NHS
National Institute for Health Research

# A brief overview of the National Institute for Health Research

Improving the health and wealth of the nation through research

# Introduction

The National Institute for Health Research (NIHR) is a large, multi-faceted and nationally distributed organisation. Together, NIHR people, facilities and systems represent the most integrated clinical research system in the world, driving research from bench to bedside for the benefit of patients.

The NIHR was established in April 2006 to provide the framework through which the Department of Health can position, maintain and manage the research, research staff and research infrastructure of the NHS in England as a national research facility.

## Vision

To improve the health and wealth of the nation through research.

## Mission

To maintain a health research system in which the NHS supports outstanding individuals working in world-class facilities, conducting leading-edge research focused on the needs of patients and the public.

## Goals

- Establish the NHS as an internationally recognised centre of research excellence.
- Attract, develop and retain the best research professionals to conduct people-based research.
- Commission research focused on improving health and social care.
- Strengthen and streamline systems for research management and governance.
- Act as sound custodians of public money for the public good.

# Setting strategic directions and priorities

## Advisory Board

The NIHR Advisory Board's role is to advise on the development and progress of NIHR. It provides guidance about meeting the research needs of the NHS, public health and social care and helps to ensure that NIHR can play its part in contributing to the country's economic growth. The Board also offers advice about improving the culture and performance of health and social care in supporting, conducting and hosting research. Members include senior representatives of key bodies in health and social care (including NHS Chief Executives), leaders from academia, and representatives from patient focussed organisations.

## Strategy Board

The NIHR Strategy Board advises on strategic issues relating to the management of the NIHR and the implementation of the NIHR's strategic plans. It helps to ensure that NIHR acts as one entity and communicates effectively both externally and internally.

Members of the Board include directors of the NIHR's coordinating centres and programmes and the senior management team of the Department of Health's Research and Development Directorate.

## Strategic priorities

- Transform research in the NHS.
- Increase the volume of applied health research and opportunities to participate in it, for the benefit of patients and the public.
- Promote and protect the interests of patients and the public in health research.
- Drive faster translation of basic science discoveries into tangible benefits for patients.
- Develop and support the people who conduct and contribute to applied health research.
- Maximise the research potential of the NHS to contribute to the economic growth of the country through the life science industries.

## Adding value in research

The NIHR is committed to adding value in research to maximise the potential impact of the research it funds. This means that NIHR-funded research should:

- answer questions relevant to clinicians, patients, the public and health professionals
- use appropriate design and methods
- be carried out efficiently
- produce unbiased, accessible and comprehensive reports
- publish a full research article or abstract in Europe PubMed Central, which offers free access to biomedical literature.

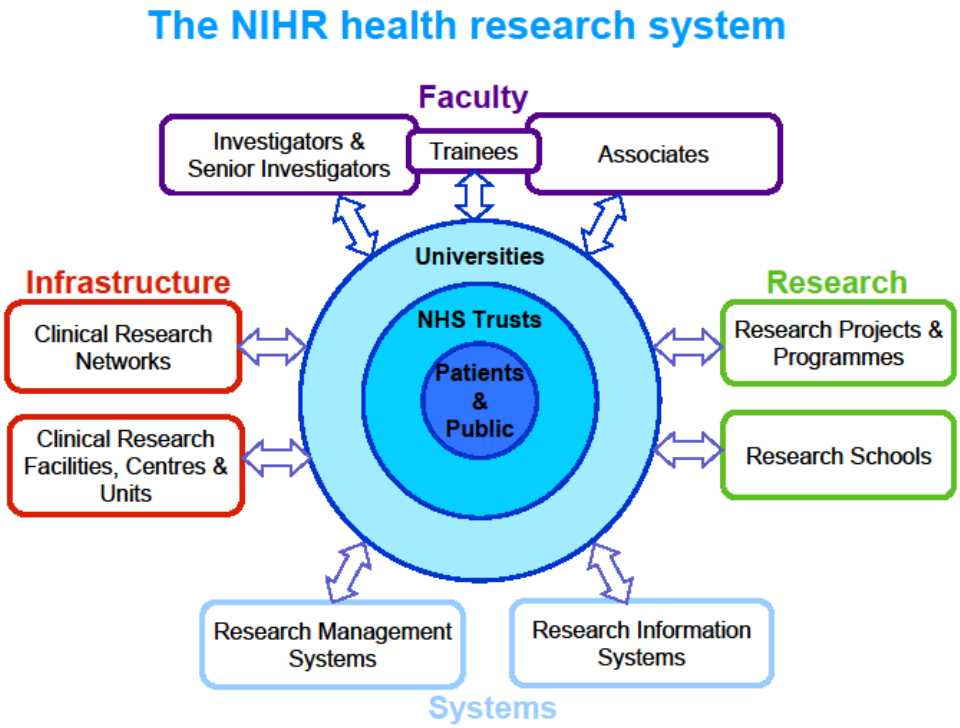
## Structure

The NIHR funds leading-edge scientific research, driving faster translation of basic science discoveries into tangible benefits for patients and the public and creating the best possible conditions for inward investment by the life-sciences sector. It works in partnership with many sectors including other Government funders, academia, charities and industry.

