

Transforming Health Research

the first two years

National Institute for Health Research

Progress Report 2006–2008

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Transforming Health Research

the first two years

National Institute for Health Research Progress Report 2006–2008



Who we are and what we do

The National Institute for Health Research (NIHR) was established in April 2006 to carry forward the vision, mission and goals outlined in Best Research for Best Health.*

Vision

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

Mission

To create 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 care
- Strengthen and streamline systems for research management and governance
- Act as sound custodians of public money for the public good.



*Best Research for Best Health. A new national health research strategy. Department of Health, January 2006.

www.nihr.ac.uk

We exist 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
- enable the NHS to support outstanding individuals – leaders and collaborators – working in worldclass facilities in both the NHS and universities, conducting leading-edge research focused on the needs of patients and the public
- benefit patients, society, the NHS and all our stakeholders by developing the NHS's reputation as the best environment for collaborative research in the public interest

 establish the NHS as the preferred environment in which to carry out multicentre clinical research in partnership with and for industry and noncommercial organisations as outlined in the Government's ten-year Science and Innovation Investment Framework.

See our plans, timetables and progress to date at www.nihr.ac.uk/about_ implementation_plans.aspx

C The Institute will provide cohesion for all parts of the research endeavour from people and programmes to infrastructure.

Professor Sally C. Davies, Director General of Research and Development



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Foreword by the Prime Minister



The science base in the UK is the foundation of our economic future and medical research is key to ensure our NHS is well placed to benefit from the latest technologies

One of the founding principles of the National Health Service was the requirement to conduct research for the improvement of health and medical treatment. With the pace of technological and scientific advance, this is even more important today than it was sixty years ago. The future health and wealth of our country depend on it.

That is why this government has been working over the last ten years to make this country the most attractive place in the world for science and innovation.

Our 10-year Science and Innovation Framework published in 2004 highlights the vital role research plays in the knowledge economy through its contribution to international competitiveness and economic growth.



10 DOWNING STREET LONDON SW1A 2AA

Health research has a central role in all of this. It is an undisputed area of strength for Britain, in which I believe we can take great pride. That strength derives from the quality of the research base across all sectors: academia, NHS and industry. It is underpinned by the massive and growing investment in health research and development made by my Government – we have committed an unprecedented £17 billion to the Single Health Research Fund over the next ten years - together with investments from our partners in industry and the research charities. And increasingly we will see the NHS contributing as an active partner in sustaining Britain's world-leading position.

Health research underpins the quality of all our health services – making a vital contribution to health outcomes. This fact alone means that it matters to each and every one of us. It matters because all of us rightly have high expectations of the NHS and its ability to offer the most cutting-edge care. And it matters because delivering the best possible health care relies on doing the best possible research.



Science spending has more than doubled since 1997. The Government's total investment in health research will top £1.7 billion per annum by 2010 –11. The last decade has seen remarkable progress including:

- the establishment of the UK Clinical Research Collaboration in April 2004;
- the launch of a new R&D strategy for the NHS in January 2006;
- the establishment of the National Institute for Health Research in April 2006;
- the publication of the Cooksey Report in December 2006; and
- the establishment of the Office for Strategic Coordination of Health Research in 2007.

The work of the NIHR – as demonstrated in this report – will play a key role in ensuring that the UK remains at the forefront of health research and the location of choice for pharmaceutical research and development.

This impressive progress report demonstrates that our vision of transforming health research in this country is starting to be realised.



The Prime Minister Gordon Brown

January 2008





Foreword by the Minister of State for Public Health

This report is published to celebrate the achievements that have been made since we

launched Best Research for Best Health in January 2006. The strategy is ambitious and far-reaching, and in under two years we are already seeing tangible results.

Not only does health research enable us to tackle the challenges that disease and ill health present, it also contributes to our international competitiveness and economic growth.

This document explains how we have established the National Institute for Health Research (NIHR) to set about creating the conditions to make the NHS and England an internationally recognised centre of research excellence. Swift progress has been made by forging new partnerships with both academia and industry, sharpening the focus for clinical trials and reducing bureaucracy, all supported by an increase in funding.

At the centre of all this work are our patients. Evidence shows that patients who take part in clinical trials receive better care, and this can have a big effect on quality throughout the health service as new findings and best practice are developed and shared. Joining in clinical trials for new technologies and treatments should be available to every patient and clinician, not just those who happen to live near a specialist centre. We have committed an unprecedented amount of money to develop new NIHR research networks and NIHR research centres and units all over the country, and to fund more research itself. Our intention is to make the NHS a hive of research activity that attracts the best researchers in the world. We are fostering a culture that pioneers new treatments in the full range of settings, and working to improve health outcomes for all NHS patients.

This report describes the great progress made to establish the structures, the people and the programmes of work needed to transform health research in England. In the first 18 months, 78 industry-sponsored trials have been adopted by the Government's new clinical research networks for important areas of public health. These include cancer, brain disease, mental health, stroke, diabetes, children's medicines and primary care. Some 104 companies are involved in these new arrangements, and 200 more trials are currently being discussed and assessed. The new trials will come on top of some 300 or so publicly funded trials already under way in the NHS.



All of this is good news and there is still so much to do. The sheer scale of this task means the NIHR has a huge job on our behalf continuing to put in place the architecture to support so much work. At the same time, the NIHR continues to launch new research initiatives and commission more research projects. The NIHR is also working closely with the Medical Research Council and the Office for Strategic Coordination of Health Research to forge a new joint health research strategy building on Best Research for Best Health.

Research is the lifeblood of high-quality healthcare. Without research, we will have no better understanding of the diseases that blight the lives of so many people, nor any better means of preventing, treating and curing these diseases. Research not only provides us with hope – it provides us with the weapons to fight, and win, the battle against disease. The funding that the Government recently announced in the Comprehensive Spending Review will enable our NIHR to ensure that new discoveries from basic science are developed and translated into real benefits for patients in the NHS. When our Government published the Best Research for Best Health strategy we set the following 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 care
- Strengthen and streamline systems for research management and governance
- Act as sound custodians of public money for public good.

This is such an exciting time for health research in England, and I believe there are many challenges that will stretch beyond 2010. Never have there been more opportunities for people to get involved and to continue to break new ground.

Jaun Theman

Rt Hon Dawn Primarolo MP Minister of State for Public Health

Summary of progress

January 06

Best Research for Best Health

Best Research for Best Health: A New National Health Research Strategy lays out ambitious plans to reform the NHS contribution to health research in England.

April 06

for Best Health.

Health Research (NIHR)

is launched as a virtual

institute to deliver the plans

outlined in Best Research

We start transforming

NHS research funding

transition period to ensure

We begin a three-year

that NHS spending on

research is transparent,

planned and focused on

delivery.

NIHR starts The National Institute for

May 06

Increasing evidence for Primary Care

The NIHR School for Primary Care Research is launched. It will receive an annual £3 million to increase the evidence for better services.

Topic specific Clinical Research Networks open for business

Research Networks for Diabetes and Stroke are created as part of the UK Clinical Research Network (UKCRN) to support clinical research in the NHS.

For the Cooksey Review agenda to succeed, NHS Research and Development (R&D) had to become far more responsive. The NIHR is enabling this to happen and to harness the extraordinary resources of the NHS so that Britain can be at the forefront of medical progress in a very competitive world.

Sir David Cooksey

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of Technology (NEAT) and the Health Technology Devices (HTD) are praised in the Sunday Times Healthcare Technologies supplement. **Dedicated facilities for experimental medicine** A consortium of funders, including the NIHR, Medical Research Council (MRC), the major health

July 06

in the news

Technology programmes

Three of our programmes

Assessment (HTA), New

and Emerging Applications

Health Technology

research charities and the other UK health departments, working under the umbrella of the UK Clinical Research Collaboration, provides £84 million to develop and strengthen Clinical Research Facilities in the UK and Ireland. ▲ To maintain the UK's place in the global economy there must be collaborative and entrepreneurial working between academia, government and industry, coupled with a facilitative environment for cutting-edge research. The establishment of the NIHR, its promise and progress, plays a central role in this and will help to attract more international research to the UK.

Nigel Brooksby, President of the Association of the British Pharmaceutical Industry

Research is an integral part of providing healthcare of the highest quality. The NIHR is progressively developing the infrastructure which will allow the unique research potential of the NHS to be realised.

Professor Kent Woods, Medicines and Healthcare products Regulatory Agency

August 06

Research for Patient Benefit

Our new Research for Patient Benefit Programme gets under way with plans to allocate up to £25 million a year to support projects in the NHS.

DeNDRoN Clinical Research Network

The Dementias and Neurodegenerative Diseases Research Network (DeNDRoN) comes into operation to support clinical research in the NHS.

October 06

Boost for cancer research

Experimental Cancer Medicine Centres are launched across the UK with £35 million over five years from the NIHR, Cancer Research UK and the health departments of Scotland, Northern Ireland and Wales.

Model Agreement

A revised model Clinical Trial Agreement (mCTA) is introduced to speed up and streamline industry-funded research in the NHS for industry.

December 06 Cooksey Review

Gordon Brown wholeheartedly welcomes Sir David Cooksey's influential report which commends the work of the NIHR. The Office for Strategic Coordination of Health Research (OSCHR) is set up with Sir John Bell appointed as interim chair.

Minister Andy Burnham launches the Medicines for Children Research Network

The Medicines for Children Research Network (MCRN) is established so that children can, for the first time, be treated with medications tailored to their specific needs.

Comprehensive coverage by research network Consultation starts on the configuration of the Comprehensive Local Research Networks across England.

The establishment of the Biomedical Research Centres, Research Networks, Programme Grants for Applied Research and Research for Patient Benefit Programme are major steps forward which create a strong framework for future health-related research for the benefit of the health and wealth of the nation.

Professor Sir John Tooke, Medical Schools Council

March 07

Primary Care Research Network (PCRN) launched

The PCRN will enable quicker, easier access to innovative approaches for managing chronic conditions and methods of detecting and preventing health problems.

April 07

Making the best better In a major contribution to the UK's scientific excellence the NIHR Research Centres start work. Worth up to £459 million over five years, their role is to enable our leading NHS and university partnerships to drive progress on innovation and translational research in Biomedicine and NHS Patient Safety and Service Quality.

Programme Grants for Applied Research

We make 29 awards for applied research worth up to £2 million each over three to five years. The scheme will be worth up to £75 million each year when fully established.

Advice service

We launched an advice service on regulatory and governance questions.

Putting patients first

INVOLVE, a body funded by the Department of Health to promote and support active public involvement in the NHS, public health and social care research, recruits new members.

Healthcare Innovations: the next frontier

The MRC, the Association of the British Pharmaceutical Industry (ABPI) and the NIHR bring visionaries of the pharmaceutical industry together with politicians and patients at the QEII Conference Centre to debate potential healthcare needs and solutions up to and beyond 2020.

May 07

The NIHR Faculty opens its doors

We create the NIHR Faculty for all professionals who carry out people and patientbased applied health research and who are funded by the NIHR or the Department of Health's Policy Research Programme (PRP).

July 07

Biomedical Research Unit funding scheme is launched

Up to £1 million per year is made available to enable each NHS and university partnership to achieve or further develop critical mass in a priority health research area.

• I am very positive about the huge amount that has been achieved on the NIHR agenda in such a short period of time.

Harpal Kumar, Cancer Research UK

September 07

New opportunities for research

In partnership with the NIHR, NHS Connecting for Health sets up the enabling phase of a new Research Capability Programme.

Rewarding innovation

Awards of up to £100,000 each go to the first seven research projects under our Research for Innovation, Speculation and Creativity (RISC) Programme. RISC is worth £5 million every year.

October 07

Fellowship of Excellence

The NIHR Fellowship Scheme is launched for promising researchers with the potential to become the research leaders of tomorrow.

CLAHRCs

A sum of £50 million is allocated to our Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) to identify effective new health interventions and support turning these into routine clinical practice.

We introduce Research Passports

The Research Passport system is introduced to make it easier and faster to begin agreed research studies.

Three-way model Jaunched We Jaunch the first

We launch the first nationally approved tripartite model Clinical Trial Agreement for use between contract research organisations, NHS trusts and pharmaceutical companies. Its aim is to speed up the contracting process for industrysponsored trials.

November 07

New partnership arrangements for clinical trials

A range of integrated initiatives with the MRC will ensure that findings made in the laboratory are developed as fast as possible into new preventive measures, methods of diagnosis and treatment:

- the Efficacy and Mechanism Evaluation Programme to underpin our understanding of biological or behavioural mechanisms and processes to be run by the NIHR for the MRC
- Patient Research Cohorts Initiative, where groups of patients with the same illness are asked to participate in research to help shed light on how diseases progress, led by the MRC with 50 per cent NIHR funding

• the Methodology Research Programme to develop new and improved systems and theories for health research, run by the MRC on behalf of the NIHR and the MRC.

Assisted Living Innovation Platform

Led by the Technology Strategy Board, it will look to find healthcare solutions for living longer in the 21st century.

