



NATIONAL INFORMATION BOARD

Personalised Health and Care 2020

WORK STREAM 6 ROADMAP

**Support care professionals to make the best
use of data and technology**

Chapter 10 of Personalised Health and Care 2020

June 2015



CONTENTS

1	CONTEXT.....	3
2	STAKEHOLDER ENGAGEMENT	3
3	RESEARCH AND EVIDENCE BASE.....	3
3.1	Establishing the ambitions that underpin the roadmap	4
3.2	Ensuring appropriate engagement and challenge	4
3.3	Defining who the workforce are	4
3.4	Impacting existing commitments	5
3.5	Building upon existing initiatives	5
3.6	Identifying early work, quick wins and ‘sentinel’ components	6
3.7	Identifying gaps, barriers and new, innovative solutions	6
3.8	Assessing interdependencies with other work streams	7
4	BUILDING THE PICTURE FOR DELIVERY	7
5	BENEFITS.....	7
	APPENDIX A: AMBITIONS, OUTLINE ACTIVITES, COST MAGNITUDE AND BENEFITS	9



1 CONTEXT

The National Information Board (NIB) Personalised Health and Care 2020 (PHC2020) Framework for Action, published in November 2014, set out that:

Better use of data and technology has the power to improve health, transforming the quality and reducing the cost of health and care services. It can give patients and citizens more control over their health and wellbeing, empower carers, reduce the administrative burden for care professionals, and support the development of new medicines and treatments.

The broad objective of this work stream is to “support care professionals to make best use of data and technology”, expressed as four high level work stream objectives:

- **Professionalism:** turning the specialist informatics community into a professional cadre, able to support colleagues across the sector to deliver the aspirations outlined in PHC2020.
- **Competency:** making data and technology a core part of every professional training programme and throughout continuous professional development/careers.
- **Leadership:** ensuring that health and care leaders/decision-makers fully understand how information and technology can enable efficient, patient/citizen-focused health and care services.
- **Collaboration and Co-operation (for uptake):** ensuring that the sector makes the best use of the knowledge, skills and capabilities acquired by collaborating and co-operating more effectively, and drive data/technological uptake.

The detailed background to this work stream is referenced in chapter 10 of PHC2020.

2 STAKEHOLDER ENGAGEMENT

As well as building upon our (quite detailed) knowledge from previous engagement and existing initiatives in this area and meeting with existing groups (e.g. Local Delivery Group) and individual workforce representatives, the work stream has been engaging with a single work stream Advisory Group, which was set up specifically to support this initial definition phase.

This group has very wide representation from across the health and care sector (our own workforce plus the 3rd sector and independents), and includes academics, service user champions, care providers, technical experts, workforce experts, charity representatives, and informatics specialists. It numbers around 50 people and many were convened via 2 ‘Challenge Sessions’, one held in late April, one in late May. These sessions were invaluable in gauging opinion, understanding gaps and barriers, as well as defining the ambitions that underpin our roadmap.

3 RESEARCH AND EVIDENCE BASE

The work stream has undertaken a number of areas of activity through the initial (definition) phase to enable the formation of the roadmap with particular emphasis on building upon



existing initiatives and commitments; identifying gaps, barriers and solutions; and ensuring appropriate engagement/challenge.

3.1 Establishing the ambitions that underpin the roadmap

Five work stream ambitions to underpin the roadmap have been developed that align with the four objectives and that have undergone challenge from a wide audience (including the work stream Advisory and Steering Groups). These are presented in [Appendix A](#).

3.2 Ensuring appropriate engagement and challenge

A work stream Stakeholder Advisory Group was established, to support this initial phase, two 'Challenge Sessions' held to help facilitate positive challenge, bringing stakeholders together to consult. These Challenge Sessions were important focal points for this work stream; they brought together the specialists, stakeholders and critical friends to help identify workable solutions to work stream objectives/commitments. Membership was from across the health and social care sector, as well as external and academic subject matter experts, and was intended to cover a range of 'knowledge areas' and workforce groups related to this work stream.

3.3 Defining who the workforce are

PHC2020 described four broad workforce segments and this has now been developed further to enable the work stream to consider impact on different areas of the workforce and system as a whole.





3.4 Impacting existing commitments

A number of commitments in PHC2020 are owned by this work stream:

- 1 By April 2016 HEE, working with the Health & Social Care Information Centre (HSCIC), will introduce a new **knowledge and skills framework** for all levels of the health, care and social care workforce to embrace information, data and technology in the context of a rapidly changing digital environment.

