### National Institute for Health Research

### School for Primary Care Research

Increasing the evidence base for primary care practice

July 2018





Anticoagulants are used to treat blood clots and prevent stroke or venous thombosis.

Traditionally-used warfarin can cause serious bleeds. Regular blood tests are needed to maintain a safe dosage.

Newer direct oral anticoagulants (DOACs) do not require regular blood tests.

The effectiveness and safety of DOACs have been studied primarily in patients with atrial fibrillation, leaving a gap in information for anti-coagulant users without atrial fibrillation. SAFETY OF ANTICOAGULANTS

This study tested the safety of newer DOACs Rivaroxaban, Dabigatran and Apixaban compared with warfarin.



Overall, Apixaban was found to be the safest anticoagulant, with reduced risks of major bleeds, intracranial and gastro-intestinal bleeding.

### **FINDINGS** (compared with Warfarin)

#### Patients with atrial fibrillation:

#### Apixaban

Major bleed: **34**% decreased risk Intracranial bleeds: **60**% decreased risk Mortality: **27**% increased risk for low doses.

Dabigatran Intracranial bleed: 55% decreased risk

**Rivaroxaban** Mortality **19%** increased risk.

#### Patients without atrial fibrillation:

#### Apixaban

Major bleed: **40**% decreased risk. Gastro-intestinal bleeds: **45**% decreased risk. Mortality: **34**% increased risk for low doses.

#### Rivaroxaban

Intracranial bleed: **46**% decreased risk . Mortality: **51**% increased risk.

### The risks and benefits of modern anticoagulant drugs

The School for Primary Care Research has funded a study using anonymised patient data to look at the risks and benefits of modern anticoagulant drugs (Apixaban, Rivaroxaban and Dabigatran). Professor Julia Hippisley-Cox, and researchers at the Universities of Nottingham and Southampton, used patient data from the records of 1500 GP practices using EMIS Web and QResearch database. The study compared the health outcomes of patients treated with three commonly-prescribed direct oral anticoagulants (DOACs) with those treated with Warfarin. Published in the BMJ, the study gives the most comprehensive overall picture of the real-world use of anticoagulants in patients with a range of conditions, not just atrial fibrillation. Researchers analysed data from the primary care records of almost 200,000 people, comparing two large groups over a five-year period. One group had abnormal heart rhythm, the other a range of other conditions treated with anticoagulants.

Read more: https://www.spcr.nihr.ac.uk/news/ the-risks-and-benefits-of-modern-anticoagulant-drugs

## Congratulations

#### Promotions at University College London

Greta Rait	Professor of Primary Care and Health Services Research
Kate Walters	Professor of Primary Care and Epidemiology
Jonathan Rosenthal	Professor of Primary Care Education

#### **University of Oxford**

**University of Bristol** 

James Sheppard Awarded 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>Read more.</u>

John MacleodReceived £1.5 million as part of a large grant from the Medical Research Council (MRC) to<br/>develop a platform for conducting research into early years influences on mental health. Read<br/>more: <a href="http://www.bristol.ac.uk/primaryhealthcare/news/2018/mrc-mental-health-data-pathfinder-grant-award.html">http://www.bristol.ac.uk/primaryhealthcare/news/2018/mrc-mental-health-data-pathfinder-grant-award.html</a>Gene FederAwarded £1.7 million by the NIHR's Global Health Group for research into health systems<br/>responses to violence against women in Palestine, Brazil, Nepal and Sri Lanka. Read more:<br/>http://www.bristol.ac.uk/primaryhealthcare/news/2018/award-to-tackle-domestic-violence-in-low-and-middle-income-countries.html

**Emma Le Roux** Appointed Clinical Champion for Dermatology for the Royal College of General Practitioners (RCGP). Read more: <u>http://www.bristol.ac.uk/primaryhealthcare/news/2018/rcgp-clin</u> ical-champion-for-dermatology.html

### What questions do you want answered by advanced heart failure research?

The SPCR funds a group of patients, carers, care professionals and researchers who want to find out what research is needed to help people with heart failure living in the community. They are keen to hear from all people who live and work with advanced heart failure.

Read more and complete the survey:\_ https://oxford.onlinesurveys.ac.uk/ ahf\_psp



### Organisation and delivery of primary care working group

The School has a new working group, organised by the University of Oxford's Geoffrey Wong and UCL's Sophie Park.

The working group hopes to :

1) bring together SPCR members interested in researching the organisation and delivery of primary care

2) Involve patients and the public as partners to help us to focus, develop and deliver our research and shape its potential impact

3) Build stronger partnerships with stakeholders such as the NHS, the Royal College of General Practitioners and NHS Clinical Commissioning Groups to ensure our

work remains relevant and informs practice

4) Prioritise and develop research for future funding applications, both within the NIHR SPCR and other funding streams.

