National Institute for Health Research

School for Primary Care Research

Increasing the evidence base for primary care practice

Business Plan
1.10.15 – 30.9.20

1. Background

The main roles of the National Institute for Health Research School for Primary Care Research (NIHR SPCR) [hereafter referred to as 'the School'] are to i) increase the evidence base for clinical practice and policy in primary care, and ii) build academic capacity in primary care. The School brings together top academics and practitioners in the leading academic centres for primary care research in England to conduct leading-edge research to benefit patients and the public. The School expands the evidence base for effective practice by conducting research to increase the volume and quality of reliable and relevant evidence; and creating an environment where first-class applied research can be designed and delivered. The School provides strategic leadership to attract the best bright new researchers to support the development of primary care research.

The research undertaken in the School complements other NIHR funding streams and work undertaken in NIHR funded infrastructure units. Its research encompasses primary care and general practice, with studies around the interface between primary and secondary care (such as research on the rising number of A&E admissions), societal aspects to care (such as domestic violence, and links to social care), the potential for patient self-care, and primary care aspects to public health, mental health practitioners and medical education. We conduct leading-edge research, bench-marked by the independently assessed the national institutional research ranking in REF 2014, focused on the needs of patients and the public. This will contribute to the NIHR enabling the NHS to better meet the needs of patients.

The School's planned programme of research and training will build on established collaborations and add value to existing funding, increase research capacity, and result in high quality published research with practical relevance to primary care. The School creates 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 high quality research, awarded through internal rounds of competition between partners, judged by independent referees and a panel chaired by an independent team, to meet its aims. All of the School research undergoes rigorous independent review and must be judged fundable prior to project commencement.

The University of Oxford will continue to host the School as the Lead Partner and Professor Richard Hobbs was re-appointed as Director for next five-year term by the NIHR. The Partners are the University of Bristol, Keele University, University of Manchester, University of Nottingham, University of Oxford, University of Southampton and University College London renewing (seven partners) and University of Cambridge and Newcastle University entering (two partners) a collaboration agreement to govern their roles in the conduct of the School. This 2015-20 business plan was developed and agreed with senior academics from all nine academic partners at the inaugural meeting in December 2014 of the refreshed School.

The School's Business Plan 2015-2020 together with the Capacity Business Plan for the same period will be used as the strategic plan for the School going forward into its third phase. They will be referred to in the overarching Collaboration Agreement between the nine partners and will be used as reference documents when reviewing the School's performance.

As has been successfully delivered in the first two phases of School funding, the School's performance will be reviewed regularly by the Board against these key deliverables:

- Developing research activity as per the School's 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 an expanded and highly trained research capacity across multiple primary care disciplines

The plans will also detail the strategy for patient and public involvement throughout the School.

2. SPCR Mission

The main missions of the School remain:

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

The School has helped create a 'critical mass' of research expertise and funding through coordinated and collaborative working across England. It will continue the strategy, successfully delivered in the second term of the School, to commission high quality research to inform the development of better clinical practice in primary care focusing on the following five main research themes; prevention and diagnosis, non-communicable disease and ageing, acute care, organisation and delivery of care, and research innovation and new technologies.

The School will increase and improve research awareness in the sector. It will provide strategic leadership to support the development of primary care research and contribute to ongoing efforts to build research capacity amongst partners.

We intend maintaining 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. We will also continue to explore the synergies between the capacity and research functions of the School.

3. SPCR objectives

The School's short, medium and long-term objectives are as follows. The Board will hold a series of meetings in its first year to monitor progress against these and will also use its mid-term review as a mechanism to ensure progress is as planned.