It has subsequently been deemed (following Advisory Group engagement) that it would be much more effective instead to first establish the high value/high risk areas to address through knowledge and skills improvement (including via curricula changes or the introduction of skills frameworks).

- 2 By April 2016 the HSCIC will work with national and local partners to agree a **revised definition of the health, care and social care informatics profession**.
- 3 DH, HEE and Skills for Care will work with the professional regulation and education bodies to ensure that by April 2017 their core curriculum and associated knowledge frameworks contain the relevant **knowledge, skills and characteristics** to enable the workforce.
- 4 The NIB and its Strategic Clinical Reference Group will, with clinical leaders, develop proposals to support an emerging **federation for the professional informaticians** working in health and social care. The longer-term vision involves the **development of a Faculty of Medical Informatics for medical practitioners, which will be part of the Federation for Informatics Professionals (Fed-IP)**. Fed-IP will be an umbrella body which includes organisations representing other health and social care informatics professionals (UKCHIP), record managers and coders (IHRIM), ICT(BCS), information analysts in health (APHA), knowledge managers (CILIP) and those working in social care informatics roles (SOCITM). The latter will launch an Informatics Career Framework to support the development and professionalisation of informatics specialists. The Federation will engage with stakeholders to determine whether a voluntary registration-based model or professional regulation is appropriate.
- 5 Carers are vital to the sustainability of health and care services and they should also share, and have access to, digital tools to support those they look after, with appropriate consents. By April 2016 the HSCIC will **consult on ways of supporting carers to access digital records**.

3.5 Building upon existing initiatives

The work stream is not starting from scratch as much prior work has already been carried out in this area, for example, the work of The British Computer Society, UK Council for Health Informatics Professionals (UKCHIP), Fed-IP, and others, have already built strong foundations in competency and standards. In the area of curricula for health and care professionals, many existing training programmes utilise technology as part of the teaching and learning process, and technology is also routinely used in recording of electronic portfolios for professional registration, and in recruitment processes for training posts.



3.6 Identifying early work, quick wins and ‘sentinel’ components

There are a number of short-term activities that are deemed as fundamental for the future success of the programme of work. Some of this is base-lining activity which is important for scope and assigning value to programme activity as well as to enable benefits/success realisation in relation to the ambitions the work supports. As well as establishing quick wins from those initiatives already in train, there could also be great value in the inclusion of a handful of short-term ‘sentinel’ components including initiatives such as the Faculty of Informatics, Code4Health (C4H), and Procurement ‘Fast-Track’ for Innovation.

By way of a specific key piece of early work, a series of [Digital] Leadership Summits will take place during 2015/16 that will be targeted at key decision makers in frontline health and care services and focused around:

- Transformative and assistive technology/info services ("art of the possible")
- Understanding what services are available for use now and emerging
- Improving operational efficiency (using technology and data)
- Understanding the scale of information/technology threats and risks
- Making good technical/information decisions and detailing support that is available to leaders to help them make sound technical/information decisions
- Removing barriers and 'navigating the system'

3.7 Identifying gaps, barriers and new, innovative solutions

The recent Stakeholder Advisory Group Challenge Sessions and other engagement carried out resulted in some innovative ideas around competency development and specifically around collaboration (the mechanics of actually sharing and working better across sectors and organisations). The Local Delivery Group, for example, suggested an idea relating to ‘home visit advocacy’ to help support the Informal Workforce.

The work stream identified a number of barriers that could impact progress and that rely on externally dependent activity. These include:

- The need to break down procurement, contract and commercial barriers across the system
- The need to be clear on compliance arrangements for initiatives (e.g. mandatory/optional activity) and to establish and share system-wide ‘hooks’ for take-up where they are identified
- The need to overcome any perceived information governance issues, particularly where they may impact simple resource and information sharing
- The need for all service users to have an appropriate infrastructure and technology environment (available and working tools), including WIFI in all places
- The need to ensure that resourcing constraints within organisations do not constrain take-up or progress



The work stream must maintain a position where it is able to lobby and provide strength of argument where externally dependent activity is required to overcome these barriers.

