



## DEPARTMENT OF HEALTH DESIGNATED ACADEMIC HEALTH SCIENCE CENTRE (AHSC)

### 2014/15 ANNUAL REPORT

**Note:** Please note this form should be completed in font no smaller than 10-point Arial.

#### 1. ACADEMIC HEALTH SCIENCE CENTRE DETAILS

**Name of the Department of Health Academic Health Science Centre:**

King's Health Partners

**Contact details of the DH AHSC lead to whom any queries and feedback on this Annual Report will be referred:**

**Name:** Professor Sir Robert Lechler

**Job Title:** Executive Director, King's Health Partners

**Address:** The Counting House, Guy's Hospital, Great Maze Pond, LONDON SE1 9RT

**E-mail:** robert.lechler@kcl.ac.uk

**Tel:** 020 7188 8794

#### 2. OVERVIEW OF ACTIVITIES (no more than 4 pages)

Please provide a brief overview of activities for your AHSC for 2014/15 financial year, addressing the following points:

- progress with further aligning the strategic objectives of the NHS provider(s) and university(ies) in order to harness and integrate world-class research, excellence in health education and excellence in patient care;
- a summary of the progress against the specific short, medium and long-term objectives as detailed in your full stage application, and a brief summary of progress made in each of the approved themes / work programmes for the AHSC as detailed in the full application;
- summary of the AHSC's contribution to economic growth and the economy, including through partnerships with industry;
- progress on the development and delivery of an appropriate e-Health informatics platform;
- an overview of any significant developments or issues associated with the leadership, strategy and governance arrangements which might impact on the delivery of the aims and objectives of your AHSC.

## Introduction

King's Health Partners (KHP) has made significant progress over the last year in delivering the commitments of our tripartite mission for excellence in research, education and clinical care. In 2014-15 we have delivered pioneering and system-leading work on the integration of physical and mental health, achieved outstanding results in the Research Excellence Framework, played a vital role at the centre of the Ebola response in Sierra Leone and driven work to develop a world class offering in a number of key specialties.

Our staff and teams have also been recognised by a variety of external bodies during the year, including royal honours and awards from the Guardian, NHS England, Nursing Times, British Medical Association, the International Association for Dental Research and the UK Clinical Pharmacy Association. Many of our staff have also been recognised in 'top 100' lists such as HSJ's Top Chief Executives, Innovators, BME Pioneers and Women.

### **Progress with further aligning the strategic objectives of the NHS provider(s) and university(ies) in order to harness and integrate world-class research, excellence in health education and excellence in patient care**

Building on our second stage accreditation, KHP launched its five year plan in summer 2014, aligning strategic priorities across our four partners and aimed at transforming health and wellbeing, locally and globally. Combining our focus on key underpinning themes of excellence in education, research translation and clinical practice, public health, integrated care, mind and body and value based healthcare we also aim to achieve internationally competitive standards of practice in a number of key specialties. The drive and focus of this delivery is anchored in our 21 Clinical Academic Groups (CAGs) and overseen by the KHP Boards.

Our outstanding health results in the 2014 Research Excellence Framework are a reflection of the strength, impact and alignment of the translational health research of our partnership. As a sign of the fantastic progress made in recent years, Clinical Medicine at King's is now ranked 3rd in the country for research quality, and Psychology, Psychiatry and Neuroscience is now ranked 2nd nationally for research power. King's has risen to 6th position nationally in the overall 'power' ranking – up from 11th in 2008 and our combined submission for the first four Units of Assessment linked to the health disciplines puts our power ranking as second in the UK. King's has also risen to 7th position overall for quality – up from 22nd in 2008. 84 per cent of our research has been deemed 3\* and 4\* (up from 61 per cent in 2008), meaning that it is regarded as 'world-leading' or 'internationally excellent'. Excellent results were also achieved in Imaging Sciences, Nursing, Midwifery and Palliative Care, Dentistry, Public Health and Pharmacy, Nutritional Science and Women's Health, evidence of the huge breadth of clinical research excellence right across our AHSC. It is our standing as an AHSC that has allowed us to align and strengthen our research activity right across our four partners, drawing on our combined world-class expertise and facilities to drive continued improvement and excellence for our patients. Our Education Academy has driven progress right across our Clinical Academic Groups through a range of new resources, programmes and courses and we have been awarded preferred bidder status for our workforce development education and training by Health Education London.

### **Summary of progress in key themes in 2014-15**

#### **Integrated mental and physical healthcare**

We have made huge strides towards our ambition of better integrating physical and mental healthcare. Our 3 Dimensions of Care for Diabetes programme has now seen over 800 referrals and has been commissioned by Lambeth and Southwark CCGs to deliver whole person care to people with diabetes, promoted and spread by the Health Innovation Network (HIN) and the Strategic Clinical Network. We are developing plans to extend this across a range of other long term conditions. During the last 12 months the programme has been named BMJ Diabetes Team of the Year 2014, Diabetes UK Mary MacKinnon Named Lecture 2015 and won an NHS Innovation Award 2015. Our IMPARTS (Integrating Mental and Physical Healthcare Research Training and Services) programme is now live in 22 clinics and has screened nearly 7,500 patients through over 11,000 screening encounters. The programme has shown significant evidence of the links between physical health conditions and associated mental health problems and allowed appropriate interventions to be identified. We have also set up new programmes to improve the physical health of people with severe mental illness and to improve care for people with persistent physical symptoms.

We are committed to improving the physical and mental health and wellbeing of our workforce. To this end, we worked jointly with the Health Innovation Network (South London AHSN) to hold a sold-out conference in February 2015 to discuss this issue. Dame Carol Black (Expert Advisor on Health and Work to Department of Health) and Earl Howe (Parliamentary Under Secretary of State for Quality at the Department of Health) delivered the keynote speeches. The event has since received a write-up on the Department of Health's website, alongside case studies of our wellbeing work on smoking cessation, 'happier at work' and 'creating

space’.

### **Basis science and experimental medicine**

Our international strength in research and education continues to rise. In addition to our REF success, King's is now ranked 11th worldwide in the ‘clinical, pre-clinical and health’ category by the *Times Higher Education* World University Rankings. Over the past five years our position has moved upwards from 27th, to 22nd, to 20th, to 13th, to 11th. This ranking is the highest any part of King's has reached in an international league table. In recognition of our work to advance gender equality in science disciplines, we have been granted twelve departmental Athena SWAN awards within the Health Faculties (five silver and seven bronze). Further faculties and divisions have since submitted applications, with award decisions pending, and all remaining faculties and divisions will submit applications next year.

Our research income is on a steady upward trajectory, with the total value of new grants awarded for 2014 being 22% higher than the previous year, at a value of £192m. We are now ranked 4<sup>th</sup> in the UK for new research grants from the MRC (2013/14), with an application success rate of 33%, the highest ever recorded for any university. King's now hosts 11 Wellcome Trust Investigator Awards and these are complemented by a number of substantial strategic awards including an Institutional Strategic Support Award valued at £1.5m. This will be used to support early career researchers, pump-prime research in areas of strategic importance and support public engagement.

Our new Clinical Research Facility on our Denmark Hill campus, officially opened this year by Professor Dame Sally Davies, is the first in the world because it has been built with mental health research in mind. Our NIHR Biomedical Research Centres at Guy's and St Thomas' and South London and Maudsley continue to carry out cutting edge translational research to transform scientific breakthroughs in physical and mental health into new treatments for patients and service users. Building on our BRU-Dementia, the new Maurice Wohl Clinical Neuroscience Institute, due to open shortly, is set to be one of Europe's largest centres for interdisciplinary neuroscience excellence. The Institute will be the key research facility in our efforts to fast-track new treatments to patients affected by disorders such as Alzheimer's disease, Parkinson's disease, motor neurone disease, depression, schizophrenia, epilepsy and stroke, while strengthening KHP's portfolio of internationally recognised brain research.

We have enrolled our first students onto a new PhD programme developed by the Francis Crick Institute and its academic partners, including several whose projects are jointly supervised by KHP/Crick staff. Three one-year collaborative Clinical Research Fellowships have recently been established between the King's-GStT BRC and the Crick. A pilot scheme has also been launched to identify the first KHP staff who will undertake a range of flexible attachments to the Crick's purpose-built research centre from spring 2016, offering our researchers exceptional opportunities to develop new collaborations, and benefit from access to specialist facilities, expertise and training.

