a serving officer in the Royal Navy. I have received no external funding.

**280**

### **What are students' perspectives of learning from, and performing, quality improvement and audit projects in primary care settings?**

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### **Abstract - The Problem**

Some students conduct QIP/audit work in primary care during their Student Selected Component (SSC) in their first clinical year. This may enhance students' knowledge of quality assurance in general practice and the role of GPs.

QI is a tool for evaluating changes in clinical practice; it is also a requirement for appraisals. Teaching of QI is received well (Peiris-John et al, 2020) and students find these projects empowering (Coster et al

2023). There are also implications for patients and staff development. However, research on the impact of QI partnerships between healthcare and higher education institutions is limited.

Barriers in GP placements include time pressures and staff knowledge (Jackson et al, 2018). Facilitating factors include supportive organisations, mentors and frequent check-ins (Godfrey-Harris, 2022).

Aim: To explore student perspectives of learning about Quality improvement/audit in primary care.

### **Abstract - The Approach**

SSC students who have completed a QI project or audit in primary care were invited to take part in a qualitative interview study.

Routinely collected feedback was appraised along with literature to develop a topic guide. Tutors were also interviewed.

Data analysis will involve a constructivist grounded theory approach; two authors will review data to generate codes which are then reviewed by a third author.

### **Abstract - The Findings**

6 tutor interviews and 7 student interviews have been completed. Students value learning about QI in clinical practice and self-directed learning, as well as new insights into general practice but feel underprepared. Experiences of supervision are positive, but students do not seem to be integrated into practices. Supervisors find the process rewarding; however, they would like protected time and guidance about assessment. Supervisors also seek room for more partnership building with the university.

### **Abstract - The Implications**

The SSC is a rewarding experience, with students acquiring skills, but both students and tutors want preparation and protected time. There is room for improvement in partnership building; through greater engagement with the university for tutors, involving students in their practices and sharing learning from projects.

### **Funding acknowledgement**

N/A

**286**

**Hairdressing Salons to improve the uptake of NHS Health Checks: BELONG-Study Evaluation**

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## **Abstract - The Problem**

### **Background:**

Low uptake of NHS health checks among women in deprived and ethnically diverse neighbourhoods contributes to delayed detection of cardiovascular disease (CVD) risk factors. BELONG study explored hairdressers' feasibility in promoting a co-designed, web-based intervention for increasing NHS health check participation, supported by GP practices.

### **Aim:**

To assess feasibility, implementation, and effectiveness of salon-based interventions to improve NHS health check uptake among underrepresented populations.

## **Abstract - The Approach**

BELONG engaged eight salons and three GP practices across deprived neighbourhoods in London. Hairdressers trained to deliver health messaging and promote NHS health checks, supported by co-developed educational materials. Data were collected through client and salon staff surveys, health record linkage, and qualitative interviews. RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) framework was used for intervention evaluation.

## **Abstract - The Findings**

**Reach:** Among 215 salon clients (115% over target) recruited from ethnically diverse backgrounds (23% Other White, 19% Other Ethnicity), 46% were eligible for NHS health checks. 89% completed evaluation surveys to assess their intention to take up NHS Health Checks.

**Effectiveness:** 79% of participants expressed intent to attend future NHS health checks. Hairdressers reported enhanced confidence in initiating health discussions and increased awareness of CVD prevention among clients.

**Adoption:** Eight salons agreed to participate; 5/8 (63%) retained, of which all four selected salons completed training (100%). GP practices demonstrated high engagement (100% retention and training completion).

**Implementation:** Salon staff adapted health messaging to fit salon routines, leveraging existing client relationships. Hairdressers' fidelity to protocols was 80%, and client acceptability was 70%.

**Maintenance:** We will follow PRISM (Practical Robust Implementation and Sustainability Model) for sustainability.

### **Abstract - The Implications**

Embedding health interventions in salon community settings can enhance NHS health check uptake among underserved populations, supported by community champions and community prevention programmes. Future efforts will prioritize capacity building and explore scalable, community-focused delivery models for sustainability. Findings highlight the role of trusted community spaces in addressing health inequalities by embedding preventative healthcare into familiar, non-clinical environments. This approach enhances accessibility, fosters client trust, and empowers salon staff as health advocates. It has the potential to inform future public health strategies by leveraging social networks to improve early detection and health check participation.

### **Funding acknowledgement**

National Institute of Health Research for Patient Benefit Programme NIHR202769

**289**

### **Atypical Mycobacterium: A Challenge in the Treatment of Pemphigus Vulgaris 'The not-so-common blister'**

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### **Abstract - The Problem**

Pemphigus Vulgaris (PV) is an autoimmune acantholytic blistering disease affecting the skin and mucous membranes. Rituximab is now recommended as a first-line treatment for moderate to severe PV. Here in this case report we present a case of refractory PV complicated by atypical mycobacterium infection with a patient who has developed side effects of long-term high-dose steroid use.

### **Abstract - The Approach**

A fifty-eight-year-old male presented to his general practitioner with painful blisters in his mouth and on his scalp and body. He was referred to dermatology with a preliminary diagnosis of PV and was initiated

on 1g mycophenolate mofetil BD, prednisolone 60mg and received monthly intravenous immunoglobulins. Unfortunately, after repeated rounds of treatment, the PV was not well controlled and he was later referred to a tertiary centre for Rituximab treatment in 2023. The PV had stabilised on the Rituximab but he had been getting recurrent painful and purulent abscesses on his chest and back. His initial skin swabs grew moderate pseudomonas and microbiology recommendation was treated with repeated courses of Ciprofloxacin. This helped in the initial phase, but the abscesses would shortly return after completing the course. An excision biopsy from an abscess on his back was sent to histology for analysis including mycobacterium culture. The preliminary results from the skin biopsy showed that he had been positive for acid alcohol fast bacteria (AAFB). During this patient's 2 years of treatment, he developed; steroid-induced diabetes, steroid-induced myopathy and osteoporosis.

### **Abstract - The Findings**

Corticosteroids have been the mainstay of treatment of PV since the time of their approval in the 1950s. Corticosteroids long-term have severe adverse effects, including hypertension, osteoporosis, atherosclerosis, peptic ulcer disease, aseptic necrosis, diabetes mellitus and increased susceptibility to infections. Rituximab, a chimeric anti-CD20 monoclonal antibody, which causes B-cell depletion, has been shown to improve disease remission rates with faster tapering of steroids compared to the conventional treatment.

### **Abstract - The Implications**

From this case, we have shown that treating PV can be a challenging and complicated journey. Steroids are the first-line therapy for PV, but long-term administration may lead to serious adverse effects and this needs to be addressed when counselling a patient on long-term treatment.

**293**

### **Competencies and clinical guidelines for managing acne with isotretinoin: A scoping review**

Diarmuid Quinlan<sup>1,2</sup>, Prof Miriam Santer<sup>3</sup>, Prof Alison Layton<sup>4,5</sup>, Prof Tony Foley<sup>6</sup>, Prof Laura Sahm<sup>7</sup>, Dr Linda O'Keeffe<sup>8,9,10</sup>

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### **Abstract - The Problem**

**Background:** Acne is common and chronic, imposing much morbidity. There is evidence of delayed and inequitable patient access to isotretinoin. Furthermore, antibiotic use in acne raises antimicrobial stewardship concerns.

### **Abstract - The Approach**

**Method:** The Arksey and O'Malley framework informed the design in conjunction with JBI guidance. The PRISMA extension for Scoping Reviews guided reporting. The search was conducted across six databases (Embase, Scopus, Web of Science, PubMed, CINAHL, PsycINFO), three guideline repositories (SIGN, TRIP, GIN), professional clinical networks and grey literature between 2013 and 2024. Two researchers independently screened the titles and abstracts, and full-text papers. The AGREE II checklist appraised CPG quality.

### **Abstract - The Findings**

**Results:** Of the initial 2292 articles, eight CPGs were included after applying inclusion and exclusion criteria. Five from Europe, with one each from North America, Canada and Malaysia. CPG guidance varied when identifying "*which doctor may prescribe isotretinoin?*" All indicating dermatologists, and four indicated GPs as appropriate prescribers. The CPGs describe monitoring requirements notably pregnancy prevention, mental health assessment and blood testing.

### **Abstract - The Implications**

**Conclusion & implications:** There is evidence of delayed and inequitable patient access to isotretinoin, the most effective acne treatment. There is no global consensus on whether GPs are appropriate isotretinoin prescribers. However, given the broad clinical skillset required to safely manage isotretinoin, GPs appear well placed. The Commission on Human Medicines and its Independent Isotretinoin Expert Working Group (IIEWG) in October 2023 proposed "*the potential for GPs with extended roles to independently prescribe isotretinoin for adult patients should be explored...and reflected in clinical practice.*"

CPG-guided patient access to isotretinoin in primary care may reduce dermatologist acne workload, improve antimicrobial stewardship and enhance safe, timely and equitable acne management for our patients.

## **Funding acknowledgement**

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**298**

## **The primary care research priorities of people in Southern Aotearoa New Zealand**

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### **Abstract - The Problem**

The Southern Primary Care Research Network (PCRN) has been established to support primary care research in Southern Aotearoa New Zealand (NZ). Patients are key stakeholders in this work as it relates directly to their healthcare. The voices and research needs of patients, particularly those belonging to ethnic groups including Māori (indigenous peoples of Aotearoa) and Pasifika (those from the Pacific Islands), and other communities with specific health needs, such as migrant and disabled populations, must be considered when establishing research priorities. Understanding their priorities will improve research relevance and will have greater impact on health equity. Patient engagement for the purposes of considering their research priorities relating to primary care has not been undertaken previously in the region. Therefore, this study aims to explore the primary health care research priorities of health populations with significant health needs in Southern NZ.

### **Abstract - The Approach**

This project used a community-based participatory approach and interpretivist perspective to hear from patients in urban and rural Southern NZ. Participants were recruited through community organisations. Seven focus groups were held with 50 participants from populations with significant health needs. Participants spoke about their experiences as patients, whānau (family) members, caregivers, and as part of their community group. All meetings were recorded and transcribed. A general inductive approach was taken to thematic analysis. When collating codes into themes consideration was given to the overall focus of the research, namely health equity and research needs in primary health care.

### **Abstract - The Findings**

Three research themes were developed: communication, access to care and quality of care. Communication related to health literacy and interpersonal communication with healthcare providers. Advocacy promoted access to care. Barriers to accessing primary health care included practical, financial, sociocultural and workforce factors. Quality of care focused on the patient experience in primary healthcare settings, and related to cultural safety, clinician skills and knowledge, and service availability.

### **Abstract - The Implications**

This study provides themes from a patient perspective to focus future research in the region. Such research has potential to improve health and reduce inequity. Given the high level of engagement in this process this project provides a foundation for future research engagement in Southern NZ.

### **Funding acknowledgement**

This work was funded by the Health Research Council of New Zealand.

## Final category: Poster

24

**The impact of the out-of-pocket costs of health care and medicines for people living with chronic conditions in Australia viewed through the lens of Maslow's theory of human motivation.**

Jane Desborough<sup>1</sup>, Anne Parkinson<sup>1</sup>, Danielle Butler<sup>1</sup>, Kamania Butler<sup>1</sup>, Hsei-di Law<sup>1</sup>, Cam Donaldson<sup>1</sup>, Fiona Hodson<sup>2</sup>, Elisabeth Huynh<sup>1</sup>, Samar Ibrahim<sup>1</sup>, Jillian Kingsford Smith<sup>1</sup>, Charles Maskell-Knight<sup>1</sup>, Julie Veitch<sup>1</sup>, Leanne Watts<sup>1</sup>

<sup>1</sup>Australian National University, Canberra, Australia. <sup>2</sup>Chronic Pain Australia, Sydney, Australia

### **Abstract - The Problem**

On diagnosis of a chronic condition, people receive a treatment plan that includes various consultations, medications and other items required to manage their health. Many of these carry associated costs, some of which are subsidised by the government. Individuals and families thus begin a process of calculating how they can afford to pay any out-of-pocket costs (OOPC) and due to an inability to afford some OOPC, some people then determine which aspects of treatment they may deem as discretionary. These decisions have the potential to adversely impact their health and other critical aspects of their lives.

### **Abstract - The Approach**

We applied the lens of Maslow's theory of human motivation (also known as Maslow's hierarchy of human needs) to examine findings of a systematic review of the qualitative literature examining experiences of OOPCs for healthcare and medicines among people with chronic conditions in Australia.

### **Abstract - The Findings**

Impacts of the financial burden of OOPCs, plus reduced or lost employment for many, due to chronic conditions, were evident throughout Maslow's hierarchy. Despite prioritising "physiological needs", many trade-offs were made between medications and health consultations, food, housing and lifestyle. Reduced income, use of savings to pay OOPCs, and early retirement due to health impacted people's current and future financial security and sense of "safety". Forgone social activities reduced individuals' and families' social connectedness and "sense of belonging". Several triggers, including financial stress, foregone opportunities in career, relationships and lifestyle induced by chronic conditions and related OOPCs, were reported to negatively impact on "self-esteem and self-worth", as well as other dimensions of "self-actualisation".

### **Abstract - The Implications**

For many people living with chronic conditions in Australia, the OOPCs of healthcare and medicines present prohibitive barriers to enacting recommended treatment plans. At the same time, they also impact their capacity to meet basic physiological, safety and emotional needs, and higher aspirations.

Application of Maslow's theory of human motivation provides a valuable lens for policymakers that may inform improvements to more equitable and efficient health financing in Australia.

### **Funding acknowledgement**

This research is funded the Australian Research Council, Discovery Early Career Researcher Award #DE220100663, The Real Price of Health: Experiences of Out-of-Pocket Costs in Australia.

27

### **Hydroxychloroquine in general practice: safety and effectiveness of shared care agreements for prescribing and monitoring**

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#### **Abstract - The Problem**

Hydroxychloroquine (HCQ) was prescribed to 153,659-166,673 UK patients in 2023. HCQ requires regular monitoring for side effects, including retinopathy (Yusuf et al., 2023). The National Institute for Health and Care Excellence (NICE) advises annual eye screening for those using the drug for over 5 years or with risk factors for retinopathy, renal function testing for patients with risk factors, and vaccinations (annual influenza and pneumococcal prior to treatment). HCQ is usually initiated in secondary care with ongoing prescriptions from the GP under a shared care agreement. Clinically stable patients may have minimal secondary care input and yet require monitoring that is not available in primary care.

#### **Abstract - The Approach**

An audit was undertaken at Elmwood Family Doctors (West Yorkshire, England) in June 2024 to assess compliance with HCQ monitoring guidelines. Criteria [and standards] assessed if patients had received the recommended eye screening [80%], renal function tests [90%], and vaccinations [90%]. 37 HCQ users were identified via the practice's SystemOne database, from a total registered list of approximately 15,000 patients.

#### **Abstract - The Findings**

Of the 27 long-term HCQ users, only 33% had received annual eye screening, and none of the four patients with risk factors for retinopathy had received eye screening. Renal function had been appropriately tested for 85% of patients, 92% had received their annual influenza vaccine and 86% had received their pneumococcal vaccine.

#### **Abstract - The Implications**

The audit highlighted some issues: many patients had been discharged from secondary care before being referred for retinopathy screening. GPs beyond this practice may be taking ongoing responsibility

for HCQ prescribing without their patients being part of a retinal screening recall. In particular, as the risk of retinopathy increases from 7% at 5 years use to 20-50% after 20 years (Manchester University NHS Trust, 2024), this audit highlights the need for clear shared care arrangements between primary and secondary care to ensure safer long-term monitoring of patients prescribed HCQ by GPs.

32

### **Can we nudge patients to change their health behaviours in the primary care setting? A systematic review**

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#### **Abstract - The Problem**

The concept of system one and system two thinking was developed by Nobel Prize winner Daniel Kahnemann, to help us understand how human decision making works. System one thinking is the quick, reactive, thinking, with system two being more considered. We are exposed to 'nudges' that use our biases and heuristics to influence our quick processing system one brains through advertising, mobile apps and our physical environments everyday. When patients interact with primary care services both virtually and physically, can we use 'nudging' to encourage positive healthcare choices, from appointment attendance to exercise and nutrition?

#### **Abstract - The Approach**

A systematic review was conducted searching CINAHL, WoS, MedLine, EconLit. Screening of over 4000 abstracts was undertaken to find behavioural change interventions that could be classed as nudges (low cost, light touch, without withdrawing choice) that had been undertaken in Primary Care settings with primary or second outcomes. Papers were assessed for quality, and data extracted to allow comparison between studies and trends to be analysed.

#### **Abstract - The Findings**

Interim findings:

Interventions for diet, physical activity, vaccination uptake, prescribing and appointment attendance were all found. A realist approach is being taken to aid learning from interventions to understand better why some worked, vs others.

#### **Abstract - The Implications**

By learning from previous 'nudge' interventions, I am putting together a 'checklist' to facilitate increased success of nudge interventions aimed at patient behaviour in the primary care environment.

## **Funding acknowledgement**

Currently undertaking a PhD, funded by the Royal Air Force

**39**

## **Diabetes care in Singapore Primary Care Networks: a mixed-methods study of healthcare professionals**

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### **Abstract - The Problem**

Diabetes patients require patient-centred care as guided by the Chronic Care Model (CCM). Many diabetes patients in Singapore are managed by Primary Care Networks (PCNs) comprising general practitioners, nurses, and care coordinators (healthcare professionals, HCPs). Little is known about how PCNs deliver diabetes care. This study evaluated congruency of diabetes care delivery in PCNs in relation to the CCM from the perspectives of HCPs.

### **Abstract - The Approach**

Convergent mixed-method study. Quantitative and qualitative data were collected and analysed separately before merging. Assessment of Chronic Illness Care (ACIC) version 3.5 was self-administered by HCPs in the quantitative arm; scores range 0–11 with 11 indicating care delivery most congruent with CCM. Descriptive statistics were obtained. Linear mixed-effects regression model was used to test for association between independent variables and ACIC total scores. The qualitative arm comprised focus group discussions and data analysed using thematic analysis. Integrated analysis was performed using a joint comparison table. Themes or subthemes describing same concepts as ACIC subscales were compared using the table. Based on interpretation of quantitative and qualitative results (integrated analysis), each row was summarised into an overarching key concept that answered the research question.

