SPCR MID-TERM REVIEW (OCTOBER 2015 – DECEMBER 2017) [Incorporates annual report 2016-2017]

BACKGROUND

As this is the third renewal of the NIHR School for Primary Care Research (SPCR), the School's planned programme of research and training has built on the existing caucus of work and expertise. The primary focus has remained the generation of high quality new evidence to guide better clinical care in primary care and the expansion of research infrastructure and capacity to deliver this evidence. This has involved refreshing academic collaborations, providing added value to existing funding, increasing research capacity, with the delivery of high quality published research with practical relevance to primary care. The School continues to create a critical mass of research expertise and funding through coordinated and collaborative working across the country, driving forward the development of new and under-researched research topics.

The School commissions this high quality research through competitive rounds of research funding or fellowship calls, awarded mainly through external rounds of competition between partners, judged by independent referees and a panel chaired by an independent team, to meet its aims. Some funding (around 40%) is distributed prospectively and by equal quantum by centre, but this still subject to internal competition for research projects or training posts and external peer review of those internally short-listed. With the third SPCR renewal, the School has cemented the collaboration between the new School members, reconnecting with colleagues in Cambridge and establishing new networks with colleagues in Newcastle.

The School lay the foundations for an efficient transition to Tranche III funding in 2015 by ensuring contracts and financial systems were in place across the School in advance for the next five years. Establishing these systems in the new member departments was one of the School priorities.

As had been successfully delivered in the first 2 phases of School funding, the School's performance has been assessed regularly by the SPCR Board against these key deliverables:

- Developing research activity as outlined in the School's 2015 business plan
- Leveraging funding for further major research grants
- Impact of our research on patient care and on health policy
- Publications in high impact factor journals
- Development of well-trained research capacity across multiple primary care disciplines

The plans also detail the strategy for Patient and Public Involvement throughout the School.

SPCR MISSION

The main missions of the School remain the NIHR mandated priorities to:

- Increase the evidence base for primary care practice
- Increase research capacity in primary care.

The School has helped create a larger 'critical mass' of research expertise and funding within primary care through coordinated and collaborative working across England. It has continued (successfully delivered in the second term of the School) to commission high quality research to inform the development of better clinical practice in primary.

The School has provided strategic leadership to support the development of primary care research and contribute to ongoing efforts to build research capacity amongst partners.

We have maintained a balance in the SPCR research portfolio between smaller pilot studies and feasibility work within member departments (around one third of research funding) and larger cross-School definitive studies (around two-thirds). The main purposes of the smaller projects are to progress better designs for definitive studies, test ways of enhancing research delivery, and increase the outputs linked to completed work where additional or merged analysis is indicated. This investment is therefore intended to act as 'gearing' funding.

The School reviewed and maintained our five main research themes, focusing upon prevention and diagnosis; non-communicable disease, multi-morbidity, and ageing; acute care; organisation and delivery of care; and research innovation and new technologies.

SPCR OBJECTIVES

The School's short, medium and long-term objectives were described as follows. The SPCR Board has monitored progress against these and believes the objectives in italics have been fully or substantially met at this mid-term review.

Short term aims (1-2 years)

- Successful integration of new partners into the School
- Ensure contract and finance arrangements are in place to begin next phase of the School
- Commissioning a range of high quality research in a series of departmental and collaborative funding rounds
- Ensure that research undertaken in the period to September 2015 is complete and published or in draft publication (completeness currently being audited)
- Strengthen collaborations between our research groups and other leading academic centres and other organisations such NIHR CLAHRCs, the RCGP, etc.
- Appoint strong candidates to the range of capacity funded posts within 2015 and 2016
- Embed an effective Patient and Public Involvement and Engagement (PPI/E) strategy.

Medium term aims (3-4 years)

- Develop large robust trials building on earlier feasibility work
- Publish all completed studies in high impact journals and included in the NIHR Dissemination
 Centre. To ensure final reports are included in the NIHR Journals Library
- Review the overall School strategy and main focus(s), with an external panel
- Continue to develop stronger links and collaborations with other NIHR entities, RCGP, SAPC
- To complete training of the first new cohorts of trainees, with a proportion succeeding in national competitions at the next level and all publishing their work.

Long term aims (5+ years)

- Ensure that the School continues as a world leading focus for research in primary care
- Continue to monitor the impact of the School's research on policy, practice and patient care
- Lead the primary care research agenda through continued membership of Government, NIHR,
 NICE, QOF, RCGP and charity strategic groups, boards and panels
- Contribute to the implementation of research findings in primary care through various means such as inclusion in NICE guidelines
- Seek School renewal in 2020.

RESEARCH STRATEGY

In the current programme, the School has supported 147 projects supported to date. Large trials with continue to be supported include: The ATAFUTI trial (Project no. 171 Investigating alternative treatment to antibiotics for Urinary Tract Infection) and the CANDID trial (Project no. 121 Colon or lung cancer detection) were initially funded in Tranche II and received continued support until

February and September 2016. A number of the initial studies are now complete have published, or are in the process of publication.

We have successfully commissioned a range of research projects under our 9th, 10th, 11th, 12th, 13th and 14th funding rounds. In addition, applications under funding rounds 15 and 16 are currently undergoing review. These will ensure that the whole SPCR award is committed and utilised before renewal in 2020.

Strengthening successful collaborations has been demonstrated across all our larger projects and, one in particular, the Evidence Synthesis Working Group has the potential to bring together a substantial body of work. The synthesis of evidence across primary care takes advantage of the different expertise held by School members. The collaboration, across all nine member of the School and originating from a working group, has been awarded £1.8 million to undertake, develop the methods, and build capacity in systematic reviews covering priority areas in primary care. The programme aims to deliver twenty high-quality reviews in urgent care interface; end-of-life care and bereavement; assessment of new drugs and technologies in chronic disease patients using unpublished data sources; and health service redesign in primary care. Importantly, this award was made under the existing competitive rules under Funding Round 14 and was subject to the same priority ranking by the external independent panel.

Twelve working groups were established in 2017 to enhance cross-departmental work across topic areas and methodologies. They have co-ordinated meetings and collaborated on funding applications. More detail on both of these initiatives can be found under 'Collaboration'.

RESEARCH IMPACT

Highlights from October 2015 include:

1. Multi-morbidity

A new online resource has been launched to help patients with several long-term conditions to not only self-manage their treatment approaches across multiple conditions but to help influence the tailored nature of treatment required by NICE in the new guidelines. The healthtalk.org "Living with multiple health problems" section presents patients' experiences of coping with the complexities of multiple illnesses. Users of the website are able to access more than 200 extracts in video, audio or written format from interviews with real patients discussing various aspects of living with multimorbidity as well as advice on self-management of treatments and juggling all the required medication across multiple conditions.

2. Cancer

Between 2007 and 2010, Fiona Walters (Cambridge) received School funding to conduct the MoleMate Trial to investigate the melanoma. She examined the effect of adding a diagnostic aid, the MoleMate system, to manage suspicious lesions. The findings influenced the revised NICE guidelines for suspected cancer in 2015 and underpinned the development of new approaches to the systematic use of best practice guidelines. http://www.phpc.cam.ac.uk/pcu/nihr-10-equipping-gps-tackle-cancers-effectively/

Publication: Effect of adding a diagnostic aid to best practice to manage suspicious pigmented lesions in primary care: randomised controlled trial won RCGP Research Paper of the Year Award in 2015. The new <u>CanTest Collaborative</u> has emerged from earlier SPCR research to investigate ways of developing and implementing new and improved cancer diagnostic tests for GPs. This international group is funded by Cancer Research UK and led by Dr Fiona Walter (Cambridge).