### **Transforming outcomes through education and training**

Our Education Academy continues to drive improvement and innovation in our education offering for postgraduates and Trust staff. All clinical specialties are represented through their clinical academic groups allowing for coordination and alignment of training right across our partners and the full spectrum of mental and physical healthcare. Our student recruitment to both undergraduate and postgraduate programmes for 2014 was robust. We are doing significant work to enhance our MBBS programme and we have ambitious plans to recruit strongly for new programmes at both undergraduate and postgraduate level, including a Psychology BSc, over 10 new PGT programmes, the expansion of existing four-year MSc degrees, and the enhancement of our distance learning and CPD portfolios. New teaching units in Immunology and Genetics have been launched. To maximise our status as a multi-faculty AHSC, we are also exploring synergies with Arts and Sciences to develop new areas of growth. Decisive action across a number of fronts has led to excellent results overall in undergraduate and postgraduate student surveys. Clear plans for underperforming areas are being implemented with a view to ensuring that we deliver a world-class learning experience for every student. We have produced a wide range of KHP kite marked education materials for our workforce, students and community education provider networks for the KHP Learning Hub, our innovative e-learning platform. We have also developed further face to face courses for trainees and educational supervisors and postgraduate taught programmes. Our widening participation programme continues to engage young people from a wide range of backgrounds with careers in health, health sciences, social care and supporting services.

KHP is at the heart of a south east London alliance to deliver the 100k Genomes project, being designated as a Genomic Medicine Centre in December 2014. Building on a pilot programme at Guy's and St Thomas', our partners are putting their collective weight and commitment behind this revolution in patient care, which cuts right across our tripartite agenda. Our trusts will be responsible for recruiting suitable patients and their relatives to the programme, for collecting blood and tumour samples and for extracting the DNA from these

samples. KCL will play a key part in genomic research and education and successfully bid to host a Genomics MSc in partnership with our alliance partners St George's University London.

### **Excellence through key specialities**

As set out in our five year plan and further to the significant progress of our 21 Clinical Academic Groups (CAGs) since their launch in 2009, KHP is now focussed on achieving international competitive excellence in seven key specialities. We believe that a new type of clinical academic institute model for south east London (and stretching across the south of England), working across sites and campuses, bringing together the combined strength of the partners, would provide improved outcomes and experience for patients and service users whilst ensuring the delivery of our science and translational research ambitions. We are currently scoping how the nature of differing specialities now and in the future will require bespoke and carefully calibrated models of delivery, particularly with regard to clinical pathways across out of hospital and in-hospital care environments. We are looking at potential options for consolidation of major tertiary and quaternary specialities across our partners to improve health outcomes at scale. Some specialities may require highly specialised tertiary diagnostic and treatment facilities in one place to enable translational practice. For others the model of care may require a new focus on localities, communities and acute hospital pathways. We are considering plans that capitalise upon the excellent education, research and clinical care already provided and which consider the provision of services across the partners and in localities.

### **Value Based Healthcare**

We continue to lead the way on value based healthcare to achieve our objective of a more sustainable healthcare system with better outcomes for patients and service users. We have now published six Clinical Academic Group outcomes books with a further 15 due this year. We are creating a culture of improvement by being open and transparent about the outcomes we are achieving right across our clinical specialities to ensure our research, education and care is consistently delivering the very best for patients. In addition to clinical outcomes, we are also using the books to focus on more detailed patient experience, staff wellbeing and student satisfaction measures to ensure we are considering all the factors which contribute to excellence for our patients. A value based healthcare project run at King's College Hospital on performance management in three specialities won at the HSJ Value in Healthcare Awards 2014.

A key element of our work to improve the sustainability of our local health system is to focus on the root causes of why people are using services and to this end we have made significant progress in our work on public health in the last year. KHP have developed strategies around tobacco and alcohol misuse and we are engaging with local partners (including the HIN and the CLAHRC) on how best to deliver these strategies in partnership with local stakeholders, optimising the spread of KHP research. Of particular note has been our success in making our NHS sites smoke-free. SLAM became smoke-free in October 2014, KCH in January 2015 and GStT will be smoke-free in June 2015. KCL has also agreed to pilot smoke-free policies on some of its campuses in recognition of the impact that smoking has on population health. We are progressing exciting work to develop a south east London Institute of Urban Population Health to further streamline and improve our work in this area. KHP are demonstrating significant system leadership in this field through our role supporting the development of the south-east London six boroughs health strategy and initiatives focussed on the next generation such as the Lambeth Early Action Programme and the Children and Young People's Health Partnership.

Integrated care sits at the heart of our mission to improve health and wellbeing for our local population. Alongside the Southwark and Lambeth Integrated Care programme, KHP has formed an Integrated Care Delivery Office to strengthen the provider offer, working collaboratively with a range of partners across south east London. The main focus is on improving services for working age and older people with one or more long-term conditions across Southwark and Lambeth. This includes work to address admission and discharge, locality working, unified point of access, measuring integrated care outcomes. Following a successful first year in our two acute trusts, the KHP Pathway Homeless Team has recently extended its service into SLAM, helping provide joined up mental and physical healthcare and support to homeless people from our local communities.

### **Progress on the development and delivery of an e-Health informatics platform**

Informatics is a pivotal part of how we drive value and improvement and we have achieved major success this year with the launch of KHP Online, joining up patient information right across our three partner trusts. This has led to immediate improvements in the management and care of patients and service users and better join-up between mental and physical health care. We are progressing plans with local partners to extend the project into primary care and to develop the initiative further to join up records right across our local health economy. KHP Online was featured as a case study by Dame Fiona Caldicott in her Information Governance report to the Secretary of State for Health in December 2014. Our innovative Myhealthlocker project was also featured in this report as an example of providing mental health patients with access to their own records. Our i3 Diabetes programme has been working with industry to join up primary and secondary

care data to improve care pathways and reduce catastrophic diabetes complications. We also launched our D-CRIS partnership with four other mental health trusts in 2014. D-CRIS: the Dementia Clinical Record Interactive Search is a world-leading resource that was first developed at the NIHR Dementia Biomedical Research Unit at SLaM and the Institute of Psychiatry, Psychology and Neuroscience at King's College London. It will enable large datasets to be pooled so that research can be conducted at scale, providing researchers with access to one million patient records and enabling them to identify trends in the data and investigate why treatments work for some patients and are not as effective for others. KHP is also closely linked with the work that the HIN is doing to support NHS England to develop a framework for pan-London interoperability.

### **Our global impact**

Our commitment to improving health and wellbeing locally and globally has taken on added significance during the last year. In addition to our existing and fruitful partnerships with prestigious academic health institutions across the world, our King's Sierra Leone Partnership has played a vital role responding to the Ebola outbreak in West Africa. The team are based in-country to improve the local health systems, education and training. Since the Ebola outbreak reached Sierra Leone in May 2014, the team have supported a strong and effective clinical response at Connaught Hospital in the capital Freetown. The team work closely with the Sierra Leone Government, local and international partners to increase the local capacity to identify and treat Ebola patients, provide essential clinical training, spread best practice quickly and, by helping set up an Ebola Command Centre in Freetown, manage the effective flow of patients across the city. The team have also played an influential role advising the UK Government about the ongoing response, and were awarded a £1m grant by the Department for International Development in October 2014. As cases reduce, the team are planning the next phase, focussed on rebuilding clinical systems and education programmes. Our Global Health team has co-chaired the launch of The Lancet Global Surgery programme, formally announced earlier this month.

### **Summary of the AHSC's contribution to economic growth and the economy, including through partnerships with industry**

Our continued focus on value based healthcare is primarily about achieving the best outcomes and experiences for patients for the best value, which will ultimately have a significant impact on the sustainability and growth of the local health economy. Further to recent engagement with Healthcare UK, we are developing a joint education and training offer across our partnership to maximise our offering to potential investors in our expertise from abroad. We have also developed new and exciting relationships with industry partners such as Pfizer (biopharmaceuticals), Biosense Webster (medical technology), Siemens Healthcare (imaging technology), GE Healthcare (radiopharmaceuticals) and Aridhia (informatics) as we continue to foster innovation through collaboration. We also work very closely with the Health Innovation Network (the AHSN for south London) to disseminate best practice and develop industry relationships, particularly on shared priorities such as alcohol misuse, diabetes and dementia. Our work on alcohol intervention has already had a direct impact on staff absenteeism in one of our partner trusts and staff physical and mental health and wellbeing is a priority across our partnership. In diabetes, joint working with Johnson & Johnson, Roche and Boehringer Ingelheim has been instrumental in establishing the HIN's Diabetes Improvement Collaborative. We have also supported the HIN in working with smaller local enterprises, such as Ixico who are developing a product to meet the needs of local people with dementia.

### **Changes to Governance arrangements which might impact on the delivery of the aims and objectives of your AHSC.**

We have strengthened our governance arrangements over the past year to ensure we have the most effective leadership and oversight in place to deliver our ambitions. Professor Ed Byrne, the new Principal of King's College London, joined the KHP Board as its new chair in 2014, bringing a wealth of knowledge from his previous roles in Australia and the UK. The KHP Board also welcomed the Rt Hon Stephen Dorrell, a former Secretary of State for Health, Professor Garret FitzGerald, Director of Translational Medicine at the University of Pennsylvania, and Lord Butler of Brockwell who remains on our Board, as our non-executive directors. These three roles have provided us with invaluable expertise and experience and ensure the Board is effectively held to account. Members of the KHP boards chair our various different theme programme boards and we have also appointed several new leaders to our clinical academic groups (CAGs) to help us drive improvements in all clinical specialties. At the end of May, we will launch our refreshed website to enable stronger and more agile access to our materials, including the KHP outcomes books.

