

NIHR SCHOOL FOR PRIMARY CARE RESEARCH

Annual Report for the 2017-18

PART A: Report for the School for Primary Care Research contract (managed by CCF).

SUMMARY SENTENCE

Please provide a sentence that captures the very high level achievements of the School. This may be used by the Department of Health and Social Care for providing quotes as part of Ministerial updates.

The NIHR School for Primary Care Research provides practicing clinicians with world leading, high quality, evidence that is needed to transform general practice in the UK and beyond. Our strong links with the NHS ensures our research addresses the most urgent health problems faced by patients, clinicians and policy makers and our extensive networks support the rapid implementation of evidence into practice to benefit patients, their families and wider society.

RESEARCH HIGHLIGHTS

Please provide a description of highlights of research funded by the NIHR SPCR award in 2017/18, including examples of how the School has increased the evidence base for primary care practice and an overview of new research projects or new areas of research activity. Please place most emphasis on the most recent activities of the School:

297 Thomas, Keele

Patient-led non-pharmacological management of ACuTe FLAREs of knee osteoarthritis in primary care settings: a feasibility and pilot study

The feasibility and pilot study have served its purpose well in developing the expertise and capability for the research team to develop a full main study to investigate acute flares in knee osteoarthritis using a web-based observational case-crossover study design. This research has specifically enabled the successful attainment of a HEE/NIHR ICA Clinical Lectureship awarded to Martin Thomas, which includes a main study of flares in knee osteoarthritis as its principal research project.

298 Panagioti Manchester

Burnout in general practitioners: a systematic review of relationships with patient safety and a feasibility study of the measurement of burnout Impacts.

• Two 4* papers were published in one of the top General Medical Journals internationally (IF=20). They have received so far 2000 citations (within 1 year of publication, over 55,000 views and have

been both the subject of commentaries in New England Journal of Medicine and British Medical Journal.

- Latest paper (Panagioti et al. 2018) was rated as one of the research articles of the year and second most influential paper across the JAMA network in 2018.
- The Royal College of Physicians and Surgeons of Canada (the largest society of physicians in Canada) conducted a podcast specifically for our paper (Panagioti et al. 2017) in which international experts and clinicians rated this paper as the most clinically influential paper within 2017.
- This research has also generated much public interest as reflected by over 4,500 shares/discussions in online networks (Panagioti et al. 2017, 2018); press releases in several professional societies across the globe and articles in several newspapers (e.g. The Guardian).

311 Hawley, Oxford

Cochrane Tobacco Addiction Group twentieth anniversary priority setting

In 2016 the Cochrane Tobacco Addiction Group carried out a priority setting project (CTAG taps), funded by the NIHR School for Primary Care Research. Drawing on the opinions and experiences of members of the public, health professionals, healthcare commissioners, researchers, guideline developers and funders a clear message emerged- that there are still many unanswered research questions in the areas of tobacco use prevention, harm reduction and cessation. Now the NIHR have put out a large funding call, across several its funding streams, for research in these areas. The NIHR cite the findings of CTAG taps as a clear driver for this call. "This research brief has been In addition, the Cochrane Tobacco Addiction Group (TAG) has conducted a priority setting, stakeholder engagement exercise to identify where further research is needed in the areas of tobacco control and smoking cessation. The results of the published report highlighted that there are many unanswered questions in the area. The top 24 unanswered questions were grouped into eight priority research themes

390 Heneghan Oxford See appendix one for further details.

There has been significant progress in the first year of the School's largest research award to date; the **Evidence Synthesis Working Group** ((<u>https://www.spcr.nihr.ac.uk/projects/evidence-synthesis</u> .

The planned 18 reviews have led to a further nine reviews being supported or delivered by the group (total reviews now 27), of these 18, protocols have been published on PROSPERO, one published in BMJ Open [review 4.4] and two reviews [reviews 3.8 and 3.9] have been accepted for publication. One review [1.2] was awarded the SPCR best blog, and reviews are underpinning funding applications [see review 1.3 and 2.3].

The results of review 3.8 were presented in the Houses of Parliament to an All Party Parliamentary Group and has led to a ministerial question directed to the Prime Minister at PMQs and the results are currently being reviewed by the MHRA.

Anne Marie Boylan has been appointed as PPI lead, who has developed the ESWG PPI strategy.

Workstream 4, service redesign in primary care, have liaised with the RCGP about endorsing the review findings for review 4.5 and have initiated dissemination projects around social prescribing. Kamal Mahtani has created links with the Gardens Libraries and Museums in Oxford to take this dissemination forward and been awarded a grant to support this dissemination project.

University of Bristol Vice-Chancellor's Impact Awards (Nov 17)

Prof Gene Feder and the IRISi team were recognised for their work on improving the primary health care response to domestic. The team were winners in the Policy and Practice category. SPCR funded research includes

46 Pilot for an individually, randomised, parallel group controlled trial to determine if a psychological intervention delivered by domestic violence advocates is effective and cost – effective 132 Identification of the nature and severity of domestic violence (DV). A mixed methods evaluation of two commonly used measures: Composite Abuse Scale (CAS) and HARK four questions

176 Longitudinal measurement of cortisol in association with mental health and experience of domestic violence and abuse: Cortisol Evaluation in Abuse Survivors 245 The impact on children of exposure to domestic violence and the implications for a primary care response: a systematic review and secondary analysis of qualitative evidence

2010 studentship On the outside looking in; the share burden of domestic violence

2014 Fellowship Preventing the ripple-out effect: a pilot study of proactive support for the social network of domestic violence survivors

Professor Paul Little

Professor Paul Little was awarded a CBE in the Queen's birthday honours (June 2018) for his services to General Practice Research. <u>https://www.southampton.ac.uk/medicine/news/2018/06/queens-honours-summer2018.page</u>

RCGP achievements in general practice May 2018

Professors Elaine Hay (Keele) and Peter Bower (Manchester) were awarded Honorary Fellowships, the College's most important award, given for outstanding work towards the objectives of the College.

Professor Joanne Protheroe (Keele) was presented with the John Fry award. This is awarded to an RCGP Member or Fellow of the College who has promoted the discipline of General Practice through research and publication and has actively encouraged people to undertake research as a practicing GP.

RCGP research papers of the year 2017

Category 2: CVD, Renal, Respiratory, Oral, ENT & Ophthalmology <u>Hippisley-Cox J, Coupland C, Brindle P. Development and validation of QRISK3 risk prediction algorithms</u> to estimate future risk of cardiovascular disease: prospective cohort study. BMJ. 2017;;j2099.

Category 3: Children, Reproduction, Genetics, Infections

Morgan C, Webb R, Carr M, Kontopantelis E, Green J, Chew-Graham C et al. *Incidence, clinical* management, and mortality risk following self-harm among children and adolescents: cohort study in primary care. BMJ. 2017;:j4351.

Category 4: Neurology, Mental Health and Dementia

Spiers J, Buszewicz M, Chew-Graham C, Gerada C, Kessler D, Leggett N et al. *Barriers, facilitators, and survival strategies for GPs seeking treatment for distress: a qualitative study.* British Journal of General Practice. 2017;67(663):e700-e708.

Category 5: Health Service Delivery and Public Health

Wynne-Jones G, Artus M, Bishop A, Lawton S, Lewis M, Jowett S et al. *Effectiveness and costs of a* vocational advice service to improve work outcomes in patients with musculoskeletal pain in primary care. PAIN. 2018;159(1):128-138.

Category 6: Endocrinology (including Diabetes), Gastroenterology, Musculoskeletal and Trauma, and Dermatology Research Paper of the Year 2017 Overall Winner Barry E, Roberts S, Oke J, Vijayaraghavan S, Normansell R, Greenhalgh T. Efficacy and effectiveness of screen and treat policies in prevention of type 2 diabetes: systematic review and meta-analysis of screening tests and interventions. BMJ. 2017;356:i6538.

Appendix two lists research publications in 17/18.

Appendix three lists international research presentations in 17/18.

IMPACT ON PRIMARY CARE PRACTICE

Please provide descriptions of impacts on primary care practice or policy arising from research undertaken by the School, explaining precisely how the research has contributed to changes in practice or policy (rather than simply stating that it has made a contribution):

60 Hay Bristol PCAAR-H Primary care antibiotics and antibiotic resistance in patients admitted to hospital

This systematic review meta-analysis was the first to provide compelling evidence that the routine use of antibiotics in primary care influences antimicrobial resistance at the individual (as opposed to population) level. This paper has been cited 1158 times (Google), including multiple citations in government policy documents internationally, because it has been difficult to persuade primary care clinicians, and their patients, that 'one more antibiotic will make any difference'. The paper shows that the odds of a patient harbouring a resistant bacterium are doubled within 2 months of being prescribed an antibiotic (for any reason), and that resistance persists for up to 6 months.

This evidence has influenced UK DH policy, including underpinning national prescribing incentives, and has been cited by NICE antimicrobial stewardship guidelines (the 2016 quality standard and the 2017 "changing risk-related behaviours in the general population").

Hay was subsequently invited to sit on the UK Government Advisory Committee for Antimicrobial Prescribing, Resistance and Healthcare Associated Infections (member 2013 to 2018), and NICE guideline committees (Antimicrobial Stewardship, chair 2014 to 2015; and Managing Common Infections, member 2016 to date).

113 Avery Nottingham

PINCER Patient Safety Toolkit in General Practices

NHS70 Excellence in primary care award

The research team were chosen as regional winners in the 'Excellence in Primary Care Award' category of the NHS70 Parliamentary Awards. Tony Avery and Sarah Rodgers received the award at the national awards ceremony in Parliament on 4 July. Their achievements include: Creating PINCER – an IT-based improvement tool that is helping more than 350 surgeries across the East Midlands to prescribe medicines safely ; Creating a Patient Safety Toolkit that's hosted on the website of the Royal College of General Practitioners (RCGP) and has been accessed more than 10,000 times since 2015 ; Working with RCGP to ensure there's a greater focus on safe prescribing during GP training and assessment. https://www.nottingham.ac.uk/news/%20pressreleases/2018/may/nottingham-team-chosen-torepresent-midlands-and-east-in-nhs-birthday-awards.aspx

117 Hay Bristol

Use of oral steroids for the treatment of acute lower respiratory tract infection (OSAC) Research paper makes Pulse top five practice-changing papers of 2017

Paper from study was been selected as one of Pulse magazine's top five practice-changing papers of 2017. Read more: <u>http://www.pulsetoday.co.uk/clinical/more-clinical-areas/dermatology/the-top-five-practicechanging-papers-of-2017/20035761.article_JAMA 2017;318(8):721-730</u>

327 Goldacre Oxford

OpenPrescibing

User stats

The project has a wide user base, serving GPs, pharmacists, CCG medicines optimisation teams, hospital consultants, patients, NHS Informatics staff. <u>OpenPrescribing.net</u> served millions of graphs and analyses to 94,000 unique users during 2018, and the site has received extensive media coverage, including in national newspapers.

User feedback

The project receives a wide variety of constructive feedback as well as general positive feedback, both formally by email and on social media such as twitter. Examples of positive feedback include:

"I think the website in general is a fantastic resource and, as a GP, I use it frequently." "This tool is great and will be really useful" "This is really useful and a great source of information for us as a practice going forward." "Your website is awesome"

Some examples.

https://www.thetimes.co.uk/article/gps-spend-millions-on-treatments-identified-as-a-waste-of-public-cashm7j0qfl38

http://www.bbc.co.uk/news/uk-england-41441857

http://www.pharmaceutical-journal.com/opinion/insight/dangers-with-inappropriate-use-of-long-acting-betaagonists/20201972.article

http://www.pharmaceutical-journal.com/opinion/editorial/drug-price-manipulations-destabilise-pharmacy/20204097.article

https://www.thetimes.co.uk/article/nhs-close-to-blowing-entire-winter-fund-on-costly-drugs-pvmgr9mwn

http://practicebusiness.co.uk/new-website-reveals-prescribing-habits-across-general-practice/

http://www.liverpoolecho.co.uk/news/liverpool-news/gluten-free-bread-special-desserts-13731547

Policy engagement

The team have contributed extensively to national discussions on better informatics in the NHS, including with senior figures in the NHS, and through fora such as the National Information Board. The National Information Board flagged up OpenPrescribing to the Secretary of State for Health, as an example of best practice in the use of NHS data that should be replicated more widely. Brian MacKenna has joined the team and he is a pharmacist who also works in the office of the Chief Pharmacist for NHS England. Dr Ben Goldacre has been appointed chair of the UK government's new <u>HealthTech Advisory Board</u>. This board reports directly to the Secretary of State and 'will highlight where change needs to happen, where best practice isn't being followed, and be an ideas hub for how to transform the NHS to improve patient outcomes, patient experience, and to make the lives of NHS staff easier'.

