

■ ■ ■ National Research Strategy ■ ■ ■

- ⊙ Research is needed to help inform service development and to demonstrate the value of Medicines Information services to the NHS and patient care.
- ⊙ The UKMi Executive will identify research topics, and provide practical support for Medicines Information Pharmacists, their managers and local partners, to stimulate contributions to a national research agenda.
- ⊙ UKMi wants to build research partnerships with schools of pharmacy, information experts, healthcare professionals, and other local, regional and national partners.

Intended audience for this document: Medicines Information pharmacists, chief pharmacists, schools of pharmacy, academic and healthcare research organisations, customers and partners of the MI service locally, regionally and nationally.

Why is a UKMi Research Strategy Needed?

UKMi is an organisation of professionals focused upon managing information to improve patient care. However, those who seek to invest in, use, or support it deserve to have evidence that UKMi has tangible benefits for patients and professionals, will deliver quality, can evolve to meet need, and is cost effective. The published research is limited but has been reviewed.(2,3)

The UKMi Executive will initiate a nationally co-ordinated strategy across the whole UK to address the deficit in published research, with aims similar to those outlined by the Department of Health in England, and the Research and Development Office for Northern Ireland (4,5):

- ⊙ To manage a specialist national research programme, and attract partners and funding, so that UKMi is recognised for research excellence.
- ⊙ To build vision, resources, training and career development, and so create a lasting culture in which pharmacists engaged in providing UKMi services will aspire to undertake research based on the ideas which the strategy contains.
- ⊙ To direct the research activities of individuals within a wider framework, so that each effort forms part of a series of nationally agreed goals which ultimately seek to improve patient care and ensure effective management of information resources.
- ⊙ To deliver and revise UKMi services based on the evidence of research so that public money is spent appropriately. Research will drive innovation and improve service quality.

About UKMi

The UK Medicines Information network (UKMi) uses the knowledge and skills of pharmacists, technicians and others to advise healthcare professionals in primary and secondary care on the selection and safety of medicines for individual patients. The network comprises over 250 locally and regionally based UKMi centres.

UKMi empowers NHS professionals via the National electronic Library for Medicines (www.nelm.nhs.uk) by producing outputs such as critical assessments of new drug therapies, a daily news service, and evidence-based answers to common enquiries about medicines. UKMi also provides extensive training and quality assurance materials (www.ukmi.nhs.uk).

UKMi is led by an Executive body. The aims and future development of UKMi as a whole has been described in its national strategy document endorsed by the four UK Departments of Health.(1)

Leadership of UKMi Research

The UKMi Executive will promote this strategy to ensure its aims are met. The Executive has appointed the Wessex Drug & Medicines Information Centre (Wessex MI), based at Southampton University Hospitals NHS Trust, to lead on implementing and monitoring research. Wessex MI will work in partnership with the Pharmacy Practice Unit at University of Portsmouth to undertake research and lead by example, guide the Executive to remain focused on the aims of the strategy, facilitate the provision of the researcher support identified below, and report on progress.

Recruitment and Identification of Researchers

UKMi will work with educators to utilise pharmacy undergraduate students and pre-registration pharmacists to undertake short-term projects. Sometimes a larger piece of research can be broken down into smaller component parts to facilitate this, but undergraduate and pre-registration pharmacists can also undertake valuable pilot project work to test ideas and methodology. An account of a successful pilot project can help with applications for research funding. Similarly, UKMi will work to make its research agenda appealing to pharmacists studying for postgraduate master's degrees.

At the time of writing, research is rarely undertaken by experienced UKMi staff. The UKMi Executive will aim to change this by fostering a culture of research within the network, and providing potential researchers with the direction, training and support required to enable them to successfully complete reliable and relevant research projects. This could be achieved through registration for a higher degree such as a PhD or professional doctorate.

Participation in research and development needs to become an integral part of the career pathway of medicines information pharmacists and technicians, and incorporated into their job descriptions, KSF outlines, and departmental objectives. UKMi Executive will work to strengthen career pathways by pressing for the creation of consultant pharmacists and advanced level practitioners within the specialty of Medicines Information. These individuals will be highly experienced with a long-term commitment to research, enabling large, long-term, and/or complex projects to be undertaken.

