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Title: care.data Programme Brief (v1.1 220114 - for January Board)

Author: David Farrell, Programme Manager

Programme Board Sponsor: HSCIC Programme Director

Purpose:

The Brief contains information to enable the HSCIC Portfolio Board to make an informed decision as to whether to commit further resources prior to the development of more detailed documentation, such as the Business Case and Programme Definition Document (PDD). It also acts as a key information source for the care.data programme board and, as an important document in the delivery lifecycle; it should be approved by the board.

Background/Key Points:

NHS England has commissioned the care.data programme on behalf of the NHS, public health and social care services. This programme will ensure that there is more rounded information available to citizens, patients, clinicians, researchers and the people that plan health and care services. Our aim is to ensure that the best possible evidence is available to improve the quality of care for all.

This Programme Brief provides further detail for the programme, including strategic justification, objectives and delivery structure.

Following approval of this Brief, in line with the HSCIC delivery framework, a Programme Definition Document will be developed to provide more detail.

Desired outcome(s): That the programme board approves this Programme Brief.

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Health & Social Care Information Centre

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care.data Programme Brief including Strategic Justification

Document Management

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Reviewers

This document must be reviewed by the following people:

Reviewer name	Title / Responsibility	Date	Version
Eve Roodhouse	Programme Director for care.data, HSCIC		
Andy Burn	Programme Director for National Tariff System (NTS), HSCIC		
Martin Dennys	Programme Director for Data Services for Commissioners (DSC), HSCIC		
Jeremy Thorp	Director, Business Architecture, HSCIC		
John Madsen	Head of Productivity and Efficiency, HSCIC		
Ken Lunn	Director of Data Standards Products, HSCIC		
Chris Roebuck	Director of Benefits and Utilisation, HSCIC		
John Varlow	Director of Information Services, HSCIC		
Geraint Lewis	Chief Data Officer, NHS England		
Peter Flynn	Head of Strategic Intelligence, Patients & Information, NHS England		

Approved by

leads

This document must be approved by the following people:

Name	Title	Date	Version
Max Jones	Director of Data and Information Services, HSCIC		
	(as HSCIC Sponsor)		
Christine Outram	Director of Intelligence and Strategy, Patients and Information, NHS England		
	(as SRO)		
care.data Programme Board	Programme Board is a sub-group of the ISCG		
HSCIC Portfolio Board	Approval of the Brief (and to formally accept the programme onto the HSCIC delivery portfolio)		

Glossary of Terms

Term / Abbreviation	What it stands for
HSCIC care.data programme	The programme formed from that strategy and vision for the care.data initiative; as commissioned by NHS England (as lead commissioner on behalf of the ISCG) for delivery by the HSCIC in support of this strategy and vision.
ISCG	The Informatics Services Commissioning Group (ISCG) directs the commissioning of all national information and technology services in health, healthcare and social care; ensuring that investment decisions are well informed; that lines of accountability are clear; and, that delivery programmes are effectively performance managed and remain strategically relevant.

Document Control:

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Contents

1 In	Introduction 7				
1.1	Purpose and context	7			
1.2	Anticipated outcome	7			
2 Ba	ackground	8			
2.1	What is care.data?	8			
2.2	Commissioning of the programme	8			
2.3	Context with other initiatives	8			
3 St	trategic/Policy Drivers	9			
3.1	NHS Constitution and Mandate	9			
3.2	Secretary of State's Priorities	10			
3.3	Health and Social Care Act	10			
3.4	The Health and Social Care Information Centre	10			
3.5	The Information Strategy	11			
3.6	Open data and transparency	12			
3.7	Outcomes framework for Public Health	12			
3.8	Outcomes framework for Social Care	12			
3.9	Life sciences	13			
4 Hi	igh Level Vision Statement	13			
5 Se	соре	13			
5.1	In Scope	13			
5.2	Out of Scope	14			
6 O	verall Objectives, Deliverables and Outcomes	14			
6.1	Objectives	14			
6.2	Deliverables	15			
6.3	Outcomes	16			
7 N	ext Stage Objectives and Deliverables	17			
8 C	andidate Projects	18			
8.1	Data Delivery	18			
8.2	Common Capability Platform and Operating Model	19			
8.3	Data Access and Accelerators	20			
8.4	Programme Office	20			
8.5	Stakeholder Engagement, Communications and Media	20			
9 Ex	xpected Key Benefits	20			

care.data Programme Brief RESTRICTED - MANAGEMENT		RESTRICTED - MANAGEMENT	v1.1 22/01/14
9.1	Key benefits		20
9.2	Benefits Management		22
10	Options appraisal ap	proach	22
11	Governance and Ass	surance	23
11.	1 Sponsor/sponsoring g	Iroup	23
11.	2 Senior Responsible C	wner (SRO)	24
11.	3 Proposed Governing	Body	24
11.	4 Informatics Services (Commissioning Group	24
11.	5 care.data programme	board	24
11.	,	ucture	24
11.	7 Assurance		25
12	Next Stage Timescal	e	25
13	Estimated Overall Ti	mescale	26
14	Next Stage Costs		26
15	Estimated Overall Co	osts	27
16	Funding sources		27
17	Staff resource requir	ements	28
18	Commercial/Procure	ment considerations and approach	28
18.	1 Strategic Commercial	Considerations	29
19	Constraints and Dep	endencies	30
20	Interfaces		31
21	Key Risks and Issue	S	31
22	Tolerances		32
23	Document submission	on	32
App	endix A – Programme	Governance Structure	33
App	endix B – Proposed d	elivery organisation chart	34
B1	- Overall structure		34
B2	 Data delivery workstream 	n	34
B3	 Common Capability Platt 	form & Operating Model	35

1 Introduction

Programmes can be identified in a variety of ways but must be aligned with the Health and Social Care Information Centre's strategic objectives. Before any work is commenced or resources allocated, it has to be agreed that the proposed work item is viable and worthwhile.

1.1 Purpose and context

This Brief reflects and expands upon the New Work Mandate, which was approved by the HSCIC Portfolio Board in June 2013, and provides more detail and specifics around objectives, benefits, costs, risks, timescales and tolerances.

It contains sufficient information to enable the HSCIC Portfolio Board to make an informed decision as to whether to commit further resources prior to the development of more detailed documentation, such as the Business Case and Programme Definition Document (PDD). It also acts as a key information source for the care.data programme board.

The Brief informs of the purpose and objectives of the programme, and seeks to gain support for further work to progress programme delivery.

1.2 Anticipated outcome

In relation to the submission of this Programme Brief for the HSCIC Portfolio Board, the HSCIC care.data programme delivery team is asking the Portfolio Board:

- For approval of this Programme Brief and therefore approval to continue to commit resources to the care.data programme ahead of the production of a detailed Programme Definition Document (PDD); and as such for the inclusion of the programme on the HSCIC portfolio, recognising that public commitments have already been made in relation to the programme.
- For guidance as regards any required next steps in advance of/in line with the delivery framework/approval process (e.g. specific reporting requirements).

2 Background

2.1 What is care.data?

The NHS has some of the best information systems in the world. Since the 1980s, we have been collecting information about every hospital admission, nationwide. This information is brought together at the Health and Social Care Information Centre, where it is anonymised. The information has been invaluable for monitoring the quality of hospital care, for planning NHS services, and for conducting research into new treatments. Whilst we have this type of information for some care provided outside hospitals, there are significant gaps meaning that it is not possible to see a complete picture of the care that individuals receive.