Short term aims (1-2 years)

- To successfully integrate new partners into the School
- To ensure that contract and finance arrangements are in place for the start of the next phase of the School (by October 2015)
- To commission a range of high quality research in a series of departmental and collaborative funding rounds, timetabled for early 2015, to enable School programmes to commence from October 2015.
- To ensure that the research undertaken in the period to September 2015 is complete and published or in draft publication
- To strengthen the successful collaborations between our research groups and other leading academic centres, and other organisations such NIHR CLAHRCs, the Royal College for General Practice etc.
- To appoint strong candidates to the range of capacity funded posts in 2015 and 2016 annual nationally advertised competitions
- To embed an effective Patient and Public Involvement and Engagement (PPI/E) strategy across the School

Medium term aims (3-4 years)

- To develop large robust trials building on earlier feasibility work
- To publish all completed studies in high impact journals and include them in the NIHR Dissemination Centre. To ensure final reports are included in the NIHR Journals Library.
- To perform a review the overall School strategy and main focus(s), with an external panel of experts in the field
- To continue to develop stronger links and collaborations with other NIHR entities, RCGP, Society for Academic Primary Care etc.
- 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)

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

4. School Management and Governance

The School's Board is led by the School's Director who has overall responsibility for the business of the School and is accountable to the School's funder, the National Institute for Health Research. The NIHR appointed the Director for the period covered by this plan. The SPCR Directorate coordinates the delivery of the School aims and objectives and provides the primary interface with the funders, in terms of oversight and periodic reporting, and external organisations, such as the other NIHR Schools and infrastructure bodies, the Society for Academic Primary Care, and the Royal College of General Practitioners.

The School's Board is responsible for the overall co-ordination and management of the School and in particular, but without limitation, will:

- Be responsible for leading all the School activities
- Initiate, time, and manage competitive project funding rounds
    a. Develop mechanisms for scientific ranking of all applications from partners for new research to determine those funded, based on external peer review and Board ratification (see section 4)
    b. Develop mechanisms to monitor and supervise progress of projects
    c. Consider reports and recommendations following completed research
    d. Take action to intervene in projects that are not meeting targets
    e. Develop a strategy for ensuring all SPCR research is published
- Develop and oversee a research training programme offering:
    a. A range of seniority schemes for trainees
    b. Opportunities for clinical and non-clinical posts
    c. Short training courses as well as trainee programmes
- Interface with external bodies, such as NHSE.

It is responsible for the implementation of strategy and overall direction of the School and operates as the main steering and scrutiny group for the School. The Board has oversight of both the research and training activity. It sets appropriate frameworks and policies and procedures to support delivery of the organisational objectives. Using the frameworks in place the Board continually monitors and reviews the operational performance of the School and decides corrective measures where necessary.

The quorum for a meeting of the Board is not less than five Partners or their appointed proxies. Each member has one vote on matters arising at the meetings. Decisions will be taken by a majority vote of the Board. In the event of a tied vote the Director shall have the casting vote. No decision of the Board may require a Partner to incur additional work or expenditure or to give up Intellectual Property without the consent of that Partner and, where required, approval by its authorised signatory.

The Board consists of the Director, Senior Scientific Manager, the SPCR Training Lead, and a senior academic from each partner department. These latter members are determined by the constituent partners and are normally the Head of Department or their nominee. The Head of Department or nominee may select up to two named deputies to attend School meetings in their absence when necessary. Responsibility for strategic direction and delivery of the School rests with the School's Board. The Board will meet every three months or more frequently if required. Meetings may be face to face or by teleconference.

The School has an Executive Directorate Group comprising the Director, Training Lead and Senior Scientific Manager for day to day decisions for the School. They are able to make decisions outside of the Board's normal business schedule on matters delegated to them.

An International Advisory Board will be formed which will include the Board, two to three international members (from outside of England), a practitioner and a lay representative. They will meet annually (with virtual attendance if necessary), with a full day face to face meeting for the midterm review Their principal role will be to review the progress of the research programmes, and to provide strategic advice on the development of the School's activities in the context of other national and international strategic opportunities. The Board may call on the Advisory Group for guidance in the case of difficulties or disputes.