3. Data analysis

How has the GP management of depression changed in the last 10 years? Exploring the effects of the QOF, the economic recession and NICE guidelines on rates of diagnosis, antidepressant prescribing and referrals, Tony Kendrick, Michael Moore, Dr Beth Stuart, and Dr Adam Geraghty, found that rates of recorded depression in English general practices were falling prior to the economic recession but increased again subsequently, among men, associated with increased unemployment. Rates of GP antidepressant treatment for patients with incident depression fell following introduction of NICE depression guidelines and QOF payments for assessing depression severity, but treatment rates for recurrent depression increased.

The study findings were published in two papers:

- 1. Kendrick, Tony, Stuart, Beth, Newell, Colin, Geraghty, Adam W.A. and Moore, Michael (2015). Changes in rates of recorded depression in English primary care 2003-2013: time trend analyses of effects of the economic recession, and the GP contract quality outcomes framework (QOF). Journal of Affective Disorders, 180, 68-78. doi:10.1016/j.jad.2015.03.040
- 2. Kendrick, Tony, Stuart, Beth, Newell, Colin, Geraghty, Adam W.A. and Moore, Michael (2015) *Did NICE guidelines and the Quality Outcomes Framework change GP antidepressant prescribing in England? Observational study with time trend analyses* 2003-2013. Journal of Affective Disorders, 186, 171-177. doi:10.1016/j.jad.2015.06.052

Tony Kendrick also wrote an editorial based on the findings: Kendrick, Tony (2015) Editorial. *Long-term antidepressant treatment: time for a review?* Prescriber, 26, (19), 7-10. doi:10.1002/psb.1389.

4. Discontinuity of primary care

Research has found that older patients who do not see the same GP over a period of time are at higher risk of emergency hospital admission than those who see the same or a small number of GPs. Dr Peter Tammes and researchers from the Universities of Bristol and Oxford found that the risk of emergency hospital admission was more than twice as high for patients with the least continuity of care compared with those with high continuity of care. **Publication**: *Continuity of Primary Care and Emergency Hospital Admissions Among Older Patients in England*. Peter Tammes et al. Annals of Family Medicine. Earlier publication: *Why do patients seek primary medical care in emergency departments? An ethnographic exploration of access to general practice*. doi: 10.1136/bmjopen-2016-013816

News coverage

Pulse: http://www.pulsetoday.co.uk/news/commissioning/commissioning-topics/urgent-care/seeing-different-gps-makes-patients-twice-as-likely-to-be-admitted-to-hospital/20035669.article

GP Online: https://www.gponline.com/continuity-care-halves-risk-emergency-hospital-admission-research-suggests/article/1450004

Practice Business: http://practicebusiness.co.uk/discontinuity-of-care-puts-older-patients-at-risk-of-emergency-hospital-admission/

Medical Xpress: https://medicalxpress.com/news/2017-11-discontinuity-older-patients-emergency-hospital.html

Telegraph: http://bit.ly/2hAMF4e

5. Identifying the GP practices prescribing "low priority" treatments

A new tool by Oxford University researchers launched on <u>OpenPrescribing.net</u> identifies which individual GP practices are prescribing a range of ineffective and wasteful treatments that NHS England are spotlighting. The 19 prescription items considered as "low priority" for NHS funding are the subject of a national consultation on new commissioning guidance, and were selected based on lack of evidence of their clinical effectiveness, concerns for their safety, or cost-effectiveness.

6. Clinical workload

An analysis of the workload in primary care from 2007 to 2014, conducted by researchers at the Universities of Oxford and Bristol, found that increases in average consultation rates rose by 13.5% over the seven year period. The research, published in The Lancet, found that people are visiting their GPs more often, and are having longer consultations than they were in 2007, resulting in a 16% rise in clinical workload. Researchers suggest that the overall primary care system in England may be reaching "saturation point." The paper has already been cited in over 50 papers and achieved nearly 500 citations in altmetrics. Co-author Chris Salisbury said: "Because consultations are both happening more often and taking longer, the combined effect is that the overall workload of doctors and nurses in general practice has increased by 16% over seven years, while time spent by GPs with patients has increased by 18%. This increased workload for GPs is equivalent to almost an extra working day each week. These findings may explain why people are finding it increasingly difficult to get an appointment." The paper was cited by NHSE in their 5 Year Forward View for general practice in 2016. Hobbs FDR et al. Has workload risen in primary care? An analysis of 100 million consultations in England, 2007- 2014, The Lancet.

7. **OpenPrescribing.net**

Open Prescribing is the first website of its kind to enable health professionals, patients and the public to easily explore patterns of prescribing nationally, in CCGs and by individual GP practices. It is supported with funding from the NIHR Oxford Biomedical Research Centre and the NIHR School of Primary Care Research. Read the full story. Media coverage: More than 700 GPs prescribed 'rubbish' homeopathic treatments last year.

8. Gambling and gambling related problems among patients presenting at general practice

A School funded cross-sectional study explored gambling problems, and gambling related problems (anxiety, financial strain and relationship breakdowns) among 1000 patients attending general practices across 11 general practices in southwest England. *Gambling problems in primary care: A cross-sectional study of general practices* by S. Cowlishaw, L. Gale, A. Gregory, J. McCambridge, D. Kessler published in British Journal of General Practice, 14 March 2017. Also published in **The**

Conversation: https://theconversation.com/why-healthcare-services-have-a-problem-with-gambling-75317. Press release: www.bristol.ac.uk/primaryhealthcare/news/2017/gambling.html

9. Lack of evidence for steroids in treating symptoms of sore throat in primary care

There is not enough evidence to recommended steroids as a treatment for symptoms of sore throat in patients seeing their GP according to researchers at the Universities of Oxford, Southampton and Bristol. The primary aim of the TOAST (Treatment Options without Antibiotics for Sore Throat) trial was to investigate whether a single dose of oral dexamethasone compared with placebo increased resolution of symptoms at 24 hours after consultation. The results, published in JAMA, show that although there was not much change in symptoms after 24 hours, after 48 hours significantly more participants experienced complete resolution in the dexamethasone group.

Effect of Oral Dexamethasone Without Immediate Antibiotics vs Placebo on Acute Sore Throat in Adults: A Randomized Clinical Trial. Gail Nicola Hayward, Alastair D. Hay, Michael V. Moore, et al. and blog by Dr Gail Hayward: Can steroids soothe the thorny issue of acute sore throat? In addition: April edition of JAMA Highlights: Dexamethasone for Acute Sore Throat WebMD: Is it wise to take a steroid for a sore throat?

10. Steroids not effective for chest infections in adults who don't have asthma or other chronic lung disease.

Results from a School funded study published in JAMA indicates that oral steroids should not be used to treat acute lower respiratory tract infection. Oral steroids should not be used for treating acute

lower respiratory tract infection (or 'chest infections') in adults who don't have asthma or other chronic lung disease, as they do not reduce the duration or severity of symptoms.