NHS England has therefore commissioned a programme on behalf of the NHS, public health and social care services to address these gaps. Known as the care.data programme, this initiative will ensure that there is more rounded information available to citizens, patients, clinicians, researchers and the people that plan health and care services. Our aim is to ensure that the best possible evidence is available to improve the quality of care for all.

2.2 Commissioning of the programme

NHS England has commissioned the Health and Social Care Information Centre (HSCIC) to deliver care.data on behalf of the Informatics Services Commissioning Group (ISCG). The commissioning arrangement will be formalised through an 'umbrella' Memorandum of Understanding between the HSCIC and NHS England. This document is currently in development; it will have a care.data schedule included, and it is anticipated it will cover all/the vast majority of commissioned HSCIC delivery programmes.

2.3 Context with other initiatives

Within the HSCIC Data and Information Services Directorate, there are three parallel initiatives currently underway:

- *Care.data*, as described in this Brief.
- The National Tariff System (NTS), for the development of what was previously known as Payment by Results (PbR), covering national tariff policies for the hospital sector. It is sponsored by NHS England and Monitor, who are jointly responsible for the provision and commissioning of NHS healthcare services.
- **Data Services for Commissioners** (DSC), to bring together the data requirements of commissioners at a local (CCG) level together with other levels of specialised commissioning.

Each of these initiatives is currently developing a Strategic Outline Case (SOC) to justify their respective areas of investment. In the case of care.data however, it has been decided to create a wider case to include the development activity that underpins the HSCIC's statutory role in line with the 2012 Health Social Care Act, and this has been termed the "strategic capability platform".

In relation to the drivers for this strategic capability platform, whilst some technical infrastructure and software tools exist in the HSCIC and are already used to receive and manage data, further investment is needed to:

- Replace those tools that are not fit for purpose or adequately scalable to meet the demands of the anticipated ten-fold increase in volume of data and processing power required to process, link and disseminate new data flows.
- Close known gaps in the tool sets e.g. scalable end-user reporting tools and the roll-out of the Index and Pseudonymisation services.
- Strengthen information governance controls.

- Ensure there are appropriate service management arrangements around the environment.
- This new infrastructure is required to develop links across multiple data sets (not currently feasible but a key requirement of care.data); to support the DSC programme; and to provide the strategic replacement to meet the requirements of the NTS programme.
- The investment case for the care.data programme is aligned directly to the care.data business case (SOC, and subsequent Outline Business Case(s) and Full Business Case(s) that will follow from the SOC). Delivery of this strategic platform is covered in this business case and delivery of it is very much part of the care.data programme.

3 Strategic/Policy Drivers

The political and strategic landscape presents a compelling framework for the delivery of this programme of work:

3.1 NHS Constitution and Mandate

The care.data programme is required to enable the delivery of some of the commitments made, either to the public under the NHS Constitution¹ or under the NHS Mandate², which is how NHS England is held to account to improve the NHS.

Specific commitments that require care.data include:

Under the constitution the NHS commits:

- To anonymise the information collected during the course of your treatment and use it to support research (in line with the government plan for a secure data service including creation of the Clinical Practice Research Datalink (CPRD), 20113) and improve care for others.
- That, where identifiable information has to be used, to give you the chance to object wherever possible.
- To offer you easily accessible, reliable and relevant information in a form you can understand, and support to use it. This will enable you to participate fully in your own healthcare decisions and to support you in making choices. This will include information on the range and quality of clinical services where there is robust and accurate information available.
- To provide you with the information and support you need to influence and scrutinise the planning and delivery of NHS services.
- That you (the patient) have the right of access to your own health records and to have any factual inaccuracies corrected.

Under the NHS Mandate:

• To achieve a significant increase in the use of technology to help people manage their health and care. In particular, to enable secure linking of electronic health and care records wherever they are held.

¹ NHS Constitution:

http://www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Documents/2013/the-nhs-constitution-for-england-2013.pdf

² NHS Mandate: https://www.gov.uk/government/publications/nhs-mandate-2014-to-2015

³ Government plan for a secure data service: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/215337/dh_131242.pdf

- To shine a light on variation and unacceptable practice, to inspire and help people to learn from the best so that the NHS leads the world in the availability of information about the quality of services.
- To demonstrate progress by comparing our services and outcomes with the best in the world.

3.2 Secretary of State's Priorities

The Secretary of State for Health has set out five key priorities:

- Improve the standard of care throughout the system
- Bring the technology revolution to the NHS
- Radically improve treatment and care of dementia
- Improve health and care for vulnerable older people
- Reduce avoidable premature mortality

These priorities are driving a thirst for data and information about how care is delivered across care pathways and geographies rather than in individual care settings. This demand for data and information is coming from regulators, commissioners, providers, researchers, life sciences and the public alike.

3.3 Health and Social Care Act

The Government launched a strategic reform programme for health, public health and social care through the **Health and Social Care Act** in 2012 (the Act).

The Act included a number of measures which radically changed the organisational structure of the health and care system. There is a key emphasis on the importance of robust and timely information to support decision making, reporting and accountability to underpin these reforms.

There is a significant shift in information requirements for health and adult social care towards a position where:

- patients and the public have the information they need to stay healthy, to take decisions about and exercise more control of their care, and to make the right choices for themselves and their families;
- people are able to see an accurate record of their care, which is available to them electronically, and use it as a basis for interacting with their care providers;
- health and adult social care information is liberated from a closed, bureaucratic system to one of transparency, in order to serve patients and the public, and to help drive better care.

Local and national commissioners of care in the new health and social care system depend on ready access to high quality information to secure the right services that have the best outcomes for patients.

Clinical Commissioning Groups (CCGs) and their local communities are empowered to prioritise on the basis of local need and patient and public preferences. CCGs will work to ensure that public and patient's views are heard and expectations understood. By providing better information to citizens, patients, and clinicians, they will be able to hold the NHS to account and develop a hunger for better data, thereby setting up a virtuous cycle of transparency and participation that leads to better care for all.

3.4 The Health and Social Care Information Centre

The Health and Social Care Act established the HSCIC as a non-departmental public body (NDPB) from April 2013, and extended its role and functions to:

- Manage and provide advice on the administrative burden associated with national data collections, to minimise the burden on front line services by making increased use of data derived from front line systems;
- Manage a national repository and routine data flows between the health and care system and the HSCIC to ensure that local commissioners and national organisations all have easy access to the data they need to carry out their duties;
- Lead the production and publication of national and official statistics, indicators and measures used for national accountability, measurement, audit and reporting;
- Be the leading source of data relating to health, public health and social care for the national transparency agenda;
- Provide the systems and infrastructure to securely, efficiently and effectively support the new demands arising from the Quality and Commissioning Outcomes Frameworks;
- Provide expertise to drive more value out of currently available data through services which deliver the secure processing, robust pseudonymisation processes and the linking of data from different sources; and
- Facilitate strong information governance arrangements for data for purposes other than clinical care which underpin the new ways of working required by the Information Revolution in terms of control and ownership of data, and the handling of consent.