This form must be submitted, by e-mail, no later than 1pm Thursday 7 May 2015 to Sonja Tesanovic ([sonja.tesanovic@nih-ccf.org.uk](mailto:sonja.tesanovic@nih-ccf.org.uk)). Please feel free to provide any other information you wish (in a separate annex) that demonstrates the progress made with your AHSC in 2014/15.

A signed copy of this report should be sent no later than 14 May 2015, to:

Dr Sonja Tesanovic

NIHR Central Commissioning Facility  
Grange House  
15, Church Street  
Twickenham TW1 3NL

## List of Supporting Documents to be provided to supplement KHP Annual Report

### Corporate

- KHP Five Year Plan
- KHP/HIN public response to London Health Commission and NHS Five Year Forward View reports
- KHP/HIN response to LHC report to Mayor of London
- List of awards received by KHP staff

### Theme 1 - Integrated mental and physical healthcare

- IMPARTS film via YouTube link
- Mind and Body training and education report
- Alcohol Strategy
- Staff health and wellbeing case studies
- Mind & Body Programme Update

### Theme 2 - Excellence through key specialities

- Clinical Academic Benefits Case

### Theme 3 – Basic Science and Experimental Medicine

- REF case studies
- GStT Charity Prize PhD programme in biomedical and translational science annual report

### Theme 4 – Transforming Outcomes through Education and Training

- KHP Education Academy annual report
- KHP Learning Hub leaflet
- KHP Education & Training Programme Update

### Theme 5 - Value Based Healthcare

- Six published outcomes books
- Tobacco Strategy
- Learning from SLaM Journey to Smoke-Free

### Theme 6 – Transforming through Informatics

- Dame Fiona Caldicott Information Governance annual report (inc KHP Online and Myhealthlocker case studies)
- Informatics Strategy
- KHP Online demo presentation

### Global Health

- Global Health materials re Ebola response
  - Research papers
  - Letter to UK Govt
  - Guardian award submission
  - Media coverage highlights (HSJ, BBC, Guardian etc)
  - Press releases (inc DfID funding)
  - Film

## **KING'S HEALTH PARTNERS ANNUAL REPORT 2014/15**

### **THEME UPDATE**

#### **THEME 1: INTEGRATED MENTAL AND PHYSICAL HEALTHCARE**

Our aim is for King's Health Partners to be the global leaders in transforming healthcare for the whole person. With South London and Maudsley NHS Foundation Trust and the Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College London at the heart of our partnership we are uniquely placed to focus our efforts on both mind and body.

We will achieve this through our commitment to integrated mental and physical healthcare research, education and clinical delivery, across our breadth of services and from conception to the last days of life. Specifically, we are developing and delivering programmes of work to:

- transform outcomes for patients with both mental and physical health conditions, to ensure that care in all healthcare settings address the whole person, and is patient centred
- expand our international programme of research and provide comprehensive innovative staff education programmes
- develop and evaluate novel and integrated mental and physical healthcare pathways in collaboration with commissioners, patients and primary care colleagues
- address underlying physical health risk factors which contribute to the excess mortality experienced by patients with enduring mental health problems
- reduce the adverse impact of mental health disorders on outcomes of long-term conditions and medically unexplained symptoms
- integrate service provision and models of care throughout all of our specialties

We have made significant progress against our ambitions in the last 12 months across a wide range of work and we are fully committed to expanding the delivery of our existing programmes and to develop new and innovative projects to join up mental and physical healthcare.

#### **3 Dimensions of Care for Diabetes**

Our 3 Dimensions of Care for Diabetes programme has now seen over 800 referrals and has been commissioned by Lambeth and Southwark CCGs to deliver whole person care to people with diabetes. During the last 12 months the programme has been named BMJ Diabetes Team of the Year 2014, Diabetes UK Mary MacKinnon Named Lecture 2015 and won an NHS Innovation Award 2015. We have appointed a full time consultant psychiatrist to lead the programme and we are developing plans to extend this across a range of other long term conditions. We are looking to scale up our 3DFD work to introduce virtual diabetes clinics within SLaM, to train diabetes professionals to develop and deliver CBT and motivational interviewing, to seek funding to scale across other long term conditions such as smoking and obesity, and to more closely integrate parts of the diabetes service with IMPARTS. There is ongoing work to define 'long term condition' with reference to mental health conditions to feed physical input into the mental health care of these conditions, in line with the 3DFD model.

#### **IMPARTS (Integrating Mental and Physical Healthcare Research Training and Services)**

Our IMPARTS programme is now live in 22 clinics and has screened nearly 7,500 patients through over 11,000 screening encounters. The programme is working closely with diabetes clinics in our acute trusts and will continue to be rolled out into further clinics in the coming months. IMPARTS has shown significant evidence of the links between physical health conditions and associated mental health problems and allowed appropriate interventions to be identified. By asking patients to complete a short questionnaire on a tablet ahead of their appointment, we have been able to identify those affected by mental health problems and address this accordingly. Examples of the type of measures that we are collecting information on are: depression, anxiety, worries, distress thermometer, quality of life – generic and disease specific, occupational status, work and social status, smoking, alcohol and substance use, pain, fatigue, sleep, adherence, physical symptoms – e.g. cough severity, allergy screening, limb function. We also now have the technical capability to ask patients if they wish to receive information about smoking cessation. The Advanced Kidney Care Clinic at Guy's and St Thomas' are planning to use the adherence data collected via IMPARTS to create an adherence clinic and refer patients accordingly into this clinic and we will be developing self-help information and intervention on adherence for people with children/teenagers suffering with liver disease. IMPARTS will also be working closely with our pain management teams to address the issues of whole-person chronic pain treatment, an area where we have significantly increased our number of peer-reviewed research papers in the last year.

### **Addressing physical health of people with severe mental illness**

We have also set up programmes to address the physical health needs of people with severe mental illness. PHaSES (Physical Health in Severe Mental Illness) has been established to build a multi-disciplinary community for research into physical health in severe mental illness across King's Health Partners. Academic research into the mental health of people with physical illness - liaison psychiatry - is a well-established field. Less advanced though is research into the physical health challenges faced by people with severe mental illness. A coordinated and collaborative academic approach is needed to understand the causes and associations of the excess morbidity and mortality in SMI and determine the most impactful ways for our patients to live longer, healthier lives. PHaSES will bring together researchers in the field to strengthen the evidence base through collaboration and links with clinicians and service planners.

Our Improving Physical Health and Reducing Substance Use in Psychosis (IMPACT) project carried out research into the cost effectiveness of lifestyle intervention for substance use in service users with psychosis. We have also published a range of research papers on the 'Provision of Health Promotion Programmes to People with Serious Mental Illness', the 'Implementation of Stepwise programme – weight loss for psychosis' and research into the impact of vitamin D exposure in first episode psychosis.

We continue to pursue the development of a successful proposal to test the effectiveness and cost effectiveness of a medical liaison team to support those with serious mental illness across the general-mental health interface.

### **Persistent Physical Symptoms**

The PRINCE Programme, funded by Guy's and St Thomas' Charity, aims to develop new, integrated health care pathways for patients with Persistent Physical Symptoms (PPS) otherwise known as medically unexplained symptoms. PRINCE Primary will evaluate the acceptability and feasibility of studying an integrated approach to care for these patients in general practice within the context of a cluster randomised controlled trial. PRINCE Secondary will focus on the clinical and cost effectiveness of a joint clinic (JC) (i.e., physician and psychotherapist) plus cognitive behaviour

therapy (CBT) (JC+CBT) versus treatment as usual (TAU) for PPS patients. The commissioning element of the program aims to develop care pathways that bridge physical and mental health care, reduce costs, improve patient outcomes, develop a skilled workforce and have a significant impact on the NHS. Since October 2014, we have appointed two trial managers, two research workers, three CBT therapists and a psychiatrist to work on the PRINCE Programme. Furthermore we have formed independent committees (Programme Steering Committee and Data Management and Ethics committee) to oversee the programme. Both PRINCE Primary and PRINCE Secondary Trials have received a favourable ethical approval subject to minor amendments.

PRINCE Secondary has appointed three consultants (cardiologist, neurologist and rheumatologist) to conduct the joint clinic consultations along with the therapists. In regards to PRINCE Primary, we have 15 practices who have shown an interest in participating. The manuals for both trials are being finalised and the training of GPs in 10 minute CBT is being developed. We are liaising with the clinical trials unit in setting up the databases required for both trials. The PRINCE programme had its official launch on 29<sup>th</sup> January 2015 and we plan to start recruiting in March 2015.

## **Education and Training**

We have undertaken a significant cross-institutional scoping exercise with staff surveys, focus groups and stakeholder interviews in 2014/15. This identified both a need and a desire from staff for the mental / physical health interface to be better addressed through education and training. We have written up the report and produced a series of recommendations to ensure that Mind-Body pertinent issues are addressed in the full range of education and training initiatives from across all four partner organisations. The full report is included in our suite of annexes and an implementation plan for mind-body pertinent training involving resources from all three partner NHS Foundation Trusts will be rolled out in the summer of 2015.

