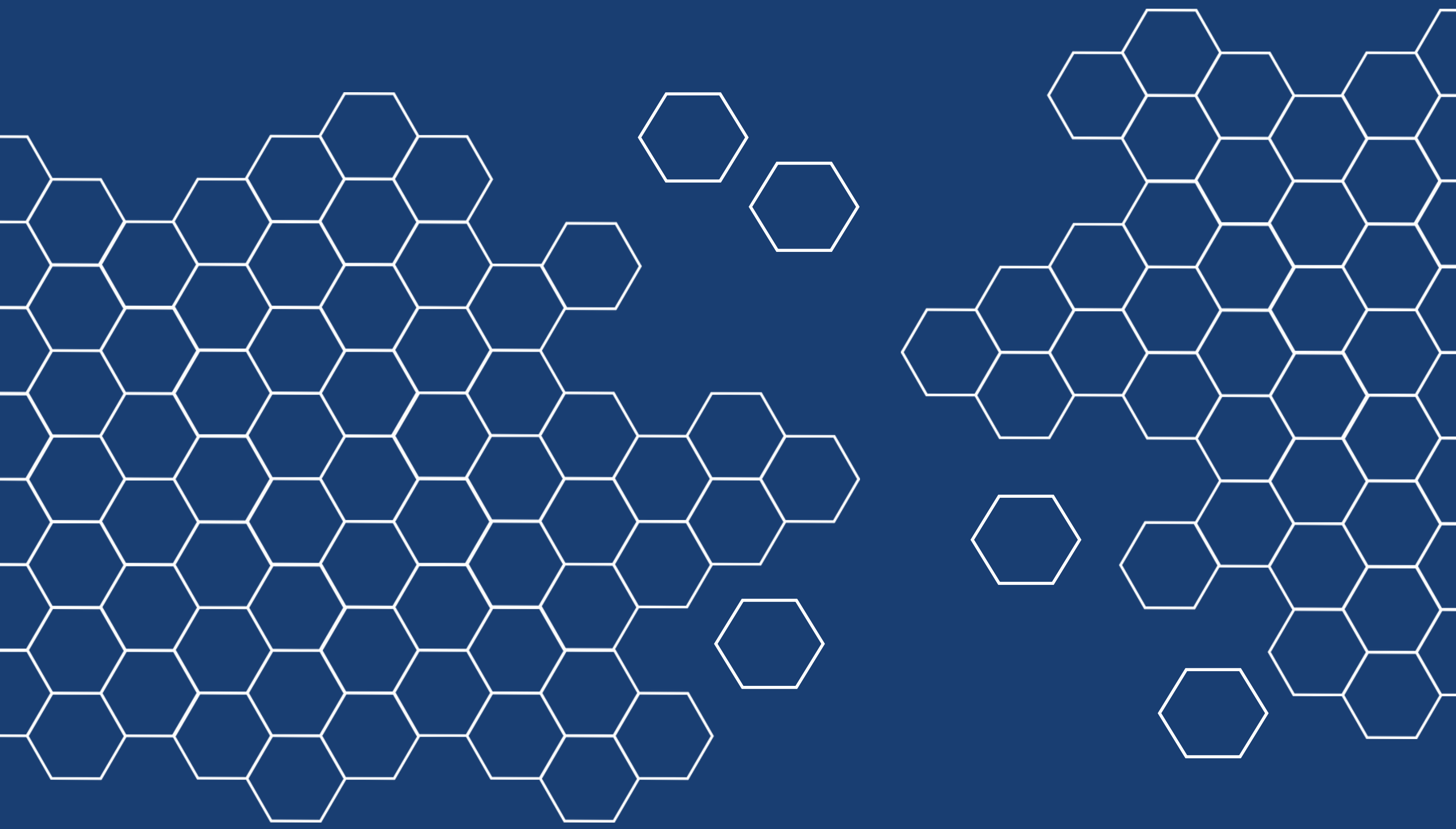
NIHR | School for Primary Care Research

2023 SPCR Showcase

Conference

Abstract Book



BMA House, London
18 September 2023

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Welcome

Welcome to the National Institute for Health and Care Research School for Primary Care Research (NIHR SPCR) Showcase 2023. We are at the half way point of the fourth phase of the school.

The showcase aims to highlight excellence and impact across the range of primary care research funded by the School. Our intention is to foster collaboration amongst researchers, and inspire future primary care leaders.

Our research not only illustrates the School's diversity in areas of expertise and multidisciplinary skills sets, it shows a commitment to evidence based research and capacity building.

We hope you are inspired by the day.

Professor Christian Mallen

Director at NIHR School for Primary Care Research.

Georgina Fletcher

Assistant Director at NIHR School for Primary Care Research.

Keynote Address

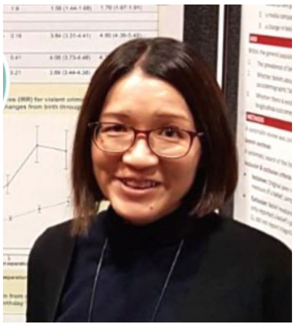
Prof Lucy Chappell - DHSC Chief Scientific Advisor and CEO of the NIHR

Professor Lucy Chappell is Chief Scientific Adviser to the Department of Health and Social Care and Chief Executive Officer of the National Institute for Health and Care Research (NIHR), the UK's largest funder of health and care research. The Chief Scientific Adviser has overall responsibility for DHSC research and development and for supporting analysis and life sciences across the Department. Prof Chappell provides science advice to ministers across the range of health topics and is involved in cross-government science policy.

Prof Chappell is also Professor of Obstetrics at King's College London, working mainly in clinical trials in pregnancy, and a practising Consultant Obstetrician at Guy's and St Thomas' NHS Foundation Trust.

Plenaries

Dr Pearl Mok



Research Fellow, University of Manchester

Psychiatric diagnoses and self-harm episodes among children and young people in the two years following onset of the COVID-19 pandemic: a population-based cohort study of UK primary care records

Dr Alex Trafford, Dr Matthew Carr, Prof Darren Ashcroft, Prof Carolyn Chew-Graham, Dr Emma Cockcroft, Emma Garavini, Dr Shruti Garg, Dr Thomas Kabir, Rachel Temple, Prof Roger Webb, Dr Pearl Mok

Centre for Pharmacoepidemiology & Drug Safety, Division of Pharmacy & Optometry, The University of Manchester. NIHR Greater Manchester Patient Safety Research Collaboration. School of Medicine, Faculty of Medicine and Health Sciences, Keele University. College of Medicine and Health, University of Exeter. The McPin Foundation. 6Division of Psychology & Mental Health, University of Manchester. Royal Manchester Children's Hospital, Central Manchester University Hospitals NHS Foundation

SPCR Award: 556

Aims:
To investigate temporal trends in incidence of primary care-recorded psychiatric diagnoses amongst children and young people during the COVID-19 pandemic. Depression, anxiety disorders, eating disorders, attention deficit hyperactivity disorder (ADHD), autism spectrum disorder, substance misuse, personality disorders, self-harm, referrals, and psychotropic medication prescribing were examined.

Methods:
Population-based investigation of primary care records of patients aged 1-24 years in the UK Clinical Practice Research Datalink. Monthly incidence rates, January 2010 through March 2022, were calculated. Negative binomial regression was used to predict incidence rates after the pandemic commenced in March 2020, based on antecedent trends. Percentage differences between observed and predicted rates were calculated to discern the pandemic's potential influence. An advisory group of young people, parents/carers, helped shape the study and interpret the findings.

Plenaries (cont.)

Results:
Substantial increases in incidence of eating disorders were observed among females, with the rates being 42·3% (95% CI 25·6-61·2%) higher than expected for those aged 13-16 and 32·0% (13·3-53·7%) higher for those aged 17-19. Large increases in self-harm episodes, ADHD diagnoses, and prescriptions for ADHD medications, were also observed among young females. The increases in incidence for these outcomes were attributable to larger rises in less deprived communities. Other diagnoses and referrals remained largely below expected levels, especially in males.