The team found there was no reduction in the duration of cough, the main symptom of chest infections, or the severity of the accompanying symptoms between two and four days after treatment (when symptoms are usually at their most severe) in the prednisolone group compared with the placebo group. The results suggest that steroids are not effective in the treatment of chest infections in non-asthmatic adult patients.

Publication: Effect of Oral Prednisolone on Symptom Duration and Severity in Nonasthmatic Adults With Acute Lower Respiratory Tract Infection: A Randomized Clinical Trial. Alastair D. Hay, Paul Little, Anthony Harnden.https://jamanetwork.com/journals/jama/fullarticle/2649201

Medical Express news: Steroids not effective for chest infections in non-asthmatic adults

Press coverage: Pulse, BMJ, Healio.com, Medical Xpress, European Pharmaceutical Review, Xinhua.net, India.com, Medscape, Business Standard, CBS Philly, Science Daily, OzarksFirst.com, HealthDay, Pharmacy Today, Science Codex, Monthly Prescribing Reference Daily Pioneer, Drugs.com, Asian Age

11. Understanding kidney health on healthtalk.org

A new section on healthtalk.org has been launched to bridge the communication gap between healthcare professionals and patients who show mild Chronic Kidney Disease (CKD). This is after findings from the School funded ESKIMO (ExperienceS of Kldney MOnitoring in primary care) study revealed a disparity between what health professionals seek to explain and what patients understand. The new <u>Kidney health section</u> of the award-winning <u>healthtalk.org</u> website, was devised and created by researchers at the Universities of Bristol, Oxford, Manchester and University College London and lay representatives from the British Kidney Patient Association and the Kidney Patient Guide.

12. NIHR Dissemination Centre Signals

- Aerobic exercise moderately reduces depressive symptoms in new mothers
- Blood pressure self-monitoring works best when people are well-supported
- Screen reminders for GPs did not improve anticoagulation prescribing in atrial fibrillation
- A blood test threshold for diagnosing heart failure in general practice is reviewed
- Collaborative care can be moderately effective at treating depression regardless of physical health status
- Options in the care of people with depression
- Transient ischaemic attacks may have greater long-term impact than previously thought
- Young children from deprived areas are more at risk of serious burns and scalds
- "Case management" can prevent people with heart failure being admitted again

13. NIHR Dissemination Centre

Highlights: Childhood Eczema

Themed review: Better Beginnings: Improving health for pregnancy

The NIHR Dissemination Centre published a new themed review which focusses on women's health before, during and after pregnancy. The SNAP trial, featured on page 39, compares at delivery, the clinical effectiveness and cost-effectiveness for achieving biochemically validated smoking cessation of NRT (nicotine replacement therapy) patches with placebo patches in pregnancy, and behaviour, development and disability in infants at 2 years of age.

14. Impact on Policy and commissioning

Whilst School research has been cited a total of 39 times internationally in policy documents, there are a number of papers in particular which have had a significant impact on International health policy.

Multi-morbidity:

- Huntley, Johnson, Purdy, Valderas, & Salisbury, (2012) are in the in the top 25% of all research outputs scored by Altmetric, and cited in the UK governments 'Present and future configuration of health and social care services to enhance robustness in older age' report, which is authored by School board member Professor Louise Robinson.
 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/447240/gs-15-12-future-ageing-health-social-care-er16.pdf).
- Bower et al., (2011) are cited in the systematic review for NICE Guidelines for Multi-morbidity: clinical assessment and management (NG56) https://www.nice.org.uk/guidance/ng56/evidence/appendices-aq-pdf-2615543104;
- Roberts et al., (2012) are cited in in *The Australian Health Policy Collaboration document* 'Beyond the fragments: preventing the costs and consequences of chronic physical and mental diseases' https://www.vu.edu.au/sites/default/files/AHPC/pdfs/beyond-the-fragments.pdf
- Blakemore et al., (2014) are cited in the NICE 'Chronic obstructive pulmonary disease in over 16s: diagnosis and management' guidance. https://www.nice.org.uk/guidance/cg101/evidence

At Keele University, support from the School has led to a number of departmental and research advances in the field of Orthopaedics. In 2016, the 'Arthritis Research UK Primary Care Centre', together with clinical rheumatology partners at the Haywood Hospital, were awarded EULAR Centre of Excellence status.

15. SPCR Ten Year Anniversary: A Decade of Research

The School celebrated ten years of primary care research at the Wellcome Collection on 22 November. Delegates from around the country were welcomed with a programme of presentations and discussions about past, present and future research impact. The showcase highlighted the increased evidence base provided by the School to date as well as research that promises to add a lot more to this in the future. The School's first Director, Professor Martin Roland, gave the keynote address 'How far has primary care research come and how far does it have to go?' in which he laid out key markers, turning points and the potential challenges for the future of primary care research.

In a blog by Editor of the Canadian Medical Association Journal (CMAJ), Domhnall McAuley wrote:

"The 10th anniversary of the SPCR is a time for celebration. It has been a remarkable story, and this milestone should allow the key players an opportunity to stand back and recognise what that have done... As a GP, I recognise how their research has improved clinical practice and contributed greatly to the health of patients. As an academic colleague, I am immensely proud of their achievements. As an editor, it has been an immense privilege for me to have shared part of the journey."

http://cmajblogs.com/a-primary-care-research-success-story/#more-3715 http://bjgplife.com/2016/11/24/happy-birthday-to-the-nspcr/ https://www.spcr.nihr.ac.uk/news/celebrating-ten-years-of-primary-care-research

INDIVIDUAL AWARDS

2017 Officer of the British Empire (OBE)

Professor Debbie Sharp, a member of the School since its inception in 2006, was awarded an OBE for services to primary care in the Queen's Birthday Honours list in 2016. Debbie Sharp was Professor of Primary Health Care in the Centre for Academic Primary Care at the University of Bristol before her retirement

Professor Gene Feder was awarded an OBE in 2017 for services to healthcare and victims of domestic abuse. Gene Feder is professor of Primary Care at the University of Bristol. He has chaired four NICE guidelines and the WHO intimate partner and sexual violence guideline development group.

Fellowship of the Faculty of Public Health

Professor Christian Mallen (Keele) has been awarded Fellowship of the Faculty of Public Health through distinction, in recognition of his clinical and academic contribution to public health. Christian was elected a Fellow of the RCGP in 2014, for his contributions to research into the diagnosis and prognosis of musculoskeletal disorders to improve patient care in a general practice setting.

2016 Yvonne Carter Award

Dr Kamal Mahtani won the RCGP's Yvonne Carter Award for Outstanding New Research. Kamal is NIHR Academic Clinical Lecturer in General Practice (Oxford). He has conducted School funded research on reducing salt intake in heart failure patients, the risks and benefits of anticoagulants with patients with atrial fibrillation and, evidencebased medication use and unplanned hospital admissions. This is the third year in a row that a SPCR member has won the award with previous awards going to **Clare Taylor (2015)**, **Helen Atherton (2014)**, **and Christian Mallen received the award in 2011.**

SPCR academic support for national committees

NIHR Senior Investigators (2015-2017) awarded to:

Alastair Hay (Bristol), Sue Ziebland (Oxford), Chris Salisbury (Bristol), Christian Mallen (Keele) Irwin Nazareth (UCL), Chris Butler (Oxford), Simon Griffin (Cambridge), Nadine Foster (Keele), Matt Hickman (Bristol) and Matt Sutton (Manchester). Richard Hobbs (Oxford) and Martin Roland (Cambridge) Louise Robinson (Newcastle).

