hscic
Health & Social Care
Information Centre

Information
and technology
for better care

Health and Social Care Information Centre
Strategy 2015–2020

Information and technology for better care

Health and Social Care Information Centre Strategy 2015–2020

Final draft

Published by the
Health and Social Care Information Centre

March 2015

www.hscic.gov.uk

enquiries@hscic.gov.uk

0300 303 5678

@hscic

Contents

Introduction

The health and social care system faces unprecedented challenges. Constraints on resources, coupled with rising expectations and an escalating demand for services, are placing the current models of health and social care under increasing strain.

However, there is also considerable agreement on how we must respond to these challenges. A growing consensus says that we must do more to help citizens look after their own well-being. We need to join up health and social care services to better reflect the way these services are accessed and delivered. We must also give more support to unpaid carers and professional health and social care staff, so they can deliver safer services more efficiently. The better use of technology and data is central to bringing these changes about.

The Health and Social Care Information Centre (HSCIC)[1] was formed in April 2013 as an executive, non-departmental public body and the national provider of information, data and IT systems for patients, service users, clinicians, commissioners, analysts, and researchers in health and social care.

Our role is to improve health and social care in England by putting technology, data and information to work. We provide national technology and information services and we are the centre of excellence and leadership in the development and use of technology, data and information.

Working with our partners across the health and social care system, particularly within the framework of the National Information Board (NIB)[2], we have the key role in enabling and supporting the whole health and care system to use technology, data and information to transform its services.

In partnership with all the health organisations interested in information and technology, NIB has published Personalised Health and Care 2020: A Framework for Action[3]. This Framework, which has now been adopted as government policy, sets out the blueprint for using information and technology to transform health and care services. It aims to enable citizens, patients, service users and frontline staff to take advantage of the opportunities offered by digital technologies and better use of information to yield substantially better health and social care outcomes, much more efficiently.

One of the central arguments in the NIB Framework is that local organisations are charged with implementing local systems over time, consistent with a national set of standards. We will take the lead role, with our partners in the NIB, in orchestrating and delivering all these objectives for the benefit of all.

Given the numbers of different organisations involved across the health and care system, we do not underestimate the challenge of creating a health and social care environment that is centred on the citizen.

Yet we bring a range of expertise in response – our knowledge of standards, technology, operations, clinical systems and data is broad and deep.

We will also need to change the way we work, and we must become closer to our partners and stakeholders and significantly enhance our skills and capacity in many areas. Our approach to doing this is outlined in on page 18 of this strategy 'What this strategy means for us'.

By 2020 the exploitation of 21st century technology, the use of increasing quantities of data and the impact of richer information flows have to catalyse a fundamental change in the way citizens look after themselves and in the way their carers and health and social care professionals deliver services to them. Our role is to help bring about that fundamental change.

Our overarching objective is that by 2020 we will have revolutionised the way technology, data and information are used to transform the delivery of England's health and social care services. This five year strategy outlines our contribution to making this ambition a reality.

Kingsley Manning
Chair, Health and Social Care
Information Centre

Andy Williams
Chief Executive, Health and Social Care
Information Centre

> We will take the lead role, with our partners in the NIB, in orchestrating and delivering these objectives for the benefit of all.

Our strategy

At its core, our strategy reflects the consensus on how health and social care delivery needs to change – a vision that can only be achieved by the effective exploitation of technology, data and information.

Our strategy sets out five objectives for the next five years. They look beyond the boundaries of the health and social care system to include the voluntary and independent sectors, service users and carers.

Our strategy commits us to:

This strategy sets out five objectives for the next five years, looking beyond the boundaries of the health and social care system to include the voluntary and independent sectors, service users and carers.

1. Ensuring that every citizen's data is protected

We will assure the quality, safety and security of data and information flows across the health and social care sector so that citizens will willingly share their data in the knowledge that it will be kept confidential and secure. Citizens will also be confident that their data will only be shared when appropriate, with their consent and for their benefit.

