Interview with Dame Sally Davies, Chief Medical Officer for England

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"We want to make the UK the best place in the world for health research and innovation."

There has long been recognition that the UK is a leading country for medical and scientific research, but it is only in the last 15 years that governments in the UK have recognised the need for investment to stop the UK falling behind other countries. In late 1999, the government and the pharmaceutical industry came together to develop recommendations on the steps needed to retain and strengthen the competitiveness of the UK environment for the global industry. Over the following years, a number of significant investments in research and related infrastructure have been made, first by government and more recently by companies in the industry.

In April 2006, the UK government set up the National Institute for Health Research (NIHR), bringing together the people, systems, research schools and infrastructure across the National Health Service to rejuvenate and expand research for health care in the UK. Since then, the government has made further, significant commitments to encourage scientific and clinical research in the UK, and specifically to attract more activity from the global life sciences sector. While initiatives such as the 2007 establishment of the Biomedical Research Centres (BRCs) and Units (with funding of £800m over five years from 2012) build on the skills and heritage of major institutions and universities, the 2012 creation of the Clinical Practice Research Datalink (£60m funding over four years) and the launch earlier this year of the Farr Institute (£20m) are just two of the initiatives aiming to capitalise on the world-leading strengths in electronic patient data and related capabilities in the UK.

Several companies have responded with novel research activities, such as the Salford Lung Study initiated in 2012 by GSK, and new global centres, such as J&J's innovation centre in life sciences in London that was announced in September of 2012. In observational research, there is already evidence that the UK attracts a disproportionate share of research activity in Europe.[1] More generally, in 2011, the most recent year for which data are available, the UK was ranked first across all countries in Europe for pharmaceutical industry spending on R&D.[2]

In the first of an occasional series of interviews for *The Evidence Forum,* Rob Thwaites, Vice President, Evidera, speaks to Professor Dame Sally Davies, Chief Medical Officer for England and Chief Scientific Adviser to the Department of Health, to hear her opinions on the future of biomedical research in the UK, the role of government in encouraging research activities, and the importance of high quality evidence for health care decision making.

When you think about the range of research, development and market access activities that life sciences companies are engaged in, why do you think the UK should be a country of choice for the location of those activities?

If you look at the pipeline, we have excellent basic research in the UK—not just in the biosciences, but also in other sectors such as engineering. There are opportunities to work with leading scientists in modern state-of-the-art facilities in many centres across the country, and companies such as J&J have recognised this by locating one of their global innovation centres in London. Back in 2004, the Government also recognised that clinical research was an area that needed supporting, and we set up the NIHR Clinical Research Networks to provide infrastructure to both public sector research and research by industry. And we know that the UK is probably the leading country in the world right now for research activities based on electronic health records, whether that be public health research, epidemiology, or outcomes research.

The number of patients recruited into clinical trials in the UK, as a proportion of the number globally, has fallen from about 6% in 2000 to just 1.4% now. Are we going to see that trend reversed?

I think so. We have made a lot of progress in the last few years to make the UK a more attractive place to take part in global clinical trials. The numbers going through the clinical research networks are going up every year and large CROs are reporting an upturn in the percentage of patients recruited in the UK. We have also managed to start a significant shift in culture, where working with industry is thought to be a good thing to do, and so more specifically, we saw a 19% increase over the previous year in the number of subjects recruited into commercial trials and 63% of National Health Service (NHS) trusts participated in commercial trials last year. Last year, the NIHR Clinical Research Network achieved 11 global firsts in recruitment, a good illustration of the UK's improving competitiveness.

And for market access and post-marketing activities: how is the environment changing?

I don't think any other country is working as hard as the UK to understand the needs of industry and to see how we can make improvements in partnership. Not just in basic research and in clinical research, but also later in the life cycle. There is more focus on post-authorisation activities, and the UK is in a great position because of its fantastic history in terms of pharmacovigilance and its world-leading capabilities in health outcomes research to inform health technology assessment and value based pricing.

I know you have commented in the past on the importance of evidence-based approaches and of course, for a company such as Evidera, our ability to find data to generate high quality evidence is key to our choice of location.

In the UK, we have excellent sources of data and we are building on this. We are investing in CPRD, the Clinical Practice Research Datalink, with a huge injection of £60 million. There are other health informatics collaborations and investments going on, for example around the BRCs, such as the CRIS[3] system for mental health data, which will allow industry to harness routine NHS data for research.

Have you been pleased with industry's response to these investments and initiatives?

We've seen some significant commitments—from Wyeth in Scotland a few years ago to Eli Lilly's new early-stage research facilities in Surrey, and the J&J choice last year of the UK for one of its innovation centres that I mentioned. The Salford Lung Study is a global first—the first time a study has had advice from the Medicines and Health Care Products Regulatory Agency (MHRA) and the National Institute for Health and Care Excellence (NICE), the first time that the MHRA has approved a "real-world" study for an unlicensed product.

I would ask that industry take an evidence-based approach when selecting a country for locating research activities. Where there is a perception that the UK does not deliver, we need to challenge that because a lot has changed over the last few years. And if there are sites that really are not performing we need to know that too.

You've been involved in many initiatives to improve R&D. When you look back at your career, what will you be most proud of?

From an R&D perspective, it has to be setting up the NIHR because it is a complete health research system that has changed the face of patient-based research in this country. It's happened in so many ways: we now have a very dynamic and transformational approach to medical research; we now have a service approach to clinical trials; and we have an increased evidence base for new drugs. It's very exciting; we are changing the culture so that the NHS works with industry and all this is being done in an integrated way.

Originally trained as a haematologist, Dame Sally became Chief Medical Officer for England in 2010. For more than ten years, she has been at the forefront of many substantial initiatives that have set up research activities or facilities to support medical and scientific research by universities, the NHS and industry. In 2006, when Director General of Research and Development for the Department of Health, she led the establishment of the National Institute for Health Research.

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References

[1] Peperell K, Lones R, Devlin N. (2012) The UK Contribution to Real World Research: Review of Published Data Presented at ISPOR Madrid 2011. Presented at ISPOR European Congress, 2012, Berlin, Germany.

[2] EFPIA: The Pharmaceutical Industry (2013). Available at: http://www.efpia.eu/uploads/Modules/Documents/figures-key-data-2013.pdf. Accessed on: 23 September 2013.

[3] The Clinical Record Interactive Search (CRIS) system has been developed for use within the NIHR Mental Health Biomedical Research Centre and Dementia Unit (BRC/U). It provides authorised researchers with regulated access to anonymised information extracted from the South London and Maudsley NJS Foundation Trust (SLaM) electronic clinical records system. Available at: http://brc.slam.nhs.uk/about/core-facilities/cris.