Other operational working groups include the Training Lead Steering Group which is led by the School Training Lead and reports to School Board. Members include a nominated Training Lead from each department and the Senior Scientific Manager. A Patient and Public Involvement Steering Group

comprises a PPI Lead from each department who advise the Board on matters relating to PPI and PPE strategy.

Ensuring transparency of decision making

Although the minutes taken at School Board meetings are confidential to its membership, partners are encouraged to summarise and communicate these to the SPCR faculty within their departments. The School's annual reports and the responses from NIHR are posted onto the School website. Monthly news summaries including projects funded and trainees appointed are published. Quarterly newsletters have a wide circulation within and without the School and are also posted on the website.

All funding applications and publications are subject to external review. All final reports will be posted on the NIHR Journals website.

Control of contractual and financial arrangements

The arrangements including overheads, invoicing, auditing, indemnity and insurance will all be detailed in the Partnership agreement between the nine partners. The current agreement has clauses covering insurance, termination, withdrawal etc. and it is likely that these will be adopted by the renewed School membership:

Budget issues such as the division of funds between individual members are decided upon at Board meetings. If necessary, a vote is taken to reach a decision.

Monitoring and reporting arrangements, including processes to ensure the SPCR delivers its objectives

Principal investigators are required to provide detailed Gantt charts for their projects showing project timelines, recruitment, milestones and planned spend. These will be a crucial monitoring tool for the Board enabling it to review project progress. This will assist the School to operationalize its key deliverables.

All funded studies are required to submit an annual report and an end-of-project set of reports. Templates are provided with the following sections:

- A description of highlights from the previous financial year
- Examples of effective implementation of research findings
- Examples of added value case studies
- Descriptions of impact/benefits to patients arising from the work
- Publications arising from funding
- Other research income leveraged
- A forward look identifying any significant developments (such as major research findings or planned initiatives) anticipated in the next financial year, particularly those that are likely to generate media interest

Each report is scrutinised by the Senior Scientific Manager with any notable issues referred to the Director and to the Board if appropriate. This escalation procedure allows the School to intervene and demand corrective action if required. The School submits an annual report to the NIHR.

In addition to the narrative reports required, partners are expected to provide twice yearly updates on expenditure and to forecast costs for the remainder of the projects.

A summary of each project is submitted to the NIHR Journals library. The School currently has manual data collection procedures. It is planned to move these to an electronic system as soon as possible. It is hoped that the introduction of 'ResearchFish' across the NIHR will assist this aspiration. Other online collaborative recording systems will be investigated to allow the School to monitor progress of projects.

Commissioning and conducting high quality research

The School offers a source of funding focused on small projects which would otherwise be difficult to fund as there are few sources of funding for developmental or pilot work. These small projects tend to be based in a single member departments. They provide information and evidence to inform grant applications for large projects. In addition, these funds can be used for precursor start-up work to try to exploit the new opportunities faster than competitors. Additional funds are offered that focus on larger, cross-School collaborative, definitive studies.

Applications are invited in response to calls for these two types of approach. Applicants are asked to submit proposals that seek to answer specific research questions which fit into one of the School's five research themes. A standard School template is used for applications, with a different one for reviews.

All project proposals undergo a two stage process. The smaller, internal projects proposals generated in one department are scored by three senior academic members in that department. These are then prioritised according to their strength against a set of criteria:

- Quality of the science
- Potential impact of the research area on the NHS
- Perceived feasibility of the proposal
- Do the costs seem realistic and reasonable?

A ranked list is then sent to the Senior Scientific Manager who arranges for the proposals to be reviewed. The proposals with their reviews are considered in the second stage of the process by the School's Board. If the proposals are deemed fundable then approval is granted, subject to satisfactory external peer review and response to feedback.

For the large, cross School projects, outline proposals are submitted directly to the Senior Scientific Manager. Outline collaborative proposals are scored by three senior academic members of the SPCR, selected by the Director or SSM after excluding SPCR members with an interest in the project. If three project independent SPCR referees are not possible, then the lead referee as a minimum must be independent and if this is not possible then there must be at least one external referee to score the proposal and feedback on suggested changes using the standard pro-forma. All the outlines for each funding call are then ranked at the School Board, where there will be at least one external PPI representative, and where the lead department does not contribute to their projects. The ranked list determines those projects that are invited to submit full proposals.