### **Abstract - The Findings**

244 HCPs participated in this study (179 HCPs in quantitative arm and 65 HCPs in qualitative arm). Integrated analysis of quantitative and qualitative findings revealed that there was support for diabetes care congruent with the CCM in PCNs. Mean ACIC total score was 5.62 (SD 1.93). Mean CCM element scores ranged from 6.69 (SD 2.18) (Health System Organisation) to 4.91 (SD 2.37) (Community Linkages). Qualitative themes described how the PCNs provided much needed diabetes services, demonstrated practice characteristics such as continuity of care and patient-centred care, collaborated with community partners, experienced financial issues during care delivery, encountered enablers for and challenges in performing care, and proposed areas for enhancement.

### **Abstract - The Implications**

This mixed-methods study informs that diabetes care delivery in PCNs is congruent with the CCM. The study highlighted areas of care delivery that requires enhancement such as community involvement and care integration. Future research should consider using independent observers in the quantitative study and collecting objective data such as patient outcomes.

### **Funding acknowledgement**

National Medical Research Council Singapore and Ministry of Health under Research Training Fellowship (MOH- FLWSHP19nov- 0003/MOH- 000436- 00)

40

### **Diabetes care in Singapore Primary Care Networks: a qualitative study of primary care leaders' perspectives**

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#### **Abstract - The Problem**

Diabetes patients require person-centred care as guided by the Chronic Care Model (CCM) that consists of 6 elements, namely, organisation of health systems, community linkages, self-management support, delivery system design, decision support, and clinical information systems. Many diabetes patients in Singapore are managed by Primary Care Networks (PCNs) comprising general practitioners, nurses, and care coordinators. Little is known about how PCNs deliver care to people with diabetes. Primary care leaders provide leadership and resources for the formation and functioning of PCNs. This study explored the perspectives of primary care leaders in Singapore on the diabetes care delivery by the PCNs.

#### **Abstract - The Approach**

This qualitative study comprised individual interviews with 28 primary care leaders in Singapore who were purposively recruited. Participants consisted of PCN leaders, Ministry of Health officials, public primary care (polyclinics) chief executive officers, and primary care academics. Interviews were conducted by a family physician who used a semi-structured interview guide based on the CCM. Interviews were audio-taped and transcribed. We used thematic analysis to analyse the qualitative data. Data saturation was achieved.

#### **Abstract - The Findings**

There were 11 (39.3%) females in the study with a median age of 52.5 years (IQR 50-56.8, range 38-71). Participants were 16 PCN leaders, 3 polyclinics officers, 5 Ministry of Health officers, and 4 academics. There were 7 themes: (i) PCNs provided much needed diabetes services, (ii) PCN characteristics that enhanced care (continuity of care, convenient care, team-based care), (iii) Collaborating with community partners, (iv) Financial aspects of PCN care (affordable care, comparing costs with public polyclinics), (v) Enablers provided for performing PCN care (leadership support, incentives, training, team camaraderie), (vi) Challenges faced in performing PCN care (lack of physical space in clinics, administrative workload,

lack of access to medical records), and (vii) Aspects of care for enhancement (increase technology use, enhance roles of nurses and allied health professionals, having GPs with special interests).

### **Abstract - The Implications**

This study informs Singapore policymakers that PCNs are strong in many aspects of care delivery such as organisation of health systems, decision support, and delivery system design. However, there are areas of care delivery in self-management support and community linkages that require enhancement.

### **Funding acknowledgement**

National Medical Research Council Singapore and Ministry of Health under Research Training Fellowship (MOH- FLWSHP19nov- 0003/MOH- 000436- 00)

46

### **Embedding a cluster-randomised RCT within a primary care database: CASNET2 and ORCHID**

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### **Abstract - The Problem**

Randomised controlled trials (RCTs) are typically expensive and resource-intensive to run. Database studies, using routinely collected primary care data, are much more resource efficient, but typically only allow for observational study designs. We present a case study of an interventional RCT, where all outcome data was collected through a database of routinely collected primary care data.

### **Abstract - The Approach**

CASNET2 is a pragmatic cluster-randomised RCT of a safety netting toolkit for suspected cancer. The intervention (“turning on” the toolkit) was applied at the GP practice level using a stepped wedge design, and outcomes were collected and analysed at the patient level. Contribution of routinely collected data to the ORCHID primary care database was an inclusion criterion for practices taking part in the CASNET2 study, and practice recruitment, training, and communication were facilitated by the ORCHID practice liaison team. Routinely recorded pseudonymised individual patient data was extracted from the ORCHID database for all patients registered at included practices, enabling analysis of outcomes.

### **Abstract - The Findings**

We successfully recruited and retained 52 practices into the CASNET2 study through the ORCHID database, representing an eligible patient population of over 440,000 patients. The study was “light touch”, with only minimal study activities required of participating practices. This facilitated both recruitment and retention.

As the CASNET2 study was cluster-randomised at the practice level, it was not necessary to be able to identify individual patients to determine allocation.

Limitations of this methodology are primarily related to the nature of routinely collected data. Data that is not coded as part of the primary care record is not available, and some outcomes, such as secondary care referrals, diagnoses and tests, are incompletely recorded in primary care. However, this methodology does allow for “real world” evaluation of an intervention, reducing bias associated with study interventions such as additional clinical visits for data collection.

We will also discuss how future updates to the ORCHID platform could benefit interventional research

### **Abstract - The Implications**

The CASNET2 study shows that it is possible to carry out an RCT embedded within a primary care database. Future similar studies may benefit from the learnings obtained during the CASNET2 study.

### **Funding acknowledgement**

This work is supported by Cancer Research UK, Early Diagnosis Advisory Group (EDAG) grant number C48270/A27880. Neither the funders nor the sponsor have had any role in the study design, data collection, management, analysis or interpretation of data, writing of reports, or the decision to submit reports for publication.

**47**

### **Ensuring equality, diversity and inclusivity in the coproduction and planning for the evaluation of a shared decision-making intervention for older people living with multiple long-term conditions during general practice consultations**

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### **Abstract - The Problem**

We will present work in progress.

The prevalence of multiple long-term conditions is expected to rise, in an ageing population who have increasingly complex health care needs. Patient involvement in shared decision-making (SDM) is key to the provision of high-quality, cost-effective, person-centred care. However, there is a lack of pragmatic guidance.

The VOLITION model was developed using Intervention Mapping (IM) to support tailored SDM; where patients’ preferences for involvement and personal priorities are sought, and where clinical complexity and associated uncertainty are shared. VOLITION materials need further refinement. We hypothesised that people from different cultural backgrounds might experience SDM differently. A working group was

established to ensure diversity in demographics and protected characteristics, and relevant public, patient, multidisciplinary practitioner, expert, policy, and other stakeholder perspectives. We will:

- Coproduce patient-facing and practitioner-facing intervention materials.
- Undertake the preliminary development of new measures of SDM.

### **Abstract - The Approach**

The ongoing coproduction of VOLITION takes account of the need to involve carers, time required for consultations, continuity of care, the need to combat inequality, and difficulties with access to care (information technology, language barriers). We strive to create inclusive conversations where members have equal voice, by considering meeting location and timing, for example.

We integrate PPIE from South-Asian and Afro-Caribbean communities in West Yorkshire, and from rural and coastal communities in Devon and Cornwall.

A scoping review is being used to map existing measures of SDM, whether validated, and context of use.

### **Abstract - The Findings**

Our multi-media design service will provide physical, coproduced intervention materials to share at conference.

A PPIE member and community champion from the Race Equality Network will be invited to co-present.

Identifiable gaps in the evidence, regarding applicability of existing SDM measures to diverse populations and contexts, will be outlined (to be addressed through development of a new measure of SDM).

### **Abstract - The Implications**

We have funding for qualitative feasibility work. The output will be a refined intervention with proof of concept testing to ensure it is inclusive, relevant and responsive to the needs of diverse patients, ahead of a randomised-controlled feasibility trial. A subsequent full trial will incorporate a new measure of SDM and inform cost-effective, time-efficient care.

### **Funding acknowledgement**

This work is funded by an Academy of Medical Sciences Starter Grant for Clinical Lecturers

## **Patient Bridge Role: a new approach for patient and public involvement (PPI) in primary care research programmes.**

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### **Abstract - The Problem**

Most NHS interactions happen in primary care. Therefore, it is critical that primary care research is informed by people who use these services. The involvement of patients in research leads to better designed and more relevant research. However, the degree to which patients are involved varies greatly. It is particularly true in large programmes of work. We developed and implemented a new approach to PPI to support a more equal power relationship between public members and researchers in large programmes of work.

### **Abstract - The Approach**

Our proposed approach consisted of a patient advisory group (PAG), composed of eight people with relevant lived experience. The group was proposed to meet approximately three times per year to discuss specific aspects of each work package (WP) within the programme. The innovative feature of our new approach was that each WP had a named contact, termed Patient Bridge, from within the PAG. The Patient Bridge could liaise directly with WP leads regarding PPI in the WP. This enabled the Patient Bridge for each WP to develop a deeper understanding of their WP.

### **Abstract - The Findings**

Firstly, taking new approaches to PPI should not be feared because there is clear value in taking a co-produced approach to PPI. Therefore, any approach that facilitates the integration of PPI into research in a more co-produced way is essential. Secondly, researcher funders need to allow scope for flexibility regarding PPI approaches within grant proposals. This will enable new and promising approaches to PPI to be co-produced. Thirdly, creative communication approaches can be valuable for exchanging messages between research teams and public members, and as a part of external dissemination materials. More creative communication approaches will mean messages can be conveyed accessibly to a wider audience. Finally, this Patient Bridge approach only works when the whole team are committed to this form of working relationship.

### **Abstract - The Implications**

The Patient Bridge approach means that researchers will be equipped with a way to approach involvement that enables public members and researchers to work as equal partners within large programmes of work. This enables an environment that fosters co-production to be created, thereby producing more relevant and higher quality research.

## **INdependent prEscribinG in community phaRmAcY; whaT works for whom, why and in what circumstancEs (INTEGRATE): A Realist Review**

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### **Abstract - The Problem**

The United Kingdom (UK) has implemented several measures to enhance patient access to safe and effective healthcare, including initiatives to streamline access to medications. One such measure is pharmacist independent prescribing (IP). Community pharmacies, as highly accessible and trusted points of primary care, play a critical role in supporting these efforts and contributing to the NHS long-term plan. Despite recent advancements , evidence on how pharmacist IP is operationalised in community pharmacies remains limited.

#### Study Aims:

- To explore how pharmacist IP operates in community pharmacy settings, identifying the key mechanisms, contextual factors, and outcomes associated with its use through a realist review.
- To develop programme theories that explain how, why, and for whom this model of care works (or does not work).
- To provide insights into the context-specific barriers and facilitators to implementation and offers recommendations for optimising pharmacist prescribing in community pharmacy practice.

### **Abstract - The Approach**

This study employs a realist review methodology to explore how IP in community pharmacies functions, who benefits from it, under what conditions it is most effective, and the mechanisms that drive its success. Realist research is particularly suited to examining complex interventions such as independent prescribing, as it aims to develop and refine explanatory programme theories using the context-mechanism-outcome (CMO) framework. This approach helps to identify not only what works but also why it works, for whom, and in what circumstances.

### **Abstract - The Findings**

INTEGRATE is work in progress (finish date 31/12/2025). To date we have nine "theory buckets" that group key themes emerging from the literature.

### **Abstract - The Implications**

Our preliminary "theory buckets" sheds light on key factors affecting IP and its impact on primary care. These buckets underscore how individual, organisational, and systemic factors interact to shape IP service success.

These insights carry significant implications. By pinpointing influential mechanisms and contexts, this review can guide policymakers, healthcare providers, and pharmacists in optimising IP services. It may also influence training, support frameworks, funding priorities, and strategies for equitable and efficient IP service expansion.

As we refine our theories, these initial findings form a solid base for further exploration and practical recommendations to improve IP implementation and outcomes.

### **Funding acknowledgement**

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<https://fundingawards.nihr.ac.uk/award/NIHR155314>

59

### **Public perception of body composition metrics: A community-based survey**

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### **Abstract - The Problem**

Cardiovascular disease (CVD) is the leading cause of morbidity and mortality worldwide, with 80% of cases linked to modifiable risk factors like obesity and physical inactivity. A healthy lifestyle can reduce CVD risk, but maintaining these interventions is difficult without effective goal-setting and monitoring tools. While body weight is a common metric, it does not fully reflect changes in body composition (BC), such as skeletal muscle mass (SMM) and fat mass, which can lead to demotivation. This survey aims to explore public perception of BC metrics

### **Abstract - The Approach**

Closed-ended questionnaires were used. This survey was carried out as part of the baseline information for the EMBODY study, an ongoing UK-based cohort study of adults aged 40-74 with or without hypertension to assess the association between SMM, blood pressure, and physical activity level.

## **Abstract - The Findings**

To date, 26 participants (11 (42%) males and 15 (58%) females) have enrolled in the study, with a median age of 49.52 years and a median BMI of 26 kg/m<sup>2</sup>.

Whilst 54% were dissatisfied with their lifestyle habits, 80% felt satisfied with their progress toward lifestyle goals, prioritising physical and psychological well-being. Although 77% were aware of "body composition", only 6 (23%) rated their understanding as "good." Eighteen participants (70%) had measured their body composition at some point at various venues and frequencies.

Reasons for infrequent measurements included accessibility, limited knowledge, and lack of interest. Among those who measured their BC, 19% felt more positive about their lifestyle afterwards, while another 19% reported feeling anxious or decided to give up on their lifestyle measures, and 20% were unsure.

## **Abstract - The Implications**

While many participants were aware of BC, their understanding of its significance was limited. This suggests the need for better education and resources regarding the role of BC in managing CVD and monitoring lifestyle interventions. There were also different levels of accessibility and interest in measuring BC, which could guide more personalised programs for effective lifestyle habits.

Interest in developing user-friendly, accessible, and affordable techniques to evaluate BC, such as bioelectrical impedance analysis, is growing. Addressing the impact of BC knowledge on public motivation, mood, and health-seeking behaviour could be beneficial.

## **Funding acknowledgement**

Nil to declare

**71**

## **The effect of uninterrupted and interrupted sitting on vascular function in people with Long COVID**

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### **Abstract - The Problem**

Long COVID (LC) has been increasingly recognized as a condition with a significant vascular component, including transient elevations in arterial stiffness. In healthy individuals, sedentary behaviour, such as uninterrupted sitting, is known to acutely exacerbate arterial stiffness and increase cardiovascular disease risk, an effect that can be attenuated through light movement. This study aimed to investigate: (i) whether prolonged uninterrupted sitting exacerbates vascular dysfunction more severely in individuals with LC compared to healthy controls; and (ii) whether introducing brief bouts of light movements during sitting periods alleviates vascular dysfunction in individuals with LC.

### **Abstract - The Approach**

Thirty participants with LC and 15 healthy controls were recruited from three Primary Care practices and two NHS LC clinics. All participants underwent two experimental conditions, each lasting 2-hours: (i) uninterrupted sitting and (ii) sitting interrupted by light bouts of movement. In the interrupted condition, participants engaged in movement every 30 minutes consisting of three minutes of self-paced walking, and five sit-to-stand transitions/bilateral calf raises. Physiological assessments included blood pressure (BP), measures of central vascular function through arterial wave reflection (augmentation index [AIx]), and arterial stiffness (carotid-femoral pulse wave velocity [cfPWV]). These parameters were evaluated both before and after each sitting condition.

### **Abstract - The Findings**

There was no two-way interaction of Time (pre, post) x Condition (uninterrupted, interrupted), or Time x Group (LC, control) for any outcome measure. There was a main effect of Time, with increases in central systolic BP (MD = 3.37, SE = 0.93,  $p < 0.001$ ) and central diastolic BP (MD = 3.00, SE = 0.58,  $p < 0.001$ ) observed, however, AIx (MD = -3.10, SE = 0.89,  $p < 0.001$ ) significantly decreased. No significant interactions or main effects were observed for cfPWV ( $p > 0.05$ ).

### **Abstract - The Implications**

Acute bouts of prolonged sitting cause increases in BP and decreases in surrogate stiffness measures in both LC and healthy controls. Interrupting sitting with light movement does not have a protective effect against increases in BP over 2-hours of sitting. Future research should investigate whether extended durations of sedentary behaviour, reflective of the elevated sedentary tendencies reported in LC, exacerbate vascular dysfunction compared to controls.

### **Funding acknowledgement**

The study has been supported by the University of Winchester's Research and Innovation service

72

## **Developing Indicators to Measure Low-Value Care in UK Primary Care: A Systematic Review and Consensus Study**

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### **Abstract - The Problem**

Low-value care, defined as medical services where harm outweighs benefit, is a global issue affecting up to 30% of healthcare services, rising to 80% for some procedures. It increases costs, misallocates resources, and harms patients, causing distress, complications, and cascading adverse effects. Alarming, 87.5% of low-value services carry moderate to high risks of harm. Addressing low-value care requires robust indicators to inform audits, feedback, reporting, and incentive programs. Utilizing primary care databases for measuring low-value care can provide valuable insights and drive impact at a population scale.

However, developing indicators in this context can be particularly challenging since the value of most services depends on the clinical context in which they are provided. Administrative data often lack the clinical detail necessary to differentiate appropriate from inappropriate use, and the detection of low-value care can be highly sensitive to how these measures are defined. Although some international studies exist in this space, there has been very little work using UK electronic health records.

### **Abstract - The Approach**

This study combines a systematic review and a RAND/UCLA Appropriateness Method consensus study. The review will synthesize low-value care indicators from population-level databases in primary care. A two-round online consensus with GPs will then assess these indicators based on relevance, validity, cost-saving potential, patient safety risks, and measurability within the CPRD dataset.

### **Abstract - The Findings**

This review identified 7,282 articles, with 298 retained for full-text review after screening. Simultaneously, we began extracting indicators from 23 highly relevant articles identified early in the review process to develop search strategies. From these 23 articles, we merged similar indicators to reduce duplication, resulting in 65 unique indicators, including 6 related to cancer screening, 27 to medications, and 32 to lab tests/imaging.

### **Abstract - The Implications**

This study will be the first to develop indicators and quantify the scope of selected low-value care practices in the UK primary care setting. These indicators can be applied in audits, decision support systems, public reporting, and performance evaluations on a population scale. By analysing geographic variations and GP/patient characteristics, we can potentially identify drivers of low-value care and inform targeted de-implementation strategies.

