



Foreword

When I published *Innovation Health and Wealth,* accelerating adoption and diffusion in the NHS (IHW) in December 2012, I said that innovation must become core business for the NHS. Since then, we have made great progress, but there is more to do. Now, more than ever, the NHS needs to put innovation at the heart of everything it does.

I have been really impressed by the passion and enthusiasm for IHW that I have seen amongst NHS staff, industry, academia and many others. Already, we are starting to make a difference; levels of compliance with NICE Technology Appraisals are increasing right across the NHS; the largest roll-out of tele-health anywhere in the world is underway; 15 new Academic Health Science Networks will be up and running in the new financial year and will drive innovation at pace and scale; we have introduced a new legal duty for CCGs and the NHS Commissioning Board to promote innovation; we have established a Specialised Services Commissioning Innovation Fund which will go live from April next year; we have doubled our investment in the Small Business. Research Initiative (SBRI): we have launched a series of innovation Challenge Prizes; we have established new networks with industry, and for the first time we have directly linked financial incentives (CQUIN) to innovation.

One year on, I am very pleased with the progress we have made, but I want to go further. The only way we will improve outcomes and quality for patients in a tighter economic climate is through innovation – both incremental and disruptive. We need to change the way healthcare is delivered,

where it is delivered, who delivers it, and how patients access services. More of the same is just not an option. IHW is a top priority not just for me, but for the NHS as a whole. It's delivery nationally, and locally, is non negotiable. I want the new NHS to re-state it's commitment to IHW, and increase it's effort at all levels to deliver it's recommendations.

We must not allow ourselves to become complacent, or to lose focus. We owe it to patients, the public and our stakeholders to continue to move at pace. We must continue the search for innovative approaches to delivering healthcare, we must make innovation integral to the way the NHS does business, we must continue to help drive growth in the life sciences industry and the economy more generally. We must ensure that NHS patients are amongst the first to benefit from advances in genomic medicine, and we must build grass roots support in the NHS for innovation.

When I published IHW, I said that we had the potential to create the best health system in the world, enhancing the quality of life for people with long term conditions, preventing people from dying prematurely, helping people recover from ill health and ensuring that patients have a positive experience of care. I still believe that, but we will not succeed unless the NHS embraces innovation and IHW, that is why innovation is one of my top priorities.

Sir David Nicholson Chief Executive of the NHS, England





Introduction

IHW set out a delivery agenda for spreading innovation at pace and scale throughout the NHS. It included a number of actions that are delivering game changing improvements in the quality and value of care delivered in the NHS. They are designed as an integrated set of measures that together will support the NHS in achieving a systematic and profound change in the way the NHS operates, and transforms the way services are delivered. IHW is delivering against all its milestones.

The innovation landscape before the publication of IHW lacked transparency and accountability, there was variable compliance with NICE Technology Appraisals, and it was confused and cluttered with layers of organisations seeking to serve as gateways for interaction between the NHS, academia and industry partners. Value for money for patients, the NHS, UK plc and healthcare partners was doubtful and innovation was not a central priority throughout the system.

IHW seeks to overcome barriers to innovation that have built up over decades, and aims to deliver long term, sustainable change embedded right at the heart of the NHS. To do that it needs not only to change structures, and process, we need to change culture and behaviour – that takes time.

We set out to transform the relationship between industry and the NHS, so that it is based on trust not transaction, so that it is open and transparent and is focused on delivering outcomes for patients, the NHS and UK plc. I believe we are succeeding. IHW was co-created through partnership between

industry, clinicians, NHS managers, academia and patients and it is testament to the strength of this partnership and the contribution of all healthcare stakeholders that the relationship remains strong throughout implementation.

We are also seeing real advances in our research partnerships. Last year 99% of NHS Trusts were involved in delivering studies via the NIHR Clinical Research Network; 60% of NHS Trusts were involved in delivery of commercial studies via the Network.

Overall, good progress is being made at a time of great change in the NHS but much more remains to be done to deliver the improvements we need.