January 08

NIHR Faculty Senior Investigators selected

Our initial tranche of NIHR Faculty Senior Investigators are selected and their names will be announced in the spring.

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GOAL ONE: Establish the NHS as an internationally recognised centre of research excellence

The second

Establishing the infrastructure

The NIHR was launched in April 2006 as a virtual national research facility to provide the framework for positioning, managing and maintaining the research, staff and infrastructure of the NHS in England. During 2006/07, we invested £56.9 million to accelerate research and development.

Directed by Professor Sally C. Davies, the NIHR is providing coherence and focus for NHS research and development and a focal point for research commissioning.

Network solutions

New, improved treatments for common but debilitating conditions such as stroke, diabetes, dementia and mental illness are vital. But before these can reach patients, they must undergo rigorous clinical trials to prove they are safe and effective. We have set up topic specific and comprehensive networks to ensure that all NHS patients and clinicians from all parts of the country can share the benefits of participating in clinical research by working with partners and funders, including industry.

The NIHR clinical research networks were set up to support a high-quality portfolio of clinical trials and other well-designed

studies throughout England, and to promote patient and public involvement in health research. They are already boosting the numbers taking part in clinical trials, improving their speed, quality and coordination, and strengthening NHS links with industry.

Models of success

The NIHR research networks are made up of the new Primary Care Research Network (PCRN), the Comprehensive Clinical Research Network (CCRN) and six topic specific clinical research networks (see NIHR research networks diagram on page 5).

The NIHR topic specific networks are:

- Cancer
- Dementias and Neurodegenerative Diseases
- Diabetes
- Medicines for Children
- Mental Health
- Stroke.





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We are modelling these on the highly successful National Cancer Research Network (NCRN), established in 2001, which has more than doubled the number of patients included in trials. These include the Medical Research Council (MRC)

leukaemia (myeloma) trials, which had previously fallen short of reaching their recruitment target (see graph below). We now have a greater percentage of cancer patients in clinical research trials than any other country.



Medical Research Council Myeloma Trials

Recruitment to cancer trials rose steeply following the establishment of the National Cancer Research Network, as demonstrated by the myeloma trials example.

£16 million

the sum allocated each year to the National Cancer Research Network

Comprehensive coverage

All other diseases and areas of need are covered by our Comprehensive Clinical Research Network (CCRN) across England, with 25 Comprehensive Local Research Networks covering the whole of the country. The UK Clinical Research Network (UKCRN) Coordinating Centre co-located in Leeds and London manages, coordinates and oversees the work of all the networks for the NIHR, including the Comprehensive Clinical Research Network.

Topic specific clinical research network coordinating centres



Focus on... the NIHR Stroke Research Network

This is making a real difference to stroke patients

Many more stroke patients are benefiting from research to find treatments that could save lives and prevent disability, says stroke physician, Professor Gary Ford, Director of the NIHR Stroke Research Network.

'The Stroke Research Network is providing us with the dedicated local leadership and resources needed to enable us to undertake high-quality research with stroke patients. This used to be difficult because of pressures on clinical care, the lack of secure funding for nurses with stroke research skills and the problems in getting research scans.

'Stroke was always going to be a difficult call because people who have had a stroke often lack the ability to give personal consent. Since the creation of the network, however, we have doubled the number of patients entering trials. For the first three months of 2007, the networks recruited 905 patients across the UK compared with fewer than 450 in 2006.

'Our eight networks cover 31 million people in England and work closely with networks in Northern Ireland, Scotland and Wales. We aim to get 400 patients per network into trials each year. This year we expect the average to be more than 300.

'We are also improving the quality of stroke research. We have an excellent relationship with the Stroke Association and work together to help researchers develop high-quality research proposals.

'The network is bringing increased collaboration between different professionals too – not just stroke physicians but nurses, physiotherapists, occupational therapists, speech and language therapists, and public health professionals.

'We also have active patient and carer involvement, which we did not have before. All these things will ultimately improve the lives of stroke patients and their carers.'



Recruitment to Stroke Research Network-adopted studies, 2006/07–2007/08

There has been a marked increase in recruitment to stroke trials since the NIHR Stroke Research Network started work in May 2006.

Better treatments for sick children

We have allocated £20 million over five years to the Medicines for Children Research Network (MCRN) so that children can, for the first time, be treated with medications tailored to their specific needs.

The new MCRN, led by a partnership between the University of Liverpool and Alder Hey Hospital (the Royal Liverpool Children's NHS Trust), aims to facilitate the development of safe, effective medicines specifically for children. This means that, for the first time ever, children can benefit from treatments designed, developed and licensed especially for them. Many of the medicines doctors use to treat sick children are actually designed for and tested on adults. Clinicians use their skill and judgement when deciding how to prescribe them for children, but they desperately need a sounder evidence base for their prescriptions.

A wide range of health professionals are involved in the Network together with representatives from the pharmaceutical industry and most importantly, children and their parents.

Focus on... the NIHR Medicines for Children Research Network

I want researchers to find better medicines than the ones I had

Former leukaemia patient Georgia Semple, aged 10, explains how she hopes the Medicines for Children Research Network will improve treatments for other children with that condition.

'Having leukaemia was horrid for me and my family. I felt sick and tired all the time. The medicines were horrible. They made my hair fall out, which made me cry and cry. And I had to go to hospital every time I had even a tiny infection. I was on medicine for two and a half years and finished in May. I feel OK now but I still get tired.

'The MCRN asked my Daddy if I would be interested in being on its children's group Stand Up, Speak Up! I said 'Yes' because I want people to find better medicines than the ones I had.

'We meet up about once every two months. There are about 14 children in the group split into two age groups – nine to twelve years old and thirteen to eighteen. 'We have been learning about how medicines work, where they come from and how trials are done. I know what a randomised controlled trial (RCT) is and I am taking part in one for leukaemia treatment.

'We've helped make information sheets better for children and



designed logos, which were actually used. I also designed the smiley faces logo for Stand Up, Speak Up!

'Our group is helping researchers decide which trials should be done. I missed that session but we choose ones that should make a real difference to how children are treated.'

Georgia Semple is on the young persons' advisory panel set up to work with MCRN leaders and to encourage young people receiving medical care to take part in research. She has two sisters, a kitten, a dog and a Mummy and Daddy.

£20 million

the sum we allocated to the Medicines for Children Research Network over five years

Putting primary care centre stage

Most NHS consultations take place in GP surgeries, health centres, antenatal clinics, pharmacies and other primary care settings. Our Primary Care Research Network for England and School for Primary Care Research are improving the evidence base for practice in these areas.

Primary care is where 85 per cent of NHS consultations take place and where most people learn how to stay healthy and prevent disease. It is also the main location for screening, early diagnosis and treatment of long-term conditions. Until now, though, most research has bypassed the primary care setting – particularly multi-centre randomised controlled trials requiring large numbers of patients.

There is no denying that the primary care setting can be a challenging one in which to set up studies. Traditionally, most research has taken place in hospitals. There is a perception – shared by many staff and patients – that research is not really central to the business of looking after patients in the community. In addition, there is also the fact that most primary care is independently contracted to the NHS. Bringing research into these settings is, however, essential to increase the evidence base upon which clinicians base decisions in order to improve the quality of patient care. To encourage this, we have set up two flagship initiatives – the NIHR Primary Care Research Network for England and the NIHR School for Primary Care Research. Between them, they are providing a coordinated approach to developing and delivering a high-quality primary care research programme and collaborating in areas of shared interest and responsibility.

Increasing the evidence

The NIHR School for Primary Care Research is a £15 million initiative, headed by Professor Martin Roland of the University of Manchester, made up of the five academic departments of primary care which were rated as 5 or 5* in the 2001 Research Assessment Exercise (RAE).

Under its auspices, some 38 studies have now started in five areas. They include:

- monitoring and managing long-term conditions
- the patient–practitioner interface
- prevention and early diagnosis
- co-morbidity and patient-focused outcomes
- new methods for primary care research.

Laying the foundations

The School for Primary Care Research is a partnership between the five leading centres for primary care research in England:

- Birmingham
- Bristol
- Cambridge
- Manchester
- Oxford.

A coordinated approach

Meanwhile, the Primary Care Research Network is providing the infrastructure across England which is needed to get studies up and running in the community setting. This is bringing together GPs, dentists, pharmacists, health visitors and other primary care practitioners as well as offering patients unprecedented opportunities to become involved in high-quality clinical studies. The Network covers the whole of England and is led by Professor Paul Wallace of University College, London.

Between them, the two bodies are providing a coordinated approach to developing and delivering a high-quality primary care research programme and collaborating in areas of shared interest and responsibility.

2007/08 Planned spend Spend £3m

School for Primary Care Research

Focus on... the NIHR School for Primary Care Research

Patients can expect better care based on sound evidence

GP Professor Martin Roland explains how the School for Primary Care Research is enabling GPs and other primary care professionals to provide better care for patients.

'The UK is the world leader in primary care research. The additional funding for researchers and the links that the School is fostering between these five leading centres of excellence will increase our strength and allow us to develop new ways of working together that have not been possible before.

'To give just a few examples, researchers are evaluating a device to help GPs diagnose moles more accurately, new ways to diagnose cancer at an early stage, better ways of interpreting tests for thyroid disease and heart failure, and group therapy for women with depression.

'This research will give professionals in primary care the tools they need to provide better care for patients and a sound evidence base on which to develop strategies for preventing and diagnosing illness at an early stage, managing childhood infections, and managing long-term conditions such as diabetes and heart disease.'

Martin Roland is Professor of General Practice at the University of Manchester and Director of the School for Primary Care Research. He is also Director of the National Primary Care Research and Development Centre (NPCRDC) based at the Universities of Manchester and York, which is funded by the Department of Health's Policy Research Programme.

Working with industry

Representatives from the devices, biotech and pharmaceutical industries are working with our Clinical Research Networks and building relationships as they work together to streamline the processes used to set up clinical studies and trials, and ensure that trials are delivered on time and to budget.

Over the last two years, we have been working with industry to smooth out processes for getting studies up and running and to develop services to encourage companies to place research through our Networks.

To improve the environment for clinical research, we work closely with industry at all levels, including the Ministerial Industry Strategy Group (MISG) and the High Level Industry Reference Group of the UK Clinical Research Collaboration (UKCRC), chaired by Sir David Cooksey (see table opposite). Strategic discussions on research and development in the UK are also undertaken by the UKCRC Board.

The UK Clinical Research Network (UKCRN) Industry Team is also working closely with stakeholders on our behalf through the UKCRC Industry Road Map Group to develop processes to make contract and collaborative research easier to get off the ground. This is already producing results: 234 potential clinical trials are being discussed with the Networks; 78 trials have already been adopted, of which 32 have now started or are in set-up. The UKCRN's brochure Working with Industry outlines the new opportunities for clinical research provided by the networks.



Improving the research environment

In October 2006, after an extensive consultation, we introduced a new bipartite model Clinical Trial Agreement (mCTA) to be used by pharmaceutical and biotechnology sponsors of contract clinical trials and the NHS hospitals from which patients are recruited. Use of the mCTA improves start-up times for trials by removing the need for sponsors or hospitals to carry out legal reviews of contracts on a trial-by-trial basis.

To complement this, a year later we introduced the tripartite Contract Research Organisation model Clinical Trial Agreement (CRO mCTA), between the pharmaceutical company sponsoring the trial, the CRO managing it and the NHS trust hosting it. This is the first time that a CRO-managed agreement has been launched.

The agreement covers phase I–IV trials involving NHS patients, for example those done to evaluate the safety and efficacy

Our p	partnerships	with	industry	are	having	a real	impact

Group	Purpose	Examples of outputs
Ministerial Industry Strategy Group (MISG)	Strategic dialogue between Government and pharma and biotech industries	Published the Long Term Leadership Strategy to maintain and strengthen the environment for industry in the UK; improving health for patients treated in the NHS
Healthcare Industries Task Force (HITF) Strategic Implementation Group	Oversees implementation of HITF deliverables and provides a forum for strategic dialogue with devices industries	Call for pilot Healthcare Technology Cooperatives Increase of funding for NEAT and HTD Programmes
MISG Clinical Research Working Group Formerly PICTF Clinical Trials	Improving the UK environment for contract and collaborative research in the NHS	Launch of model Clinical Trial Agreement (mCTAs) to speed up the initiation of approved industry studies in hospitals Published the standard form for Primary Care Research Governance Permission to speed up trial initiation in general practice
UKCRC Industry Road Map Group	Network/industry Group examining how Networks can best work with industry, focusing on the provision of more reliable feasibility data and faster set-up times for trials.	Developed and published the UKCRN Service Proposition, with named contacts for industry studies Developed and piloted an adoption process for industry studies conducted in the Networks Developed and implemented generic confidentiality agreements Work initiated on a standard costings template and guideline tariffs for trials

of medicines prior to the decision to grant them a Marketing Authorisation or to assess safety once a new medicine is on the market.