2. Establishing shared architecture and standards so everyone benefits

We will create a new architecture for the sector's technology and data services and extend a framework of standards to encourage interoperability and the development of new, digitally enabled services. We will enable safe and secure information sharing so that carers and clinicians have timely and reliable information about those in their care. Citizens will be able to see and contribute to information held about them. We will do this in collaboration with our national partners and with care providers and the software market.

3. Implementing services that meet national and local needs

Where there is a clear advantage in a national, integrated approach, we will continue to build and operate national technology and data services for the benefit of citizens and health and care organisations.

Where necessary to fulfil the commitments in the NIB Framework, we will integrate some of these national systems to create a new information and transaction service for citizens, including service users and carers. We will also open up access to our core systems, with appropriate safeguards, so that third parties can develop new and innovative services. Finally, as we all become more dependent on these systems, we will continue to make them secure and resilient.

4. Supporting health and care organisations to get the best from technology, data and information

We will help local health and social care organisations maximise the value of their information technology investments, and when invited, help them decide on future investments and implementations. We will encourage local innovation that delivers new forms of health and care services, and take steps to foster their broader adoption.

5. Making better use of health and care information

We will analyse, use, and make available more data, information and insights about the health and social care sector. Where there is a clear benefit to the health and social care of citizens, we will supply sophisticated analytical technology to all-comers.

This work will allow citizens to make informed choices about their own care. It will help care professionals make better and safer decisions, support policymakers, and facilitate better commissioning of health and care services. It will also provide research organisations with the data they need.

2020 Our vision

By 2020, all the citizens who want it will have access to national and local data and technology services that enable them to see and manage their own records; undertake a wide range of transactions with care providers; and increasingly manage their own health, care and well-being.

By the same date, care professionals will have timely access to the information, data, analysis and decision-support systems that they need to deliver safe and effective care.

The rest of this document provides an overview of our five objectives and concludes with an outline of what the strategy means for the HSCIC and our relationship with our partners and stakeholders.

1. Ensuring that every citizen's data is protected

Citizens rightly expect to have access to their care records and to see the information that organisations hold about them. They also expect to be able to decide who can access their data by making choices about how it is shared.

Citizens need to have confidence that their personal data is being handled safely and securely. We recognise that there is legitimate public concern about this.

This is already reflected in the NHS Constitution[4] but a concerted effort is needed so that citizens have confidence that these principles are applied across the whole health and social care sector.

Citizens also need to have confidence that their personal data is being handled safely and securely, and we recognise that there is legitimate public concern about this. We are tackling this concern, and in partnership with government are committed to move increasingly to a more open and transparent consent- based system where citizens will always know who sees their data and why.

Against this backdrop, there has never been a greater need for national standards, rules and information governance guidelines that are clear and legal and can be applied locally and consistently. As set out in our Code of Practice for Confidential Information[5], at the heart of these guidelines is a need for health and care professionals always to share information for the benefit of patients and service users.

We, and the health and social care system more broadly, will be judged by the way we manage the data with which we are entrusted. Over the life of this strategy, we will manage even more of the data that flows around the system. We will become the main organisation that extracts data from health and social care organisations and will become the major 'safe haven' for data.

Our work needs to be balanced against the need to make sure that people with legitimate reasons for accessing data can still do so to improve health and social care services used by citizens. We need to make sure that data flows are safe and secure, that only the people allowed to access data can, and that they can only distribute it in the right forms. We expect in future that customers will make greater use of secure data facilities to access and process the data they need, so as to reduce the need for sharing data extracts.

What we will do

The NIB Framework commits the health and care system to adopt a model for sharing personal data based on citizens' own preferences. The HSCIC will co-ordinate with our partners across the sector to deliver a service that will:

• Allow every citizen to state their preferences for their personal data to be shared outside a formal face-to-face consultation with a health and social care professional.

• Be capable of dealing with different preferences for data flows, and allow for citizens to change their preferences.

• Enable citizens to decide whether to share data from their apps or medical devices with one or more health or care providers, and

• Enable citizens to find out when and why their data has been used for purposes other than direct care.

Our cyber security strategy and programme will continue to help deliver improvements in data and system security by supporting health and social care organisations to manage new and evolving threats. This is critical to building and sustaining public trust.