### **Funding acknowledgement**

This PhD is jointly funded by the National Institute for Health Research School for Primary Care Research (NIHR SPCR) and National Institute for Health Research Greater Manchester Patient Safety Collaboration (NIHR GM PSRC)

80

### **Is the Kidney Failure Risk Equation valid, diagnostically accurate and clinically applicable in non-white populations: A Systematic Review**

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#### **Abstract - The Problem**

NICE guidelines currently recommend the use of the Kidney Failure Risk Equation (KFRE) in patients with chronic kidney disease (CKD) stages 3-5 to estimate the risk of requiring kidney replacement therapy (KRT) within the next five years. KFRE should be calculated at least yearly with risk of over 5% requiring a referral to specialists. Existing literature validates the use of KFRE in White populations, however there is no recent pooled evidence for the use of KFRE within non-White populations, despite this group having approximately double the rates of KRT.

**Objective:** This systematic review +/- meta-analysis aims to investigate the validity and diagnostic accuracy of KFRE and whether it is clinically applicable in non-White populations.

#### **Abstract - The Approach**

Using PRISMA protocol, the databases Medline, Embase, Cochrane Library and Google Scholar were searched from 2005 to 2025, with reference and citation checking. Data will be extracted according to the Cochrane SR guidelines. RCTs, observational and cohort studies will be included due to the limited number of RCTs available, to collate a comprehensive database. Studies restricted to White patients will

be excluded. To assess bias and evaluate certainty of evidence, The Quality Assessment of Diagnostic Accuracy Studies (QUADAS-2) and GRADEpro tools will be used.

Population: adults of non-White populations with CKD stages 3-5

Intervention: use of KFRE

Comparison: predictive accuracy of KFRE in White populations

Outcome: validity and predictive accuracy of KFRE in non-White populations

### **Abstract - The Findings**

62 full texts were assessed, and 8 studies were selected for review. Relevant adjusted data will be summarised and presented in tables/charts, accompanied by a narrative synthesis. If sufficient data is available, a meta-analysis will be done, with results displayed in a forest plot. Statistical heterogeneity will be measured using the I<sup>2</sup> statistic and Cochran's Q test and stratified by ethnicity using the RevMan platform.

### **Abstract - The Implications**

The results of this study can provide guidance on the use of KFRE in non-White patients, validating this tool in identifying patients at risk of kidney failure. This can help enable timely CKD risk factor management, earlier referral and improved patient outcomes, promoting equity for those in non-White populations.

### **Funding acknowledgement**

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85

### **The impact of deprivation, condition count and co-morbid mental illness on quality of life in people with multimorbidity: An analysis using the new MMQ1 patient-reported outcome measure**

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### **Abstract - The Problem**

There is a need for bespoke patient reported outcome measures (PROMs) measuring quality of life in people with multiple long term conditions (MLTC). Such measures may improve the evaluation of MLTC interventions, which to date have failed to demonstrate improved patient outcomes using generic QOL

measures such as EQ-5D.

MMQ1 is a recently validated PROM measuring needs-based quality of life over six sub-scales: Physical ability, Concerns and worries, Limitations in daily life, Social life, Personal finances and Self-image. The effectiveness of MMQ1 in identifying variations in quality of life across patient groups based on health and demographic characteristics, and its comparison to established generic PROMs such as EQ-5D, remains unexplored.

### **Abstract - The Approach**

A cross-sectional survey of 2,753 patients with multiple long term conditions in Lothian included MMQ1 alongside EQ-5D. Descriptive analysis compared MMQ1 and EQ-5D mean scores across patient groups based on age, sex, deprivation, multimorbidity count and multimorbidity type (physical-only vs mental-physical). Multiple linear regression was also used to assess the association between these variables and both MMQ1 and EQ-5D scores.

### **Abstract - The Findings**

597 survey responses were received (22% response rate). As hypothesized, quality of life (as measured by MMQ1) was significantly worse in patients with more long term conditions, with mental-physical multimorbidity, and from high deprivation areas (all  $p < 0.001$ ). Regression analysis demonstrated that deprivation, multimorbidity count and multimorbidity type were significant predictors of MMQ1 scores when controlling for age and sex. Similar findings were demonstrated with EQ-5D. However, a significant association was also demonstrated between age and quality of life using MMQ1 subscales, that was not detected by EQ-5D.

### **Abstract - The Implications**

The detection of significant differences in MMQ1 scores across groups based on deprivation, multimorbidity count and multimorbidity type demonstrates 'known-group validity,' reinforcing the psychometric quality of this new PROM.

Moreover, the significant association between age and quality of life that was detected using MMQ1 subscales, but not with EQ-5D, indicates that the six-scale structure of MMQ1 may improve its ability to detect differences in quality of life compared with this well-established generic measure.

This new PROM has the potential to improve the measurement of quality of life in MLTC research, including trials.

### **Funding acknowledgement**

Royal College of General Practitioners (SFB 2022-14)

## **Prevalence of potentially inappropriate prescribing in community-dwelling older adults: application of STOPP/START Version 3 to The Irish Longitudinal Study on Ageing (TILDA).**

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### **Abstract - The Problem**

Potentially inappropriate prescribing includes prescribing potentially inappropriate medicines (PIMs), where risk of medication-related harm may outweigh the clinical benefit(s) and potential prescribing omissions (PPOs), whereby clinically indicated medications are not prescribed. The STOPP/START criteria assess PIMs and PPOs respectively and were recently updated to include additional indicators. This study sought to assess prevalence of PIMs and PPOs (STOPP/START version 3) in older community-dwelling adults and examine any association with healthcare utilisation (general practitioner (GP) visits; emergency department (ED) visits; outpatient visits; hospital admissions) and functional decline over time.

### **Abstract - The Approach**

Retrospective cohort study of a nationally representative longitudinal study of ageing in Ireland (n=3,619). The overall prevalence, as well as the prevalence per individual criterion were calculated as the proportion of eligible participants aged  $\geq 65$  years at TILDA Wave 4. Logistic regressions examined association of patient characteristics with PIMs/PPOs (odds ratio (OR), 95% CI) and between PIM/PPO and functional decline at Wave 5. Negative binomial regressions examined associations between PIM/PPO and healthcare utilisation (incident rate ratios (IRR) 95% CIs), including GP visits, at Wave 5.

### **Abstract - The Findings**

Participants' mean age was 74.2 years (SD 6.99), 53.9% were female and were prescribed a mean of four (SD 3.16) medications. A total of 1,123 (31.0%) participants experienced STOPP PIMs and 1,309 (36.2%) had START PPOs. STOPP PIMs were associated with increased hospital admissions (adjusted (a)IRR 1.38, 95% CI 1.08, 1.75), and functional decline (adjusted (a)OR 1.46, 95% CI 1.11, 1.91) at follow-up. Age  $\geq 75$  years (aOR 1.32, 95% CI 1.10, 1.57) and three or more chronic conditions (aOR 5.19, 95%CI 3.69, 7.31) were associated with START PPOs. Participants with START PPOs reported more GP, outpatient and ED visits over time, but no evidence of an association with hospital admission or functional decline was observed.

### **Abstract - The Implications**

Approximately one-third of study participants experienced STOPP PIMs, associated with an increased risk of hospital admissions and functional decline at follow up. START PPOs also occurred in about one-third, associated with increasing age and number of chronic health conditions. Balancing the risk to benefit ratio of medications in older people with multimorbidity remains challenging.

## Funding acknowledgement

This study was funded by the Health Research Board Ireland Emerging Clinician Scientist Award (HRB-ECSA-2020-002) awarded to Prof Emma Wallace. Funding for the TILDA study is provided by the Irish Government, the Atlantic Philanthropies and Irish Life plc.

90

## Prevalence of ThinkCascades in community dwelling adults: longitudinal analysis of The Irish Longitudinal Study on Ageing (TILDA).

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### Abstract - The Problem

Prescribing cascades occur when medication is prescribed to prevent/treat the adverse effects of another medication and may be intentional or unintentional. ThinkCascades is a list of nine clinically important prescribing cascades in older adults, developed by international multidisciplinary expert consensus. Examples include i) calcium channel blocker-induced peripheral oedema treated with a diuretic and ii) alpha-1-receptor blocker-induced dizziness treated with a vestibular sedative. This study aimed to examine the prevalence of ThinkCascades in The Irish Longitudinal Study on Ageing (TILDA), a nationally representative cohort of community-dwelling aging adults.

### Abstract - The Approach

A retrospective cohort study was conducted examining TILDA participants aged  $\geq 50$  years and present for three consecutive data collection waves (N=6,118). TILDA data collection is multi-modal, comprising a home interview, self-completion questionnaire and health assessment, with data collected on a biennial basis. Data from Wave 1 (2009/2011) to Wave 5 (2018) were examined. Nine separate analysis sets were created, representing each ThinkCascades dyad. Exposure was incident use of Drug A at wave  $x$ . The outcome, prescribing cascade, was defined as incident use of Drug B at wave  $x+1$ , in addition to continued use of Drug A. To define incident use, a washout period was applied.

### Abstract - The Findings

Five out of nine ThinkCascades were identified between Waves 1 and 5. The prevalence ranged from 0.5% (1/201) for the diuretic-induced urinary symptoms leading to overactive bladder medication cascade, to 8.3% (5/60) for the non-steroidal anti-inflammatory drug (NSAID)-induced hypertension to antihypertensive cascade. Twenty-four participants experienced at least one ThinkCascades dyad over the period, representing 2.1% of the eligible sample (n=1,153). By Wave 4 (2016), 2.4% (20/832)

experienced at least one ThinkCascades. Healthcare utilisation outcomes at Wave 5 were similar for those who experienced any ThinkCascades and those who did not.

### **Abstract - The Implications**

The prevalence of ThinkCascades was low when assessed over successive waves, with only five of nine ThinkCascades identified. The low number of cases prevented a detailed examination of secondary healthcare utilisation outcomes. Larger studies or those with continuous longitudinal data available on medication use will help further delineate the clinical impact of prescribing cascades in community-dwelling adults and any association with adverse health outcomes.

### **Funding acknowledgement**

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95

### **How contrasting practices are responding to asthma self-management implementation strategies; findings from a case study within the IMP2ART cluster randomised controlled trial.**

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### **Abstract - The Problem**

Supported self-management for asthma reduces the risk of attacks and related mortality. However, implementation in primary care is poor; with many patients not receiving an asthma action plan. IMP<sup>2</sup>ART is a UK-wide programme to develop and evaluate a whole-systems strategy to help primary care practices implement supported asthma self-management. The strategy, supported for 12-months by a trained nurse facilitator, included facilitated formation of a practice plan, regular audit and feedback, team/professional education, and a 'Living-with-Asthma' website for patients and professionals. The IMP<sup>2</sup>ART RCT includes a process evaluation to explore how and why the trial achieves its outcomes.

### **Abstract - The Approach**

A case-study approach using multiple methods across five practices is exploring the interaction of IMP<sup>2</sup>ART delivery, practice context and response. We report interim analysis of longitudinal staff

interviews (n=15) from two case-study practices; Practice 1 (P1): an English, inner-city practice; Practice 2 (P2): a Scottish, rural, three-site practice.

### **Abstract - The Findings**

Practices started with contrasting levels of asthma self-management; P1 had well established processes; P2 had a very low baseline. Asthma care in both practices was nurse-led. Receptionists, nurses and GPs in P1 were aligned in their understanding of the whole team's roles in asthma care. In contrast, in P2, understanding varied by practice site with little evidence of GP involvement, and a new nursing team with limited experience of asthma care delivery. The initial context may have influenced practices' different expectations of IMP<sup>2</sup>ART and their contrasting accounts of how they used and valued the IMP<sup>2</sup>ART strategies. In P1, practice plan formation drove many improvements, with the patient/resource website highly valued. P2 valued staff education and developing a practice approach to asthma care. There were early signs in both practices of how patients are influencing self-management implementation.

### **Abstract - The Implications**

Initial findings provide evidence of how contrasting practices are able to adapt and tailor a whole systems approach to asthma self-management to meet their own specific needs.

Analysis of all process evaluation data will be completed by late Spring and will contribute to our understanding of the wider processes and inform scaling up and sustainability of implementation strategies to improve supported self-management of asthma in primary care.

### **Funding acknowledgement**

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**111**

### **Attitudes of primary care professionals, carers and patients towards Binge Eating Disorder and Bulimia Nervosa: a mixed-method systematic review**

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### **Abstract - The Problem**

Binge Eating Disorder (BED) and Bulimia Nervosa (BN) are the most common eating disorders (EDs) globally, posing a significant health concern to the public. Based on a previous review, effective identification and management of these EDs could be influenced by the attitudes of healthcare professionals, family members and patients themselves. Therefore, understanding the attitudes of those involved in the identification and management of BED and BN is critical for enhancing the quality of care in primary care settings. Whilst the literature offers some understanding of attitudes towards EDs, studies focus primarily on Anorexia Nervosa and secondary care settings. Hence, this ongoing systematic review aims to understand the attitudes of healthcare professionals in primary care, carers and patients towards BED and BN, including attitudes on aetiology, identification, management and recovery.

### **Abstract - The Approach**

A mixed-methods systematic review was conducted following standard PRISMA guidelines. From conception to August 2024, searches were completed in Medline, Embase, PsycINFO, Global Health (via OVID), CINAHL Complete (via EBSCO host) and ProQuest. The included studies were not restricted to the year of publishing or language and were extracted using a data extraction tool. The quality of articles is assessed using established tools appropriate to the method of the article. Data is analysed using a convergent integrated approach, during which quantitative and qualitative data are analysed separately and then integrated into one narrative.

### **Abstract - The Findings**

602 articles have been identified and screened for inclusion by three independent reviewers and checked by a fourth independent reviewer. 120 articles have been included for full-text review, which is ongoing. Preliminary results of this review suggest that mixed attitudes are reported across healthcare professionals, carers and patients towards BED and BN. The perceived topics within BED and BN, such as aetiology, symptoms, or barriers to management, may often influence the attitudes of patients, healthcare professionals and carers. The final results will be presented at the conference.

### **Abstract - The Implications**

This systematic review highlights potential gaps in medical education and public perception of BED and BN. These gaps ought to be addressed if the identification and management of BED and BN want to be improved.

### **Funding acknowledgement**

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## **Using GP tutors' experiences to enhance undergraduate primary care leadership teaching: a Learning Needs' Assessment**

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### **Abstract - The Problem**

#### **Background**

Clinician leadership is associated with improved patient care (Kirkpatrick, 2023). Hence, leadership must be incorporated into medical education. Only 20.4 % of medical students felt leadership was taught effectively at medical school (Stringfellow et al., 2014).

Therefore, medical schools should develop their leadership curricula. Jefferies et al (2016), reported that many planned to do this, but there was a lack of consensus about how. Robust evidence for the efficacy of existing leadership courses is lacking (Faculty of Medical Leadership and Management, The Kings Fund and Center for Creative Leadership, 2015), so conducting a 'Learning Needs Assessment' (Grant, 2002) can help formulate the best approach to developing a leadership curriculum.

GPs with leadership and teaching experience are well-placed to provide input into this. As educationalists, they understand student learning needs. They also understand the leadership requirements of primary care.

#### **Aim**

To explore GPs' experiences of leadership and their opinions about what to include in a primary care undergraduate leadership course.

### **Abstract - The Approach**

Eight General Practitioners (GPs) in greater London with experience of leadership and undergraduate teaching were recruited to this qualitative study. Semi-structured interviews were used as part of a Learning Needs Assessment to explore views on leadership teaching. Braun and Clarke's (2006) thematic analysis was used for data analysis.

### **Abstract - The Findings**

## Results

GPs described undertaking a range of leadership roles and discussed their experiences. Four themes and seven sub-themes were generated during the study. Themes included: 'Leadership Roles in Primary Care', 'Leadership Challenges', 'Leadership Skills', and 'Development of a Leadership Curriculum'. GPs described their leadership challenges, and suggested classroom and workplace-based activities to help students develop leadership skills. GPs learned their leadership skills through experience, and by observation of peers, suggesting a potential applicability of Experiential Learning Theory (Kolb, 1984) and Situated Learning Theory (Lave and Wenger, 1991).

### Abstract - The Implications

Recommendations:

Legitimation of everyday leadership roles and activities undertaken by GPs.

Experiential learning activities: group projects, role-play, QIPs, and presentations.

Situated, workplace-based leadership learning activities: shadowing the duty doctor, attendance at practice meetings, managing clinical lists and supervising other students.

Observation of leadership activities and leaders whom they encounter.

Training for GP tutors on leadership education.

121

**Patient and carer experiences of involvement in remote primary care CONSULTations for Medical Education: A mixed methods study (CONSULT-ME)**

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## **Abstract - The Problem**

### Background

During the COVID-19 pandemic, consultations between GPs and patients became “remote” (e.g. telephone and online consultations) [1].

Remote consultations remain a common mode of primary care service delivery.

Today’s medical students are tomorrow’s GPs so it is important that they learn to consult remotely.

Previous studies [2] have examined the student and GP perspective on student-led remote consulting. However, no study to date has considered the patient perspective on student-led remote consultations..

### Aim

To understand patients’ and carers’ views on student-led remote primary care consultations.

### References:

- 1) Alderwick, H. and J. Dixon, *The NHS long term plan*. 2019, British Medical Journal Publishing Group.
- 2) Armstrong, S., et al., *Students’ and tutors’ experiences of remote ‘student–patient’ consultations*. *Medical Teacher*, 2023. **45**(9): p. 1038-1046.

## **Abstract - The Approach**

This is a mixed methods cross-sectional study.

Participants will be patients and carers (18+ years) registered at a GP practice providing placements for medical students, who hold remote consultations, attached to one of four medical schools.

Collaborating medical schools include UCL, Queen Mary's University London, Keele University and University of Leeds Medical School.

Phase 1: Participants will be invited to complete a survey after being offered a remote appointment with a medical student.

Phase 2: Willing participants will be contacted for a semi-structured interview (face-to-face, over the telephone, or online) with the researcher.

Analysis

- Survey data will be analysed using descriptive statistics.
- Qualitative data will be analysed using framework analysis.

### **Abstract - The Findings**

- A Steering Committee and Stakeholder Group are active and supporting the study. These are multidisciplinary and include patients and medical students.
- NHS ethical approval has been granted in January 2025 (REC reference: 24/EM/0289 / IRAS ID: 332111).and NIHR CPMS portfolio adoption has been approved.

Practices hosting students from one of the four collaborating medical schools are being recruited onto the trial.

### **Abstract - The Implications**

Impact

- By capturing their perspectives on their involvement, this study will support the involvement of patients as active collaborators in planning future curricula.
- This in turn will foster remote patient-centred communication skills in the future primary care workforce.