The contract, which is put in place once a trial has regulatory and ethics approval, gives NHS trusts and companies the assurance that appropriate legal safeguards are in place.

Together, the two agreements are helping to avoid the site-by-site review and renegotiation of Clinical Trial Agreements which have, until now, been a major stumbling block to the quick and efficient initiation of trials with regulatory and ethical approval. Their introduction is an important step towards reducing bureaucracy while safeguarding important standards. The Association of the British Pharmaceutical Industry (ABPI), the BioIndustry Association (BIA), the Clinical Contract Research Association (CCRA), the Council of Heads of Medical Schools (now Universities UK) and the NHS all worked with us to develop these agreements and endorsed their routine use in unmodified form, proving their willingness to collaborate and reduce previous barriers to commercial clinical research.

Collaborating to showcase healthcare innovation

Leaders of the pharmaceutical industry, the NHS and medical research organisations came together for a high-level conference at the QEII Conference Centre in April 2007. Jointly sponsored by the Association of the British Pharmaceutical Industry, the Medical Research Council and the NIHR, the conference was the first of its kind to examine the challenges of providing healthcare up to and beyond 2020 both here in the UK and globally.

With a keynote address given by Lord Hunt of Kings Heath, OBE, then Minister of State for Quality at the Department of Health, influential innovators considered the potential of stem cell research, personalised medicines and biotechnology to improve health, well-being and quality of life for patients and the public.

Focus on... industry-sponsored trials

Professor Rick Kaplan, Associate Director for Industry at the UK Clinical Research Network describes how we are overcoming previous hurdles to industry-sponsored trials.

'We have many of the best clinicians in the world but in the past large randomised, controlled, multi-centre clinical trials took a long time to get going, which deterred industry. We have been tackling some of the major bottlenecks that have held up the process. The Networks have enabled us to put staff in place to do trials and to set working rules for both trusts and companies.

'For the first time ever, we are bringing consistency to the way trials are negotiated and governed and to how costs are estimated. We also have a unified "adoption process", which enables us to decide within two weeks whether a research proposal from industry can and should be taken forward.

All this means that, when we are satisfied that there will be clear patient benefit – for example in the form of a new drug, a new route of delivery or fewer side effects – clinical trials will start faster.

'The improvement in speed and consistency will stimulate industry investment and money. This in turn will flow back into the networks building even more capacity, which in turn will bring in more money – it's a win–win situation.'

Turning breakthroughs into treatments

UK researchers have a long and outstanding record of basic scientific research. We are investing £450 million in 11 new Biomedical Research Centres to help transform their breakthroughs into life-saving treatments for patients.

The new Centres, all with a worldwide reputation for excellence, are investigating major causes of illness and death including cancer, heart disease, asthma, HIV, mental illness, blindness, childhood diseases and ageing.

The Centres began operating in April 2007. They share £50 million during the first year of operation, to allow for start-up costs, and will receive £100 million a year from April 2008, totalling £450 million over five years.

We also awarded them over £50 million of capital funding in 2007 for new

buildings and renovations to enable them to refurbish and relocate equipment, including the scanners, imaging and assay devices, needed to support their leadingedge research programmes. The investment underpins the contribution of the NHS to international scientific excellence and is helping to keep England at the top of the world biomedical research league table.

There are five Centres working across a wide range of research areas plus six outstanding specialist centres. They were selected through open competition by an independent international panel to ensure the highest standards.



Want patients to benefit from sight-saving treatments

Professor Peng Tee Khaw and his colleagues are developing treatments for eye diseases which will one day help save the sight of men, women and children all over the world.

'Whenever I tell patients about a piece of biomedical research that could lead to a new treatment, their first question is always "When will it be ready to help me?" They don't want treatments in five or ten years time, they want them now – and, as doctors and researchers, so do we.

'Although we have already developed several new sight-saving treatments, these have taken many years. The new NIHR Biomedical Research Centre gives us a fantastic opportunity to fast track experimental treatments so that patients can benefit from potentially sight-saving treatments sooner rather than later.

'We are working on exciting new treatments, whose progress will be greatly speeded up by Biomedical Research Centre support. These include gene therapy for inherited childhood blindness, new medicines to prevent scarring in the eye, and stem cell therapy, which could help regenerate different parts of the eye and restore sight.

'Being the national Biomedical Research Centre in our specialist area has already enabled us to attract charitable donors and industry from the UK and around the world to help support our research in the NHS and university sector. Capital funding from the NIHR has also allowed us to begin building a new Translational Research Clinical Centre (the "Fast" TRACC Unit) with stateof-the-art diagnostic facilities. These include imaging of individual cells in the eye alongside new therapeutic facilities required to develop and deliver the very latest treatments.

'Our research is driven by the needs of our patients. The new biomedical research centre gives them and us hope and inspiration to create the treatments of tomorrow today.'

Professor Peng Tee Khaw is Director of the Biomedical Research Centre at Moorfields Eye Hospital and the University College London (UCL) Institute of Ophthalmology. Research themes are age-related macular degeneration, diabetes and the eye, glaucoma, childhood and inherited eye disease, and ocular surface diseases.



Professor Peng Tee Khaw is Director of the Biomedical Research Centre at Moorfields Eye Hospital and the UCL Institute of Ophthalmology.

Specialist NIHR Biomedical Research Centres

NHS Organisations	Academic partner	Specialism	Work Themes
Great Ormond Street Hospital for Children NHS Trust	University College London, Institute of Child Health	Paediatrics/ Child Health	Molecular Basis of Childhood Diseases; Gene, Stem and Cellular Therapies; Novel Therapies for Childhood Diseases
Moorfields Eye Hospital NHS Foundation Trust	University College London, Institute of Ophthalmology	Ophthalmology	Age-Related Macular Degeneration; Diabetes; Glaucoma; Ocular Surface Disease; Paediatric Ophthalmology and Inherited Eye Disease
Newcastle upon Tyne Hospitals NHS Foundation Trust	University of Newcastle	Ageing	Dementias and Neurodegenerative Diseases; Stroke and Cardiovascular; Ageing; Mitochondria; Diabetes; Liver; Musculoskeletal; Vision
Royal Liverpool and Broadgreen University Hospitals NHS Trust	University of Liverpool	Microbial Diseases	Sexual Health; Respiratory; Infectious Diseases; Safety of Interventions; Community and Hospital-Associated Infection
Royal Marsden NHS Foundation Trust	Institute of Cancer Research	Cancer	Cancer; Genetics; Molecular Pathology; Drug Development; Breast Cancer; Haemato-Oncology; Urological Cancers; Paediatric Oncology; Head and Neck; Academic Radiotherapy and Physics; Cancer Imaging
South London and Maudsley NHS FoundationTrust	King's College London Institute of Psychiatry	Mental Health	Substance-Use Disorders; Anti-social and Aggressive Behaviour; Common Mental Disorders; Mental Disorders Starting in Childhood; Dementia and Related Syndromes; Psychosis; Biomedical Technologies Research; Analytical Methods Research; Stakeholder Participation Research; Clinical Neurosciences

Comprehensive	NIHR	Biomedical	Research	Centres
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NHS Organisations	Academic centre	Work themes
Cambridge University Hospitals NHS Foundation Trust	University of Cambridge	Cancer; Cardiovascular Medicine; Obesity; Diabetes and Metabolic Disorders; Imaging; Infection and Immunity; Medical Genetics; Musculoskeletal Disorders; Neurosciences; Improving Outcomes in Transplantation; Women's Health; Translating Biological Science Into Clinical Care – Capacity Development and Training
Guy's and St Thomas' NHS Foundation Trust	King's College London	Asthma and Allergy; Managing Atherosclerosis Risk and Ischaemic Injury; Emerging diagnostic and therapeutic approaches in organ and cell transplantation; Infection and Immunity; Molecular profiling in cancer; Severe skin disease; Oral Health
Imperial College Healthcare NHS Trust	Imperial College London	Cancer; Cardiovascular Disease; Child and Adolescent Medicine; Genetics and Genomics; Haematology; Hepatology and Gastroenterology; Imaging; Infection; Endocrine, Metabolism and Diabetes; Neurosciences; Public and International Health; Renal Medicine and Transplantation; Reproductive Medicine and Development; Respiratory Medicine; Rheumatology; Surgery and Surgical Technology
Oxford Radcliffe Hospitals NHS Trust	University of Oxford	Bioengineering Innovation and Technology (BIT); Blood; Brain; Cancer; Diabetes; Genetics; Heart; Imaging; Immunity; Infection; Stroke; TRIO Cohorts; Vaccines; Women
University College London Hospitals NHS Foundation Trust	University College London	Education and Training; Cardiovascular Disease; Anaesthesia and Critical Care; Cancer; Cellular and Gene Therapy; Infectious Disease; Long-Term Conditions; Women and Neonates; Gastroenterology and Hepatology; Imaging; Neuroimaging; Neurodiagnostics; Neurodegeneration; Neurotherapeutics; Pain and Headache; Oral Health

Building on the best

NIHR Biomedical Research Units are being established in NHS and university partnerships with substantial portfolios of world-class biomedical research in health areas not currently covered by our Biomedical Research Centres.

The Units, which are expected to be operational from April 2008, will examine cardiovascular disease, deafness and hearing problems, gastrointestinal (including liver) disease, musculoskeletal disease, nutrition, diet and lifestyle issues including obesity.

Our funding will assist these partnerships to develop their capacity to carry out research in their particular specialist area so they can compete for Biomedical Research Centre status in future funding competitions. Our new Biomedical Research Units will therefore be 'building on the best', whereas our Biomedical Research Centres are 'making the best better'.

Uniting clinicians and scientists

A key part of our strategy to turn laboratory research into new approaches to treatment is to bring scientists and clinicians together to promote patient-centred clinical and applied research based on experimental findings.

To support dedicated Clinical Research Facilities for Experimental Medicine, we invested £6 million of capital during 2007 in the research infrastructure of the NHS, as well as providing running costs of £2.1 million to support a small number of NIHR Developmental Clinical Research Facilities. We are also investing £5 million each year in running costs for Clinical Research Facilities established in collaboration with the major health research charities, the MRC and the UK health departments, under the banner of the UK Clinical Research Collaboration, in a funding competition led by the Wellcome Trust.

These are dedicated facilities with cuttingedge technology in which in-depth studies with patients are taking place. All the facilities were awarded to university and NHS partnerships following competition



and independent peer review to ensure the highest possible standards.

Modelled on the four successful Wellcome Trust Millennium Clinical Research Facilities launched in England in 1997 and supported by the Department of Health, they are bringing leading researchers and clinicians together under one roof and acting as a magnet for investors.

Professor Mark Walker, Director of the Clinical Research Facility at Newcastle upon Tyne Hospitals NHS Foundation Trust, which was opened by Professor Sally C. Davies in April 2005, says:

C Researchers are no longer having to use scarce and valuable health service resources to conduct clinical research. We now have a high-quality facility dedicated to clinical research with highly trained and experienced staff and state-of-the-art equipment. As well as supporting academic studies, we are also able to accommodate industry studies.

Dedicated space

The Clinical Research Facility at Newcastle's Royal Victoria Infirmary, for example, provides a dedicated space all under one roof for researchers investigating conditions such as arthritis, diabetes, stroke and ageing. The facility has 16 beds with sophisticated clinical signs, monitoring equipment, six outpatient rooms, an exercise lab, procedure and specimen preparation rooms, as well as dedicated Positron Emission Tomography (PET) and Magnetic Resonance Imaging (MRI) scanners and bone spectrometry.

Clinical Research Facilities Lead NHS Organisations

Lead NHS Organisations	Academic partner
Birmingham Children's Hospital NHS Foundation Trust; University Hospital Birmingham NHS Foundation Trust	University of Birmingham
Brighton and Sussex University Hospitals NHS Trust	Brighton and Sussex Medical School
Cambridge University Hospitals NHS Foundation Trust	University of Cambridge
Central Manchester and Manchester Children's University Hospitals NHS Trust	University of Manchester
Christie Hospital NHS Foundation Trust	University of Manchester
Hull and East Yorkshire Hospitals NHS Trust; York Hospitals NHS Foundation Trust	The Hull York Medical School
Imperial College Healthcare NHS Trust	Imperial College School of Medicine, London
King's College Hospital NHS Foundation Trust; South London and Maudsley NHS Foundation Trust	King's College London
Newcastle upon Tyne Hospitals NHS Foundation Trust	University of Newcastle
Oxford Radcliffe Hospitals NHS Trust	University of Oxford
Royal Devon and Exeter NHS Foundation Trust	Peninsula Medical School
The Royal Marsden NHS Foundation Trust	Institute of Cancer Research
Southampton University Hospitals NHS Trust	University of Southampton
University College London Hospitals NHS Foundation Trust	University College London

Clinical Research Facilities



Towards better cancer treatments

Approximately 285,000 people in the UK are diagnosed with cancer each year and one in three people will develop the disease. That is why we are investing £3 million each year for the next five years into 15 Experimental Cancer Medicine Centres – partnerships between the NHS and medical schools.