Conclusion:
Increases in incidence of eating disorders, ADHD, and self-harm in females require urgent action. Reductions in other mental health diagnoses, particularly in males, may increase severity of subsequent mental health presentations.

Tanimola Martins

Post Doctoral Research Fellow, University of Exeter

Evaluating ethnic differences in Prostate Specific Antigen (PSA) for detecting prostate cancer in primary care

Ms Liz Down, Mrs Melissa Barlow, Dr Luke Mounce, Dr Samuel Merriel,
Dr Jessica Watson, Dr Sarah Bailey, Dr Tanimola Martins

University of Exeter. University of Manchester. University of Bristol

SPCR Award: 511

Background:
Patient ethnicity is linked to prostate cancer incidence and survival in the UK. The prostate specific antigen (PSA) test can be an indicator of prostate cancer; PSA levels vary by patient ethnicity. This study assessed differences in PSA test performance by ethnicity, using the Clinical Practice Research Datalink (CPRD), with linkage to hospital and cancer registry data.

Methods:
This cohort study includes men aged >=40 years, registered at English GP practices from 2010-2017, with a PSA test and no prior cancer diagnosis. Multi-level logistic regression models adjusting for potential confounding factors were contstructed to generate estimates of incidence of any or advanced prostate cancer by ethnic group for men with a raised PSA.

Results:
The cohort included 730 515 men. Of these, 13% (97 295) had a raised PSA value, and 4% (26 238) received a diagnosis of prostate cancer within one year of that test. Following a raised PSA result, prostate cancer incidence was 25% in Black men, 20% in White men, and 13% in Asian men. Rates of advanced prostate cancer were lowest for Asian men, but similar across other ethnic groups, despite adjustment for multiple factors.

Conclusion:
Although Black men had higher rates of prostate cancer overall, their rates of advanced disease were similar to White men. This could suggest some overdiagnosis of clinically insignificant prostate cancer in Black men. Further research is needed to investigate the potential impact of personalised reference ranges for PSA levels, and explanations for the observed differences in this study.

Plenaries (cont.)

Dr Lucy Potter

Clinical Research Fellow, University of Bristol

Bridging Gaps: Improving access to general practice for and with marginalised patients- “it’s quite joyful for us, it’s really improved our work”

Dr Lucy Potter, Dr Tracy Stone, Ms Florrie Connell, Dr Helen Cramer, Dr Helen McGeown, Professor Jeremy Horwood, Professor Gene Feder, Dr Michelle Farr

University of Bristol. One25

SPCR Award: PhD Programme for Primary Care Clinicians

Background / Aim:
People with severe and multiple disadvantage (SMD- combinations of homelessness, substance misuse, violence, abuse and poor mental health) have high health needs and poor access to primary care.

To explore perceptions and experiences of improving access to general practice for people with SMD in healthcare staff and people with lived experience.

Design and Setting:
Bridging Gaps is a collaboration between healthcare staff, researchers, women with lived experience of SMD and a charity that supports them in a UK city. We co-produced a project to improve access to general practice for marginalised patients, that was further developed with 3 inner city general practices.

Method:
We observed six collaborative service improvement meetings at three general practices and conducted documentary analysis of minutes of a further three meetings. We interviewed nine practice staff and four participants with lived experience. Three participants with lived experience and one staff member who supports them participated in a focus group. Data was analysed inductively and deductively using thematic analysis.

Results:
Enabling motivated general practice staff with time and funding opportunities, galvanised by lived experience involvement, resulted in sustained service changes. These included: care coordinators and patient lists to support access to patients in greater need and an information sharing tool. The process and outcomes improved connections within and between general practices, support organisations and marginalised patients.

Conclusion:
These co-produced strategies could be locally adapted and evaluated elsewhere. Investing in this different way of working may improve inclusion of marginalised groups, health equity and staff wellbeing.

Juan Carlos Bazo-Alvarez

Post Doctoral Research Fellow, University College London

Adherence to statins and long-term LDL-cholesterol control: a retrospective cohort study using primary care data

Juan Carlos Bazo-Alvarez, Kingshuk Pal, Tim P Morris, James R Carpenter,
Rafel Ramos, Irene Petersen

University College London. Girona ICS

SPCR Award: FR-19

Objectives:
Describe the impact of different levels of statin treatment adherence on LDL-C control up to 5 years from the first statins prescription.

Methods:
Retrospective cohort study using UK primary care data. We evaluated individuals aged 40 to 99 between 2006 and 2018, observed from their first statin prescription date up to 5 years. We defined the dosage intensity as 1=low, 2=medium, 3=high. For every three months of individual follow-up, we selected the highest dosage recorded to define the dosage of that period. Then, we performed a latent class growth analysis to identify clusters of patients with different adherence patterns. For each cluster identified, we described the non-linear LDL-C trajectory over time by fitting fractional polynomial models.

Results:
We observed 60,257 patients, 27,959 women (46.4%). From latent class growth analysis, we detected six clusters of patients showing the following adherence patterns: 1) extremely poor (16.9%), 2) very poor (16.4%), 3) poor (11.9%), 4) moderate (12.8%), 5) good adherence with medium dose (35.7%), 6) good adherence with higher dose (6.3%). LDL-C trajectories differed across adherence clusters. For example, the group with “extremely poor adherence” controlled their cholesterol levels for a very short period (<1 year) and then got back to baseline levels. Conversely, people with good adherence showed a stable control of their LDL-Cholesterol over time.

Conclusions:
We identified six classes of adherence to statin treatment, from extremely poor to good adherence. More than 1/3 of patients showed good adherence to medium dosage. People with better adherence reached better LDL-C control.

Abstracts - parallel sessions

Challenges Around New Technologies

Oral Presentation: Developing and optimising EMPathicO communication skills e-learning for primary care practitioners

Felicity Bishop, Kirsten Smith, Jane Vennik, Leanne Morrison, Stephanie Hughes, Mary Steele, Riya Tiwari, Jennifer Bostock, Jeremy Howick, Christian Mallen, Paul Little, Beth Stuart, Mohana Ratnapalan, Emily Lyness, Pranati Misurya, Clare Lockyer-Stevens, Gerry Leydon, Hajira Dambha-Miller, Hazel Everitt

University of Southampton. University of Oxford. Keele University

SPCR Award: 563

Background:
Effective communication that incorporates clinical empathy and realistic optimism may help improve patient satisfaction, self-management and pain outcomes. However, enhancing and implementing these skills can be challenging in time-poor general practice.

Aim:
To develop, optimise, and prepare for trial a very brief e-learning package “EMPathicO”, to enhance practitioner skills in communicating clinical empathy and realistic optimism.

Methods:
The Person-Based Approach to intervention development and optimisation was used, alongside evidence and theory-based approaches. Intervention development involved conducting literature reviews to identify barriers, facilitators, and promising methods for enhancing clinical empathy and realistic optimism and conducting qualitative studies to explore practitioners’ and patients’ perspectives on clinical empathy and realistic optimism. Intervention optimisation involved conducting qualitative studies to explore practitioners’ use of EMPathicO prototypes and patients’ views on EMPathicO consultations. Further optimisation work drew on data from the feasibility trial about telephone and other remote consultations and consultancy work with patients from selected non-White British ethnic backgrounds. A feasibility trial tested and refined design of a full cluster-randomised trial in primary care.

Evaluation:
A systematic, thorough, and rigorous approach to intervention development and optimisation has produced a very brief e-learning package that engages primary care practitioners to change their communication behaviours. EMPathicO consultations are acceptable to patients and existing evidence and theory suggest they should enhance patient pain and enablement.

Conclusion:
This paper illustrates the complexities of intervention development, optimisation, and feasibility work that puts practitioners and patients at the centre of the process. The person-based approach provided an essential organising framework.