Pharmacy staff need not necessarily undertake all UKMi research. Consideration should be given to employing, or collaborating with, researchers from partner organisations if there are areas of mutual interest. Funding may sometimes allow the employment of research companies.

Supporting Researchers

The existence of this strategy document will offer a stimulus to researchers, and the establishment of a national lead research centre at Wessex MI will offer further encouragement, but other support is needed. The following will be provided:

- ⊙ **Local leadership** – UKMi Executive members will establish a named individual responsible for leading research in each geographical region. These regional UKMi research leads will facilitate local training and guidance, and establish links with researchers in schools of pharmacy, other academic units, and healthcare organisations in the area. It is important that regional leads network with other researchers in their locality to identify areas of mutual interest and to collaborate to secure funds. Wessex MI will support the regional leads as resources allow.
- ⊙ **Support tools** – A section of the UKMi website (www.ukmi.nhs.uk) will be devoted to research. This will contain guidance on initiating research, an index of relevant research which has already been published, ideas for research topics, helpful web resources, and advice on specific subjects such as the use of statistics. The UKMi Executive has also created and continues to support the pharmacy practice bibliographic database PharmLine (www.pharm-line.nhs.uk) which assists all forms of pharmacy practice research.
- ⊙ **Training** – It is important to note that the skills required comprise not only research techniques and methodology, but ancillary skills such as writing skills, preparing a research proposal, negotiating skills and so on. UKMi Executive will invest in postgraduate study days to address specific needs, but training will also be built into existing UKMi programmes such as the advanced training programme, UKMi annual conference, and regional UKMi educational meetings.

Where possible UKMi will provide support by working with existing organisations such as universities, the National Institute of Health Research, and NHS Service Quality and Safety Research Centres.

Partnerships with Other Organisations

Partnerships with other research organisations enables co-research bringing together funding, researchers, experience and ideas. Although UKMi Executive has established links with many healthcare organisations on the basis of service provision, new partners are needed to facilitate research.

Linking to academia, especially Schools of Pharmacy, will be a vital step if the aims of the UKMi strategy are to be met. Linking needs to be a two-way process with each partner contributing for the benefit of the other. This will require local negotiation. Apart from collaboration on practice research, UKMi could also contribute teaching, and advice about information resources, as well as offering supervision of postgraduate and undergraduate research projects. In addition, UKMi should explore the possibilities of academic secondments, and of split practice/academic posts.

A rounded research output also requires close links between UKMi and frontline health professionals, and information providers outside of UKMi.

In order to raise the profile of Medicines Information as a discipline, and UKMi as a research organisation, UKMi Executive will also plan to ensure a wider representation of its pharmacists and research at conferences. This will encourage networking, partnerships, and research investment. International conferences should be part of this initiative.

To investigate co-working the Executive and regional UKMi Research Leads need to meet with bodies such as the Department of Health, universities (especially schools of pharmacy), Royal Pharmaceutical Society of Great Britain (RPSGB), Guild of Healthcare Pharmacists (GHP), National Pharmaceutical Association, National Library for Health, NHS Direct, local primary and secondary care research networks, workforce development confederations, Research and Development Support Units, charitable trusts, Pharmaceutical Information and Pharmacovigilance Association (PIPA), and key journal editorial boards.