The NIHR manages its health research activities through four main work strands:

- Research: commissioning and funding research
- Infrastructure: providing the facilities and people for a thriving research environment
- Faculty: supporting the individuals carrying out and participating in research
- Systems: promoting faster, easier clinical research through unified, streamlined and simple systems for managing research and its outputs and improving patient participation in research.

The following diagram shows the NIHR health research system, with the interests of patients and the public at its heart.



# Research

The NIHR funds a number of research programmes and initiatives to ensure that patients and the public benefit from the most up-to-date and cost effective health interventions and treatments.

## Research programmes

The NIHR has a comprehensive range of research programmes in both commissioned and response mode. They offer a focused source of funding for researchers with the aim of improving health and care by providing evidence to inform clinical professionals, NHS managers, patients and the public, and where appropriate policy makers.

- Programme Grants for Applied Research (PGfAR) are prestigious awards for up to five years, directed towards leading researchers who can demonstrate an impressive track-record of achievement in applied health research. Each programme funds a series of related projects, which form a coherent theme in an area of priority or need for the NHS.

  Nested within the PGfAR programme is the Programme Development Grants scheme. This initiative offers investigators the opportunity to undertake preparatory research that will position them to submit a competitive Programme Grant for Applied Research application.
- Research for Patient Benefit (RfPB) is a response-mode programme for high quality investigator-led research projects that address issues of importance to the NHS. Applications are assessed by Regional Committees to ensure that research proposals will increase the effectiveness of NHS services and will benefit patients.
- Health Technology Assessment (HTA) programme funds research to ensure that healthcare professionals, NHS managers and the public and patients have the best and latest information on the costs, effectiveness and impact of developments in health technology.
- Efficacy and Mechanism Evaluation (EME) programme supports 'science driven' studies with an expectation of substantial health gain. It is jointly funded by the NIHR and MRC and aims to support excellent clinical science with an ultimate view to improving health or patient care.
- Public Health Research (PHR) programme commissions research to provide new knowledge on the benefits, costs, acceptability and wider effect of non-NHS interventions, for example, prevention of obesity in children.
- Invention for Innovation (i4i) programme supports and advances the development of innovative medical technologies and techniques that could have a potential impact if applied in a healthcare setting. i4i funds collaborative research and development between partners from industry, NHS organisations and universities or other Higher Education Institutions.
- Health Services and Delivery Research (HS&DR) programme funds a broad range of research to produce rigorous and relevant evidence on the quality, access and organisation of health services, including costs and outcomes, to improve health services.

## Systematic Reviews Programme

- UK Cochrane Centre and Cochrane Review Groups support the preparation, maintenance and accessibility of systematic reviews of the effects of healthcare interventions produced by twenty NIHR-funded Cochrane Review Groups. The Centre is part of the international Cochrane Collaboration.
- Centre for Reviews and Dissemination (CRD) is one of the largest groups in the world engaged exclusively in evidence synthesis in the health field. CRD's databases are used extensively by health professionals, policy makers and researchers around the world, and CRD reviews have influenced health care policy and practice, both in the UK and internationally.
- Technology Assessment Reviews are commissioned by the HTA programme on behalf NICE and other policy-makers to support evidence-informed policy and practice.

## Horizon Scanning Centre

The Horizon Scanning Centre appraises new technological developments to provide the Department of Health and policymakers with information on their implications to the NHS both in clinical and economic terms. The Centre's appraisals include new medicines, medical devices, diagnostic tests, surgical interventions, rehabilitation measures, and new health promotion approaches.

## Research schools

The NIHR supports national research schools that bring together top academics and practitioners to conduct leading-edge research to benefit patients and the public. The purpose of the schools is to increase 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 thrive, focused on the needs of the public. The three schools are:

- School for Primary Care Research
- School for Social Care Research
- School for Public Health Research.

## Centre for Surgical Reconstruction and Microbiology

This NIHR Centre brings both military and civilian trauma surgeons and scientists together to share advanced clinical practice in the battlefield and innovation in medical research to benefit all trauma patients in the NHS at an early stage of injury. The Centre is a partnership between the NIHR, the Ministry of Defence, University Hospitals Birmingham and the University of Birmingham.