Abstracts - parallel sessions

Challenges Around New Technologies

Oral Presentation: Point of care testing using FebriDx to improve antibiotic use for respiratory tract infections in primary care (PREFIX): a mixed methods feasibility study protocol

Dr Christopher R Wilcox, Prof Nick Francis, Nour Odeh, Dr Jill Rutter, Prof Tristan Clark, Dr Ingrid Muller, Prof Paul Little, Dr Taeko Becque

University of Southampton

SPCR Award: 633

Background:
FebriDx® is a single-use, hand-held, point-of-care test that provides an indication of both viral (myxovirus resistance protein A) and bacterial (CRP) infection within 10 minutes, and therefore could be a useful tool for antimicrobial stewardship in primary care. Primary care data on the clinical and cost-effectiveness of this approach are lacking.

Aims:
To (1) explore the feasibility of using FebriDx® to safely reduce antibiotics use for LRTI in primary care, and (2) explore the feasibility of conducting a future trial assessing the clinical impact, safety, and cost-effectiveness of FebriDx® in UK primary care.

Methods:
Up to 200 patients presenting with a LRTI (and likely to receive antibiotics) will be invited to participate. Data are collected before and after FebriDx® testing, to assess the impact on antibiotic prescribing decisions, as well as test success rate, time-to-result and ease-of-use scores. Nasopharyngeal swabs are taken for external validation (via viral PCR). Clinicians and patients (10-15 of each) will participate in semi-structured interviews to explore their views on the acceptability and clinical impact of FebriDx® , and future trial design.

Results:
Over 100 participants have been recruited at abstract submission and complete data will be available at the showcase. Preliminary data suggest that antibiotics were not subsequently prescribed in 57% of cases (at the index consultation), and in 53% of cases clinicians felt more confident that antibiotics were not required. The test was successful on the first run in 89% of cases, required more than one go in 9%, and was abandoned in 2%.

Abstracts - parallel sessions

Challenges Around New Technologies

Oral Presentation: Making decisions about mode of consultation in general practice – what happens, when, with whom, and why?

Dr Sophie Spitters, Dr Natassia Brenman, Dr Michael Gill, Dr Sara Paparini, Professor Sara Shaw,
Dr Sharon Spooner, Professor Deborah Swinglehurst, Dr Joseph Wherton

Queen Mary University London. University of Oxford. University of Manchester

SPCR Award: Mode of Consultation in general practice NIHR SPCR 2022 – 2024

Abstract:

The UK government announced during the COVID-19 pandemic that primary care should be delivered ‘remote-by-default’. Many practices now have the technological infrastructure and clinical skills to deliver primary care remotely via video, telephone and text message. However, not all practices and patients are equally ready or able to participate in this emerging model of hybrid care and the practices underpinning it remain under-researched. This study aims to understand decision-making processes supporting the delivery of hybrid remote and in-person primary care.

This mixed-methods study analyses decisions and experiences relating to mode of consulting in three general practices. Team ethnography was undertaken over two intermittent weeks in each practice (totalling 6 weeks) to observe, map, and record practices informing decisions. Observations were complemented by interviews with staff and a purposive sample of patients. Access to routine activity data enabled quantitative analysis of appointment modalities.

The study findings demonstrate the distributed nature of mode of consultation decisions. Patients, doctors and receptionists all feed information on patient preferences, clinical need and practice demands into one appointment decision. The role each group plays depends on the triage model in operation. Decisions are also distributed over time. Remote care technologies facilitate various doctor-patient interactions, each with different (dis)advantages. Consequently, a consultation in one mode might continue or require follow-up in another. We argue that understanding the distributed nature of consultation modality decisions can help practices be intentional about organising processes and work in ways that exploit the benefits of hybrid remote and in-person primary care.

Abstracts - parallel sessions

Challenges Around New Technologies

Lightening Talk: Safety of COVID-19 vaccine in 9.5 million children under the age of 18

Miss Emma Copland, Dr Martina Patone, Dr Defne Saatci, Dr Jennifer Hirst, Professor Carol Coupland, Professor Julia Hippisley-Cox

University of Oxford

SPCR Award: 622

Background:
The risk-benefit profile of COVID-19 vaccination in children remains uncertain.

Methods:
A self-controlled case series design was conducted using national data in England to compare the risks of pre-specified outcomes, resulting in hospital admission or death, in children aged 5-11 and 12-17 years after COVID-19 vaccination and infection.

Results:
In ~5.1 million children under the age of 18, we estimated an additional 137 (95% CI 134, 140) hospital admissions from multisystem inflammatory syndrome (MIS-C) per million exposed in the 1-42 days following a SARS-CoV-2 infection in unvaccinated children aged 5-11 years, and an additional 84 (95% CI 81, 86) cases in children aged 12-17 years. We also observed increased risk of myositis, immune thrombocytopenia (ITP), myocarditis, acute pancreatitis, epilepsy, appendicitis and anaphylaxis following infection in under-18s. In our cohort, 99.7% of children under the age of 18 received BNT162b2 for their first vaccine dose. In 12-17-year-olds, we estimated an additional 3 (95% CI 0, 4) and 4 (95% CI 2, 5) cases of myocarditis per million exposed in the 1-42 days following a first and second dose, respectively, of BNT162b2. We found no increased risks of any of the pre-specified adverse events following COVID-19 vaccination in 5-11-year-olds.

Conclusion:
We have shown that vaccination provides protection against MIS-C and other serious complications following SARS-CoV-2 infection in children, whilst conferring very low risk of serious adverse events. Our results show that the risk of serious complications following SARS-CoV-2 infection in unvaccinated children far outweigh the adverse effects of COVID-19 vaccines.

Abstracts - parallel sessions

Challenges Around New Technologies

Lightening Talk: Understanding the measurement of postural hypotension in primary care: a national qualitative inquiry

Dr Rosina Cross, Dr Sinéad McDonagh, Dr Bethan Treadgold, Dr Jane Masoli, Dr Judit Konya, Associate Professor Gary Abel, Associate Professor James Sheppard, Dr Bethany Jakubowski, Dr Cini Bhanu, Mrs Jayne Fordham, Professor Katrina Turner, Professor Sallie Lamb, Professor Rupert Payne1, Professor Richard McManus, Professor John Campbell, Dr Christopher Clark

University of Exeter. University of Oxford. King's College London. University College London. Mid Devon Medical Practice. University of Bristol

SPCR Award: 580

Introduction:
Postural hypotension (PH), the drop in blood pressure (BP) on standing, is associated with falls, cognitive decline and all-cause mortality. It is often asymptomatic, therefore, a systematic approach to detection is required. However, this does not occur in English primary care settings.

Aim:
To explore the barriers to, and facilitators of, PH assessment in English primary care.

Methods:
Individual, remote, semi-structured interviews are underway to explore how multidisciplinary primary care health professionals (HCPs) check for, and manage, PH. Participants have been purposively sampled, to maximise sample diversity, from our national survey.

We are exploring HCPs' understanding of who should be tested for PH, approaches to PH measurement (sit-to-stand vs supine-to-stand), diagnostic thresholds and treatment options. Interviews are being transcribed verbatim, anonymised and thematically analysed.

Results:
Interim results suggest that staff check for PH when patients are older, report dizziness, fatigue or have a chronic condition, such as diabetes. Despite awareness of guidelines, various diagnostic definitions were provided, and measurement protocols vary between participants. While supine-to-stand measurement is undertaken, a sit-to-stand measurement is more feasible due to time limitations and

Abstracts - parallel sessions

Challenges Around New Technologies

Lightening Talk: Does food allergy test-guided dietary advice improve eczema control in children? Protocol for Trial of food allergy IgE tests for Eczema Relief (TIGER) study

Prof Matthew Ridd, Dr Stephanie MacNeill, Ms Yumeng Liu, Prof Miriam Santer, Dr Tom Blakeman, Dr Hannah Wardman, Dr Ingrid Muller, Prof Joanna Coast, Dr Kirsty Garfield, Dr Robert Boyle, Dr Isabel Skypala, Dr Shoba Dawson, Ms Hannah Morgans, Dr Julie Clayton, Prof Sara Brown, Prof Hywel Williams

University of Bristol. University of Southampton. University of Manchester. Imperial College London. Royal Brompton & Harefield Hospitals. PPI. University of Edinburgh. University of Nottingham

SPCR Award: 383

Background:
The NIHR SPCR-funded TEST study established the feasibility of a definitive trial of routine food allergy tests in children with eczema.