Led by the National Cancer Research Institute, and in partnership with Cancer Research UK which ran the competitive process, the NIHR is supporting 13 Experimental Cancer Medicine Centres in England, with an additional two centres designated as Cancer Medicine Centres in development (see map overleaf).

The NHS organisation in each Experimental Cancer Medicine Centre will receive up to £1.25 million over five years from April 2007, while the centres in development will receive over £60,000 per year. This support will meet NHS infrastructure costs for the early testing of new cancer treatments or interventions in human participants. Identical funding from Cancer Research UK will meet research infrastructure costs in partner universities. Four NHS trusts have also been awarded £50,000 each per year by the NIHR in partnership with Cancer Research UK to meet the NHS support costs associated with early phase trials for children with cancer. These are:

- Birmingham Children's Hospital NHS Foundation Trust
- Central Manchester and Manchester Children's University Hospitals NHS Trust
- Leeds Teaching Hospitals NHS Trust
- The Royal Marsden NHS Foundation Trust.



Experimental Cancer Medicine Centres

NIHR Experimental Medicine investment


Supporting safer hospitals

It is vital that patients and the public feel confident in the safety, quality and effectiveness of the care they receive from the NHS. That is why we are targeting more than £9 million over five years to two NIHR Research Centres for NHS Patient Safety and Service Quality.

The centres were chosen by an international selection panel which included patient representation. The Research Centres for NHS Patient Safety and Service Quality are partnerships between the NHS and universities. They are bringing together researchers from a wide range of backgrounds to look at ways of improving patient care and the quality of NHS services.

NHS Organisation	Academic Partner	Work Areas
Imperial College Healthcare NHS Trust	Imperial College London	Using Information to Drive Quality and Safety; Design and Evaluation of Technology for Quality and Safety; Safety Skills; Building Reliability and Resilience; The Role of Managers in Safety and Quality
King's College Hospital NHS Foundation Trust	King's College London	Organisational Governance Implications for Patient Safety and Service Quality; Risk and Patient Safety; Workforce Issues in Patient Safety and Service Quality; Emerging Service Innovations and Health Technologies; Patient Safety and Service Quality Issues

NIHR Research Centres for NHS Patient Safety and Service Quality

It's about better outcomes for patients

Margaret Murphy, whose son Kevin died at the age of 21 as the result of a series of medical errors, was on the selection panel to choose our two NHS Patient Safety and Service Quality Centres. She says:

✓ I was fully involved in the whole selection process. I was not simply a token patient. I had as much standing as everyone else and in fact got to ask the first question. It was very important for me that the projects were patient-focused and I asked each applicant whether they had included patients in the preparation of their submission. I really felt that the message went out loud and clear that this is about patients. We have also awarded development funding totalling up to £750,000 over three years to Bradford Teaching Hospitals NHS Foundation Trust and the University Hospitals of Morecambe Bay NHS Trust to fund their research on patient safety and service quality.

'Memory prompting'

Researcher Rachel Davis is doing a PhD at the Clinical Safety Research Unit at Imperial College London. She is looking at measures patients can take themselves to help prevent medical errors. These include simple solutions such as issuing patients with a medicine bag to remind them to bring in medications when going for day surgery.

£10 million

the sum awarded to improve patient safety and quality of care

Ensuring the safety of
 everyone who comes into
 contact with health services
 is one of the most important
 challenges facing healthcare
 today. The work of the
 NIHR Research Centres for
 NHS Patient Safety and
 Service Quality will make an
 important contribution to our
 efforts to enhance the safety
 and quality of NHS services.

Professor Sir Liam Donaldson, Chief Medical Officer



Focus on... Research Centres for NHS Patient Safety and Service Quality

Considence in hospital care

Professor Charles Vincent and his team are researching ways to reduce the risk of medical errors and to make sure that an operation, a trip to A&E or a stay in hospital is as safe as possible.

'Going into hospital can be a risky business – patients can develop minor infections or, more seriously, be left in pain or given the wrong drugs. Many medical mishaps could be avoided with better systems, which is why we are trying to find simple yet effective ways to enhance safety and quality.

'Projects include using briefings and checklists in the operating theatre, developing a patient safety video, testing out computerised drug prescribing, using robot dispensers in the pharmacy, and developing a model of infection control that could potentially be widened to apply to other hospitals. Just as importantly, we are trying to develop ways to measure the quality of care that patients receive.

'Most of our work is long term, which is why having secure funding from the NIHR is so important. It has put our work on a much firmer footing. Now we can get on with the really important business of improving patient safety and quality of care.'

Professor Charles Vincent is Director of the NIHR Centre for NHS Patient Safety and Service Quality at Imperial College Healthcare NHS Trust.



Harnessing state-of-the-art technologies

Until now, one of the barriers for health researchers in England has been the lack of access to cutting-edge technology. To help overcome this, we piloted a new, dedicated funding stream to support the NHS costs of key imaging platforms.

State-of-the-art technology such as sophisticated MRI and PET scanners and other high-tech equipment underpins health research. Diagnostic imaging equipment, in particular, has been pinpointed as a most critical need in a survey of NHS providers and an Academy of Medical Sciences' report. With this in mind, we are giving £14 million over a period of two years to cover the support costs of diagnostic imaging platforms in 25 NHS trusts (see table opposite).

Jargon buster

Diagnostic imaging – X-rays, radiography, mammography, magnetic resonance imaging (MRI), ultrasound, computerised tomography (CT) scans and positron emission tomography (PET) scans, and other state-of-the-art techniques using computer and digital information technology.

Access to the technology platforms will speed up patient recruitment to trials and accelerate the speed at which results can be used to help patients, as Professor Lindsay Turnbull, Scientific Director of the Centre for Magnetic Resonance Investigations at Hull Royal Infirmary, observes:

Access to equipment for research has been difficult until now. NHS scanning lists are often fully booked so it is hard to do scans for research. When they are done, scanning sessions often get pushed into the evening when the equipment is not being used for clinical purposes.

Until now there has also been very little funding purely for imaging research, and most imaging performed for research purposes has been on the back of clinical studies which have used it to answer clinical questions. The funds we have received from the NIHR are allowing us to do cardiac MRI to see how well the heart functions in people with diabetes. This in turn will help us to manage people with cardiovascular problems better.

NHS trusts awarded funding for Technology Platforms

Barts and The London NHS Trust Birmingham Children's Hospital NHS Foundation Trust Cambridge University Hospitals NHS Foundation Trust Clatterbridge Centre for Oncology NHS Foundation Trust Great Ormond Street Hospital for Children NHS Trust Guy's and St Thomas' NHS Foundation Trust Hammersmith Hospitals NHS Trust and St Mary's NHS Trust Hull and East Yorkshire Hospitals NHS Trust Leeds Teaching Hospitals NHS Trust Salford Royal NHS Foundation Trust Moorfields Eye Hospital NHS Foundation Trust Newcastle upon Tyne Hospitals NHS Foundation Trust Nottingham University Hospitals NHS Trust Oxford Radcliffe Hospitals NHS Trust Royal Brompton and Harefield Hospitals NHS Trust Royal Liverpool and Broadgreen University Hospitals NHS Trust **Royal Marsden NHS Foundation Trust** Sheffield Teaching Hospitals NHS Foundation Trust Southampton University Hospitals NHS Trust South London and Maudsley NHS Foundation Trust St George's Healthcare NHS Trust University College London Hospitals NHS Foundation Trust University Hospitals Birmingham NHS Foundation Trust University Hospitals Coventry and Warwickshire NHS Trust West Hertfordshire Hospitals NHS Trust

Funding for Technology Platforms



Improving the health of future generations – in partnership with the Wellcome Trust and Medical Research Council

The UK Biobank is gathering a wealth of health information that will shed light on the origins, development and progress of common conditions and form a powerful national resource for future generations.

The UK Biobank is a major new resource for research which will help to improve the prevention, diagnosis and treatment of a wide range of serious and life-threatening illnesses – including cancer, heart disease, diabetes, arthritis and forms of dementia. Recruitment is now well under way to recruit 500,000 people aged 40 to 69 to provide information and samples, and then let UK Biobank follow important health events throughout their lives.

Leading the way in research ethics

Ever since the idea of a biobank was first mooted in 1999, the detailed protocols, ethics and governance have been subject to the highest degree of scrutiny, consultation and review.

UK Biobank's funders – led by the Wellcome Trust and the Medical Research Council, and supported by the Department of Health, the Scottish Executive and the North West Regional Development Agency – are aware that the analysis of health data and biological materials in such depth by many projects over time could raise ethical concerns. For this reason, in November 2004, an independent Ethics and Governance Council was formed to guide UK Biobank and maintain transparency and involvement with the public and the project's participants, and form a powerful national resource for the benefit of future generations.



Leading the way in applied health research and care

In October 2007, we launched Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) – to address key recommendations of the Cooksey Report (Sir David Cooksey's Review of Health Research) and the Chief Medical Officer's High Level Review of Clinical Effectiveness.

Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) are being piloted to work specifically on developing new and innovative models in the way health research is carried out and to ensure the 'second gap in translation' identified by the Cooksey Review and the Chief Medical Officer is bridged. With a total investment of £50 million in the pilot phase, each CLAHRC established will receive between £5 million and £10 million over five years.

As a partnership between higher education and the NHS working across the widest possible health community areas, CLAHRCs will make the best use of the skills and expertise embedded in the medical academic sector to support initiatives to improve the effectiveness of clinical care.



Building research capability into the national care record

Electronic patient databases, which are being used more and more by doctors and hospitals, have huge potential to aid research. We are paving the way to harness this potential within the NHS National Programme for IT (NPfIT) through the 'Research Capability Programme'.

Linked electronic data as used in the health service can be harnessed to monitor patterns of disease and help discover more about the effectiveness of drugs, medicines and other interventions such as the effects of public health messages. For example, research in Denmark using these databases helped provide strong evidence that the measles-mumps-rubella (MMR) vaccine was not linked to autism. Electronic data will also provide one route to finding patients who could be interested in joining research projects.

To explore the feasibility of using electronic health records in this way, the UK Clinical Research Collaboration and NHS Connecting for Health asked a group of experts chaired by Professor Ian Diamond to examine how the electronic care record could support health research, strictly within the bounds of patient confidentiality.

You can see their report at: www.ukcrc.org/ activities/infrastructureinthenhs/ nhsitprogrammes.aspx

NHS Connecting for Health has now established the Research Capability Programme, funded through the NIHR. This programme is a long-term initiative designed to make research capability an integral part of the NPfIT. A new programme board is overseeing this programme. Professor Sir Alex Markham has been appointed Chair of the Research Capability Programme Board.

The programme offers exciting opportunities to make health services safer and more effective, but its success depends as much on engaging with ordinary people as it does on understanding how researchers and the NHS can make the most of them. To this end it is working closely not only with academic and industry researchers, but also with patients and the public through an external reference group.

Jargon buster

NPfIT – the NHS National Programme for Information Technology.
NHS Connecting for Health – the organisation implementing the NPfIT.
NHS Care Records Service – the body looking after electronic care records.

NHS Care Records Guarantee – sets out the rules that will govern information held by the NHS Care Records Service.

Focus on... electronic patient data

(Healthcare records will enhance research)

The new NHS Care Records Service has tremendous potential benefits for researchers and patients, says Professor Ian Diamond, Chief Executive of the Economic and Social Research Council.

'Electronic health records can be used to detect patterns of illness over time, to examine factors that influence the development of disease in advance rather than in retrospect, to analyse rare events such as drug reactions, to identify participants for clinical trials and even, in conjunction with other data, to highlight possible environmental hazards.

'At the same time, safeguards are vital to make sure that confidential information is carefully protected and individuals and the public feel comfortable about the way their details are used for research.

'The group commissioned a series of simulations that confirmed the enormous potential of the NHS Care Records Service to extend health research, alongside other electronic databases. We are now working on establishing the infrastructure and governance procedures to ensure that the public feels these are sound and appropriate. We are also developing model examples using some databases already in existence to ensure that we are in a position to maximise the opportunities created by the NHS National Programme for IT.'

Professor Ian Diamond chaired the UKCRC Research and Development Advisory Group to Connecting for Health. He is a member of the programme board for the new Research Capability Programme in NHS Connecting for Health, and Chair of the external reference group through which researchers and others will help to shape the programme.

Jargon buster

Observational epidemiology – the empirical study of naturally occurring events. **Cohort study** – epidemiological study that observes a large group of people over a period of time.

Disease surveillance – study done to find early and precise information on key aspects of disease activity such as time, location, virus type and disease severity.



GOAL TWO: Attract, develop and retain the best research professionals to conduct people-based research

Creating the NIHR Faculty

One of our most exciting initiatives to date is helping to support people-based research through our new NIHR Faculty.

The Faculty is open to all researchers doing patient- and people-based research, whether they are employed in the NHS or in a university, provided that part of their salary is funded by the NIHR or the Department of Health (DH) Policy Research Programme (PRP). The Faculty will help us to attract, develop and keep the best research leaders, senior researchers and collaborators as well as create a sense of unity.

