



# Investing in Primary Health Care

Achieving better health care in the community



Images by Nasir Hamid, Rob Judges and Niall McLaughlin Architects  
Designed by University of Oxford Design Studio



*'Over the last 5 years, Oxford University has invested significantly in expanding the academic base of primary care and this investment has been more than matched by considerable national research funding, awarded in open competition, for our major research themes. We have further capitalised on this influx to Oxford of some of the UK's top primary care senior scientists by attracting a large number of junior clinical and non-clinical fellowships to 'grow' our future academic leaders. The inevitable consequence of this strategic investment is an urgent need to provide appropriate accommodation for this UK leading centre. The University has boldly provided a mechanism for this by allocating the Old Radcliffe Infirmary Outpatients Building to the department, subject only to raising the necessary funds to refurbish and transform this Grade II Listed Victorian edifice. The space use is most apposite since it will convert this historic space, previously raised by public subscription to treat the ambulant population of Oxford and empty for a decade, into a world class venue, adjacent to the local community, for the best science to guide doctors internationally and the best education of future doctors locally.'*

Professor Richard Hobbs, Head of Department, Nuffield Department of Primary Care Health Sciences

# Changing the face of health care

**Oxford has been responsible for some of the world's most important medical breakthroughs, including the development of penicillin, the confirmation of the links between smoking and cancer and cardiovascular disease, and the discovery of cell fusion which enabled the mass production of antibodies.**

Today, the pursuit of scientific discoveries and testing their rapid translation into life-changing treatments remain the twin aims of our medical research. Medical education is equally important if we are to train the next generation of world-leading scientists and medical professionals.

Primary Health Care provides the first point of contact in most health care systems for patients, and the place where most disease prevention and illness follow up takes place. In the UK, primary care services, delivered mainly by general practitioners and their practice teams, provide over 90% of all patient interaction in the National Health Service (NHS). It is essential that this great volume of care is guided by the best evidence of what works best in preventing disease, or recognising it earlier, or treating diseases effectively when they occur. It is also a UK government priority to train more doctors and nurses for primary care since the NHS' demands on this speciality are overwhelming.

**The Nuffield Department of Primary Care Health Sciences is the largest and top ranked primary care academic department in the UK, hosting some of the UK's top clinical researchers and teachers, and the only centre focussed on primary care at Oxford University.**

**Our research is led by internationally renowned scientists; many of whom also work as general practitioners (GPs), and whose research findings have changed clinical guidelines internationally, improving the care that GP practices deliver in the UK and across the globe. Our teaching has inspired many young doctors to commit to a career in general practice serving local communities.**

We specialise in tackling important and common major illnesses, including cancer, obesity, smoking, cardiovascular and metabolic diseases, childhood illness, infection, international health and patients' experiences of health.

Our department was ranked the top centre for primary care research in the UK in the 2008 national Research Assessment Exercise. We were similarly judged a top centre on our 1996–2001 assessment, so have been one of the world's most important primary care centres for over 15 years.

With major success come major challenges – our department has outgrown its space and now finds itself spread across several locations, making our research more difficult and less effective. In Primary Care the range of conditions and diseases that we study, and the different research techniques that we use, mean that we need all our researchers, and teachers, together in a single location. We need one big melting pot where ideas can come together. Our plan is to move all our staff into the old Outpatients Building on the Radcliffe Observatory Quarter in central Oxford.