Objectives:
To determine the clinical and cost-effectiveness of test-guided dietary advice versus standard care, for eczema management.

Method:
Pragmatic, multi-centre, parallel group, individually randomised controlled trial (ISRCTN52892540). Children (<2 years) with eczema will be recruited from ~84 GP surgeries. All participants will receive our "Good eczema care" leaflet. Those randomised to intervention will receive dietary advice based on skin prick tests to milk, wheat, egg and soy.

The primary perspective of a health economic analysis will be NHS. A cost-utility analysis will compare quality-adjusted life years gained for the child and main carer. Additionally, costs from NHS and non-NHS perspectives will be related to a range of outcomes in a cost-consequences approach.

A nested process evaluation will assess intervention fidelity, clarify causal mechanisms, and identify contextual factors associated with variation in outcomes. We will interview participants and observe recruitment visits. We will explore potential mediators of adherence and intervention outcomes.

Results:
493 participants will be followed up over 36 weeks. The primary outcome is eczema control (RECAP), collected four weekly over 24 weeks. Secondary outcomes: eczema symptoms; quality of life; adverse events; breastfeeding status and diet; growth; parental anxiety.

The primary analysis will be a multilevel mixed model framework with observations over time nested within participants.

Conclusions:
This study will fill an evidence gap of importance to patients and carers, and reduce variation in practice and associated harms.

Abstracts - parallel sessions

Workforce and skill mix in primary care

Oral Presentation: “Implementing a co-designed care bundle to improve patient safety at discharge from mental health services: the SAFER - (Y) MH study”

Dr Natasha Tyler, Dr Sarah Croke, Dr Ioannis Angelakis, Dr Claire Planner, Dr Sally Giles, Dr Richard Keers, Dr Alexander Hodkinson, Dr Andrew Grundy, Prof Christopher Armitage, Prof Catherine Robinson, Prof Navneet Kapur, Prof Stephen Campbell, Dr Jessica Leather, Dr Tom Blakeman, Dr Maria Panagioti

University of Manchester. University of Liverpool

SPCR Award: SPCR Postdoctoral Fellowship - Natasha Tyler

Background:
People being discharged from inpatient mental health wards can encounter safety risks from inadequate information sharing and limited family involvement in discharge decisions. We refined and co-designed the NHS Improvement SAFER care bundle, for adult and CAMHS mental health services, named as the SAFER (Youth) Mental Health care bundle, SAFER-(Y)MH.

Aims and Objectives:
To examine the feasibility and acceptability of the SAFER-YMH intervention for patients aged between who are being discharged from CAMHS and adult inpatient care.

Methods:
A mixed-methods, uncontrolled before-and-after feasibility study, where all participants will receive the intervention. The baseline and intervention periods are both 6 weeks. SAFER-(Y)MH implementation is in three CAMHS and three adult wards, located on different sites, within three trusts in England. Quantitative (e.g. questionnaires, completion forms) and qualitative (e.g. interviews, process evaluation) methods assess the acceptability and feasibility of the intervention.

Results:
For two CAMHS wards, we completed intervention training with 25-30 professionals and recruited 10 staff, 4 patients and 4 parents/carers in the baseline period. Data collection is due to be completed in Summer 2023. Results are emerging about the acceptability and feasibility of the SAFER-YMH.

Conclusion:
This is a novel best practice intervention for making discharge from inpatient mental health services to the community safer and more patient-centred. Findings will provide vital learning to support the feasibility, design, implementation, and key outcomes of a future trial.

Abstracts - parallel sessions

Workforce and skill mix in primary care

Oral Presentation: Talking in Practice: Randomised controlled trial testing the effects of communication skills e-learning for primary care practitioners on patients' musculoskeletal pain and enablement.

Professor Hazel Everitt, Mrs Nadia Cross, Dr Rachel Dewer-Haggart, Dr Emma Teasdale, Ms Amy Herbert, Mr Sebastien Pollet, Professor Matthew Ridd, Professor Christian Mallen, Ms Lorna Clarkson, Ms Jennifer Bostock, Dr Taeko Becque, Professor Beth Stuart, Dr Kirsty Garfield, Dr Leanne Morrison, Dr Jane Vennik, Dr Helen Atherton, Professor Jeremy Howick, Professor Geraldine Leydon, Professor Paul Little, Professor Felicity Bishop

Primary Care Research Centre, University of Southampton. Centre for Academic Primary Care, University of Bristol. School of Medicine, Keele University. Patient representative. Pragmatic Clinical Trials Unit, QMUL. Unit of Academic Primary Care, University of Warwick. Director of the Stoneygate Centre for Excellence in Empathic Healthcare, University of Leicester. School of Psychology, University of Southampton

SPCR Award: 563

Background:
Effective communication can help optimise healthcare interactions, improve self-management and patient outcomes such as pain. Previous feasibility work (NIHR SPCR Empathica) rigorously developed a brief e-learning tool for practitioners to deliver positive empathic care.

Aim:
To determine effectiveness and cost-effectiveness of EMPathicO practitioner communication training in patients with Musculoskeletal (MSK) pain and 'All comers'.

Methods:
Cluster RCT in GP surgeries, England and Wales. Practitioners in 42 GP surgeries serving patients from diverse geographic, socio-economic, and ethnic backgrounds are randomised to receive the e-learning package immediately, or at the trial end.

Agile flexible recruitment methods to minimise clinician time needed to participate. Practitioners (GPs, Physios, Nurses) consult as usual without needing to identify or consent patients.

Target recruitment: 840 adults with MSK pain and 840 with other conditions, consulting face to face, by telephone or video. Reception staff invite patients to complete consent and baseline questionnaire online prior to the consultation. Post-consultation questionnaires: 1 week, 1, 3 and 6 months online or paper. Interpreters available if needed.

Evaluation:
- Patient-reported outcome measures: pain intensity, patient enablement, symptom severity, quality of life, patient satisfaction, health economic costs. Practitioner and patient-reported process measures assess empathy, expectancies, anxiety/depression and continuity of care.
- Qualitative interviews with patients and practitioners.
- Practice and patient recruitment should be complete by the SPCR Showcase.

Conclusion:
Flexible recruitment strategies can enable recruitment to clinical trials in the current environment. If successful, this communication training could quickly be made available at low cost to primary care practices across the country.

Abstracts - parallel sessions

Workforce and skill mix in primary care

Oral Presentation: Mapping prescribing practice and shared care arrangements in primary care in England for people with attention deficit hyperactivity disorder: Findings from a national survey with comparison of reporting between three stakeholder groups, and by local area characteristics

Dr Anna Price, Mr Kieran Becker, Dr Jane Smith, Ms Anita Salimi, Dr John Ward, Ms Rebecca Gudka, Dr Tamsin Newlove-Delgado

University of Exeter Medical School. University of Warwick

SPCR Award: MHF008

Objective:
Attention deficit hyperactivity disorder (ADHD) is a common childhood neurodevelopmental disorder, affecting around 5% of children and adolescents, with up to 40% experiencing symptoms into adulthood. Primary care professionals play a key role in providing healthcare for people with ADHD including prescribing ADHD medications under shared-care agreements with adult mental health services (AMHS). Qualitative evidence suggests local variations in prescribing of ADHD medications, potentially increasing health inequalities for this underserved group. This study aims to provide a stakeholder informed overview of primary care prescribing across England.

Methods:
A national survey of primary care professionals, people with lived experience of ADHD, and commissioners (Integrated Care Boards (ICBs)) asked about shared-care agreements and prescribing of ADHD medication. Demographic data included respondent location, providing information on local area characteristics (LAC) such as deprivation, ethnicity, and rural/urban locations. Variations in reported provision will be analysed by geographic region, and stakeholder group. Preliminary analyses will explore relationships between reported prescribing and LAC.

Results:
In total 782 responses were received from healthcare professionals (331), people with lived experience of ADHD (409), and ICBs (42) across England. Initial analyses indicate variations in reported prescribing by geographic region, but not LAC.

