
Introduction

The Academy of Medical Sciences promotes advances in medical science, and campaigns to ensure that these are translated into healthcare benefits for society. Our elected Fellowship includes the UK's foremost experts drawn from a broad and diverse range of research areas.

We welcome the opportunity to respond to the **consultation on the Government's mandate to NHS England to 2020**, to ensure the health service can support, and benefit from, the strength of the UK's research base. Horizon scanning forms an important part of this process, and the Academy has been actively engaged in relevant activities, including our FORUM Annual Lecture which explored the challenges and opportunities facing biomedical research to 2025.¹

The benefits of supporting research, innovation and growth are acknowledged in Section 3 of the consultation: *Proposed strategic objectives for NHS England*. We welcome this recognition of research, and its value to the NHS and the wider economy, and would like to offer some key reflections.

Supporting innovation

The ability to translate novel research into clinical practice is vital in ensuring that the NHS remains a world-leader in healthcare. Operating within the Department for Health, the National Institute for Health Research (NIHR) plays a key role in supporting this process, and works in a coordinated manner with the Medical Research Council to provide funding for the entirety of the discovery pipeline. We highlighted the value of the NIHR in a recent joint letter to the Chancellor, alongside other organisations from across the sector. Protecting departmental research spending of this type will be paramount to ensure the NHS continues to develop and adopt innovative treatments.

The ongoing Accelerated Access Review (AAR) is examining options to 'speed up access to innovative drugs, devices and diagnostics for NHS patients', and the Academy has been actively engaged in this discussion, both through Fellows contributing their expertise to the AAR External Advisory Group, and a discussion dinner for stakeholders held in July 2015.² We welcome initiatives such as this one, which seek to engage across the community to establish how addressing challenges throughout the innovation pipeline can enable the healthcare system to better embrace and deliver cost-effective innovations. This process will require a commitment to culture change within NHS Trusts, to truly embed research within healthcare and streamline the regulatory and governance frameworks involved. In 2011, the Academy published 'A new pathway for the regulation and governance of health research', which discussed many of the existing challenges and proposed the establishment of the Health Research Authority (HRA) to drive the

¹ Academy of Medical Science (2014). *Horizon scanning: looking ahead to 2025*.
<http://www.acmedsci.ac.uk/viewFile/53c7da0846146.pdf>

² <http://www.acmedsci.ac.uk/policy/policy-projects/accelerated-access-review-discussion-dinner/>

cultural shift needed to deliver healthcare innovations to patients more quickly.³ We recently welcomed the extension of HRA Approval: the centralised and streamlined approval system for conducting research in the NHS in England.⁴ Delivery of this approval system will require the NHS and HRA to work closely in partnership.

In related work, the Academy is undertaking a project addressing how society evaluates evidence, by considering what constitutes best practice for ensuring that society is receptive to medical innovations.⁵ This work recognises that, in addition to the 'lit runway' required for fast and effective translation of medical innovations into new treatments, a 'lit landing zone' is also required to ensure that novel treatments are readily adopted by patients and healthcare professionals. We would draw the mandate team's attention to our recent workshop on 'Exploring a new social contract for medical innovation', which considered how the health benefits of 4P (Predictive, Pre-emptive, Personalised and Participatory) medicine can be realised through examining the perceptions of risk and value by individuals and organisations.⁶ A report on the workshop's outcomes will be available shortly.

We urge the mandate team to ensure that the new objectives encourage ongoing engagement by the NHS with stakeholders across the community and with the public. The NHS can contribute to, and benefit from, engagement with the entire pipeline of discovery, and the activities of the NIHR within the Department of Health make a substantial contribution to this connection.

