

## King's Health Partners

### 2017/2018 Annual Report

#### Summary of highlights

Our 2017/2018 annual report sets out how, as we move into the final stages of our 2014-2019 accreditation, we continue to maximise our combined expertise to improve the lives of the people we serve.

- Across our four major campuses in south east London we have taken a **joined-up approach to estate development**. We are attracting commercial partners to co-locate with our research and patient populations to accelerate innovation and translation.
- We have established **clinical academic Institutes and Networks** in Cardiovascular, Women and Children's Health, Neurosciences, Haematology, and Diabetes, Obesity and Endocrinology. Each of these ventures are likely to involve consolidation of research related to these clinical areas, international education programmes, integration of physical and mental healthcare and in some cases, specialist service reconfiguration.
- Working with our partners across south east London to deliver our **Sustainability and Transformation Partnership (STP)**, focusing on improving the quality and reducing variation across both physical and mental health.

#### Value Based Healthcare

- Our work **calculating value** is prioritised in three local key areas, cardiovascular, orthopaedics and depression in older adults.
- 14 of our 22 Clinical Academic Groups (CAGs) have now **published Outcomes Books**.
- Development of prototype **Outcomes Scorecards** to support CAGs to drive value by identifying opportunities for improvement.

#### Mind & Body

- **IMPARTS** (Integrating Mental and Physical Healthcare Research Training and Services) is now live in 52 acute outpatient clinics, a 25% increase from end of 2016/17, screening more than 26,000 patients for signs of anxiety and depression alongside their physical health conditions.
- Mind & Body **Champions Network** launched to enhance staff awareness of the need for holistic care and to encourage and empower staff to advocate for integrated care, more than 430 Champions are signed up from across King's Health Partners.
- **Public engagement** events involving more than 400 patients, service users, carers and their family members held.
- **Patient and Public Engagement** strategy and **Learning and Development** strategy published.
- Mental Health Boards established in acute trusts.

- Number of King's Health Partners kitemarked education materials available on our **Learning Hub** has risen to more than 100, and there are now 11,500 users registered to access our educational resources.
- International education and training team overseeing development of a new **PGCert in Advanced Medical Training** aimed at international learners.

### Research awards

- £30m investment from the UK Government (UKRPIF), in partnership with GSK and Charité CRO (Berlin), to create an **Advanced Therapies Centre**.
  - Successfully renewed Medical Research Council (MRC) **Confidence in Concept** (translational pump priming) and **Proximity to Discovery** (industry interactions) with an award of more than £1.25m.
  - Appointing a leader of a newly formed **Institute of Urban Population Health** with the aim of integrating conventional public health with epidemiology, social science, engineering, geography and mental health.
  - £55m from the EU-AIMS consortium for autism research; a £10m grant from the Wellcome Trust's 'Our Planet, Our Health' programme; and a new 7-Tesla MRI scanner that will be hosted by St Thomas' Hospital for all of London.
  - Part of a cross-London consortium awarded £7m in competitive funding to be a "substantive site" of the new Medical Research Council Health Data Research (HDR) UK Institute.
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- 48,000 patients took part in **clinical studies** across our organisation last year and our partner trusts are among the best performing trial recruiters in the country.
  - Our two linked **NIHR Biomedical Research Centres (BRCs)** continue to combine their significant expertise to bring together research and discovery in mental and physical health.
  - New Palliative Care CAG formed, increasing our number of CAGs from 21 to 22.
  - Plans announced to explore a partnership with **Royal Brompton & Harefield NHS Foundation Trust** to revolutionise cardiovascular and respiratory services for patients.
  - **King's Centre for Global Health & Health Partnerships** launched a framework for pioneering better health in all partner countries and strengthening education, research and NHS engagement over the next 10 years.
  - Received more than **£10m in grants to support our global health work**, including an award from the NIHR Global Health Group to focus on stroke research in the developing world.
  - Engaged with 20 major **international pharma and MedTech businesses** to shape potential partnerships.