Conclusion:
Data from this national survey will provide the first overview of primary care prescribing of ADHD medication in England, informed by multiple stakeholders. Through planned analyses, we will explore variations in access to prescribing, informing work to address health inequalities and improve and better co-ordinate primary care for ADHD.

Abstracts - parallel sessions

Workforce and skill mix in primary care

Lightening Talk: Non-cancer diagnoses and their potential for missed opportunities in symptomatic cancer diagnosis: a mixed-methods study

Dr Sarah Price, Professor Gary Abel, Dr Georgia Black, Dr Claire Friedemann Smith, Professor Willie Hamilton, Angela King, Dr Brian Nicholson, Professor Suzanne Scott, Professor Anne Spencer, Professor Fiona Walter, Professor Richard Neal

University of Exeter. Queen Mary University of London. University of Oxford

SPCR Award: 680

Background:
Non-cancer conditions may be diagnosed in the period before a cancer diagnosis. Whilst such non-cancer diagnoses may be based on good information and clinical reasoning, they may also represent missed opportunities to diagnose cancer.

Aims:
This mixed-methods study will explore the pattern and context of interim non-cancer diagnoses from healthcare and patient perspectives, and quantify their clinical and health economic consequences. It will explore how associated delays in diagnosing cancer could be minimised.

Methods:
Quantitative analyses will analyse Clinical Practice Research Datalink data with cancer registry linkage. Cases (aged ≥40) with an incident cancer diagnosis in 01/01/2012–31/12/2019 will be matched to controls. Logistic regression will define patterns of interim non-cancer/cancer diagnoses. Their consequences on cancer outcomes and primary-care resource use and costs will be assessed. Secondary analyses of existing qualitative datasets will explore patient perspectives of how non-cancer diagnoses arise and change during the cancer diagnostic interval, and their repercussions for ongoing care and timing of patient re-consultation. In-depth interviews with approximately 40 healthcare professionals will discuss vignettes describing non-cancer diagnoses before a cancer diagnosis. Opportunities for reducing or avoiding delays in suspecting cancer and reaching a final diagnosis will be sought. Connections between the patients' and healthcare providers' perspectives will be mapped using The One Sheet of Paper method.

Implication and Impact:
Consulting with stakeholders, we will synthesise the mixed-methods results and conceptualise feasible solutions for optimising time to cancer diagnosis and to inform the development of interventions to reduce incidence of harm from diagnostic delay.

Workforce and skill mix in primary care

Lightening Talk: Collaborative and Integrated Working Between General Practice and Community Pharmacy: A Realist Review of what works, for whom, and in which contexts.

Dr Emily Owen, Ms Ziyue Cai, Ms Claire Duddy, Dr Nina Fudge, Ms Julia Hamer-Hunt, Ms Fran Husson, Prof. Kamal Mahtani, Ms Margaret Ogden, Prof. Deborah Swinglehurst, Mr Malcolm Turner, Prof. Cate Whittlesea, Associate Prof. Geoff Wong, Prof. Sophie Park

Department of Primary Care and Population Health, University College London, London, UK. Faculty of Medicine, Imperial College London, London, UK. Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK. Wolfson Institute of Population Health, Queen Mary University of London, London, UK. Research Department of Practice and Policy, UCL School of Pharmacy, University College London.

SPCR Award: 567

Background:
Collaborative and integrated working between General Practice (GP) and Community Pharmacy (CP) has the potential to increase accessibility to services, improve service efficiency and quality of care, and reduce healthcare expenditures. Many existing studies report challenges and complexities inherent in establishing effective collaborative and integrated ways of working. The objective of our realist review is to understand how, when, and why working arrangements between GP and CP can provide the conditions necessary for optimal communication, decision-making, and collaborative and integrated working.

Methods:
A realist review approach was used to synthesise the evidence to make sense of the complexities inherent in the working relationships between GP and CP. A realist review is a theory-driven interpretive approach that aims to examine the dynamic interaction between contextual factors, underlying mechanisms, and outcomes of interest. Our research team worked closely with PPI co-applicants and stakeholders throughout the review process to refine the focus of the review and the programme theory.

Results:
We will present context-mechanism-outcome configurations (CMOCs) which underpin our refined programme theory. Specifically, CMOCs have been developed relating to central infrastructure and commissioning support, organisational leadership, flexible systems, physical infrastructure and space design, role clarity, the synergistic combination of skills, knowledge, and resources, and the role of the patient as a ‘broker’.

Conclusion:
Our review provides new insights and recommendations to maximise GP and CP collaboration and integration. The review findings are likely to have broader relevance to other primary care interfaces and the future productive shaping of collaborative and integrated working.

Abstracts - parallel sessions

Workforce and skill mix in primary care

Lightening Talk: Blood test result communication in primary care: mixed methods systematic review

Dr Helen Nankervis, Dr Alyson Huntley, Professor Penny Whiting, Professor Willie Hamilton, Professor Hardeep Singh, Jane Sprackman, Anna Ferguson Montague, Dr Jessica Watson

University of Bristol, UK. University of Exeter, UK. Baylor College of Medicine, USA

SPCR Award: 600

Background:
Identifying interventions to improve test communication from the decision to test through to sharing of results has important implications for patient safety, clinician workload and patient engagement. Recent advances in IT systems, such as text messaging or online patient access to results, offer potential to improve test result communication.

Aims:
To assess the factors around communication of blood test results including: barriers and facilitators; interventions; and patient, carer, primary care staff & provider needs and preferences.

Methods:
Medline, Embase, CINAHL, Cochrane Library (CDSR & CENTRAL), PsycINFO, and grey literature, including NHS websites, will be searched. Reference lists of eligible full texts will be handsearched. Two reviewers will independently screen titles and abstracts identified. One reviewer will extract data and these will be checked by a second reviewer. The review will use a segregated convergent synthesis method to analyse and interpret the quantitative and qualitative information gathered. Patient and public representatives, including as co-applicants, are involved in the design and conduct of the review.

Discussion:
This systematic review will map out the current evidence on blood test communication in primary care. The evidence from this review can be used when developing future studies aimed at improving the test result communication process. Searches for the review are ongoing and we expect to present preliminary findings. Outcomes from this research will be important for patients, carers, healthcare professionals and healthcare systems, potentially improving patient outcomes and reducing primary care workload.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Oral Presentation: Incidence of ‘low-risk but not no-risk’ features of cancer prior to high-risk feature occurrence: an observational cohort study

Dr Sarah Moore, Dr Sarah Price, Prof Richard Neal, Prof Willie Hamilton

University of Exeter

SPCR Award: GP Career Progression Fellowship awarded to Sarah Moore in 2021

Background:
Expediting cancer diagnosis may be achieved by targeted decreases in referral thresholds to identify patients at an earlier stage in the disease process.

Methods:
Clinical Practice Research Datalink data from England for 150,921 adults aged ≥40 were used to classify participants with features of possible cancer equating to risk strata 1-1.99%, 2-2.99% or ≥3% positive predictive value (PPV) for breast, lung, colorectal, oesophago-gastric, pancreatic, renal, bladder, prostatic, ovarian, endometrial and laryngeal cancers.

Results:
In 2016, of 150,921 eligible patients in our sample, 8576 presented with a feature with PPV of ≥3% for one of the 11 cancers. Of those, 365 (4.2%) and 1147 (13.3%), respectively, presented with a feature meeting 2-2.99% and 1-1.99% threshold criteria in the preceding year. The percentages were heterogeneous across cancer sites.

Conclusions:
This study shows that for some cancer sites, there may be a progression from low-to high-risk features prior to becoming eligible for urgent cancer referral but for the vast majority of patients, the first feature identified has a PPV ≥3%. The details of specific features across multiple cancer sites will allow for a tailored approach to any future reduction in referral thresholds, assisting in the planning of cancer services.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Oral Presentation: Systematic review of prognostic factors for cognitive decline, care home admission and palliative care in people living with dementia

Dr Michelle Marshall, Mrs Joanne L Jordan, Dr Ram C Bajpai, Dr Daneille Nimmons, Ms Tilli Smith,
Dr Paul Campbell, Prof Kelvin P Jordan

Keele University. University College London. Midlands Partnership NHS Foundation Trust

SPCR Award: 574

Background:
Primary care is at the forefront of care for people living with dementia. Dementia has a major impact on people and their families, with some people having a faster progression of their condition than others. The objective was to identify evidence-based primary care prognostic factors for accelerated cognitive decline, care home admission and palliative care.