We have initiated an innovative ward twinning pilot between our acute elderly care ward at King's College Hospital and the acute elderly care ward at The Maudsley. The aim is to build a collaborative relationship between the two wards that optimises staff competence and confidence and patient care against some key deliverables, including mental health staff competence in essential skills in general nursing, general nurses competence in essential skills in mental health nursing, availability of a nursing advice in reach service and the pilot of an 'A&E avoidance' pathway from The Maudsley older peoples inpatient ward into KCH.

SLaM won approximately £1m from Health Education England to set up the UK's first Centre for Mental Health Simulation. A major work stream for this initiative has been to produce training targeting mental physical interface issues. We have developed several courses including SWAMPI (Simulation Working at the Mental Physical Interface) following patient pathways across the acute trust / mental health trust divide; SWAMPI-CYP, following the same challenges but in Children and Young People; Mental Health Simulation Training in the Emergency Department; the ABC (Anticipating Behaviour that Challenges) for acute trust medical wards and our highly in demand Perinatal Mental Health course.

We are developing a 'Mental Health Liaison Enhancement and Integration Strategy'. The integration component of this will be to ensure that regardless of age a patient in the acute trust has access to the highest quality services whether in the Emergency Dept, on the in-patient wards or in an out-patient clinic. The enhancement component of the strategy will be to ensure that we are at the forefront of development of mental health liaison services within every acute trust pathway.

## **Public health**

We have led on the development and implementation of a comprehensive smoke-free policy for SLaM in support of our KHP smoke-free strategy, making a significant contribution to the writing of the Trust policies and procedures for implementing smoke-free services, including contribution to the development of a tobacco dependence pathway.

We have enhanced electronic health care records within SLaM to identify smokers and ongoing referral to smoking cessation services and have enhanced the e-learning tobacco dependence treatment training package, created the only e-learning package tailored to meet the needs of mental health workers in the UK, which has had a significant effect on knowledge and confidence and has provided informative data for future research.

SLaM was only the second mental health trust in England to implement a policy in line with 2013 NICE guidelines and was the first mental health trust in the UK to implement the National Centre for Smoking Cessation Training's (NCSCT) 'national referral scheme'. We have been invited to work with Public Health England on seminars about implementing NICE guidelines for smoking cessation in secondary mental health care from Spring 2015 and we will begin evaluation of the implementation of the NCSCT's 'national referral scheme', developing measurable clinical outcomes in a more efficient and clinically meaningful way.

## **Staff health and wellbeing**

We are also deeply committed to improving the physical and mental health and wellbeing of our workforce. To this end, we worked jointly with the Health Innovation Network (AHSN) to hold a sold-out conference in February 2015 to discuss this issue. Dame Carol Black (Expert Advisor on Health and Work to Department of Health) and Earl Howe (Parliamentary Under Secretary of State for Quality at the Department of Health) delivered the keynote speeches. The event has since received a write-up on the Department of Health's website, alongside case studies of our wellbeing work on smoking cessation, 'happier at work' and 'creating space'.

## THEME UPDATE

### THEME 2: EXCELLENCE THROUGH KEY SPECIALTIES

King's Health Partners launched its [five year plan](#) in summer 2014, aimed at transforming health and wellbeing, locally and globally. Combining our focus on key underpinning themes of excellence in education, research translation and clinical practice, public health, integrated care, mind and body and value based healthcare we also aim to achieve internationally competitive standards of practice in a number of key specialties:

- Cardiovascular
- Children
- Cancer including Haematology
- Mental Health and Neurosciences
- Diabetes and Obesity
- Dental
- Transplantation and Regenerative Medicine

This update paper represents our preliminary thinking in these areas, and is not a position statement of agreed plans. It is designed to reflect our ambitions to deliver world-class education, research and clinical care.

#### Local services

A key part of our vision for excellence is the way in which we continue to align ourselves with our partners right across the south east London health and care economy. Colleagues from across our partnership have been closely involved in the development of the *Our Healthier South East London* strategy and we are committed to supporting and enabling its successful delivery.

We are aware that successful delivery of the six borough strategy requires the ongoing delivery of high quality services right across our three foundation trust partners. To this end, we are committed to seeking continuous improvement of our services, working closely with partners across the sector to deliver joined up and effective care for local people. Provision of excellent local services remains our highest priority and we are taking significant strides towards the integration of care:

- working with local colleagues to develop and deliver Local Care Networks and GP federated structures which we fully support as an important step towards better integrated care;
- building on our close partnership working through the Southwark and Lambeth Integrated Care programme (SLIC) and the detailed programmes within each of our providers
- the advent of locality based commissioning and alliance contracting to support population wide arrangements.

#### Specialised Services

People in south east London should have access to the very best specialist care, as benchmarked against the best in the world. We believe that a new type of clinical academic model for south east London (and stretching across the south of England), working across sites and campuses, bringing together the combined strength of the partners, would provide improved outcomes and experience for patients and service users whilst ensuring the delivery of our science and

translational research ambitions. We are currently scoping the feasibility of making further improvements to our services across KHP and in doing so we are considering the following points:

- the nature of differing specialties now and in the future will require bespoke and carefully calibrated models of delivery, particularly with regard to clinical pathways across community, secondary and tertiary care environments;
- some specialties require highly specialised tertiary diagnostic and treatment facilities in one place to enable translational practice. For others the model of care will require a new focus on localities, communities and acute hospital pathways;
- the new model we are proposing has parallels with the Crick Institute in that it will operate as a whole network and system leader, rather than being focussed on a given location. It is to this high aspiration that teams have been working;
- improved informatics and data sharing will be crucial – the development of KHP Online and its planned evolution into the Local Unified Care Record (LUCR) is a major step in the right direction;
- we have collective strength in our partner organisations and we should leverage the expertise of clinical services, research and education into a more joined up offer;
- improved access to the very best specialist care with the best outcomes for patient and family experience;
- provide networks of care across south east London / south east England that support acute, community and primary care;
- the role and tone of the institutes' position within local, regional and global health systems will be vital and in many cases, we will require broader partnerships across healthcare and industry to help us deliver at scale and extend our reach.

As set out in our five year plan, we are focusing on achieving internationally competitive excellence in seven key specialties. Our preliminary thinking for each of these areas is set out below but is subject to ongoing refinement and evolution. The KHP mission promotes the strength of each partner for the collective benefit of the partnership and requires safe, sustainable healthcare practice to align with outstanding research and education offer right across our three main campuses.

### **Diabetes and obesity**

This is critical to our local population and we are considering how we build on the successes of the Diabetes Modernisation Initiative and i3 Diabetes programmes to:

- draw together the clinical, research and educational expertise to enable rapid translation of innovative treatments to the local population;
- provide networked services based in community settings that support new models of integrated care delivery.

### **Cardiovascular**

We are in the process of considering the merits of:

- bringing together the expertise of GStT, KCH and KCL into a fully integrated team, predominantly based in one location but with all necessary support provided to other sites
- developing a cardiovascular network that promotes all providers across south east London and south east England
- exploring a range of organisational models that will support this and ensuring sufficient buy in and collaboration from all parties to secure a sustainable long term model

## **Children**

South East London already has a strong clinical services network for children. We should be leveraging our collective expertise to provide world class care, research and education to south east London. We are exploring how we:

- further develop Evelina London Children's Hospital as the hub of specialised children's services for south east London / south England
- support the significant child health offer across Denmark Hill
- better integrate children's mental and physical health care needs
- develop better community and primary care services for children in Lambeth and Southwark as part of the Children and Young People's Health Partnership programme.

## **Cancer**

Building on the strengths of KHP and the new Cancer Centre at Guy's we are considering how to:

- work closer with local providers to support cancer care closer to home where it is clinically appropriate
- maximise the provision of the cancer centre across the network to provide chemotherapy and radiotherapy in south east London
- consider the merits of further tumour group consolidation

## **Haematology**

We are considering how we can build on the strengths of both GStT and KCH to:

- ensure effective clinical care for patients recognising the synergies with both cancer and transplantation
- explore whether there is real value in bringing solid organ transplant services together with specialist haematology and Bone Marrow Transplantation services
- ensure regenerative medicine research and science will continue to be provided on the Guy's campus

## **Mental Health and Neurosciences**

The launch of the Wohl Institute in spring 2015 provides a platform for joint working across the partners and local networks. In particular KHP is keen to:

- build on our current strength in clinical neurosciences
- develop our capacity across our estate for specialised neuro rehabilitation
- strengthen our Dementia care and sciences offer
- build on our mind and body pathways right across all specialties to better care for the whole person

## **Dental**

The KHP Dental Institute is the single largest trainer of dentists in the UK and we are proud of all they have achieved. The Clinical Academic Group is working hard to refresh the vision to ensure continued internationally competitive education, research and clinical practice. The CAG is working across local networks to ensure the provision of services in localities, building on the very good progress seen in Norwood Hall, Lambeth.