2020 Our vision

By 2020, citizens will routinely make decisions about who sees their data with complete confidence that it is kept confidential, secure and shared only when appropriate and with their consent.

Citizens will easily be able to find out which organisations have accessed their care records, and when their personal data has been used for a specific purpose. Citizens will understand more about the value that rich and diverse research creates.

2. Establishing shared architecture and standards so everyone benefits

Digital services should enable every citizen to do as much as possible to help themselves stay fit and well. At the same time, we must give health and social care professionals the right information, at the right time and in the right format to help them deliver safer and more effective care where and when it is needed.

These services will put much greater control in the citizens' hands, giving them access to data about themselves to manage and plan their own health and social care. This empowers people to do simple things that save their time and make their lives more straightforward – for example, booking appointments when and where it is most convenient to them, or ordering repeat prescriptions without needing to contact their GP.

The NIB Framework commits us and our partners to tackling service integration through a range of actions that encourage broad adoption of a core set of standards, underpinned by an improved dialogue with industry.

We need services designed around standards and principles that allow records and information to flow freely between care settings. Citizens rightly expect that their records should be available to those who are treating them and that their health information should be up to date, complete and accurate.

Consistent, timely information delivered by integrated services will also lift a very significant proportion of the administrative burden away from health and social care providers and allow them to redeploy their resources.

Information standards will ensure that data is recorded in formats that make it easier to share or transfer across organisations, systems and devices, including apps running on personal smartphones and tablets. In the past, the adoption of such standards has been uneven because IT leaders have not seen the benefits clearly enough. We will therefore provide a leadership vision as well as facilitate the delivery of the standards themselves.

What we will do

We will continue to plan and build a national architecture that enables local organisations to deliver fully integrated health and care services.

We will also continue to develop information and technical standards, and will expand our support for software and care providers to adopt and implement the standards.

We will develop standards and implement systems that allow citizens to view their care records and contribute to them. We will enable individuals to track the use of their data and to be informed about the purposes and benefits of its use.

We will work with colleagues across the sector to enable integrated health and social care to be delivered safely across all care settings, and to encourage the development of transactional services that can be used seamlessly across organisational and geographic boundaries.

We will lead the work to deliver one of the key commitments in the NIB Framework – for all health and care organisations to adopt the guidance set out in the Academy of Royal Medical Colleges' publication Standards for the Clinical Structure and Content of Patient Records[6]. This will improve the timely integration of information across care settings and require the systematic use of standard clinical terminology across health and social care.

Co-ordinated action from our national partners will ensure that effective levers and incentives, such as contracts and regulation, are used throughout the system to drive adoption of these publication standards. This move also requires the involvement of, and a consistent dialogue with, industry.

Developments like these signal a strategic shift for the HSCIC from top-down delivery of standards to a more engaged and inclusive role (as 'orchestrators').

To that end:.

- We will publish a roadmap that sets out the technical interfaces necessary for organisations to access the core transactional services, such as the Spine and NHS Referrals services.

- We will design and implement a service with partners that will accredit digital services and applications and provide guidance on technical and data standards.

- We will encourage local innovations and initiatives that will help the adoption of standards that enable interoperability, and that will enable the 'joining-up' of care and support in local communities.

- We will work with industry to develop these standards and embed them more fully in industry products.

Information standards will ensure that data is recorded in formats that make it easier to share or transfer across organisations, systems and devices.

2020 Our vision

By 2020, everyone who wants to will be managing their own health and care services and making more decisions about the support they need. Citizens, their families and carers will have the information and tools they need for better care and we will make sure that people who can't or don't want to use digital services are included in this. Care professionals will have access to data and analytic tools that will help them provide better services.

We will develop and introduce a common digital platform, based on the adoption of common standards and consistent rules and this will be the corner stone of a genuinely seamless and integrated care.