### Conclusion

In conclusion, it has been a hugely effective year for our Academic Health Sciences Centre (AHSC) with considerable achievements witnessed in a challenging financial climate. The partners believe in the added value of the AHSC and are committed to its future and the outcomes we will achieve.



## DEPARTMENT OF HEALTH & SOCIAL CARE DESIGNATED ACADEMIC HEALTH SCIENCE CENTRE (AHSC)

### 2017/18 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 & Social Care Academic Health Science Centre:**

King's Health Partners

**Contact details of the DHSC 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

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

Please provide a brief overview of activities for your AHSC for 2017/18 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.

King's Health Partners has existed since our first accreditation in 2009 as a collaboration between King's College London and Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts. Since that time, we have worked hard to make sure that the lessons from research are used more swiftly, effectively and systematically to provide better and more joined-up physical and mental healthcare for our patients and communities. This report sets out how, as we move into the final stages of our 2014-2019 accreditation, we continue to maximise our combined expertise to improve the lives of the people we serve, building on the evidence already provided in our previous three annual reports.

### **Our progress with further aligning the strategic objectives of our NHS providers and university to harness and integrate world-class research, excellence in health education and excellence in patient care**

Our partnership drives improved outcomes and experience for patients whilst ensuring delivery of our ambitions for world-leading science, translational research and education and training. Integrating mental and physical healthcare, value based healthcare, production of transparent outcomes and joined up informatics is at the heart of this work. Our NHS and university partners are focused on the delivery of our shared clinical academic ambitions, as described in our 2014-2019 strategic plan and previous annual reports.

A key enabler of our ambitions in the integration of patient care, research and education is our estate. Across our four major campuses in south east London we have taken a joined-up approach to estate development. We are attracting commercial partners to co-locate with our research and patient populations to accelerate innovation and translation. In response to the success of the 'World questions, King's answers' fundraising campaign, our partners are planning their next major campaign to reflect our integrated model and shared priorities. This is a significant achievement.

The most radical step we have taken is the establishment of five clinical academic Institutes and Networks in Cardiovascular, Women and Children's Health, Neurosciences, Haematology, and Diabetes, Obesity and Endocrinology. Each of these ventures are likely to involve consolidation of research related to these clinical areas, international education programmes, integration of physical and mental healthcare and in some cases, specialist service reconfiguration. Each Institute is overseen by a Programme Board chaired by a non-executive director (NED) or executive director from one of our partner organisations, and each build on existing entities within King's Health Partners and our Clinical Academic Groups (CAGs). Our partners have committed £6m over the last two years to develop this programme in a reflection of the significant impact it will have in driving improved outcomes and experience for patients.

This year our leadership jointly provided a response to the Select Committee Call for Evidence on Life Sciences and the Industrial Strategy, and a letter to the Department of Health outlining how designated NHS/university partnerships provide us with the opportunity to collaborate to improve patient care in ways not previously possible.

We are working with our partners across south east London to deliver our Sustainability and Transformation Partnership (STP) focusing on health and social care to make sure we are doing all we can to get the best outcomes for our population. One of the key priorities of the STP is to improve quality and reduce variation across both physical and mental health. As an Academic Health Sciences Centre (AHSC) bringing together mental health and acute trusts, with a university that delivers the largest volume of highly cited psychiatry and psychology research papers in the world, we are in a unique position to maximise our collective strength and drive improvements to patient care across our six boroughs.

### **Summary of progress in key themes 2017/18**

#### Value based healthcare

With unprecedented levels of demand and financial challenge facing the whole system, we want to achieve transformational health improvements that are patient-centred, population-based and sustainable, making the best use of every pound available by focusing on value for patients and carers across the full cycle of care.