354 Spooner Manchester

An investigation of factors which are associated with successful transitions from GP Specialty Training Programmes to long-term careers in NHS general practice

In practical terms this study has provided an opportunity to build a research collaboration with senior staff and officers of the RCGP. The college perceives itself to be at the nexus of engaging, training and retaining the GP workforce and is in regular conversation with the Department of Health regarding policy decisions that directly and indirectly affect GP recruitment and retention. Officers and support staff are aware that the perceptions and aspirations of newly trained GPs appear to have changed. They are therefore keen to understand this better to improve how GP training prepares doctors for GP careers. They also want to gather data about GP career plans which they can present to the Department of Health as evidence to support constructive discussions about future resources for general practice. Following our engagement with RCGP and a successful grant proposal g from this study have guided the design of an online questionnaire which has been sent to GPs who recently completed GP training. It is anticipated that this larger-scale survey may be extended to include more than a single cohort to track changes over a period of time.

A paper examining how GPs reported how experiences of GP training prepared them for and influenced their career plans has been submitted for peer review.

388 McManus Oxford

Evaluating the impact of the 2011 NICE Hypertension Guideline on the Management of Hypertension in Primary Care and Subsequent Outcomes

The SPCR has supported both preliminary studies leading to substantive programme grant funding and then meta-analysis around self-monitoring of hypertension (16 Birmingham TASMIN SR study, 74 Southampton SMILE study, 267 Oxford BP SMART). The impact of these has been:

TASMIN-SR was published in JAMA in 2014 showing that high risk individuals could self-monitor their own blood pressure and adjust their own medication. This work led to the funding of an NIHR PGfAR around self-monitoring of hypertension. This in turn funded the TASMINH4 study of self-monitoring, with or without

telemonitoring which showed that GPs could use self-monitored blood pressure to adjust patients' antihypertensive medication.

The SMILE study was a pilot of a digital intervention. This digital intervention was in turn built on the TASMINH2 & SR trials and led to funding of another NIHR PGfAR (Southampton and Oxford), which funded the HOME-BP study. The BP SMART IPD was published in September 2017 and showed that blood pressure reductions associated with self-monitoring of blood pressure are directly related to the intensity of co-intervention.

These studies have led and will lead to changes in the management of hypertension in the UK in the 2019 NICE Hypertension guidelines which are anticipated to be published in February 2019.

Further work funded by SPCR (388 Oxford/Cambs/Keele) is currently examining the impact of previous work on self-monitoring from the 2011 NICE guidelines and is under review at a leading journal.

All Party Parliamentary Group on Pancreatic Cancer

Professor Julia Hippisley-Cox, University of Nottingham (University of Oxford since Feb 19), spoke about her research into the earlier diagnosis of cancer at the launch of the All Party Parliamentary Group on Pancreatic Cancer (APPGPC) on 15 November 2017.

NIHR Dissemination Centre have picked up the following papers from SPCR funded research Signals Oct 17 – end Sept 18

Reminders help GPs to find and manage inherited cholesterol disorders S Weng, J Kai, J Tranter, J Leonardi-Beeb, N Qureshi (11 Sept 18)

Aerobic exercise moderately reduces depressive symptoms in new mothers Pritchett, R. V., Daley, A. J., Jolly, K. (21 Nov 17)

Blood pressure self-monitoring works best when people are well-supported R McManus, K Tucker, J. Sheppard, R Stevens, H. Bosworth, A Bove, E Bray, K Earle, J George, M Godwin, B. Green, P Hebert, R Hobbs, I Kantola (21 Nov 17)

The blood-thinner apixaban is less likely to cause major bleeding than warfarin Y Vinogradova, C Coupland, T Hill, J Hippisley-Cox (1 July 18)

Themed Review

July 18: Moving forward

https://www.spcr.nihr.ac.uk/news/moving-forward-physiotherapy-for-musculoskeletal-health-and-wellbeing https://www.dc.nihr.ac.uk/themed-reviews/Moving-Forward-Final.pdf

Three SPCR case studies were featured:

- 1. Subgrouping and targeted exercise programmes for osteoarthritis: the role of comorbidity Melanie Holden, Keele University
- 2. Comparative effectiveness of treatment options for subacromial shoulder conditions: a network meta-analysis (CETOSS) Danielle van der Windt, Keele University
- Individual patient data meta-analysis of trials investigating the effectiveness of exercise in patients with knee and hip osteoarthritis. (STEER OA) (ACTIVE 2017-2019) Nadine Foster & Melanie Holden - Keele University

PATIENT AND PUBLIC INVOLVEMENT AND ENGAGEMENT

Please provide specific examples of how service users and practitioners have been actively involved in the research undertaken within the School (e.g. in informing or developing strategy, identifying research priorities, participating in the research process itself), detailing the nature of their contribution and the impact this has made. It would be helpful if you could highlight any

6

significant successes as well as any difficulties or barriers experienced, as well as identifying any areas where you would like further support or information

Please also describe how you keep service users, practitioners and the general public informed of the research being undertaken within the School. This could include, among other things, presentations at appropriate events or written communication for a lay readership

Please note that we will make the information that you provide in this section of the report publicly available on the <u>NIHR website</u>. This supports and promotes the sharing of knowledge, learning and good practice across the NIHR and aligns with recommendations in the NIHR's '<u>Going the Extra</u> <u>Mile</u>' report.

Please note that from 2019/20, NIHR centres, units, facilities and schools will be encouraged to report their progress in relation to the <u>national standards for public involvement in research</u> that are currently being developed by the NIHR, Health and Care Research Wales, the Chief Scientist Office Scotland and the Public Health Agency Northern Ireland.

Patient and public involvement (PPI) is an accepted and widely implemented element in the research funded by the SPCR. Several funded studies based their questions on priority setting partnerships and almost all studies involve public contributors at various stages of their research. A difficulty is raising awareness amongst groups not yet involved in research, such as minorities, of the PPI opportunities and share research outcomes with these groups. Researchers are invited to publish blogs on the SPCR website, research is online highlighted as news items and several lay summaries have been published. Some researchers have also presented their research at conferences for clinical professionals such as the Royal Society of General Practitioners and the Diabetes UK Professional Conference.

361: External Validation of the Familial Hypercholesterolaemia Case Ascertainment Tool (FAMCAT) (Weng, Nottingham)

The study tests if the Familial Hypercholesterolaemia Case Ascertainment Tool (FAMCAT), a developed computer-based approach to diagnose *Familial Hypercholesterolaemia* (FA), is valid and more accurate than current approaches to improve diagnosis in a primary care setting. The principal investigator worked with HEART UK, a cholesterol charity, on the dissemination and output strategy of the study. There have also been discussions with clinical stakeholders about the translation of FAMCAT into the clinical system of GPs and lipidologists in the Northeast England, Greater Manchester and London. In these areas, *Academic Health Science Networks* projects are started to find and detect FA in primary care. The projects are interested in using FAMCAT to find FA in these settings and the principal investigator is working with them to support and advise on the implementation pathways for patients. The principal investigator is invited to speak at HEART UK's 2019 annual conference for researchers and healthcare professionals.

367: What is the value of diagnostic tests at presentation in the ambulatory care setting to identify serious bacterial infections in the elderly? A systematic review and meta-analysis (Gbinigie, Oxford)

The systematic review aims to determine the diagnostic tests that are most likely to help diagnose serious bacterial infections in the elderly. A PPI panel, consisting of five members with relevant personal experience, was set up for the study and advised the principal investigator on the direction and priority of the study pre-funding and supported the development of the grant application. In 2017-2018 they offered their explanations on the study's findings and made suggestions on the language used for further dissemination. I.e. they advised avoiding using the term 'elderly' - as they felt it may have negative connotations. As such the term 'older adults' has been chosen instead in the manuscript and lay communication.

368: Establishing research priorities to improve the management of patients with advanced heart failure using the James Lind Alliance method (Johnson & Taylor, Bristol & Oxford)

The study partnered with the James Lind Alliance to identify the top ten research priorities for patients with advanced heart failure, led by a steering group of 16 patients, carers and clinicians. There have been several teleconferences and face to face meetings to agree on the protocol of the study. A survey was held to reach the wider patients' and clinicians' community and the patients and carers in the steering group helped to access people with advance heart failure and encouraging them to complete the survey. The survey was a success. During the data analyses, the public's suggestions of potential gaps in the current research landscape were checked to provide evidence for their urgency. An interim survey will be launched where respondents are asked to rank their top 10 research priorities based on the first survey's analyses. The last step will be a final workshop on 13th of February 2019, where both the steering group and additional clinicians, patients and carers are invited. During this workshop the final list will be identified. This list will be available for researchers to use when they are applying for funding for future studies. The patients and carers is the steering group will be key to identify the dissemination strategy.

390: Improving the evidence-base for primary care: NIHR Evidence Synthesis working group (Heneghan & Park, Oxford & UCL)

The NIHR Evidence Synthesis working group contains of four topical work streams to deliver a significant number of high impact systematic reviews to underpin effective care in important priority areas for the NHS. A PPI strategy has been established and a PPI lead has been appointed (Dr. Anne Marie Boylan). The strategy works across all work streams and ensures that PPI is actively embedded throughout the review process. Each study will regularly report on their PPI and public engagement work and a lay summary will be published on the SPCR website. Two public contributors have been recruited as members of the steering committee. The strategy also expresses the ambition to hold prioritisation partnerships for systematic reviews within primary care.

397: Targeting Acute Kidney Injury (AKI) to improve patient safety: informing a learning healthcare system (Blakeman, Manchester)

The study is a first step to develop a computer system that uses their results to continuously learn and develop to eventually improve patient safety for people with acute kidney injury (AKI). Two established PPI groups, H@PPI (Health E-Research Centre group) and PRIMER (Primary Care Research in Manchester Engagement Resource), were consulted to outline the design and co-facilitate a workshop. The co-design workshop took place in July 2018 and was attended by ten public contributors, including seven patients and carers, two patient facilitators and a PPI research officer. Following a brief introduction to the project, participants were split in two smaller groups for personalised discussion. The Ketso® kit was used to stimulate deeper reflection and discussion using colour coding and systematic representation. The workshop helped identifying potential merits and challenges of the study and refined the research question and safety informatics design. Areas of improvement included the isolation of primary and secondary information, especially at discharge, and the delay in patients receiving the results of blood tests and AKI diagnoses. Potential solutions involved using a computerised system to join up certain primary and secondary health records, audit functions to pinpoint the most vulnerable patients and providing patients access to blood tests to remove the need for an extra communication step. Feedback was positive for the capability of the ongoing development of "learning healthcare system" prototypes.

420: INSPIRE: Implementing the New Standards for Public Involvement in Research Environments (Blackburn, Keele)

Keele University is one of the official test beds of the NIHR standards for public involvement in research. There is a steering group consisting of 11 public contributors and a public contributor takes part in the regular teleconferences held by the NIHR for the 10 test beds. Together with a public contributor, the team used the standards to self-assess their current practices and resources for public involvement. The results of the audit showed that they were performing better against the Support & Learning, Working Together, and Inclusive Opportunities Standards and less well in the Governance, Impact and Communications

Standards. With two public contributors per standard, initiatives and activities were identified to improve the quality of public involvement for all six Standards. i.e., a Communication Plan for the Research Institute public involvement activities and a new Communication Good Practice guide for researchers have been co-produced with public contributors and has received positive feedback from both researchers and public contributors. Feedback from researchers and public contributors will contribute throughout the implementation period. The produced resources, as part of their standards work, are shared with involvement leads throughout the SPCR and the regional Public Involvement network (PILAR). Next year, blogs for the SPCR newsletter and website will be produced to share the outcomes of the project more widely.

Miriam Santer (Southampton) has been appointed Associate Editor for the co-produced, open-access journal Research Involvement and Engagement.

PRIMER

2018 marked the tenth anniversary of PRIMER (Primary Care Research in Manchester Engagement Resource), established at the University of Manchester to shape primary care research with an overarching focus on patient and public involvement. Since the early days with SPCR funding, PRIMER has demonstrated dedication and commitment to connecting patients and the public to researchers, goals which resulted in a Making a Difference Award from the Social Responsibility team at the University on 1 May. They received a Highly Commended Award in the Outstanding Contribution to Public and Community Engagement category. https://www.spcr.nihr.ac.uk/news/primer-is-winner-at-making-a-difference-awards

MANAGEMENT AND GOVERNANCE ARRANGEMENTS

Please provide an overview of any changes to the management and governance arrangements for the NIHR SPCR:

A sub-group of the SPCR Board has been created; the Trial Monitoring Group (TMoG). This followed several issues with two large trials that had problems with recruitment and delays in placebo production which resulted in the Board being asked to approve further funds. The Board felt that difficulties should have been flagged earlier. Additional funds were approved to ensure that the studies could complete. The TMoG oversees trials funded under funding rounds 12, 14 and 16. The group meets quarterly and reviews the quarterly progress reports. This increased scrutiny has been beneficial with issues flagged up contemporaneously with research progress enabling interventions being required by the school if necessary.

FORWARD LOOK

Please identify any significant developments (e.g. major research findings or planned initiatives) anticipated in 2018/19, particularly those that are likely to generate media interest:

243 Hobbs and Salisbury

Understanding the volume and content of general practice consultations: the 5th National Morbidity Study

Further publications planned from project 243

Patient consultation rate and clinical and NHS outcomes: a cross-sectional analysis of English primary care data from 2.7 million patients in 238 practices.