# The Radcliffe Observatory Quarter

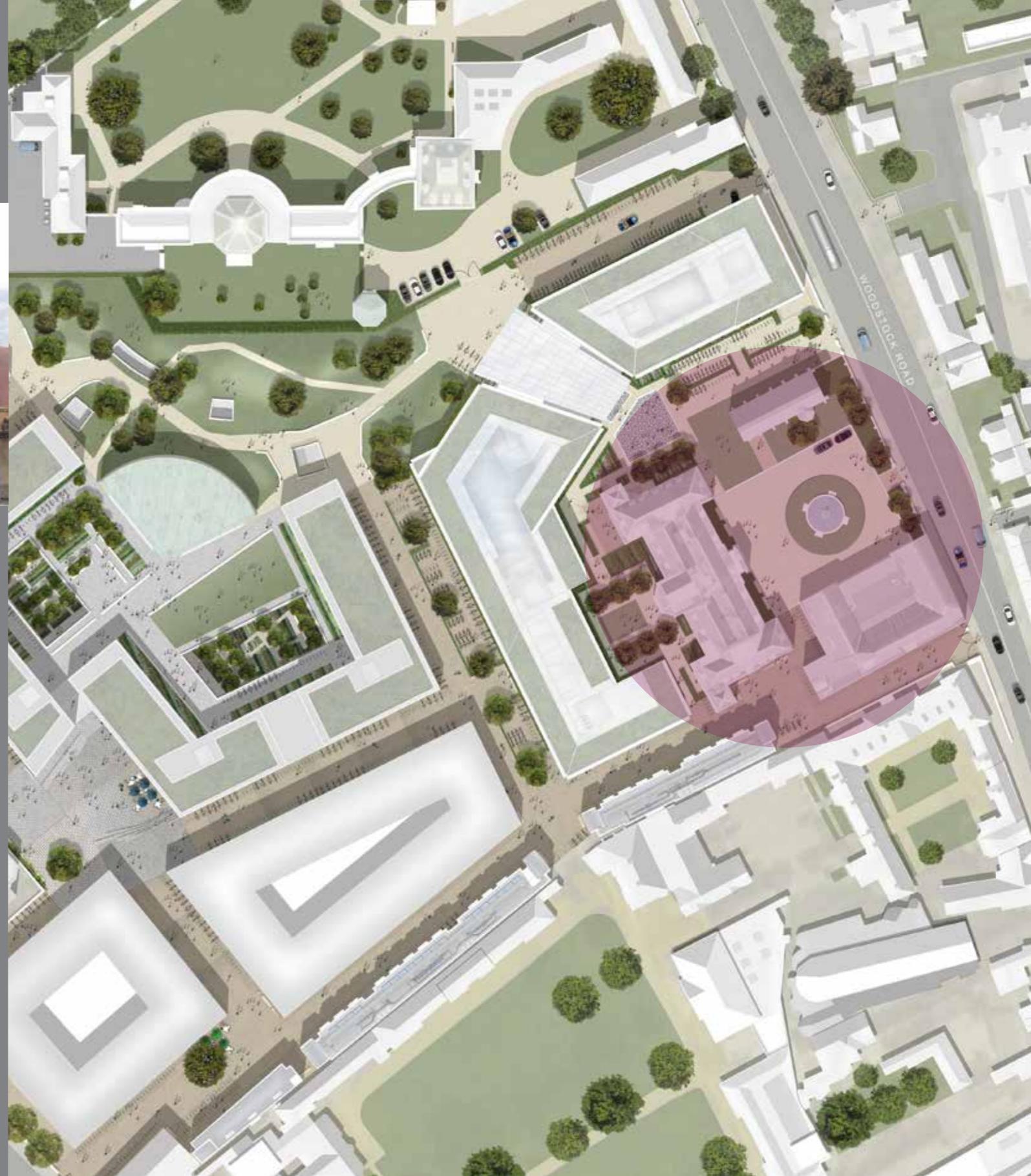


**The Radcliffe Observatory Quarter (ROQ), which houses the former Radcliffe Infirmary, is one of the most significant development projects the University of Oxford has undertaken for more than a century.**

The University recently purchased the site of the Radcliffe Infirmary which, for over 200 years, was at the heart of health care in Oxford. From the outset it was dependent on voluntary donations – not only Dr Radcliffe's original bequest for the building, but also the subscriptions of local people recorded on the original donor boards, and the doctors who donated their time to care for the sick.

Since its closure as a hospital, the city has lost a health presence on this historic site, yet it retains a strong place in the affections of local people, health professionals who trained and worked there, and many University alumni.

Oxford's historic architecture is well known, yet the physical infrastructure of the collegiate University that we see today has evolved over many centuries. These changes continue as we build, restore and reconfigure to meet the academic challenges of the 21st century.





