

The Lancaster Health Innovation Campus

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Innovation is crucial to the success of the NHS. Innovation has allowed us to offer care for a whole range of health-related problems for which we previously had no solutions (for those of us old enough, just think back to the care we offered for patients with a heart attack or stroke, or for couples facing fertility problems, back in the 1980s and consider what we offer now). It has also allowed us to drive up continually the quality of the care we do provide (think of the impact on patient experience that has resulted from endoscopic surgery). And it provides one approach to improving the efficiency of care, something of particular importance at a time when the NHS is under huge pressure.

Innovation also has indirect benefits for the NHS. For example, the income derived from new diagnostics or therapeutics makes huge contributions to the UK economy, helping to ensure that there is the financial underpinning for a publicly funded health service available to all. And the strong history of driving and embracing innovation is a significant contributor to the international reputation of the NHS.

Nevertheless, if innovation is to remain as an important component of a thriving health system, we need to address three questions. Firstly, how do we ensure that there is a continuous stream of ideas? Secondly, how do we select which developments to introduce, especially as many will introduce additional costs? And thirdly, how do we ensure that important modernisations don't just wither? Answering these questions has been central to the thinking behind the establishment of the Health Innovation Campus (HIC) at Lancaster University, the first phase of which is scheduled to open in 2019.

Innovation arises in a whole range of ways – for example from people working in the NHS or local government re-thinking how to tackle a problem they face on a regular basis; from academics from a whole range of subject backgrounds looking at the implications of emerging research; or from innovators, entrepreneurs and businesses bringing new ideas to the field. However, the team at Lancaster who have developed the plan for the HIC see the greatest benefit coming from people from a range of backgrounds working together to design effective solutions. As a result we're developing ways of working, and shaping the design of the building, with inter-disciplinary working at the forefront of our minds; our aim is to create an environment that brings people together and encourages innovative thinking. From the University alone we intend to draw in staff from every academic department (and Lancaster is extremely unusual as a university in already having health-related research going on in all 28 departments) along with students, alumni and professional services such as Human Resources. But we want to go beyond just involving those with a professional interest in improving health. We see the public and patients as central to successful innovation – failure to consider health needs from the perspective of the public runs the risk of 'missing the point'. So we're placing a strong emphasis on 'co-creation'; and we'll do that not only by working with communities close by the HIC but also by getting out and working directly with communities across the area and by using technology (for example with the Healthy New Town at Whyndyke Farm) to create 'virtual communities'.

All aspects of health and health care are in need of innovative solutions. However, when looking at health both on a global scale and locally two challenges in particular stand

out. Some of the areas with the highest levels of premature mortality in the UK lie in Lancashire and Cumbria; and, by 2030, this area is predicted to have one of the highest proportions of very elderly people. Consequently the first phase of the HIC will have a particular focus on innovations applied to improving the prevention of illness and to supporting healthy ageing. Similarly, whilst we ultimately expect the HIC to drive a whole range of solutions – 'soft' innovations (such as processes, systems and techniques) just as much as 'hard' innovations (such as tests or devices or drugs), and combinations as much as single innovations – having taken account of what is already being done in other parts of the country, and bearing in mind the particular expertise available locally, in its first phase there will be a particular (but not exclusive) focus on the role of digital technology, on healthy spaces and materials and on innovations in systems and organisational processes targeted at maximising quality and value in healthcare.

Nevertheless it's important to recognise that not all innovations make the difference we might expect, and for some the benefits come with significant cost. It's therefore crucial that innovation is accompanied by robust and rapid evaluation. This is where universities have a particular role to play in innovation; they are experienced in accessing the relevant evidence and have the relevant national and international networks and methodological and subject expertise to support rigorous evaluation. The challenge for the academic community is to ensure that such evaluations are undertaken in ways that will produce answers that are not only robust but also rapid and relevant. As a result a key part of our planning at Lancaster is to develop this capacity. And just as we are emphasising co-creation with the public, the Lancaster HIC will place a strong focus on co-evaluation with the public.

The third challenge to innovation is ensuring that it becomes part of the routine. There is a wide range of evidence that demonstrates that innovations fail because too little attention is paid to ensuring that the system is changed to accommodate, support and drive the new approach and to supporting individuals to change long-established personal ways of doing things. If these aren't addressed the innovation will struggle to become the new norm and the default is to return to previous ways of working. We are fortunate at Lancaster University in having world-class expertise in organisational and personal development and we plan to embed that expertise in the work of the HIC to maximise the likelihood that proven innovation will become rapidly captured into everyday practice.

In summary we intend that the Health Innovation Campus (HIC) at Lancaster will become a world-class centre of excellence in innovation in health, driving advances in technologies, products and ways of working to transform health and healthcare, internationally and nationally as well as regionally, but also driving economic development in the area by attracting investment and creating employment in new businesses focused on the health sector. We very much hope that clinicians in this area will want to be involved, helping to position Lancashire and Cumbria as a major international presence in the field of health and medicine.

Further information on the HIC can be found at <http://www.lancaster.ac.uk/health-innovation/> or contact us at fhm@lancaster.ac.uk