Methods:
A systematic review was undertaken, guided by a PPIE focus group ensuring the scope was relevant. Searches were conducted to identify relevant population-based observational studies (inception to 17-Jun-2022). Two reviewers screened titles, abstracts, and full texts independently; disagreements were resolved by consensus and/or a third reviewer. Potential risk of bias was assessed using the Quality In Prognostic Studies (QUIPS) tool. A narrative synthesis was undertaken, and random effects meta-analyses used to pool estimates of association with outcomes for studies with sufficient homogeneity.

Results:
49 studies were included; 26 had cognitive decline as an outcome, 22 care home admission and one palliative care. Over 164 factors had been investigated. Strength of evidence on their prognostic value will be presented at the showcase. A consensus group, including PPIE, will review the evidence to agree upon a final set of evidence-based prognostic factors.

Discussions:
Information on identified prognostic factors could alert clinicians that a person diagnosed with dementia may be at risk of a faster trajectory, and inform shared decisions on care and support. Modifiable prognostic factors could be targeted with interventions at the earliest time point to offer the possibility of slowing progression.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Oral Presentation: Understanding the measurement of postural hypotension: a nationwide survey of primary care practice

Dr Sinéad McDonagh, Dr Rosina Cross, Dr Jane Masoli, Dr Judit Konya, Associate Professor Gary Abel, Dr Bethan Treadgold, Associate Professor James Sheppard, Dr Bethany Jakubowski, Dr Cini Bhanu, Mrs Jayne Fordham, Professor Katrina Turner, Professor Sallie Lamb1, Professor Rupert Payne1, Professor Richard McManus2, Professor John Campbell1, Dr Christopher Clark1

1University of Exeter. 2University of Oxford. 3King's College London. 4University College London. 5Mid Devon Medical Practice. 6University of Bristol

SPCR Award: 580

Introduction:
Postural hypotension (PH), the drop in blood pressure (BP) on standing, is common and associated with falls, cognitive decline and all-cause mortality. Diagnostic criteria require lying-to-standing BP assessment, however, PH is infrequently recorded in routine English primary care data, suggesting that checking for and/or recording of PH is under-utilised.

Aims:
To understand current PH measurement and management strategies in English primary care practices.

Methods:
Clinical Research Networks circulated an online survey to primary care staff who undertake BP measurements from 10th August until 8th December 2022. Responses were summarised as percentages and/or median (inter-quartile ranges (IQR)) and chi2 tests. Mixed-effect logistic regression models are underway exploring response variation by professional and practice characteristics.

Results:
Responses from 703 healthcare professionals in 242 practices were received; median age 45 (IQR 38 to 53) years, 72% female. Doctors (97%) and nurses (92%) reported checking for PH more often than healthcare assistants (82%) or pharmacists (80%; $p<0.001$). Most reported checking for PH when symptoms are present (97%). Other reasons for checking, such as patients being aged over 80 (24%) or during reviews for hypertension (17%), medication (12%), or diabetes (11%) were more commonly undertaken by allied health professionals than doctors ($p<0.001$). Standing BP measurements are feasible, usually (77%) following a sitting BP assessment; only 22% use lying-to-standing measurements.

Conclusions:
Findings suggest that most primary care PH assessments do not meet current guideline criteria. Results from this survey will inform future national guidelines to support PH detection.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Lightening Talk: Guilt, shame and the perception of being a burden among older adult with multimorbidity: a scoping review and qualitative exploration - The GLASS Study

Dr Tamsin Fisher, Dr Suhad Daher-Nashif, Dr Shoba Dawson, Prof Carolyn Chew-Graham, Dr Jacky Forsyth, Mrs Julia Hamer-Hunt, Dr Anne-Marie Boylan, Dr Stephanie Tierney, Dr Opeyemi O Babatunde

Keele University. University of Bristol. Staffordshire university. University of Oxford

SPCR Award: 605

Background:
Many older adults live with multiple long-term conditions (multimorbidity). In a previous study, older adults with musculoskeletal and mental health problems discussed feeling guilt and shame, which affected their help-seeking behaviour and access to health services. This study aims to develop a better understanding of these feelings and experiences and how they impact on older adults' health care interactions.

Methods:
We are undertaking three complementary research elements:

1. Scoping review: A comprehensive search of databases (n=6) was conducted to identify relevant studies up to November 2022. Citations were screened using pre-defined eligibility criteria. Extracted data were categorised and a map of existing knowledge and current gaps in literature is being profiled. Protocol: Open-Science-Framework-registry (https://doi.org/10.17605/OSF.IO/EKADQ)

2. Through interviews and focus groups, and using 'creative methods', we further explore older people's experiences of guilt, shame and self-perceived burden, and their impact on healthcare use, self-management, and overall health. A public art gallery(virtual) will be developed, adding depth and richness to findings.

3. Stakeholder engagement workshops will support co-design of strategies to reduce the potential impact of older adults' perceptions of being a burden on their overall health outcomes, and interactions with health services.

Results:
Of 9845 unique citations screened, 52 studies (6 UK-based) were included. Analysis is ongoing. We will present findings (1 & 2) at the conference.

Discussions:
Findings will inform future research, and strategies to strengthen support for the health and well-being of older adults with multimorbidity. This may reduce health inequalities and enhance health and social-care delivery.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Lightening Talk: Developing a primary care lifestyle intervention for people living with gout; intervention development research.

Dr Lorraine Watson, Dr Nicola Cornwall, Professor Clare Jinks, Dr Katherine Bradbury, Dr Louise Goff, Professor Paul Little, Professor Christian Mallen, Professor Edward Roddy

School of Medicine, Keele University, Staffordshire, UK. Specialist Adult Dietetic Service, Midlands Partnership NHS Foundation Trust, Cannock, Staffordshire, UK. Dept of Psychology, University of Southampton, Southampton, UK. Dept of Nutritional Sciences, King's College London, London, UK. Dept of Medicine, University of Southampton, Southampton, UK. Haywood Academic Rheumatology Centre, Midlands Partnership NHS Foundation Trust, Burslem, Stoke-On-Trent, Staffordshire, UK

SPCR Award: 175 Post-doctoral Fellowship

Background:
Lifestyle has been associated with gout for centuries, with dietary triggers of flares of great interest to people with gout. However, there is a lack of robust clinical trial evidence about the effectiveness of lifestyle change in people living with gout. This research aimed to identify barriers and facilitators to behaviours relating to lifestyle (diet, alcohol, physical activity) change in people with gout, and to explore stakeholder views on lifestyle interventions for gout.

Method:
A scoping review, following Arksey & O'Malley's methodological framework, searched databases Embase, MEDLINE, CINAHL, PsycINFO and AMED from January 2000 to October 2021 to identify qualitative studies in gout. Thematic synthesis identified themes and barriers and facilitators to behaviours relating to lifestyle change within the results of included qualitative studies.

Semi-structured interviews with people with gout and healthcare professionals (n=31) have been undertaken and are being analysed using inductive reflexive thematic analysis using NVivo v12 software.

Stakeholder and Patient & Public Involvement and Engagement groups share their views on the intervention research at regular intervals.

Results:
Themes identified in the 38 included qualitative studies were: Impact of gout, Current information, Knowledge, Current treatment plans/strategies, Patient/healthcare professional relationship, Motivation to treat/manage gout, Social influence. Potential barriers for lifestyle change include poor knowledge, confusing information, a reluctance to see healthcare professionals and stigma.

Results of the semi-structured interviews will be presented.

Conclusion:
This intervention development research will inform the development of a new lifestyle intervention for people living with gout in primary care.