Our work calculating value is prioritised in three local key areas, cardiovascular, orthopaedics and depression in older adults. This innovative approach, underpinned by powerful informatics and analytical capability, will support development of meaningful and consistent patient-centred metrics; quantify the potential impact that investment decisions have on patients, carers, the local health economy and wider society; ensure that the mental, physical and psychosocial needs of people are treated as one and; evaluate and learn from the outcomes we achieve through research and transparent use of data to reduce variation. In elective orthopaedics we are linking with our partner Academic Health Science Network (AHSN) for south London, the Health Innovation Network (HIN), to include the award-winning ESCAPE-Pain in the complete pathway of care.

14 of our 22 CAGs have now published Outcomes Books, which evidence a wide range of clinical, research and education delivery, as well as providing powerful benchmarks against which to measure future progress. We are currently developing prototype Outcomes Scorecards, which will form an important part of our strategy for supporting CAGs to drive value by identifying opportunities for improvement. The AHSC has recently joined the University Hospitals Alliance, Europe to further develop our work in value based healthcare with European partners, notably in Stockholm, Berlin and Vienna.

#### Integrated mental and physical health

Our partnership is leading the vision for integrating mental and physical health in the UK providing a unique combination of research, teaching and clinical expertise to address the relationship between mind and body, a core priority of our ASHC.

IMPARTS (Integrating Mental and Physical Healthcare Research Training and Services) is now live in 52 acute outpatient clinics, a 25% increase from end of 2016/17, screening more than 26,000 patients for signs of anxiety and depression alongside their physical health conditions. IMPARTS will shortly go live on 4G networks enabling access in community and primary care settings. Small-scale pilots for use in inpatient acute and mental health settings are also underway.

COMPASS, a project to deliver online Cognitive Behavioural Therapy tailored for long-term conditions is in an implementation phase with local Improving Access to Psychological Therapies services. 3 Dimensions for Long-term Conditions (3DLC) has completed an interim evaluation, highlighting positive impacts to patient care, staff awareness and mental healthcare skills. This model of integrated psychosocial support will be adopted by the new Haematology Institute Mind & Body project, which has secured £460k of funding from Leukaemia UK and will begin operating in 2018.

In 2017 we launched the Mind & Body Champions Network to enhance staff awareness of the need for truly holistic care and to encourage and empower staff to advocate for integrated care within our organisation. More than 430 Champions are signed up from across King's Health Partners, including staff from primary care, Clinical Commissioning Groups and AHSNs. We have held public engagement events involving more than 400 patients, service users, carers and their family members. Alongside this, we have published a Mind & Body Patient and Public Engagement strategy and implementation plan. In the acute trusts, Mental Health Boards have been established to bring together existing mental health related discussions and governance. We continue to focus on staff development and training in integrated care. This year we published a Mind & Body Learning and Development strategy, setting out our ambition to target all levels of staff education and development. The Mind & Body animation, and signposting to e-learning, has been embedded within all trust corporate and medical inductions, reaching at least 500 new starters per month. We have re-launched the Mind & Body one-day clinical skills courses and have seen a 200% increase in access by primary, community, secondary care and university staff to Mind & Body e-learning. Funding has been secured from South London Small Grants for development of a depression and anxiety MOOC (massive open online course) to be launched in 2018.

#### Transforming outcomes through education and training

We are increasing research capacity through the strength and expertise of our education and training offerings, with opportunities ranging from undergraduate student led activity through to some of London's most popular Academic Foundation Programmes. In addition, our NIHR Integrated Academic Training programme includes a PGCert in research methodology that is unique in London.

During 2017/8, the number of King's Health Partners kitemarked education materials (eg lectures, videos and interactive e-learning materials) available on our Learning Hub has risen to more than 100, and there are now 11,500 users registered to access our educational resources. This year's highlights include advanced online workbooks for critical care nursing, a video-based introduction to the debriefing process in simulation and the importance of 'human factors' such as communication skills and situational awareness in healthcare, and a selection of videos and articles based on evidence-based science about nutrition and health.