## The Outpatients Building: a site of pioneering health care

**We are seeking funding to contribute to the refurbishment of the landmark Grade II Listed Outpatients Building on the old Radcliffe Infirmary to bring together Primary Care research and teaching in a single location in the heart of the city from their current three disparate locations.**

The handsome Grade II Listed Radcliffe Infirmary Outpatients Building has been empty since the hospital left the site in 2007 to transfer to the John Radcliffe Hospital in the north east of Oxford. Built in 1911, at the time it was an example of a purpose built, well designed, state of the art Outpatients Department. The building included an X-ray department, mortuary, chapel, pathological department, laboratories and teaching rooms.

When it was opened in 1913 the Chancellor of the University, Lord Curzon of Kedleston, was part of a distinguished gathering that, as the hospital's management committee recorded, hoped that the hospital 'may also prove the point of contact between the general practitioners outside and the work of the Hospital as a centre of Medical Research and Knowledge'.

The Outpatients Department has been from its very inception a pioneer in health care delivery. In July 1941 the first ever Accident and Emergency Department in the UK opened in the Outpatients Department. It became highly successful with an international reputation for excellence. The Oxford Accident Service was the first place to have neurological surgeons responsible for the treatment of head injuries – a 'progressive and important arrangement'.



More recently, in the 1980s, a day hospital for the elderly was housed in the Outpatients Department. This unit began in the Cowley Road Hospital where it was a pioneer and world leader.

Putting our research department into this historic building is particularly fitting: it will put community medicine back into a building designed for exactly that. And will put medical pioneers and innovators back in a building that has led the way in delivering progressive, patient centred health care.

# What will the building look like?



The original building was designed in close consultation with leading physicians of the time. It had a central waiting room, with glass vaulted roof, and consulting rooms around the perimeter. Although a relatively modern building it was built with a façade to match the original hospital building and it is the façade that led to the Grade II listing.

The building will be rehabilitated and its centre replaced with double height atrium spaces and the sensitive yet dramatic renovation will form a welcoming gateway to the entire Radcliffe site. Indeed, beyond its architectural features, the Outpatients Building will act as a critical structure uniting the Observatory Quarter as a whole. A central footpath connecting the main courtyard to the east/west link will provide one connection through the Quarter, allowing easy passage through the whole site.

The £14.1m plans to redevelop the Outpatients Building have already been approved and, if we can maintain our momentum, the scheme could be completed by autumn 2015.

*'Our vision is to restore the former Outpatients Building as a new home for primary care health sciences, renewing a health presence in the building into the 21st century. This development will provide the very best facilities to support our vital research and teaching, and enhance the experience of our students and staff'*

Nicola Small, Departmental Administrator, Nuffield Department of Primary Care Health Sciences



# Why is primary care important?



**Throughout the world primary care remains the most effective way to deliver health care, from the UK, where an aging population with long term conditions place an ever growing strain on the NHS, to third world countries where access to medical care is limited.**

For health care systems to survive, we need to challenge the way that they are delivered; developing and using our knowledge to deliver health care that meets the needs of the patients, that catches disease and ill health early and uses resource most effectively.

In England, more than 15 million people have a long term condition – a health problem that can't be cured but can be controlled by medication or other therapies. This figure is set to increase over the next 10 years, particularly those people with 3 or more conditions at once (source: Department of Health).



People with long term conditions are intensive users of health and social care services, including community services, urgent and emergency care and acute services, accounting for:

- 50% of all GP appointments
- 64% of outpatient appointments
- 70% of all inpatient bed days

In total around 70% of the total health and care spend in England (£7 out of every £10) is attributed to caring for people with long term conditions. This means that 30% of the population account for 70% of the spend (source: 2009 General Lifestyle Survey).

Our research rethinks the way that health care is delivered to people, helping them to manage their own health and reduce the numbers that need to be admitted to hospital. This improves patients' independence and well-being as well as dramatically reducing the cost to the NHS.