### **Funding acknowledgement**

123

**Patterns of attendance at emergency department, hospital outpatients and hospital admissions in the last year of life.**

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**Abstract - The Problem**

BACKGROUND:

The medical understanding of the patterns of accessing care in the last year of life is known as 'illness trajectories'. People with advanced illnesses often attend the emergency department and hospital outpatient clinics and have frequent hospital admissions. Scotland's last year of life sees 75-90% of individuals utilising unscheduled care services. However, gaps and disparities in care are prevalent, with minimal understanding of these patients' experiences and needs.

**Abstract - The Approach**

AIM: To understand the patterns of attendance at the emergency department, hospital clinics, and acute hospital admissions by patients in their last 12 months of life and to identify any distinct trajectories or patterns of use ('clusters').

METHODS: This retrospective cohort study covers NHS Fife and Tayside from 2010 to 2019. Attendance was considered between 01-01-2009 and 31-12-2019 for all patients whose deaths occurred between 01-01-2010 and 31-12-2019. Data were linked using the Community Health Index (CHI) number, a unique patient identifier used across all contacts with health and social care. Linked datasets included demography, emergency attendances, outpatient clinics, hospital admission, and NRS death records. Data were cleaned, anonymised, stored, and analysed in the SafeHaven Trusted Research Environment.

**Abstract - The Findings**

Through visual assessment of the dendrogram constructed using hierarchical clustering, we identified four discrete clinical clusters of patients who had distinct patterns of healthcare usage in the last year of life. These clusters were characterised in terms of demographic factors, clinical conditions and markers of multimorbidity, and cause of death in order to identify what mix of patients followed each pattern of use cluster. Preliminary analysis suggests that demographic factors and multimorbidity have little influence on patient clusters, but that cause of death is associated with different illness trajectories: Cluster 1: Heart Failure, Coronary Artery Disease, Dementia, Stroke; Cluster 2: Low multimorbidity, low numbers on all diseases in general (healthier patients); Cluster 3: Solid Organ Cancers; Cluster 4: Chronic Obstructive Pulmonary Disease (COPD).

**Abstract - The Implications**

There are distinct patterns or 'clusters' of how people in their last year of life access hospital-based healthcare services. The clusters' populations show minimal variation in multimorbidity/clinical conditions but have significantly distinct causes of death.

### **Funding acknowledgement**

Funding for this work was received from Marie Curie.

**127**

### **A systematic review of blood pressure monitor validation studies published since January 2018**

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### **Abstract - The Problem**

Accurate clinic or home blood pressure (BP) measurement is essential for diagnosing, treating and managing hypertension. Therefore, knowing which BP monitors can be recommended as accurate is important. Several validation protocols exist to assess monitor accuracy; however, many commercially available devices are not assessed against these standards. Others are reported to fulfil validation protocols, but on inspection of the evidence published, do not. The British and Irish Hypertension Society (BIHS) maintains the only peer-reviewed list of validated BP monitors independent of commercial interests. The list provides a resource for the public, professionals, commissioners and the NHS, and is cited in NICE guidance.

A new Universal Standard for validation of BP monitors (the "AAMI/ESH/ISO" standard) was published in 2018, prompting this updated review of adherence to the standard.

This review seeks to:

1. Identify validation studies published since our last update.

2. Establish which validation protocols are now used to validated BP monitors, and document uptake of the Universal Standard.
3. Report the proportion of published BP monitor validation studies that successfully fulfil the criteria of current validation protocols, and identify common reasons for failure.

### **Abstract - The Approach**

Systematic review. Searches identified BP monitor validation studies published since January 2018. Evidence of achievement of validation criteria was extracted using pre-specified checklists. Narrative synthesis methods were used to summarise the evidence. Findings are being used to update the BIHS approved list of validated BP monitors. PROSPERO registration: CRD42024480953.

### **Abstract - The Findings**

Following de-duplication, 1,483 unique records were retrieved, 1,267 excluded on title/abstract screening, 216 full texts reviewed and 79 excluded. Data extraction is nearing completion for the 137 included validation studies (assessing 176 monitors). To-date, 70 device validations have passed assessment and 26 have failed due to violations of validation criteria within the reports. Full findings will be presented at the conference.

### **Abstract - The Implications**

The findings from this review will allow the BIHS list of approved validated BP monitors to be updated. We have identified published validation studies that fail to justify their claims of successful device validation, implying significant shortcomings exist in the peer review and reporting processes of validation studies.

### **Funding acknowledgement**

BIHS Legacy fund and South West GP Trust

**131**

### **How can we improve primary care's management of perinatal anxiety? Insights from a community engagement and involvement event.**

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### **Abstract - The Problem**

Perinatal anxiety (PNA) occurs during pregnancy or in the twelve months after birth and is experienced by 21% of women worldwide. PNA can have a negative impact on mothers, children and their families. There are evidence gaps around suitable interventions for women with PNA in primary and community settings.

### **Abstract - The Approach**

A community engagement and involvement (CEI) event was co-hosted with a community Perinatal Mental health (PMH) organisation to explore and understand perspectives of interventions for women with PNA, to inform the development of a PNA care pathway.

Thirty participants attended: women with lived experience of PNA, healthcare professionals (HCPs), practitioners from PMH community organisations and a commissioner of PMH services. Research findings from were presented under three themes: education and information, help-seeking and interventions. Each theme was discussed in small groups followed by whole group feedback.

### **Abstract - The Findings**

PNA was described as an individualised experience and thus, ideally, interventions should be personalised. Participants suggested that women would benefit from improved information about PNA, including how to seek help and the types of interventions available, tailored to their personal socio-economic and cultural circumstances and health literacy. Discussions around help-seeking for PNA highlighted that HCPs should try to minimise barriers for help-seeking by proactively exploring mood in routine consultations and being open and approachable.

Participants discussed the range of available interventions for PNA and intervention settings including peer support, community services and healthcare services. Community organisations may be able to offer support to those where healthcare services are less accessible or acceptable to them. Improved connections and more integrated support between healthcare and community organisations could improve access to interventions and minimise gaps in services available to support women with PNA.

### **Abstract - The Implications**

Discussions at this CEI event informed the development of a PNA care pathway which provides a summary of the important aspects of PNA care. This could support clinicians in understanding how best to identify and support women with PNA, as well as informing policy-making and commissioning of services. Further Patient Involvement and Engagement work will explore which parts of the PNA care pathway should be prioritised for future research.

### **Funding acknowledgement**

VS is currently an NIHR Academic Clinical Lecturer in Primary Care and was a Wellcome Trust funded Clinical PhD Fellow when this research was conducted. CCG is part-funded by the WM ARC.

## **Predicting multiprofessional continuity across English general practices in 2024: a cross-sectional ecological study**

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### **Abstract - The Problem**

GP continuity has been declining in England. Since 2018 GPs have delivered less than half of primary care appointments. The 2024 General Practice Patient Survey reported undifferentiated multiprofessional continuity, replacing GP continuity used in previous years. Our research question asked whether appointment delivery predicted variations in patient-reported multiprofessional continuity in 2024, after adjusting for population and practice factors.

### **Abstract - The Approach**

Our cross-sectional practice level study collated data sets of active English general practices for the time period 2023-2024, published by the National Health Service and Government. We excluded practices smaller than 750 patients or with average NHS payments above £500/patient.

We fitted an ordinary least squares regression model. with multiprofessional continuity as our outcome and, after a robust selection process, 10 independent variables: appointment mode and numbers were our predictors of interest, and we adjusted for previous GP continuity (to reflect a practice's previous approach and achievement of GP continuity), geography (deprivation score, commissioning region), population (% white ethnicity, % with long-term condition) and practice (list size, workforce numbers, funding) characteristics.

### **Abstract - The Findings**

The model included 5,207 practices (83.3% of active practices). Mean multiprofessional continuity in 2024 was 14.8%. More face-to-face appointments being delivered (coefficient=0.0162, p=0.0025), as well as higher previous GP continuity and higher % with long-term conditions, predicted greater continuity. Living outside London (5 of 6 regions), greater deprivation and smaller list sizes predicted lower continuity. Numbers of appointments/patient, % white ethnicity, workforce numbers, and funding were not predictors. The adjusted R-squared value was 0.63 and the residual standard error was 5.618 (5189 degrees of freedom).

### **Abstract - The Implications**

Appointment mode, and several geographical, population and practice factors predicted practice levels of HCP continuity. Although we could not directly compare multiprofessional continuity with previous

GP continuity, we infer that GP continuity is an important component of multiprofessional continuity and that a reversal in the previously documented decline in practice level GP continuity was unlikely.

Replacing face-to-face appointments with other modes appears to be detrimental to providing continuity. Increasing multiprofessional continuity should build on existing GP continuity, including facilitating more flexible practice appointment systems that take account of deprivation and morbidity, whilst improving current funding and workforce levels.

### **Funding acknowledgement**

No external funding received.

**135**

### **Integrated degrees: Understanding how medical students' select their IBScs**

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#### **Abstract - The Problem**

Integrated BSc (IBSc) provide opportunity for undergraduate medical students to study a subject of their choice, allowing them to enhance their understanding in their chosen field, assisting them to become independent, self-directed learners. Health Education England report that the inclusion of integrated BScs into a medical curriculum has the potential to deliver more mature, well-rounded graduates into the NHS (HEE in BMJ, 2024).

Furthermore, the IBSc often involves the undertaking of a research project, which facilitates the development of valuable, transferable research skills. There is evidence to suggest that undertaking research as part of an IBSc may enhance medical career progression, and make students more likely to become involved in research later in their careers (Sorial et al, 2021).

At our institution the number of students applying to each programme fluctuates year-on-year. In order to aid planning, promote better resource allocation and ensure the provision of high-quality courses, it is useful to understand how students select their IBSc. By understanding their priorities and preferences, we can ensure that IBScs are tailored to student need. Furthermore an understanding of the dynamics of student choice helps to frame national discussion on the future place of the IBSc in undergraduate medical education.

#### **Abstract - The Approach**

We report on work in progress from focus groups with students. The first group of focus groups will be with students who have completed their IBSc. The second is with students in year 1 and 2 of the MBBS programme, who have yet to select their IBSc. The sample size for each group will be between 6-10

medical students. Once sufficient participants have been enrolled on the study, recruitment will cease. The focus groups are facilitated by two members of staff from primary care.

### **Abstract - The Findings**

Early data shows a number of tensions held by students in making a choice as well as identifying the sources of information, formal and informal, used by student to inform their choice.

### **Abstract - The Implications**

We report on the main tensions students balance in making their choice and how they are influenced by information. We will also make suggestions as to how programme leaders can support students in their choices.

### **Funding acknowledgement**

nil

**146**

### **‘Get rid of the poop samples’: a qualitative study exploring the acceptability of faecal immunochemical testing versus a blood test to detect colorectal cancer amongst marginalised groups.**

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### **Abstract - The Problem**

FIT (faecal immunochemical testing) is available for use by General Practitioners (GPs) in the UK to guide management and referral in patients presenting with symptoms of colorectal cancer (CRC). Uptake of FIT is lower among marginalized communities such as ethnic minorities, socioeconomically deprived groups, and people experiencing homelessness. CanSense-CRC is a new blood test which uses Raman spectroscopy and artificial intelligence to detect cancer metabolites in serum to return a low or high-risk referral decision output for CRC. We wanted to explore the views of people from ethnic minority communities and people experiencing homelessness, to gain an understanding of the barriers to testing for CRC and the acceptability of the CanSense-CRC blood test as a potential alternative to FIT.

### **Abstract - The Approach**

We conducted interviews (n=3) and focus groups (n=2) with participants recruited through voluntary organisations and homeless healthcare services. Interviews and focus groups explored barriers to uptake of FIT and views about CanSense-CRC. Interviews were analysed using the Theoretical Framework of Acceptability (TFA). The research team included clinicians, health services researchers, and a patient advisory group comprising individuals from ethnic minority backgrounds with cancer experience.

### **Abstract - The Findings**

Twenty-one people participated in the study: sixteen from ethnic minority backgrounds and five experiencing homelessness. Participants highlighted challenges of using FIT and emphasised the need for education about CRC risk factors, symptoms, and the importance of early detection. Generally, a blood test delivered in primary care settings was favoured by participants due to familiarity and convenience, but stigma around colorectal cancer and fear of care seeking persisted. Participants also expressed a preference for testing to be available outside of traditional primary care settings, such as in supermarkets, community and religious centres.

### **Abstract - The Implications**

This study underscores the importance of developing screening tests to detect symptoms of bowel cancer that are acceptable, appropriate, and accessible. This includes not only the type of test but also the setting in which it is offered. A blood test such as CanSense-CRC was broadly perceived to be acceptable by participants and has potential to improve bowel cancer testing uptake in underrepresented communities and those who are reluctant to use FIT.

### **Funding acknowledgement**

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155

### **Characteristics of a General Practice Cohort for a Primary Care-based Dementia Risk Prediction Model**

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### **Abstract - The Problem**

The prevention and reduction of dementia risk are crucial for addressing its growing burden in the UK and globally. Despite its significance, no dementia risk prediction models are currently implemented in UK primary care. Our aim was to develop and validate a dementia risk prediction model using Clinical Practice Research Datalink (CPRD) Aurum for model development and CPRD GOLD for validation. This abstract presents the baseline characteristics of the CPRD Aurum cohort.

### **Abstract - The Approach**

Adults ( $\geq 18$  years old) from CPRD Aurum (1-Jan-2005 to 31-Dec-2022) with linked Health Episode Statistics Admitted Patient Care (HES APC) and Office of National Statistics (ONS) death records were included. Individuals with an existing diagnosis of dementia, cognitive impairment, memory loss,

neurodegenerative conditions (including Huntington's disease, Parkinsons disease, Creutzfeldt-Jacob disease) at or prior to study entry or <12 months of follow-up were excluded. A total of 70 risk factors across demographic characteristics, comorbidities, and prescriptions medications were included. The primary outcome was incident dementia diagnosis in either HES APC or CPRD Aurum.

### **Abstract - The Findings**

From an initial cohort of 20,871,098 individuals, 2,817,587 were excluded for prevalent dementia (141,065), cognitive impairment and memory loss (230,754), other pre-existing conditions (80,095) and <12 months of follow-up (2,576,087). The final study cohort included 18,053,980 individuals (mean age of 45.04 ± 5.42 years, 50.7% men, and 69.78% of White ethnicity). The median follow-up was 6.49 (3.06-13.43) years. Incident dementia occurred in 208,375 (1.15%) individuals [men: 79,839 (38.32%); women: 128,536 (61.68%)]. Baseline characteristics included a mean BMI of 25.83 ± 5.55 kg/m<sup>2</sup>, systolic and diastolic blood pressures (mmHg) of 125.97 ± 16.98 and 76.07 ± 10.16, respectively and total cholesterol of 5.11 ± 1.13 mmol/L. Men were more likely to report alcohol misuse, current smoking, fractures and head injuries. Women were more likely to have anxiety, depression, cancer, irritable bowel disease and migraines. Women were more frequently prescribed medications, except for antiarrhythmic, antiplatelets, antipsychotics, and lipid-lowering medications.

### **Abstract - The Implications**

This study highlights the baseline characteristics of a large primary care cohort for dementia risk prediction. The findings inform the development and validation of a risk model with potential to identify high-risk individuals and provide more tailored interventions needed to reduce dementia incidence.

### **Funding acknowledgement**

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157

### **Healthcare Use and its Variation in People with Fibromyalgia: A Systematic Review**

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### **Abstract - The Problem**

Fibromyalgia is a chronic condition characterised by widespread pain and a range of non-pain symptoms that have a detrimental impact on patients' quality of life. Fibromyalgia is poorly understood and presents difficulties for those with the condition and the clinicians treating them, partly due to a lack of effective treatment options.

Whilst many people with fibromyalgia are seen in rheumatology secondary care services, recent UK guidelines propose that primary and community services take responsibility for their care. This recommendation presents a considerable challenge, particularly considering the current workload crisis and resource limitations within primary care. Reducing ineffective healthcare use and providing recommendations to support practitioners in providing evidence-based care is an important research priority.

The first step towards optimising the care of people with fibromyalgia is to understand current practice, and its variation. This systematic review addresses this, using global electronic health record and insurance data to describe levels of healthcare use in people with fibromyalgia, how they vary across geographical regions and over time, and whether there are patient subgroups with particularly high healthcare use.

### **Abstract - The Approach**

A protocol was registered with PROSPERO. The search strategy identified 2,091 unique records across four medical databases that explored fibromyalgia healthcare usage. Title, abstract and full-text screening led to inclusion of 30 papers. Quality appraisal and data extraction were carried out. Data synthesis used narrative synthesis, meta-analysis, or synthesis without meta-analysis as appropriate. Analysis is ongoing, with initial findings most relevant to UK primary care described.

### **Abstract - The Findings**

People with fibromyalgia have twice as many primary care consultations per annum as controls, over time and across regions. As at least 24/30 studies were funded by pharmaceutical companies, findings require interpretation in context. Inconsistencies in overall and service-specific reporting, alongside limited data after 2015, were also evident.

### **Abstract - The Implications**

This interim analysis highlights the increased levels of primary care consultation in people with fibromyalgia and potential bias within the existing literature. Review findings may be used to bridge the gap between policy and practice at an international level, help support integration of healthcare services and provide insights to facilitate the transition towards managing fibromyalgia within primary care.

### **Funding acknowledgement**

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162

**A primary care intervention to promote engagement in an online health community for adults with troublesome asthma: non-randomised feasibility study**

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### **Abstract - The Problem**

Among 5.4 million people with asthma in the UK, >2 million experience suboptimal control, leading to healthcare services use and costs, and poorer quality of life. Self-management interventions can improve asthma control. People are increasingly using online health communities (OHCs) for health advice and peer support, suggesting that peer-driven learning and support could complement NHS resources. We developed a primary care intervention for adults with troublesome asthma, in which clinicians promote engagement with the Asthma+Lung UK (ALUK) asthma OHC.

### **Abstract - The Approach**

Patients with asthma were recruited via a survey sent by text message from their GP surgery. Interested and eligible patients were invited to a face-to-face consultation with a nurse at their GP surgery, who demonstrated the ALUK OHC and signed patients up. Online follow-up questionnaires were sent to participants three months later.

### **Abstract - The Findings**

425 patients (38% female, 19% male, 43% unknown; mean age 51.3 years, SD 15.6) from 11 participating GP surgeries responded to the survey (response rate 10%). 104/425 (24%) said they would consider seeking online peer support and 158/425 (37%) thought it was appropriate for primary care clinicians to promote engagement in a safe asthma OHC. Among respondents, mean Asthma Control Test (ACT) score was 15.97 (partly controlled), SD 5.53, n=379/425; quality of life (EQ-5D-5L) utility score was 0.65 (moderate), SD 0.33, n=296/425; and anxiety level (GAD-7) was 7.88 (mild), SD 7.73, n=264/425.