The **Strategy for the Health and Social Care Information Centre 2013-15** makes direct reference to care.data and commits the organisation to responding to legal Directions that may be issued (by NHS England and the Department of Health) in relation to the collection of new data sets. This will require the rigour of a programme to deliver.

3.5 The Information Strategy

Published in May 2012, the **Department of Health's Information Strategy**⁴ incorporated the Department's Open Data Strategy and provides a clear framework for the programme:

"From April 2013, the Health and Social Care Information Centre will take on its new status and functions – collecting, linking securely and publishing a wealth of core data – enabling it to become the national focal point and key resource for health and care information. Provisions in the Health and Social Care Act 2012 are designed to strengthen and clarify the role of the Health and Social Care Information Centre so that information can be collected, held securely and made readily available to those who need it in safe, de-identified formats, with crucial safeguards in place to protect the confidential data it holds".

Extract from 'The power of information: Putting all of us in control of the health and care information we need', 21 May 2012)

The information strategy also states:

"The Health and Social Care Information Centre's secure data linkage service and the complementary new secure data service, the Clinical Practice Research Datalink (CPRD), will be

⁴ The full document is available here:

http://webarchive.nationalarchives.gov.uk/20130802094648/http://informationstrategy.dh.gov.uk/about/the-strategy/

available to health and care organisations, managers, commissioners, public health specialists, researchers and industry and others. The ability to draw upon a wealth of linked, then anonymised, data from these invaluable services to improve health and care – when coupled with other resources such as the UK Biobank57 – will serve to reinforce this country's reputation as a global centre for health and care data and research".

(Extract from 'The power of information: Putting all of us in control of the health and care information we need', 21 May 2012)

3.6 Open data and transparency

The **Open Data and Transparency** agenda is now well established as a cross-Government initiative in which healthcare data figures prominently and the ISCG places particular emphasis on this. The publication in June 2012 of the Open Data White Paper "Unleashing the Potential" firmly placed Open Data and Transparency (and indeed participation) at the heart of Government policy.

NHS England has transparency as one of its core operating principles and will therefore work to ensure that transparency becomes central to the relationship between patients, the public and the entire NHS. Open data and transparency is important in improving outcomes for patients, empowering citizens and communities to shape their local health service, and ensuring that patients have greater control over the care they receive. To achieve this, the health and social care system will require comprehensive, timely, and robust information.

Government policy goals are linked to the provision of information for purposes other than clinical care and are characterised by greater openness, transparency and participation based upon:

- Electronic capture of data at the point of care, allowing individual records to become the prime source of information to be used at aggregate level for purposes other than clinical care.
- Linkage of all records for an individual across pathway settings.
- Methods of deriving information through extraction and aggregation that protect the individuals' confidentiality.

3.7 Outcomes framework for Public Health

The care.data programme supports **The Public Health Outcomes Framework** - *Healthy lives, healthy people: Improving outcomes and supporting transparency* – which sets out a vision for public health, desired outcomes and the indicators that will help us understand how well public health is being improved and protected.

The framework concentrates on two high-level outcomes to be achieved across the public health system, and groups further indicators into four 'domains' that cover the full spectrum of public health. The outcomes reflect a focus not only on how long people live, but on how well they live at all stages of life.

3.8 Outcomes framework for Social Care

The programme will also provide data in support of the indicators detailed in the **The Adult Social Care Outcomes Framework 2014/15** (*November 13*), which is presented under the following four areas:

- 1. Enhancing quality of life for people with care and support needs.
- 2. Delaying and reducing the need for care and support.

- 3. Ensuring that people have a positive experience of care and support.
- 4. Safeguarding adults whose circumstances make them vulnerable and protecting from avoidable harm.

3.9 Life sciences

The government's **Life Sciences Strategy**, published by the Department for Business, Innovation and Skills in December 2011 underlined the importance of the delivery of routinely linked data, in particular primary and secondary care data to support growth:

"To encourage innovation and investment in UK life sciences, the Health and Social Care Information Centre will set up a secure data linkage service as part of its core delivery. By September 2012, it will deliver data extracts using linked data from primary and secondary care and other sources, on a routine basis at an unidentifiable, individual level. This service can also be used by the specialist research service (CPRD – see below). The service will be available to all users of health and care information in order to drive improvements in care, enterprise and innovation, and will operate on a self-financing basis where users would pay the cost of the linking process".

(Extract from 'Strategy for UK Life Sciences')

Additionally, whilst the HSCIC successfully launched a data linkage service in September 2012, the power of linkage across the full population and of a range of NHS datasets remains a commitment that the HSCIC is yet to deliver and which forms part of the scope of this programme.

4 High Level Vision Statement

The high level vision for the care.data programme is set out below.

"Care.data provides accurate, complete and timely information about health and social care in England. NHS providers, commissioners and regulators swiftly identify unwarranted variations in the care being delivered across the country in terms of safety, the experience of care, as well as its effectiveness, equity and efficiency. Citizens, patients and clinicians are using this information to become more involved in the scrutiny, redesign, and improvement of the health service. Citizens are empowered by access to prompt, pertinent, reliable information. England is the prime location for health and social care research and analysis, which drives innovation and stimulates economic growth".

This vision will be subject to review and discussion during the Programme Definition stage. A series of profiles of users of health and social care data will serve to further enhance the understanding of the vision and inform the development of the associated benefits.

5 Scope

5.1 In Scope

Programme scope includes:

• The delivery of a significant number of new datasets or major enhancements to existing datasets into the HSCIC; for example, primary care data, community data and out-of-

hours data. This work will include the development of new standards and information services where appropriate. The datasets will mostly be derived from the record standards as endorsed by the Academy of Medical Royal Colleges. The exact scope of datasets will be agreed through the care.data Programme Board.

- The delivery of the 'strategic capability platform', meaning the IT infrastructure, software tools, services and processes, as well as the associated capability to extract, receive, manipulate, analyse, report and publish data and information to the necessary scale, efficiency and security requirements. This will include the capability to link across multiple datasets and will be built in a flexible way, in order that the HSCIC can respond to the needs of the system over time.
- The documentation and implementation of the operating model associated with the strategic capability platform; including the delivery of enhanced customer services.
- The handover of the datasets, the technical platform and operating model into business as usual throughout the programme lifecycle.
- The identification and delivery of accelerator projects to inform later stages of the programme.

The programme is anticipated to run to the end of FY2017-18 which aligns with the investment set out in the Strategic Outline Case.

5.2 Out of Scope

The following areas are excluded from the scope of the programme described here:

- Costs and additional activity being carried out by NHS England or other ISCG member organisations in support of care.data (e.g. analysis of data once available). It is expected that these organisations will provide separate justification for their activities via their own business planning cycles.
- Whilst dependencies exist on the strategic capability platform, delivery of any activity relating to the Data Services for Commissioners (DSC) programme is out of scope (noting that provision may also be required to deliver (as yet unknown) DSC programme data sets through the care.data programme.
- Whilst dependencies exist on the strategic capability platform which forms part of care.data programme delivery), delivery of any activity other than this strategic capability relating to the National Tariff System (NTS) programme is out of scope. For clarity, it is only the technology that the NTS programme is expecting care.data to deliver.
- The Secondary Uses Services (SUS) programme is out of scope.
- The GP Extraction Service (GPES) project is out of scope; however, there are key dependencies on the GPES project in relation to the delivery of primary care data.
- Any clinical trial support activity is out of scope for this programme.