*'A primary health care approach is the most efficient and cost-effective way to organize a health system. International evidence overwhelmingly demonstrates that health systems oriented towards primary health care produce better outcomes, at lower costs, and with higher user satisfaction.'*

Margaret Chan, Director-General of the World Health Organisation at the International Seminar on Primary Health Care, November 2007

## Our research



**Primary Care research is very quickly translated into improvements in patient care. In just the past 5 years our research has changed the National Institute of Clinical Excellence (NICE) guidelines in many areas, including research that has identified early signs of serious illness in children, enhanced the diagnostic pathways for diabetes, heart failure and for hypertension, improved the recognition and treatment of stroke risk in atrial fibrillation, and altered health policy on smoking cessation to name but a few.**

At the Nuffield Department of Primary Care Health Sciences, we have methodological expertise in clinical decision making and diagnostics, clinical epidemiology, medical statistics, modelling, qualitative research and clinical trials. And we are host to several important research centres, including:

- The National Institute for Health Research (NIHR) School for Primary Care Research
- The Oxford Centre for Evidence-Based Medicine
- The UK Cochrane Tobacco Addiction Group
- The Health Experiences Institute with Green Templeton College



*Our key priority is to preserve the Department's position as one of the world's outstanding departments for primary care research and teaching by recruiting and retaining the world's best primary care researchers and – just as importantly – attracting the top graduate students.*

### Awards

- Guardian Healthcare Innovation Award for Service Delivery Innovation
- Royal College of General Practitioners (RCGP) Paper of the Year Award Winners in 2009, 2010 and 2011
- Athena Swan Bronze Award

# Our research groups

## Obesity

More people in the world are now overweight than underweight, causing major problems for health care systems and the wider economy.

It is therefore essential that we help people to stop getting heavier as well as support those who are already obese to lose weight. Our Obesity team's research has shown that patients whose doctors send them to a weight loss support group are twice as likely to lose weight after one year than if they use weight management services offered at their doctor's surgery. We also advise Government on policies to prevent obesity including developing the new standards for school food and negotiating agreements with the food industry to improve their products, reduce portion sizes and provide better nutritional information on food packaging.

## Smoking cessation

The Cochrane Tobacco Addiction Review Group was formed in Oxford in 1995. Working within the Nuffield Department of Primary Care Health Sciences, the group supports a worldwide team of over 200 authors to produce high quality systematic reviews in the field of tobacco control. The reviews focus on interventions for helping people to stop smoking, such as counselling and medications, and on interventions to prevent young people from starting smoking, such as education programmes and access controls. This work has been used in national guidelines for tobacco control in over 30 countries. By making the best evidence widely available, we hope to help reduce smoking and the health problems that it leads to across the globe.

## Cancer

Our research on ovarian cancer helped identify the symptoms that might predict the disease early, winning awards and changing NHS guidance. We have led work around the international bench-marking of cancer care and variations in performance. Recent work has shown the most cost effective way of following up patients with colorectal cancer to minimise over-investigation but maximise early detection of recurrence.

## Child health

Infections still account for one in five of all childhood deaths. Serious infections in children, such as pneumonia or meningitis, need to be identified promptly to start treatment as soon as possible and prevent complications. Some of the work taking place in our Paediatric Research Group focuses on providing doctors with clinical tools that identify children with a serious infection (such as meningitis) early on to optimise these children's prognosis. For example, our teams produced the world's first charts so that doctors and nurses can determine whether a child's heart rate and breathing rate are normal or abnormal. These centile charts are now being used worldwide.

*'by far the most robust set of vital sign data I have encountered in 30 years of medical practice and clinical risk management research'*

Dan Sullivan, MD, JD, FACEP, Assistant Professor of Emergency Medicine, Rush Medical College



## PRIMARY CARE RESEARCH IN ACTION

### Smoking prevention in schools

Smoking prevention in schools reduces the number of young people who will later become smokers, according to a new systematic review published in The Cochrane Library.

Smoking causes five million preventable deaths every year, a number predicted to rise to eight million by 2030. Our researchers analysed data involving a total of 428,293 young people aged 5–18.

Researchers in the Nuffield Department of Primary Care Health Sciences found that in the longer term, programmes that helped children to develop social skills and competence had a significant effect on preventing smoking in young people but that simply teaching children to resist social pressure or giving children information about the effects of tobacco was not effective.