S Lay-Flurrie, E Mathieu, C Bankhead, BD Nicholson, R Perera-Salazar, T Holt, FDR Hobbs, C Salisbury, on behalf of the NIHR School for Primary Care Research, Nuffield Department of Primary Care Health Sciences, University of Oxford. Submitted to BMC Health services Research.

Morbidity statistics from general practice, a fifth national study: cross-sectional analysis.

Bankhead, A Fuller, FDR Hobbs, T Holt, S Lay-Flurrie, BD Nicholson, R Perera-Salazar, C Salisbury, on behalf of the NIHR School for Primary Care Research, Nuffield Department of Primary Care Health Sciences, University of Oxford.

The team have also been examining the complexity of consultations and have developed a measure of complexity, since workload is related not only to the number of consultations but also the complexity of the problems encountered. Whilst this work has been conducted with salary support from the Oxford Biomedical Research Centre, it has been conducted by the same core team (CB, AF, SL-F, FDRH, TH, BDN, RP-S, CS), with additional expertise from other collaborators, and has utilised the data from this research. Therefore, these will also be badged under this research grant.

- 1. The development and validation of a complexity score for general practice;
- 2. The changing complexity of general practice.

283 Roland Cambridge

Using national administrative data to evaluate new models of primary care

Workforce planning is high on the agenda for NHS England. Policymakers are concerned about the findings from the latest (2017) GP Worklife Survey regarding the numbers of GPs with intentions to quit. This research provides useful evidence on how these figures should be interpreted. The constructed dataset has been used to prepare further grant applications and has been used in other research projects in collaboration with a wider set of researchers. We intend to continue to update this dataset on an annual basis using future funding sources.

- 1. Impact of job pressures on quitting general practice". Target journal: BMJ.
- 2. Impact of GP turnover on practice performance". Target journal: BMJ Quality and Safety
- 3. "Impact of changes in practice ownership on workforce and outcomes". Target journal: British Journal of General Practice
- 4. "Development and validation of the Cambridge Multimorbidity Score". Target journal: Canadian Medical Association Journal

298 Panagioti Manchester

Burnout in general practitioners: a systematic review of relationships with patient safety and a feasibility study of the measurement of burnout

Panagioti M, Geraghty K, Chew-Graham C, et al. A pilot mixed method empirical study examining burnout of general practices and its link with patient safety. British Journal of General Practice (in submission)

Additional Information

Please use the space below to provide us with any other topics that you would like to highlight or comments you would like to make.

We have continued to reach out to other stakeholders in primary care and general practice. We are still pursuing several research areas with SSCR and SPHR. The 2018/19 SPCR working groups have been opened to colleagues in the other two schools.

We would like to mention again that the flat payment profile in the research contract is problematic as was predicted at the business planning phase of the current School contract.

PART B. Report for the School for Primary Care Research Capacity Development Contract (managed by NIHR Academy)

SUMMARY SENTENCE

Please provide a sentence that captures the very high-level achievements of the School's research capacity development programme. This may be used by the Department of Health and Social Care for providing quotes as part of Ministerial updates.

The 'Wass Report', 'by choice, not chance', highlights the critical role academic primary care plays in the recruitment and retention of general practitioners – the cornerstone of the NHS. The School for Primary Care Research Capacity Development programme is pivotal in supporting the development of the next generation of primary care leaders, by not only providing the highest-quality training environment but by supporting their wider academic development through the provision of unique networking and mentoring opportunities.

STRATEGY UPDATE

Please provide an update on the research capacity development strategy of the NIHR SPCR, highlighting any major progress or developments and any significant changes since the submission of its most recent business plan:

Please tell us about any new collaborations, including with other parts of the NIHR, what the work entails or will entail, and any impact on the business plan.

We are active in the NIHR Primary Care incubator steering group.

Our George Lewith Prize and undergraduate medical internships introduced in 2018 have started to produce outputs.

Our training lead (Mallen) has joined the NIHR Research Capacity Development Group and school members sit on NIHR funding panels.

RESEARCH TRAINING HIGHLIGHTS

Please provide a description of highlights of research training funded by the NIHR SPCR award in 2017/18, including examples of how the School has increased the research capacity for primary care and an overview of new research training activities or new areas of research capacity building. Please place most emphasis on the most recent activities of the School:

Please advise of any activities you have undertaken beyond the School, or how your activities have impacted on increasing research capacity in Primary Care beyond the School.

Please provide some metrics alongside the list of outputs.

We received 15 applications for our inaugural **George Lewith prize** in 2018; 11 from undergraduates at the SPCR partner universities and 4 from other universities. Zuzanna Bien was awarded the prize (registration fee and travel and accommodation costs for annual scientific meeting of Society for Primary Care in July 2018 <u>https://www.spcr.nihr.ac.uk/news/blog/george-lewith-prize-funds-place-at-sapc-asm-2018</u>

In the first year of our **internship scheme** the £2k award to each partner allowed 17 summer placements. Feedback from the interns can be found in **appendix four.**

The **cross-school Evidence Synthesis working group** awarded three bursaries in 2018. Complex Reviews Faraz Mughal (Keele) and Realist Reviews Ruth Abrams (UCL) Ruth Abrams; Stephanie Tierney (Oxford). The recipients were invited to join the annual SPCR training event. The ESWG team delivered three training sessions in the SPCR trainees meeting.

Infrastructure Visiting Speaker Award (IVSA) 2018

Kelly Birtwell Manchester develop a low-intensity mindfulness-based intervention to increase wellbeing and resilience in the general population. applicability for multiple settings so I thought it would be interesting to get some feedback from researchers in public health. I have been in touch with Professor Liddy Goyder at the School of Public Health at ScHARR and she thinks my research will be of interest to her SPHR and ScHARR colleagues

NIHR Short Placement Award for Research Collaboration

Gemma Spiers, Newcastle, to LSE with Prof Martin Knapp, Director of SSCR Exploring the interface between health and social care research in the NIHR Schools.

Doug Hardman, Southampton, to Oxford with Dr Jeremy Howick, Empathy in general practice: an exploration of ethnographic data.

Alison Gregory

Former SPCR PhD Student and Research Fellow Alison Gregory secured a 125,000 Euro fellowship with the insurance firm AXA. One of eight winners, Alison will investigate 'Building resilience in the forgotten heroes: Improving informal support for women experiencing domestic violence.' <u>https://www.spcr.nihr.ac.uk/news/spcr-funding-gets-the-ball-rolling</u>

Nathan Davies

Dr Nathan Davies, former SPCR researcher and fellow at University College London, won the 2017 prestigious Yvonne Carter Award. The award is co-presented by the Royal College of General Practitioners (RCGP) and the Society for Academic Primary Care (SAPC). It recognises the contributions of early career researchers in advancing the discipline of academic primary care through research. https://www.spcr.nihr.ac.uk/news/yvonne-carter-award-winner-is-announced

Mairead Murphy

Dr Mairead Murphy, SPCR studentship recipien, won £500 for Best Doctoral Research Thesis in the Faculty of Health Sciences at the University of Bristol. She was awarded the prize for the exceptional quality of her research degree thesis.

Buddhika Fernando Current Keele doctoral student selected to the Ethics Experts Committee for a Medical Research Council Pump Priming Grant on Establishing an infant child and adolescent twin register for research and capacity building on the aetiology of mental illness in Sri Lanka and 2 other South Asian countries.

Cini Bhanu Awarded UCL Beacon Bursary 31st Dec 2018 - funding for novel PPE project.

Rachael Dewar Taggart I was appointed as Deputy Module Lead for a new module "Qualitative Methods in Public Health" for the MSc Public Health Programme at the University of Southampton. Responsible for creating, developing, and organising a 6 week module teaching students about qualitative methods and their role in public health research. Taught sessions on data collection methods, reporting, and provided support for students in the preparation of their research proposals as part of their assessment.

Oladapo Ogunbayo BMA Award for Early Career Researcher at Newcastle University. <u>https://www.spcr.nihr.ac.uk/news/bma-award</u>

Rebecca Farndale University of Cambridge, won the best overall poster prize at the APM Supportive and Palliative Care Conference in Bournemouth on 15 and 16 March for her abstract titled "Emergency admissions from care home to hospital at the end of life: an analysis of national data 2006–2015 for England".

Ashley Bryce A study, conducted during Ashley's studentship has found that antibiotic resistance in the treatment of children's urinary *E. coli*, is the most common cause of urinary tract infection. This resistance occurs with many commonly prescribed primary care antibiotics and it could render some antibiotics ineffective as first-line treatments. Bacterial resistance may persist for up to three months after treatment in children.". <u>Read the full press release.</u>

Ageism and alcohol policy tackled in the House of Lords (Nov 17) Beth Bareham, SPCR student at Newcastle University, represented the Institute for Ageing at the House of Lords on 21 November.

James Sheppard, seedcorn funded fellow at the University of Oxford was **a**warded the Sir Henry Dale Fellowship to study the benefits and harms of cardiovascular prevention treatments in primary care. The five year award is joint funded by the Wellcome Trust and the Royal Society. <u>https://www.spcr.nihr.ac.uk/news/sir-henry-dale-fellowship</u>

Seed Corn and Bridging Numbers - please list outputs with partner departments including the outcomes and impact of the awards

Cambridge

<u>Ambulance staff and end-of-life hospital admissions: A qualitative interview study</u> Sarah Hoare, Michael P Kelly, Larissa Prothero, Stephen Barclay, <u>(11.06.2018)</u>, Palliative Medicine <u>10.1177/0269216318779238</u>

<u>Real-world uptake of tailored, text message, smoking cessation support in pregnancy (MiQuit) when offered</u> <u>online</u>. <u>Emery, J.L</u>. Coleman, T. Sutton, S. Cooper, S. Leonardi-Bee, J. Jones, M. Naughton, F.(<u>April, 2018</u>) *JMIR*.

Keele

<u>MIRtazapine added to SSRIs or SNRIs for Treatment Resistant Depression in Primary Care: a placebo</u> <u>randomised controlled trial (MIR).</u> Kessler, D. S., MacNeill, S. J., Tallon, D., Lewis, G., Peters, T. J., Hollingworth, W., Burns, A., Chew-Graham-C. A., Anderson, I. A., <u>Shepherd, T.</u> A., Jenkinson, C., Macleod, U., Gibson, H., Davies, S. & Wiles, N. J. (<u>28.09.2018).</u> *BMJ*, 363, k4218

Identification of indirect effects in a Cognitive Patient Education (COPE) intervention for low back pain. Mansell, G., Storheim, K., Løchting, I., Werner, E.L. & Grotle, M. (Dec, 2017). Physical Therapy, 97 (12), 1138-1146.

Symptom trajectories and prognostic factors across different musculoskeletal pain sites: An analysis of individual patient data from randomised clinical trials. Green, D.J., Lewis, A.M., Mansell, G., Artus, M., Dziedzic, K., Hay, E., Foster, N.E. & van der Windt, D.A. (July, 2018) Clin J Pain

<u>Neuropathic pain in primary care patients with low back and leg pain: prevalence, characteristics and prognosis. A systematic review of the literature</u>. Harrisson S, Stynes S, Dunn KM, Foster N, Konstantinou K (<u>November, 2017</u>) The Journal of Pain doi: 10.1016/j.jpain.2017.04.012.

<u>A novel approach to characterising individuals with low back-related leg pain: cluster identification with latent class analysis and 12 month follow up.</u> Stynes S, Konstantinou K, Ogollah R, Hay E.M, Dunn K.M (<u>April 2018</u>) Pain.

<u>Clinical diagnostic model developed for sciatica in primary care patients with low back-related leg pain.</u> <u>Stynes S,</u> Konstantinou K, Ogollah R, Hay EM, Dunn KM <u>(05.04.2019)</u> PlosOne

Manchester

Regional variation and predictors of over-registration in English primary care in 2014: a spatial analysis Patrick Burch, Tim Doran, Evangelos Kontopantelis, <u>(15.02.2018)</u>, Journal of Epidemiology & Community Health <u>10.1136/jech-2017-210176</u>

<u>'Nobody is after you; it is your initiative to start work': a qualitative study of health workforce absenteeism</u> <u>in rural Uganda.</u> Raymond Tweheyo, Gavin Daker-White, Catherine Reed, Linda Davies, Suzanne Kiwanuka, Stephen Campbell.(<u>29.12.2017</u>) Exercise in the treatment of clinical anxiety in general practice – a systematic review and meta-analysis. Aylett E, Small N, Bower P. BMC Health Services Research (16.07.2018), 18(1):559. (<u>10.1186/s12913-</u> <u>018-3313-5</u>)

<u>Threats to patient safety in primary care reported by older people with multimorbidity: baseline findings from a</u> <u>longitudinal qualitative study and implications for intervention</u>. <u>Hays R</u>, Daker-White G, Esmail A, Barlow W, Minor B, Brown B, Blakeman T, Sanders C, Bower P (21.11.2017) BMC Health Services Research. <u>Negotiating inter-professional interaction: Playing the general practitioner-pharmacist game</u>. <u>Bradley, F.</u>, Ashcroft, D. & Crossley, N.*Sociology of Health and Illness* (<u>March, 2018</u>)

Newcastle

Impact of social care supply on healthcare utilisation by older adults: a systematic review and meta-analysis. Spiers G, Matthews FE, Moffatt S, Barker RO, Jarvis H, Stow D, et al Age and Ageing. (29.08.2018).