Sir Ian Carruthers OBE Chief Executive, NHS South of England

Reducing Variation and Strengthening Compliance

IHW committed the NHS to establish a NICE compliance regime to ensure rapid and consistent implementation of NICE Technology Appraisals (TAs) throughout the NHS. That regime was introduced in January 2012, including a new requirement, set out in the Operating Framework, binding the NHS to comply with NICE TAs.

Since then we have further tightened the regime by including clauses in the NHS core contract that require all providers of NHS services to comply with NICE TAs, and to publish their formularies so that anyone can see which medicines and technologies are being made available locally.

Plans to publish an innovation scorecard to track compliance by Clinical Commissioning Groups (CCG) and Trusts are nearing completion. Over 70% of Hospitals have contributed to the development of the Scorecard and we expect to publish the first scorecard in January 2013. A Whistleblower hotline will also be established in 2013 to allow NHS staff to report cases of organisational non-compliance.

The NHS implements the majority of NICE TAs, but the uptake of well established medicines is generally higher than that of newer technologies. Recognising the need to provide support, we have also established the Nice Implementation Collaborative (NICE). This will see industry working alongside the NHS, the Royal Colleges, and representative bodies to provide support to the NHS to accelerate the implementation of NICE guidance. A concordat binding the partners to these new ways of working will be launched before the new year. This is the very first time that the NHS, industry and it's stakeholders have done anything like this, and it completely redraws the landscape. Rather than the traditional, and somewhat adversarial model, industry, will now work with academia, clinical groups, the NHS Commissioning Board (NHS CB) and representative bodies to drive compliance.

The regime is already reducing variation. From relatively low levels of inclusion of NICE TAs on formularies, NHS South of England is now moving towards full compliance, and we expect the rest of the country will follow shortly.

Reducing Variation and Strengthening Compliance



Metrics and Information

Transparency of data and information enables NHS staff to know about their organisation's performance in adopting innovation and enables patients and the public to exercise choice about their health provider and demand better services. Whilst Phase 1 of the Innovation Scorecard tracks compliance with NICE TA's we have taken the transparency journey further and will expand the Scorecard to include measures of invention, adoption and spread at NHS Trust and CCG level. Innovation Scorecard Phase 2 will be published in March 2013.

The Clinical Practice Research Datalink (CPRD), is a new service, announced in IHW, concentrating on data and research. It will help squeeze every drop of usefulness from anonymised clinical data, while still keeping participants' information absolutely watertight. That will give researchers access to a much more wide-ranging body of data than they sometimes had previously. In September 2012, that was complemented by the Health and Social Care Information Centre's secure data linkage service routinely making available data from primary and secondary care.

Sharing ideas and information is as important as measuring them. We are working with an international partner to develop a single, high quality web portal for innovation in the NHS. It will not only provide information about the most innovative clinical practices, medical technologies, informatics and service improvements, but also an 'intellectual market place' for people to showcase and exchange ideas. The web portal will be launched in 2013.

The first of our Which? consumer campaigns will be rolled out in 2013, and will raise awareness amongst patients and the public of the everyday technologies available from modern primary care services, such as Skype, remote monitoring and electronic care planning.

Metrics and Information





Creating a System to Deliver Innovation

The NHS needs a stronger relationship with the scientific and academic communities and industry to develop solutions to health care problems and get existing solutions spread at pace and scale. IHW committed the NHS to establish a number of Academic Health Science Networks (AHSNs) across the country. AHSNs present a unique opportunity to align education, clinical research, informatics, innovation, training and education and healthcare delivery. They will improve patient and population health outcomes by translating research into practice, developing, and implementing, integrated healthcare services. Expressions of interest were received from 16 prospective AHSNs in September, with 15 getting the go-ahead to proceed to full designation. That process is now underway, and will require each prospective AHSN to set out (in its application) its plan for its first 5 years including what they will do to support the Comply or Explain regime, how they will work with SMEs on medical technology projects, how they will drive innovation at pace and scale, and how they will support and increase opportunities for patients to take part in research. We expect all AHSNs to be in place by Ouarter 1 of 2013.