Of 122/425 interested and eligible respondents, 33/122 (27%) were excluded for having an ACT score >20 and 10/122 (8%) for already being members of an OHC. 42/425 (9.8%) were recruited to the study, of whom 29/42 (69%) completed follow-up. 22/42 (52%) reporting engaging with the OHC. Follow-up completion was higher when consultations were delivered by practice nurses (77%) than research nurses (60%).

### **Abstract - The Implications**

The intervention was feasible and acceptable. A quarter of adults with asthma would consider seeking advice from peers in a safe OHC. The study design allowed recruitment of this population. Nurse-led promotion and sign-up resulted in patients engaging with the OHC. For the trial, we will prioritise practice nurses to deliver the intervention and anticipate that a shorter recruitment survey will increase response rates.

### **Funding acknowledgement**

This study was funded by a National Institute for Health and Care Research (NIHR) Programme Grant for Applied Research (NIHR202037)

**164**

### **Prognostic value of upper respiratory tract microbes in children and adults presenting to primary care with acute respiratory infections as part of the RAPID TEST RCT**

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### **Abstract - The Problem**

Antibiotics are prescribed for ~50% of respiratory tract infections (RTIs) in primary care, despite evidence most patients do not benefit. This is thought to be partly due to clinician diagnostic and prognostic uncertainty. Point-of-care testing (POCT) to detect upper respiratory tract microbes has been suggested as a solution, but there is a lack of clear evidence regarding the associations between presence of microbes in the upper respiratory tract and symptom outcomes.

**Aim:** To understand the relationship between nose/throat swab microbiological results and participant reported symptom severity in patients presenting to primary care with acute RTI.

### **Abstract - The Approach**

RAPID-TEST RCT recruited patients ≥12 months with RTI where the clinician and/or patient believed antibiotic treatment was, or may be, necessary, presenting to 16 GP practices in SW England. Baseline characteristics were collected. All patients had a combined nose/throat swab analysed using BioFire®

FilmArray® Torch 1 (19 viruses, four atypical bacteria) and extended TaqMan PCR (29 viruses, 13 bacteria) at the central research laboratory. Post consultation, patients/parents recorded the severity of fourteen RTI symptoms (eleven for children) on a 0–6 scale daily for up to 28 days.

We will use linear regression to investigate associations between nose/throat swab microbiological results and mean symptom severity at days 2-4, adjusting for age, sex, clinical characteristics and antibiotic consumption.

### **Abstract - The Findings**

552 participants were randomised between December 2022 and April 2024. 63% were female; 86% ≥16 years; 95% white ethnicity; 26% chronic lung disease.

414 participants completed the day 2-4 symptom severity data (76%). Mean severity score reduced from 2.0 to 1.4 on day 2 to 4. ≥1 virus was detected in 47% of participants and an atypical bacterium was detected in 7%. The most commonly detected microbe was human Rhinovirus/Enterovirus, detected in 20%. Full results will be available for the conference.

### **Abstract - The Implications**

These results will help determine if detecting upper respiratory microbes in nose/throat swabs could be useful in guiding treatment decisions in primary care. This programme of research could influence clinical guidelines for using POCTs in diagnosing RTIs, and guide future work into targeted antibiotic and antiviral use in primary care.

### **Funding acknowledgement**

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**166**

### **Exploring patients' and clinicians' experiences of a primary care intervention to promote engagement in an online health community for adults with troublesome asthma: Qualitative interview study**

Georgios Dimitrios Karampatakis<sup>1</sup>, Helen Wood<sup>1</sup>, Xiancheng Li<sup>2</sup>, Chris Griffiths<sup>1</sup>, Stephanie Taylor<sup>1</sup>, Veronica Toffolutti<sup>1</sup>, Victoria Bird<sup>1</sup>, Nathan Lea<sup>3</sup>, Richard Ashcroft<sup>4</sup>, Bill Day<sup>5</sup>, Neil Coulson<sup>6</sup>, Pietro Panzarasa<sup>2</sup>, Aziz Sheikh<sup>7</sup>, Clare Relton<sup>1</sup>, Nishanth Sastry<sup>8</sup>, Jane Watson<sup>9</sup>, Viv Marsh<sup>10</sup>, Jonathan Mant<sup>11</sup>, Borislava Mihaylova<sup>1</sup>, Neil Walker<sup>1</sup>, Anna De Simoni<sup>1</sup>

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### **Abstract - The Problem**

In the UK, approximately 5.4 million adults have asthma, with one-third experiencing poor asthma control, affecting quality of life, and increasing healthcare use. Interventions promoting self-management can improve asthma control, reducing comorbidities and mortality. Integration of online peer support into primary care services to foster self-management is a novel strategy. We developed an intervention for adults with asthma consisting of two components. In the first component, patients were invited to a face-to-face consultation with a clinician at their general practice, who demonstrated an established asthma online health community (OHC) and signed patients up. The second component involved patients' engagement with the OHC. This study aimed to explore patients' and clinicians' experiences of the intervention, as part of a 3-month non-randomised feasibility study.

### **Abstract - The Approach**

Forty-two study participants and five nurses who delivered the intervention were invited to qualitative, one-to-one, semi-structured interviews. A topic guide was used, and topics were further explored in subsequent interviews. Interviews were audio-recorded and transcribed verbatim. Thematic analysis (Braun and Clarke method) is ongoing.

### **Abstract - The Findings**

We interviewed twelve patients (nine female, two male, one unknown; eight White, three Asian/Asian British, one Black/Black British) registered across six general practices, and five female nurses (three practice nurses, two research nurses; two White, three Asian/Asian British). Preliminary findings indicate patient satisfaction with the simplicity of questionnaires completed during the consultation, and how long they took to complete. Patients noted that while nurses thoroughly explained peer support, more emphasis is needed on ensuring patients leave the consultation understanding how to use the OHC. Patients' engagement with the OHC varied; most reported engaging passively. Patients with symptoms found it helpful and those without symptoms did not use the OHC. Patients reported that OHC engagement gave them information about their condition and confidence in managing their asthma, as they felt encouraged realising that there are other people with similar health-related problems.

## **Abstract - The Implications**

Promotion of online peer support and sign-up by primary care clinicians was acceptable by both patients and nurses and resulted in OHC engagement. Findings will enable refinement of the intervention and inform delivery of a randomised controlled trial to assess effectiveness.

## **Funding acknowledgement**

This work was supported by the National Institute for Health and Care Research through its Programme Grants for Applied Research Programme (grant number: NIHR202037).

**171**

## **Overcoming opportunistic recruitment challenges in primary care: lessons from the COAT trial of oral antibiotics for cellulitis**

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## **Abstract - The Problem**

COAT is a blinded, non-inferiority RCT assessing the effectiveness and safety of 5 vs 7 days of oral flucloxacillin (for lower limb cellulitis). Recruitment is opportunistic in a time pressured setting

Despite implementing a decentralised workflow to reduce GP burden (central randomisation, IMP distribution and consent). Recruitment over the first 6 months was 65% of target. Improvement of recruitment was critical for continued funding.

## **Abstract - The Approach**

COAT opened in August 2023 and recruitment was lower than expected during the first 6 months (26 participants, 4.3/month). The study team undertook a detailed analysis of recruitment and screening data, survey findings, informal feedback from sites and public partners to explore barriers and identify strategies to improve recruitment. As a result, recruitment has increased to 7.1/month by 12 months, and 13.6/month during the last 6 months.

We have currently recruited 168 participants of which 60.5% are male, median age is 66 years.

## **Abstract - The Findings**

Sites reported an increase in the number of patients presenting at urgent treatment centres (UTC) and emergency departments (ED) instead of general practice. We therefore opened 2 UTC sites (recruited 20/168 participants), 3 ED sites (6/168 participants) and 4 combined UTC/ED sites (5/168 participants) (as of 30/01/2025).

Sites reported frequent use of remote assessment of cellulitis, which was not permissible in the protocol. Following a risk assessment, we implemented a system for remote assessment and consent.

Many different healthcare professionals manage acute cellulitis in primary care. Our protocol required a medical doctor to confirm eligibility, as per GCP guidance. Following MHRA approval, we modified the protocol to allow any healthcare professional who manages cellulitis to confirm eligibility.

We identified processes to facilitate recruitment in busy general practice and created study role workflows to provide simple guides to staff.

### **Abstract - The Implications**

We have been able to implement several changes that have resulted in our recruitment rate increasing from an average of 4/month during the first six months to an average of 13.6/month during the most recent six months.

### **Funding acknowledgement**

This trial is primarily funded by NIHR HTA with additional financial support from the University of Southampton.

**172**

### **Multimorbidity Trajectories in Obese and Non-obese Individuals – A Longitudinal Analysis Using UK Biobank Data**

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### **Abstract - The Problem**

#### **Background**

Multimorbidity, the presence of two or more chronic conditions, is one of the most pressing challenges in primary care, leading to increased healthcare utilization, polypharmacy, and complex disease management. People living with obesity are at a higher risk of developing multimorbidity. However, there is limited research on how obesity status, measured by different anthropometric indicators, influences disease onset and progression. With primary care shifting towards more adaptable approaches to patient risk stratification, particularly in light of new SGLT-2 inhibitors and GLP-1 receptor agonists, understanding obesity's role in multimorbidity is crucial. This study will address a critical gap in

the literature by examining multimorbidity timing, progression, and clustering in individuals with and without obesity while assessing the impact of different obesity measures.

### **Aim**

This study aims to determine whether obesity accelerates the onset and progression of multimorbidity by examining:

1. The time it takes for disease-free individuals living with and without obesity to develop their first chronic condition and progress to multimorbidity.
2. The most common incident chronic conditions and multimorbidity patterns in both groups.
3. Whether these findings differ when obesity is defined using Body Mass Index (BMI) versus waist-to-hip ratio (WHR).

### **Abstract - The Approach**

This longitudinal observational study will use UK Biobank data, a research cohort with health records of over 500,000 participants. The study population will include individuals aged 40 to 69 years who were free from chronic diseases at baseline, allowing for the tracking of disease onset and multimorbidity progression over time. Cox proportional hazards models will compare the risk of developing multimorbidity between groups, while different anthropometric measurements will be evaluated to determine their predictive value.

### **Abstract - The Findings**

This study is a work in progress and will be completed by the conference. Findings will reveal distinct multimorbidity clusters, showing that obesity increases the likelihood of multimorbidity and influences disease patterns. It will also demonstrate that using both BMI and waist-to-hip ratio is optimal for assessing obesity and multimorbidity risk.

### **Abstract - The Implications**

This study will provide evidence-based insights for primary care clinicians and policymakers to potentially influence clinical guidelines and inform public health policy on multimorbidity risk reduction for people living with obesity.

**177**

### **Factors influencing multiple non-utilized healthcare appointments from patients' and healthcare providers' perspectives in Saudi Arabia: A qualitative research study**

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### **Abstract - The Problem**

**Background:** Globally, multiple non-utilized appointments are linked to poorer health outcomes, increased emergency visits, higher hospitalization rates, gaps in preventive care, and increased mortality in patients with chronic conditions across primary and secondary healthcare. Studies of missed appointments in Saudi Arabia have revealed barriers such as unequal access, lack of staff, lengthy wait times, and transportation issues leading to non-utilized appointments. However, no distinction has been made between single and multiple non-utilized appointments, or their causes in any depth. This study focused on one governmental hospital in Saudi Arabia, which continues to experience a high rate of multiple non-utilized appointments despite implementing various interventions.

**Aim:** To explore factors behind multiple non-utilized appointments from the perspectives of patients and healthcare providers to inform interventions for improving service accessibility and appointment utilization.

### **Abstract - The Approach**

**Method:** A qualitative study was carried out within different outpatient departments. Twenty healthcare providers and twenty adult patients with multiple non-utilized appointments from clinics with high no-show rates were included. Semi-structured interviews were conducted in Arabic or English. Data were analysed using inductive reflexive thematic analysis. The themes were aligned with Levesque's access framework, which included both demand- and supply-side perspectives.

### **Abstract - The Findings**

#### **Results:**

The study identified five key themes contributing to multiple non-utilized appointments: healthcare system determinants, patients' attitudes and perceptions, communication support and engagement, health and well-being factors, and financial, geographic and transportation barriers. Potential interventions followed two themes; firstly, enhancing healthcare delivery systems by- improving appointment eligibility and management, improving reminder systems, optimizing staffing, and advancing virtual appointments. Secondly, improving patient accessibility and engagement; by enhancing transportation, fostering patient accountability, offering home visits, and enhancing patient motivation through educational initiatives and personal habit changes.

### **Abstract - The Implications**

#### **Conclusion:**

Multiple non-utilized appointments are a global challenge, also evident in Saudi Arabia, which shows the impact of this phenomenon on healthcare systems worldwide. This study showed a need for vital healthcare system changes both within hospital outpatient departments and in broader primary care

services. Improving the role of primary healthcare centres and implementing referral-back to primary care for stable cases would lessen the demand for hospital visits and enable OPD quality improvement to proceed.

**179**

### **Early cancer detection in community pharmacies in deprived areas – a systematic review.**

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#### **Abstract - The Problem**

Early detection is key to favourable cancer outcomes. Patients may present to community pharmacies (pharmacies) with symptoms of undiagnosed cancer. Pharmacies are accessible healthcare providers, with rapidly increasing clinical roles.

We aimed to summarise the available global evidence of outcomes from early cancer detection programs in pharmacies: i) the approaches being offered, ii) their outcomes, iii) the barriers and facilitators to the delivery of such programs, and iv) service users' and stakeholders' experiences. We aimed to undertake subgroup analyses to account for deprivation.

#### **Abstract - The Approach**

We have undertaken a systematic review. The following databases were searched: MEDLINE, EMBASE, CINAHL, PsychINFO and Cochrane Central Register of Controlled Trials (CENTRAL). We searched relevant websites from the United Kingdom.

Relevant articles published in or after 2015, written in any language, reporting on, or describing any interventions or programs in pharmacies to aid early cancer detection were included.

We used a narrative approach to synthesise the evidence. Quality assessment was completed using the Mixed Methods Appraisal Tool (MMAT) and the Authority, Accuracy, Coverage, Objectivity, Date, Significance (AACODS) checklist.

#### **Abstract - The Findings**

We identified 20375 records. 14143 abstracts and titles were screened, and 330 full-text articles were assessed for eligibility. 52 publications originating from 15 countries were included for data extraction. The most studied cancer sites were colorectal (n=27) and lung (n=9). 9 publications included outcomes regarding all cancer sites. Most frequently the publications reported on cancer screening (n=26) and diagnosis (n=13). The outcomes reported were diverse: numerical outcomes (n=53) including screening uptake, or number of referrals; professional (n=31) and/or patient or service user (n=25) perceptions.

The latter includes barriers, facilitators or participants' experiences. Deprivation related outcomes were rarely reported (n=8).

### **Abstract - The Implications**

The findings from our review show that there is growing evidence of the positive impact CPs can have on early cancer detection. The nature of the trialed approaches and the common themes of barriers and facilitators need to be taken into consideration when new services are piloted or being introduced.

### **Funding acknowledgement**

This project is funded by the National Institute for Health and Care Research (NIHR) School for Primary Care Research (project reference 602).

180

### **A Quality Improvement Project to Improve Adherence to Baseline Investigations in Patients with Newly Diagnosed Hypertension**

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### **Abstract - The Problem**

Hypertension affects around 30% of UK adults and is frequently diagnosed in primary care. It is a leading cause of cardiovascular disease. NICE advises that patients who are diagnosed with hypertension undergo investigations to assess cardiovascular risk and end organ damage. At a GP practice in Sheffield, we sought to improve adherence to these baseline investigations in patients with newly diagnosed hypertension by implementing iterative changes in this quality improvement project (QIP).

### **Abstract - The Approach**

This three-cycle QIP utilised Plan-Do-Study-Act cycles to implement and test changes at the practice. Three changes were implemented: (1) a practice hypertension protocol, (2) a patient reminder text template, and (3) email and SystemOne alerts. Data were collected prior to and after each change. Outcomes were adherence to each individual investigation, and if adherence to all investigations were achieved. The investigations were as stipulated by NICE: urine dip, urine ACR, blood tests (lipid profile, HbA1c, U+E and LFTs) and an ECG.

### **Abstract - The Findings**

All patients with a newly coded diagnosis of hypertension between 22<sup>nd</sup> May 2023 and 26<sup>th</sup> March 2024 were identified in SystemOne. Changes were implemented from 18<sup>th</sup> January 2024. In cases identified pre-implementation (n=45), adherence to all investigations was 6.7%, and post-implementation (n=21),

adherence was 19.0%. Improvements in adherence to investigations were identified in urine dip (+15.2%), urine ACR (+14.6%), and ECG (+4.8%). A decrease in adherence to blood tests was identified (-12.2%).

### **Abstract - The Implications**

Our QIP improved adherence to national hypertension guidelines for baseline investigations in four out of five outcomes analysed. We suspect that the lower adherence to blood tests in the post-intervention group reflects a lag between the appointment for hypertension diagnosis and the appointment for phlebotomy and hence does not reflect a true decrease in adherence. Longer-term data collection was not possible due to the rotational nature of resident doctor training; however, this would be helpful to evaluate the lasting impact of the changes. Ensuring that patients have all baseline investigations enables identification, and therefore treatment, of modifiable risk factors for cardiovascular disease. These low cost and easily implementable changes can be adapted by other practices to help reduce disease burden in our population.

### **Funding acknowledgement**

None

**184**

### **Adapting to Inspire: The 'Future of Primary Care' Seminar Series**

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### **Abstract - The Problem**

Primary care faces persistent workforce shortages, particularly in academic and alternative career pathways, exacerbated by limited exposure to non-clinical opportunities for medical students and early-career professionals. Traditional educational methods often fail to engage learners in understanding these diverse pathways. To address this gap, the 'Future of Primary Care' seminar series was designed to inspire interest in academic and leadership roles, using an adaptable, student-centred approach to explore key issues such as sustainability, health equity, and digital transformation.

### **Abstract - The Approach**

The series, delivered over one year initially, featured expert-led seminars on diverse topics, including migrant health, adolescent wellbeing, digital innovation, and prison healthcare. It employed a blended format, combining live webinars with asynchronous recordings to ensure accessibility and engagement.

Evaluation used a mixed-methods iterative design. Quantitative and qualitative post-seminar surveys assessed knowledge, attitudes, and career aspirations, while student-led focus groups provided qualitative insights into participant experiences and the impact of the series. Qualitative data from surveys and focus groups underwent thematic analysis.