3. Implementing national services to meet national and local needs

It makes sense to deliver some technology and data services nationally. Currently, we develop and operate a broad variety of services, from the Spine and core network and email services, to information services such as NHS Choices and transaction systems such as NHS Referrals, the Summary Care Record, and the Electronic Prescription Service. We also provide NHS Pathways, used by the 111 service for triage and diagnosis, and we deliver many of the national screening services.

Some of these systems are amongst the most advanced in the world and they connect many of the organisations within the health and social care system together. For example, by enabling individual patients and service users to be identified and tracked using the NHS number. But these services do not have a common look and feel and do not work together seamlessly. They do not enable citizens to personalise these services in the way that they can with other digital services.

As the sector becomes more dependent on these services, we need to make sure they are reliable. This doesn't happen by chance, so we are committed to enhancing operational resilience continually. All the national services are managed centrally, rigorously tested and designed to be exceptionally robust. This ensures they run with very high availability – currently at an average of 99.97% throughout the year. We have developed sophisticated services to constantly monitor live system performance and availability. If things go wrong, we are alerted promptly and can take remedial action. And we operate a national helpdesk that manages service, clinical and security incidents in one place and keeps end-users informed about performance.

We need to ensure that technology and data services are extended to work across local authorities. They have major responsibilities for providing social care and public health and are increasingly working with other care providers including the voluntary and independent sectors. In doing this we will need to redefine what constitutes 'national' and 'local' in this context and we will lead this discussion.

All of our national systems are managed centrally, rigorously tested and designed to be exceptionally robust.

What we will do

We will continue to develop and operate the core national technology and data services and build on our flexibility, expertise and capability.

- We will work towards a 'core national offer' of health and care digital services that are so convenient that everyone who can use them will choose to do so. We will also ensure that those who cannot, or don't wish to use them, are not excluded. Key components will support transactions, such as record access, appointments and prescriptions, and will extend to transactions and services that support self-care.

- We will prioritise the functions that are necessary for universal access, such as citizen identification and authentication.

- We will work with an increasing range of suppliers, innovators and social entrepreneurs to accelerate the creation of new personalised services that are integrated with our national systems.

- We will work with local authorities and social care providers to encourage use of the portfolio of national systems where it makes sense for them to do so.

- We will open up access and connectivity to the national infrastructure for all care providers, developers and service users, subject to accreditation.

2020 Our vision

By 2020, citizens will use our national systems routinely to access information, select care, order services and deal with administrative tasks quickly.

Citizens will use innovative new services, 'apps' and wearable devices developed by a wide range of organisations. These could be designed around specific illnesses and care pathways. Citizens will be able to link to them or share the data they capture on the national systems where appropriate. Care professionals will be able to access national systems much more easily.

4. Supporting health and care organisations to get the best out of technology, data and information

Technology and data can help reduce the funding gap and make a major contribution to meeting the nation's increasing demand for better, safer care. The HSCIC can help local health and care organisations get the best out of their technology and data by offering three kinds of support:

1. We can help them to get the most out of the often considerable investments that they and the taxpayer have already made.

2. We can enable them to get the best out of future technologies and innovations not thought of in 2015. We can increase the speed at which local health and care organisations adopt emerging technologies, for the benefit of all who use health and care services.

3. We can accelerate the 'joining-up' of individual local initiatives in a common, harmonized way.

We will help these organisations deliver better health and social care, in more efficient and effective ways. We will do this by supporting, rather than seeking to supplant, the supplier market.

What we will do

Over the next few years a number of major, long-term contracts for nationally funded programmes come to an end. As the existing contracts run out, we and our partners will ensure that the value of past investments is maximised and that future investments help local health and care organisations achieve their objectives and deliver improvements in quality and productivity.

We will retain the expertise we have in local technology implementation, and convert it over time into an expert resource pool that local organisations can call upon to support their own programmes. We will align this expertise around specialties not readily provided by the market, such as adherence to standards, benefits realisation, interoperability and new technology adoption. We will act as the national centre of excellence for enabling local data and technology initiatives.

We will retain the expertise we have in local technology implementation, and convert it into an expert resource pool that local organisations can call upon to support their own programmes.