Nottingham

Processing of discharge summaries in general practice: a retrospective record review RA Spencer, SEF Spencer, S Rodgers, SM Campbell, AJ Avery. (29.07.2018) Br J Gen Pract, bjgp18X697877 https://bjgp.org/content/68/673/e576

Poisoning substances taken by young people: a population-based cohort study Edward G Tyrrell, Denise Kendrick, Kapil Sayal and Elizabeth Orton, (27.09.2018), BJGP 10.3399/bjgp18X698897

Oxford

<u>Medications that reduce emergency hospital admissions: an overview of systematic reviews and</u> <u>prioritisation of treatments</u> Niklas Bobrovitz, Carl Heneghan, Igho Onakpoya, Benjamin Fletcher, Dylan Collins, Alice Tompson, Joseph Lee, David Nunan, Rebecca Fisher, Brittney Scott, Jack O'Sullivan, Oliver Van Hecke,Brian D. Nicholson, Sarah Stevens, Nia Roberts and Kamal R. Mahtani, <u>(26.07.2018)</u>, BMC Medicine, 16 <u>10.1186/s12916-018-1104-9</u>

Prospective external validation of the Predicting Out-of-OFfice Blood Pressure (PROOF-BP) strategy for triaging ambulatory monitoring in the diagnosis and management of hypertension: an observational cohort study. Sheppard, J.P., Martin, U., Gill, P., Stevens, R., Hobbs, R., Mant, J., Godwin, M., Hanley, J., McKinstry, B., Myers, M., Nunan, D., McManus, R.J. (27.06.2018). BMJ, 361:k2478

Association of guideline and policy changes with incidence of lifestyle advice and treatment for uncomplicated mild hypertension in primary care: a longitudinal cohort study in the Clinical Practice Research Datalink. Sheppard JP, Stevens S, Stevens RJ, Mant J, Martin U, Hobbs FDR, McManus RJ (05.09.2018). BMJ Open. 8(9):e021827.

<u>Hypertension referrals from community pharmacy to general practice: multivariate logistic regression analysis</u> of <u>131 419 patients.</u> Albasri A, Prinjha S, McManus RJ, <u>Sheppard JP</u> (2018). Br J Gen Pract. (<u>2018</u> <u>Aug</u>);68(673):e541-e550.

<u>Restructuring physical micro-environments to reduce the demand for meat: a systematic review and gualitative comparative analysis Filippo Bianchi, Emma Garnett, Claudia Dorsel, Paul Aveyard, Susan A Jebb, (Sept, 2018), The Lancet Planetary Health, 2 10.1016/S2542-5196(18)30188-8</u>

Who breaches the four-hour emergency department wait time target? A retrospective analysis of 374,000 emergency department attendances between 2008 and 2013 at a type 1 emergency department in England. Bobrovitz N, Lasserson DS, Briggs ADM. BMC Emerg Med. 2017 Nov 2;17(1):32. doi: 10.1186/s12873-017-0145-2.

Southampton

Effects of empathic and positive communication in healthcare consultations: a systematic review and <u>meta-analysis</u>. Howick, J., Moscrop, A., Mebius, A., Fanshawe, TR., Lewith, G., Bishop, FL., Mistiaen, P., Roberts, NW., Dieninyte, E., <u>Hu, X-Y.</u>, Aveyard, P., Onakpoya, IJ. (July 2018). Journal of the Royal Society of Medicine, 0141076818769477.

<u>Evidence base of randomized controlled trials and guideline recommendations of patent Traditional</u> <u>Chinese Medicines for uncomplicated acute lower respiratory tract infections in adults.</u> Xia, RY; <u>Hu, XY</u>; Di, W; Ying, W; Willcox, M; Liu, JP; Moore, M; Flower, A; Xun, L; Lai, L; Hu, RX; Wen, LZ; Zhang, LS; Qi, W; Fei, YT. J Tradit Chin Med <u>2018 August</u> 15;38(4):490-503

UCL

<u>'I'm not a real boozer': a qualitative study of primary care patients' views on drinking and its</u> <u>consequences Z Khadjesari</u> F Stevenson P Toner S Linke J Milward E Murray (<u>18.04.2018</u>), Journal of Public Health <u>10.1093/pubmed/fdy067</u>

Positive behaviour support training for staff for treating challenging behaviour in people with intellectual disabilities: a cluster RCT. Hassiotis A, Poppe M, Strydom A, Vickerstaff V, Hall I, Crabtree J, Omar R, King M, Hunter R, Bosco A, et al. (22.03.2018) Health Technol Assess 22(15):1-110

<u>Home-based health promotion for older people with mild frailty: the HomeHealth intervention development</u> and feasibility randomised controlled trial. Walters K, Frost R, Kharicha K, Avgerinou C, Gardner B, Ricciardi F, Hunter R, Liljas A, Manthorpe J, Drennan V, Wood J, Goodman C, Jovicic A, Iliffe S. (21 12.2017) *Health Technology Assessment*

Identifying key components for home-based health promotion services for older people with early frailty: A gualitative study. Frost R, Kharicha K, Jovicic A, Liljas A, Iliffe S, Manthorpe J, Gardner B, Avgerinou C, Goodman C, Drennan V, Walters K. Health & Social Care in the Community (26.05.2018)

Studentships and Fellowships Awards - please list outputs with partner departments including the outcomes and impact of the awards, e.g. career progression information

Birmingham

<u>Clinical and Demographic Characteristics Associated With Suboptimal Primary Stroke and Transient</u> <u>Ischemic Attack Prevention</u> Grace M. Turner, Melanie Calvert, Max G. Feltham, Ronan Ryan, Samuel Finnikin, Tom Marshall, (<u>13.02.2018)</u>, Stroke <u>10.1161/STROKEAHA.117.020080</u>

<u>Risk of chronic kidney disease in young adults with impaired glucose tolerance/ impaired fasting glucose:</u> <u>a retrospective cohort study using electronic primary care records</u> Ferozkhan Jadhakhan, Tom Marshall, Ronan Ryan and Paramjit Gill, (<u>26.02.2018)</u>, BMC Nephrology, 42 <u>10.1186/s12882-018-0834-4</u>

Bristol

<u>Comparison of risk factors for, and prevalence of, antibiotic resistance in contaminating and pathogenic</u> <u>urinary Escherichia coli in children in primary care: prospective cohort study</u> Ashley Bryce, Céire Costelloe, Mandy Wootton, Christopher C Butler, Alastair D Hay., <u>(29.01.2018)</u>, Journal of Antimicrobial Chemotherapy <u>10.1093/jac/dkx525</u>

Patient understanding of two commonly used patient reported outcome measures for primary care: a cognitive interview study Mairead Murphy, Sandra Hollinghurst and Chris Salisbury, (27.09.2018), BMC Family Practice, 19 https://doi.org/10.1186/s12875-018-0850-2

Primary Care Outcomes Questionnaire: psychometric testing of a new instrument Mairead Murphy, Sandra Hollinghurst, Sean Cowlishaw and Chris Salisbury (31.05.2018) BJGP

10.3399/bjgp18X695765

Qualitative assessment of the primary care outcomes questionnaire: a cognitive interview study Mairead Murphy, Sandra Hollinghurst and Chris Salisbury, <u>(01.02.2018)</u>, BMC Health Services, 79 <u>10.1186/s12913-018-2867-6</u>

Access to medical records for assisted death: clarifying the guidance Paul Teed, (26.10. 2017), BJGP, 664 <u>10.3399/bjgp17X693305</u>

<u>Keele</u>

<u>A multi-modal recruitment strategy using social media and internet-mediated methods to recruit a multidisciplinary, international sample of clinicians to an online research study Cliona J. McRobert, Jonathan C. Hill, Tim Smale, Elaine M. Hay, Danielle A. van der Windt , (06.07.2018), PLOS ONE 10.1371/journal.pone.0200184</u>

The INCLUDE study: INtegrating and improving Care for patients with infLammatory rheUmatological <u>DisordErs in the community; identifying multimorbidity</u>: Protocol for a pilot randomized controlled trial. Hider, S.L., Blagojevic-Bucknall, M., Cooke, K., Finney, A.G., Goddin, D., Healy, E.L., Hennings, S., Herron, D., Jinks, C., Lewis, M., Machin, A., Mallen, C., Wathall, S. & Chew-Graham, C.A. (02.08.2018). Journal of Comorbidity, 8(1), pp. 1-9.

<u>Meta-analysis using individual participant data: one-stage and two-stage approaches, and why they may</u> <u>differ</u>. Burke DL, Ensor J, Riley RD. (13.08.2018) Statistics in Medicine 2017; 36:855-875.

<u>Guidance for deriving and presenting percentage study weights in meta-analysis of test accuracy studies</u>. Burke DL, Ensor J, Snell KIE, van der Windt D, Riley RD.Research Synthesis Methods, <u>(07.11.2017)</u>

<u>Subgrouping and TargetEd Exercise pRogrammes for knee and hip OsteoArthritis (STEER OA): A</u> <u>systematic review update and individual participant data meta-analysis protocol. BMJ Open,</u> (22.12.2017);7(12):e018971. Holden MA, Burke DL, Runhaar J, van Der Windt D, Riley RD, Dziedzic K, Legha A, Evans AL, Abbott H, Baker K, Brown J, Bennell KL, Bossen D, Brosseau L, Chaipinyo K, Christensen R, Cochrane T, de Rooij M, Doherty M, French HP, Hickson S, Hinman RS, Hopman-Rock M, Hurley MV, Ingram C, Knoop J, Krauß I, McCarthy C, Messier SP, Patrick DL, Sahin N, Talbot LA, Taylor R, Teirlinck CH, van Middelkoop M, Walker C, Foster NE. In collaboration with the OA Trial Bank

Manchester

A mixed methods evaluation of a Mindfulness-Based Stress Reduction course for people with Parkinson's disease Kelly Birtwell, Linda Dubrow-Marshall, Rod Dubrow-Marshall, Tim Duerden, Annette Dunnb, (Nov. 2017), Complementary Therapies in Clinical Practice, 29 10.1016/j.ctcp.2017.10.009

An Exploration of Formal and Informal Mindfulness Practice and Associations with Wellbeing Kelly Birtwell, Kate Williams, Harm van Marwijk, Christopher J. Armitage, David Sheffield, (<u>21.05.2018</u>), Mindfulness, 1 – 11 <u>10.1007/s12671-018-0951-y</u>

<u>Association between a national primary care pay-for-performance scheme and suicide rates in England:</u> <u>spatial cohort study</u> Christos Grigoroglou, Luke Munford, Roger T. Webb, Nav Kapur, Tim Doran, Darren M. Ashcroft and Evangelos Kontopantelis, <u>(30.07.2018</u>), British Journal of Psychiatry, 143 <u>10.1192/bjp.2018.143</u>

<u>An Exploratory Application of Eye-Tracking Methods in a Discrete Choice Experiment Caroline Vass,</u> Dan Rigby, Kelly Tate, Andrew Stewart, Katherine Payne, <u>(03.08.2018)</u>, Medical Decision Making, 658 – 672 <u>10.1177/0272989X18782197</u>

Newcastle

The <u>"Outcome Reporting in Brief Intervention Trials: Alcohol" [ORBITAL] framework: Protocol to determine</u> <u>a core outcome set for efficacy and effectiveness trials of alcohol screening and brief intervention.</u> Shorter GW, Heather N, Bray J, Giles EL, Holloway A, Barbosa C, Berman AH, <u>O'Donnell AJ</u>, Clarke M, Stockdale KJ, Dorothy Newbury-Birch. <u>(22.12.2017)</u> Trials 18(1), DOI10.1186/s13063-017-2335-3 [1.969]

<u>Beliefs and attitudes about addressing alcohol consumption in health care: a population survey in</u> <u>England.</u> O'Donnell A, Abidi L, Brown J, Karlsson N, Nilsen P, Roback K, Skagerström J and Thomas K (21.03.2018) BMC Public Health. 18:391. [2.265]

<u>Frailty trajectories to identify end of life: alongitudinal population-based study Daniel Stow</u>, Fiona E. Matthews and Barbara Hanratty, (<u>21.09.2018</u>) BMC Medicine, 161 <u>10.1186/s12916-018-1148-x</u>

<u>Evaluating frailty scores to predict mortality in older adults using data from population based electronic</u> <u>health records: case control study.</u> Stow, D. Matthews, FE. Barclay, S. Iliffe, S. Clegg, A. De Biase, S. Robinson, L. Hanratty, B. (July, 2018) Age and Ageing, 47(4), 564-569

Nottingham

<u>Improving identification and management of familial hypercholesterolaemia in primary care:</u> Pre- and postintervention study. Weng S, Kai J, Tranter J, Leonardi-Bee J, Qureshi N Atherosclerosis July 2018; 274: 54-60.