### **Abstract - The Findings**

The series engaged 359 live participants and 228 asynchronous viewers, including students and healthcare professionals from the UK and internationally. Survey data revealed that 98% of respondents gained new insights into primary care, 93% appreciated the academic opportunities presented, and 67% expressed increased interest in a primary care career. Focus groups highlighted the value of personal narratives shared by speakers, which showcased resilience and adaptability in forging non-traditional primary care roles.

### **Abstract - The Implications**

This seminar series demonstrates the potential of adaptable, innovative teaching methods to address workforce challenges and showcase academic primary care. By blending delivery formats and highlighting real-world career opportunities, it successfully broadened perceptions of primary care and inspired interest in academic and leadership roles.

Future plans include expanding topics to reflect emerging challenges, and fostering partnerships with other institutions to sustain engagement, particularly for early career doctors who may not have yet decided which specialty to pursue.

### **Funding acknowledgement**

St George's, University of London - Staff Student Partnership Grant Funding

189

### **Characteristics of Training of Lay Health Worker Interventions in Randomised Control Trials Targeting Ethnic Minorities in High income countries: A systematic review and Narrative Synthesis**

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### **Abstract - The Problem**

Lay Health Workers (LHWs) undertake crucial roles in primary care, particularly in addressing health disparities among ethnic minority populations. However, despite their recognised effectiveness, there is significant variability in how training characteristics are reported in RCTs. This inconsistency limits the ability to compare studies, evaluate training adequacy, and determine which training components contribute to successful primary care outcomes.

Without a standardised approach to reporting, it is difficult to assess the quality of training across studies, hindering replication and scalability within primary care frameworks. The aim of the study was

to systematically review and synthesise **how** LHW training has been reported in RCTs targeting ethnic minorities in high-income countries.

This is the first systematic review to focus specifically on the reporting of LHW training characteristics in RCTs within high-income countries. While previous research has examined the effectiveness of LHW interventions, there has been little attention to the completeness, consistency, and transparency of training descriptions within these trials.

### **Abstract - The Approach**

This study is a **systematic review and narrative synthesis**.

#### **Methods:**

- **A comprehensive search was conducted in Embase, Medline, CINAHL, CENTRAL, and Cochrane (2010–2024), following PRISMA guidelines.**
- **Included RCTs reporting LHW training; excluded non-RCTs and studies outside high-income settings.**
- **Screening was conducted in two stages (title/abstract, full-text review), with data extracted on training duration, trainers, content, delivery format, assessments, and ongoing training.**
- **A narrative synthesis was used and Study quality was assessed using relevant Newcastle-Ottawa Scale items.**

### **Abstract - The Findings**

23 studies from the initial 2875 were eligible for inclusion in the final analysis, with 22 conducted in the United States and 1 in Australia. Consistent reporting was observed in number of LHWs (23 studies), intervention target (23), intervention duration (23), training duration (22), individuals leading the training sessions (17) and content (22). Significant variability was observed in the reporting of further training (12), assessments (7) and delivery format (11).

### **Abstract - The Implications**

This study strengthens the evidence base for **LHW interventions in primary care** by ensuring that training characteristics are consistently reported. This will facilitate better comparison, improve reproducibility, and ultimately support the development of clearer guidelines for integrating LHWs into primary care systems.

### **Funding acknowledgement**

n/a

**194**

### **What are women told about pain relief for intra-uterine device fitting: A document analysis**

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#### **Abstract - The Problem**

Multiple recent media reports have described women's painful experiences of intra-uterine device (IUD) fitting. Existing research suggests women feel under-prepared for the IUD fitting procedure and pain relief is inconsistently offered. The study is driven by the concern around the lack of information offered to patients about their choice of pain relief, as well as their pain relief needs not being met. These factors are leading to an unacceptable level of pain in some cases.

This work aims to understand how pain relief options are currently presented in patient-facing documents. The written information provided to women prior to IUD fitting may act as a facilitator to a shared decision-making between patient and clinician, possibly leading to more positive clinical experiences.

#### **Abstract - The Approach**

A qualitative content analysis will be undertaken of patient-facing, publicly available written information on IUD fitting procedures. Documents will be selected following a systematic search on Google using relevant search terms. Sources searched will include NHS England and NHS Wales health boards and trusts as well as key websites such as the Faculty for Sexual and Reproductive Healthcare and third sector organisations. Data extracted will include how pain is discussed, types of analgesia mentioned, benefits and risks.

#### **Abstract - The Findings**

This is work in progress and will be completed by May 2025. Seventy eligible documents have been identified to date. Early findings indicate that while some examples of good practice have been identified, the majority of documents only briefly mention potential pain and pain relief. The language used around pain and the way in which pain relief options are presented in the written information may not be appropriate or adequate to meet the needs of women. In addition, they do not include clear signposting to further sources of support.

#### **Abstract - The Implications**

By identifying existing variation we hope to drive improvements in information provision prior to IUD fitting. The findings of this work will inform a larger planned study to co-produce an effective decision

support tool about analgesia options for IUD fitting. This will support women to understand and balance the advantages and disadvantages of each pain relief option in order to make an informed choice.

198

### **In what ways has Case Management improved health and wellness with the community?**

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#### **Abstract - The Problem**

Case management is evidence-informed and effective in improving care in and with individuals with chronic conditions and complex care. The aim of the Case Management Project was to document how case management works, for whom and in what contexts. As a result, there was potential to co-create an intervention grounded in the culture and framed within the context of Sturgeon Lake First Nation which is a Plains Cree Nation in Northern Saskatchewan, Canada.

#### **Abstract - The Approach**

Although the overall design of the study was informed by the integration of community-based participatory research and transformative action research, co-creation, a form of participatory innovation, was undertaken with the Sturgeon Lake Health Centre (SLHC) to reflect upon and implement case management into primary care. Over time, an Assessment Tool was co-created to facilitate the integration of Traditional and Western approaches to health and well-being. As a result, case management is being used by all nurses facilitating care at the SLHC. The program includes four culturally grounded components: 1. Assessment; 2. Co-created care planning which has the potential to result in improved self-care; 3. Integrated health and traditional care; and 4. Support for individuals, families and the community.

#### **Abstract - The Findings**

The questionnaire used to capture outcomes (care integration, case management and self-care strategies used and quality of life) was reviewed and made easy-to-read prior to being implemented by the Nation. Of the participants, 59% were women and 41% were men. The median number of conditions per participant was four (Ranged from 1 to 11). The most common were diabetes (53.3%), vision conditions (46.7%), and hypertension/back pain (40.0%); within each, >40% reported at least moderate limitations. Greater income adequacy corresponded to fewer conditions. Of 26 participants, 20 (76.9%) indicated that their health needs and expectations were usually/always met, and 23 (88.5%) were usually/always involved in care management. Half reported always receiving culturally appropriate services.

#### **Abstract - The Implications**

This intervention has the potential to generate new ways of knowing and understanding integrated and team-based case management grounded in the culture and co-created with and within the Nation. It is expected that these tools and skills could be utilized in similar settings.

### **Funding acknowledgement**

Canadian Institutes of Health Research, Grant/Award Number: 397896 Saskatchewan Health Research Foundation: Grant/Award Number: 4463

**201**

### **An investigation into the use and users of online primary care access in England**

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#### **Abstract - The Problem**

Online consultation (OC) and triage systems have gained significant traction since the pandemic and are now routinely used to access primary care in England. OCs can be either “total triage”, where all appointments first require an online request, or as an additional service complementing existing access routes. However, concerns have been raised about the potential for OCs to widen access inequalities. This study explores the determinants of use and demographics of patients accessing OCs to identify if there is potential for inequalities in accessing primary care.

#### **Abstract - The Approach**

We use data from March 2020 to December 2022 for 539 practices using a specific OC system (Patches.ai). Data include 730,570 requests from 246,381 patients, and include nature, time and date of request, and patient demographics for those logging a request. We produced descriptive statistics of the demographics of patients and requests over various time dimensions (time of day, day of week, month and year). A multilevel count model (negative binomial) restricted to established practices during 2022 (200,944 patient requests from 97,513 patient in 63 practices) was used to examine the influence of patient demographics and practice level characteristics (list size, rates of OC use, deprivation and rurality) on the volume of OCs submitted.

#### **Abstract - The Findings**

Of the 730,570 requests, 65% were from female patients, and 55% of requestors were aged under 40 years. Ethnicity not well was coded but where present, 58% of requestors were of white ethnicity. Overall rates of practice use were low. The multilevel negative binomial model showed that a significant proportion of variation is at the practice level, with more frequent use by patients in higher-use practices, in areas of lower deprivation, by white, female users.

#### **Abstract - The Implications**

The analyses finds that younger women are the predominant users of OC, in contrast to the usual pattern of GP appointment data where there are higher consultation rates for under 5s and over 65s. Relatively low rates of use suggest that few practices were using OCs for total triage. With increasing numbers of practices relying on OCs for patient access, future work could look at whether the demographics of users are different in high-use practices.

### **Funding acknowledgement**

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**203**

### **How can primary care physicians explore suicidal thoughts: a systematic review and narrative synthesis**

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#### **Abstract - The Problem**

It is a common feature for primary care clinicians to consult with patients who present with mental health problems and it's best practice to ask about thoughts and acts of self-harm and if the patient has had thoughts of suicide because mental illness is a well-known risk factor for suicide.(1) It is important to identify if patients have experienced suicidal thoughts because these thoughts are often distressing and intervening early can reduce future likelihood of self-harm and suicide. There are however concerns among clinicians and patients that asking about suicide can induce suicidal thoughts. We aimed to explore how primary care clinicians, such as GPs, can explore suicidal thoughts in the consultation.

#### **Abstract - The Approach**

We conducted a systematic review (PROSPERO [CRD42023422196](https://doi.org/10.1111/1471-2575.15196)). Searches were done in MEDLINE, PsycINFO, CINAHL, and EMBASE from 2003-2023. Qualitative, mixed-methods, and cross-sectional studies were included. The construct was suicidal thoughts including images, plans, and urges from both patient and clinician experiences. Self-harm thoughts and physician-assisted suicide were excluded. Main outcomes were experiences, perspectives about questioning, acceptability, and perceived benefits or unintended harms of exploring suicidal thoughts in patients by primary care clinicians and for patients

being asked about suicidal thoughts. Screening, selection, data extraction and quality appraisal was done by two independent reviewers. A narrative synthesis (Popay et al 2006) was undertaken.

### **Abstract - The Findings**

The review is reported according to PRISMA 2020 guidance. Searches yielded 7,346 unique findings. Initial screening has identified 50 full-text studies for review. Preliminary synthesis identified a clinician desire for more screening tools and training for managing suicidal-thoughts, need to overcome barriers to meaningful communication in particular with young people, and importance of considering individual beliefs of primary care clinicians about suicide. The full synthesis, considering the quality of included evidence, will be presented.

### **Abstract - The Implications**

Our initial findings highlight the complexity of asking about suicidal thoughts in a primary care consultation. It is critical to further examine and understand how to optimise enquiry about suicidal thoughts because of how common these thoughts are, and to reduce distress and chances of self-harm and suicide in people presenting to primary healthcare.

### **Funding acknowledgement**

Faraz Mughal, Doctoral Fellow, is funded by NIHR (300957).

**211**

### **Using a Priority Setting Partnership to prioritise research questions that address the primary care needs of an ageing cohort of people living with HIV**

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### **Abstract - The Problem**

The proportion of people living with HIV (PLWH) aged over 50 has doubled in the last 10 years in England. As they age, PLWH face increased risks of cardiovascular disease, diabetes and frailty. Multiple long-term conditions have serious consequences in terms of reduced quality of life, increased use of medicines and healthcare services. A Lancet series on ageing with HIV highlights the global challenge of addressing the needs of this population.

General Practitioners (GPs) could play a greater role in providing primary care for ageing PLWH. However PLWH's experiences with GPs have often been negative, citing concerns around HIV knowledge, confidentiality, stigma, and poor communication with HIV clinics.

To address this, we need to better understand the healthcare priorities of older PLWH, the roles of potential care providers, and how the health system can best meet their needs.

## **Abstract - The Approach**

To answer these questions, we plan to use the James Lind Alliance's Priority Setting Partnership (PSP) approach which brings together patients, carers and clinicians to identify key research priorities. This method ensures equal input from people and organisations for whom the topic matters and involves five stages:

- Initiation – defining the scope and relevant people and organisations.
- Consultation – gathering research questions from relevant people and organisations, and reviewing research recommendations from sources such as NICE, BMJ Clinical Evidence etc.
- Collation – Grouping questions into themes and assessing existing evidence. .
- Prioritisation – refining a shortlist of questions at a priority setting workshop.
- Reporting and refining – publish in journals and communicate to stakeholders.

We have created a steering group and planned a PSP workshop for relevant people and organisations in the Spring.

## **Abstract - The Findings**

We will use PSP to identify and prioritise research questions that addressed the healthcare needs of PLWH aged over 50. We will report our findings at the SAPC ASM.

## **Abstract - The Implications**

We will identify one key research question which aims to address the healthcare needs of an ageing cohort of PLWH which can be developed into a research proposal for submission to a funding body like NIHR.

We will critique the utility of a rapid PSP methodology using limited resources and its impact on outcomes and rigour.

## **Funding acknowledgement**

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219

## **Exploring the acceptability of Home-based Creative Arts Interventions for Older People known to Community Health Services**

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## **Abstract - The Problem**

Oxfordshire Community Hospitals provide arts and creative activities to older people who are admitted for rehabilitation on community wards through Oxford Health Arts Partnership (OHAP). Patients have described how these creative activities have helped them feel happier, more relaxed, distracted from pain, boredom and negative emotions. However, housebound patients with long term conditions or mobility problems, supported by community nursing, therapy and care practitioners, are currently unable to access creative activities as part of their rehabilitation.

### **Abstract - The Approach**

This mixed methods project aims to investigate whether improvements in wellbeing could be replicated in patients' homes by the provision of creative activities. We plan to recruit up to 20 older patients who are being treated by community health teams to offer home visits from an artist and volunteer. This project aims to understand the effects of arts activities for community-based patients using quantitative measures of quality of life, perception of pain and social isolation. Qualitative outcomes will explore acceptability using Arts Observation and Qualitative Interviews. Focus groups with staff will assess perceptions of acceptability and feasibility.

### **Abstract - The Findings**

This research study is currently in progress. However, previous projects by the team showed that there were benefits for patients, staff and volunteers who participated in creative activities supported by artists on community wards. We are interested in whether people experience changes in quality of life, pain and social interactions following regular arts activities. The team anticipate that patients may experience positive effects on their mood and previous work noted that arts activities often promoted reflective conversations.

### **Abstract - The Implications**

This project plans to investigate the effect of creative arts interventions on housebound older patients during their rehabilitation. With increasing numbers of older people being supported at home, it is important to understand the feasibility of providing equitable access to creative arts activities at home.

### **Funding acknowledgement**

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**225**

### **Exploring the care pathway to diagnosis for patients with autoimmune blistering diseases: a qualitative study of General Practitioners' views**

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### **Abstract - The Problem**

Autoimmune blistering diseases (AIBDs) are a group of chronic skin conditions. They are associated with poor quality of life and can be fatal. Early diagnosis is important to improve outcomes, but AIBDs can be difficult to identify. Since GPs are often the first healthcare providers to see AIBDs, this study aimed to explore their views on recognition and referral of AIBD patients.

### **Abstract - The Approach**

Twenty semi-structured qualitative interviews were conducted with GPs from across the UK. They were sampled based on country, gender, experience, GP type, specialist interest, practice size, rurality and practice type to encourage a varied sample. Interviews were audio-recorded and transcribed verbatim. Framework analysis was then conducted using a pre-defined theoretical framework.

### **Abstract - The Findings**

Participants were mostly from England (90%) and female (80%); 30% had a specialist dermatology interests and 50% had over 10 years' experience. Half were from practices with over 10,000 patients. Additionally, 55% were from urban areas. Findings highlighted lack of experience with AIBDs and little understanding of the pre-bullous phase. Complex presentations and resemblance to other skin conditions were key challenges affecting recognition. Lack of resources, (including GP time, availability of tests in primary care and lack of skin tone diversity across photographic resources) further increased challenges. Referral options and waiting times varied greatly nationally. More joined up care between and within settings and improved access to specialist support – including better utilising GPs with special interests - were identified as key priorities. Tools to support with identification and referral should focus on providing diagnostic criteria, information on diagnostic tests, criteria for establishing the type and urgency of referral, and improved access to specialist advice on managing patients in the meantime. To ensure feasibility, tools should be easy to use, evidence-based and acceptable to dermatologists as well.

### **Abstract - The Implications**

Findings demonstrated the challenges of recognising and referring AIBDs in general practice and identified priorities for supportive tools. The importance of raising awareness amongst GPs of the complex presentations was established. Tools to support GPs should help address knowledge gaps and support better integration between primary and secondary care. Future research should capture the perspectives of dermatologists and people living with AIBDs.

### **Funding acknowledgement**

This study was funded by the NIHR School for Primary Care Research

## **Commonly diagnosed but rarely discussed: how a charity partnership identified key insights to address inequities in polymyalgia rheumatica.**

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### **Abstract - The Problem**

Background: More than 1 in 50 people over 55 have been diagnosed with polymyalgia rheumatica (PMR). It is twice as common in women compared to men and can have a profound effect on people's well-being and function. Recent guidance suggests that all but "complex" PMR should be diagnosed and managed in primary care, yet "one size fits all" treatment pathways may not be appropriate. Patients with PMR in the north of England appear comparatively underserved, with markedly lower rates of diagnosis than the south. We sought to identify possibilities for improvement via a partnership between clinicians, academics and a patient-centred charity, PMRGCAuk.

### **Abstract - The Approach**

Methods: We conducted a survey of PMRGCAuk members. A PMRGCAuk outreach worker then supported members to self-record their personal accounts of PMR as video clips, while building and maintaining relationships with clinicians and the local self-organising patient support group in and around a city in the north of England.

### **Abstract - The Findings**

Results: The membership survey confirmed that GPs played a central role in PMR diagnosis. More members in the north than those in the south initially attributed their PMR symptoms to "getting older", potentially delaying diagnosis. The self-recorded stories were used for educating clinicians and the public about PMR. The outreach worker noticed a disconnect between professional and patient perceptions of how PMR affects men, with different assumptions about the prognosis and severity of symptoms that men experience. We also noticed that men with PMR were seldom seen at in-person patient support group meetings and at local public involvement events.