Establishing organisations of this size and scope within 9 months would be a significant undertaking at any time. Given the level of change the NHS is experiencing it is testament to the commitment of the NHS and its academic, industry and research partners that such substantial progress has been made.

IHW also recognised that we needed to de-clutter the innovation landscape. Over the last decade, many new organisations charged with improving innovation in the NHS has emerged. That landscape was fragmented, confused and offered poor value for money. We promised some immediate actions, including the transfer of iTAPP to NICE which is currently underway. We will commission at least 40 Medical Evaluation Briefings per year. We also promised a more fundamental 'sunset review' of all NHS/DH funded innovation and improvement bodies. That review of over 60 existing bodies in the system has now been completed, and its recommendations will be submitted to Ministers and the NHS CB by the end of 2012.

Creating a system to deliver innovation



Incentives and Investment

With a focus on greater decentralisation, and the greater local responsibility that goes along with that, the centre can no longer simply tell the NHS what to do. But it does have a key role to play in creating a culture and values that recognise and encourage experimentation and investment in innovation. At the heart of that will be the alignment of financial incentives. Too often incentives reward the status quo, and that must change. We have made good progress and are on track to publish a comprehensive report on financial incentives and barriers in the new year. We will publish economic business case materials and guidance to promote high impact pathology diagnostics, and also publish tariffs for wheelchairs to support the Child in a Chair in a Day programme, all by early 2013. We will continue to support the work of the 3Million Lives programme pathfinder sites to develop tariffs for long term conditions.

IHW also promised to review the current 'Never Events' regime, and encourage disinvestment in old or sub optimal practice. That work has been completed, the never events list is currently under revision.

The multi million pound Specialised Services
Commissioning Innovation Fund (SSCIF) has been
established to rapidly test and evaluate specialised
innovations that have the potential to deliver
transformational change for patients. Work on the
establishment of that fund is now complete and we
expect to launch in January 2013. The SSCIF will
enable the NHS CB to generate a better understanding
of the cost and impact of innovations and create a
robust evidence base for use in national commissioning
decisions. Better evidence will result in better, more
robust commissioning decisions and more rapid,
widespread adoption of proven innovations in the
NHS, meaning that patients will have earlier access to
innovative care.

We need to do more to recognise and reward individuals and organisations for their achievements in adopting and spreading innovation. IHW committed the NHS to raise the profile and maintain investment in the NHS Innovation Challenge Prize programme. We have not only done that, but have increased the level of investment in these prizes. In March, the Prime Minister launched a new £1m Dementia Challenge Prize, alongside 2 further £1m challenges for Stroke and Diabetes launched by the Secretary of State for Health. All three of the new challenges are designed to drive significant breakthroughs in the treatment and

management of health. We have also partnered with industry to develop a further Dementia Challenge prize of £150k which will reward best current practice in the treatment and management of dementia. This new and innovative model will see industry, in this case Janssen Healthcare, fully fund the prize programme.

In addition a new round of local challenge prizes was launched soon after IHW was published, the application and selection process was completed over the summer, prizes were awarded at a ceremony hosted by the Secretary of State and the NHS CE on June 25th this year. In total we have now awarded 25 prizes and commendations and awarded nearly £1million. The next set of winners will be announced before the end of the year.

For more information visit: www.challengeprizes. institute.nhs.uk

Incentives and Investment



Procurement

In May 2012 the Department of Health published *NHS Procurement: Raising our Game* (RoG) which provided the NHS with guidance on the immediate steps they could take to improve procurement in the NHS. RoG was a good start, but there is much more to do. Our ambition should be for a procurement function as good as any internationally. Our aim will be to modernise procurement in the NHS, take advantage of its enormous buying power, ensure value for money for taxpayers, develop more productive relationships with industry, and provide patients with better access to the very best services, technologies and medicines.

The subsequent Procurement Review is now underway. The team has met with in excess of 600 people and organisations, yet feedback has been very consistent. We need to strengthen leadership for procurement at all levels in the NHS, build on the best, and make procurement a priority for the NHS. We need better, more transparent data and we need to do more benchmarking. We need to increase reward and recognition for the procurement community. We need to put clinicians at the heart of the procurement process and commission for outcomes not just cost, and we need a better balance between what is procured nationally, regionally and locally.