## **Research**

We are working hard to speed up the flow of research into translation to clinical care, from basic science through to novel therapeutics, drug discovery, clinical trials and applied research so that our local population reap the benefits more quickly. We firmly believe that the development of an institute model will accelerate this process, leading to further innovations in patient care.

## **Education and training**

We will continue to develop our educational and training programmes to support the emerging models of care recognising the increasing need for healthcare workers that can work across traditional boundaries and apply their skills in a range of settings.

Central to everything we do will be a focus on improving outcomes, experience and public health for our patients, service users and local population. CCG, stakeholder, locality and patient perspectives will drive our thinking.

## **Mind and Body**

At the heart of our institute model will be a commitment to promoting mental and physical health across all of our specialties. All institutes will be required to demonstrate how they will provide mind and body research, education and clinical care so that we continue to better join up services for our patients, service users, staff and students.

## **Urban Population Health**

The local Directors of Public Health and teams across the partners are working to develop a new type of institute model for Urban Population Health. The institute will build on the strength across the whole University and reach out across our local communities to ensure improved health outcomes and to tackle the determinants of ill health.

## **Engaging partners**

As set out above, we are working closely with local partners to strengthen the provision of excellent integrated services in south east London. We are also engaging our local commissioners and specialist commissioning colleagues at NHS England with our early thinking about our institute model and we will continue to do so as thinking progresses. We are committed to working with our local partners across the wider health and care system, including local authorities and patient groups, over the coming months to shape and design our collective vision for excellence.

### THEME UPDATE

#### THEME 3: BASIC SCIENCE AND EXPERIMENTAL MEDICINE

We have already demonstrated volume, critical mass and world-class excellence in basic medical research and the ability to translate findings from basic research into excellent translational, clinical and applied research across a range of interests focusing in particular on cardiovascular, cancer, transplantation and neuropsychiatric conditions. Our objective is to further improve performance in these areas in the next five years by developing and exploiting multi-disciplinary programmes that reflect and deliver the “complete research pathway”.

#### Quality of Research and Infrastructure

Our outstanding health results in the 2014 Research Excellence Framework are a reflection of the strength, impact and alignment of the translational health research of our partnership. In a sign of the fantastic progress made in recent years Clinical Medicine at King's is now ranked 3rd in the country for research quality, and Psychology, Psychiatry and Neuroscience is now ranked 2nd nationally for research power.

King's has risen to 6th position nationally in the overall 'power' ranking – up from 11th in 2008 and our combined submission for the first five Units of Assessment linked to the health disciplines puts our power ranking as second in the UK. King's has also risen to 7th position overall for quality – up from 22nd in 2008. 84 per cent of our research has been deemed 3\* and 4\* (up from 61 per cent in 2008), meaning that it is regarded as 'world-leading' or 'internationally excellent'. Excellent results were also achieved in Imaging Sciences, Nursing, Midwifery and Palliative Care, Dentistry, Public Health and Pharmacy, Nutritional Science and Women's Health, evidence of the huge breadth of clinical research excellence right across our AHSC. King's total research funding allocation for 2015-16 is up £8.1m, an increase of 13.9%, and the largest increase of any institution. It is our standing as an AHSC that has allowed us to align and strengthen our research activity right across our four partners, drawing on our combined world-class expertise and facilities to drive continued improvement and excellence for our patients.

Recent infrastructure and programmatic investments will further expand our capacity to link excellent basic science to clinical and applied research:

- A £10m investment from the HEFCE UKRPIF competition to provide cutting edge facilities for research into neurological and psychiatric disease, with a focus on dementia and neurodegeneration (2015). This will support our new Maurice Wohl Clinical Neuroscience Institute, due to open shortly, which will be one of Europe's largest centres for interdisciplinary neuroscience excellence. The Institute will be the key research facility in our efforts to fast-track new treatments to patients affected by disorders such as Alzheimer's disease, Parkinson's disease, motor neurone disease, depression, schizophrenia, epilepsy and stroke, while strengthening KHP's portfolio of internationally recognised brain research;
- Our new Clinical Research Facility on our Denmark Hill campus is the first of its kind in the world because it has been built with mental health research in mind;
- Renewal of our British Heart Foundation Centre of Excellence (2013), one of only two in the UK which were fully funded;
- The establishment of two new NIHR-Public Health England Health Protection Research Units, in Emergency Preparedness and Response and Environmental Change and Health;

- Our new Centre for Stem Cells and Regenerative Medicine is now open;
- Establishment of the Regenerative Medicine Platform Immunomodulation Hub;
- A new single cell functional genomics facility, focussed on clinical and translational research;
- A substantial doctoral training programme in Medical Imaging (EPSRC and industry, >16 intake/year);
- KHP-wide funding to support development of translational research (c.£2m/year, MRC and Guy's and St Thomas' Charity) and inter-disciplinary collaborations (Wellcome Trust, £750k/year).

The quality of our basic science remains high, with nine new Wellcome Trust Investigator Awards since December 2013 exemplifying an overall increase in research awards to £190m in our last university financial year. This research has produced major scientific breakthroughs, including:

- [Late outcomes of a randomized trial of high-frequency oscillation in neonates](#)  
*New England Journal of Medicine*. 370, 12, p. 1121-1130 10
- [Interleukin-8 \(CXCL8\) production is a signatory T cell effector function of human newborn infants.](#)  
*Nat Med*. 2014 Oct;20(10):1206-10. doi: 10.1038/nm.3670. Epub 2014 Sep 21.
- [An integrated epigenomic analysis for type 2 diabetes susceptibility loci in monozygotic twins.](#)  
*Nat Commun*. 2014 Dec 12;5:5719. doi: 10.1038/ncomms6719.
- [Innate sensing of microbial products promotes wound-induced skin cancer.](#)  
*Nat Commun*. 2015 Jan 9;6:5932. doi: 10.1038/ncomms6932.
- [The genetic architecture of the human immune system: a bioresource for autoimmunity and disease pathogenesis.](#)  
*Cell*. 2015 Apr 9;161(2):387-403. doi: 10.1016/j.cell.2015.02.046. Epub 2015 Mar 12.

King's Bioscience Institute, initially intended to be developed as a stand-alone research institute, has been reimagined based on a reassessment of KHP needs and opportunities. Rather than isolating this in a physical building, it now takes the form of a cross-cutting and inclusive virtual institute, supported by a substantial and high-quality multi-disciplinary PhD programme (10/year), seminar series (e.g. Rosalind Franklin lectures) and joint meetings on topics of common interest. This model has been successful, and opens opportunities for alternative structures for clinical-academic integration (see Section 2: KHP Institutes).

Our partnership with the Francis Crick Institute is developing well, and we are well-placed to ensure that collaborative opportunities are maximised when it opens. We have enrolled our first students onto a new PhD programme developed by the Institute and its academic partners, including several whose projects are jointly supervised by KHP/Crick staff. In addition, three one-year collaborative Clinical Research Fellowships have recently been established between the King's-GStT BRC and the Crick. A pilot scheme has also been launched to identify the first KHP staff who will undertake a range of flexible attachments to the Crick's purpose-built research centre from spring 2016, offering our researchers exceptional opportunities to develop new collaborations, and benefit from access to specialist facilities, expertise and training.

## Translational Research

The link from basic research to clinical and applied research continues to be strengthened, with the two Biomedical Research Centres playing a central role. This is exemplified by our leadership of two MRC Stratified Medicine Consortia (in schizophrenia and hypertension), which will provide evidence to inform clinical decision making directly. Likewise, many new translational studies have begun in diverse areas including cancer immunotherapy, transplantation, image-guided cardiovascular therapy and psychosis. A clear strength is emerging in immunotherapy in particular (including over 10 ongoing and well-funded transitional projects), in imaging-related studies (with significant industrial partnership), and in fetal and neonatal medicine (including a £10m Wellcome Trust-supported study for computer-guided prenatal screening). A number of these have arisen through our KHP-wide pilot funding mechanism, and have now been transformed into major translational endeavours.

## Clinical Benefits of Research

The partnership between university and NHS trusts has been instrumental in ensuring that research is used to drive patient benefit. Several examples of this translation in practice are given here. A recent study led by researchers at King's, published in the *New England Journal of Medicine*, found that premature babies ventilated immediately after birth by high-frequency oscillation had better lung function as adolescents than those who received conventional ventilation. This will change the use of ventilation in neonatal units across the UK, where around 60,000 babies are born prematurely each year.

Another excellent example of how this research is used to drive patient benefit is our TOHETI project, which uses imaging innovations to drive improved outcomes and health system efficiency. Funding of £13.5m has been obtained for the first two phases with large programs being established in major clinical areas such as the early diagnosis and treatment of lung, colon, prostate and breast cancer. The program also involves the use of advance imaging modalities such as PET to assess the efficacy of treatment early on so ineffective therapies can be stopped. The team have had their multi-centre RAPID study of assessing the efficacy of chemotherapy early in Hodgkin's Disease recently published in the *New England Journal of Medicine*.