Our international education and training team is overseeing the development of a new PGCert in Advanced Medical Training aimed at international learners who wish to have a period of clinical training at one of our three partner NHS Foundation Trusts, while undertaking a King's College London accredited course.

A series of highly successful educational conferences were held this year including, International Global Mental Health and Psychosocial Support, Safety Connections, the Haematology Institute's Nursing and Allied Health Professional conference and Realising Your Potential. This year the Widening Participation committee of the King's Health Partners Education Academy won King's College London's award for "Most outstanding commitment to widening participation or social mobility". Our innovative Maudsley Simulation team, leading simulation training to improve mental health services, won Education Team of the Year at the BMJ (British Medical Journal) Awards 2018.

#### Basic science and experimental medicine

We perform world-leading research across a wide range of health-related fields, with research being conducted across all four of our constituent organisations. Following our establishment in 2009, our trust partners have seen significant growth in research publications (42% which accounted for 13.5% of all UK hospital research outputs, see annex one) and last year 48,000 patients took part in clinical studies across our organisations.

Our AHSC has been a catalyst for culture change across the partnership which can be evidenced by the ever-increasing number of clinical trials led by our partner trusts, who are among the best performing trial recruiters in the country, and the marked increase in the number of highly-cited research papers published by our NHS consultants. Our partner NHS Foundation Trusts are all in the top six partners (joint publications) for King's College London. Our combined health research funding for 2016/17 was approximately £178m.

With a combined investment of £130m, our two linked NIHR Biomedical Research Centres (BRCs) have significant expertise in bringing together research and discovery in mental and physical health. In the last year we have invested in capacity building in experimental medicine linked to our two BRCs, including the

appointment of adjunct professors. This year our Clinical Research Facility (CRF) at Guy's and St Thomas' became the first NHS-managed facility in London, and the second in the UK, to be granted Medicines and Healthcare products Regulatory Agency (MHRA) Phase I accreditation. Our CRF at King's College Hospital continues to go from strength to strength.

There have been notable successes in attracting research funding this year, with joint working between the trusts and university a key factor. Our co-location of research and clinical services provides a compelling rationale for investment. Examples of major research funding awards include a £30m investment from the UK Government (UKRPIF), in partnership with GSK and Charité CRO (Berlin), to create an Advanced Therapies Centre and we lead a £5m HEFCE 'Connecting Capabilities' programme, in partnership with UCL and Imperial, for knowledge exchange across London in advanced therapies.

This year we successfully renewed Medical Research Council (MRC) Confidence in Concept (translational pump priming) and Proximity to Discovery (industry interactions) with an award of more than £1.25m. We are part of a cross-London consortium awarded £7m in competitive funding to be a "substantive site" of the new MRC Health Data Research (HDR) UK Institute. Additional developments in clinical informatics include a £1.5m MRC 'Mental Health Pathfinder' award to support development of a Mental Health Data Platform. We are also appointing a leader of a newly formed Institute of Urban Population Health with the aim of integrating conventional public health with epidemiology, social science, engineering, geography and mental health across the whole university.

We received MRC funding as one of five centres forming a new UK Dementia Research Institute. Other significant research awards include £55m from the EU-AIMS consortium for autism research; a £10m grant from the Wellcome Trust's 'Our Planet, Our Health' programme; and a new 7-Tesla MRI scanner that will be hosted by St Thomas' Hospital for all of London.

Significant high-impact patient centred developments in 2017/2018 include, research into the use of antibodies to prevent migraines; developing a peptide vaccine for treatment in type 1 diabetes, currently under trial at Guy's Hospital; and leading research in the use of CAR-T cell therapy to treat solid tumours and haematological malignancies led by King's College Hospital.

Notable staff achievements include Professor Fiona Watt appointed as the next CEO of the MRC, Professor Andy Shennan awarded the Newton Prize in India, and a major recruitment has been made in the field of healthcare engineering, Professor Sebastien Ourselin, previously at UCL.