### **Abstract - The Implications**

Conclusions: Different expectations about ageing and the course of PMR are evident in relation to geography and sex. These may not be the only factors to influence rates of diagnosis and uptake of support for the condition but have implications for the design of patient support materials and how services are configured to meet the needs of all. This insight has informed the planning of co-design workshops currently in progress.

### **Funding acknowledgement**

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## **The mental health challenges faced by perpetrators of domestic abuse and their experiences of seeking help in primary care**

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### **Abstract - The Problem**

There is increasing recognition of and provision of support for victims of domestic abuse. However, perpetrators are often poorly recognised in healthcare settings and once identified, support may be limited.

Perpetrators of abuse can experience significant difficulties with their mental health and may present to primary care for support.

This study explores the mental health challenges faced by perpetrators and their experiences of seeking support in primary care settings.

### **Abstract - The Approach**

This is a thematic analysis of perpetrator (n=34) and victim (n=39) interviews. The data analysed is from a nested qualitative study within REPROVIDE, a randomised control trial examining the effectiveness of domestic abuse perpetrator programme in England and Wales. Interviews were conducted between June 2020 and November 2023.

### **Abstract - The Findings**

Mental health difficulties were frequently reported by perpetrators. This included reference to diagnoses such as anxiety, depression, PTSD and ADHD, to more colloquial language such as stress or worry.

Perpetrators described persistent mental health challenges, often linked to trauma, emotional dysregulation, negative self-image, and insecure attachment.

Some perpetrators expressed difficulty accessing support via their GP. This included difficulties expressing vulnerability and asking for help, compounded by lack of continuity and a shift away from in person appointments over the pandemic. Perpetrators' abusive behaviour in the context of mental difficulties was sometimes reported as being poorly responded to, underexplored or dismissed by healthcare professionals.

Few perpetrators were referred to the study through primary care, perhaps indicating that primary care professionals struggle to identify perpetrators.

Many perpetrators had been prescribed antidepressants but expressed mixed views about their role. For most, there was a desire for a more holistic approach, including therapeutic interventions, and an acknowledgement that medication alone was insufficient. Some felt GPs did not know what to offer beyond an antidepressant or highlighted further challenges if were referred to other services. This included long waiting lists, ill-suited therapeutic offers and poor access to mental health services.

### **Abstract - The Implications**

This study highlights some mental health difficulties faced by perpetrators of domestic violence that can go under recognised and unaddressed. These findings suggest primary care professionals may need further support to identify perpetrators and refer to appropriate services.

**234**

### **Principles of trauma-informed care in UK general practice: a multimethod qualitative study of existing policies, processes and practices**

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### **Abstract - The Problem**

Healthcare policies and guidelines recommend implementing trauma-informed approaches but how best to apply them in general practice is not yet known. A trauma-informed approach is an organisational change intervention focused on preventing (re)traumatisation of patients and staff. A trauma-informed approach starts from the assumption that every patient and staff member may have been affected by traumatic events. By realising and recognising their potential impact, healthcare organisations can prevent (re)traumatisation by aligning their policies, processes and practices with the trauma-informed principles of safety, trust, peer support, collaboration, empowerment, and inclusivity. This study aimed to explore the extent current service provision in general practice aligns with these six principles.

### **Abstract - The Approach**

We conducted an exploratory qualitative study in four general practices in southwest England. Data from review of 18 documents, 12 hours of structured facility observations, and 43 semi-structured interviews with patients and healthcare providers was analysed using a thematic framework approach.

### **Abstract - The Findings**

We developed four themes: 1) realise-recognise-respond-resist re-traumatisation, 2) safe physical and psychological environments, 3) opportunities for choice and collaboration, 4) opportunities for empowerment. Individual professionals and additional clinics for patients with trauma experiences and complex needs already work in a way that aligns with the key assumptions and principles of a trauma-informed approach. However, general practice teams and whole organisations have not yet achieved

the same level of understanding of trauma to actively prevent (re)traumatisation in services. The outer context (NHS and wider society) is not supportive of changing general practice in a trauma-informed way. Lack of physical spaces, staff shortages, legacy of the COVID pandemic, challenges with accessing services and continuity of care are the most significant factors that could hinder implementation of trauma-informed approaches in general practice.

### **Abstract - The Implications**

While it is strategically important to incorporate trauma-informed principles across organisational policies, processes and practices, the outer and inner context shapes what is achievable. Trauma-informed change in general practice should start with improving access and continuity of care. Clinics for patients with trauma experiences and complex needs improve access, continuity, experiences and outcomes for this group. Concurrently, such clinics can create new healthcare inequalities for other patients in general practice.

### **Funding acknowledgement**

This study was funded by the National Institute for Health and Care Research (NIHR) School for Primary Care Research (Capacity Award 21/22, C016).

**243**

### **Using GP-MATE in General Practice – A Feasibility Study to Test Real-World Usability and Acceptability**

Rachel Spencer, Annabelle Long

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### **Abstract - The Problem**

Discharge from hospital can be associated with increased risk especially for older patients with multiple underlying long-term conditions. Communication is key to a safe discharge, but there is no current tool which helps the transition from secondary to primary care. A communication intervention of this nature has potential to improve post discharge experiences for patients.

The patient-held GP-MATE tool was developed to improve communication and health literacy of older patients after discharge. It was co-produced by patients, the research team and general practice staff. To ensure the tool is widely accepted we need to understand the views of those who have used it in our pilot study.

Here we will present findings from interviews and questionnaires looking at the usability and acceptability for patients/carers and general practice staff.

### **Abstract - The Approach**

Semi structured interviews will be conducted with around 24 patients/carers and around 12 general practice staff who have used the GP-MATE tool. We have the ability to link staff to patients, but the

interviews are not dyadic. We will use framework analysis to examine patient/carer views on GP-MATE alongside their experience using it in collaboration with their GP. Questionnaire responses will be presented for the wider cohort (early response rates are encouraging with an 80% return rate).

### **Abstract - The Findings**

Interviews started in January 2025 and early analysis will be presented. Early questionnaire findings suggest that patients understand the tool, with 62.5% stating they were confident in filling in the form. They also indicate it is easy to use with 62.5% stating that it took little or no effort to complete.

Our themes and questionnaire results will likely help us understand how patients/carers and healthcare professionals make use of GP-MATE and how it changes their understanding of discharge. We will also look to identify any changes in the patient GP relationship and any potential changes in patient/carer health literacy.

### **Abstract - The Implications**

The findings from this study will help refine the tool in readiness for a definitive study of effectiveness and add to the evidence base for implementation of complex health literacy interventions in general practice.

### **Funding acknowledgement**

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**248**

### **Exploring potential future diagnostic strategies for care home UTI: results from the DISCO UTI study**

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### **Abstract - The Problem**

The diagnosis and treatment of urinary tract infection (UTI) is particularly common for care home residents. However, establishing an accurate diagnosis is challenging in this population because: (i) symptoms and signs can be non-specific; (ii) histories can be unreliable due to cognitive impairment; (iii) obtaining an uncontaminated urine sample can be difficult; and (iv) there is a high prevalence of asymptomatic bacteriuria (ASB). The aim of the DlagnoSing Care hOme UTI Study (DISCO UTI) is to

assess feasibility and acceptability of conducting a prospective cohort study of urinary tract infections in care home residents and explore potential future diagnostic or prognostic strategies.

### **Abstract - The Approach**

**Participating care home residents in England were followed for up to one year. Asymptomatic urine samples were collected at baseline and repeated weekly for 4 weeks from a subset. If a participant had a possible UTI during follow up, data and further urine samples were collected. Urine samples were analysed in terms of appearance, microscopy and significant growth on culture. The study also involved exploratory work on inflammatory urinary biomarkers and novel point-of-care tests (POCTs) for UTI.**

### **Abstract - The Findings**

81 participants were recruited from 8 care homes (69% female, mean age 85.4, 46% lacked capacity). Only 8 (9.9%) had no growth in their baseline sample, with 27 (33.3%) having growth that would meet the definition of a UTI (ASB). There were 24 symptomatic episodes from 19 participants. Localising urinary symptoms were only present in 10 of these episodes, with the remainder having non-specific symptoms and signs. 18 were treated with antibiotics. 18 episodes had a research urine sample collected at onset. Of these, 3 met the laboratory definition of UTI. Up to three POCTs were used in symptomatic episodes. Urine samples are being tested for inflammatory biomarkers that may help predict UTI. Updated results will be presented at the conference.

### **Abstract - The Implications**

Better understanding the relationship between ASB and UTI, the use of novel POCTs, and testing for urinary inflammatory biomarkers are all promising approaches to improving the diagnosis of UTI in care home residents. This study will explore the potential value of these approaches.

### **Funding acknowledgement**

This study is funded by the National Institute for Health Research School for Primary Care Research (Grant 578). Additional support is provided by Abigail Moore's Wellcome Trust Doctoral Fellowship Grant, RCGP Scientific Foundation Board Grant and the NIHR Healthtech Research Centre in Community Healthcare.

**251**

### **Challenges and strategies when capturing urine samples from care home residents: a focus group with care home staff**

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### **Abstract - The Problem**

The diagnosis and treatment of urinary tract infection (UTI) is common for care home residents. However, establishing an accurate diagnosis is challenging in this population for several reasons, including the difficulty in obtaining an uncontaminated urine sample. Little is known about how care home staff approach capturing a urine sample from residents.

### **Abstract - The Approach**

We conducted an online focus group with staff working in care homes participating in the DiagnoSing Care hOme UTI Study (DISCO UTI). The focus group was audio-recorded and transcribed verbatim. Thematic analysis was facilitated by NVivo software.

### **Abstract - The Findings**

Five care home staff participated, including both managers and carers. None had a nursing background. Overall, collecting a urine sample was felt to rarely be a simple task and could often take hours of their time. Many had not heard of the phrase 'midstream clean catch sample', and when explained did not feel this was possible for the majority of care home residents. Participants discussed a range of challenges they experienced when obtaining a urine sample from residents, especially those living with dementia. These included physical challenges like mobility issues, behavioural challenges like residents being suspicious of changes around toileting, and practical challenges like the size of collection containers. Techniques used to improve chances of success included turning on a tap, getting residents to drink more water, knowing an individual's pattern of behaviour to predict when they are more likely to pass urine, and using larger containers to capture the urine. Participants also talked about how staffing levels and the gender of staff available might impact on their ability to capture a urine sample. Some described how there could be a pressure on staff to get a sample in the context of suspected UTI, and this could lead to stress if they were not successful.

### **Abstract - The Implications**

It is important to understand the limitations of urine sampling in the care home context, and in interpretation of a culture result appreciate that samples are unlikely to be 'midstream clean catch'. More work is needed to develop strategies to support urine sampling in care homes.

### **Funding acknowledgement**

This study is funded by the National Institute for Health Research School for Primary Care Research (Grant 578). Additional support is provided by Abigail Moore's Wellcome Trust Doctoral Fellowship Grant, RCGP Scientific Foundation Board Grant and the NIHR Healthtech Research Centre in Community Healthcare.

**Is it necessary to use both primary and secondary care data to identify cases of serious harm associated with hazardous prescribing? A descriptive analysis using CPRD data.**

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**Abstract - The Problem**

When using Clinical Practice Research Datalink (CPRD) data or Hospital Episode Statistics (HES) data to look for occurrences of serious harm outcomes (SHOs) associated with hazardous prescribing, we wanted to know what proportion of cases might be missed using either data source alone.

**Abstract - The Approach**

Patients with seven types of SHO over one year (2019) were identified using Read codes in CPRD data and International Classification of Diseases (ICD-10) codes in HES primary diagnosis code data and compared to patients identified with the SHO in the combined primary care and HES data. The HES primary diagnosis code was chosen as it is likely to include all important conditions leading to the hospitalisation and is less likely to include other existing conditions.

The code lists were developed to measure serious harm outcomes (SHO) associated with the potentially hazardous prescribing.

We compared the number of patients identified with the SHO using primary care data to the patients identified in the combined primary and secondary care data set (we treated this as our reference standard). We recorded all occurrences of a SHO from the HES data or CPRD data in each quarter. Multiple records of a SHO within a quarter were recorded as one event.

The comparison of the number of patients identified using each data set, provided us with an estimate for each SHO as a percentage of SHO missed/ underestimated when using primary care, or secondary care, records alone.

**Abstract - The Findings**

There were considerable differences between primary care records (CPRD) and secondary care records (HES) in the proportion of cases 'missed' when using each type of record alone. Primary care records appeared to be more successful at picking up codes for heart failure exacerbation, acute kidney injury, asthma exacerbation, and potential harm associated with methotrexate, lithium and amiodarone; secondary care records appeared to be more successful as picking up codes for gastrointestinal bleeds, particularly when focusing on the most serious bleeds and peptic ulcers.

**Abstract - The Implications**

It is important to combine both primary and secondary care data to identify as many occurrences of conditions as possible, especially for research data where only coded records are available.

### **Funding acknowledgement**

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**260**

### **The Role of Community Pharmacy in Preventing Cardiovascular Disease Among Minority Ethnic Communities in the UK**

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#### **Abstract - The Problem**

Cardiovascular disease (CVD) persists as a major public health challenge in the United Kingdom (UK), disproportionately impacting minority ethnic groups who face higher rates of morbidity and mortality. Community pharmacies, due to their accessibility and presence within communities, have the potential to address CVD associated health inequalities. However, effectively reaching minority ethnic groups, particularly those who are deprived and seldom heard requires targeted promotion and research. Understanding the role of community pharmacy in preventing CVD among minority ethnic groups is essential to enhance primary care adaptability and to meet diverse health needs.

#### **Abstract - The Approach**

A comprehensive search of the literature was conducted to explore the role of community pharmacies in CVD prevention among minority ethnic groups in the UK, with a focus on identifying barriers and facilitators to service utilisation. The databases EMBASE, PubMed, Web of Science, Medline, Scopus, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) were systematically searched from inception up to October 2024. The Mixed Methods Appraisal Tool (MMAT) was employed to assess the quality of included studies and data were synthesised using thematic analysis. Reporting adhered to the Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) guidelines. The review protocol was registered with PROSPERO (registration number: CRD42024579766).

#### **Abstract - The Findings**

The review identified 23 eligible studies (16 quantitative, 7 qualitative) and highlighted a lack of research on community pharmacy's role in CVD prevention among minority ethnic groups. Thematic analysis

identified four key interim themes: (1) language barriers hinder communication, while language concordance improves engagement; (2) cultural and religious beliefs influence the acceptability of health services; (3) a lack of culturally sensitive care exists, underscoring the need for tailored interventions; and (4) trust and a sense of belonging are crucial for seeking CVD-related advice in community pharmacies.

### **Abstract - The Implications**

This review highlights the scarcity of research in this area and the need for further study. Community pharmacies have significant potential to support CVD prevention in minority ethnic groups, who are disproportionately affected. Addressing language barriers, cultural beliefs, and health-seeking behaviours is crucial. These findings can inform future community pharmacy practice and policy in primary care.

### **Funding acknowledgement**

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**270**

### **Introducing the LS Guide: A live, comprehensive web-based resource for people with vulval lichen sclerosis**

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### **Abstract - The Problem**

Vulval lichen sclerosis (LS) is a chronic dermatosis of the anogenital area, and has a significant impact on quality of life. It is thought to affect 1 in 100 women. Vulval LS is a condition which can be managed in primary care, and patient education can empower them to feel in control of their condition and support self-management. However, patients report inconsistent and limited information from health professionals. Information available online is often limited in scope, inconsistent, and sometimes unreliable. Recent studies have shown that there are multifactorial barriers to diagnosis and treatment, and a need for comprehensive and reliable information for women diagnosed with vulval LS. Improving knowledge and awareness amongst health professionals is also a priority for people with vulval LS.

### **Abstract - The Approach**

We developed a web-based resource aimed at patients and health professionals, as well as partners and carers for people with vulval LS. Previous qualitative research and a survey of an online support group (n=607) informed topics and delivery of information. Patient advocates helped develop content, design, and video scripts throughout the project. Further PPI work was done to identify challenges with website user experience and functionality.

### **Abstract - The Findings**

In the survey, a predefined list of 15 information topics were ranked for inclusion plus nine additional topic areas were added following patient feedback. Short animations were developed to support four key areas: 'Vulval anatomy', 'What is vulval lichen sclerosus', 'How to apply topical steroids' and 'How to check your vulva'. A downloadable symptom checklist and treatment plan to facilitate diagnosis and management has been included. Key elements of the guide will be translated into the languages most spoken in the UK, or those spoken by the most deprived populations. The guide has been included in NHSE GIRFT Advice and Guidance templates.

### **Abstract - The Implications**

The LS Guide launched on World LS Awareness Day 2025, and is a new resource for patients and health professionals, co-designed with patients, which aims to empower those living with VLS and support self-care.

### **Funding acknowledgement**

This work was funded by the British Society for the Study of Vulval Disease, Wellbeing of Women, and the British Association of Dermatologists.

**273**

### **Prevalence of Mental Health Disorders in General Practice from 2014 to 2024: A literature review and discussion paper**

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### **Abstract - The Problem**

Many consultations in primary care involve patients with mental health problems and primary care is typically the place where many such patients initially seek help. While considerable research has examined the prevalence of mental health disorders in primary care, relatively few papers have examined this issue in recent years. This study aims to address this gap by reviewing contemporary literature from 2014 to 2024 on the prevalence of mental health disorders among general practice patients.

### **Abstract - The Approach**

A comprehensive search across PubMed, PsycINFO, and Google Scholar was conducted, adhering to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for article selection and assessment, examining the prevalence of mental health disorders in general practice.

### **Abstract - The Findings**

Studies varied in methodologies and healthcare settings, with reported prevalence rates of mental health disorders ranging from 2.4% to 56.3%. Demographic characteristics (female gender, older age) were associated with a higher prevalence of mental health disorders in the studies identified. Studies based on patient interviews reported broader prevalence (2.4%–56.3%) compared to studies using electronic medical record reviews (12%–38%). Prevalence also varied between countries. Notably, there has been a lack of post-COVID-19 studies, especially within Europe, examining the prevalence of mental health prevalence in primary care.

### **Abstract - The Implications**

Mental health problems are still common among patients attending general practice; the approach to data collection (i.e., prospective interviews with patients), female gender and older age appear to be correlates of higher estimates. Further research involving a large-scale study with multiple sites is a priority.

### **Funding acknowledgement**

This work didn't receive any funding.