<u>Using electronic health records to quantify and stratify the severity of type 2 diabetes in primary care in England: rationale and cohort study design.</u> Zghebi SS, Rutter MK, Ashcroft DM, Salisbury C, Mallen C, Chew-Graham CA, Reeves D, van Marwijk H, Qureshi N, **Weng S**, Peek N, Planner C, Nowakowska M, Mamas M and Kontopantelis E **BMJ Open**. June 2018 (8)

Oxford

<u>The conversation rollercoaster: How Talkaoke and Chat Lab can communicate conversation analysis to</u> <u>the public.</u> Albert, S., <u>Albury, C.</u>, Alexander, M., Harris, T., Hofstetter, E., Holmes, T. & Stokoe, E. (2018) *Discourse Studies.* 20(3):397-424. <u>doi.org/10.1177/1461445618754571</u> Let's Talk About Weight: A step-by-step guide to conversations about weight management with children and families for health and care professionals. Thompson, L., Blackshaw, B., Coulton, V., Albury, C., Tedstone, A. (2017) *Public Health England*. <u>Available online</u>. Ref: PHE publications gateway number 2017402.

<u>GP-delivered brief weight loss interventions: a cohort study of patient responses and subsequent actions, using conversation analysis in UK primary care</u> Charlotte Albury, Elizabeth Stokoe, Sue Ziebland, Helena Webb and Paul Aveyard, (<u>30.08.2018</u>) BJGP, 68, e646 - e653 <u>10.3399/bjgp18X698405</u>

The utility of long-term blood pressure variability for cardiovascular risk prediction in primary care Stevens, Sarah L.; McManus, Richard J.; Stevens, Richard J., (17.09.2018), Journal of Hypertension 10.1097/HJH.000000000001923

Current practice of usual clinic blood pressure measurement in people with and without diabetes: a survey and prospective 'mystery shopper' study in UK primary care Sarah L Stevens, Richard J McManus, Richard John Stevens, (12.04.2018) Cardiovascular Medicine 10.1136/bmjopen-2017-020589

Effects of long-term opioid analgesics on cognitive performance and plasma cytokine concentrations in patients with chronic low back pain: a cross-sectional pilot study Georgia C Richards, Lesley J Lluka, Maree T Smith, Catherine Haslam, Brendan Moore, James O'Callaghan, Jenny Strong, (01.07.2018), Pain Musculoskeletal 10.1097/PR9.000000000000669

Southampton

<u>From substance to process: A meta-ethnographic review of how healthcare professionals and patients</u> <u>understand placebos and their effects in primary care</u> <u>Doug I Hardman</u>, Adam WA Geraghty, George Lewith, Mark Lown, Clelia Viecelli and Felicity L Bishop, <u>(21.09.2018)</u> Health <u>10.1177/1363459318800169</u>

The importance of logic when choosing how to approach a systematic review: lessons from a meta-

ethnography of how healthcare professionals and patients understand placebos and their effects in

primary care. HARDMAN, D.I & BISHOP, F. L. 2018. London: Sage Publications Ltd

UCL

<u>Cost-effectiveness of facilitated access to a self-management website, compared to usual care, for</u> <u>patients with type 2 diabetes (HeLP-Diabetes): Randomized controlled trial.</u> Li J, Parrott S, Sweeting M, Farmer A, Ross J, Dack C, Pal K, Yardley L, Barnard M, Hudda M, Alkhaldi G, Murray E. Journal of Medical Internet Research. <u>(June, 2018)</u> 20(6):e201-e.

<u>Digital health interventions for adults with type 2 diabetes: Qualitative study of patient perspectives on diabetes self-management education and support.</u> Pal K, Dack C, Ross J, Michie S, May C, Stevenson F, Farmer A, Yardley L, Barnard M, Murray E. Journal of Medical Internet Research. <u>(20.02.2018)</u> 20(2):e40.

Internet-based interventions aimed at supporting family caregivers of people with dementia: Systematic review. Hopwood J, Walker N, McDonagh L, Rait G, Walters K, Iliffe S, Ross J, Davies N. Journal of Medical Internet Research. (June, 2018) 20(6):e216.

<u>A systematic review of internet-based interventions aimed at supporting family caregivers of people with dementia.</u> Hopwood J., Walker N., McDonagh L., Rait G., Walters K., Iliffe S., Ross J., & Davies N (12.06.2018) *Journal of Medical Internet Research.*

Factors influencing recording of drug misuse in primary care: a qualitative study of GPs in England Hilary Davies-Kershaw, Irene Petersen, Irwin Nazareth and Fiona Stevenson, (<u>28.03.2018)</u>, BJGP <u>10.3399/bjgp18X695309</u>

SPCR Clinical Training Awards - please list outputs with partner departments including the outcomes and impact of the awards, eg career progression information

Bristol

<u>Does locally relevant, real-time infection epidemiological data improve clinician management and antimicrobial prescribing in primary care? A systematic review Isabel Lane, Ashley Bryce, Suzanne M Ingle, Alastair D Hay, (18.09.2018), Family Practice, 1 – 10 10.1093/fampra/cmy008</u>

<u>Now Gosport: what next?</u> Lucy Pocock, Karen Forbes, Colette Reid and Sarah Purdy <u>(27.09.2018),</u> Editorial: BJGP <u>10.3399/bjgp18X698393</u>

Cambridge

Emergency admissions from care home to hospital at the end of life: an analysis of national data 2006– 2015 for England. Rebecca Farndale, Stephen Barclay. BMJ Supportive & Palliative Care (March 2018) Volume 8 Suppl 1.

<u>Variation in "fast-track" referrals for suspected cancer by patient characteristic and cancer diagnosis:</u> <u>Evidence from 670,000 patients with 35 cancers</u>. **Zhou Y** et al, 2017.(Jan 2018) British Journal of Cancer. *doi: 10.1038/bjc.2017.381*

Keele

<u>Trends in the prevalence, incidence and surgical management of carpal tunnel syndrome between 1993</u> and 2013: an observational analysis of UK primary care records. Burton CL, Chesterton LS, Chen Y, van der Windt DA (19.06.2018). BMJ Open, 8:e020166. doi:10.1136/bmjopen-2017-020166</u>

Predicting surgical intervention in patients presenting with carpal tunnel syndrome in primary care. Burton CL, Chesterton LS, Chen Y, van der Windt DA (<u>29.06.2018)</u>. Clinical Epidemiology, 10:739-748. doi:10.2147/CLEP.S154409.

Defining acute flares in knee osteoarthritis: a systematic review Emma L Parry, Martin J Thomas, George Peat, (19.07.2018), Rheumatology Research, 8 10.1136/bmjopen-2017-019804

Oxford

Evidence for the effectiveness of pomegranate supplementation for blood pressure management is weak: a systematic review of randomized clinical trials. Gbinigie, O.A., Onakpoya, I.J. and Spencer, E.A., 2017. (Oct, 2017) Nutrition Research.

Opportunities for earlier diagnosis of type 1 diabetes in children: A case-control study using routinely collected primary care records Joseph Jonathan Lee, Matthew James Thompson, Matthew James Thompson, Juliet Alexandra Usher-Smith, Constantinos Koshiaris, Constantinos Koshiaris, Ann Van den Bruel, (June, 2018), Primary Care Diabetes <u>10.1016/j.pcd.2018.02.002</u>

PATIENT AND PUBLIC INVOLVEMENT

Please provide specific examples of how patients and the public have been involved in the research capacity development undertaken within the School (e.g. in funding decision processes).

Please highlight any patient and public involvement in research training you have undertaken for trainees and how you have ensured that the training is in line with NIHR standards of patient and public involvement?

The School for Primary Care Research has supported patient and public involvement (PPI) in their research training in various ways. Paula Wray, senior Public Involvement Manager at INVOLVE, gave a training during the SPCR trainees' event in September on the National Standards for Public Involvement to train the SPCR funded trainees. Additionally, the 'Best Innovative use of Patient and Public Involvement and Engagement' prize was launched this year to celebrate the trainees' work on involvement and

engagement with the public. The winners were selected by a panel of public contributors. There was one winner and two highly recommended prizes awarded. Moreover, the SPCR updated their guidance this year to support and train researchers, all following the policy of NIHR INVOLVE and the NIHR standards for patient and public involvement. This guidance are available for the wider research community via the SPCR website. Finally, new case study booklets on PPI and public engagement within various projects and at different stages of the research cycle were published on the SPCR website. The booklets are used to share learnings in public involvement and engagement and inspire SPCR trainees and the wider research community. https://www.spcr.nihr.ac.uk/PPI/impact

Exploring patients' beliefs, attitudes, and behavioural intentions towards long-term antidepressant use for depression in primary care (Dewar-Haggart, Southampton)

A public contributor has been extremely helpful with the qualitative component for the Attitudes and Preference of People regarding Long-term Antidepressant Use for Depression (the APPLAUD) study, which is the main study of this studentship. The public contributor acted as a participant to pilot the qualitative topic guide, and gave some useful feedback on the structure of the topic guide, as well as feedback on the wording of some of the questions in the guide, which may have been difficult for participants with low-health literacy to understand. Furthermore, the public contributor sat in and listened to an interview the trainee had with a participant. They provided the student with constructive feedback on her approach to interviewing participants about their depression and antidepressant use, and provided further advice on potential questions that she could ask participants in future interviews. Once the interviews are finalised, the public contributor will further support the qualitative analyses by reading interview transcripts and discuss them with the trainee during her analysis.

SHAMIL: British South Asian recruitment into Mental Health Research in the UK (Masood, Manchester)

The study aims to improve the recruitment of South Asian ethnic minorities in randomised clinical trials. The researchers organised an involvement event for health professionals and community members of the South Asian community. The aim was to raise awareness of the training programme (SHAMIL) delivered to researchers and clinical research teams to help them increase the recruitment of minorities to participate in trials. Moreover, the need of ethnic communities to engage with clinical research was assessed. Based on the feedback from the participants, the researchers wanted to find out how to improve the manual and evaluated what could make the recruitment process effective and efficient. Additionally, a face-to-face meeting with three public contributors took place in July 2018. All the translated materials were reviewed by the contributors and their opinions and input on how to improve the materials and recruitment strategies were noted. The topic guide for the SHAMIL qualitative study was shared with the contributors and discussions took place in relation to the improvement of questions' wording. Further involvement will be sought during the analysis and interpretation of the results.

Exploring the relationship between access to social care and healthcare utilisation by older adults (Spiers, Newcastle)

The initial plan was, after consulting public contributors, to include public involvement at the end of the study to inform meaningful routes for dissemination as the methodology didn't seem appropriate for PPI. However, additional PPI took place this year to seek contextual information about the ways that older people use social care, and the complexities associated with this. It was intended that such discussion would assist with understanding some of the data regarding social care use, as well as prompt further thought about, and interpretation of, emerging findings from the cross-sectional analysis. Three public contributors provided input via a meeting or a telephone consultation. The content of these discussions was helpful in terms of understanding the ways that older people may use social care and has prompted further thought about the emerging findings and how these might be interpreted.

Clinical perspectives on the assessment process of children presenting with social and neurodevelopmental difficulties. (Coughlan, Cambridge)

The first part of the study includes an interview with health care professionals who are involved with the referral and assessment of social and neurodevelopment conditions in children. The interview schedule and symptom-matching task was reviewed by the PPI panel at Addenbrooke's Hospital in Cambridge. The panel recommended several stylistic changes (e.g. using "case study" instead of "vignette"), of which most led to changes. The panel also raised concerns about the symptom-matching task. Several of the public contributors advised that the task had the texture of a test, with one reviewer saying, "it is a bit like a police man asking a lorry driver to recite the speed limits on various roads". In response, I sought and obtained ethical approval to change the task to an online questionnaire which asks clinicians about how they see the relationship between common symptoms of childhood developmental conditions. As such, the public contributors were instrumental in shaping the interview schedule and overall design of the research. Links

have been established with the local Autism Research Centre to involve them during the analysis of the study.

Investigating comorbid mood disorders in people with inflammatory rheumatological conditions: a mixed methods study (Machin, Keele)

There were two meetings with the PPI panel. In autumn 2017, the priorities for the INCLUDE review were discussed. Panel members were enthusiastic about the proposed review, agreeing that it would be important to prioritise co-morbid anxiety, depression, cardiovascular diseases and osteoporosis. Another key priority for patients was fatigue, which thus was incorporated into the study questionnaires. Public contributors suggested improvements to patient-facing documents, including information leaflets and questionnaires for the INCLUDE study. The panel also helped to produce a patient summary sheet, by advising what information patients would want to receive following their review, like three key action points communicated via the summary sheet. PPI helped to ensure study documents were patient facing, facilitated the identification of patient priorities for the review and assisted the development of a summary sheet communicating action points for patients as an outcome of the review. During the second meeting in spring 2018, the panel discussed the proposed content for interviews with nurses, doctors and patients participating in the INCLUDE study. Public contributors helped to develop the content of interview topic guides suggesting amendments to the patient topic guides to make them more easily understandable. During this meeting, the analysis and dissemination of the systematic review results were also discussed. Participants agreed with the interpretation of the results and gave numerous suggestions for dissemination to patients, which resulted in a patient dissemination plan. A next meeting will take place in spring 2019 to discuss the qualitative analysis from the INCLUDE study and the analysis and dissemination of the cohort study results.