6 Overall Objectives, Deliverables and Outcomes

6.1 Objectives

The programme objectives can be described as follows:

- a. Deliver an agreed set of new datasets and major enhancements to existing datasets into operational service within the HSCIC (e.g. primary care dataset, expanded diagnostic dataset) to agreed timescales. This will include the development of standards, oversight of the necessary consultation and development of legal 'Directions' to support the delivery of the datasets.
- b. Establish a standard operating model for the introduction and processing of new and enhanced datasets including linkage rules, standard tools and the processes through which the data will be made available to all users of health and social care data including members of the public.

- c. Ensure that the HSCIC has the appropriate resources in place to deliver against its statutory obligations in relation to any new or significantly expanded datasets e.g. to ensure that the effort required to produce publications and respond to Parliamentary Questions and Freedom of Information requests is adequately funded through the business cases.
- d. Describe and maintain the technical architecture for the strategic capability platform and develop and deliver an appropriate plan to put the necessary IT infrastructure, software tools and service wrap in place across all phases of the programme. External advice and benchmarking will be sought where appropriate to ensure that the platform is world class, particularly in relation to the protection of personal confidential data.
- e. Procure and implement an indexing solution to enable the effective linking of data at an individual level across multiple datasets and to support the HSCIC in managing the wishes of patients in respect of their data e.g. if they have objected to their data being released in identifiable form from the HSCIC this will be recorded in the index. This will be critical to ensure linkage across care pathways.
- f. To harmonise and migrate existing datasets so that they can be derived from record standards (indexing multiple datasets developed on individual use cases may not be comparable).
- g. Procure and implement an enterprise wide de-identification solution to ensure that personal confidential data can be effectively removed from datasets and appropriate pseudonyms applied before release. This will solution will remove the requirement for dataset specific patient IDs such as the Hospital Episode Statistics (HES) ID. This will be a key component of the strategic capability platform.
- h. Identify, develop and oversee accelerator projects to inform later phases of the programme as agreed throughout the lifetime of the programme e.g. allowing a trusted partner such as Monitor access to our strategic capability platform to access, analyse and link across multiple disparate data sets (both those owned by the interested party and the HSCIC) and store the results of this analysis within the HSCIC infrastructure (whilst protecting personal confidential data); developing a patient portal for cohort of patients; or collecting social care data from a small number of geographical areas where it is available.
- i. Develop and maintain strong programme governance and controls, including the development of required business cases, benefits plan and stakeholder engagement strategy and plan.

The objectives will be confirmed in the Programme Definition Document.

6.2 Deliverables

There are two major deliverable components to the programme:

- National data flows from providers of data across health and care settings from local systems (from hospitals, GPs, community, mental health and social care) and associated information services; the linkage of the data; and the distribution of the data through a number of channels.
- Strategic capability platform (an uplift in HSCIC infrastructure) and associated operating model.

Detailed plans for the programme lifecycle through each of the delivery workstreams will be presented via the Programme Definition Document and an overall roadmap is currently being developed to show key milestone points through this lifecycle.

NHS England, as lead commissioner for the programme has made a number of public commitments regarding care.data and in line with Secretary of State's priorities. These are shown in the table below. Note that one of the key early deliverables is related to primary care data extracts (and the subsequent linkage of this to secondary care data).

Key milestone description	Original baseline date
(Public Commitment) Outcomes data for 10 surgical specialties published on care.data	30/06/2013
(Public Commitment) Outcomes data for all major services published on care.data (Everyone Counts)	31/03/2015
(Public Commitment) 75% of GP Practice data extracts available (9.3)	30/09/2013
(Public Commitment) 75% of Hospital Trusts prescribing data available (9.3)	31/12/2015
(Public Commitment) Core set of clinical data collected from GP Practices (9.4)	30/04/2014
(Public Commitment) Mental health dataset fully completed by all Mental Health Trusts	30/04/2014 (completed)
(Public Commitment) Key indicators published by Mental Health Trusts	30/04/2014 (completed)
(Public Commitment) Advice on high quality data set issued (Commitment - Everyone Counts)	31/03/2013
90% of GP Practices providing data extracts to care.data by June 2014 (SoS Priority)	30/06/2014
Publication of a plan for the phased implementation of the expanded hospital data set (SoS Priority)	28/02/2014

6.3 Outcomes

A detailed understanding and articulation of programme outcomes will be developed during the programme definition stage through discussions with the lead commissioner and the members of the programme board with the intention of developing a shared language in relation to the way they are described. A description of expected outcomes identified to date is as follows:

- a. Increased volume, quality and relevance of data available to support patients in making choices about the care they receive;
- b. Customer services improved to a modern standard;
- c. Increased transparency, in particular instances of unwarranted variation in the care received by individuals will be increasingly apparent;
- d. Improved outcomes for patients with the ability to report against the measures set out in the Outcomes Frameworks;
- e. Increased accountability of the commissioners and providers of NHS care;
- f. Increased investment in UK PIc as a result of an increase in health services research in England resulting from the increased availability of data across care pathways;
- g. Improved quality of data for comparing and measuring patient outcomes, including the ability to carry out benchmarking of services on a national scale. Providers and commissioners will be able to see how they perform in relation to others at a national scale and will be able to identify population level patterns in disease prevalence and treatment;
- h. Reduction in the flow of personal confidential data around the health and care system (with fewer requirements for section 251 support etc.) thereby protecting patient confidentiality;

- Reduction of the burden on providers to send data to multiple organisations as a consequence of the HSCIC data flows being complete and accessible to commissioners, regulators and other users of health and care data in a timely fashion (e.g. remove the requirement for four different sets of data to be submitted in relation to Accident and Emergency);
- j. Reduction in data collection, processing and storage costs for other national bodies and for local commissioning organisations;
- k. Ability to assess the health and well-being of local populations much more effectively as a consequence of having access to data linked across health and care;
- I. Ability to assess the (comparative) effectiveness of particular medications more effectively (e.g. where a more expensive drug may reduce hospital admissions, or where a particular drug may result in increased health problems for the patient);
- m. Ability to deliver publications and reports which cut across care pathways rather than focusing on a single dataset;
- n. The HSCIC is able to collect, process (including linkage and deidentification/pseudonymisation) and disseminate data in a much more efficient and timely way; and
- o. The HSCIC is able to apply the wishes of patients and the public (in terms of objections recorded, consent given etc.) across all datasets with minimal manual processes.

7 Next Stage Objectives and Deliverables

The table below lists objectives and expected deliverables (products) that will be achieved within the Define stage of the Programme as described in the Delivery Framework.