Abstracts - parallel sessions

Changing patterns of morbidity and mortality

Lightening Talk: Preventing anxiety and depression in people diagnosed with inflammatory rheumatological conditions: Lessons learned from the first year of my PhD

Miss Lauren Gray, Professor Carolyn Chew-Graham, Professor Samantha Hider, Dr Nadia Corp, Dr Tom Kingstone

Keele University. Midlands Partnership University NHS Foundation Trust

SPCR Award: PhD Studentship

Introduction:
People with inflammatory rheumatological conditions (IRCs) are at an increased risk of anxiety and depression. Having a comorbid mood problem can adversely impact physical health outcomes and is an independent risk factor for mortality.

NICE guidance recommends case-finding questions should be used to identify depression in people with long term conditions (LTCs). However, a more proactive, prevention-based approach may be more effective in reducing disease burden and the prevalence of anxiety/depression.

There has been evidence for the success of depression-prevention strategies in other co-morbidities, but there is lack of evidence in IRCs. Depression is often co-morbid with anxiety but there is little work on anxiety-prevention strategies in people with LTCs.

The aim of my doctoral research is to examine the current evidence-base for depression and anxiety prevention strategies in people with LTCs and engage with key stakeholders to develop a new prevention intervention for people with IRCs.

The Approach:
1. A systematic review to establish the current evidence-base for the effectiveness of preventative interventions for anxiety/depression in people with IRCs and LTCs.

2. Qualitative interviews with people diagnosed with IRCs and clinicians working with this population. These will explore understandings of anxiety and depression and how a preventative intervention may look in IRCs.

3. An ‘expert group’ will consider findings from the above to co-design an outline for a brief psychosocial intervention that could be delivered in primary care.

Conclusion:
In this presentation, I will provide an update on this research including challenges faced and PPIE engagement.

Globalisation, health and inequalities

Oral Presentation: COVID-19 lockdowns impact on birth and pregnancy in high-income countries: systematic review and meta-analysis

Ms Iona Hindes, Dr Stamatina Iliodromiti, Dr Dominik Zenner, Ms Lizbeth Burgos Ochoa, Dr Jasper Been, Dr Benjamin Gravesteijn, Ms Hawa Narulhuda Sarwar

Queen Mary University London. Erasmus University Rotterdam

SPCR Award: SPCR PhD Studentship

Abstract:

COVID-19 national lockdowns varied across countries and impacted health differently in high compared to low- or middle-income regions. This study aims to systematically review the impact of lockdowns on maternal and perinatal outcomes in high-income countries (HICs), through the following objectives:

1. Investigate whether maternal and perinatal outcomes changed in HICs during national lockdowns.

2. Assess if changes to outcomes differed by region, deprivation, and ethnicity.

We searched databases from Jan 1, 2019 – June 10th, 2022, for studies comparing the rates of all maternal and perinatal outcomes, including physical and mental health, before, and during COVID-19 lockdowns. Meta-analysis was conducted on crude outcome rates and on time-adjusted estimates using random-effects pooled risk ratios, and subgroup analysis was conducted per region, ethnicity group, and deprivation level. The Prospero ID number is CCRD42022327448.

The systematic review identified 156 eligible studies, 126 of which were included in the meta-analysis. Preterm birth, reported in 24 studies, significantly decreased in the first lockdown (RR 0.95 (95%CI 0.93 – 0.98)), this decrease was highest in Europe (0.95 (0.92 – 0.98) and Australia (0.94 (0.90 – 0.99). In the first lockdown, only white ethnicity groups (0.97 (0.95-0.99)) and only those in low deprivation settings (0.95 (0.91 – 0.98)) experienced decreases in preterm birth. No significant changes were observed for other maternal and perinatal outcomes.

It appears that the first lockdown significantly impacted preterm birth, but this was unequally experienced between regions, deprivation, and ethnicity groups, in HICs. Further investigation is needed on lockdowns' impact on pregnancy and birth in HICs.

Abstracts - parallel sessions

Globalisation, health and inequalities

Oral Presentation: Health inequalities for older people from minority ethnic groups receiving palliative care and end of life care: a scoping review

Ms Narin Aker, Dr Rachael Frost, Prof Kate Walters, Dr Nathan Davies

UCL

SPCR Award: SPCR PhD Studentship

Background:
Research has found that there are disparities in accessing and utilising palliative and end of life care among minority ethnic groups. However, it is unclear how this differs across minority ethnic groups in different countries, and across different health conditions.

Aim:
To map the landscape of the existing evidence base on inequalities in palliative and end of life care for older people from minority ethnic groups.

Methods:
A scoping review was conducted following Joanna Briggs Institute guidance. Searches of MEDLINE, Embase, PsycInfo, CINAHL, Scopus, Web of Science, Assia, and the Cochrane Library were undertaken May-June 2022. Studies that focused on minority ethnic groups' interactions with palliative and end of life care were included, involving older people receiving palliative care, family carers, and healthcare professionals. Data was summarised descriptively.

Findings:
The total number of search results was 2,059, with 257 full texts screened and 67 included. Most papers were quantitative studies (n=53), with mixed/unspecified health conditions (n=45), focused on people receiving palliative care (n=54), and were from the USA (n=57). Black populations were the largest minority ethnic group studied within the papers (n=39). Inequalities included utilising more intensive treatments at the end of life, less time with hospice care, accessing palliative care at younger ages, and more hospital admissions.

Conclusion:
Health inequalities are still common in palliative care. There are particular gaps in understanding the experiences of older people from minority ethnic groups with specific health conditions, carers' and professionals' perspectives, and research methods exploring inequalities in more depth.

Abstracts - parallel sessions

Globalisation, health and inequalities

Oral Presentation: Exploring the feasibility of GPs working with the public and VCSE organisations to address health inequalities: Participatory action research.

Dr Jess Drinkwater, Dr Claire Planner, Professor Caroline Sanders, Dr Rebecca Morris, Dr Jennifer Voorhees, Professor Anne MacFarlane

Centre for Primary Care and Health Services Research, University of Manchester. University of Limerick

SPCR Award: 609

Background and Aim:
Care designed and delivered with the people who receive it can help address health inequalities. To achieve this, health policy promotes integrated working between GPs and local Voluntary, Community, and Social Enterprise (VCSE) organisations. We aimed to explore the feasibility and impact of GPs working with local people and VCSE organisations.

Methods:
Participatory action research with eight early career GPs working in areas of socioeconomic deprivation enrolled on a paid fellowship scheme. The GPs will meet seven times over one year, take part in multiple individual interviews, and record reflective audio-diaries about their work with local people and VCSE organisations. Meetings and interviews are audio-recorded, and all audio data is transcribed. Data analysis is concurrent with data collection. The GPs, researchers, and a group of public contributors are contributing to analysis informed by relevant concepts such as identity and normalisation process theory.

Results:
The GPs had limited understanding of working with the public or VCSE organisations. Their training and experience focused on a narrow view of the doctor-patient relationship within the consultation. Working with local people and VCSE organisations raised the GPs awareness of their value and increased the GPs understanding of patients' lives. It also challenged the GPs' clinically focused identity which was a barrier to ongoing partnership working.

Discussion:
Working with the public and VCSE organisations is unfamiliar to new GPs and disrupts their emerging identity. This has implications for policies aiming to address health inequalities through general practice integration with VCSE organisations.

Abstracts - parallel sessions

Globalisation, health and inequalities

Lightening Talk: Summarising evidence of associations of COVID-19 with a future diagnosis of inflammatory rheumatic and musculoskeletal diseases: a rapid review

Miss Hannah Mudge, Dr Jonathon Honey, Miss Sara Tachoukaft, Professor Samantha Hider, Dr Kayleigh Mason, Dr Victoria Welsh, Dr Claire Burton

Faculty of Medicine, University of Southampton. Salisbury NHS Foundation Trust, Wessex Foundation School. Faculty of Health, Education and Medicine, Anglia Ruskin University. Centre for Musculoskeletal Health Research, School of Medicine, Keele University. Midlands Partnership Foundation Trust

SPCR Award: Student Internship Programme 2022

Introduction:
Transient musculoskeletal symptoms are frequently reported in cases of acute COVID-19. However, there have also been reports of people with acute COVID-19 who go on develop de-novo inflammatory rheumatic musculoskeletal disease (iRMD). These iRMDs include rheumatoid arthritis, axial spondyloarthropathies and psoriatic arthritis. This review summarises emerging evidence of an association between acute COVID-19 and a subsequent diagnosis of an iRMD.