MANAGEMENT, FINANCE AND GOVERNANCE ARRANGEMENTS

Please provide an overview of the management, finance and governance arrangements for the NIHR SPCR research training programme, indicating whether they have changed since the submission of its business plan (and if so, how): Please tell us how you are identifying and managing risks to the programme. If you have a risk register, please share this with us.

We have appointed training leads (Sophie Park, Kamal Mahtani) for the cross-School Evidence Synthesis Working Group and they will be members of the SPCR Training leads forum.

The Evidence Synthesis Working Group have advertised for two trainees to join their quarterly management board meetings.

FORWARD LOOK

Please identify any significant developments (e.g. major changes to training programmes or planned initiatives) anticipated in 2018/19, particularly those that may impact other NIHR research training programmes:

The School has no major changes planned. The most significant development that the School is involved with is the NIHR Academy primary care incubator. In addition to working with the PC incubator stakeholders (RCGP, SAPC, CRN etc.) we continue to have discussions with colleagues in the other two NIHR Schools.

Additional Information

Please use the space below to provide us with any other topics that you would like to highlight or comments you would like to make. This should include any significant changes to the primary care landscape that may affect academic training.

The programme will be impacted heavily in 2018/19 and 2019-20 as the five-year funding model which results in reduced cohorts towards the end of the contract period.

In 2018/19 we have only been able to offer 2 years funding for the 9 studentships awarded with the host departments being required to underwrite the third year costs. This has caused difficulties for some partners as their finance regulations will not allow this without specific funds being allocated upfront (e.g. reserve accounts, departmental accounts or other research awards).

In 2019/20, we anticipate having a couple of one year awards as we cannot contract after the SPCR contract end date.

The School will not be able to plan the recruitment for October 2020 (process needs to start in January to be able to attract strong candidates before other funding streams make their awards) until the renew and refresh is confirmed and partners for 2020-25 selected and business plans approved by DHSC/NIHR.

The Academy recently informed us that a variation to contract to enable partners to invoice for funds after the end of the current contract end date is not possible. This means that partners who have trainees taking family leave/sick leave which causes their end dates to extend after 30.9.20 will need to cover those costs themselves.

With the training and capacity development contract, SPCR awards being turned down after offers because alternative funding has been secured, trainees leaving their institutions etc. can lead to an underspend on forecast expenditure.

Appendix One

Publications arising from Evidence Synthesis Working Group

ESWG Workstream 1

Published protocols

Annette Pluddemann, Hayley Jones, Carl Heneghan. Accuracy of self-diagnosis in conditions commonly managed in primary care: diagnostic accuracy review. PROSPERO 2018 CRD42018110288 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018110288

Opeyemi Babatunde, Annette Bishop, Elizabeth Cottrell Cottrell, Joanne Jordan, Nadia Corp, Kym Snell, Katrina Humphries, Tina Hadley-Barrows, Alyson Huntley, Danielle van der Windt. A systematic review and evidence synthesis of patient outcomes, healthcare resource use, acceptability and feasibility of triage, self-referral and direct access services for patients with musculoskeletal pain. PROSPERO 2018 CRD42018085978 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018085978

Alyson Huntley, Lorna Duncan, Shoba Dawson, Dawn Craig, Fiona Beyer, Patience Kunonga, Chris Salisbury, Matthew Booker, Ailsa Cameron, Ruth McDonald, Barbara Hanratty, Gemma Spiers. Does health and social care provision for the community dwelling older population help to reduce unplanned secondary care, support timely appropriate discharge, and improve patient wellbeing? A mixed method meta review of systematic reviews. PROSPERO 2018 CRD42018087534 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018087534

Patience Kunonga, Fiona Beyer, Shoba Dawson, Alyson Huntley, Joy Adamson, Louise Robinson, Dawn Craig. Does advanced care planning (ACP) for older people help to reduce unplanned hospital admissions and improve quality of life?. PROSPERO 2017 CRD42017081060 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017081060

Opeyemi Babatunde, Annette Bishop, Elizabeth Cottrell Cottrell, Joanne Jordan, Nadia Corp, Kym Snell, Katrina Humphries, Tina Hadley-Barrows, Alyson Huntley, Danielle van der Windt. A systematic review and evidence synthesis of patient outcomes, healthcare resource use, acceptability and feasibility of triage, self-referral and direct access services for patients with musculoskeletal pain. PROSPERO 2018 CRD42018085978 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018085978

Publications

Riley RD, Moons KGM, Snell KIE, et al. A guide to systematic review and meta-analysis of prognostic factor studies. BMJ 2019;364:k4597

Diagnostic value of symptoms and signs for identifying urinary tract infection in older adult outpatients: Systematic review and meta-analysis. Gbinigie OA, OrdÃ³ñez-Mena JM, Fanshawe TR, PIÃ¹/₄ddemann A, Heneghan C.

ESWG Workstream 2

Published protocols

Mila Petrova, Stephen Barclay, Ian Wellwood, Isla Kuhn, Geoff Wong. Realist review of the management of complicated grief in primary care and community settings: what works, for whom, under what circumstances and how in identifying and managing bereaved patients experiencing complicated grief. PROSPERO 2018 CRD42018109092 Available from:

http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018109092

Mila Petrova, Stephen Barclay, Ian Wellwood, Isla Kuhn, Geoff Wong. Realist review of palliative and end of life care programmes in primary care and community settings: underpinning mechanisms, programme theories, and differential outcomes across patients groups, contexts, and stages in the patient journey. PROSPERO 2018 CRD42018097218 Available from:

http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018097218

ESWG Workstream 3

Published protocols

Kamal R. Mahtani, Carl Heneghan, Igho Onakpoya, David Nunan, Nia Roberts, Beth Stuart. Direct thrombin inhibitors and factor Xa inhibitors for atrial fibrillation: a systematic review and meta-analysis incorporating unpublished clinical study reports. PROSPERO 2018 CRD42018107582 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018107582

IGHO ONAKPOYA, ELIZABETH SPENCER, BETH STUART, JEFFREY ARONSON, KAMAL MAHTANI, CARL HENEGHAN. Benefits and harms of Mysimba® (naltrexone-bupropion) in the management of overweight and obesity: a systematic review and meta-analysis of unpublished clinical study reports. PROSPERO 2018 CRD42018086618 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018086618

Ralph Akyea, Laura Condon, Nadeem Qureshi, Lorna Duncan, Rupert Payne, Kamal R. Mahtani, Joe Kai. Genetic profiling to inform therapeutic decisions in primary care; a qualitative meta-synthesis of barriers and enablers. PROSPERO 2018 CRD42018099751 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018099751

Lorna Duncan, Rupert Payne, Sam Merriel, Ralph Akyea, Nadeem Qureshi, Kamal R. Mahtani, Nia Roberts. Genetic profiling to inform therapeutic decisions in primary care; a systematic review of relevant drugs. PROSPERO 2018 CRD42018091192 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018091192

Alex Hodkinson, Maria Panagioti, Evangelos Kontopantelis, Peter Bower, Harm Van Marwijk, Charles Adeniji. Using pedometers and accelerometers to increase physical activity and improve health in patients with diabetes, obesity and cardiovascular disease: a systematic review and meta-analysis. PROSPERO 2018 CRD42018104448 Available from:

http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018104448

Karla Salas, Igho Onakpoya, Jorge Antonio Coronado Daza, Carl Heneghan. Clinical practice guidelines recommendations for the process of initiating dialysis in patients with chronic kidney disease: a systematic review. PROSPERO 2018 CRD42018110325

Georgia C. Richards, Tonny Brian Muthee, Kamal R. Mahtani, Ben Goldacre, Carl Heneghan. Factors and variation driving the inappropriate prescribing of opioid analgesic in primary care: a systematic review. PROSPERO 2018 CRD42018088057 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018088057

Publications:

A word about evidence: 'rapid reviews' or 'restricted reviews'? Aronson JK, Heneghan C, Mahtani KR, Pluddemann A. BMJ Evid Based Med. 2018 Jun 29. pii: bmjebm-2018-111025. doi: 10.1136/bmjebm-2018-111025.

Redefining rapid reviews: a flexible framework for restricted systematic reviews. Plüddemann A, Aronson JK, Onakpoya I, Heneghan C, Mahtani KR. BMJ Evid Based Med. 2018 Jun 27. pii: bmjebm-2018-110990. doi: 10.1136/bmjebm-2018-110990.

What is a 'complex systematic review'? Criteria, definition, and examples. Mahtani KR, Jefferson T, Heneghan C, Nunan D, Aronson JK. BMJ Evid Based Med. 2018 Aug;23(4):127-130. doi: 10.1136/bmjebm-2018-110965. Epub 2018 May 19.

Transvaginal mesh failure: lessons for regulation of implantable devices. Heneghan C, Aronson JK, Goldacre B, Mahtani KR, Plüddemann A, Onakpoya I. BMJ. 2017 Dec 7;359:j5515. doi: 10.1136/bmj.j5515.

Trials of transvaginal mesh devices for pelvic organ prolapse: a systematic database review of the US FDA approval process. Heneghan CJ, Goldacre B, Onakpoya I, Aronson JK, Jefferson T, Pluddemann A, Mahtani KR. BMJ Open. 2017 Dec 6;7(12):e017125. doi: 10.1136/bmjopen-2017-017125

ESWG Workstream 4

Published protocols

Anne-Marie Boylan, Geoffrey Wong, Nia Roberts, Stephanie Tierney, Kamal Mahtani, Ruth Abrams, Sophie Park, Helen Atherton, Carl Heneghan. The impact of telephone triage on workload and quality in primary care: a realist review. PROSPERO 2018 CRD42018098549 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018098549

Stephanie Tierney, Geoff Wong, Nia Roberts, Anne-Marie Boylan, Sophie Park, Ruth Abrams, Joanne Reeve, Veronika Williams, Kamal Ram Mahtani. The role of care navigators in primary care: a realist review. PROSPERO 2018 CRD42018095090 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018095090

Ruth Abrams, Geoff Wong, Nia Roberts, Kamal Mahtani, Stephanie Tierney, Anne-Marie Boylan, Sophie Park. Understanding the impact of delegated home visiting services accessed via general practice by community dwelling patients: a realist review protocol. PROSPERO 2018 CRD42018096518 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018096518

Publications:

Park SE, Thomas J. Evidence synthesis software. BMJ Evidence-Based Medicine 2018;23:140-141. https://ebm.bmj.com/content/23/4/140

Kamal R. Mahtani, Geoff Wong, Nia Roberts, Joanne Reeve, Elizabeth Mitchell, Daniel Lasserson, Tom Walley, Edward Ranson, Janet Krska, Richard Byng, Emma Wallace, Tom Fahey, Dee Mangin (Link to Protocol)

Kamal R. Mahtani, Georgette Eaton, Matthew Catterall, and Alice Ridley. "Setting the scene for paramedics in general practice: what can we expect?" Journal of the Royal Society of Medicine (2018). https://journals.sagepub.com/eprint/BdKQ4a9krW6IZQNirGxk/full

Abrams, Ruth, Geoffrey Wong, Kamal R. Mahtani, Stephanie Tierney, Anne-Marie Boylan, Nia Roberts, and Sophie Park. "Understanding the impact of delegated home visiting services accessed via general practice by community-dwelling patients: a realist review protocol." BMJ open 8, no. 11 (2018): e024876. https://bmjopen.bmj.com/content/8/11/e024876

Appendix Two Publications arising from SPCR funded research projects

<u>A "separation of worlds": The support and social networks of family carers of people with dementia at the end of life, and the possible role of the internet.</u> Davies N, Hopwood J., Walker N., Ross J., Iliffe S., Rait G., & Walters K. (08.01.2018). *Health and Social Care in the Community.* doi.org/10.1111/hsc.12701

<u>A Patient Safety Toolkit for Family Practices</u> Campbell, Stephen M. Bell, Brian G, Marsden, Kate M, Spencer, Rachel, Kadam, Umesh, Perryman, Katherine, Rodgers, Sarah, Litchfield, Ian, Reeves, David, Chuter, Antony, Doos, Lucy, Ricci-Cabello, Ignacio, Gill, Paramjit, Esmail, Aneez, Greenfield, Sheila, Slight, Sarah, Middleton, Karen, Barnett, Jane, Moore, Michael, Valderas, Jose M, Sheikh, Aziz, Avery, Anthony J. (02.01.2018) Journal of Patient Safety DOI: 10.1097/PTS.00000000000471