Objectives/deliverables for Next Stage

Risk Potential Assessment (RPA) submitted to MPA in advance of Programme Validation Review taking place (1st assurance stage)

Vision for programme endorsed by Programme Board

Plan for Maternity and Children's Dataset (MCDS) in place

Programme accepted onto HSCIC work portfolio with controls in place across programme

Public awareness activity (national leaflet campaign) in relation to use of data taken place and evaluated

Resources recruited in line with new delivery structure

Technical Architecture Principles in place

Strategic Outline Case submitted for ISCG approval and subsequent Cabinet Office and HM Treasury approval

Development of Outline Business Case commenced

Milestone Plan approved by Programme Board

Roadmap for the programme in place

Procurement/development strategy developed

Primary care data extract taking place (aligned with public commitment)

Memorandum of Understanding in place (between HSCIC and NHS England) – umbrella agreement including care.data

Strategic Outline Case fully approved (by Cabinet Office and HM Treasury)

Approved Programme Definition Document (including Stakeholder Engagement Strategy and Benefits Realisation Strategy) approved by Programme Board

Benefits Realisation Strategy implemented (1st phase benefits identified and allocated)

Data set delivery (land, make available and link in line with agreed schedule) for phase 1 of delivery (in line with agreed data set schedule)

8 Candidate Projects

Delivery of the programme will be through a number of workstreams, each having a number of constituent projects to be defined in more detail as part of the Programme Definition Document. The workstreams are:

	Workstream	Scope/Purpose
1	Data Delivery	Taking new and major enhancements to existing datasets from feasibility through to operational acceptance
2	Common Capability Platform and Operating Model	Procurement and implementation of common components of the technical platform and associated operating model
3	Data Access and Accelerators	Developing and maintaining the data linkage schedule. Identification and delivery of accelerators to data access for selected users of health and social care data informing later stages of the programme
4	Programme Office	Develop and maintain robust programme controls, including planning, business cases, finance and assurance
5	Stakeholder Engagement, Communications and Media	Responsible for the development and maintenance of stakeholder engagement and comms strategy and plans

8.1 Data Delivery

The strategic direction is for the inclusion of multiple data sources. Further phases for data delivery into the HSCIC as part of care.data have been outlined, but only at a high level.

In addition to delivering the data sets themselves, the HSCIC will deliver linked data from primary and secondary care and other sources, at an unidentifiable, individual level according to a delivery plan agreed with ISCG. These linked data sets will utilise those data sets brought into care.data as listed above. In addition HSCIC will also make datasets available for bespoke linkage. Distribution of and access to these data is described further in section 8.3 below.

Some of these data sets already flow, some may be new and some may be existing but require uplift.

There are many requirements and technical challenges associated with the acquisition of these data sets and their delivery to users:

- some data sets are received directly from health or care providers, requiring a clearing house approach to receive data and then make transformed data available to users, e.g. hospital activity data sets. This presents a significant challenge given the range of different methods used by providers to submit their data;
- some data sets are already held at national level, or are available to national systems or services such as SPINE or GPES, and will be brought into care.data through a data extraction and transport mechanism;
- some data sets are already made available (in some form) to users by the HSCIC. The
 provision of these data sets will need to be transformed so that they are provided
 through a standard delivery approach; and,
- all data sets will require a delivery vehicle, e.g. reports or extracts. However, in some cases, (e.g. hospital activity, community) this requirement is likely to be significant and will require substantial development.

There are also a number of clinical/data quality challenges, for example the initial proposed use case of some of the dataset not being rich enough to support measuring patient outcomes even after combining a number of different datasets which were developed for disease level reporting.

An important component of the scope is to include the capability for supporting a pipeline for new / enhanced datasets. For example, a consultation is underway in relation to the potential expansion of hospital data, and this is likely to result in a roadmap for the collection of data which will stretch into Phase 2 of the programme.

8.2 Common Capability Platform and Operating Model

It is essential that flexibility is built into the services procured. The initial technical architecture will provide a layered infrastructure utilising open technical standards to ensure a flexible and scalable platform design. This will readily facilitate the subsequent inclusion of data sets that are developed but not yet flowing nationally. The operating model work will develop a process for working through taking on a new dataset via acquisition, linkage and through to data access. Additionally, the platform will also be environmentally sustainable.

Component	Tactical / First phase	Later phases
Common Services	Authentication and Identity Management Audit & Logging Tools to manage linkages, validations etc. Tracking of customer orders, billing, procuring services etc.	Further development of common services as required; Further upgrade and deployment of additional & replacement toolsets.
Pseudonymisation toolsets	Pseudonymisation toolset Index	Use and exploitation of pseudonymisation toolsets
Infrastructure provision for the active phase	Infrastructure provision for delivery of phase 1 data sets and data linkage programme Cross-service orchestration and scheduling Dashboard view of the operation (resourcing and operational costs).	Ongoing infrastructure provision
Information services	Development of technical, commercial and financial framework for the acceptance, deployment and operation of 3 rd party information services	Development & deployment of information services
Contact centre (service desk)	Establish a front line user support desk for care.data and full service wrap	Delivery of a front line user support service and service wrap
Service integration & management (SIAM)	Implementation, assessment and delivery of service support and SIAM services;	Delivery of service support and SIAM services;
Operational teams (service provision staff)	Operational teams to support care.data implementation (SIAM, infrastructure, data acquisition & processing, report generation, publications for each data set and each linked data set etc.)	Operational teams to support care.data delivery (SIAM, infrastructure, data processing, report generation, publications for each data set and each linked data set etc.)

The main elements of this workstream are outlined in the table below:

8.3 Data Access and Accelerators

This workstream will ensure that the data collected by the HSCIC is accessible in a timely and effective manner whilst protecting personal confidential data. This will include establishing accelerator projects such as supporting greater access to the data which the HSCIC holds to patients. It will also link with the ('portal') work underway to establish the appropriate data access route for different user groups (e.g. life sciences).

The HSCIC collects information from a range of places and, whilst this information includes postcodes and dates of birth so that the information about an individual can be joined together accurately, there are very strict Information Governance rules about what information can be released to the NHS and outside organisations. This workstream will therefore deal with information that can be released in three ways:

- **Anonymised information**: information that does not identify any individuals, nor small numbers of patients with rare characteristics or diseases. Anonymous information may be published in public reports produced by the HSCIC.
- **Potentially identifiable information**: information about individual patients but does not include any identifiers (personal details). The HSCIC would never publish this type of information and would only ever release this type of information to approved organisations for approved purposes, with a legal contract in place and penalties for any misuse of the information.
- **Identifiable information**: information that identifies a patient can only be disclosed where the patient has given their explicit consent (e.g. where agreed to participate in a research study) or where there is a legal basis for doing so.

8.4 Programme Office

Overall responsibility for programme controls including, but not limited to planning, reporting, risk and issue management and programme assurance.

8.5 Stakeholder Engagement, Communications and Media

This workstream supports all the workstreams in the care.data programme and operates closely both with communications and media colleagues in the HSCIC and colleagues in NHS England and other organisations (e.g. Public Health England, CPRD) as required. The purpose of this workstream is to provide communications and engagement support for the programme. This will include stakeholder analysis, mapping and engagement plans and a communications strategy and plan.

The activity of this workstream will be aligned to the needs and timetable of the programme.

9 Expected Key Benefits

9.1 Key benefits

A number of key benefits have been identified in line with the investment objectives for the care.data programme (these were established as part of SOC development). These are set out in the figure 1 below. Each benefit has been categorised as follows:

- (CR): Cash releasing e.g. avoided future spend on legacy system maintenance charges or headcount savings.
- (NCR): Financial non-cash releasing such as staff time savings or relinquished storage space that is put to better use rather than being realised as cash savings.
- (Q): Quality benefits namely benefits that cannot be quantified in financial terms.
- (S) Societal benefits benefits that are related to wider society.

More detailed benefits identification work will be included as part of the development of the outline business cases.