These full proposals undergo formal external peer review arranged by the Director (or his Deputy in the case of projects with which he is involved). Project proposals valued at under £50k require at least one favourable external review, projects valued between £50k and £500k require at least two favourable external reviews, projects between £500k to £1 million are sent to three external referees, and projects over £1 million to at least five reviewers including at least two international referees. Given the expansion of the School, the pool of available senior external referees has significantly reduced. Where necessary or appropriate to the research planned, external referees may be substituted by up to two internal referee(s) who will be senior researchers within the School but from department(s) that are not involved with leading or collaborating on the research being reviewed.

The final selection of projects is made at a specially convened funding SPCR Board. This special SPCR Funding Board is supplemented by external members including a formal lay representative and chaired by a senior independent primary care researcher.

After any initial funding decisions are made, the comments from the referees are fed back in attributed form to the proposers of the successful research projects, and they are invited to respond. In the light of the referees' comments and the proposers' responses, the Director (or nominated Deputy) will decide on final approval of funding, if necessary returning the researcher comments to the original referees.

5. Research Programmes and cross-cutting themes

The School will continue the strategy successfully delivered in the second term of the School, namely to commission high quality research to inform the development of clinical practice in primary care focusing on the following five main research themes; prevention and diagnosis, non-communicable disease and ageing, acute care, organisation and delivery of care, and research innovation and new technologies. The two new members bring new research interests and strengths in a number of clinical areas to the collaboration.

Programme 1: Disease prevention and diagnosis

The core aim of preventive medicine is to ensure that premature death or major disease events, routinely defined as death before the age of 65, is uncommon and that morbidity in the population is minimized. Services to prevent disease are among the most important and potentially cost-effective provided by the NHS and most preventive strategies are provided in primary care. Their content and delivery needs to be underpinned by a firm evidence base. However, a remarkably low proportion of medical research expenditure in many countries including the UK is committed to prevention research, hence the focus for the SPCR – prevention is a key NHS priority but the evidence base is limited by under-investment.

In terms of a focus for our SPCR disease prevention research, our principal efforts focus upon cardiovascular disease and cancer. The WHO stated in 2010 that the main sequelae of cardiovascular disease, ischaemic heart disease and stroke, were the most important causes of premature death and major disability (and therefore health system costs) on the planet and also that the risk factors for CVD (like smoking, high blood pressure) the most important to modify. Many questions remain as to how we can effect change in these major health issues, with ongoing SPCR research to answer some.

Moreover, prevention is not absolute. Disease will still occur and primary care also has a key role to play in ensuring that it is diagnosed at an early and treatable stage. This is particularly important for cancer, where the chances of survival, and the costs of NHS care, are determined more by diagnostic delay than any other health service factor. Early diagnosis is also important for other diseases with major economic implications for the NHS such as stroke. For example, failure to diagnose and treat a transient ischaemic attack in primary care increases the risk of major stroke causing death or serious disability.

As the diagnostic value of symptoms and signs and investigation depends on the prevalence of the disease and also on the care setting, and since the evolution of disease is often poorly understood, research on diagnosis in primary care must take place in primary care rather than hospital settings. Likewise, research on behavioural change is essential in order to understand how potentially effective interventions can most efficiently produce change at individual and population level.

Closely linked to diagnostic research is the study of prognosis, another relatively neglected field of investigation in primary care. Characterising the risk of poor outcome early in the presentation of illness offers exciting opportunities to target interventions at reducing that risk and improving the outcome, and links the study of diagnosis with other School themes and clinical topics. For example the early identification of depression in patients presenting with physical symptoms offers the potential to improve patient prognosis, a topic which draws on expertise across the School.