Long-term investment

The UK biomedical sector is a national asset for the UK, with universities, medical schools and industrial partners across the country undertaking world-class research which delivers health and wealth benefits. The outstanding performance of the medical sciences in the recent Research Excellence Framework assessment reflected the level of impact achieved.⁷ However, the discovery pipeline in this sector can span over a decade, necessitating long-term support in order to fully realise the UK's potential. The Academy's submission to the Business, Innovation and Skills Committee's review of the Government's Productivity Plan highlighted the need to couple long-term vision with appropriate resource, in order to optimally balance public, private and charitable contributions to tackle health challenges in a co-ordinated manner.⁸ In parallel, our submission to the 2015 Spending Review highlighted that cross-disciplinary support, including the medical sciences, social sciences and bioengineering, was central to improving health in the UK.⁹

Investment must also address the education and training of a skilled workforce. The value of talented individuals to the NHS and associated research areas is greater than ever before. We have recently expressed concerns, in a joint letter to the Secretary of State for Health, that

³ Academy of Medical Sciences (2011). *A new pathway for the regulation and governance of health research*. <http://www.acmedsci.ac.uk/policy/policy-projects/a-new-pathway-for-the-regulation-and-governance-of-health-research/>

⁴ http://www.acmedsci.ac.uk/more/news/new_HRA_approval/

⁵ <http://www.acmedsci.ac.uk/policy/policy-projects/how-does-society-use-evidence-to-judge-the-risks-and-benefits-of-medicines/>

⁶ <http://www.acmedsci.ac.uk/more/news/exploring-a-new-social-contract-for-medical-innovation/>

⁷ Medical Schools Council (2015). *Health of the Nation*.

<http://www.medschools.ac.uk/SiteCollectionDocuments/MSC-Health-of-the-Nation.pdf>

⁸ <http://www.acmedsci.ac.uk/policy/policy-projects/submission-to-the-productivity-plan-inquiry/>

⁹ <http://www.acmedsci.ac.uk/policy/policy-projects/submission-to-the-2015-spending-review/>

changes in the proposed contract for junior doctors may introduce significant disincentives for aspiring clinician scientists.¹⁰

We urge the mandate team to ensure that the new objectives recognise the value of long-term vision and stability for funding, and that NHS engagement with this process adopts a similar outlook. We hope the NHS will continue to draw on expertise from across disciplinary boundaries, and capture the combined benefits this can deliver.

Encouraging collaboration

One of the Academy's strategic objectives is 'linking academia, industry and the NHS', and our FORUM programme seeks to convene representatives from across academia, industry, Government, charities, and the healthcare and regulatory sectors, to facilitate strong and equitable partnerships that lead to the improvement of health.¹¹ Since 2003, a range of FORUM activities and events have provided an independent platform to discuss scientific opportunities, translational challenges and strategic choices in healthcare, including those addressing the acceptability of 'Real World Evidence' on the safety, efficacy and value of drugs; challenges to the implementation of stratified medicine; and effective collaboration within and between geographical clusters.¹²

We urge the mandate team to ensure that the new objectives recognise the need to coordinate and catalyse connections across the whole life sciences landscape to fully realise the potential of this sector.

Future challenges

The growing burden of societal challenges, including demographic ageing and obesity, mean that in the years ahead the NHS will need to tackle increased demand with limited resources. We welcome the recognition that research should play a major role in supporting the NHS through these changes, and feel that a strong connection between the health service and the UK's world-class research base will provide benefits to both sides.

This response was prepared by Elizabeth Gothard (Policy Intern) and approved by the Academy's President. For further information, please contact: intern@acmedsci.ac.uk; +44(0)20 3176 2162.

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¹⁰ <http://www.acmedsci.ac.uk/more/news/junior-doctors/>

¹¹ <http://www.acmedsci.ac.uk/about/objectives/linking-academia-industry-NHS/forum/>

¹² <http://www.acmedsci.ac.uk/more/events/real-world-evidence-workshop/>,

<http://www.acmedsci.ac.uk/policy/policy-projects/Stratified-medicine/>,

<http://www.acmedsci.ac.uk/more/events/geographical-clusters/>