We recognise the need for the health and care workforce to develop the right skills and tools to take advantage of the opportunities that data and technology offer to them. The NIB Framework commits us to developing the right knowledge and skills frameworks relevant for the whole of the workforce. We are also working with our partners in the NIB to ensure that Trust Boards are able to provide the right local leadership to maximise the benefits that data and technology bring to their organisations.

Where invited to do so, we will help local health and care organisations to create new contractual arrangements with industry, using framework contracts to get more rapid access to suppliers.

- We will get closer to local health and care strategies and work with local services and partnerships where we can add value.

- We will work with 'digital champions' – members of the public, clinicians, care professionals, managers and researchers – to learn from their innovations and stimulate good practice.

- We will establish an innovation centre where good practice from around the system will be showcased, technology suppliers can demonstrate new products, and test facilities will allow integration with existing systems.

- We will develop enabling technologies where it makes sense to build things once, for example in terms of the potential cost of investment and system-wide economies of scale, or where it makes sense to pilot new developments where technology is still changing.

Throughout, we will encourage and support a vibrant, dynamic and diverse health and social care supplier market for software and technology providers.

> We will encourage and support a vibrant, dynamic and diverse health and social care supplier market for software and technology providers.

2020 Our vision

By 2020, technology and data in the form of digitally enabled care will be used by most citizens and will help to meet their demand for better and safer care. We will be routinely helping health and care organisations to get the best out of their investments in technology and data.

We will have contributed to the UK becoming a world-leader in the development and use of health and social care apps. The UK will be recognised as the best place to launch innovative and improved ways of using data, information and digital technologies to deliver better, safer care.

5. Making better use of health and care information

Better use of health and care data will help those involved to manage the system more effectively, commission better services, understand public health trends in more detail, develop new treatments and monitor the safety and effectiveness of care providers. We also need to make health and care data really useful to citizens in their daily lives.

We also manage many of the nation's critical health and care data assets. We collect data from a range of care providers. We have a duty to publish the data we collect under appropriate safeguards. Many of our data sets are routinely available from our website, and this is a major contributor to the Transparency agenda. For data which is sensitive, we provide secure and controlled access only to legally authorised bodies.

We are part of the Government's Statistical Service and adhere to the UK Statistics Authority's Code of Practice[7] for national statistics. We publish data and statistics in formats that cannot be used to identify individual patients, service users or citizens. We are proud of this important independent role.

However, there are gaps in the range of information that is available to us – especially about social care, mental health or community services. At the same time, new sources of data are being created which would add richness to the analysis that can be derived from the existing data – such as feedback from people who use these services.

All this means that information is held in different places. Many other organisations also collect and store data, which is often disparate and of variable quality. This causes practical difficulties with linking the data and making it available in a timely and easily accessible way. As a result, regulators, commissioners and researchers looking at the overall quality and performance of the health and care system do not always realise the data's true value.

What we will do

Our new strategy for data must therefore look beyond our current data collections. We must champion the importance of the national data asset and build on the value and benefit it can create for people and society as a whole:

- We will make it easier to navigate information which is currently available and, where appropriate, bring it into a single, shared national location.

- We will create a richer source of intelligence and analysis for wider use by connecting health and social care data, and by encouraging the use of data from different sources, in line with the growing interest in Open Data[8].

- We will build on the opportunities to collect and use people's insight and experience data, including the use of personal 'apps' and wearable devices.

- We will minimise the administrative burden of data collection on care providers by introducing new data extraction services which will be more efficient for care providers and will help improve the trade-off between the speed with which data can be made available and its quality or completeness when it is initially available.

- We will develop our data services platform and the range of facilities offered to users so that information can be provided easily and flexibly, and with appropriate controls on access and usage.

All this will require a fundamental change to the way information flows around the health and care system as a whole. Expecting care providers to submit data through national data collection tools will become a thing of the past. Technology can now support routine data extraction at source from local systems, and we are already doing this for some types of data.

This development has major benefits for the timeliness of available data and will reduce the administrative burden of needing to move data through the system. It will also make it easier to do richer analysis and research with information from different sources.