Members come from all disciplines, including clinical, health service, public health, social science and methodological research. There are four categories of membership – Investigators, Senior Investigators, Associates and Trainees. There will also be honorary memberships for researchers without NIHR funding, including those working for charities or in industry. We put out our first call for Senior Investigators, the most prominent and prestigious researchers we fund and, as such, of fundamental importance to NHS health research. The first cohort will be appointed from April 2008.

Recent initiatives also include a membership survey, begun in November 2007, to provide a unified database of researchers. DH can use this to assess the impact of policy on equality of opportunity and to provide secure access to the NIHR portal and online resources for Faculty members.

Jargon buster

Methodological research – the study of which methods of research are the most powerful and appropriate.



Categories of Faculty membership

NIHR Investigators	NIHR Senior Investigators	NIHR Associates	NIHR Trainees
Directly engaged in research funded by the NIHR or the DH PRP	The most outstanding leaders of patient- and people-based research	Support research led by others (the main element of their salary related to research is a 'service support cost')	The next generation of researchers
Includes all research staff working on a research project including lead researchers, other senior researchers and research assistants	Will be selected from NIHR Investigators through competition by an international peer-review panel Selection criteria will be the excellence of their research in comparison with other research in their field, and the importance of their research to patients and the public in the short to medium term	Includes all clinical and clinical support staff who support research led by others including medical, nursing, pharmacy, imaging, and healthcare scientists	Those individuals whose salary is supported by NIHR training schemes, e.g. Clinical Lecturers, Academic Clinical Fellows, Research Fellows and Research Students
Main source of research funding will be from the NIHR and other infrastructure	In addition to the element of their salary cost which is funded from NIHR/ PRP sources, they will be awarded a recurrent NIHR Senior Investigator's Discretionary Fund to be used flexibly	Funded by NIHR Research Networks and other infrastructure	Supported by NIHR training schemes for Clinical Lecturers, Academic Clinical Fellows, Research Fellows and Research Students, through the NCCRCD.
May be in receipt of research and non- research funding from other sources, e.g. Research Councils, charities, NHS patient- care funds	May be in receipt of research and non-research funding from other sources, e.g. Research Councils, charities, NHS patient-care funds	May be in receipt of research and non- research funding from other sources, e.g. Research Councils, charities, NHS patient- care funds	
Can also be supported by NIHR Flexibility and Sustainability Funding	Can also be supported by NIHR Flexibility and Sustainability Funding	Can also be supported by NIHR Flexibility and Sustainability Funding	
	NIHR Senior Investigators will form an NIHR College to provide a key source of advice to the Director of the NIHR and provide research leadership to the NIHR Faculty		

Research-based medical training

As well as helping to attract the best research leaders, senior researchers and collaborators, key aims of the NIHR Faculty are to promote academic training pathways for the next generation of researchers through our Research Capacity Development Programme and to provide a framework of support, guidance and promotion to help trainees as they progress through their career.

The Research Capacity Development Programme is helping to breathe new life into clinical research through its research training schemes. NIHR research training schemes include the Integrated Academic Training Pathway initiative set up in response to the Walport Report and part of Modernising Medical Careers (www.mmc.nhs.uk), and the NIHR Fellowship Scheme. This initiative supports doctors and dentists during their clinical training period to pursue an academic clinical career by providing academic clinical fellowships and clinical lectureships.

Following the first round of competition in 2006/07, we appointed 120 Academic Clinical Fellows and 61 Clinical Lecturers with a further 186 and 70 respectively appointed in 2007/08.



Funding for Integrated Academic Training Pathway

Fast track to success

The Research Capacity Development Programme is part of our drive to foster the skills of tomorrow's leaders in peoplefocused research. It offers personal awards through the NIHR Fellowship Scheme to individual researchers to fast track those with outstanding potential. In 2006/07 we allocated £17.1 million to researchers under this scheme. This included 134 clinical academic training posts for doctors and 30 new personal NIHR research training awards.

£17.1 million

to fund clinical academic training posts and NIHR research training awards

Dr Mark Walport, Chief Executive of the Wellcome Trust, says:

Academic staff are essential for the education and training of future generations of doctors and dentists. The Integrated Academic Pathway will provide a clear and flexible route into research, which we don't have at present.

It will offer aspiring academic clinicians a chance to focus their research in a good questioning academic environment and give researchers the geographic flexibility to move around and work in different environments.

It also offers researchers just starting out the chance to get research experience early on in their careers, while for those who have just finished their PhDs, it provides the opportunity to develop their research career in a lectureship.

Focus on... academic clinical careers

A fantastic opportunity to develop my research ideas

Dr Uy Hoang describes how his Academic Clinical Fellowship (ACF) is helping him shape his career as a clinical researcher for patient benefit.

'The ACF is allowing me to combine my clinical training in the NHS with academic training in a leading university department. This has provided a fantastic opportunity to develop my research ideas further and to think about how these may be applied to the work that I do for the NHS.

'The Faculty conference provided a good opportunity to meet other researchers. The presentations highlighted the breadth of research conducted by the NIHR for patient benefit. The tips given by senior NIHR researchers on how to succeed in an academic career were equally useful. 'Being part of the first cohort of ACFs has been a privilege. The challenge remains, however, to raise the profile of the scheme with aspiring clinical researchers, and to ensure that the Fellowship provides the best opportunity for clinicians to develop into leading researchers for patient benefit.

'I feel fortunate to be involved in the forthcoming evaluation of the ACF scheme undertaken by the Unit of Healthcare Epidemiology at Oxford and look forward to contributing an insider's perspective on the scheme.'

Dr Uy Hoang is Academic Clinical Fellow in the Department of Public Health at the University of Oxford. His research interests lie in the intersection between public and mental health. He is currently working at the Unit of Healthcare Epidemiology on a longitudinal study of patients recently discharged from psychiatric in-patient care.

SUPPORTING TOMORROW'S

The NIHR funds a broad range of research training awards through its Research Capacity Development Programme. These awards support the most promising researchers and have proved invaluable in developing research leaders in people-based research.

Over two days in September 2007, 220 delegates from health and social care came together at our first Faculty Trainee Conference in Birmingham. The conference not only allowed trainees to showcase their achievements, but it also acted as a focus for collaboration and the sharing of ideas and experience.

The conference was an ideal environment for Professor Sally C. Davies, DH Director General of Research and Development, to talk with our next generation of medical and clinical researchers and discuss how the NIHR Faculty would be providing them with support, guidance and training as they progress through the spectrum of health and social care disciplines.

The two-day conference was chaired by Sarah Fox (Head of NHS Research and Development Workforce) and Dr Lisa Cotterill (Director of the NIHR National Coordinating Centre for Research Capacity Development (NCCRCD)).

Keynote speeches were given by Professor Sally C. Davies and Professor Celia Davies, Director of the NIHR Research for Patient Benefit Programme. Three trainees also presented their research.



Professor Sally C. Davies and Dr Russell Hamilton, Director General and Deputy Director of Research and Development at the Department of Health, welcoming NIHR delegates.



The Faculty is making a big difference to me as a researcher. My personal award pays for my salary, which means other staff have been recruited to give me protected time. This is helping me to think about important research questions, to read the literature, conduct research and consider how to use the findings to benefit patient health.

Wendy Hardeman, Senior Research Associate at the University of Cambridge General Practice and Primary Care Research Unit, is developing and evaluating intervention programmes to help people at risk of and with type 2 diabetes to become more active and to eat a healthy diet.

RESEARCHERS TODAY



Many of the trainees attending the conference said they really enjoyed the breakout sessions where they could participate in a range of group discussions, interactive workshops and role-play.

Twenty-three trainees displayed posters which were judged by Professor Sally C. Davies and Dr Russell Hamilton, DH Deputy Director of Research and Development, for clarity, scientific quality and the potential impact of the research to patients, practitioners and policymakers. Three winners were each presented with book-tokens by Dr Hamilton at a special prize-giving Faculty dinner:

• Martin Tickle, Manchester: The incidence of dental pain and extraction in young children

National Institute for Health Research

... improving the health and wealth

of the nation through research

• Colin Greaves, Peninsula Medical School: Lifestyle change in individuals at risk of

www.nihrad

Faculty

The Faculty is a great support mechanism and also provides a means for me to link up with other researchers in other institutions. The conference gave me a chance to meet people from different backgrounds and share ideas. I definitely felt I made good use of the networking opportunities. I also hope that trainees just starting out benefited from my experience. I got excellent feedback on the presentation I made and the comments made were really helpful.

Lynne Stobbart, DH Research Capacity Development Research Fellow based in the Institute of Health and Society at Newcastle University, is currently conducting an ethnographic study looking at ethical and methodological issues in stroke research and, in particular, decision-making processes and practices in consenting stroke patients for randomised controlled trials in the acute and hyperacute period.

diabetes and heart disease: randomised controlled trial of lifestyle counsellors using motivational interviewing

• Sarah Wordsworth, Oxford: Can the NHS afford novel genomic technologies? A case study of micro-arrays in diagnosing learning disability.



Putting people first

Above all, health research is about people. We are committed to putting patients and the public at the centre of everything we do and involving them in research at every step – from setting research priorities to benefiting from the results of such research in hospitals, doctors' surgeries and the whole range of NHS settings.

Our INVOLVE programme is one key way in which we are supporting patients, service users and carers to have more of a say in health research.

The changes that have happened in DH as a result of the development of the NIHR have brought new opportunities for the public to contribute to and influence research in the NHS. Doors are now opening in many areas. We still need to know more, however, about the extent, nature and impact of public involvement and to understand the best ways to help it happen.

Sarah Buckland, Director of INVOLVE

INVOLVE has recently agreed a new strategic plan to establish long-term priorities and appointed 17 new members to its working groups to take this forward. Other achievements in the past 15 months include:

- the INVOLVE Conference nearly 400 delegates attended and heard Professor Sally C. Davies, Director General of Research and Development, give the keynote speech
- the launch of the People in Research website – this provides information about organisations that want to actively involve members of the public in clinical research. This was a UK Clinical Research Collaboration (UKCRC) project led by INVOLVE (visit www.peopleinresearch.org)



a new Public Information Pack (PIP) and other guidelines and leaflets.

> INVOLVE's publications are helping to encourage more people to get involved in research as well as improving the quality of research practice and commissioning.

To find out more visit www.invo.org.uk

I want health research to do right by patients

Sir Iain Chalmers outlines his hopes for patient-based research.

'Until recently there has been a serious imbalance in investment between basic research and applied research. There now appears to be a will to address this.

'Research conducted under the aegis of the NHS R&D Programme has always looked at a wider range of health conditions and a greater variety of interventions than research funded by others. The principles set out in *Best Research for Best Health* build on this tradition, in the interests of patients and clinicians. The influential Cooksey Report recognised this and supported its direction.

'Best Research for Best Health made it explicit that such research should be an integral part of the NHS, rather than an optional add-on. It is a professional responsibility to promote this kind of research, to find out whether existing treatments do more good than harm.

'We need to engage a wider variety of people in the decisions about research priorities and encourage researchers to take more seriously the questions raised during everyday contacts between patients and clinicians.

'The plans being developed under the aegis of the NIHR show a seriousness of purpose that has been rare during the 35 years that I have worked as a clinical and health services researcher. We look forward to it delivering research that can help those using and working in the NHS.'

Sir Iain Chalmers is former Director of the UK Cochrane Centre and now coordinator of the Database of Uncertainties about the Effects of Treatments. Visit www.duets.nhs.uk to find out more.





GOAL THREE: Commission research focused on improving health and care





Programmes for success

To make sure that all the research we support provides tangible benefits for patients we are expanding existing programmes and introducing new funding streams.

Our aim is to fund important research that is inadequately supported by other funders but which is essential for delivering our

public services. Our research commissioning is channelled through projects, programmes, units and centres.



The central role of NIHR research in the innovation pathway

almost **£75** million

funding allocated for NIHR research programmes in 2006/07

Health Technology Assessment Programme – answering the questions that really matter

Our Health Technology Assessment (HTA) Programme produces internationally renowned independent research, which ensures that patients, the public, healthcare professionals and managers in the NHS have the best and latest information on the costs, effectiveness and impact of developments in health technology.

Changing patients' lives

In 2006/07 the HTA Programme funded 22 new projects at a cost of more than £15 million. We also set up a new responsive funding stream for clinical trials. This enabled us to fund nine clinical trials to the tune of £3 million. These ranged from assessing new treatments for breast cancer, psychological treatments for depression, surgery to treat narrowing of arteries to the brain (which might cause stroke) and an international trial looking at drugs to reduce serious bleeding in trauma patients.

We put a great deal of effort into deciding what research the NHS needs. Each year our four panels of experts – which include GPs, hospital doctors and nurses, NHS managers and patients – sift through more than 1,000 topics and decide on a shortlist of around 70 or 80 on which we commission research. We then work with researchers to refine the questions to make sure that they are addressing the areas the NHS needs answers to.