Find out more from the website: https://www.spcr. nihr.ac.uk/themes-SPCR



# Ambulance staff describe hospital as only feasible place of care for dying patients

Ambulance staff are responding to the needs of dying patients by taking them to hospital because of a lack of alternative community-based forms of care and limited access to patient information, according to a paper: <u>Ambulance staff and end-of-life hospital admissions: A qualitative interview study</u> published in Palliative Medicine. The study was carried out by researchers at the Cambridge Palliative and End of Life Care Group.

SPCR trainee Dr Sarah Hoare led the research which was funded by the NIHR CLAHRC Cambridge and Peterborough and CLAHRC East of England. She carried out an in-depth look at the decision-making of a small number of ambulance staff. The study brings to life the dilemmas that ambulance staff face and shows how they made sense of the situations they encountered. Six ambulance staff were interviewed together with other healthcare staff about their involvement in hospital admissions of patients close to the end of life. Read more: <a href="http://www.phpc.cam.ac.uk/pcu/ambulance-staff-describe-hospital-as-only-feasible-place-of-care-for-dying-patients/">http://www.phpc.cam.ac.uk/pcu/ambulance-staff-describe-hospital-as-only-feasible-place-of-care-for-dying-patients/</a>

# Gosport may have a negative impact on end-of-life care in general practice

SPCR GP Career Progression Fellow Lucy Pocock and researchers from the Centre for Academic Primary Care at the University of Bristol have highlighted the potentially negative impact the deaths at Gosport War Memorial Hospital may have on end-of-life care delivered at home.

In an Editorial published in the British Journal of General Practice today, they call for better training for GPs and community nurses to address any anxieties they may have about prescribing and administering opioids for pain relief to terminally ill patients. Read more: <u>http://www.bristol.ac.uk/primaryhealthcare/news/2018/</u> <u>potential-impact-of-gosport-on-general-practice.html</u>





# The cardiovascular challenge for primary care in diabetes

The School's Director Richard Hobbs stresses the importance of CVRM in primary care and how to manage this risk beyond glucose control in this ten minute presenation for the European Primary Care Cardiovascular Society. Link: <u>https://ipccs.org/2018/07/10/the-cardiovascular-challenge-for-primary-care-in-diabetes/</u>



"In patients with chronic diseases, medications can help to manage symptoms and prevent flare-ups that would otherwise require urgent health care."

### New study identifies medications that can reduce pressures on emergency care services

A new study <u>published in BMC Medicine</u> highlights the best medications for preventing hospital admissions.

Lead author Nik Bobrovitz says this work, funded by the NIHR School for Primary Care Research, is a key step towards reducing emergency care pressures.

> "We need to reduce demand on emergency services, which are currently stretched to their limit. Past initiatives have failed. We decided to examine the issue from a unique and simple perspective."

Bobrovitz and a team of 14 other researchers at the University of Oxford Centre for Evidence-Based Medicine

reviewed data from nearly 2000 drug trials and 1 million patients. They identified eleven commonly used medications that significantly reduce emergency admission rates in patients with major chronic diseases, such as heart failure, asthma, and chronic obstructive pulmonary disease.

"In patients with chronic diseases, medications can help to manage symptoms and prevent flare-ups that would otherwise require urgent health care. These medications we highlighted are highly effective at helping people better deal with their disease and stay out of the hospital."

The UK-based researchers suggest their study has implications for health systems all over the world.

<u>Read more: https://www.spcr.nihr.ac.uk/news/</u> <u>new-study-identifies-medications-that-can-reduce-</u> <u>pressures-on-emergency-care-services</u>

#### **BLOG:**

Which medications prevent emergency hospital admissions? Nik Bobrovitz

https://www.spcr.nihr.ac.uk/news/blog/ which-medications-prevent-emergency-hospital-admissions



Helping parents of children with respiratory tract infections decide when to consult primary care Primary care is under extreme pressure and struggling to cope with demand for care. Children with Respiratory Tract Infections (RTI) are the most common reason for parents contacting primary care internationally. Parents and patients are offered little, if any, advice on if, when or how to use primary care services. Methods to improve the appropriateness of seeking help could assist primary care to deliver an improved service to the patients in most need. There is considerable parental uncertainty regarding if and when to consult a general practice healthcare professional when children fall ill with RTIs and RTI consultation rates vary widely between GP practices. Safer, cost-effective and more practical interventions are needed urgently to help parents make better use of scarce resources. This requires clear, relevant and unambiguous advice. Valid and reliable criteria are needed to support parents when they are deciding whether (and when) to consult when their child has a (suspected) RTI.