Programme 2: Non-communicable disease, multi-morbidity, and ageing

Managing long-term illness is an important and increasingly costly element of health care, accounting for a high proportion of the work in primary care. The GP QOF contract reflects this activity, with the majority of clinical indicators relating to monitoring and management of long-term conditions. Despite recent improvements in quality of care, there are major unanswered questions about how long-term conditions should be monitored and managed, and some of these questions have substantial cost implications for the NHS. The SPCR has developed or tested potential technologies covering better monitoring and management in primary care to improve the quality of care which patients receive, such as BNP guided treatment in heart failure. A potential example for study is the safety and effectiveness of long-term drug therapy for control of symptoms such as chronic pain, a growing challenge to primary care which draws together research interests across the School.

The monitoring and management of long-term conditions have generally been neglected areas of applied research. There is considerable scope for improved practice and the development of specific clinical tools. While poor monitoring may be an expensive waste, good monitoring can improve patient outcomes. For example, effective self-monitoring of warfarin is associated in trials with a reduction in mortality of one third with no increase in haemorrhage rates. Self-management and support for self-management is a critical technology to investigate across a range of chronic diseases and the principles of psychosocial support in the management of chronic disease similarly crosses disease boundaries. There are major opportunities to develop methods to monitor management of chronic disease using GP morbidity and prescription databases, building on expertise and data resources across old and new School member departments. The SPCR will continue to invest in research into patient self-management options.

This is especially the case with the increasingly recognized importance of co-morbidity or more usually multi-morbidity. Demographic changes in the UK and elsewhere are leading to an ageing population, and co-morbidity is now the norm rather than the exception. For example, of Canadian patients with hypertension, only a third of office visits are for that condition, and in the US population as a whole, 40 percent of the population has two or more significant comorbid conditions[1].

A greater understanding of how diseases interact is important for several reasons. One disorder may make it more likely that a second will occur for a variety of different reasons. For example, the likelihood of having a depressive illness is increased in the presence of diabetes[2]. People with both diabetes and depression are less physically and socially active[3] and less likely to comply with medical care than people with diabetes alone[4]. These behaviour changes are, in turn, associated with worse long term health outcomes in terms of disease complications and death in both diabetic patients and those with other chronic diseases[5]. Yet the mechanisms by which these diseases interact within individuals are poorly understood, at cellular, organ, and individual and societal levels. Randomised controlled trials of interventions to improve the management of individuals with multiple conditions that appear to adversely affect each other in observational studies are frequently unsuccessful. This implies that current approaches to the characterisation of individuals with multiple conditions are over-simplistic and that a new approach to systematic thinking and development is needed in all these areas.

The rising prevalence of multi-morbidity has implications for the way in which health care, particularly primary care, is organised and assessed. Efforts to improve the quality of care have fuelled a move towards specialisation within general practice and better vertical integration of primary with secondary care. Examples include the introduction of nurse led specialist clinics for asthma, diabetes and cardiovascular disease in most general practices, and the promotion of GPs with Special Interests (GPwSIs). However, this may lead to reduced efficiency, poorly co-ordinated care and a service that is not necessarily based on patients' preferences or medical need. Understanding multi-morbidity is therefore important in understanding the aetiology of disease and how health services need to be organised to provide continuity of care and co-ordination of care. Research expertise in the clinical themes within the

School provides exciting opportunities to continue to build research into the causes, consequences and optimal care of multi-morbidity. The SPCR programme has explored the links between cardiovascular diseases and mental health, and mental health and musculoskeletal and metabolic diseases. It will also use its research on the patients' experiences of multi-morbidity to develop interventions for better coordination and continuity of clinical care.

Programme 3: Acute care

Despite the increased recognition of the impact of multi-morbidity in an expanding elderly population, acute care remains a high importance area for all healthcare systems and the NHS. Infection is a major cause of acute workload and the SPCR continues to have a significant focus on the better elucidation and treatment of common infections, with work on validated clinical decision rules and antibiotic outcomes. Our programme also investigates the highly topical area of antibiotic resistance and appropriate use.