A systematic review of internet-based interventions aimed at supporting family caregivers of people with <u>dementia.</u> Hopwood J., Walker N., McDonagh L., Rait G., Walters K., Iliffe S., Ross J., & Davies N. (<u>12.06.2018</u>). Journal of Medical Internet Research 20(6). <u>Antidepressant use and risk of adverse outcomes in</u> people aged 20 – 64 years: cohort study using a primary care database Carol Coupland, Trevor Hill, Richard Morriss, Michael Moore, Antony Arthur and Julia Hippisley-Cox. (<u>09.02.2018</u>), BMC Medicine, 16 – 36 doi.org/10.1186/s12916-018-1022-x

<u>Antidepressants for insomnia in adults.</u> Hazel Everitt, David S Baldwin, Beth Stuart, Gosia Lipinska, Andrew Mayers, Andrea L Malizia, Christopher CF Manson, Sue Wilson. <u>(14.05.2018)</u> Cochrane <u>10.1002/14651858.CD010753.pub2</u>

<u>Blood pressure self-monitoring in pregnancy: examining feasibility in a prospective cohort study</u> Katherine L. Tucker, Kathryn S. Taylor, Carole Crawford, James A. Hodgkinson, Clare Bankhead, Tricia Carver, Elizabeth Ewers, Margaret Glogowska, Sheila M. Greenfield, Lucy Ingram, Lisa Hinton, Khalid S. Khan, Louise Locock, Lucy Mackillop, Christine McCourt, Alexander M. Pirie, Richard Stevens and Richard J. McManus. (28.12.2017) BMC Pregnancy and Childbirth, 17 10.1186/s12884-017-1605-0

<u>Can we identify older people most vulnerable to living in cold homes during winter?</u> Claudio Sartinia, Peter Tammes, Alastair D. Hay, Ian Preston, Daniel Lasserson, Peter H. Whincup, S Goya Wannamethee, Richard W. Morris. <u>(05.12.2017)</u>, Annals of Epidemiology <u>10.1016/j.annepidem.2017.11.008</u>

<u>Child and adolescent musculoskeletal pain (CAM-Pain) feasibility study: testing a method of identifying,</u> recruiting and collecting data from children and adolescents who consult about a musculoskeletal condition in <u>UK general practice.</u> Zoe A Michaleff, Paul Campbell, Alastair D Hay, Louise Warburton, Kate M Dunn (14.06.2018) BMJ Open, 8 10.1136/bmjopen-2017-021116

<u>Chronic morbidity, deprivation and primary medical care spending in England in 2015-16: a cross-sectional spatial analysis</u> Evangelos Kontopantelis, Mamas A. Mamas, Harm van Marwijk, Andrew M. Ryan, Peter Bower, Bruce Guthrie and Tim Doran (<u>14.02.2018</u>) BMC Medicine, 19 <u>10.1186/s12916-017-0996-0</u>

<u>Continuity of Primary Care and Emergency Hospital Admissions Among Older Patients in England Peter</u> Tammes, Sarah Purdy, Chris Salisbury, Fiona MacKichan, Daniel Lasserson, and Richard W. Morris (<u>Nov/Dec</u> <u>2017</u>), Annals of Family Medicine, 15, 515 – 522 <u>10.1370/afm.2136</u>

<u>Developing a measure of polypharmacy appropriateness in primary care: systematic review and expert</u> <u>consensus study.</u> Jenni Burt, Natasha Elmore, Stephen M. Campbell, Sarah Rodgers, Anthony J. Avery and Rupert A. Payne (13.06.2018) BMC Medicine, 16 10.1186/s12916-018-1078-7

<u>Elevated total homocysteine in all participants and plasma vitamin B12 concentrations in women are associated</u> with all-cause and cardiovascular mortality in the very old: the Newcastle 85+ Study. <u>Mendonça N</u>, Jagger <u>C</u>, <u>Granic A</u>, <u>Martin-Ruiz C</u>, <u>Mathers JC</u>, <u>Seal CJ</u>, <u>Hill TR</u>. (10.08.2018) J Gerontol A Biol Sci Med Sci. Empowering people to help speak up about safety in primary care: Using codesign to involve patients and professionals in developing new interventions for patients with multimorbidity Sarah Knowles, Rebecca Hays, Hugo Senra, Peter Bower, Louise Locock, Jo Protheroe, Caroline Sanders, Gavin Daker-White, (20.12.2017) Health Expectations, 1 – 10 10.1111/hex.12648

External validation of risk prediction models for incident colorectal cancer using UK Biobank J A Usher-Smith, <u>A Harshfield</u>, <u>C L Saunders</u>, <u>S J Sharp</u>, <u>J Emery</u>, <u>F M Walter</u>, <u>K Muir</u>, <u>S J Griffin. (06.03.2018)</u> British Journal of Cancer 118.

<u>Factors associated with consultation rates in general practice in England, 2013–2014: a cross-sectional study</u> Toqir K Mukhtar, Clare Bankhead, Sarah Stevens, Rafael Perera, Tim A Holt, Chris Salisbury and FD Richard Hobbs (26.04.2018) BJGP 10.3399/bjgp18X695981

Harnessing resources from the internet to maximise outcomes from GP consultations (HaRI) study: a mixed <u>qualitative methods study.</u> Seguin, M., Hall, L., Atherton, H., Barnes, R., Leydon, G., Murray, E., Stevenson, F.A. (<u>10.08.2018</u>) BMJ Open, 8 (8), e024188. <u>doi:10.1136/bmjopen-2018-024188</u>

<u>How Do Home and Clinic Blood Pressure Readings Compare in Pregnancy?</u> Katherine L. Tucker, Clare Bankhead, James Hodgkinson, Nia Roberts, Richard Stevens, Carl Heneghan, Évelyne Rey, Chern Lo, Manju Chandiramani, Rennae S. Taylor, Robyn A. North, Asma Khalil, Kathryn Marko, Jason Waugh, Mark Brown, Carole Crawford, Kathryn S. Taylor, Lucy Mackillop and Richard J. McManus, (Sept 2018), Hypertension, 72, 686 – 694 10.1161/HYPERTENSIONAHA.118.10917

Internet-Based Interventions Aimed at Supporting Family Caregivers of People With Dementia: Systematic <u>Review.</u> Jenny Hopwood, Nina Walker, Lorraine McDonagh, Greta Rait, Kate Walters, Stephen Iliffe, Jamie Ross, Nathan Davies (June 2018) JMIR, 20 doi:10.2196/jmir.9548

<u>Is use of homeopathy associated with poor prescribing in English primary care? A cross-sectional study</u> Alex J Walker, Richard Croker, Seb Bacon, Edzard Ernst, Helen J Curtis, Ben Goldacre. (18.04.2018) Royal Society of Medicine 10.1177/0141076818765779

<u>New mechanism to identify cost savings in English NHS prescribing: minimising 'price per unit', a cross-sectional study</u> Richard Croker, Alex J Walker, Seb Bacon, Helen J Curtis, Lisa French, Ben Goldacre (08.02.2018) General Practice Research, 8 10.1136/bmjopen-2017-019643

<u>NHS health checks: a cross- sectional observational study on equity of uptake and outcomes N. Coghill, L. Garside, A. A. Montgomery, G. Feder and J. Horwood (03.04.2018)</u> BMC Health Services <u>10.1186/s12913-018-3027-8</u>

<u>Older Adults' Social Relationships and Health Care Utilization: A Systematic Review Nicole</u> K. Valtorta, Danielle Collingridge Moore, Lynn Barron, Daniel Stow, and Barbara Hanratty (07.03.2018) American Journal of Public Health 10.2105/ajph.2017.304256

Poisoning substances taken by young people: a population-based cohort study. Edward G Tyrrell, Denise Kendrick, Kapil Sayal and Elizabeth Orton (27.09.2018) BJGP, 68, e703 - e710

<u>Proactive approaches to identifying dementia risk: a qualitative study of public attitudes and preferences.</u> Robinson L, Dickinson C, Magklara E, Newton L, Prato L, Bamford C. (03.02.2018) BMJ Open

<u>Response to: 'Screening for atrial fibrillation in hospitalised geriatric patients'</u> by Tavernier et al. Lown M, Shah BN, Corbett SJ, Yue A, Little P, Moore M. Heart. (<u>Apr 2018</u>) 104(7):624. DOI: <u>10.1136/heartjnl-2017-312672</u>

<u>Risk of fragility fracture among patients with gout and the effect of urate-lowering therapy</u> Alyshah Abdul Sultan, Rebecca Whittle, Sara Muller, Edward Roddy, Christian D. Mallen, and Milica Bucknall, Toby Helliwell, Samantha Hider, Zoe Paskins (14.05.2018) CMAJ 10.1503/cmaj.170806</u>

<u>Risks and benefits of direct oral anticoagulants versus warfarin in a real world setting: cohort study in primary care.</u> Yana Vinogradova, Carol Coupland, Trevor Hill, Julia Hippisley-Cox, <u>(04.07.2018)</u> BMJ <u>10.1136/bmj.k2505</u>

27

Self managemen<u>t of patients with mild COPD in primary care: randomised controlled trial.</u> Kate Jolly, Manbinder S Sidhu, Catherine A Hewitt, Peter A Coventry, Amanda Daley, Rachel Jordan, Carl Heneghan, Sally Singh, Natalie Ives, Peymane Adab, Susan Jowett, Jinu Varghese, David Nunan, Khaled Ahmed, Lee Dowson, David Fitzmaurice (13.06.2018) BMJ 10.1136/bmj.k2241

<u>Stability of thyroid function in older adults: the Birmingham Elderly Thyroid Study.</u> Lesley Roberts, Deborah McCahon, Oliver Johnson, M Sayeed Haque, James Parle and FD Richard Hobbs, <u>(27.09.2018)</u> <u>10.3399/bjgp18X698861</u>

<u>Temporal trends in use of tests in UK primary care, 2000-15: retrospective analysis of 250 million tests</u> Jack W O'Sullivan, Sarah Stevens, F D Richard Hobbs, Chris Salisbury, Paul Little, Ben Goldacre, Clare Bankhead, Jeffrey K Aronson, Rafael Perera, Carl Heneghan. BMJ (28.11.2018) 363:k4666 doi: 10.1136/bmj.k4666

<u>The experiences of general practitioner partners living with distress: An interpretative phenomenological analysis</u> Johanna Spiers, Marta Buszewicz, Carolyn A Chew-Graham, Ruth Riley, <u>(22.02.2018)</u> Journal of Health Psychology <u>10.1177/1359105318758860</u>

<u>The extent, quality and impact of patient and public involvement in primary care research: a mixed methods</u> <u>study</u> Steven Blackburn, Sarah McLachlan, Sue Jowett, Philip Kinghorn, Paramjit Gill, Adele Higginbottom, Carol Rhodes, Fiona Stevenson and Clare Jinks (24.05.2018) BMC Research Involvement and Engagement, 16 10.1186/s40900-018-0100-8

<u>The feasibility and acceptability of self-testing for proteinuria during pregnancy: A mixed methods approach.</u> Katherine L.Tucker, Liza Bowen, Carole Crawford, Philipp Mallon, Lisa Hinton, Mei-Man Lee, Jason Oke, Kathryn S.Taylor, Carl Heneghan, Clare Bankhead, Lucy Mackillop, Tim James, Pippa Oakeshott, Lucy C.Chappell, Richard J.McManus, <u>(April 2018)</u> Pregnancy Hypertension, 12, 161 – 168 <u>doi.org/10.1016/j.preghy.2017.11.009</u>

<u>The Foundations Framework for Developing and Reporting New Models of Care for Multimorbidity</u> Jonathan <u>Stokes</u>, Mei-See Man, Bruce Guthrie, Stewart W. Mercer, Chris Salisbury, and Peter Bower, <u>(Nov/Dec 2017)</u> Annals of Family Medicine, 15, 570 – 577 <u>10.1370/afm.2150</u>

<u>The potential impact of Brexit and immigration policies on the GP workforce in England: a cross-sectional observational study of GP qualification region and the characteristics of the areas and population they served in September 2016</u> Aneez Esmail, Maria Panagioti, Evan Kontopantelis, <u>(16.11.2017)</u> BMC Medicine, 15 <u>10.1186/s12916-017-0953-y</u>

<u>'Treading water but drowning slowly': what are GPs' experiences of living and working with mental illness and distress in England? A qualitative study.</u> Ruth Riley, Johanna Spiers, Carolyn A Chew-Graham, Anna K Taylor, and Gail A Thornton, Marta Buszewicz, (03.05.2018), BMJ, 8 10.1136/bmjopen-2017-018620

<u>Trends, geographic variation, and factors associated with prescribing of gluten-free foods in English primary care: a cross sectional study</u> Alex J Walker, Helen J Curtis, Seb Bacon, Richard Croker, Ben Goldacre, (22.05.2018) bioRxiv 10.1101/211052

<u>Use of primary care and other healthcare services between age 85 and 90 years: longitudinal analysis of a single-year birth cohort, the Newcastle 85+ study</u> Mohammad Esmaeil Yadegarfar, Carol Jagger, Rachel Duncan, Tony Fouweather, Barbara Hanratty, Stuart Parker, Louise Robinson

<u>Use of primary care and other healthcare services by the very old; findings from the Newcastle 85+ Study</u>. Yadegarfar M, Jagger C, Duncan R, Fouweather T, Hanratty B, Parker S, Robinson L. <u>(24.01.2018)</u> BMJ Open 20148, (1),pp e0192018 <u>Use of primary care data to predict those most vulnerable to cold weather: a case-crossover analysis</u> Peter Tammes, Claudio Sartini, Ian Preston, Alastair D Hay, Daniel Lasserson and Richard W Morris, <u>(22.02.2018)</u> BJGP 10.3399/bjgp18X694829

<u>Using electronic health records to quantify and stratify the severity of type 2 diabetes in primary care in England: rationale and cohort study design.</u> Zghebi S, Rutter MK, Ashcroft DM, Salisbury, C, Mallen, C, Chew-Graham, C, Reeves, D, Van Marwijk, H, Qureshi, N, Weng, S, Peek, N, Planner, C, Nowakowska, M, Mamas, M & Kontopantelis, E. (30.06.2018). BMJ Open, e020926.

