Research networks are key and they offer a central role for pharmacists

For this article, Beth Allen, research manager at the Royal Pharmaceutical Society, looked at the roles of clinical research networks, which form part of the National Institute for Health Research’s infrastructure, and found examples of pharmacists’ who work within them.

The National Institute for Health Research (NIHR) was established in April 2006 to improve the health and wealth of the nation through research by means of the creation of a health research system that supports outstanding individuals working in world-class facilities, conducting leading-edge research, focused on the needs of patients and the public. The NIHR’s key work strands are outlined in the diagram opposite.

Those actively engaged in research will be familiar with the NIHR as a research funding organisation. However, there is also a nationwide research infrastructure that presents opportunities for all pharmacists in all sectors to engage in multidisciplinary research to improve and advance healthcare delivery for the benefit of patients and the public.

The infrastructure is made up of clinical research networks, clinical research facilities and centres and a research design service. This article focuses on the roles of the clinical research networks with supporting examples of pharmacy engagement and the opportunities therein.

Research networks
The NIHR topic-specific and comprehensive clinical research networks ensure that all NHS patients and clinicians can share the benefits of participating in clinical research through working with partners and funders, including industry.

These clinical research networks support high-quality clinical trials. However, they also support other well-designed health research studies throughout England, and promote patient and public involvement in health research.

Topic specific clinical research networks
There are six topic-specific clinical research networks:

- National Cancer Research Network — 40 local research networks across the UK
- Dementias and Neurodegenerative Diseases Research Network — seven local research networks across England
- Diabetes Research Network — eight local research networks in England
- Medicines for Children Research Network — six local research networks in England (see “Medicines for children” Panel, left)
- Mental Health Research Network — eight local research hubs in England (see “Mental health” Panel, right)
- Stroke Research Network — eight local research networks in England

Comprehensive local research networks
All other diseases and areas of need are covered by the comprehensive clinical research network (CCRN) across England, with 25 comprehensive local research networks (CLRNs) covering the whole country. CLRNs are the primary vehicle for providing infrastructure to support study involvement. They encourage participation in a range of high-quality studies in the NIHR portfolio and provide research personnel and facilities to support recruitment.

A forthcoming article in The Pharmaceutical Journal will spotlight the work of CLRNs and the ways in which pharmacists can and are engaging in multidisciplinary research, with a particular focus on community pharmacy.

Primary care research networks
Primary care research networks (PCRNs) are dedicated to expanding clinical research in primary care, where most patient contact takes place. A primary aim of a PCRN is to facilitate recruitment into appropriate local NIHR portfolio studies requiring the support of GPs and other primary care community staff (see “Primary care event” Panel, right).

The networks bring a wide range of primary care health professionals together and promote high-quality research, informed by the views of patients and their carers. Primary care has particular responsibility for areas such as disease prevention, health promotion, screening and early diagnosis, as well as the management of long-term conditions, such as arthritis and heart disease.

The UK Clinical Research Network (UKCRN) Co-ordinating Centre oversees the

MEDICINES FOR CHILDREN

The Medicines for Children Research Network was created to improve the co-ordination, speed and quality of randomised controlled trials and other studies of medicines intended for use in children and adolescents. The Pharmacy and Pharmacology Clinical Studies Group is one of 13 specialist groups that support the MCRRN both in providing expertise to NIHR portfolio studies and in research priority setting.

The focus of the group is formulation, pharmacokinetics and pharmacogenomics. This pharmacy expertise (particularly formulation science and the need for dosing accuracy) at the beginning of such studies involving children is vital to ensure reliability and validity of outcomes.

I have been involved in Department of Health research initiatives since I was awarded a Public Health Career Scientist Award in 2002. Establishing the Centre for Paediatric Pharmacy Research, also in 2002, provided the knowledge and expertise required by the NIHR when these clinical research networks were first established. Our early involvement as experts in medicines has ensured that pharmacy is leading in this important multidisciplinary clinical research area.

Ian Wong, chairman of the Pharmacy and Pharmacology Clinical Studies Group, MCRN NIHR, and Associate Director of London and South East MCRN Local Research Network

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work of all the networks for the NIHR, including the CCRN. Similar networks are in place in Northern Ireland, Scotland and Wales.

**ClarHCs**

Nine collaborations for leadership in applied health research and care (CLARHCs) have been established across the UK through a competitive bidding process. Their purpose is to undertake high-quality applied health research focused on the needs of patients and to support the translation of research evidence into practice in the NHS. They do not sit under the umbrella of the UKCRN Coordinating Centre but are collaborative partnerships between a university and the surrounding NHS organisations. Their aim is to create and embed approaches to research and its dissemination that are specifically designed to take account of the way that health care is increasingly delivered across sectors and a wide geographical area (see “Collaboration” Panel, below).