ID	ID Investment objective Acceptated Panefits (CP – each releasing NCP – non			
	Investment objective	Associated Benefits (CR = cash releasing, NCR = non- cash releasing, Q = qualitative)		
IO 1	To improve health and care services, with confidence that services are planned around the patient and hence improve outcomes, by (for example) monitoring against the Outcomes Frameworks	 (Q) Supports better commissioning and delivery of services based upon information about pathways of care, resulting in more cohesive, joined up local services and better outcomes for patients (Q) Supports provider and commissioning organisations to measure the performance and quality of services and to deliver improvements in the efficiency and quality of those services (Q) Contributes towards improved patient outcomes nationally through wider availability of comparable data 		
IO 2	To promote greater transparency of health and social care services to empower patients, citizens and communities to shape their local health service delivery	 (Q) Supplies accurate information to citizens, clinicians, and commissioners about the services that NHS patients receive (Q) Supports communities to influence the shape of local services (Q) Supports informed choice about the use of services, improving patient outcomes and driving up the quality of services 		
IO 3	To increase accountability for delivery and commissioning in the health service by making data more widely available	 (NCR) Reduces avoidable deaths through the publication of comparative data (Q) Reveals instances of unwarranted variation in the care received (Q) Supports the potential to use new commercial vehicles to commission services in a cost-effective manner 		
IO 4	To drive economic growth through the effective use of linked data, attracting developers, researchers and Life Science companies to this market and this country	 (NCR) Reduces costs to researchers by providing faster responsiveness in cohort identification and application handling (Q) Supports economic growth through the involvement of a number of people, including SMEs, in the future provision of innovative analytics tools and services (Q) Supports the development of a vibrant informatics market place 		
IO 5	To maintain continuity of essential data and information services , both during the transition and as a core component of the new services	(Q) Ensures continuity of services reflecting key policy areas e.g. data services for commissioners and provision of HES		
IO 6	To enable the HSCIC to fulfil its statutory role to collect and publish data as the national repository for health, public health and social care data	 (NCR) Reduces local commissioner and provider data processing costs (Q) Enables researchers to examine patterns in diseases and treatments (Q) Enables researchers to develop sophisticated tools such as predictive risk models and impactability models (Q) Enables public health teams to identify trends and variations in disease prevalence and health status and evaluate potential solutions (S) Improved patient outcomes leading to better quality of life for citizens in England 		

Figure 1: Investment objectives and benefits

ID	Investment objective	Associated Benefits (CR = cash releasing, NCR = non- cash releasing, Q = qualitative)
IO 7	To build a platform for a stable, responsive and scalable service, adaptable to future data and functional requirements	 (CR) Reduces data storage maintenance and upgrade costs (CR) Reduces future data storage maintenance and upgrade costs (NCR) Optimises physical storage and processing capacity (Q) Ends the reliance upon one large supplier for end- to-end delivery of secondary uses information (Q) Supports Agile design and promotes future growth of applications and standardisation of processes
IO 8	To enable the HSCIC to fulfil its statutory role to minimise the burden imposed on others as a result of collecting or analysing information	(CR) Reduces transaction costs (NCR) Supports data sharing and re-use of ICT solutions (NCR) Enables transition from NHS providers submitting 'forms' or 'returns' to submitting data
IO 9	To enable the HSCIC to fulfil its statutory role to facilitate strong information governance arrangements for using data for purposes other than clinical care	 (Q) reduction in the amount of personal confidential data flowing around the system (S) Builds confidence with the public with reduction in data flows and stronger controls within the HSCIC

9.2 Benefits Management

A Benefits Realisation Strategy for the later stages of the project will be developed and be available as a separate document. The objectives of this strategy are to:

- Identify the benefits and responsibility for their delivery.
- Establish baseline measurement where possible.
- Quantify benefits where possible.
- Periodically assess likely realisation and any actions required.
- Manage the change programmes.
- Record further expected benefits identified during the project.
- Measure outcomes

10 Options appraisal approach

Options for the delivery approach to specific components of the programme will be considered as part of development of the programme business cases.

A Strategic Outline Case (SOC) for care.data has been developed and this SOC describes the context and plans up to the end of FY2017-18. It will be followed by a number of cases:

- a small number of business justifications for tactical activities and enabling tasks;
- an Outline Business Case (OBC) that focuses on the period to March 2016 and addresses the delivery of the foundation platform together with the phase 1 data sets. The resulting delivery is likely to be formed of several contracts, and hence it is expected that there will be streamlined "Component Full Business Case(s)" to support contract signing, and an addendum (rather than a fully updated Business Case word document) showing value for money, key variations and procurement details with an updated Financial Model showing total costs, benefits and risks. These costs, benefits and risks will be associated with the 24 months only; and
- a further OBC that focuses on Phase 2.

This approach of SOC followed by phased OBCs has been chosen:

- to comply with the Government ICT strategy which encourages multiple shorter-term contracts and spend commitments as well as encouraging SMEs to participate;
- shorter-term contracts will enable the programme to benefit earlier from improvements in technology that will occur during the life of the contract and which can be subsequently adopted;
- to make use of central framework contracts which provide access to a wide range of services through SMEs;
- to reduce the management impact of co-terminating contracts; and,

• to allow adequate time for development and implementation of the service.

This approach (proposed profile for the business cases) is illustrated in figure 2 below.

Additionally, the SOC itself considers options for delivery (e.g. supplier options).



11 Governance and Assurance

Appendix A shows the governance structure for the programme.

11.1 Sponsor/sponsoring group

Commissioning of the care.data programme is via the Informatics Services Commissioning Group (ISCG), with NHS England being the primary commissioning organisation on behalf of the ISCG. The care.data programme board is a sub-group of the ISCG and includes representation from NHS England, the Department of Health, Public Health England (PHE), Monitor, The Care Quality Commission (CQC) and the National Institute for Health and Care Excellence (NICE), along with the all the other organisations that make up the ISCG member organisations. In addition, membership is also supplemented by representatives from areas such as clinical commissioning groups, the research community, NHS Providers and external experts.

The formal commissioning of the HSCIC activities to enable delivery of the care.data programme will form part of an overarching Memorandum of Understanding between NHS

England (as primary commissioner) and the HSCIC which is currently under development (being led by HSCIC Portfolio Office).

The HSCIC sponsor is Max Jones, Director of Data and Information Services.

11.2 Senior Responsible Owner (SRO)

Christine Outram, Director of Intelligence and Strategy, Patients and Information, NHS England is the SRO for care.data

11.3 Proposed Governing Body

The care.data programme board (see section 11.5) provides governance and control to assure the delivery of the programme, for example by receiving progress reports (covering all care.data delivery workstreams) and by addressing all risks and issues that have been escalated. The board also sets the strategic direction for the programme, and ensures that this is fully understood by the delivery partner (the HSCIC) and is being delivered.

The programme will be funded partly through GIA and, as this is fundamental to the future of the organisation, it is anticipated that the SOC will also be considered by the HSCIC Board.

As workstreams are established it may become clear that additional project boards are required to ensure they receive adequate support.

11.4 Informatics Services Commissioning Group

The Informatics Services Commissioning Group (ISCG) formally establishes all informatics programmes that are to be commissioned by its member organisations, including the care.data programme.