## Research Design Service

The Research Design Service provides support for health and social care researchers to develop and design high-quality patient focused research proposals, for submission to NIHR and other national, peer-reviewed competitions.

### INVOLVE

INVOLVE supports researchers to ensure that they involve patients and members of the public in developing their research proposals. It aims to create a research community which is more inclusive and representative of the population as a whole, and that undertakes NHS, public health and social care research, that reflects the needs and views of patients and the public.

## Infrastructure

The NIHR provides the support and facilities the NHS needs for first-class research by funding a range of infrastructure facilities. The NIHR infrastructure includes:

- Biomedical Research Centres and Units – eleven Biomedical Research Centres and twenty Biomedical Research Units that conduct and support translational research to transform scientific breakthroughs into new treatments for patients.
- Dementia Translational Research Collaboration – aims to pull discoveries from basic science into real benefits for patients. The Collaboration comprises four new NIHR Dementia Biomedical Research Units as well as six NIHR Biomedical Research Centres with dementia-related research themes, and helps meet the Prime Minister's Dementia challenge.
- Translational Research Partnerships – bring together world-class investigators in leading academic and NHS centres to support collaboration with the life sciences industry in early and exploratory development of new drugs and other interventions. The NIHR Biomedical Research Centres and Units form the bedrock of these partnerships.
- Patient Safety Translational Research Centres – conduct and support research to investigate ways to improve the patient safety and safety of NHS services.
- Clinical Research Facilities for Experimental Medicine – provide purpose-built environments for patient-centred research where clinical researchers are able to make use of cutting-edge clinical facilities, technologies and expertise and have access to patients. They support collaborations between basic and clinical scientists, which help to ensure that advances in research feed through into improvements in healthcare.
- Experimental Cancer Medicine Centres – funded in partnership with Cancer Research UK. The centres focus on speeding up the process of cancer drug development and the search for cancer biomarkers to diagnose cancer, predict the aggressiveness of the disease, or show whether a drug will be effective in a specific patient and at what dose.
- Clinical Research Network – makes it possible for patients and health professionals to participate in relevant research. The networks support the set-up and timely delivery of commercial and non-commercial studies in the NHS in England. This includes advice on study feasibility, streamlined NHS permissions and effective patient recruitment.

- Collaborations for Leadership in Applied Health Research and Care – bring together universities and their surrounding NHS organisations including primary care, to conduct applied health research that is transferable across the NHS to provide the highest quality patient care and outcomes.
- Healthcare Technology Co-operatives – eight new HTCs were established in January 2013, to develop concepts, demonstrate proof of principle and devise research protocols for new medical devices, healthcare technologies or technology dependent interventions for underserved patient groups.
- Diagnostic Evidence Co-operatives – new infrastructure established from September 2013, bringing together a wide range of experts and specialists from across the NHS and industry, to catalyse the generation of evidence on in vitro diagnostic medical devices (IVDs), to improve the way diseases are diagnosed. This will help patients access the most appropriate treatments more quickly and help the NHS make the best use of its resources.
- MRC/NIHR Phenome Centre - the national centre opened in June 2013, is a collaboration between Imperial College London, King's College London, and analytical technology companies the Waters Corporation and Bruker Biospin, and is funded by the Medical Research Council (MRC) and the NIHR. The Centre will enable researchers to better understand how the environment interacts with genes to cause disease and to develop new ways to diagnose and treat diseases, including with treatments tailored for individual patients.

## Faculty

The NIHR Faculty aims to bring together, and support the growing NIHR community of health research professionals, including clinical and support staff from all relevant professional backgrounds. The NIHR Faculty has four categories of membership: Senior Investigators, Investigators, Associates and Trainees.

The NIHR Faculty also provides a range of research training and career development programmes and individual schemes to provide support for the academic training paths of all health care professionals and other key disciplines involved in health and social care research:

- Integrated Academic Training Programme for Doctors and Dentists
- Clinical Academic Training Programme for Nurses, Midwives and Allied Health Professions, in partnership with Health Education England
- Healthcare Scientist Programme in partnership with Health Education England
- Fellowships Programme
- Research Professorships
- Research Methods Programme
- Clinical Trials Fellowships
- Knowledge Mobilisation Research Fellowships
- Leadership Support and Development Programme – provides support and development for leaders across the NIHR, at different career stages.

## Systems

The NIHR is working to make research faster and easier with a focus on outcomes so that research findings can benefit patients more quickly. The NIHR is doing this by developing integrated systems for the NIHR and its partners to streamline and simplify approvals and permissions; and other systems designed to support the development, conduct and dissemination of research. This will support this country's competitive advantage in life science industry research and assist the NIHR in realising its vision to improve the health and wealth of the nation through research.

