Editorial

Musculoskeletal research—opportunities for all?

A new model that puts research at the heart

Given the major economic crises and natural disasters which have occurred over the past few years, a real fear exists that clinical research will suffer. Especially research into musculoskeletal diseases that often lacks the profile and attention given to other headline-catching specialties such as cancer and cardiovascular diseases. If funding becomes too restricted, physicians may become consumed in maintaining a high-quality clinical service with tighter budgets and little time or resource left for research. In this scenario, major changes have taken place in the way Government funding is allocated along with organization of clinical research in the UK, which provide good grounds for optimism. In this Editorial, we discuss these changes that could revolutionize research opportunities for clinicians in the UK and provide a model for the development of similar endeavours in other countries.

Besides the financial crises, many competing demands have made participating in high-quality research a challenge for clinical rheumatologists in the UK, most of whom work almost exclusively within the National Health Service (NHS). In 2003, changes to job plans and a new contract for physicians led many NHS employers to consider that they preferred their staff to concentrate on delivering a clinical service rather than doing any research. Job plans (and therefore pay) were altered accordingly. Increasing competition for research grants also meant that external research funding became less accessible to clinicians who were not part of major academic centres. In addition, increased bureaucracy and governance demands, while certainly enhancing patient safety, may have added to the disincentives for many to spend time, effort and energy on research [1]. Even worse was a perception that laboratory science was being prioritized over clinical research. ‘Was it worth all the effort?’ was a common concern.

As a consequence of all these pressures, research output in the UK not surprisingly declined and evidence suggested that the pharmaceutical industry was beginning to disinvest in the UK. In 2002, 46% of the European Union products in clinical trials were being developed in the UK. By 2007, this number had fallen to 24% [1]. In parallel, the global share of patients participating in clinical trials had dropped from 6 to 2–3% between 2004 and 2008 [1].

However, this decline in clinical research activity in the UK did not affect all specialties. The establishment of the National Cancer Research Network in 2000, providing new resources to strengthen the workforce, led to more than doubling of recruitment to the clinical trials and other studies [2]. Based on this success, six other national topic-specific networks were established between 2003 and 2007, followed by the Comprehensive Clinical Research Network (CCRN) in England to support clinical research in all areas. This followed the UK Department of Health’s research and development strategy document Best Research for Best Health, which ensured that the Government committed to a substantial boost to the support and funding of the clinical research [3]. This commitment has been sustained despite a change in government. All these and many other initiatives were brought together in a new National Institute of Health Research (NIHR).

The CCRN has developed a system of evaluating existing and proposed clinical trials and clinical studies. If such studies can be shown to have been externally peer reviewed, to have been funded in open competition (or directly by the pharmaceutical industry), are likely to lead to benefits to NHS patients, and are feasible within the existing NHS system of care, then they are entered onto the national portfolio of clinical studies. Studies on the portfolio are eligible for CCRN support costs. The CCRN has established a number of national Specialty Groups (SGs) to oversee the relevant studies on the portfolio.

What has happened in the UK to musculoskeletal research since these developments; what opportunities are there for research being realized in busy clinical jobs; and what can be learnt from this of relevance to other health care systems and countries?

First, within the CCRN, two SGs are directly relevant to the rheumatology team: musculoskeletal disorders and immunology and inflammation. The roles of these groups are to manage their research portfolio of studies, to decide which new studies should be adopted and to identify barriers to recruitment and see how these can be alleviated. Each region and devolved nation in the UK is represented on the national group, whose role is to facilitate research within their locality. Individuals with enthusiasm for research but who find barriers to their ability to participate can contact their local representatives for advice and assistance (http://www.cncc.nihr.ac.uk/about_us/ccrn/specialty).

Secondly, Arthritis Research UK, the major research charity supporting research into musculoskeletal diseases in the UK, has taken a lead in working with the CCRN, establishing Clinical Studies Groups (CSGs) that cover eight major topic areas. CSGs are responsible for developing and delivering a research strategy that includes all stakeholders (professionals, patients and industry) [4].
Calls for research are regularly put out by the CSGs, with two-page outline proposals. Therefore, any member of the rheumatology team can propose research ideas, without the daunting task of having to develop a major grant application, or coordinating the final study. The best ideas can then be developed with the support of the CSG, ensuring greater sense of a collaborating research community, rather than being the responsibility of isolated individuals.

Thirdly, Arthritis Research UK is also working on an exciting initiative to establish a national clinical linked sample and data platform, InBank, initially focusing on early inflammatory arthritis. The British Society for Rheumatology (BSR) has played an important role to ensure that this venture will be effective, efficient and practical. The data gained from this initiative will allow benchmarking against the performance of other comparable units. Some teams will be engaged at a more involved research level, where clinical data will be supplemented by sample collection for a national biobank. The themed issue on Registries in Rheumatological and Musculoskeletal Conditions [5] included a number of articles showing how effective such registers can be.

Fourthly, the BSR Biologics Register has been accepted onto the national research portfolio, affording support to UK clinicians in registering patients through this register for participation in defined research projects. Exciting developments this year include the launch of an ASRegister and the commencement of new cohorts of RA patients treated with TNF inhibitors or tocilizumab.

The SGs of rheumatic diseases have more studies on their national portfolio than any other SGs. Moreover, although recruitment to studies has been challenging in the past [4], the ability for the SGs to monitor trial appears to be helping studies complete recruitment to target.

Worldwide, industry is the main driver and funder for clinical trials. While this is, of course, essential to bring new agents to market, opportunities, to, for example, investigate the optimal usage of new drugs in normal clinical practice or investigate novel applications of existing agents, can sometimes be neglected. These are certainly challenging times, but this new initiative in the UK has shown that a fresh configuration of research infrastructure can pay dividends in recruitment to clinical trials and studies—both commercial and otherwise. Equally important, it ensures that those physicians, who wish to be more involved in research, have a new opportunity to contribute.

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References