11.5 care.data programme board

The care.data programme board, a sub-group of the ISCG, provides assurance for the commissioned programme. To do so, it provides governance and control to assure the delivery of the programme, for example by receiving progress reports (covering all care.data delivery workstreams) and by addressing all risks and issues that have been escalated. The board also sets the strategic direction of the programme, and ensures that this is fully understood by the delivery partner (the HSCIC) and is being delivered.

The board engages with stakeholders, requirement groups, external reference groups and subject matter experts. It also links with other internal groups (e.g. Design Authority) to ensure that the strategic design of the programme is both appropriate and is meeting the requirements of stakeholders.

11.6 care.data delivery structure

As the principal delivery partner, the HSCIC is responsible for the overall delivery of the care.data programme.

The care.data delivery group heads is the co-ordinating group for the delivery structure. It provides assurance and controls for the HSCIC in relation to delivery of the programme, and also acts as an approval body (i.e. for formal approval requirements that fall below the remit/tolerances of the programme board; or for items requiring pre-board approval; or for change request items outside the tolerance levels of the programme board) and a route for escalations and resolution (e.g. risks) for the delivery workstreams. To this aim, it therefore acts as an overall conduit for these delivery elements through to the programme board and reports key decisions (e.g. delivery approvals) to the board.

As the enabling activities in support of delivery of the care.data programme are key activities/projects within the HSCIC portfolio, this group also has responsibilities for reporting,

assurance and controls through to the HSCIC Portfolio Board (and HSCIC Executive Team) as per existing organisational governance arrangements, which include the organisational links between the HSCIC and the ISCG.

Additionally, governance arrangements are in place, both within the care.data delivery workstreams, and through to the lead commissioner, NHS England (Patients & Information Directorate), in relation to agreed reporting, assurance and controls requirements.

11.7 Assurance

11.7.1 Risk Potential Assessment

A Risk Potential Assessment (RPA) has been carried out for the care.data programme with the following overall assessment outcomes:

Low Very Low Low Risk
essment Medium

11.7.2 Gateway Reviews

The programme is subject to the Major Projects Authority (MPA) assurance process (i.e. Gateway Reviews) and a schedule of assurance reviews will be established for the programme in line with appropriate milestones and with discussions with MPA representatives.

It is anticipated that the programme will be subject initially to a Programme Validation Review (PVR), which replaces the old 'Starting Gate' review and trigger's entry into the Government Major Projects Portfolio (GMPP). The outcome from the PVR (the Delivery Confidence Assessment, i.e. Red to escalate, Amber to proceed with recommendations, Green to proceed directly) is required to support the approval of the Strategic Outline Case by HM Treasury.

12 Next Stage Timescale

The table below shows deliverables and milestones, with forecast delivery dates, that will be undertaken within the next stage.

Task/Deliverable/Milestone	Forecast delivery date
Risk Potential Assessment (RPA) submitted to MPA in advance of Programme Validation Review	November 2013 (update: now completed)
Vision for programme reviewed and endorsed by Programme Board	December 2013 (update: now completed via board review of prospectus and this Brief – see section 4 above)
Plan for Maternity and Children's Dataset (MCDS) in place	December 2013 (update: now completed and approved by MCDS board)

Task/Deliverable/Milestone	Forecast delivery date
Programme accepted onto HSCIC work portfolio by HSCIC Portfolio Board	January 2014 (update: approved and
Public awareness activity (national leaflet campaign) in relation to use of data taken place	January 2014 (update: undertaken in January via national leaflet campaign)
Recruit resources in line with new delivery structure	February 2014 – May 2014
Technical Architecture Principles in place	February 2014
Programme Validation Review (1 st stage of MPA assurance) taken place	February 2014 (update: scheduled for late February)
Strategic Outline Case submitted for ISCG approval	March 2014
Development of Outline Business Case commenced	March 2014
Milestone Plan approved by Programme Board	March 2014
Draft Programme Definition Document (including Stakeholder Engagement Strategy and Benefits Realisation Strategy) ready for approval	March 2014
Roadmap for the programme in place	March 2014
Procurement/development strategy developed	March 2014
Primary care data extract taking place	March 2014 - May 2014 (update: agreed phased approach through 3 months)
Memorandum of Understanding in place (between HSCIC and NHS England) – umbrella agreement including care.data	April 2014
Strategic Outline Case fully approved (by HM Treasury)	May 2014
Approved Programme Definition Document (including Stakeholder Engagement Strategy and Benefits Realisation Strategy) approved by Programme Board	May 2014
Benefits Realisation Strategy implemented (1 st phase benefits identified and allocated)	June 2014
Data set delivery (land, make available and link in line with agreed schedule) for phase 1 of delivery (in line with agreed data set schedule)	Now - through to March 2016

13 Estimated Overall Timescale

The programme is aligned to the care.data SOC which covers the time period from now through to the end of FY2017-18. This includes two phases of dataset delivery, one running to the end of FY2015-16 and one running from FY2016-17 through to the end of FY2017-18.

14 Next Stage Costs

The estimated cost for the programme up to the end of the FY2014-15 has been estimated as:

Capital = \pounds 11,113M

Revenue = \pounds 12,959M

Total = £24,072M

This is based upon the (current) cost model developed for the SOC (highest cost option: 3 – mixed economy supply) and includes optimism bias, contingency, inflation, irrecoverable VAT, and excludes depreciation and rate of return.

15 Estimated Overall Costs

The programme costs over the time period of the SOC (to end of FY2017-18) are shown as an estimate (taken from the current SOC) in the table below. There is a fully-populated financial model behind this. The detailed figures will depend on the preferred option taken forward at the next stage however the ones shown here are based upon the highest cost option (based upon the mixed economy supply option – see also section 18.1 below).

	2013-14	2014-15	2015-16	2016-17	2017-18	Total
HSCIC						
- Capital						
- Capital optimism bias uplift *						
- Capital contingency **						
- Capital total						
- Revenue						
- Revenue optimism bias uplift *						
- Revenue contingency **						
- Revenue total						
- Total capital + revenue						

Redacted –Section 43 FOI Act 2000

The figures have been submitted as part of the Zero-Based Review process for the HSCIC and presented to the Star Chamber of DH, the ISCG approvals group (by way of verbal update), NHS England and HSCIC representatives.

16 Funding sources

The funding sources for the programme is still to be agreed. However, the following proposal is set out in the SOC:

- For capital: DH Grant-in-aid (GIA) or the Technology Fund (either through DH or NHS England).
- For revenue: through NHS England for programme-specific items or through GIA for core HSCIC capability.

Activity	Funding source
Data collection activity	Programme
Information services	Programme
Common services and tool set	Grant-in-aid
Infrastructure	Grant-in-aid
SIAM and support	Grant-in-aid
Programme, Approvals and Contact Centre staff	Programme

Where:

- Programme-specific funding is linked to be for identifiable deliverables (e.g. such as a phase of care.data delivery)
- Grant-in-aid is linked to the provision of a core capability for the HSCIC in line with its statutory role.

Given the critical nature of the care.data programme to NHS England and the ISCG member organisations, it is expected affordability will be agreed and signed off by the ISCG Approvals group.

The first exception to this is the Maternity and Children's Data Set (MCDS) work which is being funded from NHS England (this was originally being funded from DH and this budget moved to NHS England). This is existing agreed budget.