Work has also covered acute illness in children, a particularly sensitive subject for the public – can we detect serious causes of sickness in children earlier? This has encompassed international collaborations across Europe and in Africa, with the pooled data supplied and analysed in the UK.

The SPCR Acute Care programme has also contributed to research on the better triage acute elderly illness out of hours, a current pre-occupation of the NHS in relation to demand and capacity in Emergency Departments across the NHS. This research theme links some of the diagnostics interests in Theme 1 with the service reconfiguration interests in Theme 4 with the content expertise in the Acute Care Theme on intermediate care models, such as the Emergency Medical Unit (EMU) service evaluations, sitting between the Acute Trust and local practices in Abingdon.

Programme 4: Organisation and delivery of care

The Department of Health is committed to patient centred care and therefore to giving reliable and timely health information to the public and patients. However, this laudable aim is not straightforward. Traditional health information has been based on facts and figures, not the experiences of patients. Many different types of information on Patient Experiences are available online in health information sites, social networking, reputation systems (an approach borrowed from e-commerce) and online support groups. Patient Experiences may support and inform people but equally people may make poor decisions if they identify with powerful stories that are not relevant to their circumstances. The key aim is to ensure the research findings impact on care quality and this is done in two ways – a direct public access website (healthtalkonline.org.uk) and through direct contact with NHS agencies, particularly NHS Choices.

Providing high quality patient centred care also depends on the engagement of health practitioners. The patient-practitioner interface lies at the heart of medical practice; but the nature of practice and the core tasks of medicine are deeply contested, as is the nature of the patient-practitioner interface that can best underpin them. As primary care embraces preventive medicine and the long-term care of long-term conditions (see programmes 1 and 2) the range of practitioners and their relationships with an increasingly educated public changes, and the potential interfaces between practitioner and populations and individuals increase with technical innovation in communications. There is significant potential for conceptualising this interface as a focus for research.

Reviews of work in this area demonstrate the increasing gap between the effectiveness of potential for new technologies to contribute to prevention and treatment, and our understanding of how to deliver these treatments effectively. Without innovative work on how to engage effectively across the practitioner-patient interface it will not be possible to realise the increasing potential of the applications of medical science to reduce suffering and premature mortality. Key foci of the research undertaken to date have been communication of risk, non-pharmacological interventions (such as brief psychological treatments), medication adherence and smoking cessation. The main disease areas we are addressing include the

prevention and management of cardiovascular disease, metabolic diseases, cancer, mental health, and chronic pain syndromes.

Programme 5: Research innovation and new technologies

This theme develops new methods and tools to conduct research in primary care. The programme contributes to the further development of clinical trial methodology for complex interventions.

Clinical trials and epidemiological studies in primary care typically need to involve large numbers of GPs and their staff, up to several hundred at a time, and have led to significant practical difficulties. Particular challenges are:

- Identifying and inviting potential subjects for trials in a standardised way across many sites
- Prompting clinicians when eligible patients consult and prior case-finding cannot be used[6]
- Delivering complex interventions in a standard way across many practice sites
- Keeping track of subjects as they move address and practice during the trial follow-up[7]
- Privacy, confidentiality and ethical approval issues[8]
- The high cost of training and monitoring across a large geographical area
- Even when trials manage to complete, over-runs are common, and there is evidence that variations in recruitment by centre can introduce potential bias[9]

This programme aims to develop an infrastructure that will be able to be used widely in primary care research in the UK such as the validation of large primary care research databases. It embraces topics such as the use and interpretation of data from routine general practice consultations, novel analyses of trajectories of illness and disease over time, and the synthesis of patient, public and health care professional interview data to address questions of practice and policy.

Whilst the initial focus on eScience solutions to support research will continue, this programme will expand into broader methodological developments, such as routine database mining, better trial development, and better subject recruitment and retention strategies.