**284**

### **Digital twinning for placements: a novel approach to primary care learning**

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### **Abstract - The Problem**

Placements in General Practice play an important role in undergraduate medical education but there are significant capacity constraints. Practical issues of travel may adversely impact upon learning for students particularly in a geographically dispersed area.

Simulation offers an opportunity for students to apply theoretical knowledge and practical skills in communication in challenging primary care scenarios.

The use of generative AI driven voice recognition platforms has been used for developing communication skills in healthcare professionals. In a digital twin this is embedded in a virtual representation of a system, designed to reflect that accurately. This platform then uses the machine learning to respond.

### **Abstract - The Approach**

A unique digital twin has been built, modelled upon a GP surgery in Kent and Medway. Backgrounds for patient avatars have been written using a standardised template. Students consult with the same case concurrently in virtual reality using headsets. The group then has a facilitated case debrief before the cycle is repeated.

Whilst the use of the simulation environment provides a 'safe space' for practising communication skills with challenging scenarios, there is the potential for cognitive overload. There is the risk that the extraneous load, conferred by the structure of the activity (and the technology) may limit the capacity of the learners to process the material and learn.

### **Abstract - The Findings**

Evaluation data from the pilot (with one cohort of medical students) will be presented. This will consider overall acceptability and satisfaction with the learning activity as well as aspects of the briefing and debriefing for the virtual simulation. NASA task load index outcomes will be presented as a measure of perceived workload using six subjective sub scales (mental demand, physical demand, temporal demand, performance, effort and frustration).

### **Abstract - The Implications**

This approach has the potential to bring primary care to life on campus, including challenging and less frequently encountered scenarios. The discussion will include an overview of the limitations and barriers encountered in implementation. Additionally it will explore how this fits into the strategy at KMMS for addressing the teaching capacity constraints.

### **Funding acknowledgement**

Not applicable. This project is undertaken by members of the KMMS GP team. The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of KMMS.

**291**

### **Echoes From Remote: A Systematic Review on Ultrasound in Remote and Rural General Practice.**

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### **Abstract - The Problem**

Limited access to advanced imaging and radiology services in remote and rural general practice (RRGP) poses significant diagnostic challenges. This systematic review addresses the growing interest in point-of-care ultrasound (POCUS) as a solution to enhance diagnostic capacity in RRGP settings. The study aims to evaluate the clinical applications, diagnostic accuracy, training requirements, and implementation barriers of POCUS performed by generalists in RRGP globally.

### **Abstract - The Approach**

A systematic review following PRISMA guidelines was conducted, searching three databases from inception to November 2024. Studies focusing on ultrasound use in rural and remote settings by generalists were included. Two reviewers independently performed screening, data extraction, and quality appraisal. Due to study heterogeneity, a narrative data synthesis was planned.

### **Abstract - The Findings**

Of 2,204 studies identified, 58 met inclusion criteria after screening 330 full texts. Key POCUS applications in RRGP included emergency assessment, antenatal care, cardiac and pulmonary examinations, and abdominal aortic aneurysm screening. Diagnostic accuracy varied by application, with focused scans showing higher accuracy than comprehensive or screening scans. Implementation challenges included operator training, equipment costs, and maintenance in resource-limited settings. Studies reported improved patient outcomes and enhanced practitioner confidence with POCUS integration, though data on cost-effectiveness and long-term impacts were limited.

### **Abstract - The Implications**

POCUS enhances diagnostic capacity in RRGP, particularly for acute and time-sensitive conditions. However, barriers such as training and resource limitations require targeted interventions. The findings highlight the potential of POCUS to improve healthcare delivery in remote areas, but also underscore the need for further research on implementation strategies, cost-effectiveness, and long-term impacts. Future studies should focus on understanding POCUS implementation in specific contexts, such as Scotland, to optimize its use in RRGP settings and potentially influence healthcare policies for remote and rural areas.

### **Funding acknowledgement**

none

**303**

**Who sees whom in English primary care? Associations between consultation and patient factors, and the health professionals consulted**

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### **Abstract - The Problem**

The Additional Roles Reimbursement Scheme (ARRS) began in 2019 to expand the multidisciplinary workforce and improve patient outcomes in primary care. However, its impact on care delivery and care responsibilities allocation remains unclear.

We aimed to (1) describe the proportion of consultations with 17 predefined patient and consultation complexity factors managed by health professionals before and after ARRS implementation; and (2) identify which complexity factors were associated with being seen by a DPC-ARRS role.

### **Abstract - The Approach**

We conducted a longitudinal cohort study using Clinical Practice Research Datalink (CPRD) Aurum data to compare consultations pre- and post-ARRS implementation (01/01/2018-31/12/2018 and 01/01/2021-31/12/2021, respectively). Eight DPC-ARRS roles identified in CPRD were chiropodist/podiatrist, dietician, occupational therapist, paramedic, pharmacist, physician associate, physiotherapist, and nursing associate. Consultations with complexity factors were described by staff role (DPC-ARRS eligible roles/nurses/GPs). Multilevel multinomial logistic regression assessed the association between complexity factors and the likelihood of being seen by a DPC-ARRS role, adjusting for calendar year, age, sex, region, and deprivation.

### **Abstract - The Findings**

The study included 3,643,695 consultations involving 441,790 patients from a random sample of 600,000 patients across 400 practices. Consultations with DPC-ARRS eligible roles more than doubled post-implementation (2018: 3.7%; 2021: 8.2%), including a rise in complex consultations (from 4.5% to 9.6%).

Consultations about drug/alcohol abuse (relative risk ratio, RRR=0.5 [95%CI=0.4–0.6] vs nurses; RRR=0.8 [0.8–0.9] vs GPs) and chronic pain (RRR=0.1 [0.1–0.1] vs nurses; RRR=0.9 [0.8–0.9] vs GPs) were less likely to be managed by nurses and GPs than DPC-ARRS roles. Nurses were less likely to see consultations resulting in emergency hospital admissions (RRR=0.3 [0.2–0.3]) or involving patients who ever had personality/disruptive disorders (RRR=0.5 [0.4–0.5]) than DPC-ARRS roles. GPs and nurses were less likely than DPC-ARRS roles to manage consultations involving patients with interpreter needs in the past three years, with drug/alcohol abuse or chronic pain in the last year, or with  $\geq 3$  long-term conditions (RRRs  $\sim 0.9$ ).

**Abstract - The Implications**

The expanding role of DPC-ARRS staff in managing complex consultations contributes to a more diverse primary care workforce. Effective integration of multidisciplinary roles through the ARRS may optimise workforce capacity and improve access and outcomes.

**Funding acknowledgement**

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## Final category: Workshop

33

### **Overcoming 'Medical Ambivalence' to improve access to quality and responsive primary care**

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#### **Workshop/Creative Enquiry - Aim**

In research to address the lack of representation of ethnic minorities in Long Covid research, we looked at the 'structural vulnerabilities' (risks encountered in everyday life – and susceptibility to harms – as a result of organisational practices) such groups face. We uncovered a 'hidden' form of structural vulnerability especially faced by minorities, namely "[medical ambivalence](#)", or inconsistent healthcare. Professionals may be not consciously aware of medical ambivalence, as it is an organisational-wide issue, which is more likely to be visible to NHS outsiders (e.g. when a member of a minority group compares the support they receive from the NHS with other kinds of support like online groups). Medical ambivalence can be especially problematic in disputed conditions like Long Covid, myalgic encephalomyelitis/chronic fatigue syndrome and persistent physical symptoms. Our workshop will explore the contours of medical ambivalence, with a view to raising awareness of the concept and finding possible solutions. The workshop will additionally cover ways in which practitioners can address medical ambivalence within the primary care consultation, to transform care provided to vulnerable patients.

#### **Workshop/Creative Enquiry - Format**

A brief presentation (no more than 10 minutes) will be followed by an interactive discussion, a demonstration of working with medical ambivalence, including role-play, audience generated solutions to the dilemma proposed, and take-home messages.

#### **Workshop/Creative Enquiry - Content**

Training will outline the concept and help practitioners to think about overcoming hidden medical ambivalence, and respond to patients with raised levels of positivity. Researchers will be able to consider this concept in their work on primary care consultations. Participants will learn about the kinds of support that vulnerable groups want from the NHS, and how the training could potentially transform care for the better. A handout including key messages will be provided, and the workshop will be evaluated via an exit survey.

#### **Workshop/Creative Enquiry - Intended audience**

Any NHS practitioners and primary care health scientists.

Maximum of 20.

**35**

**Phones and Ladders – a games workshop exploring the challenges of GP appointment systems and inequalities in access to primary care.**

Catherine Pope<sup>1</sup>, Abi Eccles<sup>1</sup>, Helen Atherton<sup>2</sup>

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**Workshop/Creative Enquiry - Aim**

Aim: to understand positive and negative experiences of attempts by different kinds of patients to make an appointment with a GP, and to explore how we might think about access differently to address inequalities.

**Workshop/Creative Enquiry - Format**

Format: interactive game exploring findings from our recent NIHR funded study of access to general practice – Access to General Practice: Innovation, impact and sustainable change (GP-SUS).

**Workshop/Creative Enquiry - Content**

The session includes a brief introduction and a game which takes approx. 20-30 mins.

The game is modelled on the popular children’s game ‘Snakes and Ladders’. In small groups of up to 6, players, take turns rolling a die and moving their counter along the numbered board. Landing on a ladder advances a player to a square further up the board, while landing on a telephone sends them back to a previous square. The goal is to reach the final square, and the first player to do so wins. Example text on the ‘action’ squares are taken from GP SUS observations, conversations and interviews with staff and patients in eight English general practices, and are informed by our secondary analysis of data from archived interviews with patients about their experiences of health conditions and health services. Participants will be encouraged to consider these data while playing the game, and to look at the difficulties encountered by people with disabilities and/or social or personal characteristics that might make getting an appointment challenging. The game reveals that solutions to the problem of getting an appointment work for some patients but not all, and highlights unintended consequences and inequities of appointment systems and ways that these create barriers to access.

Depending on time allowed we can include optional discussion to explore responses to the game and personal experiences of GP access systems. The session facilitators will provide input and examples from

the research encouraging participants to consider inequality and inclusion, and exploration of alternatives to the demand and organisational focus of many current GP access systems.

### **Workshop/Creative Enquiry - Intended audience**

We can run this for 6-36 people in a room with cabaret style seating.

### **Funding acknowledgement**

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99

### **How can primary care embrace the potential of genomic medicine to personalise medicine and tackle health inequalities?**

Miriam Samuel<sup>1</sup>, Veline L'Esperance<sup>2</sup>, Sarah Finer<sup>1</sup>

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### **Workshop/Creative Enquiry - Aim**

Aim: To increase knowledge and understanding of the role of primary care in delivering genomic medicine i and explore how new precision medicine technologies could be implemented within general practice.

Objectives: By the end of the session participants will be able to:

1. Describe the current genomics landscape within the NHS
2. Describe future opportunities to personalise management of common conditions such as type 2 diabetes.
3. Discuss how genomic medicine could both tackle and exacerbate health inequalities
4. Consider how genetically informed personalised management pathways in primary care could reduce health inequalities

### **Workshop/Creative Enquiry - Format**

This session is aligned with a social constructivist pedagogical approach and will include short presentations followed by discussions in groups of 8-10 individuals. Participants will be able to frame information communicated through the presentations and case vignettes within their own experiences and develop new understanding of the topic through interactive discussions.

## **Workshop/Creative Enquiry - Content**

1. Presentation 1 (5 minutes): A basic introduction to the genomics landscape within the NHS
2. Small group discussion 1 (5 minutes): Participants will be encouraged to discuss their own experiences of genomic medicine.
3. Presentation 2 (5 minutes): An example of genomic research relevant to primary care e.g. how individuals with genetic variants indicative of undiagnosed red blood cell conditions could be having blood sugar levels underestimated by HbA1c.
4. Small group discussion 2 (5 minutes): Potential clinical applications of this research.
5. Small groups discussion 3 (20 minutes): Each table will be given a case vignette which demonstrates an opportunity for genomics in primary care (e.g. personalised statin regimen). Groups will then be asked to consider this new technology, focussing on opportunities, concerns, impact on health equity, and learning needs.
6. Group work feedback (20 minutes) and sharing of openly available educational resources

## **Workshop/Creative Enquiry - Intended audience**

Up to 50 individuals who have an interest in the role of genomics in primary care including, but not limited to, clinicians, allied health professionals, educationalists, researchers and electronic health record software providers. Prior knowledge of genetics is not required. However, we hope this session will encourage some interested individuals to learn more about the field.

## **Funding acknowledgement**

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**231**

## **Sustainable Healthcare Education: Translating community priorities into a toolkit for GP educators**

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## **Workshop/Creative Enquiry - Aim**

Medical students should be equipped with the knowledge and skills to deliver healthcare sustainably<sup>1</sup>. Curriculum documents for sustainable healthcare (SH) exist<sup>2</sup>,

however medical educators often feel uncertain about integrating learning outcomes into teaching<sup>3</sup>. Primary care has a key role in developing new educational approaches to create an adaptable workforce equipped to deal with future challenges.

We developed a toolkit using focus group data, to support GP educators to incorporate SH priorities identified by patients, into their undergraduate teaching.

This workshop will equip GP educators with the knowledge and strategies to incorporate key community-identified SH priorities into their undergraduate teaching through small group discussions and actionable insights.

Workshop participants will:

1. Identify key SH priorities relevant to their educational context, based on community insights.
2. Evaluate our toolkit for integrating SH priorities into undergraduate teaching.
3. Consider barriers and solutions in using the toolkit.
4. Create actionable next steps to implement SH in their own contexts.

### **Workshop/Creative Enquiry - Format**

15 mins – A brief introduction to SH + Participant introductions & reflections (small groups of 4-6)

5 mins – Plenary

5 mins – Mentimeter

5 mins – Overview of GP toolkit draft

15 mins – Small group activity

15 mins – Plenary & actionable next steps

### **Workshop/Creative Enquiry - Content**

Following a brief introduction to SH, participants will share existing knowledge and practice of SH education in small groups.

After plenary discussion, a mentimeter will be used to understand what resources and support would be helpful in further integrating SH in their teaching.

A summary of the community-identified priorities in SH will then be presented, alongside key elements from our GP educator focus groups, who translated these priorities into a practical GP educator toolkit.

In groups, participants will focus on a specific community priority area. They will evaluate the toolkit, identifying barriers and solutions for incorporating the toolkit's recommendations into their

educational practice. Discussions will be documented on Padlet, which will remain open for 2 weeks following the workshop.

Groups will feedback in a plenary discussion. Individuals will be encouraged to develop actionable next steps for how they will integrate SH into their teaching.

### **Workshop/Creative Enquiry - Intended audience**

GPs, allied healthcare professionals, trainees and students involved in teaching and/or SH.

235

### **Comics and Conversation: capturing narratives of addiction and recovery to create a community graphic memoir**

Lynsay Crawford, Nic Dickson

University of Glasgow, Glasgow, United Kingdom

### **Workshop/Creative Enquiry - Aim**

This workshop will introduce the field of Graphic Medicine and aims to explore the co-creation of visual narratives that represent the lived experience of the recovery community . Participants will gain insight into the role of graphic medicine as an educational tool, learn to facilitate conversations that empower marginalised voices, and develop skills to utilise comic-based methodologies for addressing healthcare challenges in this community.

### **Workshop/Creative Enquiry - Format**

The workshop will be highly interactive, incorporating group discussions, hands-on activities related to comic creation and peer feedback sessions.

It will include a brief introductory segment of 10 minutes to introduce participants to Graphic Medicine and thus set the context. Examples of Graphic Medicine literature and Public Information Comics (PICs) will be shown to illustrate their uses and impact in healthcare, followed by participant engagement, as the primary focus to encourage collaboration and active learning.

### **Workshop/Creative Enquiry - Content**

The content will begin with an introduction to graphic medicine and its relevance in medical education and enhancing patient care, followed by an overview of co-creating Public Information Comics (PICs) using the 'Comic Jam' process. Participants will engage in breakout sessions where they will brainstorm comic ideas based on recovery scenarios and take part in hands-on storytelling and visual art activities. The session will culminate in a presentation of group ideas, where constructive feedback will be

provided. A discussion will also address the challenges and ethical considerations in depicting lived experiences.

### **Workshop/Creative Enquiry - Intended audience**

This workshop targets healthcare professionals, medical and social work students, policymakers and those that work with members of the recovery community. We anticipate a maximum of 30 participants to ensure engaging discussions and collaborative learning experiences.

### **Funding acknowledgement**

Glasgow Knowledge Exchange is funding our research project to create a PIC on Recovery.

269

### **Growing research capacity within academic primary care: building a community representative of the primary care workforce**

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### **Workshop/Creative Enquiry - Aim**

Recent years have seen a substantial increase in diversity of the primary care workforce, with particular growth in extended roles of pharmacists and allied health professionals (AHPs, e.g. physiotherapists, paramedics). These clinicians join substantial numbers of established nurses in helping to deliver effective, wide-ranging care in general practice.

However, most research in primary care is led by academic GPs, who may not be optimally positioned to understand the challenges faced by the wider primary care workforce. In addition, whilst there are long-established programmes to support GPs in engaging with academic careers, opportunities for other professions are less developed.

The aim of this workshop is to discuss the challenges and opportunities for building research capacity in academic primary care which better represents our clinical workforce and new approaches being employed by health services.

Key objectives:

- Identify, share and discuss ongoing initiatives, challenges, potential solutions, and opportunities
- Promote development of a strong network within SAPC representing the wider primary care workforce

### **Workshop/Creative Enquiry - Format**

The workshop will open with 3 brief presentations (15-min), from a panel representing academic nursing, pharmacy, and AHPs. Small groups (15-min) will discuss key issues raised and develop questions. These questions will feed into a panel Q&A discussion (30-min) with the whole audience. The session will be supported by experienced clinical academics representing several professions.

### **Workshop/Creative Enquiry - Content**

The initial presentations will set context, discussing the particular relevance/importance of research in the respective clinical area, specific challenges professional groups face, and emerging opportunities. This will also draw on NIHR-funded Pharmacy Incubator work examining the value of research, research community, and professional identity. Small group discussion will expand on presentation themes, sharing experiences across disciplines, identifying key areas of interest, and developing questions for the subsequent Q&A discussion. The Q&A will offer an opportunity to discuss identified topics in more detail, including identifying potential solutions.

### **Workshop/Creative Enquiry - Intended audience**

This workshop will be of particular interest to nurses, pharmacists and AHPs, who wish to support academic practice within their profession, including both early career and established researchers. It will also attract academic GPs and Primary Care Scientists undertaking work related to the wider clinical workforce.