Research Topics

Based on analysis of published research, and the needs of service users, the UKMi Executive will initially focus research onto the following areas essential for informing the delivery of services:

- ⊙ Patient care – Impact of the UKMi enquiry answering service for healthcare professionals on various measures of patient wellbeing in primary and secondary care (e.g. risk avoidance, risk reduction, and harm reduction) and on the behaviour of professionals caring for patients. Impact of other UKMi services on patient care. Identification of, and benefits of, direct to patient UKMi services. Ethical issues related to enquiry answering services.
- ⊙ Service performance and quality – Performance of UKMi services against standards or set criteria. Benefits of UKMi to the NHS other than to patient care (e.g. cost-effectiveness, clinical governance issues, medicolegal). Methods to conduct, and impact of: peer review, service audit, benchmarking. Identification and analysis of critical incidents and near misses in UKMi.
- ⊙ Partnerships and users of the service – Exploring how to work with other organisations (NHS and academic), multidisciplinary working in primary and secondary care. Investigation of non-users of the MI service. Assessment of information needs of various users. Methods of assessing user satisfaction. Publicity. Assessing information provision from non-UKMi sources.
- ⊙ Information technology – Evaluating the impact of IT developments (e.g. software) or e-resources on providing UKMi services (cost-effectiveness, quality, efficiency). Evaluation of medicines-related IT products for non-UKMi healthcare staff.
- ⊙ Personnel and training – Impact of training on UKMi and non-UKMi staff, assessment of teaching techniques. Training requirements of non-UKMi staff. UKMi career development, skillmix, retention of staff, work practices (e.g. working from home), assessment of UKMi skills. Competency assessment. Relating complexity of enquiries and other activities to professional competency.

Some specific research priorities are identified on the next page.

Research Priorities

A Delphi technique was applied to research ideas generated from the general themes described above. Selected users of the service and the UKMi Executive itself identified the following as the top five specific priorities for UKMi research:

1. What impact does the UKMi enquiry answering service have on patient care?
2. What economic impact do UKMi services and products have for the NHS? What are the costs and benefits?
3. Are UKMi internet resources (e.g. new product reviews, news) used by healthcare professionals in the care of individual patients?
4. How can UKMi best support 24/7 NHS services?
5. What can UKMi contribute to the management and maintenance of electronic prescribing systems?

Identification of Research Funding

This research strategy document will provide evidence of the UKMi Executive's direction, stimulate research activity, and provide a platform for co-ordination of practice. All this should favourably influence local and national funders. Collaboration between public and private sector investors may be necessary depending on research priorities. Acquisition and successful utilisation of research funding, followed by publication and/or presentation, will raise the profile of UKMi.

Potential funders may include national bodies such as the NHS Service Delivery and Organisation R&D Programme (SDO), Department of Health, RPSGB, GHP, and the pharmaceutical industry. International bodies such as the International Pharmaceutical Federation should be considered. Some organisations have regular timetabled funding opportunities, and the UKMi website will need to identify these for the whole network. UKMi itself has limited resources but will offer an annual research grant, perhaps in association with a sponsor. Local partners to consider include Trust Research and Development departments, local research networks and universities, workforce development confederations, and other stakeholders such as charities and patient bodies.

Publishing, Disseminating and Utilising Research

Researchers will be expected to publish research to ensure that their findings are taken up and used to inform best practice. Part of the national support to researchers will include a listing on the UKMi website of journals likely to accept Medicines Information research. However, researchers should be aware that there are methods of publishing research other than in journals, including conference posters/presentations and websites. National and regional research leads should make themselves aware of suitable conferences where UKMi research could be presented.

UKMi Executive will ensure that research findings are disseminated to all UKMi centres via existing communication methods. Research will also be used by the UKMi Executive and its various working parties to update national standards, policies, training materials and other products to ensure that UKMi is an evidence based service. Where appropriate, guidance produced will be used as the basis for UK-wide service audit.

References

- (1) Better Information for Managing Medicines. A Strategy for Pharmacy's Medicines Information Service in the NHS. Published April 2000. Available at: http://www.ukmi.nhs.uk/Policy_product/Strat.asp Currently being updated: update due in 2007.
- (2) Hands D, Stephens M & Brown D. A systematic review of the clinical and economic impact of drug information services on patient outcome. *Pharmacy World Sci* 2002; 24: 132-38.
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- (4) Research and Development Directorate, Department of Health (England). Best Research for Best Health: A New National Health Research Strategy. Jan 2006.
- (5) Research & Development Office for Health and Personal Social Services in Northern Ireland; Research for Health and Wellbeing; March 1999.