Senior roles on NIHR national panels

- Sue Ziebland (Oxford) is NIHR Research for Patient Benefit Programme (RfPB) Director.
- Paul Little (Southampton) is Director of the NIHR Programme Grants for Applied Research (PGfAR)
- Dr Kamal Mahtani (Oxford) has been appointed chair of one of the HTA Programme's five advisory committees. The Primary Care Topic Identification, Development and Evaluation (TIDE) panel, advises on the research agenda for the HTA programme based on the needs of NHS primary care.

Other senior roles

- Richard McManus (Oxford) holds a NIHR Professorship, is Chair of the Blood Pressure Monitoring Working Party of the British Hypertension Society. Richard is also Guardian of the RCGP Cardiovascular Curriculum and provides advice to NICR as a member of the 2011 and 2018 Hypertension Guideline Committees, and the European Societies of Hypertension and Cadiology.
- Chris Salisbury (Bristol) is board member for the NIHR Health Services and Delivery Research
 Programme, chair of the Scientific Foundation Board of the RCGP, chair of the RCGP Research
 Paper of the Year award.
- Louise Robinson (Newcastle) is Regius Professor of Ageing, and holds a NIHR Professorship. She is primary care lead for the NICE dementia health and social care guidelines group and lead advisor for the Prime Minister's National Dementia Challenge, and Fellow of the RCGP.
- Richard Hobbs chairs several HRB funding panels in Ireland

RCGP Research papers of the year

2015: The School funded TASMIN-SR project investigated the effects of self-monitoring in the lowering blood pressure amongst patients with hypertension. The results confirmed that among patients at high risk of cardiovascular disease, self-monitoring with self-titration of antihypertensive medication compared with usual care resulted in lower systolic blood pressure at 12 months.

The research was led by Professor Richard McManus (Oxford) and involved researchers from the Universities of Birmingham, Cambridge, Central Lancashire, Southampton and UCL in the UK, and from the Vancouver Coastal Health Research Institute and the University of British Columbia in Canada. Effect of Self-monitoring and Medication Self-titration on Systolic Blood Pressure in Hypertensive Patients at High Risk of Cardiovascular Disease

2017: Drs Sarah Muller, Sam Hider (pictured right), Toby Helliwell and Prof Christian Mallen (Keele) et al., were winners in the category 'Endocrinology, Gastroenterology, Musculoskeletal & Trauma, and Dermatology' for their paper 'Characterising those with incident polymyalgia rheumatica in primary care: results from the PMR cohort study'. Published in Arthritis Research & Therapy Read the news.

2017: Professors Alastair Hay (Bristol), Paul Little (Southampton) and Chris Butler (Oxford), et al., won the Children, Reproduction, Genetics, Infections category with their paper: 'Improving the Diagnosis and Treatment of Urinary Tract Infection in Young Children in Primary Care: Results from the DUTY Prospective Diagnostic Cohort Study' published in the Annals of family medicine

2017 New website explores women's experiences of Science

Professor Sue Ziebland (Oxford) conceived the project which looks at the key to success for women who work in science. A new website, www.womeninscience.ox.ac.uk, explores the various experiences of successful women scientists at the University of Oxford.

2017 Vice-Chancellor's Impact Awards

Prof Gene Feder and the IRISi team were recognised for their work on improving the primary health care response to domestic violence with a Vice-Chancellor's Award from the University of Bristol. The team were winners in the Policy and Practice category.

2017 Chair of Data Science & Health Services

The Data Science and Health Services Research Chair from the University of Manchester has been awarded to Dr Evan Kontopantelis for his contributions to primary care and health services research.

2017 Paper of distinction

Dr Jenni Burt, from the University of Cambridge, has been awarded one of only two 'papers of distinction' places at the 46th Annual Scientific Meeting of the SAPC.

2016 Distinguished member of the British Society for Rheumatology

Professor Elaine Hay, Keele University, was one of eight distinguished members awarded this year. The award recognises an individual's achievements 'above and beyond' the duties involved in their normal job and is open to current members of the BSR. Acknowledgement is made of academic achievement in the categories of: exemplary service to BSR; service to the community above and beyond the work plan; and, work for the Royal College, the Deanery or for a professional college.

2016 RCGP John Fry Research Award

Dr Matthew Ridd, a practising GP and Consultant Senior Lecturer at the University of Bristol, has won the 2017 John Fry Award. Matthew's research explores continuity of care and person-centred care, with a foundation in dermatological issues in general practice and wider primary care. Dr Ridd has had

School funding to conduct two studies, a systematic review on improving the diagnosis and management of acute infectious rashes in children and a second study on the psychological impact of childhood eczema.

2016 Prize for best educational research

Dr Sophie Park (UCL), was awarded the prize for best educational research presentation 2016 at SAPC in Dublin. Sophie is currently training and capacity development lead on the new Evidence Synthesis Working Group.

2016 NAPCRG Pearls

Professor Alastair Hay (Bristol) was awarded a Pearl for his presentation 'Oral Steroids for Acute Cough (OSAC): A UK Multi-Centre, Placebo Controlled, Randomised Trial'.

2015 John Fry Research Award

Dr Hazel Everitt, (Southampton), was awarded the Royal College of General Practitioner's John Fry Award. Her research in the area of antidepressants has had a significant impact on the prescribing decisions made by GPs of antidepressants. She is currently School funded to conduct a Cochrane review which assesses the available research evidence for the use of antidepressants for insomnia.

Presentations at local and international meetings and conferences

- Professor Tony Avery (Nottingham) gave this year's James MacKenzie lecture at the Royal College
 of General Practitioners Annual General Meeting on November 18 with the title: 'A prescription
 for safe and effective care'.
- During the first World Antibiotic Awareness Week (17 23 November), Professor Michael Moore contributed to a webinar (run by Public Health England) on 'Assessing the need for antibiotics'.

PRACTICE IMPACT

1. GP Tutor's conference

Researchers presented the results of a School funded study at a workshop for GP tutors who teach UCL Medical School undergraduates. The study explored the barriers and facilitators to help-seeking by GPs with mental health problems. The main implications for policy and practice identified included:

- To increase patient awareness of the pressures/constraints facing GPs
- To make it easier to recruit locums at short notice to cover for GPs when unwell
- To reduce GP workload by recruiting more nurse practitioners to manage minor illness and encourage patients to manage self-limiting illnesses where possible
- To engender a culture of effective support for colleagues and impart the importance of being open and honest at practice meetings, and coffee breaks

2. Dementia Research

The research programme in dementia in primary care supported by the School is an exemplar of where early investment has built capacity and led to meaningful impacts. This includes a project hosted by UCL that used routinely collected primary care data to develop a five year risk prediction tool for dementia (Walters et al., 2016). This attracted global media attention from 22 news outlets internationally and made headline news in the UK, and has already been cited 8 times Internationally. The tool is undergoing validation in the UK, Hong Kong and Spain, and has potential to be implemented in practice to increase timely diagnosis of dementia.