Our pioneering work in allergy, which through the LEAP trial recently demonstrated that the majority of infants at high-risk of developing peanut allergy are protected from peanut allergy at age five years if they eat peanut frequently, starting within the first 11 months of life. This contradicts previous recommendations and will have direct clinical impact ('Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy' by Du Toit et al is published in the *New England Journal of Medicine*).

Mr Andy Leather, Director of the King's Centre for Global Health, co-chairs the *Lancet* Commission on Global Surgery, with the following mission: *The global burden of disease amenable to surgical intervention, such as trauma, cancer and complications from childbirth, is significant and growing. Despite this, there are currently gross disparities in access to safe surgical care worldwide. Surgery is an integral, indivisible component of a properly functioning health system, and all people should have access to safe, high-quality surgical and anesthesia care with financial protection when needed. The purpose of The Lancet Commission on Global Surgery is to make this vision a reality by embedding surgery within the global health agenda, catalysing political change, and defining scalable solutions for provision of quality surgical and anesthesia care for all.*

A major aim in our submission was to increase the number of academic clinical trials, particularly at the first-in-man stage. Clinical trials and first in man studies have increased across the partnership during the period 2013/14 to 2014/15. For example, GStT increased from 331 trials initiated to 370 with Phase 1 and 2 increased from 14 to 18 and SLaM remains steady at 20 approved each year.

Partnership with industry is a continuing theme for the AHSC. Recent examples of success here include the licensing of a novel type 1 diabetes therapy to UCB, and the appointment of a King's professor (Linden) to lead Pfizer's Genetic Medicine Institute, a new academic-industry collaboration. Biosense Webster, the leading medical technology company in the area of cardiac arrhythmias, are starting a major research collaboration with our team in Imaging Sciences and Biomedical Engineering funding two new NIHR clinical lecturer posts in cardiology and a number of investigator led research programs. Siemens Healthcare, a leading imaging technology company, have also started a new major research collaboration, embedding two clinical scientists on site (one in MR and one in CT) and providing 50% funding for ten PhD students for our medical imaging Centre for Doctoral Training. They are also partnering us on three new major grants funded by Innovate UK/EPSRC, NIHR i4i and Wellcome/NIHR Health Innovation Challenge Fund. Finally, GE Healthcare have committed £2.5m of direct (300K) and in kind support over five years for co-development of new PET radiopharmaceuticals for neuropsychiatric conditions which was part of the package that led to a recent £10m capital award from HEFCE to support our Neuroscience research. Partnerships such as these have supported a steady increase in the success of our commercial trials:

- 2013/14: number of studies approved – 190; number of Phase I trials approved – 14
- 2014/15: number of studies approved – 181; number of Phase I trials approved – 15

### **Next steps**

The establishment of the KHP Institutes will be a major focus of consolidating on our research strengths in cardiovascular, cancer, transplantation and neuropsychiatric conditions, as well as building on research expertise in child health, diabetes and public health to develop new centres of excellence. In addition, our Biomedical Research Centres will be undergoing renewal in this period, which will be an intensive activity to ensure that the enormous benefits of the BRCs are retained within KHP. Research partnership with industry will continue to be a priority, and we will endeavour to cement this through formal and strategic interactions. Finally, ensuring that our substantial portfolio of pre-clinical therapies and diagnostics progress through to clinical stages will be an important focus.

**THEME UPDATE**

**THEME 4: TRANSFORMING OUTCOMES THROUGH EDUCATION AND TRAINING**

The provision of excellent education and training for a comprehensive range of healthcare professionals, support staff and students is a core ambition of KHP. This is important to ensure that our workforce remains adequately skilled and equipped to deliver improvements in care, in new roles and settings, and also for training and educating the next generation of academic and clinicians. Training our staff in research techniques and methodologies is also an important enabler of our research mission.

We have made significant progress in the past year against our objectives to:

- train and develop the entire workforce using high quality, easily accessible, on-line training resources;
- provide support to improve the overall quality of education and training and increase learning opportunities for students and trainees;
- build capacity in research skills ensuring more patients benefit from research;
- extend our education reach at home and abroad, widening access;
- better prevention and management of long term conditions, by delivering multi-professional education and training across care pathways to enhance the delivery of integrated care;
- bridge the artificial gaps between mental and physical health provision with education and training that improves outcomes in patients with co-morbidities.

Our Education Academy continues to drive improvement and innovation in our education offering for postgraduates and trust staff. All clinical specialties are represented through their clinical academic group allowing for coordination and alignment of training across our partners and the full spectrum of mental and physical healthcare. Our student recruitment to both undergraduate and postgraduate programmes for 2014 was robust. We are doing significant work to enhance our MBBS programme and we have ambitious plans to recruit strongly for new programmes at both undergraduate and postgraduate level, including a Psychology BSc, over 10 new PGT programmes, the expansion of existing four-year MSc degrees, and the enhancement of our distance learning and CPD portfolios. New teaching units in Immunology and Genetics have been launched and, to maximise our status as a multi-faculty AHSC, we are also exploring synergies with Arts and Sciences to develop new areas of growth. Decisive action across a number of fronts has led to excellent results overall in undergraduate and postgraduate student surveys. Clear plans for underperforming areas are being implemented with a view to ensuring that we deliver a world-class learning experience for every student.

**Learning resources**

We have produced a wide range of KHP kite marked education materials for our workforce, students and community education provider networks for the KHP Learning Hub, our innovative e-learning platform. The novel suite of learning materials, which have been developed under the guidance of the CAG education and training leads and all quality assured, is available for all staff and students with over 50 resources made available in the last year with another 40 in development. In response to increasing numbers of requests both nationally and internationally

to access the Learning Hub, an outward face of the KHP Learning Hub is being developed, so that our educational materials can be accessed by external organisations with a subscription.

We have also developed further face to face courses for trainees and educational supervisors and postgraduate taught programmes. Our widening participation programme continues to engage young people from a wide range of backgrounds with careers in health, health sciences, social care and supporting services.

We are committed to supporting wider work across KHP through the development of education and training about population health, focusing on inequalities in health and healthcare delivery. Our short courses will become credit bearing, enabling more health care professionals to work towards postgraduate qualification and encourage more staff into higher education.

## **Genomics**

KHP is at the heart of a south east London alliance to deliver the 100k Genomes project, having been designated as a Genomics Medicine Centre in December 2014. Building on a pilot programme at Guy's and St Thomas', our partners are putting their collective weight and commitment behind this revolution in patient care, which cuts right across our tripartite agenda. Our Trusts will be responsible for recruiting suitable patients and their relatives to the programme, for collecting blood and tumour samples and for extracting the DNA from these samples. KCL will play a key part in genomic research and education and successfully bid to host a Genomics MSc in partnership with our alliance partners St George's NHS Foundation Trust and St George's University London.

## **Strategic partnerships**

We continue to work closely with Health Education South London (HESL) and senior colleagues across KHP are members of the HESL Board, helping to shape and drive the strategic direction of education and training in south London.

KHP staff successfully bid to develop a strategic network around a multi-professional community workforce development in palliative and end-of-life care and a network with a focus on Learning Disabilities. HESL have divided the Community Education Provider Networks (CEPN) into three groups geographically. KHP/KCL is the hub of the CEPNs in Lambeth, Southwark and Lewisham with a particular remit to support their education initiatives. We are working with the CEPNs to develop new roles to ensure better self-management and prevention of long term conditions. Funding (£330,000) has been approved for a further year. A KHP Workforce Development Board has been established. Following submission of an Invitation to Tender document, KCL on behalf of King's Health Partners, has been selected as a preferred bidder to develop the current workforce through innovative CPPD, a reflection of the wealth of KHP's CPPD offering. KHP colleagues were successful in their bids for funding of projects with a focus on the following areas: service transformation and quality improvement, maternity and childhood, genomics and workforce.

Our strategic partnership with University of California, San Francisco (UCSF) has allowed us to work together to discover synergies in basic medical research and clinical translational research that bring benefits to both campuses and allow the partnership to promote an extend science education. As part of this partnership, we are providing a joint MSc programme in Global Health with UCSF.

## **Simulation**

The simulation workstream of our Education Academy successfully collaborated on a large HESL bid for work to be delivered across King's Health Partners and were awarded £1.163 million in 2014-15. Programmes have been developed by host sites and disseminated across the South London Simulation Network. The "Hands up for health" a simulation based programme, has extended its range of interventions into primary schools, youth clubs and the Princes' Trust. Simulation continues to be a keystone of our multi-professional education and training with continued development of links with SLaM and mental and physical health simulation interventions.