All of this will need clear and explicit controls in place. Citizens should feel confident in the way their personal data is protected, and we will not compromise on that. Whether data is anonymised or not, it is important that citizens can see what is available, who uses it and for what purpose.

> We have a duty to maximise the value and benefits that the data can provide, and to minimise the administrative burden of data collection on care providers.

2020 Our vision

By 2020, much more data will be available because of new initiatives such as genomics, data from personal devices and more standardised collections from care providers.

This data will be more accessible and the burden of collection will be reduced. Better data will help researchers, commissioners and national bodies gain better insight. Clinicians and care professionals will have access to more and better information to inform better care.

The UK will be seen as one of the best places globally to conduct research and the collection and use of the nation's care data will have made a substantial contribution to the development of health and social care services.

What this strategy means for us

Transforming the way we engage

We are a young organisation, with an extraordinary opportunity to make a real difference, but we will not achieve anything on our own. The success of this strategy hinges on our ability to improve the way we engage with our partners and stakeholders.

We must radically change the way we work so that everyone who uses our services – be they citizens, health and social care organisations, researchers or government – feels that we are listening and responding in ways that meet their needs.

We need to speed up delivery, and grow our capacity to provide innovative solutions. We must get much closer to our national partners and understand their business requirements better. We must develop new ways of working with local organisations, commissioners, providers of care, and public, independent and voluntary sector organisations.

We must also move closer to research, industry and the market. We must understand the potential for innovation in information and technology, and provide influential leadership and advice on how we can continue to provide and stimulate technology that modernises and transforms care services.

We are introducing new models of relationship management and customer service to enable us to work more effectively with our partners and stakeholders and better understand the needs of the health and care system.

Transforming the way we work

To transform the way we work there needs to be a partnership between the organisation and our staff. This calls for our staff to:

- fully engage with our values of being people-focused, professional, trustworthy and innovative – always acting as HSCIC advocates

- understand and genuinely engage with this strategy, to support its delivery in teams and roles

- as members of professional groups, actively engage in communities of practice and seek to be inspired and influenced by the wider knowledge, intelligence and experience of their professional bodies

- be flexible and dynamic, with the will to take on new assignments and challenges, and

- take responsibility for, and contribute to, their own professional development.

In return, we will ensure that our staff:

- are managed by a smaller number of really good line managers, who are recruited and encouraged to develop so they have the skills, interest and motivation to manage others in fewer management layers

- are rewarded fairly, taking account of national and local labour market conditions, and are provided with flexible reward options

- have more flexible working opportunities to balance business and personal needs

- are supported to achieve, through our investment in their professional, technical, managerial and leadership development, and

- are accountable for what they deliver in a workplace where performance is routinely reviewed relative to peers, with consequences for both good and poor performers.

Achieving our joint objectives will also mean shifting our balance of skills. This shift to reflect that we will be working more proactively with local partners and with industry, and that the emphases on patient and citizen- centric systems and on security and information governance are growing.

We are putting in place support for the development of our people, and mechanisms to help them work more flexibly and focus better on the needs of our partners and stakeholders. We will reduce bureaucracy, help facilitate innovative ways of working and attract people with new skills. This will be balanced by a greater focus on quality and, anticipating future financial pressures, on improving productivity.

Endnotes

1   For more information about who we are and what we do, see our website
    www.hscic.gov.uk and our previous strategy
    www.gov.uk/government/publications/hscic-strategy-2013-15

2   For more information about the NIB, see
    www.gov.uk/government/organisations/national-information-board

3   Personalised health and care 2020: A framework for action
    www.gov.uk/government/publications/personalised-health-and-care-2020

4   www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Pages/Overview.aspx

5   http://systems.hscic.gov.uk/infogov/codes/cop

6   http://www.aomrc.org.uk/doc_download/9702-standards-for-the-clinical-structure-and-
    content-of-patient-records

7   www.statisticsauthority.gov.uk/assessment/code-of-practice

8   See http://data.gov.uk

Final draft

Published by the
Health and Social Care Information Centre

March 2015

www.hscic.gov.uk

enquiries@hscic.gov.uk

0300 303 5678

 @hscic