3. Cancer Research

In 2007, School funds supported the MoleMate trial, led by Dr Fiona Walter in Cambridge. The trial explored the management of the serious skin cancer melanoma in primary care, showing that a novel diagnostic aid was no more effective in improving the management of suspicious pigmented lesions than the routine application of an existing checklist, as recommended by NICE guidelines. Findings from the MoleMate trial were used to develop Dr Walter's NIHR Clinician Scientist award, funding the MelaTools studies, which investigates ways to help patients and GPs diagnose melanoma earlier. This trial has led to a number of larger, collaborative grant awards to School partner organisations. Overall, these research programmes have raised awareness amongst GPs of cancer diagnostics through publishing and discussion in GP press and high impact journals.

Programme findings were cited as underpinning evidence for guidance from NICE in 2015 in NG12; for example, the cost-effectiveness of the MoleMate system is discussed (page 218). https://www.nice.org.uk/guidance/ng12/evidence/full-guideline-pdf-74333341

4. Service and workforce provision

A team from six School departments developed and evaluated a Patient Safety Toolkit for general practices - now available to all GPs in UK via the RCGP website and accessed over 10,000 times since its launch in 2015.

The School also supported feasibility work in the University of Nottingham, in parallel with implementation of a new tool to improve identification of familial hypercholesterolaemia (FAMCAT) in NHS general practice.

5. Cardiovascular and Metabolic Diseases

- 'Can Machine-Learning Improve Cardiovascular Risk Prediction Using Routine Clinical Data?' (Weng, Reps, Kai, Garibaldi, & Qureshi, 2017) has been engaged with the most online, with an Altmetric score of 558. This article is in the top 5% of all research outputs ever tracked by Altmetric. The information provided by Altmetric provides context in relation to similar publications, publishers and institutions. The news outlets that covered this story included The Guardian and Forbes.
- Research by **Taylor** et al., (2017) conducted at the University of Oxford, has shown survival rates for patients with heart failure have not improved since 1998. This research was reported in 90 local, national and international print and online news outlets between January and September 2017, including The Telegraph (http://www.telegraph.co.uk/news/2017/01/30/no-improvement-heart-failure-death-rates-since-1990s/), The Express (https://www.express.co.uk/life-style/health/760744/heart-failure-cancer-symptoms-disease) the Mail Online (https://www.dailymail.co.uk/news/article-4173884/Heart-attack-sufferers-saved-avoiding-E.html), and Yahoo News (https://in.news.yahoo.com/no-improvement-heart-failure-survival-rates-two-decades-112206059.html).

6. BMA Medical Book Awards

'The Handbook of General Practice 4th Edition', co-authored by **Dr Hazel Everitt** (Southampton), was awarded highly commended in the Primary Health Care section at the BMA book awards in 2015. The BMA book awards programme summary stated: "This is an excellent summary of general practice. It's easy-to-use, fits in a bag, and enables a student, new GP or older GP to find the necessary information to support diagnosis and treatment quite easily." Chantal Simon, Hazel Everitt, Francoise van Dorp and Matt Burkes – Oxford University Press, March 2014 ISBN: 9780199671038

PATIENT AND PUBLIC INVOLVEMENT

Since November 2016, the School has employed a PPI Officer to co-ordinate PPI efforts across the School. Dr Emma Palmer-Cooper has been very active in setting up systems, drawing up a comprehensive PPI strategy, and networking with the NIHR Involve team and researchers and trainees conducting School funded work.

There have been innovative and detailed examples of PPI implemented across the ongoing projects since 2015. These reports demonstrate that PPI is increasingly considered to be essential in research across the spectrum of research design, in line with INVOLVE guidelines. Below are some examples that have included PPI at each feasible stage of their research, and include a level of detail that demonstrate the PPI elements of the research project were valued.

Project 170 Alternative Treatments of Adult Female Urinary Tract Infection: a double blind, placebo controlled, factorial randomised trial of Uva ursi and open pragmatic trial of ibuprofen (Moore, Southampton) The project has a PPI representative on the Trial Management Group (TMG) who reviews all our study documentation that is to be used by or given to patients to ensure that the documents are clearly written and easy to understand and answer any questions that patients may have about the trial. The PPI representative attends all TMG meetings and is fully engaged with the trial management. The PPI representative was consulted on the strategies that have recently been introduced to improve the return rate of fully completed participant diaries. The PPI representative will be involved in interpretation and dissemination of the results. In addition, a sample of patients have participated in a qualitative interview to find out about their views on antibiotics and alternative treatments for UTIs.

Project 247 Assessing the potential of a data sharing and communication facility within a cessation smartphone app (Q Sense) for patients and NHS smoking cessation advisors (Naughton, Cambridge) Four PPI representatives provided input in the early stages of the study development. One PPI representative who provided ongoing input into the project attended an end of study meeting with co-applicants. As part of this meeting they provided feedback on the findings, dissemination plans and future directions for the project. This meeting provided very useful feedback, particularly regarding optimisation of the app and the role of new location sensing technologies. Two previous participants of a related Q Sense-orientated study provided PPI input largely at the beginning of the project but were not involved in the later stages of the project. However, we intend to draw on their experience to support dissemination of the findings to key groups and stakeholders.

Project 253 Comparative Effectiveness of Treatment Options for Subacromial Shoulder Conditions: A Network Meta-Analysis (van der Windt and Opeyemi, Keele) A meeting with a Research User Group (RUG) was held on 5th July 2016 to discuss the review question and approach with patients who have experience of living with shoulder pain. RUG members were invited to share their experiences of currently available treatments for subacromial shoulder conditions, and give their individual opinion regarding the effectiveness of treatments for subacromial shoulder pain by ranking the likelihood of benefit from each treatment included in the systematic review (1-5 scale). The combined scores resulted in an experienced-based ranking of comparative effectiveness of treatments. Once the network meta-analysis has been completed, which will produce a hierarchy of treatment effectiveness based on available evidence, this will be compared and discussed with the RUG. Discussions with the RUG group has also guided planned sub-group analyses for the meta-analysis, based on pain severity, duration, and age. The results of the final, updated network meta-analysis will be shared with our RUG in spring 2017 to discuss implications for future research and practice, and optimal ways of disseminating findings to the wider public.

Project 254 Children and adolescents with musculoskeletal pain in primary care: CAM-Pain feasibility study (Dunn, Keele). The CAM-Pain study protocol and processes have had extensive patient and parent input from the National Institute for Health Research (NIHR) Rheumatology Clinical

Studies Group (CSG) whose role is to assist researchers with refining the research question, assess feasibility, facilitate patient and parent input, comment on recruitment, and comment on study design. In light of feedback for example, inclusion / exclusion criteria and terminology were refined. The study was also reviewed by the GenerationR Young Person's Advisory Group (YPAG) in Liverpool, (a group of child / adolescent users) specifically for review and feedback on study processes and materials including the participant information booklet and questions that we plan to use. The feedback we received from the YPAG resulted in a number of changes e.g. revision of the wording to make it more child friendly and age specific participant information booklets were developed. These processes therefore ensure that the study procedures and materials are appropriate and acceptable for use by the target population of children and adolescents. We will continue to obtain the advice and guidance from patients and families throughout the project development, management, and dissemination.