Professor Tom Walley, Director of the HTA Programme

HTA clinical trials funded (responsive route) in 2006/07

- Asymptomatic Carotid Surgery Trial an international randomised trial of two stroke prevention procedures in patients with asymptomatic carotid artery stenosis
- The RATPAC Trial a randomised assessment of treatment using panel assay of cardiac markers
- PET-CT guided watch and wait policy vs planned neck dissection for the management of locally advanced (N2/N3) nodal metastases in patients with head and neck squamous cancer
- A trial comparing three diagnostic techniques for the assessment of patients with lung cancer
- CRASH2 Trial the effects of fibrinolytic treatment on outcomes in trauma patients with significant haemorrhage
- The TACIT Trial a randomised controlled trial of tumour-necrosis-factor inhibitors against combination intensive therapy with conventional disease modifying anti-rheumatic drugs in established rheumatoid arthritis
- PERSEPHONE a study of the duration of trastuzumab with chemotherapy in early breast cancer: six vs 12 months
- A randomised phase III study of docetaxel plus prednisolone vs docetaxel with prednisolone plus either zoledronic acid, strontium-89 or both agents combined
- Assessment of opportunistic screening and stepped care intervention for hazardous alcohol users in primary care.

A special HTA call for research in the area of medicines for children was made to support the new Medicines for Children Research Network. The projects funded included the control of blood sugar in paediatric intensive care, the management of asthma in schoolchildren and a comparison of verruca treatments.

The HTA has also invested more than £10 million in public health research. Projects ranged from obesity prevention, sexual health and smoking cessation.

Driving changes in practice

The HTA's work with organisations such as the National Institute for Health and Clinical Excellence (NICE) and the National Screening Committee ensures that the results of its research drive real changes in working practices in the NHS and therefore patients' lives. Good research takes time, which is why it is important to have sustained funding. In 1997, we commissioned one of the largest worldwide studies to investigate screening for chlamydia. The results, which became available in March 2007, are now providing the basis for the development of a new National Chlamydia Screening Programme.

▲ NIHR has been instrumental in ensuring NICE can deliver on its core objective – the production of timely evidence-based guidance on the prevention and treatment of ill health and the promotion of good health.

Professor Sir Michael Rawlins, Chairman of the National Institute for Health and Clinical Excellence

Funding for the Health Technology Assessment Programme



National Horizon Scanning Centre – an eye on the future

The costs to the NHS of providing proven new health technologies or services, or of modifying clinical guidance in the light of new advances in knowledge, have to be thoroughly assessed well in advance of being introduced.

Our National Horizon Scanning Centre exists to keep us abreast of the latest developments and to help evaluate their value to patients and the public. It appraises all new technological developments to provide the Department of Health and policymakers with information on their implications both in clinical and economic terms. The centre's appraisals include new drugs and medicines, medical devices, diagnostic tests and procedures, surgical and other interventions, rehabilitation measures and new public health and health promotion messages.

UK Cochrane Centre – helping healthcare decisions

The NIHR provides core funding for the UK Cochrane Centre, one of 12 such centres around the world, and contributes to the infrastructure in England for The Cochrane Collaboration, which is known worldwide for its reviews into the effects of healthcare interventions.

This year, for instance, in an updated Cochrane Review of almost 40 trials involving more than 17,000 patients, Dr Eric Brunner and colleagues from the University College London Medical School showed how dietary advice can lead to important changes in the risk factors for cardiovascular disease among adults. This knowledge could point the way to some simple ways to prevent thousands of deaths from heart disease. The Review was overseen by the Cochrane Heart Group, which receives funding from the NIHR. The update itself was fast-tracked with an incentive payment from the NIHR.



Cover 16,000 people contribute to the work of The Cochrane Collaboration, which produces close to 500 new reviews a year, in more than 100 countries across the world. Without the NIHR's contribution to our infrastructure costs, we simply would not be able to support researchers such as Dr Brunner in their work. NIHR support is also vital to encourage activity in this country and to ensure quality and standards in what we do and in the use of our reviews in improving healthcare.

Professor Mike Clarke, Director of the UK Cochrane Centre

Centre for Reviews and Dissemination – disseminating the evidence

Our Centre for Reviews and Dissemination, which was established in 1994 at the University of York, is the largest group in the world engaged exclusively in high-quality systematic reviews that evaluate the effects of health and social care interventions and the delivery and organisation of healthcare.

The centre produces three renowned databases used by health professionals, policymakers and researchers worldwide:

- the Database of Abstracts of Reviews of Effects (DARE)
- the NHS Economic Evaluation Database (NHS EED)
- the Health Technology Assessment (HTA) Database.

It also undertakes methods research and produces *Hitting the Headlines*, an online analysis of the evidence behind selected health stories reported in national newspapers to help busy health professionals keep in touch with current, reliable information on new medical and healthcare interventions.

As well as having very close links with the international Cochrane and Campbell Collaborations, the centre is a member of the International Network of Agencies for Health Technology Assessment (INAHTA) and the Public Health Research Consortium (PHRC) and it undertakes independent research for a number of different agencies, including the:

- National Institute for Health and Clinical Excellence (NICE)
- Department of Health Policy Research Programme
- Home Office
- Social Care Institute for Excellence (SCIE)
- Economic and Social Research Council (ESRC)
- NHS Institute for Innovation and Improvement
- Health Technology Assessment (HTA)
 Programme
- Service Delivery and Organisation (SDO) Programme.



Funding for Reviews (including The Cochrane Collaboration)

Service Delivery and Organisation Programme – improving healthcare management and systems

Our Service Delivery and Organisation (SDO) Programme commissions research on the way health services are organised and delivered by the NHS. The research is designed to help health practitioners, managers and policymakers improve the quality of patient care, the efficiency of health services and, ultimately, the health of the public.

During 2006/07 we expanded the programme to include new topics and areas. New projects funded ranged from a study examining the care of women at low risk of complications in labour in midwiferyled units, to a scoping exercise looking at services provided by non-specialist healthcare professionals for people at the end of their lives.

Key SDO studies funded in 2006/07 by thematic area

Change management

- Leadership and better patient care: from idea to practice
- A synthesis of reviews on leadership in healthcare

Evaluating models of service delivery

- Patients, professionals and the internet: renegotiating the healthcare encounter
- The Evaluation of Midwifery-led Units (EMU) in England

Patient- and carer-centred services

- A scoping exercise: generalist services for people at the end of life
- Health, medicines and self-care choices made by children, young people and their families: information to support decision making

Studying healthcare organisations

- Comparative governance arrangements and comparative performance: a qualitative and quantitative study
- The impact of incentives on the behaviour and performance of primary care professionals

Workforce

- Integration of social care staff within community mental health teams
- Mobility of health professionals in Europe PROFMOBILITY UK case study.

Reputation and impact

The SDO makes an impact both nationally and internationally. Canada is the only other country worldwide that funds research in similar health areas and demand for SDO research findings and products reflects both the quality and usefulness of the research programme and its pioneering status.

Prize publications

The SDO's guide for managers, Organisational Change: A review won the British Academy of Management Book of the Year Award. Meanwhile Diffusion of Innovations in Health Service Organisations, based on an SDO-funded project, won the prestigious Baxter Award in 2006 for the most outstanding publication contributing to excellence in healthcare management in Europe.





Funding for the Service Delivery and Organisation Programme

NHS Physical Environment Research and Development Programme – making sure buildings and equipment are safe and fit for purpose

Funding research that improves the way NHS property and facilities are managed and maintained, or research which is designed to investigate the safest and best value design of buildings and equipment, is as critical to the health of patients and the public as funding research into diseases and ill health.

Our NHS Physical Environment Research and Development Programme addresses issues relating to the built and non-clinical physical environment in primary and secondary NHS settings and which are of practical concern to the health service.

An example of the type of work funded by the programme is research into preventing and controlling healthcare associated infections. This is an absolute priority for patients and the NHS and the potential causes have to be investigated from every conceivable angle to make sure hospitals are provided with the best available information which, in turn, enables them to focus on priority areas. Approximately one in ten patients pick up an infection whilst in hospital. While hand washing and other hygiene measures are vital, evidence suggests that these measures alone are not always enough to prevent certain infections and therefore a fresh approach is needed. We know that many Gram-negative bacteria desiccate and die in dry environments – we are therefore investigating the extent to which humidity control might assist in the fight against infection.

Professor Clive Beggs at the University of Bradford has recently been awarded funding worth over £175,000 to investigate an alternative strategy for controlling hospital-acquired infections.

Research topics funded by the NHS Physical Environment Research and Development Programme

Infection control

- Building components to reduce infection
- Determining if spatial proximity and meticillin-resistant *Staphylococcus aureus* (MRSA) are related
- Use of finishes to reduce infection
- Mobility of health professionals in Europe PROFMOBILITY UK case study

Older people

- Environments to promote good nutrition
- General hospital care and the ageing population, e.g. contribution of built environment to achieving dignity and autonomy, suitability of current stock to the needs of frail older people in design to reduce falls and delirium

Space and design

- Improving external spaces
- Better use of common spaces, e.g. dayrooms
- Functional suitability assessment
- Designing to reduce damage by moveable items
- Wayfinding without signs
- Making the economic case for good design
- Linking efficient building design to choice and payment by results

Mental health and learning disabilities

- Environments to reduce confusion
- Environments to reduce aggression, challenging behaviour and self-harm

Strategy for the physical environment

- Strategic indicators for investment in health and social care facilities (i.e. exploring a link with capital investment and health outcomes)
- Business improvement, knowledge management and strategic management
- Performance management and measurement in the facilities sector
- Developing a measurable healthcare design quality benchmark
- Care setting and health outcomes, e.g. community-based acute care environments
- Planning relationships in the context of new technology and the shift to primary care
- Strategic asset planning across healthcare

Decontamination

• Protein detection on surgical instruments.

Research for Patient Benefit Programme – transforming patient experience

Although the latest blockbuster drug or high-tech scanner is vital, it is just as important for the NHS to help people to stay healthy and to ensure that their experience of the health service is positive. To make certain this happens we are investing in a new Research for Patient Benefit (RfPB) Programme that will build up to £25 million per year by 2009/10.

To make sure that the studies funded really do change health and patient experience for the better, we are asking the people who know best – those delivering the services and those receiving them – to get involved in research proposals.

Grants are awarded for projects to help promote health, prevent disease, overcome illness and improve patients' everyday experience of the NHS (see table overleaf). These can last up to 36 months with a total maximum cost of £250,000. Proposals are assessed three times a year by ten regional funding committees (one covering each Strategic Health Authority). There is immense enthusiasm across our ten regional committees about the programme's potential to make a real difference to practice. The range of research questions coming forward is really exciting. The challenge now is to translate hunches into hypotheses and the kind of research designs that can transform patient experience and people's health for the better.

Professor Celia Davies, Director, Research for Patient Benefit Programme





Some examples of RfPB projects agreed in 2006/07 which will make a real difference in practice

Lead Researcher principal investigator	Programme Title	Institution principal investigator
Dr Kamlesh Khunti	Self Assessment of Waist Circumference for Screening for Type 2 Diabetes and Pre-diabetes	Leicestershire, Northamptonshire and Rutland Primary Care Research Alliance
Dr Howard Ring	Relative efficacy and cost-effectiveness of different treatment approaches currently used in the management of epilepsy in people with a learning disability	Cambridgeshire and Peterborough Mental Health Partnership NHS Trust
Dr Sonia Johnson	Early detection of psychosis via community and educational organisations: a feasibility study	Camden and Islington Mental Health and Social Care Trust
Prof Martin Cowie	Patients' and professionals' views of telemonitoring in heart failure: a qualitative study	Royal Brompton and Harefield Hospitals NHS Trust
Dr Claire Glasscoe	Assessing the impact and safety of home intravenous antibiotic treatment (IVAT) for children with cystic fibrosis	Royal Liverpool Children's Hospital NHS Trust
Prof Douglas Mitchell	Optimisation of services for the care of people with Motor Neurone Disease (MND), based on an understanding of personal experience of MND in Lancashire and South Cumbria	Lancashire Teaching Hospitals NHS Foundation Trust
Mr Ravi Sastry	A prospective, randomised controlled trial on efficacy of lignocaine with hyaluronidase as a local anaesthetic for carpal tunnel decompression	Maidstone and Tunbridge Wells NHS Trust
Dr Zafar Iqbal	A critical analysis of the Mental Health needs of older prisoners	South Staffordshire Primary Care Trust

Research for Innovation, Speculation and Creativity Programme – risking it

The Research for Patient Benefit Programme is supplemented by another newly established programme: Research for Innovation, Speculation and Creativity (RISC). This initiative gives researchers a chance to test out innovative ideas in health research that could potentially radically change thinking but that would probably be considered too risky or unusual to receive funding through more traditional peer review panels.

The first seven grants, awarded in September 2007, are supporting research ranging from the use of online communities to help prevent self-harm, to testing whether acupuncture and moxibustion can improve the health and well-being of patients with Lymphoedema. We plan to expand our spending on the programme to £5 million per year. Researchers can apply for funding of up to £100,000 for each project for 12 to 18 months. Once fully up and running we expect to make 50 awards each year.