Funded by the NIHR School for Primary Care Research, researchers from the NIHR Greater Manchester PSTRC (Stephen Campbell, Rebecca Morris) and the Universities of Bristol (Alastair Hay) and Oxford (Gail Hayward) will see if professional consensus can be reached on the signs and symptoms that should be used by parents /guardians when deciding if and when to consult, both during the day and out of hours. It will use the RAND/UCLA Appropriateness Method to develop symptom scenarios and appropriateness criteria. Read more: <u>https://gmpstrc.wordpress.com/2018/06/19/</u> helping-parents-of-children-with-respiratory-tract-infections-decidewhen-to-consult-primary-care/

## **GP Online celebrate the 70th birthday of the NHS**

The GP Online published 'A GP's account of the start of the NHS' on 16 June 2018.

Dr John Fry, one of the founding members of the RCGP, published a report for the Nuffield Trust in 1988, in which he describes what it was like to be a GP as the NHS was founded.

There were no celebrations, no bands or public processions, and a few preliminary special pronouncements on 5 July 1948. It was a fine summer's day and I had been in my practice single handed for exactly one year.

In preparation, for weeks before the appointed day the public had been asked to 'register' with a general practitioner of their choice. This was done by completing small brown EC1 cards (EC denoting Executive Council then, which for the next three years was the local administrative body for general practice). The permitted maximum number of patients for a principal in general practice was 4,500. Within a few weeks I had over 3,000 registered NHS patients.

#### HOW DID GENERAL PRACTICE CHANGE?

What were the changes and differences in my practice after 5 July 1948? I worked from the same premises as before with the same arrangements for consultations and home visits for the same patients and with the same part-time staff, my wife.

Nevertheless, there were great differences. No longer did my patients have to pay or feel inhibited from seeking any help because of cost, nor did I have to worry how much to charge and whether I would be paid. No longer did my wife and I have to spend midnight hours sending out monthly accounts, of which 1 in 5 were never paid.

No longer did I have to dispense medicines or worry whether the patient could afford the more expensive ones, I merely wrote a 'free' NHS prescription for what I thought was appropriate. No longer was there any distinction between 'private patients' and the less privileged 'panel patients', for all NHS patients carried the same annual capitation fee.

I was an independent contractor in the NHS free to work and practise as I thought appropriate, within the terms of my contract, and I received a regular quarterly cheque from the Executive Council.

Having bought my practice in 1947 with a large overdraft I was pleased to be compensated by the NHS for my loss of the right to sell it. I was able to continue to work as a hospital clinical assistant, but was now paid for the sessions. In my Beckenham practice there was no immediate change in the nature or volume of work. However, nationally, the first effect of the NHS was of mass euphoria, the second was of massive demands of hitherto unmet social and medical needs. There was a rush for 'free' spectacles, dentures and hearing aids and the work of hospitals and general practitioners increased.

As Richard Titmuss put it well: 'the NHS inherited the debts of a decade of sacrifice and neglect, financial poverty and disorganisation. Simultaneously it had to meet, with access to medical care no longer dependent on the means of the patient, an immense pent-up demand for treatment'.1

Amazingly the new NHS coped with these demands reasonably well because of the tolerance and goodwill of public and profession alike.

Yet it soon became clear that a huge medical industry and been taken over as a going concern but with no administrative and organisational arrangements to promote effectiveness, efficiency and economy.

In general practice there was a lack of local leadership and unity. There were no new ideas on methods and services. In particular there were no arrangements to promote good liaison and collaboration between general practice, hospitals and local authority services.

There were few attempts to collect facts and data on which future planning could be based and no immediate resources or funds to encourage experiments.

As a result, it was not long before the early heady days of the summer of 1949 changed into a cooler atmosphere. The 1950s became a period of criticism and counter attack on many aspects of general practice.

This extract is taken from the Nuffield Trust report General Practice and Primary Health Care 1940s-1980s by Dr John Fry and is reproduced with permission of the Nuffield Trust.

## NIHR blog: Celebrating 70 years of health research

Dr Louise Wood, Director of Science, Research & Evidence, Department of Health and Social Care

https://www.nihr.ac.uk/blogs/celebrating-70years-of-health-research-on-the-70th-birthday-ofthe-nhs/8820

# **Moving forward**

Three SPCR case studies were featured in the latest NIHR Dissemination Centre Themed Review which discusses physiotherapy for musculoskeletal health and wellbeing.