PRIMER's patient hack day 2015

PRIMER is a group of patients, carers, and members of the public. It was set up in 2008, funded by the School, to help to make sure that patients and the public can shape primary care research. After the successful launch of the Patient Hack Day in April 2014, PRIMER invited PPI partners, members of the public, researchers and charities to work together on research ideas, for another day of engagement and interaction. During the second Patient Hack Day on 30 September, participants heard from patients, carers, service users or members of the public who 'pitched' their ideas for research.

COLLABORATION AND LEVERAGING OF RESEARCH FUNDING

1. Cross NIHR Schools Collaboration

The SPCR, through the Director and Senior Manager, initiated a series of teleconferences with members in the Schools for Social Care and Public Health Research (SSCR & SPHR) to consider ways of collaborating on research. An initial meeting of senior academics from the three Schools met in London in December 2016 which resulted in sufficient interest to continue to explore options. A follow up meeting occurred on 15 December 2017. The meeting considered the inevitable synergies between the three NIHR Schools and the benefits of working together on studies that cover the broader healthcare landscape. Themes discussed were: **Multiple needs; community and individual capability; diversity, equity, access and wellbeing**. Members spoke about the potential of the collaboration to consolidate evidence and implications across a number of platforms - to inform policy and implementation in GP practices, care homes and care in homes, for example. We expect further progress on this initiative in 2018 but are aware of the separate renewal dates for the Schools which tends to make operationalising collaborations more complex.

2. Working groups

Working groups have been established to facilitate continued and new collaborations across the School. Financial assistance is provided to allow colleagues to meet and write proposals.

- Ageing and the health and care of older people
- Brief behavioural and psychological interventions
- Conversation analysis
- Digital health
- Involving patients and families in improving the quality & safety of healthcare
- Mental health
- Mindfulness
- Palliative and end of life care
- Patient and public involvement
- Increasing the evidence base for general practice based pharmacists

Details of each of the working groups is found online: https://www.spcr.nihr.ac.uk/themes-SPCR

3. £2 million NIHR award to focus on dementia care and prevention on a global scale

Professor Louise Robinson has been awarded NIHR Global Health Group funding, to the tune of £1,928.469, to create a Global Health Research Group on Dementia Prevention and Enhanced Care (DePEC). The proposal was informed by data collected as part of SPCR grant which investigated how GP management of depression has changed since 2006, exploring the effects of the economic recession, NICE guidelines, and the Quality and Outcomes Framework (QOF).

4. Evidence Synthesis working group

The <u>Evidence Synthesis Working group (ESWG)</u> is a collaboration of all nine primary care member departments of the School of Primary Care Research. Primary care is increasingly under considerable pressure to meet the demands of an ageing population and to transform care with more done in the community, against a backdrop of ensuring new technologies are used whilst maintaining budgets. To address these issues we have formed a cross-school collaboration to deliver a significant number of high impact systematic reviews to underpin effective care in important priority areas for the NHS.

5. <u>Evidence to Practice – Addressing the second translational gap for complex interventions in primary care</u>

Researchers across four School departments were involved in a project to explore the causes of the evidence to practice gap (2nd translational gap) for complex interventions in primary care and what strategies are effective for closing the gap. The team, led by Professor Elizabeth Murray (UCL) and Professor Bie Nio Ong (Keele), were invited to present their findings to the NIHR Evaluations Trials and Studies (NETSCC).

6. SPCR study leads to £2.4 million NIHR Programme Grant

The University of Southampton's Professor Tony Kendrick and his research team were awarded a NIHR Programme Grant for Applied Research for their application: REviewing long-term anti-Depressant Use by Careful monitoring of Everyday practice (REDUCE). The proposal was informed by data collected as part of SPCR grant which investigated how GP management of depression has changed since 2006, exploring the effects of the economic recession, NICE guidelines, and the Quality and Outcomes Framework (QOF)

CHALLENGES AND FUTURE DIRECTION

We are currently finalising contracts for successful funding round 15 bid, and 16 funding round applications have each been subject to internal and external review, and awaiting ratification. These awards will be complete before the end of the current contract.

The School will continue to develop networks and collaboration by growing the working groups initiated at the beginning of the current contract, as well as working more closely with the Schools for Public Health and Social Care.

Evidence Synthesis Working Group will start to bring in a number of results and publications before the end of the current contract. A team of doctors, researchers, librarians, statisticians, patients and members of the public will collectively work together to deliver the primary goals of the ESWG. Website: https://www.spcr.nihr.ac.uk/projects/evidence-synthesis

SPCR CAPACITY AND DEVLOPMENT REPORT

BACKGROUND

The NIHR School for Primary Care Research provides a setting where trainees can benefit from the leadership of researchers at the top of their field and where supplementary training, networking, mentoring and guidance is part of the added value that the School environment brings. The School aims to build research capacity in primary care by providing a range of multidisciplinary training and development opportunities. Its goal is to nurture future research leaders from a range of professional groups who can contribute to primary care research. The School currently offers funding opportunities for clinical and non-clinical awards in ST3 Academic Clinical Fellowships, GP Career Progression Fellowships, PhD Studentships, and post-doctoral Launching Fellowships. In addition to the unique training opportunities offered by the NIHR SPCR, trainees are also able to access the range of opportunities provided by the NIHR and other academic institutions such as the Oxford Academic Leadership Programme held in Oxford, and the Transdisciplinary Understanding and Training on Research in Primary Health Care (TUTOR-PHC) programme, held in Canada. Another key network outside of the NIHR is the Society for Academic Primary Care (SAPC). The School has developed a mentoring scheme with SAPC for non-clinical trainees and all trainees are strongly encouraged to present at the SAPC regional and national meetings.

By funding a range of training and development awards, the School aspires to provide complementary rather than duplicate training pathways to the ones provided by the NIHR Trainees Coordinating Centre (TCC) and other funding agencies such as the MRC and Wellcome trust. The aim is to ensure that a range of training opportunities are available to maximise primary care research capacity. Awards are distributed between member departments in two ways: a pro rata allocation and in open competition. The pro rata allocation of PhD studentships and ST3 entry General Practice vocational trainees, allows capacity building in core developmental areas, whereas the open competition allows departments to attract and develop high calibre trainees from a range of methodological backgrounds.

A new innovation for the School has been working with a range of national funding bodies to lever additional resource for capacity building. We have worked alongside the Wellcome Trust to develop the Wellcome Trust Doctoral Training Programme for General Practice. This initiative for clinical doctorates started with the first four students in October 2017.

The School holds an annual training event where trainees are exposed to the different areas of involvement across the healthcare sector as well as differing areas of research, research methods and expertise from senior researchers. Trainees are also strongly encouraged to attend and present at the NIHR Training Meeting in Leeds every year. Here trainees are exposed to the wider NIHR and the research taking place across the broader health care landscape. As part of the pro rata allocation, School members receive funds for seed corn and bridging awards. Approval is sought from the School Training Lead before the awards are made and a sound training and development plan for the person involved has to be presented.

BUILDING RESEARCH CAPACITY AND DEVELOPMENT HIGHLIGHTS

2017 George Lewith Prize

The NIHR School for Primary Care Research has established a new undergraduate medical student prize in memory of Professor George Lewith. The award is open to medical undergraduates at any UK medical school. The recipient of the award will receive a certificate and funded attendance and accommodation at the Society of Academic Primary Care Annual Scientific Meeting from 11 - 12 July in London. More: https://www.spcr.nihr.ac.uk/trainees/GL

2017 Innovative student run training days

DPhil student Charlotte Albury and former trainee Ben Fletcher conceived of the idea of giving students the opportunity to organise their own training and to access specific skills training from experts within the SPCR. They hoped these workshops would enhance their skills in organising events and to provide trainees with the opportunity to meet others interested in similar research topics and to present their work.