#### Excellence through key specialties

Our CAGs remain the collaborative vehicles through which our tripartite mission for excellence in care, research and education is delivered across and within our four partner organisations. This year we have grown from 21 to 22 CAGs, with the introduction of a Palliative Care CAG in recognition of their unique and outstanding offer building on the strength of the Cicely Saunders Institute of Palliative Care & Rehabilitation Research.

Our Institutes and Network Programme in Cardiovascular, Women and Children's Health, Neurosciences, Haematology, and Diabetes, Obesity and Endocrinology is the next stage in the evolution of our CAGs. The explicit ambition of the Institutes and Networks is to achieve a step change in clinical academic performance through a new type of network model for south east London and into the south of England. Working across sites and campuses, integrating clinical academic services across our two acute trusts with our university health schools, and bringing together the combined strength of our partners into new centres of excellence which can genuinely be recognised as comprehensively world-leading with the ultimate aim of increasing the health and economic value of the services we provide as a partnership.

This year we announced plans to explore a partnership with Royal Brompton & Harefield NHS Foundation Trust to revolutionise cardiovascular and respiratory services for patients. We have a vision to create a global powerhouse for heart and lung medicine and research in London, providing the best possible patient care and experience.

We are further developing and growing strong relationships with NHS and academic partners, alongside industry relationships including pharma, MedTech and digital sectors. This strategy, along with a range of new partnerships, will support NHS England London specialised commissioning with a unique offer to improve the health outcomes of our diverse and large population across a wider geography.

#### Development and delivery of e-Health informatics platforms

Our ambitious informatics strategy and examples of real innovations built in environments that support research and transformation, including home grown approaches in free text-mining combined with well our characterised patient data populations, give us the ability to develop data capability that leads the way in the NHS.

We continue to make significant progress in joining up electronic patient records across our local healthcare system. The award-winning Local Care Record has recently linked with three additional boroughs in south east London to cover a population of more than 1.7 million people. We are using CRIS and CogStack, pioneering technology developed in-house, to text-mine electronic patient records, improving the quality and safety of our patient care and research capability.

We are one of six national sites as part of HDR UK. This collaborative partnership combines the knowledge and skills of London's leading universities, the NHS and industrial partners, to generate benefits for patients more quickly by unleashing the potential for data and technologies to drive breakthroughs in medical

research. Building on this we are part of a pan-London response to the recent call for Local Health and Care Record Exemplars.

Our Centre for Translational Informatics (CTI) is a core component of HDR London. This unique research partnership provides a front door to collaboration with the digital health industry and is driving digital innovation in mental health by finding new ways of improving healthcare and accelerating their delivery to patients. In recognition of the digital excellence at the heart of our partnership, South London and Maudsley NHS Foundation Trust were announced by NHS England as London's only mental health digital exemplar to help deliver the NHS Five Year Forward View.

#### Our global impact

Building on the significant success of the King's Centre for Global Health & Health Partnerships over the last five years in Somaliland, Sierra Leone and more recently the Democratic Republic of Congo, the Centre continues to go from strength to strength. Through their work, the partnerships are increasingly recognised as influential in health systems strengthening and bring tangible research benefits back to King's Health Partners. In March, the Centre launched a framework for pioneering better health in all partner countries and strengthening education, research and NHS engagement over the next 10 years.

Across the whole university we have launched the Department of Global Health and Social Medicine, this has resulted in a substantial expansion of our global health research. Over the past year we have received more than £10m in grants to support our global health work, including an award from the NIHR Global Health Group to focus on stroke research in the developing world.

We continue to work with international colleagues to share our learnings as an AHSC. This year we have supported colleagues in Denmark as they explore ways to translate the King's Health Partners model to their regions and develop a CAG infrastructure in key specialties.