3.8 Assessing interdependencies with other work streams

Links have been identified with other work streams and work is taking place to co-ordinate:

- **Work Stream 1.1**
How we can ensure education gets out to the wide workforce and public (including choice, ensuring they are able to take more control)
- **Work Stream 2.1**
Building a learning culture (Building Block D); and ensuring the leadership learning environment to drive digital adoption (Building Block E)
- **Work Stream 4**
Ensuring people better understand the implications and value of the use of data

4 BUILDING THE PICTURE FOR DELIVERY

The vision of this work stream is to establish practical, usable initiatives that will influence a real cultural shift across the whole workforce, providing them with the skills and knowledge platform to understand and utilise data, information and technology to improve care.

For each of the stated ambitions, a number of activities will be required to support delivery. The more specific, detailed activity that will need to take place within this will be broken down and presented in the detailed work plans as they are developed after this initial phase. The intention is that an overall pipeline of enablers (initiatives) for the work stream will be the cumulative result of all these activity items. [Appendix A](#) shows the ambitions and the outline activities along with associated cost magnitude.

5 BENEFITS

This Work Stream is all about benefits to patient, citizens and professionals, so we need to maintain a clear line of sight between the objectives of NIB, those embedded in this work stream, and the benefits we expect to deliver as a result. We will need to articulate this, and use it as part of our reporting and governance.

Linking this programme of work to the objectives, commitments and overall aspirations of the NIB programme is very important as it helps the work stream maintain a clear line of sight to the overall goals of the NIB work. To facilitate this, this work stream intends to adopt the Benefits Dependency Network (BDN) approach to mapping objectives, benefits, outcomes, activities and enablers upon approval to move beyond this phase.

Much of the programme of work will contribute to and support better (and more confident, easier, safer) ways of working at all levels in all care settings. Benefits themselves, as this involves shifting culture, are likely to be longer in places in realisation however there should be



tangible differences seen, particularly in patient/citizen ‘pull’ and confidence in the consistency of care provision through such initiatives as professionalism across the workforce.

Benefits have been considered at this point in relation to each ambition and each workforce/system segment. [Appendix A](#) also shows the key benefits for each.



APPENDIX A: AMBITIONS, OUTLINE ACTIVITIES, COST MAGNITUDE AND BENEFITS

Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
1 As with all other regulated professionals such as doctors, nurses and social workers, we will increase the professionalism and regulation of the informatics community, based upon clear standards, so that better decisions can be made.	<p>1.1 Establishment of a universal, relevant and clearly understood definition of the 'informatics community' (direct link to PHC2020 Commitment)</p> <p>1.2 Understand informatics roles in the context of different care settings, to build a matrix of risk and competency</p> <p>1.3 Establish a professional body (Federation, Faculty) and build a professional framework to support it to include: competency frameworks, registration and regulation mechanisms, link to continuous professional development, and ongoing maintenance (direct link to PHC2020 Commitment)</p> <p>1.4 Explore regulation and what it means practically for this professional body</p> <p>1.5 Make a clear link to accredited materials and where to find them</p>	<p>Large</p> <p>(estimate up to £4m in period to 2020)</p> <p>(Note: ongoing maintenance cost and ownership of service would need to be considered and would impact cost; also potential dis-benefit cost from potential additional 'salary pull' from a professionalised workforce)</p>	<ul style="list-style-type: none"> - Patients/Citizens and The Informal Workforce: increased chance of proper governance of information through professional environment based upon agreed standards; increased trust and confidence in open and transparent professional environment; remove 'bad news stories' - Academics and The Emerging Workforce: provides a way of being recognised for skills and contributions; provides a 'pathway to recognition'; sets expectation early and 'buys in' emerging workforce early - Informatics Specialists: provides a recognised route to professionalism and belonging and consistent approach with others in similar positions; enables clarity across different care settings - Clinical and Social Care Practitioners: recognition through their work in informatics (particularly where involved beyond 'day job'); confidence when dealing with they work with/face off to in informatics community - General Workforce (non-clinical): Trust when dealing with recognised professionals when using and understanding information - Leadership: better recognising the importance of informatics professionals in the workforce and reflecting this in bolstering governance (include them in decision making) - Suppliers/Advisors/3rd Parties: provides a way for them to pick up skills; provides recognition (2-way); allows them to understand standards/consistency; provides way for them to get business - National and Regulatory Bodies: confidence that regulation is being included and addressed; confidence through better record keeping standards



Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
<p>2 Carers are vital to the sustainability of health and care services and they should also share, and have access to, digital tools to support those they look after, with appropriate consents. By April 2016 we will have consulted on leveraging existing initiatives to find the best ways of supporting carers to access digital records and information to support it.</p> <p><i>(The output from the work associated with this ambition is intended to inform the work plans of other NIB work streams)</i></p>	<p>2.1 Establish which networks exist now (local level likely route) for the informal workforce and provide options for expanding/changing form of these</p> <p>2.2 Establish requirements/consult on what the informal workforce would like to see (what information do they need for their care settings? what assistive technology could help them?) and how they would like to access it (1-click link?), including support and network requirements (direct link to PHC2020 Commitment)</p> <p>2.3 Establish options for appropriate support, advocate, 'hook for take-up' route for this initiative</p> <p>- ensure design is improved to enhance usability, inclusiveness and communication for marginalised communities</p> <p>2.4 Provide output for/link up with NIB Work Stream 1 ('Enable me to make the right health and care choices') and NIB Work Stream 2 ('Give care professional and carer access to all the data they need') so they can deliver, as appropriate and in line with their work plans, against the findings</p>	<p>Small</p> <p>(estimate under £250k)</p>	<p>- Patients/Citizens and The Informal Workforce: establishment of what is actually needed for carers to support access to information will move things forward and provide further strength to argument for, say, WIFI access in all areas and digital information in one place and '1-click' away</p> <p>- Clinical and Social Care Practitioners: a way forward to supporting their own relationships with carers and, anticipated, improved understanding of information and digital records as a result</p> <p>- Suppliers/Advisors/3rd Parties and National and Regulatory Bodies: provides a single, consistent route to communicating with carers and enabling them to access the information they provide for the system</p>



Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
<p>3 For our own workforce (the formal, employed workforce across health and care) we will identify the level of skill and knowledge required in working effectively with data, information and technology. Concentrating on those areas with the most value for patients/citizens and the wider system (e.g. nursing, social care practitioners), we will have implemented and provided access to the skills and development that will improve their working life.</p>	<p>3.1 Review the existing KSF and curricula for relevant domains. Then, work out risk/value matrix and best vehicle (barrier removal - what would make their working life better?) to establish best/new approaches to address these gaps (direct link to (reshaped) PHC2020 Commitment)</p> <p>3.2 Shape a future, prioritised work plan to take forward (each risk/value area with agreed approach) to support the workforce in working with data, information and technology. This will include, for example, alignment with the work being proposed (in conjunction with the RCN) to establish an 'E-nursing institute' and a 'smart technology for sharing' initiative (direct link to (reshaped) PHC2020 Commitment)</p> <p>3.3 Where the appropriate approach to supporting this ambition is deemed to include curricula changes, a prioritised work plan will establish the requisite changes to this curricula to ensure an 'information fit' workforce</p> <p>3.4 Delivery of agreed work plan(s) to meet this ambition - addressing gaps and overcoming identified barriers for specific segments of the workforce</p>	<p>Medium-Large</p> <p>(estimate between £1m - £2m in period to 2020)</p> <p>(assuming that changes can be made to existing curricula where required and assuming that it can build upon existing and emerging initiatives as far as possible)</p>	<ul style="list-style-type: none"> - Patients/Citizens: increases confidence in those they see from a care point of view having sufficient skills (e.g. the nurse understanding at least as much/more than the carer about information the carer has to hand) - Academics and The Emerging Workforce: increased capability and competence; widening attractiveness of courses and providing the ability for influencing the future workforce - Informatics Specialists: in different care settings, understand what we are discussing and what information means - Clinical and Social Care Practitioners: engaging and understanding better in all situations; enabled to work better with other professionals; increased confidence, particularly in adapting to and using tools - General Workforce (non-clinical): increased confidence from higher level of skills and knowledge and appreciation of what information is out there - Leadership: can be confident that their organisation will deliver with a greater degree of understanding, that they will better utilise tools and information - Suppliers/Advisors/3rd Parties: easier to engage with wider range of people; able to 'speak the same language'; better at cross-working - National and Regulatory Bodies: can be confident that their organisation will deliver with a greater degree of understanding; easier recruitment routes and mechanism through clearer competency levels



Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
<p>4 Organisational leaders will be more confident in making decisions about data, information and technology and will know the best ways to assure themselves that those decisions are safe and appropriate.</p>	<p>4.1 A series of (digital) leadership summits through 2015/16 to address the needs of leaders using innovative (and 3rd sector/external where appropriate) knowledge base</p> <p>4.2 Provide options (framework proposal) and a plan for delivering appropriate training for boards/leadership - into existing programmes where appropriate - and look at how to best show value of the training (this may be through potential disbenefits such as care setting outcome impact). This training should emphasise 'transformational change' elements (and taking staff along with them) as the system moves from paper to digital in the next period</p> <p>4.3 Engage industry to support; work to open up technology centres to combine working with innovation and learning - e.g. a board meeting that links to a technology/innovative demonstration</p> <p>4.4 Similar to how 'superteachers' work in education, provide moving CIO/similar resource, with protected time, to add value in areas outside of their own. This would realistically be a '+1' scenario (an additional CIO in the</p>	<p>Medium-Large</p> <p>(estimate between £1m - £2m in period to 2020)</p> <p>(assuming that changes can be made to existing curricula where required, where leadership summits are relatively low cost, and assuming that utilises a '+1' model with minimal recruitment level but a mechanism that allows move around with backfill where required)</p>	<ul style="list-style-type: none"> - Informatics Specialists: more traction with the leadership teams; better, common understanding - Clinical and Social Care Practitioners: should see better systems, better data use and better working practices that are tried and tested in many cases - General Workforce (non-clinical): should see the results of better working practices based upon 'best in class' - Leadership: key benefits in building networks, confidence, improving ways of working and outcomes; building trust amongst peers; establishing higher knowledge levels; providing the ability to discuss and share ideas in a protected environment - Suppliers/Advisors/3rd Parties: stronger links as working with similar people doing similar things; consistent approach across the system - National and Regulatory Bodies: better alignment with other organisations; confidence in non-reliance on one person's judgement in all scenarios - a different perspective



Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
	<p>system that enables backfill and moving around). The idea would be to provide 'protected, trusted' second opinion/support</p> <p>4.5 Look at commissioning and regulatory levers, financial incentives and scrutiny that would support this support model. So this could involve a vanguard-type programme to identify organisations who could volunteer for funding from the centre to be exemplars</p>		
<p>5 It will be routine practice for different organisations and sectors to collaborate on data, information and technology initiatives which lead to better and more efficient patient/citizen care.</p>	<p>5.1 Establish and provide networks of support across organisations, sectors and health and social care to help share initiatives that work and improve understanding of information and technology - e.g. regional communities of practice, 'know how and show how'; intelligent procurement; Information Governance initiatives</p> <p>5.2 Establish cross-working/placement opportunities and mechanisms (including 'floating resource') to provide assurance, practical help, share experiences and add a new perspective in relation to data, information and technology for the benefit of the individual and the organisation Provide</p>	<p>Medium in magnitude</p> <p>(estimate between £1m - £2m in period to 2020)</p> <p>(with assumption that networks need to be maintained and floating resource has a cost associated although coaching and mentoring is cost neutral)</p>	<ul style="list-style-type: none"> - Patients/Citizens: care will be more joined up and with a lower cost. Drive to improve standards and consistency will be reflected in outcomes and care settings - The Informal Workforce: Information will be easier to find and networks will exist that enable digital intelligence to grow as things are shared - Academics and The Emerging Workforce: career pathways and opportunities linked to this. Standardised approaches will set the right tone early and teach good habits - Informatics Specialists: provides opportunities to share 2-way that will improve knowledge and bring about better ways of working and lead to increased understanding of information - Clinical and Social Care Practitioners: Standardised approach is better in long-term and also day-to-day; private sector and public sector understanding improved and this will bring better ways of working; confidence from sharing with others in same position in other places - 'common understanding'



Work Stream Ambition	Outline Activities	Cost Magnitude	Benefits
	<p>an environment that allows individuals to look outside of their own role as a standard part of their job/training</p> <p>5.3 Establish mentoring and coaching across organisations, sectors and health and social care that brings benefit from sharing, a new perspective and practical support</p>		<ul style="list-style-type: none">- Leadership: leading a happier workforce with more opportunities; efficiency gains and support where needed and barriers removed will help them deliver their strategies- Suppliers/Advisors/3rd Parties: closer involvement with health and social care workforce - actively be a conduit to opportunities which has business and reputational benefit- National and Regulatory Bodies: alignment with others, faster uptake of change and regulation is far better if doing it in the same way as others and for themselves