- 1. **Charlotte Albury (from Oxford)** organised the first one in Cambridge on Randomised Controlled Trials in Primary Care. 21 February 2017. Bethany Bareham, from Newcastle University, attended the day and said "The day gave an in-depth overview of RCTs from experts working on different aspects... It was great to hear how qualitative research can be of value to many aspects of the RCTs, and all of the work that goes on in the background more generally when conducting them. Read about the series: https://www.spcr.nihr.ac.uk/news/skills-training-for-phd-students
- 2. **Beth Bareham (from Newcastle)** Read about it online: https://www.spcr.nihr.ac.uk/blog/PPI-blog
- 3. **Sarah Stevens (from Oxford)** held the third training day at University of Oxford on CPRD. 12 December 2017.

INDIVIDUAL AWARDS

- 2017. Dr Nathan Davies, SPCR Fellow at University College London, wins the Royal College of General Practitioner's Yvonne Carter Award. 'Meet Nathan Davies', interview by RCGP.
- 2017. Dr Amy O'Donnell, SPCR Fellow at Newcastle University, was awarded a 2-year Visiting Fellowship in Implementation Science at the Linkoping University in Sweden. This exciting award will build directly on the work Amy has done during her SPCR fellowship. Amy will on a study to evaluate the implementation of preventative alcohol interventions in health care via a series of population surveys in England, Sweden and the Netherlands. The English arm of the study is being conducted in collaboration with University College London's Alcohol Toolkit Survey.
- 2017. RCGP Fellowship was awarded to Dr Toby Helliwell from Keele University. Toby was the recipient of a two year SPCR GP Career Progression Award from 2013 to 2015. The RCGP Fellowship was given in recognition of his significant contribution to general practice. Toby is currently NIHR Academic Clinical Lecturer in General Practice at the Research Institute for Primary Care and Health Sciences (iPCHS) at Keele University. "I would like to thank the SPCR for awarding me the GP progression funding. This was critical for me to undertake further research investigating polymyalgia rheumatica and giant cell arteritis in primary care which allowed me to complete my PhD which has subsequently opened so many opportunities to develop my career in academic general practice."
- 2017. SPCR doctoral fellow at Newcastle University Bethany Bareham was awarded the
 research prize for her presentation 'A systematic review and qualitative synthesis of health and
 social care workers' views and experiences regarding older adults' drinking' she attributes this,
 in part, to the presentation skills training she received at the NIHR trainee meeting in November.
- 2017. Sophie Orton, PhD student at the University of Nottingham, won best poster prize at SAPC Trent, hosted by the University of Lincoln, on 21 March.
- 2017. Grace Turner's abstract submitted to the North American Primary Care Research Group (NAPCRG) Annual Conference in Cancun, Mexico, was voted as one of the 18 highest rated submissions from over 350. After submitting an extended abstract, voted in the top 5 out of the 18 highest rated submissions, it was also accepted as a distinguished paper presentation. Title of paper: 'Missed opportunities for prevention of stroke and transient ischaemic attack (TIA) in primary care.' The International Society for Quality of Life Research (ISOQOL) Annual Conference is taking place in Vancouver where Grace will give an oral presentation 'Not so transient: fatigue, psychological and cognitive impairment following transient ischaemic attack (TIA).'

Grace was also awarded Pearls for two presentations 'Not as Transient as the Name Suggests: Fatigue, Psychological and Cognitive Impairment Following Transient Ischemic Attack (TIA)' **and** 'Missed Opportunities for Prevention of Stroke and Transient Ischaemic Attack (TIA) in Primary Care'.

- 2017. Dr Abi Methley received the 2016 Emerald and EFMD Outstanding Doctoral Research
 Award for her School funded research "Health care services for multiple sclerosis: The
 experiences of people with multiple sclerosis and health care professionals."
- 2016. Dr Shoba Poduval won Best Poster Prize at the NIHR TCC's 'Research leaders of the future' annual training meeting.
- 2016. Ben Fletcher, SPCR trainee at the University of Oxford, was presented with a Nautilus Award by Green Templeton College on 25 June. The award recognises his outstanding contributions to college and university life, in particular his publication record, conference presentations, and competitive selection for the TUTOR-PHC (Transdisciplinary Understandings and Training on Research Primary Health Care) programme.
- 2016. Yumna Masood has been selected as the Faculty of Medicine's 2016 President's Doctoral Scholar at the University of Manchester.
- 2016. DPhil student at the University of Oxford, Charlotte Albury, received a competitive ESRC bursary to attend an advanced training workshop in applied Conversation Analysis at Loughborough University from 2-3 February 2017.
- 2016. Dr Abi Methley, Trainee Clinical Psychologist at the University of Manchester, received the Emerald and EFMD Outstanding Doctoral Research Award for her School funded research "Health care services for multiple sclerosis: The experiences of people with multiple sclerosis and health care professionals."
- 2015 Grace Moran won the Distinguished Paper Award for Missed Opportunities for Prevention of Stroke and Transient Ischaemic Attack (TIA) in Primary Care. Grace Moran; Melanie Calvert; Max Feltham; Tom Marshall; Ronan Ryan. Her presentation is mentioned in a CMAJ blog Highlights of NAPCRG 2015 by Domhnall MacAuley.
- 2015. Dr Alison Gregory, SPCR research fellow at the University of Bristol, is joint recipient of the Corinna Seith Award, presented to her by the organisation: Woman Against Violence Europe (WAVE). She also received the Elizabeth Blackwell Fellowship in 2016.
- 2015. Following seedcorn funding from the School in 2015, Dr Luke Munford has successfully won a post-doctoral award from the MRC to research health and well-being in later life through measurement, predictions, and interventions.

BUILDING RESEARCH CAPACITY DEVELOPMENT IMPACT

- Nathan Davies, was invited to spend a month in Australia, to present his work on dementia and end-of-life care. Nathan was introduced to several palliative care and dementia care researchers by Prof Wendy Moyle, from Griffith University in Sydney. Nathan also spoke about his current research on developing new ways to support the carers of dementia sufferers. Nathan discussed how practitioners can best support family carers in relation to his School funded project that explores the support needs of family carers. This project will also develop a prototype website to support them towards the end of life of the person with dementia.
- NIHR review Roads to recovery: Organisation and Quality of Stroke Services
 - Ongoing impairments following transient ischaemic attack: retrospective cohort study by Grace Turner (PhD at Birmingham) was referred to in the review, based on her PhD research. This study used the Health Improvement Network database, which covers approximately 6% of the UK population to examine life after a transient ischaemic attack.