#### **Our contribution to economic growth and the economy, including through partnerships with industry**

In 2017/18, we invested in dedicated resources to deliver our industrial partnerships strategy. In this time, we have engaged with 20 major international pharma and MedTech businesses in shaping potential partnerships. We are developing a range of models for co-locating industry, academic and clinical staff, at our sites that will pave the way for major partnership investments, broadening our industry exchange agenda from a core scientific focus to include capabilities most relevant to translation, specifically patient engagement, clinical research, partnership operations and commercial expertise.

We have a strong track record of collaborating with our partner AHSN the HIN. The HIN work to accelerate the adoption of value enhancing innovations in the local health system and promoting local innovations further afield. Over the past five years, the HIN has helped hundreds of companies looking to do business with the NHS. More recently, we have supported the development of DigitalHealth.London which has successfully supported innovators and the local health system, aiming to make London a leading centre of digital health. In addition, the King's Commercialisation Institute is running a support programme for staff and students that is boosting the London start-up community.

One of our standout industry partnerships to improve patient care is our work with Buddi, a British technology company, we collaborate with to test digital technologies to treat and prevent type 2 diabetes. Buddi was selected by NHS England as one of five companies to trial wearable technologies as part of the NHS Healthier You: Digital Diabetes Prevention Programme.

#### **Our governance arrangements**

Our AHSC is led by the King's Health Partners Joint Boards, chaired by our University Principal, and consisting of our four partner Chairs and Chief Executives, and four NEDs from government, science and industry. This arrangement provides leadership and stability to our local health economy in a way that would previously not have been possible. These arrangements are also mirrored at levels beneath the King's Health Partners Joint Boards, with cross-partner meetings of Chief Executives, Medical Directors, Chief Operating Officers, Strategy Directors and the Education Council, to ensure the delivery and alignment of our mission. We have positioned ourselves as system leaders in the local health economy and built effective working relationships with other system partners such as MedCity, our fellow AHSCs, the south London ASHN, the Clinical Research Network, the Collaboration for Leadership in Applied Health Research and Care, and the Francis Crick Institute.

In September 2017, a Partnership Board between King's Health Partners and Royal Brompton & Harefield NHS Foundation Trust was established. Comprising board members from each of the NHS trusts including chairs and chief executives, and members of King's College London Council. The Partnership Board will set strategic direction as the collaboration develops its plans over the coming months.

#### **Conclusion**

In conclusion, it has been a hugely effective year for the AHSC with considerable achievements witnessed in a challenging financial climate. The partners believe in the added value of the AHSC and are committed to its future and the outcomes we will achieve.

## 2017/2018 Annual Report Supporting Information and Materials

### [King's Health Partners governance](#)

#### **Our impact**

- [Innovation Impact Stories](#) - clinical academic collaborations improving the lives of our patients

#### **Value Based Healthcare**

- [Outcomes Books](#)
- [Value Based Healthcare case studies](#)
- [Value Based Healthcare blog and vlog series](#)

#### **Integrating mental and physical health (Mind & Body)**

- [Mind & Body Learning and Development strategy](#)
- [Mind & Body Programme Patient and Public Engagement strategy](#)
- [Mind & Body blog series from King's Health Partners staff](#)
- [Mind & Body education and training resources for King's Health Partners staff](#)

#### **Education and training**

- [Education Academy Annual Report 2017, Executive Summary](#)

#### **Research**

- [£30 million world-class Advanced Therapies Centre](#)
- [New centre for dementia research](#)
- [Clinical Research Facility accreditation](#)
- [South east London leading the way for patient research](#)
- [King's Health Partners clinical trials infographic](#)

#### **Excellence through key specialties**

- [King's Health Partners Institutes and Networks](#)
- [A new partnership to deliver world-class care for heart and lung patients](#)

#### **Informatics**

- [Transforming health through data science - Health Data Research \(HDR\) UK](#)
- [Better sharing of care records offers people faster, safer treatment](#)
- [CogStack video](#)

#### **Global impact**

- [The First Five Years - King's Sierra Leone Partnership](#)