South London and Maudsley won approximately £1m pounds from Health Education England to set up the UK's first Centre for Mental Health Simulation. A major work stream for this initiative has been to produce training targeting mental physical interface issues. We have developed several courses including SWAMPI (Simulation Working at the Mental Physical Interface) following patient pathways across the acute trust / mental health trust divide; SWAMPI-CYP, following the same challenges but in Children and Young People; Mental Health Simulation Training in the Emergency Department; the ABC (Anticipating Behaviour that Challenges) for acute trust medical wards and our highly in demand Perinatal Mental Health course.

## **Mind and body**

We have undertaken a significant cross-institutional scoping exercise with staff surveys, focus groups and stakeholder interviews in 2014/15. The identified both a need and a desire from staff for the mental / physical health interface to be better addressed through education and training. We have written up the report and produced a series of recommendations to ensure that Mind-Body pertinent issues are addressed in the full range of education and training initiatives from across all four partner organisations. The full report is included in our suite of annexes and an implementation plan for mind-body pertinent training involving resources from all three partner NHS Foundation Trusts will be rolled out in the summer of 2015.

## **Innovative programmes**

Funded summer studentships of patient safety and quality improvement projects were created for KCL health students. The pilot scheme was overwhelmed by faculty offering opportunities and students wishing to take them up. The projects included audits, patient, process and pathway reviews, e-learning resource development, observation and assessment and identification of good practice. This year the studentships will be funded by HESL and the HIN. The students' Clinical and Academic Research Society (CARS) has been expanded to include all health school students with opportunities for them to present their research findings, as well as access to a database of research opportunities. Through the INSPIRE programme summer studentships were offered, building on the successful programme which had been run for a number of years in the Schools of Medicine and Biomedical Sciences.

The Academic Foundation Training programme has been extended and bids for additional Integrated Academic Training posts have been successful. We have the third largest NIHR Integrated Academic Training scheme (108 trainees), and it is supported by a credit bearing generic research course. An administration and projects officer post, funded by the NIHR, has been created to support the Integrated Academic Training programme. The post-holder is responsible for managing the PGCert in Research Management, as well as induction and presentation events. NIHR in their general feedback about this year's bids noted "A large, well-

established academic training programme is described. There is evidence of a very good track record of developing ACF and CL trainees within generally high-quality research training programmes. There are high fill rates for ACFs and also generally for CLs with very good evidence of a number of trainees gaining further fellowships and academic positions.”

In their induction, all core trainees receive training in taking consent, good clinical practice and basic research methodology, and this is now being expanded to other disciplines. For the first time this year, a nurse and a research coordinator as well as medical trainees and pharmacists, participated in the Designing Clinical Research course, run in collaboration with UCSF. The course includes an introductory session followed by an intensive twelve weeks of face to face sessions, online lectures, reading and research protocol development. The trainees have fed back on a consistent basis that the course and its delivery are excellent.

### **Global offer**

Further to recent engagement with Healthcare UK, we are developing a joint education and training offer across our partnership to maximise our offering to potential investors from abroad. The Education Academy continues to attract international interest including a visit from Dr Roy Ziegelstein, Vice Dean for Education, Johns Hopkins University School of Medicine and the KHP Director of Education and Training gave an invited lecture to the Symposium on Academic Leadership at The Royal Danish Academy of Sciences.

**THEME UPDATE**

**THEME 5: VALUE BASED HEALTHCARE**

We continue to lead the way on value-based healthcare to achieve our objective of a more sustainable healthcare system with better outcomes for patients and service users. We seek to achieve this purpose against a background of rising costs of and demand for healthcare.

We believe that the way to improve clinical quality and health outcomes, reduce health inequalities, and build a sustainable health care system is to deliver value based healthcare (VBHC). Our mission is to strive to increase value; ensuring that the 'value proposition' is built into the mind set of KHP staff, informing our culture and decision making. We define value in terms of the outcomes that matter to patients and carers, over the full cycle or pathway of care, divided by the cost of producing these outcomes.

**Improving outcomes**

We have now published six of Clinical Academic Group outcomes books (see supporting documents) with a further 15 due this year in order that we cover all of our clinical specialties. We are creating a culture of improvement and increased value by being open and transparent about the outcomes we are achieving right across our clinical specialties to ensure our research, education and care is consistently delivering the very best for patients.

In addition to clinical outcomes, we are also using the books to focus on more detailed patient experience, staff wellbeing and student satisfaction measures to ensure we are considering all the factors which contribute to excellence for our patients.

The books published so far have demonstrated many examples of excellent outcomes, high quality safe care, and good long term health gains, but while encouraging progress has been made we need to do more to drive substantial increases in value. Our ambition for the next five years will be for all CAGs to have comprehensive outcome measures for several of the most important conditions they care for. Our CAG leaders will identify the conditions they wish to prioritise, agree the outcomes to be measured, published and benchmarked, and commit to year on year improvement in those outcomes.

Our Safety Connections network and learning events are very well attended and regarded and the network provides a cross-KHP focus on safety which is a key driver of outcomes and value for patients.

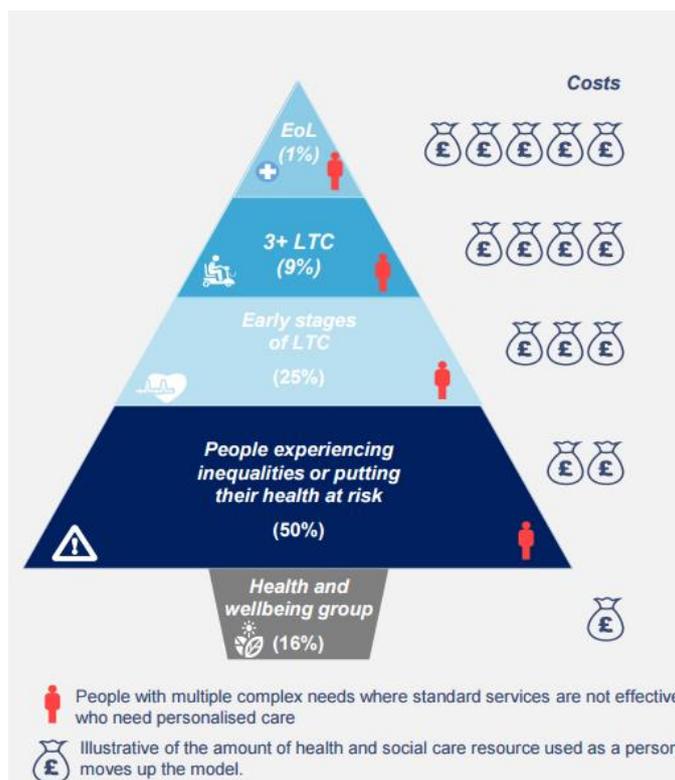
**Award-winning approach**

In a demonstration of the impact this approach can have, a Health Foundation-funded value based healthcare project run at King's College Hospital on performance management in three specialties won at the HSJ Value in Healthcare Awards 2014. Working with clinical teams in three pilot specialties, the team restructured cost information to represent hospital pathways, not departmental boundaries, and created a suite of patient-focussed outcome measures to best represent quality from patients' points of view. Both managers and clinicians are interested in this rounded picture of their service – and use it to generate improvements.

The project has been a collaboration between three clinically-led working groups and colleagues in finance, data, patient involvement and clinical effectiveness. Those clinical groups are wide multidisciplinary teams including patients, community-based and voluntary services. Two years into the project the team reported that they had been able to create new patient-led outcomes and pathway cost measures in King’s College Hospital’s stroke, hepatitis and endocarditis services; developed value dashboards that bring clinicians and managers together; worked with teams to identify early options for value improvement; and built learning about how to do value-based health care that has been shared with other organisations. We play an active and collaborative system leadership role in the pan-London AHSC value based health group to disseminate best practice.

## Public health

A key element of our work to improve the sustainability of our local health system is to focus on the root causes of why people are using services and to this end we have made significant progress in our work on public health in the last year. Detailed analysis of the population of south east London (see diagram below) shows that only a minority of the population (16%) are completely healthy and with no identifiable risk of developing an illness. A huge proportion (50%) are at risk of developing illnesses because of their behaviours (e.g. smoking, lack of exercise, excessive calorie intake, excessive alcohol consumption) and the severe inequalities they face.



At the apex of the Christmas tree, 10% of the population have three or more long-term conditions or are at the end of life. 10% account for the bulk of expenditure (long-term conditions consume 70-80% of health spend). The huge number of people who have or will inevitably develop LTCs makes the health (and social care) system unsustainable.

We are committed to a relentless focus on maintaining health and addressing life style choices which will be every bit as important as dealing effectively with overt illness if we are to improve value. It is essential that we change the shape of the “Christmas tree” for our local population.

KHP have developed strategies around tobacco and alcohol misuse and we are engaging with local partners on how best to deliver these strategies in partnership with local stakeholders. Of particular note has been our success in making our NHS sites smoke-free. SLaM became smoke-free in October 2014, KCH in January 2015 and GStT will be smoke-free in June 2015. KCL has also agreed to pilot smoke-free policies on some of its campuses in recognition of the impact that smoking has on population health. We are progressing exciting work to develop a south east London institute of urban population health to further streamline and improve our work in this area. KHP are demonstrating significant system leadership in this field through our role supporting the development of the south-east London six boroughs health strategy and initiatives focussed on the next generation such as the Lambeth Early Action Programme and the Children and Young People's Health Partnership.