Cross cutting themes

Cross cutting themes are likely to include the following but will evolve over the life of the School:

- Mental health
- Cardiovascular disease
- Infection and antimicrobial resistance
- Disease diagnosis and monitoring
- Disease prognosis
- Child health
- Cancer
- Patient safety
- Behavioural medicine, clinical databases and datasets, clinical trials, medical education, health service delivery and policy, doctor-patient communication, genetics, end of life care, multimorbibity, patient and public involvement and engagement.

The themes are formal agenda items at Board meetings and all the School's business constantly refers to them, e.g. in funding round applications, in progress reports and other reports.

Funding rounds 9 and 10 will deliver the first wave of research projects. Also included will be projects on multi-morbidity and anti-microbial resistance and dementia to reflect cross NIHR priorities and funding

calls. It is also likely that work on GP workload evaluation using the Clinical Practice Research Datalink (CPRD) for NHSE will be included.

6. Partnerships and Networking

Wishing to contribute the NIHR's strategic aim of 'One NIHR', the School will prioritise building on existing links and keying into current networks. Many members of School faculty have roles within other NIHR programmes and infrastructure, e.g. CLAHRC, BRC, DEC, PSTRC etc. Many hold research awards from complementary funding programmes and several hold senior investigator awards.

The partners' Expressions of Interest submissions for the School renewal process show the wide range of disciplines embedded within the primary care units; nursing, pharmacy, physiotherapy, psychology, public health practitioners etc. The broad range of the School's membership offers opportunities to foster and build multi-professional relationships.

Work is already in progress to explore synergies and future joint working with the other two NIHR Schools. There is some convergence with research themes and it may be that some topics would benefit from a multi-disciplinary approach.

The School has had exploratory talks with the Royal College of General Practitioners (RCGP) and was pleased with the collaborations recently announced between the National Institute for Health Research (NIHR) and the RCGP. We contributed to the joint multi-morbidities workshop and the resulting funding call will be supported by the School. Another key network outside the NIHR is the Society for Academic Primary Care (SAPC). Members of the School are also members of SAPC and ways of collaborating on work that is a priority for both SAPC and the SPCR will be sought.

Other health research funders, particularly charitable funders, are potential collaborators on c0-funded research initiatives, building on the success of the jointly funded SCPR and HTA trial project '*The Benefits of Aldosterone Receptor Antagonism in Chronic Kidney Disease (BARACK D) Trial.'* We will seek to identify further research that would benefit from such a model or shared cost and shared risk. We are also seeking to expand our commercial collaborations over primary and secondary research, which already involves commercially funded trials or the industrial partner supply of subsidised or free diagnostics or medications.

In the primary care sector, we will build on current relationships with the Wales School for Primary Care Research (WSPCR) (http://www.wspcr.ac.uk/), Scottish School of Primary Care (http://www.sspc.ac.uk/sspc-welcome), National Centre for Primary Care Research in Ireland (www.hrbcentreprimarycare.ie) and also beyond the UK, e.g. the Netherlands, Canada, Australia and the US (NAPCRG, WONCA).

Improving the operational synergy between the School and GP research practice networks is also an aim for the School in this programme of work.

7. Patient and Public Involvement and Engagement

The School is grateful for the general feedback on the patient, public involvement and engagement sections of the expressions of interest submitted in the NIHR Renew and Refresh 2014 process.

Meaningful involvement and engagement of patients and the public is central to the School, ensuring its work draws on their lived expertise, incorporates their perspectives and responds to their challenge. The

School will build on the significant existing body of involvement and engagement activities within its research projects and beyond.

Patients and the public will be involved and able to participate in all stages of research and governance. Existing expertise and structures will be used wherever possible. Work will be coordinated with other key organisations.

The School's will coordinate PPI/E innovations, activities and developments across its partners. One way of achieving this could be the appointment of a PPI and Engagement Officer to work across the School. A decision on this will be made early in the life of the School. In addition a member of the Board will be asked to take a strategic lead on PPI. The School's International Advisory Group and Funding Boards will also have lay representation.