Jargon buster

Lymphoedema – swelling of the arms or legs caused by blockage or damage to the drainage of the lymphatic system which affects some patients with cancer. Moxibustion – a type of heat treatment used in traditional Chinese medicine in which a herb is burned on or above the skin to warm an acupuncture point and stimulate the flow of energy or chi.

Funding for the Research for Innovation, Speculation and Creativity Programme



Programme Grants for Applied Research – practical research that really helps patients

Conditions such as dementia, diabetes, stroke, depression and other mental illnesses exert a devastating toll on individuals, their families and the NHS. Our prestigious new Programme Grants for Applied Research will encourage leading researchers to come up with innovative practical solutions to these problems.

Researchers can apply for grants of up to £2 million over three to five years to do applied research. Each programme involves a series of interlinked projects with particular emphasis on conditions causing significant disease burden, in areas where other research funders may not be focused or where there is insufficient funding available. In the first funding round we awarded grants in a number of high-priority areas (see table opposite).

When it reaches full capacity, the new funding scheme will have an annual budget of £75 million. Following our first

competition in May 2006, we awarded 29 programme grants with a total value of £45 million. Some of these included:

- ways to translate epidemiological and psychological research findings into preventive action for people at risk of type 2 diabetes
- changing practice in dementia care in the community
- reducing stigma and discrimination for people with mental health problems
- improving stroke prevention in routine clinical practice.



Funding for Programme Grants for Applied Research



£45 million

awarded to applied researchers in 2006/07

Programme Grants for Applied Research agreed in 2006/07

Topic area	No. of programme grants awarded
Medicines for Children	1
Dementias, Neurogenerative Diseases and Neurology	4
Diabetes	5
Stroke	5
Mental Health	14



Focus on... applied people-based research

(I want to end discrimination against people with mental illness)

Professor Graham Thornicroft and his team are looking at ways to identify and combat discrimination against people with mental illness. Here he describes how funding from the NIHR is helping to advance this research.

'Mental illness affects one in four people every year. Most people who have been mentally ill report experiencing stigma and discrimination. In fact, according to service user groups, this can sometimes be worse than the illness itself.

'We want to develop scales to measure the knowledge, attitudes and behaviour of employers, healthcare staff and others towards people with mental illness. We want to find a way to assess "anticipatory discrimination" – when someone who is mentally ill avoids jobs or relationships because they fear they will be discriminated against.

'We also want to investigate whether negative attitudes affect people with different types of mental illness equally and whether it is true that certain service users, for example black people with mental illness, face double discrimination.

'We plan to investigate "diagnostic overshadowing" – when healthcare staff attribute physical problems to mental health problems in people who are mentally ill, leading to under-diagnosis and poor treatment. And we are going to assess the attitudes of staff in casualty departments to see if we can learn to understand better the interaction between patients and staff that may lead to this.

'We will also develop a tool to help people with mental health problems decide whether to declare or conceal these issues when applying for jobs. Furthermore, we will investigate the behaviour of middle managers when looking at job applications to see what difference discrimination makes to their decisions.

'The £2 million Programme Grants for Applied Research award from the NIHR means that we can do all this research much faster than would otherwise have been possible. We intend this research to lead to more effective ways to tackle discrimination against people with mental illness in the future.'

Graham Thornicroft is Professor of Community Psychiatry and Head of the multi-disciplinary Health Services Research Department at the Institute of Psychiatry, King's College London.
750,000 people in the UK have dementia

(Source: Alzheimer's Society)

Focus on... high-quality research right across the country

(There is so much we can do to ease dementia)

Dementia touches all our lives, whoever we are and wherever we live, says Professor Esme Moniz-Cook.

'In the past staff, funding and research awards tended not to reach Yorkshire. We want to change this, to enable people all over the country to benefit from new approaches to health and disease.

'Now the £2 million we have received from the NIHR will allow us to look at ways of training and supporting health and social care staff by applying our expert knowledge to real-life situations, for the very first time in Yorkshire.

'Older people with dementia don't usually get much of a look in – partly because research has traditionally neglected them, and partly because of the view that there is nothing you can do about dementia. The idea of recovery and being able to have a reasonable quality of life has not been taken on board. 'We are trying to develop practical, personalised programmes that people with dementia, their families, and health and social care staff can use to prevent disability and help maintain autonomy and dignity.

'We are also collaborating with Professor Martin Orrell, in North East London, on a second Programme Grant for Applied Research to develop a range of psychosocial interventions for people with dementia and their carers.

'As a clinician it is especially exciting to be given the opportunity to work with people with dementia and their families in finding support that really works to resolve the challenges they face in their everyday lives.'

Professor Esme Moniz-Cook is a Consultant Clinical Psychologist at Humber Mental Health Teaching NHS Trust and a researcher at the University of Hull.

Invention for Innovation – accelerating the development of new healthcare technologies

Our new Invention for Innovation (i4i) Programme is bringing together the work of several smaller programmes in a new responsive investment stream to help accelerate the development of new healthcare technologies and devices.

Funding for the programme will be gradually increased from £3 million in 2006/07 to £13 million in 2009/10.

Programmes which will come under the umbrella of i4i include:

- New and Emerging Applications of Technology (NEAT)
- Health Technology Devices (HTD)
- Challenge Fund for Innovation, a new responsive funding stream to promote the uptake of health research and developments for use in the NHS
- Pilot Healthcare Technology Co-operatives (HTCs)
- Assisted Living Innovation Platforms.

In the meantime NEAT and HTD activities have been maintained, with two calls for NEAT and three for HTD to the tune of £2 million each over the past year.

The i4i Programme will build on the activities of NEAT and HTD by improving links to universities, research councils and others to enable the early stage development of new technologies.

Another way in which it will do this is through piloting two HTCs that will bring together clinicians, patients, the medical technology industry and academic researchers. Their aim is to provide a collaborative environment that will catalyse the development of technological solutions that will be of value to patients, the public and the NHS in areas where clinical need for new healthcare products is not being met.

We are managing the programmes under the i4i umbrella with funding provided by ourselves, the Technology Strategy Board (TSB), the Engineering and Physical Sciences Research Council and the Medical Research Council (MRC).

Another initiative established through the TSB as part of the i4i Programme is the Assisted Living Innovation Platforms. These will examine how technology can be harnessed to help address the healthcare challenges we face as a result of the longer lives people are living, the increasing demand for care for those with chronic long-term conditions, and the need to prevent the development of health problems such as obesity.

2007/08 Forecast spend £5m 2006/07 Spend £2m

Funding for the Invention for Innovation (i4i) Programme

Bridging the gap

In November 2007, in partnership with the Medical Research Council (MRC) we announced a new raft of measures for clinical trials designed to help turn research discoveries into benefits for patients faster.

One of the key points made in the Cooksey Review was the need to bridge the gap between basic scientific discoveries and new ways to prevent, diagnose and treat disease. To bridge this gap we are now working closely with the MRC under the umbrella of the newly established Office for Strategic Coordination of Health Research (OSCHR) Board to develop an integrated strategy for publicly funded health research.

The measures planned will enable researchers in both new and existing research programmes to work side by side to ensure that biomedical research leads as quickly as possible to improved prevention and care for patients.

✔ The MRC is delighted to be working with the NIHR to provide new opportunities for late phase clinical trials. The partnership will enable us to take promising research and turn it into effective therapies more quickly and more efficiently.

Sir Leszek Borysiewicz, Chief Executive, Medical Research Council They include:

- the Efficacy and Mechanism
 Evaluation (EME) Programme.
 This will be managed by our HTA
 Programme, to move promising
 technologies forward by evaluating
 their efficacy and safety by assessing
 their clinical and cost-effectiveness.
 The programme, funded by the MRC,
 will start in April 2008
- the Patient Research Cohorts
 Initiative. This will identify small, carefully defined groups of patients with particular illnesses, in order to throw light on previously poorly understood aspects of how these illnesses progress. The initiative is a partnership between the MRC, the NIHR (which is providing 50 per cent of the funding) and the health research departments in Northern Ireland, Scotland and Wales
- the Methodology Research Programme. This will support the development of new, improved systems and theories for health research, because research is only able to provide reliable and relevant evidence if it is carried out using the most powerful and appropriate research methods. The programme will investigate the tools, theories and disciplines that underpin the design, analysis and evaluation of research in the health sciences and will be managed and led by the MRC on behalf of the MRC–NIHR partnership.



GOAL FOUR: Strengthen and streamline systems for research management and governance



Strengthening and streamlining systems



An efficient and robust ethical and governance system that safeguards the public and participants without unnecessary bureaucracy is essential to meet the challenges of health research in the 21st century. To this end we are refining our ethical and management systems.

The red tape involved in getting healthcare research up and running has been one of the UK research community's biggest headaches. At the same time, the social and ethical dimensions of research remain a matter of close public scrutiny and media interest. To address this, over the past 15 months we have been updating research management systems, simplifying the administrative and regulatory procedures governing trials and studies, and making the research ethics committee structure simpler and stronger.

The NIHR Coordinated System for gaining NHS Permission

The NIHR Coordinated System for gaining NHS Permission (NIHR CSP) was developed because investigators highlighted the need to cut out the duplication and inconsistency that results when individual NHS bodies work in isolation, leading to delays in study set-up and missed recruitment targets.

The ability to set up studies rapidly is central to making the NHS an internationally competitive environment in which clinical research can take place. The NIHR CSP will ensure that clinical research studies are approved quickly through a consistent and streamlined process while addressing all quality assurance and statutory research requirements. The NIHR CSP will provide sponsors and investigators with a single application point when applying for permission to begin multi-centre studies and reduce duplication within the NHS review processes. We expect the NIHR CSP, which will be managed by a national coordination unit in the UK Clinical Research Network (UKCRN), to be fully operational from April 2008.



Promoting research, protecting patients

Both applicants and research ethics committees benefit from greater support and coordination through our National Research Ethics Service.

In March 2007, we launched the National Research Ethics Service (NRES). Hosted by the National Patient Safety Agency (NPSA), NRES is providing a UK-wide system of management support for some 120 research ethics committees that work to protect the safety, dignity and well-being of research participants while facilitating and promoting health and social care research. The new service is building on improvements already carried out by the Central Office for Research Ethics Committees (COREC). NRES is also preparing to introduce a faster review process for research proposals that do not raise material ethical issues and is leading, on behalf of a range of review bodies, the developing Integrated Research Application System (IRAS). This system will make it simpler for researchers preparing to apply for approval from regulators, care organisations and research ethics committees. IRAS will be launched in January 2008.

Improvement in research ethics committees' turnaround times



Funding for Research Ethics and Systems*



*Spending includes funding transferred to another Department of Health budget for NPSA's costs in hosting NRES (£5 million in 2006/07).

Focus on... protecting patients

(These innovations make sense – that's why they will work)

Sir John Lilleyman has experienced the ethics committee system both as a clinical researcher in the field of childhood leukaemia and now as strategic adviser to the National Research Ethics System. He explains how the new system will help researchers and protect patients.

'Setting up a research trial used to involve getting approval from more than 20 different ethics committees. It could take a frustrating six months or more to get ethical approval. And although this never stopped us getting started, it was bureaucracy we didn't need, and it was costly.

'The crux of the difficulty was the dichotomy between a research community that rarely if ever saw any problems in the studies they wanted to do and an ethical research community that saw them everywhere. As a result there was a loss of proportionality – a failure to initiate a common-sense approach.

'The new system builds on the standardised operating procedures

and standardised application form introduced by the COREC.

'Within the next year, researchers will only need to fill in a single application form once on-line, with an opportunity to tick the relevant organisations that need to receive the basic information.

'A single experienced expert, rather than a committee, will filter applications that come in to identify those with few or no ethical implications. Every application will still need to have ethical approval. But those with few ethical implications will go through within about three weeks.

'These innovations make sense and that's why they will work.'

Sir John Lilleyman is former chairman of the National Patient Safety Agency and a strategic adviser to National Research Ethics System.

Passport to success

A 'research passport' to unify and simplify employment procedures was a commitment of the Government's health research strategy, *Best Research for Best Health*. This consistent approach will make it easier and faster to begin agreed research studies.

Following a successful pilot, the new Research Passport system was launched at a conference in October 2007.

The Research Passport is one of a series of measures identified by *Best Research for Best Health* to reduce unnecessary bureaucracy. Researchers working across different NHS organisations have had to obtain multiple honorary research contracts, each involving similar pre-engagement checks such as criminal records and occupational health. This often led to delays in projects starting and there was no clear, practical, national guidance on the situations in which honorary research contracts were required. The Research Passport will iron out these difficulties. Pre-engagement checks by non-NHS employers can now be shared with NHS organisations, reducing duplication and speeding up the process of getting research under way.

In England our new Comprehensive Local Research Networks are adopting the Research Passport as standard practice and are developing working procedures with local partners – a step that is already helping to shorten the time taken to get projects up and running.