*'This review is important because there are no other comprehensive reviews of world literature on school-based smoking prevention programmes. The main strength of the review is that it includes a large number of trials and participants. However, over half were from the US, so we need to see studies across all areas of the world, as well as further studies analysing the effects of interventions by gender.'*

Julie McLellan, Researcher, Nuffield Department of Primary Care Health Sciences

### How GPs identify sick children

Primary care research revealed that doctors should check for leg pain, confusion, stiff neck and sensitivity to light in children as the 'red flags' for meningitis. Differentiating between minor illness and serious conditions in children is particularly difficult. Approximately one in 10 patients infected with bacterial meningitis will die and researchers at the Nuffield Department of Primary Care Health Sciences found that half of children with the condition were initially misdiagnosed, perhaps because symptoms such as the classic rash, appear later in the infection. This research has changed NHS guidance on diagnosis of meningitis in children.

*'Anything that helps early diagnosis is a good thing.'*  
Sue Davie, Chief Executive, Meningitis Now

## Chronic Kidney Disease

Chronic kidney disease, which is often asymptomatic until later stages, seriously increases the risk of cardiovascular disease, hospitalisation and death. Our research will identify which patients are at risk of chronic kidney disease, how their cardiovascular health is affected by this and how screening and monitoring can help. We have developed the Monitoring of Renal Specific Endpoints (MORSE) programme to address the key issues of chronic kidney disease management in primary care. There are three large studies with different streams of NIHR funding and all take place in general practices with patients that GPs are likely to see on a daily basis.

## Diabetes and long term conditions

We are working to find new ways to help people who are suffering from long-term conditions manage their health through better self-management. One of our projects researched how people with diabetes can use mobile phone systems to adjust their insulin and tablets and our teams have developed these systems to help people who are suffering from other diseases, including chronic obstructive lung disease, both in the UK and resource poor settings such as Africa.

## Heart failure

Our ECHOES (Echocardiographic Heart of England Screening) Study is the world's largest cohort exploring heart failure and left ventricular systolic dysfunction (LVSD) to see how common the problem is in the general population and how it affects people's lives and mortality. Follow up research has examined how natriuretic peptides (which are produced by the body when heart muscle is stressed) can be used to diagnose heart failure and to determine the prognosis for patients suffering from heart failure and LVSD. We are continuing to collect data from those patients who were part of the ECHOES study and our findings to date have been incorporated into guideline recommendations in the US, UK and Europe, and informed NHS practice via NICE guidance.



### PRIMARY CARE RESEARCH IN ACTION

#### Smart blood pressure testing for hypertension control in Cape Town, South Africa

The SMS-text Adherence Support (\*StAR) Study is working with people who have high blood pressure attending a Community Health Centre in Capetown. Automated blood pressure monitors are linked to portable computers to improve the efficiency of blood pressure assessment at each clinic visit, ensuring that measurements are more accurate. Patients attending the clinic are also invited to take part in a trial in which they are randomly allocated to receive different types of support by SMS text message. The aim of the study is to see if there is an improvement in people's blood pressure if they receive regular messages of support by SMS.

*'The SMS project aims to fill a gap for much needed simple technologies designed for needs of some of the world's poorest people, and it is hoped that this new intervention will improve blood pressure control for the patients who use the hypertension service.'*

Dr Kirsty Bobrow, Researcher, Nuffield Department of Primary Care Health Sciences

## Hypertension

Identifying and treating raised blood pressure (hypertension) is key in the prevention of cardiovascular disease as well as in other situations such as pregnancy. Our group investigates novel methods for the monitoring, diagnosis and treatment of high blood pressure, focussing on helping patients monitor themselves and altering their own medication. Our ground breaking work shows that the use of ambulatory and home blood pressure monitoring in the diagnosis of hypertension was more effective and cost effective than standard clinic measurement. Our work is underpinned by several millions of grant income and has led to changes in both local and national guidelines.