### Research Management

The NIHR's approach to making research faster and easier in the NHS is to:

- Make the NHS' performance in starting and delivering research transparent and accountable, through the introduction of changes to the NIHR contracts, which includes the introduction of a 70 day benchmark for clinical trial initiation and a transparency commitment on clinical trial recruitment.
- Provide support to help the NHS improve performance, through:
  a) Facilitating NHS providers to share learning about achieving improved performance, encouraging:
     - NHS Trust Boards, researchers clinicians and managers to work together in a partnership, developing and engaging others in a clear, integrated approach to research;
     - organisations to measure how long it takes to start studies and their progress with recruitment against target, and to use this data to monitor performance, identify issues needing attention and plan and take action;
     - organisations to develop a research management culture that understands and promotes the benefits of research to patients, and which pragmatic and proportionate about risk (for example, accepting credible assurances from others) and proactive in planning and managing studies throughout their life cycle, including recruitment.

  b) The NIHR Research Support Services framework, a set of tools and guidelines that enable providers and in particular their research managers to take a consistent, streamlined and risk-proportionate approach to considering their participation in research.

  c) The NIHR Research Passport scheme, which supports HR arrangements to simplify the process of issuing or recognising Honorary Research Contracts and Letters of Access to make it easier and faster to begin agreed research studies.

  d) The NIHR Co-ordinated System for gaining NHS Permission (NIHR CSP), which involves a single study-wide review to consider compliance issues, allowing local reviews to focus on whether individual sites can deliver a study.
- Work with the Health Research Authority to simplify approval processes for ethical research, for example on its feasibility study about an HRA assessment for approval of research in the NHS.

## Research Information and Intelligence

The NIHR provides information systems and policies to speed up the research process and maximise the use of information collected in routine NHS care:

- Clinical Practice Research Datalink – in partnership with the Medicines and Healthcare products Regulatory Agency (MHRA), provides a secure and safe access point to patient electronic health records, collected routinely by the NHS, to support research.
- As part of the Patient Choice agenda the NIHR provides services to make sure patients have informed choices in accessing research:
- UK Clinical Trials Gateway – a website and mobile app, that provides patients with easy to understand information about research studies that may be relevant to them.

- The NIHR infrastructure, training and research programmes are supported by NIHR-wide systems including:
- Information Systems – e.g. the NIHR Portal, developed to help researchers work more efficiently, tracking programme and project awards for research funding applications, tracking research trainees funded by NIHR and monitoring the performance of the NIHR.
- Management Information systems – including the NIHR Dashboard, a standardised reporting system that provides information about research that has been funded.
- Research outputs Assessment Tool – that captures the progress of all NIHR commissioned research on an annual basis.
- The NIHR Open Data Platform – that makes available useful support data sets that researchers require in a single place.

The NIHR also engages with a wide selection of stakeholders to champion the benefits of research and has appointed a NIHR Director of Public Participation and Engagement in Research. The NIHR promotes the role of clinical research in improving treatments for NHS and social care patients and its work includes patient, public and carer facing campaigns and encouraging NHS Providers to raise awareness of local opportunities to participate in research and put patients at the heart of their research agenda.

# Supporting growth and the UK life sciences industry

The UK life sciences industry is a strong driver of economic growth. It contributes to the delivery of high-quality healthcare through the development of innovative medicines and medical technologies. The NIHR aims to develop the reputation of the NHS as a world-class environment for collaborative research in the public interest and to establish NHS as the preferred host for multi-centre clinical research in partnership with and for industry. The NIHR Office for Clinical Research Infrastructure facilitates industry's engagement with the NHS clinical research infrastructure by providing expert advice to life sciences research partners including pharmaceutical, biotechnology, contract research organisations and device and diagnostic companies.

## Support for NHS organisations that sponsor or host research

Research and the use of research evidence are key to achieving improvements in outcomes. The NHS constitution states that the “NHS should ensure that patients are made aware of ethically approved research of particular relevance to them” so that they can choose whether they wish to join in. All of the NIHR work streams, described above aim to support NHS organisations to sponsor or host research and to provide patients with the opportunity to take part in research.

The NIHR Research Capability Funding provides funding to research-active NHS organisations to help support research activity. Funding is allocated in proportion to the total amount of other NIHR income received by that organisation, and on the number of NIHR Senior Investigators associated with the organisation. Funding is also allocated to NIHR Clinical Research Networks for their local research networks, via the NHS organisations that host each local network.

## Further information

Further information is available on the NIHR website (www.nihr.ac.uk).

Information correct as of June 2013.