Researchers will be asked to consult INVOLVE's definitions of involvement, engagement and participation. Funding applications must contain a robust PPI/E approach and a satisfactory Plain English Summary or they will not be eligible for funding. Updates on PPI/E must be provided at all points during the project monitoring.

The School is aware that the NIHR has recently conducted a review of public involvement across the NIHR and that the high level findings from this were published in late 2014. The full report will be available in early 2015 and the SPCR will review its current strategy at that point to ensure that it is in line with the recommendations for the wider NIHR. This document will be submitted to CCF once completed.

8. Dissemination/ Communication

Communications about the School's research and impact will be generated centrally by the Directorate and locally by member departments. All research proposals have to include a description of its dissemination strategy and the project's likely impacts. Researchers will be encouraged to think about their project's contribution to national guidelines from the project inception. Funding will be made available to researchers to enable their research to be disseminated appropriately. This will follow the NIHR's Open Access policy.

It will be a requirement of funding that research teams produce at least one peer reviewed publication in a high ranking journal and the project final report will be published in the NIHR Journal Library.

The School will continue to invest in its website and in a full time Communications Officer post. Case studies from research projects will help contribute to the evidence base for primary care practice and policy.

9. Performance Indicators

As has been successfully delivered in the first two phases of School funding, the School's performance will be reviewed regularly by the Board against these key deliverables:

- Developing research activity as per the School's 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 an expanded and highly trained research capacity across multiple primary care disciplines

Funding is allocated to research questions that have a high relevance and high priority in primary care. The most appropriate methodology needs to be used to conduct the research. Efficient delivery of the research is crucial to ensure projects run to time and target. Once the research is complete the results need to be accessible. The plans for these items are described in researchers' requests for funding which are then reviewed by researchers outside of the School. Only proposals of sufficient quality are funded.

Detailed project Gantt charts for their projects showing projects timelines, recruitment, and milestones and planned spend will be required at each stage of the research process and these will be a crucial monitoring tool for the Board. Project progress will be reviewed twice a year and outcomes used to assist the School operationalize its key deliverables.

10. Budget

The NIHR 'Invitation to submit' document stated that "The School will be supported by NIHR research funding in the region of £22 million over this five year period."

After top-slicing funds for a range of cross School activities the amount for individual research projects is expected to be approximately £18M. Of this, around a third will be allocated to the nine partner departments and the remaining two thirds will be used to fund larger cross School projects.

The first funding round in the third phase of the School will be Round 9 and will be an internal departmental round where a budget is allocated to each partner. The nascent Board has agreed this will be £150k per partner (£1.350M) and that the whole £150k must be spent in first year (1 Oct 15 to 30 Sep 16). The following schedule of internal funding rounds is likely to have the following budget envelopes:

Year 2	~ £200k per partner
Year 3	~ £250k per partner
Year 4	~£100k per partner

Although these internal funding rounds are called 'internal' this does not stop departments collaborating with another department if this adds to the research in a meaningful way.

It is recognised that collaboration forming, in some cases new working relationships, will take some time to produce funding applications and that these projects will be of a longer duration. These projects will be expected to have the involvement of at least three partners. However, it is planned that £450k could be spent in the first year as the projects start. It is difficult ensure that larger projects starting towards the end of the School contract period complete on time and therefore the majority of expenditure is expected to be in years two and three. Value of projects awarded in each of the subsequent collaborative funding rounds will be approximately:

Year 1	~ £2M
Year 2	~ £6M
Year 3	~ £4M

APPLICANTS

Hobbs FDR & Fletcher EG, University of Oxford

on behalf of Avery AJ, Bower P, Hay EM, Little P, Mant J, Nazareth I, Robinson AL, Salisbury C

SCHOOL DEPARTMENTS

SPCR Directorate, University of Oxford

on behalf of academic partners at the Universities of Bristol, Cambridge, Keele, Manchester, Newcastle, Nottingham, Oxford, Southampton, University College London