SUBGROUPING AND TARGETED EXERCISE PROGRAMMES FOR OSTEOARTHRITIS: THE ROLE OF COMORBIDITY

#### Melanie Holden, Keele University

This study investigates whether individuals with knee osteoarthritis (OA) who also have other health conditions such as asthma, diabetes and heart disease, would benefit from an exercise programme. The researchers will complete a systematic review of the literature to look at the benefits of exercise for knee OA and whether information on the influence of other health conditions has also been collected. They will also re-analyse three clinical trials to investigate whether individuals with knee OA who have other health conditions benefit from exercise. The results will provide a better understanding as to whether a targeted treatment approach may be beneficial for those with knee OA and other health conditions. https://www.spcr. nihr.ac.uk/projects/subgrouping-and-targetedexerciseprogrammes-for-osteoarthritis-the-role-of-comorbidity

#### COMPARATIVE EFFECTIVENESS OF TREATMENT OPTIONS FOR SUBACROMIAL SHOULDER CONDITIONS: A NETWORK META-ANALYSIS (CETOSS)

#### Danielle van der Windt, Keele University

This network meta-analysis combines direct and indirect evidence about treatment for adults with subacromial shoulder conditions (SSC) to determine the most effective treatment strategy. The researchers identified 142 trials of 21 different treatments for SSCs. Effectiveness of treatment options for relieving pain and improving function were summarised in comparison to each other, and treatment options were ranked based on their effectiveness at short (<6 weeks). medium (up to three months) and long (>6 months) follow up times. van der Windt, Babatunde O, Ensor J, Littlewood C, Jordan J, Roddy E, et al. Comparative Effectiveness of Treatment Options for Subacromial Shoulder Conditions: A Network Meta-Analysis (CETOSS). https://www.globalevidencesummit.org/ abstracts/comparativeeffectiveness-treatment-optionssubacromial-shoulder-conditionsnetwork-meta

National Institute fo Health Research

NIHR Dissemination Centre

MOVING FORWARD



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

Exercise is a recommended core treatment for people with knee and hip osteoarthritis (OA), however, the effects on pain and function are small to moderate. This may be due to insufficient targeting of exercise to subgroups of people who are most likely to respond and/or suboptimal content of exercise programmes. This study aims to identify subgroups of people with knee and hip OA that do/donot respond to exercise and to different types of exercise and identify mediators of the effect of therapeutic exercise for reducing pain and improving physical function. Protocol: Holden MA, Burke DL, Runhaar J, et al and the OA Trial Bank. Subgrouping and TargetEd Exercise pRogrammes for knee and hip OsteoArthritis (STEER OA): A systematic review update and individual participant data meta-analysis protocol. BMJ Open 2017 Dec 22;7(12):e018971. doi: 10.1136/ bmjopen-2017-018971

Read the full review: https://www.dc.nihr.ac.uk/ themed-reviews/Moving-Forward-Final.pdf

### **Dates for your diary**

#### SPCR Annual Trainees' Event

24 & 25 September 2018

St Anne's College, Oxford

https://www.spcr.nihr.ac.uk/events/spcr-annual-trainees-event

#### SPCR Showcase

13 November 2018

Wellcome Collection, London

https://www.spcr.nihr.ac.uk/events/spcr-showcase-2018

### International Perspectives on Evaluation of PPI in Research

15 November 2018. Deadline for abstract submissions: 31 July.

https://www.newcastlebrc.nihr.ac.uk/events/ save-the-date-international-perspectives-on-evaluation-of-ppi-in-research/

#### **NIHR Events Diary**

https://www.nihr.ac.uk/news-and-events/events/

NIHR funding & support NIHR news & research

NIHR in the media on NHS70 NIHR INVOLVE news

### Blogs

#### Developing a funding application: NIHR Infrastructure training camp

Yumna Masood, University of Manchester

### George Lewith prize funds place at SAPC ASM 2018

Zuzanna Bien, University of Oxford Medical School

Université d'Angers Primary Care Summer School: From primary care trainee to "expert"

Grace Turner, Birmingham University

## What will the NIHR look like at 70? #NIHRnextgen

Matt Ridd, University of Bristol

# <u>'I thought it was just me': mutual benefit from public involvement in research</u>

Anna Spathis, Stephen Barclay, University of Cambridge

Navigating the 'public health epidemic' of loneliness in primary care

Stephanie Tierney, University of Oxford

**#OPAL2018: Identifying and** addressing shared challenges in conducting health and social care research for older people Rachael Frost. UCL

## Publishing soon?

Please send all SPCR funded publications and press releases to Kate Farrington before the proposed date of release. All info about outputs is available on the website