- Identifying the long-term needs of stroke survivors using the International Classification of Functioning, Disability and Health by Kethakie Sumathipala (SPCR PhD at UCL). This study explored the long-term impact of stroke through a series of interviews with 35 stroke survivors between 1 and 11 years after stroke.
- Artificial intelligence can accurately predict future heart disease and strokes. Dr Stephen Weng's SPCR fellowship research received considerable media attention.
 The research found computers that can teach themselves from routine clinical data are potentially better at predicting cardiovascular risk than current standard medical risk models. PUBLICATION: Can machine-learning improve cardiovascular risk prediction using routine clinical data? Press release https://www.spcr.nihr.ac.uk/news/artificial-intelligence-can-accurately-predict-future-heart-disease-and-strokes Publication altmetric score: 564
- New research published by PhD student Kieran Ayling has found evidence that being in a positive mood on the day of your flu jab can increase its protective effect. Flu vaccination is estimated to only be effective in 17-53% of older adults compared to 70-90% of younger people. With the onset of winter and so-called 'flu season', the research is likely to be of interest to everyone having their autumn flu jab. This new Nottingham-based study is the first to examine several psychological and behavioural factors that have been shown to affect how well vaccinations work. The researchers set out to understand which factor, or combination of factors has the greatest impact on the ability of vaccinations to protect against disease. Publication: Positive mood on the day of influenza vaccination predicts vaccine effectiveness: A prospective observational cohort study. Kieran Ayling, Lucy Fairclough, Paddy Tighe, Ian Todd, Vanessa Halliday, Jon Garibaldi, Simon Royal, Alj ali Hamed, Heather Buchanan, Kavita Vedhara. Publication altmetric score: 482

http://www.mailonsunday.co.uk/health/article-5226925/Which-pictures-trigger-migraine.html
http://www.dailymail.co.uk/health/article-5226925/Which-pictures-trigger-migraine.html
http://www.thisismoney.co.uk/health/article-5226925/Which-pictures-trigger-migraine.html
http://www.briefreport.co.uk/news/flu-jab-2017-the-trick-to-making-your-vaccine-more-effective-5371909.htm
http://www.nla-eclipsweb.com/service/redirector/article/39839053.html

PATIENT AND PUBLIC INVOLVEMENT AND ENGAGEMENT

Media

- 2015. International Clinical Trials Day marks the anniversary of the start of James Lind's famous trial into the causes of scurvy in 1747. The NIHR marked the day with an 'OK to ask' campaign, calling on patients and carers to ask their doctor about NHS research they can take part in. We spoke to SPCR trainee Claire Planner (Research Associate) and Ailsa Donnelly (Patient and Public Involvement Partner) from the University of Manchester about their new programme of work- PACT which explores the concept of the 'patient-centred trial'. View the interview online.
- Domestic Violence in Primary Care, Dr Alison Gregory, University of Bristol. Alison conducted research as part of a School doctoral fellowship and a Primary Care Scientist Launching Fellowship, exploring the impact domestic violence and abuse has on the informal supporters of survivors. Bristol City Council, in collaboration with Avon & Somerset's Primary Care Commission, launched a public campaign targeting informal supporters of domestic violence and abuse survivors during 2015. This consisted of billboard posters, radio adverts, website and guides and Dr Gregory was commissioned to produce the guide for informal supporters based on this

research. The Guides were distributed across a range of community venues in Bristol (http://www.bava.org.uk/wp-content/uploads/DVA-Friends-and-Family-Booklet.pdf), and used in Avon & Somerset Constabulary, North Somerset Council, and Leicester City Council regional campaigns (http://www.thisisnotanexcuse.org/wp-content/uploads/2015/09/Domestic-Abuse-Friends-and-Family-Help-Guide-1.pdf) (http://www.nava.org.uk/wp-content/uploads/2016/11/UAVA-friends-family-booklet.pdf). (<a href="http://www.n-somerset.gov.uk/wp-content/uploads/2017/11/domestic-abuse-friend-and-family-help-guide.pdf), and made available on the internal websites for Avon & Wiltshire Mental Health Partnership (AWP) and North Somerset Community Partnerships. Since the release they have been inundated with requests for hard copies for health and community venues across the region.

- Dr Gregory wrote an article for the leading national charity for domestic violence and abuse, Women's Aid, about her research for SAFE (a quarterly magazine for practitioners featuring practical domestic violence initiatives, strategies and policy developments). This exposure is likely to increase interest in the guide, for use in other geographical areas.
 A booklet aimed at helping friends and family members to support victims of domestic abuse was written by Alison and distributed across Bristol. The booklet *It might be nothing but it could mean everything* is informed by Alison's PhD research ('On the outside looking in: the shared burden of domestic violence') in which Alison looked at how domestic violence and abuse affects the friends and family members of the person in the abusive relationship. Read the University of Bristol's press release and news on the Centre for Academic Primary Care website.
- The NIHR's <u>Join dementia research</u> spoke to SPCR funded fellow Dr Nathan Davies at the UCL's Primary Care and Population Health Department to find out more about the CADRE study and how it aims to support the carers of people with dementia. Read more: http://news.joindementiaresearch.nihr.ac.uk/?s=Nathan+Davies
- Blog by Nathan Davies: <u>Dementia the leading cause of death in England and Wales?</u> What is really going on?
- Blog by Sarah Knowles on her work on a Knowledge Mobilisation Fellowship: How can patients be involved in the implementation and improvement of research?
- Blog by Lesley Wye on her experience of being a NIHR Knowledge Mobilisation Fellow:
 Confessions of a NIHR Knowledge Mobilisation Research Fellow

COLLABORATION

Wellcome Trust PhD Programme

This five year programme will support the development of a strong cohort of clinical academics, by providing high quality training in applied research units, and supporting capacity development in a critically important but still underresourced field. The Wellcome Trust PhD Programme unites four primary care departments, bringing together expertise in a wide range of methodologies and covering important clinical areas. The four host departments - Keele, Cambridge, Oxford and Southampton are members of the NIHR School for Primary Care Research and have a strong track record in collaborative research and developing clinical academic careers. Consideration is currently being given to how other members of the School will be included in the future. Find out more about the programme on https://www.keele.ac.uk/wellcometrust/

2017: Bethany Bareham travelled to London to join the launch event for the 'Calling Time' report at the House of Lords. "The Drink Wise Age Well group (DWAW) who commissioned the

report, are a strategic partnership of six organisations with expertise in alcohol service delivery, ageing, policy analysis and research. Their message was simple and powerful - we need to address ageism and age discrimination in alcohol policy, practice and research. https://www.spcr.nihr.ac.uk/blog/house-of-lords

Charlotte Albury is a contributing author on the Public Health England's step-by-step guide to conversations about weight management with children and families for health and care professionals. Charlotte contributed to inform Public Health England's 'Let's talk about weight' guide (https://www.gov.uk/government/publications/adult-weight-management-a-guide-to-brief-interventions). Her PhD study used conversational analysis to understand how to address and explore weight management for families.

CHALLENGES AND FUTURE DIRECTION

At this point in the contract our challenge is to maintain momentum and critical mass at a time when future recruitment to new fellowship posts is limited. Whist we will continue to support and promote training opportunities, we are keen to avoid having prolonged gaps in recruitment which can be detrimental to capacity building and promoting a strong cohort of trainees. We will be actively working with NIHR to identify future capacity opportunities, including those highlighted in the NIHR Strategic Review of Training. We continually work with School member departments and external partners to horizon scan the current state of academic primary care, allowing us to proactively plan for the future capacity needs of the discipline. We will continue doing this to produce a coherent and future proof plan for renewal.