Focus on... shrinking the time to set up research

Dr Rhian Hughes, Deputy Director of the Primary Care and Health Sciences Research Institute at Keele University, who was involved in piloting the Research Passport, observes:

'In 2002/03 when we set up our trial of acupuncture for knee pain we needed honorary contracts across 28 trusts for seven staff. This involved an average of eight contracts for each trust over a period of nearly six months. By contrast, in 2007, when we set up our back pain trial, Research Passports were established within a couple of weeks for our physiotherapy staff to support the NHS to undertake the trial. The process was far more streamlined and was coordinated by our administrative staff, with no impact or delays to the trial's project plan. 'The university has gained more clarity on its responsibilities towards staff undertaking research that has an impact on patient care. We have also been able to clarify the systems to undertake appropriate pre-employment checks for this group of staff. In addition we have also established closer and more effective relationships with our NHS partners. As a result of this we both now have a better understanding of each others' needs.'



A joined-up approach to advice

Researchers need authoritative advice on dealing with regulatory processes, approvals and permissions and on compliance with legal requirements. This is why the NIHR has collaborated with partners in the UK Clinical Research Collaboration to set up a national research advice service.

Comprehensive laws and regulations exist to safeguard the rights, safety, dignity and well-being of research participants and to ensure that health research meets consistently high standards. But in order for researchers to meet their obligations, reliable advice is essential. That is why we have been working with the UK Clinical Research Collaboration to establish a national Regulatory and Governance Advice Service. The service, which is administered by the NIHR-funded UK Clinical Research Network together with the Medical Research Council, was rolled out across the UK in April 2007 with a series of roadshows following a successful pilot. It will provide:

- support for local advice providers, such as R&D offices, clinical trials units and local research networks
- a route for handling complex queries such as those involving more than one regulatory issue
- access to a range of web-based resources including tool kits and a Question and Answer site.



The Regulatory and Governance Advice Service

Towards a shared working environment

A key goal is to ensure that we use information and knowledge management systems effectively so that they meet the needs of our stakeholders. By making research information, outputs and innovations more accessible, we shall make the most of their potential to improve practice in the NHS and benefit patients and the public.

Our website (www.nihr.ac.uk) is our main point of communication with our stakeholders and reflects our principles of transparency and accountability. With regular updates of our progress in implementing and delivering *Best Research for Best Health* and links to calls for proposals for funding, it allows professionals, patients and the public immediate access to information about our activities.

The implementation plans listing our objectives, milestones and timetables for delivery are there for all to see and are refreshed at least every six months. Meanwhile the NIHR portal, although still only in its infancy, is already facilitating a real shared working environment for a number of our networks by allowing disparate researchers to work together and share documents or other materials in a secure e-network.

Unifying our systems

We have also begun to unify the information management systems that will support us in the future. As part of this endeavour, in October 2006, we sought feedback on our *High Level User Requirements Specification* document to discover in broad terms what users want and need from our information systems.

The document identifies the services that researchers and the public can expect from the NIHR portal and outlines how these will work, as well as pinpointing which groups are most likely to need access to its secure services.

We also consulted on another document, the *NIHR Portal User Requirements Specification*, which provides more detail on the nature and function of the portal.

Revised versions of these two documents incorporating the feedback we received are now available on our website at www.nihr.ac.uk/systems_research_ information_systems.aspx





GOAL FIVE: Act as sound custodians of public money for public good

Ensuring transparency, fairness and contestability

Making sure that publicly funded health research is of the highest quality and provides value for money through a transparent and accountable system is an absolute priority for us.

All NIHR funding is based on consistent principles of fairness, transparency and contestability, but with different funding mechanisms for different aims. Some funding, for example, is awarded through national competition to the best researchers and research centres, taking account of value for money as well as quality. Other funding is allocated across the whole of England because we want all patients and health professionals from across the country to be able to participate in and benefit from high-quality clinical studies no matter where they are.

All change

In everything we do, we are committed to ensuring that patients are at the centre of a system that offers quality, transparency and value for money.

In the past, funding worth some £500 million each year was allocated to individual NHS organisations through a formal NHS contract. The amounts in question, however, did not always reflect very closely the level, quality and relevance of the research carried out, based as they were on their historical allocations.

To make sure that NHS research funding is now used only to support the highest quality research and the facilities and systems needed to support this, we are introducing new systems to ensure that funding follows research activity openly and sustainably, and supports new ways of working for the different elements of NHS and Department of Health funded research.

To allow NHS organisations the time needed to adjust to our new model of funding, we introduced a funding transition programme in April 2006. During this transition period, which is due to end in April 2009, we are continuing to allocate funds as we traditionally have but at progressively lower levels.

At the same time, we are allocating increasing amounts of funding through the new infrastructure and research programmes for the defined purposes described earlier in this report.

New funding stream

In April 2008, we plan to introduce a new research funding stream – *Flexibility and Sustainability Funding*. Its aim is to enable research-active NHS organisations to attract, develop and retain a cadre of high-quality research, clinical and support staff and to support the appointment and retention of key staff undertaking peopleand patient-based research.

The level of funding awarded to individual trusts will be based on the income they received from us in the previous year. The money will support some of or the entire research-related component of the salary of researchers, where that component is not already provided by another research funding source.

Funding is subject to explicit contractual agreements and robust planning,

monitoring and control. We publish clear criteria for each NIHR scheme on our website, together with membership of selection panels, and publish the outcome of each competition both on the website and in press releases.

All our new programmes conduct peer and expert review on research applications to make sure that everything within our portfolio is relevant and of the highest standard. NIHR coordinating centres manage the process. These include the:

- NIHR Central Commissioning Facility
- Health Technology Assessment
 Coordinating Centre
- Service Delivery and Organisation Programme Coordinating Centre
- National Coordinating Centre for Research Capacity Development.

The public can be assured that their money is being spent wisely

Professor Anne Forster, of the University of Leeds, who sat on one of our Programme Grants for Applied Research proposals committees, says:

All the proposed projects had been out to a wide range of referees, many of them international experts in the field, and there was a good range of experts on the panel – both medical experts in the field and others such as statisticians as well as patients – bringing different views to the table on both the methods and relevance of the research. I was impressed by the organisation and robustness of the process and the considerable effort made for equity, all with the intention that the best research was chosen to enhance patient care. As Chief Executive of the Strategic Health Authority, I have been extremely impressed at the gains made since Best Research for Best Health was launched. Research is now organised within a clear strategic framework that places the patient at the centre, underpinned by new processes that ensure best value from the funding available.

Successes include new programmes like Research for Patient Benefit, which make explicit reference to the needs of patients. National research networks, such as the Stroke Research Network, are already making a difference to patient outcomes and experience. The new strategy has given patients a real voice in setting the research agenda in this country. I congratulate everyone involved in delivering the ambitions of the strategy so far and look forward to working with colleagues in the future in pursuit of a truly world-class, R&D-driven NHS.

Candy Morris, Chief Executive of the South East Coast Strategic Health Authority

Sound custodians of public money

Although the NIHR is directly accountable to the Department of Health (through the Director General for Research and Development) and Ministers, it is also subject to scrutiny by a number of other bodies.

Following the Cooksey Review of UK health research funding, the Office for Strategic Coordination of Health Research was created. Its mission is to facilitate more efficient translation of health research into health and economic benefits in the UK through better coordination of health research and more coherent funding arrangements to support translation.

The NIHR Advisory Board, whose members include chief executives of NHS trusts and strategic health authorities as well as leaders of academic organisations, exists to advise and support the Director General of Research and Development on the strategic development of the Best Research for Best Health strategy and of the NIHR. Specifically, it advises on priorities for the allocation of funds between infrastructure, capacity development and programmes or between health groupings. It also advises on the strategic development of incentives for research in the NHS and the development of a research and innovation culture.



NIHR: Governance, oversight, accountability and quality assurance



Financial summary

NIHR funding for 2006/07

rea Spend (£m)	
Research programmes	
Health Technology Assessment	16.2
Methodology	1.0
Reviews	9.1
Service Delivery and Organisation	9.5
Investment for Innovation	
(NEAT and HTD)	2.7
Horizon Scanning	0.6
School for Primary Care Research	1.0
Consumers (INVOLVE)	0.5
Research support units	11.4
Time-limited research programmes*	21.6
Programmes total	73.6

Infrastructure initiation

Infrastructure total	56.9
Other	7.7
Ad-hoc support and excess	8.2
Technology platforms	3.0
Experimental cancer medicine centres	2.5
Clinical research facilities	3.4
topic specific networks)	32.1
Networks (cancer and new	

*Includes: genetics/gene therapy/knowledge parks/ Biobank; mental health and forensic mental health; cancer, including prostate; patient safety

Area Spe	Spend (£m)	
Faculty trainees		
Public Health Career Scientist awar	ds 1.1	
Complementary and Alternative		
Medicine awards	0.8	
Clinician Scientist awards	4.0	
Nursing and AHP awards	1.4	
Primary care awards	2.5	
Research Scientist in Evidence		
Synthesis	0.6	
Joint Cancer Fellowships	0.1	
Research Capacity Trainees	3.4	
DH/MRC Health of the Public awar	ds 0.6	
Health Service Researcher awards	0.4	
Health Economics awards	0.1	
Academic Clinical Fellowships		
(Walport)	0.5	
Academic Clinical Lectureships		
(Walport)	0.2	
Other	1.4	
Faculty total	17.1	

NIHR systems

Total NIHR spend	661.5
NHS infrastructure	507.2
Transition funding for	
NIHR systems total	6.7
Other	0.2
systems	0.5
Busting bureaucracy information	
NHS research ethics system	6.0

Postscript by the Director General of Research and Development



I cannot have been alone in my awe of the immensity of the task we all had to achieve when we launched Best Research for Best

Health to deliver our shared vision. For me, therefore, this review of our achievements in less than two years prompts a variety of reflections.

Firstly, I am struck by how far we have travelled since April 2006 when we launched the NIHR.

Since that time, we have accelerated research and development in the NHS by launching the broad range of schemes and initiatives highlighted in this document. Importantly, the way research funding is awarded is steadily being transformed so that funding is now focused where it can make a real difference. Crucially, this means we are now commissioning more clinical and applied research through our new and expanded research programmes and our world-class research centres. It also means that we are improving the systems we use to support research, through accountable and independent expert review processes.

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Our topic specific research networks have already established their presence, strengthening links with industry while streamlining research management and delivering proper governance. They are improving the speed, quality and coordination of clinical trials, and boosting the numbers of people taking part. The new Comprehensive Clinical Research Networks will bring these advantages to the whole of England.

Our flagship School for Primary Care Research is now up and running, and will develop more evidence for better services in settings like GP and dental surgeries, health centres, antenatal clinics and pharmacies. This is where more than 85 per cent of NHS consultations take place, including important interventions like screening, early diagnosis and the treatment of long-term conditions – as well as health promotion.

New measures have been introduced, over time, to reduce delays and inconsistencies in setting up research studies. The modernised bi- and tri-partite Clinical Trial Agreements are already facilitating industry-sponsored research in the NHS. Research passports are simplifying the processes involved in issuing honorary research contracts to non-NHS researchers and the UK Clinical Research Collaboration-hosted advice service is available to advise and assist in resolving researchers' questions about regulatory, governance and ethics matters. Our NIHR website has become firmly established as the primary source for the latest updates and developments in our work, and we are now beginning to roll out the NIHR portal. The portal, a fully integrated Information Systems internetbased service, will make it possible, for the first time, for the research community and their partner organisations to work together regardless of their geographic location.

People are and always will be at the centre of everything we do. That is why we are creating the NIHR Faculty for all research professionals. We are developing, with our partners, integrated training pathways across all disciplines for our most promising and talented young researchers, and our first highly enjoyable NIHR Faculty trainee conference took place in September 2007.

Since Sir David Cooksey's Review of the institutional arrangements for health research funding, we have been working closely with the Medical Research Council to make sure that lab-based breakthroughs are translated into medical innovation in the NHS. We welcome the new player on the block – the Office for Strategic Coordination of Health Research. These are very new ways of working and I am really looking forward to the benefits this will bring about for patients and the public.

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In October 2007, the Government confirmed its commitment to supporting health research in the Comprehensive Spending Review. Public funding for health research will rise to £1.7 billion per annum, with ring-fenced funding for the NIHR of £1 billion per annum by 2010/11. This level of funding will support an unprecedented growth in the number of NHS clinical trials in England.

Achieving all of this has required amazingly hard work from all the NIHR Programme Directors and Centres, as well as all the Department of Health teams, with real partnership working from a multitude of partners. Both the NHS and academia are rising to the challenge. So, while we still have a huge amount of work to do, I am confident we will continue to deliver the goals and aims of Best Research for Best Health. I would like to send my personal thanks to everyone involved including the patients for whom we do this work.

Sally (C

Professor Sally C. Davies Director General of Research and Development, Department of Health

Centre for Reviews and Dissenination



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