The Procurement Review will report in the new year and will address each of these points. In addition we intend to mandate the use of standard coding to improve data sharing and benchmarking, and will appoint a procurement champion to lead work on modernisation of procurement in the NHS.

We will lead on delivering the NHS vision for genomics. This will start with a design and procurement process to ensure that, from April 2014, a small number of contracts are in place for whole genome sequencing of NHS patients. The NHS CB will work with the research community and industry to maximise benefits for patient outcomes and the wider economy.

In addition, the IHW review of NHS intellectual property was completed during Autumn 2012, and will publish guidance for the NHS during 2013. That guidance will take into account the recommendations from the Hargreaves review of IP, and the emergence of AHSNs.

SMEs are an engine for growth in the economy. The public sector needs to do more to support SMEs, and in particular start ups. IHW committed the NHS to double its investment in the Small Business Research Initiative (SBRI) which provides seed funding to support the development of innovative products and services. Following that increase in investment, a new £5m SBRI competition is being launched in December 2012. This new programme sits alongside the existing SBRI programme, and will target Primary Care, in particular, technologies that enable individuals to have a better experience at the end of life and technologies that can make a difference to people with mental health illnesses.

The existing Department of Health SBRI programme has launched three competitions in stratified medicine, changing behaviour to reduce the impact of obesity and alcohol related diseases and medicines management to improve outcomes. To date 24 contracts have been awarded and a further 5 have been co-funded in partnership with NHS Midlands and East in the area of Long Term Conditions.

In addition, we are working in partnership with the industry regional Medlinks organisations to ensure SME awareness and understanding of the programme and the opportunities it offers.

Procurement





Developing Our People

Joint training and better and more regular toplevel engagement increases mutual understanding, encourages cross-fertilisation and allows the development of much stronger and diverse personal networks. As a first step in this process, we launched the ITW Innovation Network in January 2012. The network brings together several hundred NHS and industry leaders primarily just to network, but also to discuss and debate innovation in the NHS. The Network is now well established and continues to meet on a regular basis.

Work to establish a new NHS Innovation Fellowship Scheme is well advanced, and we expect the programme, and the first Fellows to be announced at the Healthcare Innovation Expo in March 2013. Its aim will be to get the brightest and best healthcare and non healthcare innovators to share their knowledge and experience with the NHS.

IHW is also working with Health Education England to publish a 2013 framework to embed innovation into training and education programmes, aligned to the academic and career frameworks of the NHS workforce.

Developing Our People



Leadership for Innovation

Innovation must be become core business for the NHS. The measures set out in IHW aim to do that and achieve an enduring shift in attitudes towards experimentation and innovation amongst clinicians and managers at all levels in the NHS. IHW promised to introduce a new legal duty for CCGs and the NHS CB to promote innovation. The necessary legislation for that new duty was included and passed in the Health & Social Care Act 2012. Guidance to support CCGs deliver their new duty will be issued in January 2013.

Recognising that innovation is at the heart of the way the NHS operates and that it must become an integral part of the daily work of every member of staff, we will also launch an IHW Call for Action on 25th January 2013, initially targeting 100,000 NHS staff. This will create a grass roots movement to drive innovation in the NHS and will engage staff from the front line right through to the boardroom.

Leadership for Innovation



Spreading Best Practice & Adoption - High Impact Innovations

We know that the NHS can spread new ideas at pace and scale when it puts its mind to it, and has a long and successful track record of doing just that. Building on that, IHW committed the NHS to the delivery of 6 High Impact Innovations (HIIs). Our intention was to deliver long term and sustainable improvements in key services. In a number of cases this will require a significant amount of planning and reconfiguration of services before results will be seen.