Methods:
A systematic search of Medline, EMBASE and two COVID-19 databases was conducted until August 2022. Case studies, case series, cross-sectional, case control and cohort studies reporting patients with an de novo iRMD following COVID-19 were included. Results were narratively synthesised.

Results:
This review identified 80 studies (69 case studies, 10 case series and 1 cross sectional study). 13 different iRMDs were reported post-COVID-19, classified according to ICD-11. Most commonly, reactive arthropathies, inflammatory arthropathies unspecified, rheumatoid arthritis and systemic lupus erythematosus. The single cross-sectional study with 100 participants reported that 37% of those with COVID-19 developed ‘post-covid arthritis’. Further data was extracted relating to iRMD onset, symptom duration, proposed mechanisms and clinical lessons.

Discussion:
iRMDs have a high disease burden both for individuals and for wider society. Understanding any association between COVID-19 and iRMD development will be essential for primary care clinicians who may have patients presenting with new musculoskeletal symptoms following an episode of COVID-19. This review identifies the range of iRMDs that have been reported following an acute episode of COVID-19, highlighting important clinical lessons and areas for further research.

Abstracts - parallel sessions

Globalisation, health and inequalities

Lightening Talk: Exploring ethnic differences in diagnostic intervals of cancer: a population-based UK cohort study

Dr Tanimola Martins, Professor Richard Neal, Professor Gary Abel, Dr Lavu Deepthi, Ms Elizabeth Down, Professor William Hamilton

University of Exeter

SPCR Award: 604

Background:
Emerging UK evidence suggests that inequalities in diagnostic pathways may explain ethnic differences in cancer outcomes. A recent population-based study showed that Asian and Black patients with prostate, colorectal, myeloma, and oesophagogastric cancer were more likely than White patients to experience prolonged intervals of diagnosis. However, the evidence is unclear whether this resulted from delays in primary care or delays occurring after a specialist referral. The present study investigates ethnic differences in diagnostic interval, subdivided into: primary care interval (period between initial primary care consultation and specialist referral), referral interval (period between specialist referral and first hospital visit) and secondary care interval (period between first hospital visit and cancer diagnosis).

Methods:
A cohort study of patients diagnosed with eight common cancers (lung, breast, colorectal, prostate, stomach, oesophageal, ovarian, and myeloma) between 2006 and 2022, using cancer registry data linked to the Clinical Practice Research Datalink (CPRD) and Hospital Episode Statistics (HES). All individuals with those cancers, aged ≥40 years at diagnosis, with a recorded ethnicity and at least one year of follow-up after diagnosis, will be included in the study. Adjusted accelerated failure time models will determine ethnic differences in primary care, referral, and secondary care intervals.

Results:
Preliminary results will be shared at the Showcase

Potential Impacts:
Exploring ethnic differences in diagnostic intervals will help identify areas for targeted intervention(s) to address ethnic inequalities in cancer diagnosis.

Lightening Talk: Is the identification of risk factors of perinatal anxiety possible and acceptable? A mixed methods approach.

Tamsin Fisher, Prof. Carolyn A. Chew-Graham, Dr Victoria Silverwood, Dr Tom Kingstone, Dr Charlotte Archer, James Bailey, Dr Jonathan Evans, Prof. Irene Petersen, Dr Holly Smith, Prof David Kessler, Amy Spruce, Dr Pensee Wu, Dr Dahai Yu, Prof Katrina Turner

Keele University. West Midlands ARC. University of Bristol. University College London. Keele University (PPIE contributor). University of Keele

SPCR Award: 565

Background:
Perinatal anxiety (PNA) is experienced from conception to one year after childbirth. Global prevalence of PNA is 21%. Early identification improves treatment outcomes. We aim to understand if we can identify women ‘at risk’ of PNA using routinely collected data, and women’s views on the acceptability of being given an ‘at risk’ label.

Methods:
Mixed methods approach. University Ethical approval obtained. Patient Advisory Group and Clinical Advisory Group informed each stage of the research.

Quantitative analysis of Clinical Practice Research Datalink (CPRD) and The Health Improvement Network (THIN) to identify diagnoses, symptoms, processes of care, and to identify utilisation of hospital services for PNA.

Qualitative interviews with women who have had PNA, primary, community and specialist healthcare professionals, and third sector organisation representatives, will explore their understanding of risk and management of women with PNA. Findings will inform the direction of the quantitative analysis. A second set of interviews will be informed by the quantitative findings.

Findings:
Initial analysis of qualitative data suggests women and healthcare professionals attribute risk to previous miscarriage and traumatic and/or unexpected pregnancies; other perceived factors include (lack of) support networks, stigma from societal pressures and their expectations. These risks are not coded in primary care records.

Implications:
The study will determine whether it is possible to identify women at risk of PNA. Initial findings from qualitative data suggest women would find this acceptable, with caveats, but that primary care records may not include relevant codes to make such risk prediction possible

Posters

Bristol	Olivia Skrobot	Nationwide mapping of primary to secondary care referral pathways for patients with suspected papilloedema: results from the DIPP study.
Bristol	Alyson Huntley	Should researchers standardise usual care arms in randomised controlled trials?
Exeter	Emma Cockcroft	Educational and psychoeducational self-management interventions for children and adolescents with Type 1 Diabetes: A systematic review and meta-analysis
Exeter	Judit Konya	Early cancer diagnosis and community pharmacies in deprived areas
Exeter	Stella Kozmér	Perceptions of patients and healthcare professionals on the identification and management of bulimia nervosa and binge eating disorder in primary care settings: a qualitative systematic review
Exeter	Emma Cockcroft	Involving people with lived experience in electronic health record database studies: challenges and opportunities
Keele	Sam Monk	Primary care-based interventions for those with multimorbidity: Taking health literacy into account: A systematic review. (Work in progress)
Keele	Helen Twohig	Preventing steroid harms in people with polymyalgia rheumatica in UK primary care: an observational study in the Clinical Practice Research Datalink (CPRD) Aurum
Manchester	Gail Davidge	‘Getting it Write’: Helping health professionals to write online consultation notes that meet patients’ needs whilst maintaining clinical utility.
Manchester	Igor Francetic	Trust-level maintenance backlog, capital investments and productivity of hospital imaging units: Spatial analysis of the implications for GP-level indicators of urgent cancer referrals
Manchester	Sarah Croke	Supporting carers to improve patient safety and maintain their well-being in transitions from mental health hospitals to the community: A Prioritisation Nominal Group Technique
Nottingham	Dr Barbara Iyens	Risk of bone fracture in women during and after menopausal hormonal therapy.
Oxford	Francesca Dakin	What is the 'new normal' in general practice, how does it affect staff wellbeing, and how can we improve?
Southampton	Amy Dobson	“There must be something wrong, or else I’m just a terrible parent": Systematic review and thematic synthesis of parent experiences of unsettled infants.
UCL	Fiona Stevenson	Tackling the challenge of qualitative data sharing for secondary analysis in primary care research: Building the Qualitative Data Preservation and Sharing (Q-DaPS) Repository
UCL	Tasmin Rookes	How does Mild Cognitive Impairment in older adults’ impact engagement with behaviour change interventions and maintenance of changes? A qualitative study
UCL	Tasmin Rookes	Identifying important behaviour change components in complex interventions for people with multiple long-term health conditions (M-LTCs): a systematic review
UCL	Megan Armstrong	Self-management of multiple long-term conditions in people experiencing socioeconomic deprivation

The National Institute for Health and Care Research School for Primary Care Research (NIHR SPCR) is a partnership between the Universities of Bristol, Exeter, Keele, Manchester, Nottingham, Oxford, QMUL, Southampton and UCL.

This document discusses research funded by the National Institute for Health and Care Research School for Primary Care Research (NIHR SPCR). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health