## Infectious disease

The Chief Medical Officer considers antibiotic resistance a greater threat than terrorism. Over 80% of all antibiotics are prescribed in primary care but about 50% of these are probably unnecessary. This wastes money, exposes people unnecessarily to the risk of side effects and drives antibiotic resistance. Our teams are leading projects with the NHS and across Europe to safely reduce unnecessary antibiotic prescribing. Our research has provided the basis for new clinical guidelines, antibiotic stewardship initiatives and policies, and educational tools for clinicians and patients that are being used in the UK and internationally.

## Primary care for the developing world

Effective primary health care is particularly important in resource-poor countries. Effective delivery of vaccinations, maternal care and treatment of common diseases, such as malaria, is essential for the achievement of the United Nations Millennium Development Goals. Our researchers work with academic institutions, non-governmental organisations and government agencies including Africa, India and China to support delivery of high quality primary care through policy development and research.

## Stroke prevention and atrial fibrillation

Stroke is the leading cause of disability in adulthood, the third leading cause of death and costs £9 billion per year in the UK. Reducing the risk of stroke is vital to improving the health of older people. We research 'funny turns' that are a warning sign of stroke (termed 'transient ischaemic attacks') and the detection and treatment of major risk factors for stroke – high blood pressure and atrial fibrillation.



### PRIMARY CARE RESEARCH IN ACTION

#### Confidential Enquiry in Africa

- Lifetime risk of maternal mortality is 330 times greater in Africa than in the UK
- 7.6 million children die every year before their 5th birthday

With the Universities of Mbarara (MUST, Uganda) and Bamako (Mali), we are trialling the use of *Confidential Enquiry* – a method of investigating adverse events without attributing blame – into child and maternal deaths in Uganda and Mali. By involving local people and politicians in discussing the causes of each death investigated, we are seeking to facilitate remedial action by both local and central government as well as local primary health care staff.

*'Since we introduced the Confidential Enquiry in 2011, we have seen a reduction in child deaths of approximately 25% in our study areas in Uganda and Mali.'*

Dr Merlin Willcox, GP and Researcher, Nuffield Department of Primary Care Health Sciences

### Clinical trials

Our trials team is an integral part of our department and is involved in the design, conduct and analysis of investigator led multi-centred randomised trials that are carried out in collaboration with local NHS Trusts in both primary and secondary care. We are proud to hold UK Clinical Research Collaboration fully registered Clinical Trials Unit status, in recognition of our ability to coordinate multi-centre clinical trials to the highest standard.

### Medical statistics

Our team of statisticians, systematic reviewers and methodologists provide support for the design, execution and analysis of studies to all the clinical research groups in the department. Our statisticians have their own research programmes and contribute to the department's many teaching activities at all levels. We use our wide range of expertise to develop innovative methods of analysis and monitoring in primary and secondary research, including diabetes, oral anticoagulation therapy, hypertension, cardiovascular disease and chronic kidney disease.

### Health experiences

Our team researches experiences of health and illness, interviewing people about what it's like to live with medical conditions such as cancer, heart failure and autism. We highlight how personal narratives can inform policy and improve services. We run training courses on qualitative data collection methods and analysis and provide training and on-going support to similar groups of researchers worldwide. Our interview resources are helping to improve services and develop training for clinical staff in the NHS and we developed the world's largest repository of health experience narratives via the award winning *Healthtalkonline*.



## PRIMARY CARE RESEARCH IN ACTION

### **www.healthtalkonline.org listed in The Times 50 Top Websites You Can't Live Without and ranked second in their top 5 health websites**

www.healthtalkonline.org is a wealth of highly reliable data on personal and patient experiences collected and analysed using world leading qualitative research methods. Thousands of people have shared their experiences on film to help others understand what it's really like to have a health condition such as breast cancer or arthritis. The site also offers free information for health professionals. Two recently launched modules focus on Experiences of Antidepressants and Conditions that threaten women's lives in childbirth and pregnancy.