<u>What are the sources of stress and distress for general practitioners working in England? A qualitative study</u> Ruth Riley, Johanna Spiers, Marta Buszewicz, Anna Kathryn Taylor, Gail Thornton, Carolyn Anne Chew-Graham, <u>(05.12.2018)</u> Mental Health Research, 8 <u>10.1136/bmjopen-2017-017361</u>

<u>Who breaches the four-hour emergency department wait time target? A retrospective analysis of 374,000</u> <u>emergency department attendances between 2008 and 2013 at a type 1 emergency department in England</u> Niklas Bobrovitz, Daniel S. Lasserson and Adam D. M. Briggs, <u>(02.11.2017)</u> BMC Emergency Medicine, 32

Appendix three Presentations October 2017 – September 2018

Many SPCR research projects were presented to regional and national Society for Primary Care (SAPC) meetings as well as other local research meetings.

International presentations included:

Presenter and topic	Event and date	Project
Rait Assessment of dementia risk, timely diagnosis and post diagnostic support: a qualitative study of the attitudes and experiences of UK based primary care health professionals.	27th Alzheimer Europe Conference in Berlin 2017	277
Robinson The Newcastle 85+ study: health care use by the very old increase as they age – true or false?	Presentation at North American Primary Care Research Group Montreal 2017	303
Morris	European Association for the Study of Obesity New Investigators United International Autumn School, October 2018, Mallorca	404
Stevenson How do GPs introduce information from the internet in consultations and how is it received?	International Conference on Conversation Analysis July 2018 World Congress Sociology July 2018	284
Sheppard OPtimising Treatment for MIId Systolic hypertension in the Elderly (OPTiMISE): feasibility study for a randomised controlled trial.	Society for Academic Primary Care (Oral presentation)	335
Yang The association between statin use and dementia after stroke.	Harvard in August 2018	340
Weng Improving identification of familial hypercholesterolaemia in primary care using FAMCAT (Familial Hypercholesterolaemia Case Ascertainment Tool): validation in a large population database.	European Society for Human Genetics Conference in Milan, Italy 16-18 June 2018	361
Ainsworth Investigating the feasibility of a mobile mindfulness-based digital intervention for patients with asthma.	European Respiratory Society Congress, Paris 2018. (Highest rated abstract Primary Care Oral Presentation)	373
Stanescu A qualitative exploration into the benefits of an online mindfulness meditation intervention for people with asthma, recruited in primary care.	European Society for Research on Internet Interventions, Dublin 2018.	

Discus		070
Pham Methods for handling missing ethnicity data and their impacts on the association between ethnicity and type 2 diabetes diagnoses in UK primary care. [poster]	34th International Conference on Pharmacoepidemiology & Therapeutic Risk Management. 24 Aug 2018, Prague, Czech Republic.	379
Panagioti Systematic review and meta-analysis which examined the effects of doctors' burnout on patient safety, professionalism and quality of patient care.y	WELLMED-2018 <u>http://wellmed.gr</u> American Psychiatric Association 2018 Annual meeting. May 2018	298
Re-analysis of an IPD meta-analysis which focused on the effectiveness of collaborative care for managing people with suicidal ideation in primary care.	https://www.psychiatry.org/psychiatrists/meetings/annual- meeting	
Davies Providing online support for family carers of people with dementia at the end of life	Alzheimer's Disease International, Chicago, July 2018. European Association for Palliative Care, Bern, May 2018	322 & fellowship
	Ageing Research Workshop, Sri Lanka, November 2017 Alzheimer's Europe, Berlin, October 2017	
McDonagh An examination of factors associated with STI testing in primary care: An online questionnaire study employing a behavioural science theoretical model.	The International Union against Sexually Transmitted Infections (IUSTI) World and European Congress (Dublin, Ireland).	323
Sexually transmitted infection testing influences for young people in primary care.	The 31 st Annual Conference of the European Health Psychology Society (University of Padua, Italy).	
Duschinsky I'm Fine': Exploring Patient and Carer Assertions of Status in Advanced Chronic Obstructive Pulmonary Disease (COPD) and Palliative Care Implications	10 th World Research Congress of the European Association for Palliative Care. Bern, Switzerland 2018.	343

Presentations at international conferences by trainees Sarah Audsley International Society for Physical Activity and Health Congress 2018 Libby Fergie European Conference for Human Genetics Gemma Spiers, Andrew Kingston, Daniel Stow, Libby Fergie Gerontological Society of America Emma Parry Oesteoarthritis Research International Society World Congress 2018 Kelly Birtwell International Conference on Mindfulness, University of Amsterdam July 2018 Dapo Ogunbayo 16th Qualitative Methods Conference University of Alberta.

Appendix four

News item about first cohort of SPCR internships 2018: changing impressions of primary care research

Aimed to encourage careers in academic primary care, the School's internship programme offers medical students a unique opportunity to join a research team for hands-on experience in one of our partner departments, for a few weeks over the summer.



UCL's Nathan Jeffreys presenting a poster at the SPCR Showcase.

I feel like a lot of the critical thinking I was able to do this summer will, in the long run, influence the ways I approach medicine in the future

The initiative hopes to enhance the experiences offered to medical students by providing them with first-hand involvement in a research environment and access to a team of specialised mentors and supervisors. By the end of the programme, interns produce a piece of primary care focussed academic work and an opportunity to present at the School's annual showcase event.

The programme came about to address some of the issues identified by the 2016 Health Education England and the Medical Schools Council published <u>'By choice – not by chance'.</u> The report considers the concerns faced when recruiting medical students to careers in general practice and highlights the need for greater collaboration to raise the academic profile of general practice. As such, two new initiatives were introduced by the SPCR: The Medical Student Prize named after Professor of Academic Primary Care George Lewith, and most recently in early 2018, the Medical Student Internship programme.

The School was encouraged by the enthusiasm and uptake during the first year of the programme in 2018. The research experience and mentoring resulted in some remarkably positive responses from both interns and supervisors alike. We would like to thank the students for the positive contribution they have made to the School's most recent capacity initiative, mentors, supervisors, and the research teams and departments for hosting them.

"During my 3 years of studying I've always been interested in qualitative research and its impact on clinical practice, especially in a primary care setting. Despite my interest I'd never had the opportunity to carry out or be involved in any qualitative research during University. This internship was brilliant in developing my skills in qualitative analysis. I was well supported during the internship and therefore was able to ask questions, had regular meetings and learn from my supervisors. During the internship I enjoyed gaining a better understanding of how qualitative research is carried out- from the initial steps of coding and creating themes to thinking in the 32

greater context of how pieces of qualitative research are produced with the aim of publication. I enjoyed being a part of the team I was involved in and finding out about the diverse range of projects which were taking place. This internship has made me think about the direction of my future career and the potential of undertaking more qualitative research in the future alongside my clinical work"

ASKED ABOUT THE MOST USEFUL ASPECT OF THE PROGRAMME, RESPONSES INCLUDED:

- The environment being around so many interesting people with passion for their work.
- Involvement in qualitative research and the methodology
- Crystalising statistical and epidemiological knowledge
- Learning how policy is developed for a specific problem when there are no guidelines which exist and the process in which working groups identify these issues and help to identify how new guidelines can be generated and piloted and reviewed
- Using fresh data sets and large data sets and using statistical software
- The opportunity to develop skills in self management and be proactive in identifying projects
- The opportunity to design and carry out a research study
- Introduction to new research methodology
- Gain more exposure to quantitative data analysis
- To see how primary care researchers divide their time between clinical and academic work
- Valuable insights into the world of academic and epidemiological research
- Experience working on publications
- Interview analysis, working on both quantitative and qualitative studies and an understanding of how they work together to validate findings
- The opportunity to get to know an international public health dataset in detail, of identifying its strengths and weaknesses, or assessing validity of measures, and whether the measures capture what they were intended to capture

"The key learning points are that: academic medicine requires passion and determination in order to generate outcomes from the research. A researcher needs to be an efficient delegator of tasks in order to make progress in addressing a complex problem as the good thing about working in large groups is that other members of the group will have different skill sets."

The internship was brilliant. It really ignited my passion for research and academic general practice. I gained fundamental skills in working with a research group. I learnt about conducting systematic/restricted reviews; from developing the protocol and search strategy to screening papers, extracting data and writing in the style of an academic manuscript."

" I was able to construct my own data analysis and draw relevant conclusions. I now have invaluable experience and skills gained in using statistics programmes which I am determined to work on in the future."

"I was fortunate to be able to work on several papers in different stages of production, from the first research protocol to writing up the final publication. I was surprised to see how detailed a research protocol had to be to ensure that the researcher's ambitions met ethical standards and would produce valid and useful results."

"I was surprised to see the how detailed a research protocol had to be to ensure that the researcher's ambitions met ethical standards and would produce valid and useful results. Following this, I was really interested to see, once interviews had been conducted, how thoroughly they were analysed, with researchers going through each interview multiple times each with a different thematic focus. I also learnt the importance of gaining consent from both patients and healthcare professionals."

"I feel grateful to have been given the opportunity to experience working with a new department, a new field of research, and an exciting project, and am looking forward to applying the quantitative and methodical critical thinking toolkit I gained this summer to future academic and research endeavours. Thank you very, very much for this"

"Highly recommend the internship. Really grateful for all the support I continue to receive from my supervisors. They've encouraged me to push this project all the way to conference presentations and publications."

	Supervisors	Host institution
Alisha Bhanot Restricted review of published data on adverse events from emollient use in eczema	Matthew Ridd	Bristol
Jonathan Bowley A metanarrative review of the how AI techniques are being applied to improving patient safety	Chrysanthi Papoutsi	Nottingham
Susan Bromley Perspectives on unexpected weight loss as a precursor to a cancer diagnosis: a qualitative secondary analysis	Brian Nicholson Sue Ziebland	Oxford
Thomas Greenslade The extent of medication complexity in UK general practice	Rupert Payne Rachel Denholm	Bristol
Kyle Hallas Development of 'Timeliness in Response' Appropriateness Ratings in Relation to the Management of Post-AKI Patients in Primary Care	Thomas Blakeman	Manchester
Aaron Henry Cognitive and behavioural strategies for weight loss in participants enrolled in the DROPLET Randomised Control Trial. Receiving dietary or weight loss advice for hypertension and diabetes: 25-year trends in the Health Survey for England	Nerys Astbury Carmen Piernas-Sanchez	Oxford
Nathan Jeffreys Exploring the causal factors for mental health problems experienced by medical undergraduates in the United Kingdom: a realist review	Sophie Park	UCL
Rachel Mackay Using near peer GP specialty trainees (GPSTs) to inspire medical students to choose a career within General Practice	Jaspal Taggar	Nottingham
Zoe Morrice Reviewing parents' involvement, experiences and perspectives of their child being involved in the ARCTIC trial	Gerry Leydon Catherine Woods	Southampton
Michael Reid Multimorbidity, Frailty and Disability: Analysis of data from the Newcastle 85+ Study	Barbara Hanratty, Andrew Kingston	Newcastle
Jemma Stewart A qualitative exploration of primary care providers' views of facilitating and hindering factors for addressing alcohol misuse among older patients and clients	Beth Bareham, Barbara Hanratty, Eileen Kaner	Newcastle
Yousrah Uraiby Social and physical health profiles in primary consulters for	Ross Wilkie, Joanne Protheroe	Keele

common musculoskeletal conditions; Operationalisation of the PROMIS short form tool in patients with musculoskeletal conditions		
Rachel West Fibromyalgia meta-analysis data collection	Adam Geraghty	Southampton
Anna Wood Analysis of the BRAcED study qualitative findings. Data collection for the CanRisk study. Quantitative data collection and entry for the ECASS study in GP practices throughout the east of England	Fiona Walter	UCL
Jessica Xie What features would undergraduate medical students' value in the delivery of an undergraduate Culinary Medicine course?	Sophie Park, Shoba Poduval	UCL
Ruiyang Yan Herbal Alternative Treatment for lower Respiratory tract Infections with Cough in adults – Qualitative study	Merlin Wilcox, Dia Soilemezi	Southampton
Beatrice Yeung Non-Communicable Disease (NCD) progress - How does country implementation progress relate to objective measures of NCDs?	Luke Allen	Oxford