## **Integrated care**

Integrated care sits at the heart of our mission to improve health and wellbeing for our local population. King's Health Partners works closely with our partners in Lambeth and Southwark to promote integrated care, for mental and physical health, for adults and children. Integrated care strongly supports VBHC, including preventative care. Evolving new ways of commissioning and providing integrated care will promote value.

We have established the KHP Integrated Care Delivery Office to help deliver this vision, working collaboratively with a range of partners across south east London. Dr Matthew Patrick, Chief Executive of SLaM, is the senior responsible officer for the delivery office and all partner trusts are represented by senior colleagues at programme meetings. He is supported by a small dedicated delivery team to coordinate efforts across the partnership and implement a full programme of work. The main focus of the team's work is on improving services for working age and older people with one or more long-term conditions across Southwark and Lambeth. This includes work to address admission and discharge, locality working, unified point of access, measuring integrated care outcomes. The team works closely with Southwark and Lambeth Integrated Care (SLIC) and other local partners but is primarily focussed on coordinating new and existing work across our four partner organisations. Following a successful first year in our two acute trusts, the KHP Pathway Homeless Team has recently extended its service into SLaM, helping provide joined up mental and physical healthcare and support to homeless people from our local communities.

King's Health Partners is committed to achieving excellence in specialised services. These services will measure, publish and benchmark outcomes to both justify and build international reputation. Best outcomes often require appropriate scale. Specialist services are expensive. The duplication of specialist services can be a low value strategy, with the potential for worse outcomes, at a higher cost. The long-term strategy of KHP will include the best location and configuration of specialist services to achieve best outcomes, with best use of resources, to optimise value. Achieving outstanding result for patient care will also drive growth of our specialist services (and associated academic activity).

We are developing a robust value based healthcare strategy which will sit at the heart of all our future activity and help to shape our role as a system leader.

**THEME UPDATE**

**THEME 6: TRANSFORMING THROUGH INFORMATICS**

Informatics is a pivotal part of how we better integrate our services, join up care across mental and physical health, drive value and improvement and deliver excellence in our key specialties. The past year has seen significant informatics developments and successes across our partnership in support of our mission.

**Background**

Data is one of our most important assets at KHP. We prize our ability to control information systems for the purpose of data creation, curation and analysis with strong and transparent information governance processes throughout. This control enables our exploration of the relationship between clinical and biological data, extending at one end to clinical decision support embedded in electronic medical records (EMRs), sharing of clinical data to enhance care and outcomes, through to research recruitment and participation, with strong patient engagement throughout. We have developed a clear strategy and action plan to maintain and develop leadership in the field of informatics.

**Patient record sharing**

We have achieved major success this year with the launch of KHP Online, joining up patient information right across our three partner trusts. KHP Online is a new web portal which allows staff across King's Health Partners to view electronic patient records from our three partner trusts. Significant numbers of people attend multiple sites across our partnership in any given year. For example, of 521,301 patients seen at GStT last year 35,418 could be matched on NHS Number to a patient at SLaM. Of the 57,564 patients seen by SLaM in the previous year, 26,785 (47%) had a record at GStT. For those patients the flow of information did not previously match their movement between sites, care pathways were disjointed and important information was potentially unavailable.

KHP Online displays real time patient information from the clinical systems at Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts. This means that clinical staff involved in a person's care are able to access a patient or service user's physical and mental health records for treatment they have received at any one of our three trusts where records have been recorded and stored electronically. Records will only be accessible to clinicians treating a patient or service user, meaning patient confidentiality is not compromised.

KHP Online will help to improve clinical safety through improved use of data, for example by providing information about allergies or recent test results. It will also enable more efficient working, reducing duplication of gathering and recording data. It is now able to search across three sites and display information about visits with contact type and caring clinician, results of laboratory tests and radiology reports, access to PACs images, documents, clinical notes and correspondence, view of RiO community system data and view of MOSAIQ Cancer Information System.

It will also better support staff to treat both the physical and mental health needs of our patients and service users so we are caring for the whole person, mind and body. We know that addressing

mental health issues has been demonstrated to improve physical health outcomes and vice versa, and as a partnership we are committed to joining up mental and physical healthcare across all of our services. The portal has been developed by clinicians and technical staff across the three partner trusts and with the full involvement of each trust's Information Governance team and Caldicott Guardian to make sure that it meets the needs of staff, patients and service users in all three organisations. KHP Online has led to immediate improvements in the management and care of patients and service users and better join-up between mental and physical health care and was featured as a case study by Dame Fiona Caldicott in her Information Governance report to the Secretary of State for Health in December 2014.

We are progressing plans with local partners to extend the project into primary care and to develop the initiative further to join up records right across our local health economy. We are working closely with Southwark and Lambeth Integrated Care (SLIC) to support the creation and implementation of a Local Unified Care Record (LUCR), a system to support the direct provision of care. LUCR is a view\_only system that allows clinical teams in different care settings to access clinically relevant information when it is needed. In the initial phase this will link KHP Online with the system in general practice. In hospital settings care teams will be able to see pre-defined views of important information about a person, drawn from the GP system (EMIS). In the primary care setting GPs will be able to access information from the acute trusts about test results (including images), forthcoming appointments, and hospital documents. This will mean that GPs no longer have to navigate the hospital switchboard to track down relevant information about a person in their clinic – it will be available immediately through their existing EMIS system.

We are also feeding into the work being undertaken by the HIN looking at information exchanges on a pan-London basis in support of NHS England's London Transformation Programme. KHP is committed to taking both a leading and supporting role in the wider interoperability agenda.

### **Patient involvement**

Patient access to their health care records is already available in primary care. We plan to work with patients to develop electronic tools that help them to manage their own health and wellbeing needs. This work has already begun at SLaM. Our innovative Myhealthlocker project was also featured in the Caldicott report as an example of providing mental health patients with access to their own records. This record is owned by the service user which contains information in the clinical record as well as feeding information through to a care coordinator. All this information is useful for personally managing health and clearly puts the service user in the driving seat.

To support patient and service user involvement in our mental health research, we have introduced Consent for Contact (C4C). We are creating a database of people who would be willing for researchers to contact them to ask if they would like to take part in current or future research projects that interest them by consenting to join the C4C register, people are agreeing their consent for researchers to look at their SLaM medical records. By using these records, researchers can check if people might be suitable for a specific research project based on different aspects of their health, for example, symptoms or medication.

### **Diabetes**

Our i3 Diabetes programme has been working with industry partner Aridhia to join up primary and secondary care data for diabetes in our local boroughs to help drive improvements in research and ultimately care pathways for our patients. 93 GP practices are in the process of agreeing data sharing across Lambeth and Southwark localities.

## **Dementia research**

We also launched our D-CRIS partnership with four other mental health trusts in 2014. D-CRIS: the Dementia Clinical Record Interactive Search is a world-leading resource that was first developed at the NIHR Dementia Biomedical Research Unit at SLaM and the Institute of Psychiatry, Psychology and Neuroscience at King's College London. It will enable large datasets to be pooled so that research can be conducted at scale, providing researchers with access to one million patient records and enabling them to identify trends in the data and investigate why treatments work for some patients and are not as effective for others.

D-CRIS allows researchers to take information from patients' records without revealing sensitive information that could identify them or their carers. Electronic Patient Record (EPR) systems hold a wealth of rich clinical patient data. D-CRIS transforms this data into a pseudonymised database appropriate for research use. This comprises data recorded in coded and structured form, including dates and scores, plus data held in unstructured free text form, for example, within written assessments, progress notes and correspondence. The project is part of the Strategy for UK Life Sciences, which outlines an ambitious vision to promote the UK as a competitive global hub for life sciences, enabling an environment where the NHS, academia, industry and patients work collaboratively.

## **Our future vision**

Over the next five years, we will be an international leader in the field of optimised clinical and research informatics, and associated disciplines. Our world-leading expertise will provide a strong foundation to support and facilitate excellent research activity and clinical outcomes across all areas of clinical interest.

We will consolidate and enhance this position by investing to build a fully interoperable and integrated research platform, providing flexible and scalable data and systems management, which is responsive to a broad range of clinicians' and researchers' informatics needs. We will establish a secure data repository drawing from and linking together existing core components, as well as harnessing the opportunities provided by the extensive electronic medical records within the three Trusts, alongside our growing biological and imaging datasets. Working to a clear five year roadmap, we will support our systems capabilities with effective and co-ordinated deployment of people resources and expertise to deliver streamlined processes and analytics functions, streamlining data and information links between the partner organisations and more widely with primary care and community stakeholders. Informatics will be at the heart of our role in delivering the 100,000 Genomes Project, supporting data provision requirements for our submissions to Genomics England.