*'The methods used by the Health Experiences Research Group have set the benchmark for research into health and illness experiences'*

Sir Muir Gray, Director of the National Knowledge Service and NHS Chief Knowledge Officer

### **BJGP study urges wider use of anticoagulants to prevent stroke**

Our researchers have found that lowering the threshold for prescribing anticoagulants to patients with atrial fibrillation would significantly reduce the number of strokes. Dr Tim Holt and colleagues at the Nuffield Department of Primary Care Health Sciences examined the records of 99,000 patients from over 500 UK general practices to see how many people with atrial fibrillation – a major risk factor for stroke – were taking anticoagulant medication. Only about half of at-risk patients were being prescribed anticoagulants.

*'Oral anticoagulation reduces the risk of stroke very significantly in people with atrial fibrillation, but is underutilised: only about half of patients with atrial fibrillation and at risk of stroke receive anticoagulants. Reducing the threshold for anticoagulation would substantially reduce the incidence of disabling strokes in the UK.'*

Dr Tim Holt, GP and Researcher, Nuffield Department of Primary Care Health Sciences

### **Easing the pressure on accident and emergency**

Research designed and led by Primary Care, working with NHS providers and the local council, has dramatically changed the way sick, vulnerable elderly patients are treated, avoiding the need for costly, and unnecessary, hospital admission. This innovative, comprehensive care regime won the 2013 Guardian Healthcare Innovation Award for best service delivery innovation.

*'This recognition by the Guardian shows what can be achieved by collaboration across disciplines. We must continue to develop and evaluate new services supported by technological advances to find the best way of caring for our most frail and complex patients.'*

Dr Daniel Lasserson, GP and Researcher at the Nuffield Department of Primary Care Health Sciences

# Our education programmes



## Evidence-Based Medicine (EBM)

Our Centre for Evidence-Based Medicine (CEBM) team aims to develop, teach and promote evidence-based health care through conferences, workshops and EBM tools so that doctors, clinicians, teachers and others interested in learning about EBM can maintain the highest standards of medicine. Over 1,000 health care professionals from across the globe have trained with the CEBM either in Oxford or through our growing Outreach Programme. Our staff have trained over 400 teachers of evidence-based practice and half of these new teachers live and work outside the UK.

## Teaching medical students

Our staff teach students throughout the medical course at Oxford. Early in the course, students meet patients for the first time in GP surgeries, where they learn to listen to the patient's story and put their scientific learning into a human context. Later in the course, the department provides training in the generalist skills of medicine, coordinating high quality clinical placements, and running training programmes in communication skills and evaluation of evidence. The Oxford Medical School aims to produce doctors who combine compassion with sound scientific and clinical knowledge. With its multiple inputs into the medical course, our department has a unique role in contributing to these objectives and in encouraging students to consider the career of a general practitioner.

We provide a highly supportive environment for postgraduates whether they are registered for a DPhil (PhD), enrolled on one of our short courses or the International Programme in Evidence-Based Medicine. We welcome domestic and international students to join our experienced and enthusiastic teachers, mentors and supervisors in aspirational study and research.

# Supporting the campaign

**We need help to carry on the restoration of the former Outpatients Department as a new home for the Nuffield Department of Primary Care Health Sciences. Your support is increasingly necessary in today's volatile funding environment and will help us build the very best facilities for our staff and students.**

This project presents a unique opportunity for philanthropic individuals and corporate organisations to:

- support academic excellence and innovation in association with a globally recognised institution
- shape and stimulate innovative thinking in collaboration with world class academics
- be associated with one of the boldest new University building projects in recent Oxford history
- leave a lasting legacy
- support researchers to carry out cutting edge medical research and help pioneer new kinds of research
- develop an historic, listed building, which has a place in medical history

**Please give generously and help us make a difference.**

## Funding needs

The transformation of the Radcliffe Infirmary Outpatients Building will cost **£14.1 million**.

## How will major donations be recognised?

There are **naming opportunities** within the new building including a new donor naming board to complement the one that previously existed in the Old Radcliffe Infirmary site.

In addition, donors will be recognised within the **University Donor Recognition programme**.

## Contact us

If you would like more information or are interested in supporting us please contact

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We would be delighted to talk to you.

To find out how your donation will make a difference, visit **[www.phc.ox.ac.uk/ROQ](http://www.phc.ox.ac.uk/ROQ)**

*A home for world class research that focuses on better understanding the community's health, helping to generate a new age of personalised care.*