**Conclusion**

What all the CRNs have in common is the desire to bring together researchers, practitioners, policymakers and members of the public: there are opportunities for pharmacists across all sectors and at various career stages to bring their unique knowledge and expertise to multidisciplinary research. However, the examples given in the Panels are by no means exhaustive, and pursuing an academic/research career is certainly not the only reason to get involved, as the personal and professional benefits are wider reaching, for example: enhanced job satisfaction; pursuit of an interest in a specific aspect of practice; opportunities for career development or change; greater multidisciplinary working and networking; developing a local leadership role (and skills); opportunities for mentoring (mentor and mentee); training and grounding in research (theory and practice); creation of opportunities for collaborative and partnership working; contribution to continuing professional development and positive outcomes for patients and the public.

To begin to explore the ways in which you might get involved you can approach the network leads directly to find out what is happening in your local area. Maps for all the networks and the leads in each region are available on the NIHR website at www.nihr.ac.uk/infrastructure.

Alternatively, approach your local practice forum research lead to facilitate local pharmacy engagement with these networks. This will assist the integration of LPPs into the local healthcare community and ensure pharmacy practice research does not sit in isolation from the wider healthcare team or users of pharmacy services.

The Royal Pharmaceutical Society’s science and research team would also like to encourage pharmacists to share their experiences of working with the NIHR. If you have an experience you wish to share, please go to the new S&R network on the RPS website at www.rpharms.com.

**Mental Health**

The Mental Health Research Network is managed by a partnership between the Institute of Psychiatry, King’s College London, and the University of Manchester.

Historically, mental health research has generally been under-resourced and lacked co-ordination. The MH RN aims to provide the infrastructure to support research, link this with practice to improve the quality of treatment and care, identify research priorities and develop research capacity. The MH RN consists of a central co-ordinating executive management team and eight regional hubs. David Taylor, chief pharmacist, South London and Maudsley NHS Foundation Trust and professor of pharmacology, King’s College London, is pharmacy lead for the whole of the MH RN and sits on the central executive representing pharmacy issues. Each regional hub has a pharmacy lead linked with the central executive via Professor Taylor.

The role of hub leads includes working with pharmacists within the hub to streamline their involvement in studies adopted by the MH RN, identifying clinicians interested in research and developing future research projects. One of the key aspects of the role is advising on the feasibility of studies, especially pharmaceutical industry studies.

In mental health supply, services are commonly not provided in-house, but via an acute trust or a community pharmacy and the hub lead may need to liaise across organisations during study set-up.

Ian Maidment, pharmacy lead, MH RN South London and South East hub

**Collaboration**

The NIHR Collaboration for Leadership in Applied Health Research and Care for North West London currently has five partnering organisations across eight sites undertaking a medicines management project.

These are all being project managed or led by nine pharmacists working closely with a consultant lead who co-ordinates activity and shares learning within a multidisciplinary team.

The projects involved are: “Medication reconciliation and telephone support at discharge”; “Medication reconciliation at discharge”; “Improving medications in the elderly – developing a STOPP trigger tool kit to avoid inappropriate use of medications in the elderly”; “Improving antibiotic prescribing”; and “Embedding the five rights of medication management: a systems and education approach”.

Other projects, such as “Community acquired pneumonia” and “Chronic obstructive pulmonary disease discharge care bundles” have also relied heavily on pharmacist support in a number of ways, for example, support in the “front-line” and patient training (COPD inhaler use), systems change (four hour antibiotics delivery for community acquired pneumonia and improving local antibiotic guidelines).

The pharmacists involved form part of the CLARHCs’ “Collaborative learning and delivery” events, which aim to enable the application of improvement and research methodology to other aspects of practice.

Jackie Valentine, programme lead for acute care, NIHR CLAHRC for North West London

**Primary Care Event**

The Primary Care Research Network for Greater London (PCRN-GL) is hosting a pan-London engagement event for pharmacists interested in research on 21 July 2010 at the Royal Pharmaceutical Society’s headquarters. This is part of its commitment to increase the number of primary care healthcare professionals in London willing to facilitate the flow of participants into high quality clinical studies on the NIHR portfolio.

This event will help PCRN-GL to identify pharmacists in London with an interest in research, or those who are already research active.

In putting together this event the PCRN-GL has discovered high levels of enthusiasm among the pharmacy community. A key output of the event will be equipping the PCRN-GL to better understand what pharmacist interests are and how the PCRN-GL and other NIHR organisations can support them. The event will offer pharmacists an insight into the network and how it currently works with study teams and primary care practitioners to recruit Londoners into high quality NIHR research studies.

There will be speakers from research study teams who have worked with pharmacists in the delivery of previous research. There will be an open session and an opportunity for pharmacists to put questions to researchers and network staff. The PCRN-GL believes that this event will complement other pharmacy initiatives across London.

Claire Pentecost, senior research officer, PCRN-GL