That said, we are already making progress. Usage of fluid management technologies has risen by 23% in the last 12 months. By April we will have signed off plans for the 3Million Lives pathfinder sites, delivering the first 100,000 to patients. We have appointed a CEO for Healthcare UK and are close to finalising our first deals in the Middle East. Reviews of wheelchair services are underway across the NHS and we will issue a best practice commissioning toolkit to increase competition in provision before the new financial year. Work is underway across the NHS to increase support provided to carers of people living with dementia, and a new data collection tool measuring this at a local level will be introduced by the Information Centre in April 2013. Finally, guidance on how the NHS can improve both the quality and cost of care by making use of digital technology was published in the summer, an online tool to allow CCGs to benchmark the provision and use of technology will be launched in the New Year.

More information can be found to support implementation of the High Impact Innovations on www.innovation.nhs.uk. This site has received nearly 20,000 visits in its first 3 months.

High Impact Innovations



CQUIN

There are compelling reasons for the NHS to adopt each of the High Impact Innovations set out in IHW, not least because they have the potential to drive significant improvements in quality and value. As set out in IHW we will not directly measure or make judgements on compliance from the centre. That will be left to the local NHS. But we will link delivery of the HIIs to CQUIN payments from April 2013.

Guidance for CQUIN payments for 2013/14 was agreed by the NHS CB in November, and will see the introduction of both a national threshold delivery test for each HII and a further local threshold. The national threshold will set the minimum requirements, which can then be raised locally should commissioners wish to do so.

Commissioners will begin the process of determining which providers have passed or failed the CQUIN pre-qualification thresholds in the new year, and will provide returns by April 2013.

CQUIN



Next Steps

Implementation of IHW is a key priority for the NHS, and will feature strongly in its planning guidance 2013/14

Implementation of Innovation Health and Wealth, accelerating adoption and diffusion in the NHS remains a priority for the development of QIPP. All NHS organisations should demonstrate how they are driving innovation and developing delivery mechanisms for long-term success and sustainability of innovation in their health economy.

NHS organisations should demonstrate their commitment to implement each element of the Comply or Explain regime, and we shall set out compliance in the NHS Standard Contract. There are four elements to Comply or Explain:

automatic inclusion of positive NICE Technology Appraisals on local formularies in a planned way that supports safe and clinically appropriate practice;

publication of local formularies;

tracking of adoption of NICE Technology Appraisals through the Innovation Scorecard; and

support to overcome the system barriers to implementation of NICE Technology Appraisal guidance and other guidance through the NICE Implementation Collaborative.

The first Academic Health Science Networks (AHSNs) will become operational from April 2013. All Clinical Commissioning Groups and our own direct commissioners should be members of an AHSN. The AHSNs will present a unique opportunity to align education, clinical research, informatics, innovation, training and education and healthcare delivery. Their goal is to improve patient and population health outcomes by translating research into practice and developing and implementing integrated health care services. Working with Academic Health Science Centres, they will identify innovations and spread their use at pace and scale through their networks.

Innovation Health and Wealth: Accelerating adoption and diffusion in the NHS sets out a number of approaches NHS organisations can use to develop new ways to develop services around the needs of patients. Modern technology should allow for a much more rapid take up of telehealth and telecare in line with patient need.

CQUIN payments will only be made to those providers who meet the minimum requirements of the High Impact Innovations as set out in Innovation, Health and Wealth. These minimum requirements, including how Clinical Commissioning Groups can identify whether they have been met will be in guidance which we shall publish.

To support the implementation of the Planning Guidance 2013/14 we will:

- 1. Embed IHW at the heart of the NHS Commissioning Board and the new NHS architecture
- 2. Develop an IHW led investment strategy to support industrial growth
- 3. Raise awareness of the potential of IHW with all leaders in the new NHS system

The Table of Actions

IHW in Operating Framework	
Introduce NICE Compliance Regime	
Require automatic inclusion of NICE TAs on local formularies	
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CCG Legal Duty	
Showcase Hospital Programme	
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CQUIN pre-qualification	
Intra Operative Fluid Management High Impact Innovation	
Child in a Chair in a Day High Impact Innovation	
International and Commercial High Impact Innovation	
3Million Lives High Impact Innovation	
Digital First High Impact Innovation	
Dementia High Impact Innovation	
Review of Intellectual Property	
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