The second exception relates to expenditure of care.data data sets, platform and tools that would be over and above that already within HSCIC funding. The scale of this requirement for funding has yet to be determined and will be evidenced through the business case.

The third exception to this is for other cross-programme care.data activities that will be funded by NHS England (the Patients & Information Directorate has an agreed care.data budget in place). An example of this would be engagement activities across the health and care system to support requirements gathering.

17 Staff resource requirements

Resource requirements for the HSCIC to enable delivery are being established in line with the agreed care.data workstream structure and the care.data business case development.

Over the full lifecycle of the Programme, it is predicted that staff resources will be required from:

- Finance
- Commercial
- Procurement
- Programme management / Project management / Project support / Business analysis (likely to be sourced from the HSCIC Portfolio Delivery resource pool)
- Service management
- Communications team
- Information Governance (IG)
- Statistical Governance (SG)
- The Business Case Team
- Solutions Assurance
- PMO/support resources
- Technical resource Technical Architects, Testers, and so on
- Data Standards team
- Clinical Informatics Assurance
- Clinical Safety Assurance
- Existing Information and Data Services Directorate business teams (e.g. SUS/HES team)
- External resource input e.g. NHS staff

Appendix B shows the proposed organisational structure for delivery of the programme and this is the resource structure being taken forward for immediate implementation and for recruitment purposes.

The Programme Definition Document will detail specific roles and descriptions for the programme across all workstreams.

18 Commercial/Procurement considerations and approach

As regards the strategic (business case) approach, within the Government ICT strategy, reforms to procurement approaches mean that, to encourage and support more SMEs to bid for Government contracts:

- long-term £100m+ contracts with prime suppliers are no longer likely to be approved so there becomes a need for multiple shorter-term contracts and spend commitments;
- the increased use of central framework contracts provides access to a wide range of services through SMEs; and
- programmes are encouraged to use, and will be monitored in the use of, Agile approaches to software development through SMEs.

The strategic approach for the care.data programme has been devised based on this direction, rejecting a single prime contractor and instead proposing successive phases incorporating several inter-related product and service elements each with its own procurement.

18.1 Strategic Commercial Considerations

The SOC sets out the policy context and main drivers for establishing a Strategic Capability Platform to support the care.data requirements and is a key part of the care.data programme. Of particular significance to informing the commercial approach to be adopted are:

- The principles and objectives for future ICT enabled business change programmes established within the *Government ICT Strategy*. These include the mandating of open standards and interoperability and providing a stimulus to economic growth through a competitive market place with opportunities for small and medium sized enterprises (SMEs);
- The aims within the *ICT Strategic Implementation Plan* of ensuring that delivery plans incorporate the use of common data standards and cloud computing technology that exploits commodity ICT services to optimise use of infrastructure and reduce running costs;
- The **Open Data and Transparency Agenda** which is now becoming well established as a cross Government initiative leading to the Cabinet Office consultation on the wider use of open data, and on policies to support the planned establishment of the Public Data Corporation;
- The proposals for a *National Information Strategy for the NHS* that will seek to ensure that information for secondary uses purposes will provide for the linkage of records across pathway settings and progressive development of quality and outcome measures to underpin the new outcome frameworks.
- Existing systems / systems developed for other reasons / development in line with other business cases that could potentially be re-used and that may have positive implications on the commercial strategy for this programme.

The Cabinet Office has also been leading on work to develop a market and supplier strategy to ensure that the Government ICT Strategy is fully supported commercially, and that the ICT market is aligned to government priorities with appropriate commercial vehicles in place.

The SOC sets a clear investment objective to build a strategic capability platform, adaptable to future data and functional requirements.

Building on both the policy context and investment objectives the Economic Case has appraised sourcing options to support the platform procurement. It is likely that the preferred option to emerge from the business case will be the adoption of a multiple supplier commercial model that effectively separates the procurement of the technical platform and storage capability from the commissioning of the information services and applications.

Therefore the key outcome objectives of the Commercial Workstream for this project will have been met if:

- a. A range of vehicles have been brought into being, which result in the successful delivery of care.data and all of the services which fall under its remit throughout its operational life
- b. Cost, quality and risk have been managed within the compass of supporting commercial activity so as to enable the most efficient, effective and successful service possible
- c. The procurement overhead has been minimised to the maximum degree possible in respect of the whole life of the service (reduction in management cost, alignment of process to value, improvement in speed to market)
- d. A supplier ecosystem has been facilitated, whose design enables innovation within a vibrant market, reduces over-reliance on a small number of 'locked in' suppliers, resulting in increasing supply chain resilience and choice
- e. The market has been harnessed to unlock the latent value from data held within the HSCIC

Furthermore, the characteristics of success will include:

- a. Sourcing from the market at the right level, so as to enable lowest cost, best of breed supply (on the assumption that these are not mutually exclusive) within the known constituent elements of the requirement
- b. Reducing the barriers to entry for supply into the platform ecosystem, so as to improve the richness of a supply base with sufficient domain expertise to offer services of value to the NHS (and supporting the SME agenda)
- c. Maintaining compliance with relevant legislation at all times; considering this as a 'hygiene factor' (i.e. a state which necessarily persists at a structural and procedural level) rather than a process design objective in and of itself
- d. Maintaining clear and effective commercial boundaries in order that actors within the system understand their roles and responsibilities clearly, avoiding wasteful duplication or gaps in service coverage
- e. Reducing commercial difficulties associated with succession lifecycle management, which have typically resulted in cycles of complete service rebuild and demolition in the past, and denied access to emerging technologies or cost base improvement for in contract services
- f. Removing the artificial boundaries to capability enhancement, which are the product of legacy processes and the unintended consequence of procurement legislation
- g. Complementing at a commercial structural level, key technical aims regarding speed of solution delivery, interoperability and technical choice
- h. Enabling multiple transactional styles, so as to access different technical, development and commercial models (targeted choice).
- i. Reducing technical and commercial risk by staging pre-procurement feasibility and pilot activities that may be associated with building from existing services.

19 Constraints and Dependencies

The main constraints identified are:

- timescale available for delivery of a care.data solution. The timeframe for the delivery of the phase 1 data sets is within 2 years, and the service will need to be established in that phase to support further extension and developments;
- funding for the implementation and operation of the service;
- speed with which required organisational and operational change within HSCIC can be delivered;
- availability of HSCIC resources for implementation activities;
- any solution must operate within the IG and data protection requirements, ensuring liaison and approval from the Information Commissioner's office where appropriate.

The main dependencies, defined as being factors outside the direct control of the programme are as follows:

- clear future health policy requirements for open data, transparency and participation; a clear requirement as to who we should provide data to, under what circumstances and to what service levels, what financial model
- future funding streams to support developing policy requirements;
- ability of national and local health and care organisations to meet data collection requirements of care.data (e.g. Community Information Dataset, Maternity Data Set, new data sets etc.);
- co-operation of existing suppliers for the transition of data to the service;
- support and approval from NHS England, the Information Services Commissioning Group, DH and the Cabinet Office
- commitments given by the Government in its response to the Information Governance review
- requirements arising from National Tariff Systems and Data Services for Commissioners.
- The constraints and dependencies identified at this stage will be carefully reviewed, monitored and managed throughout the lifespan of the scheme.

20 Interfaces

There are a number of key interfaces for the programme, though this does not constitute a full list of stakeholder groups. A stakeholder map will be created during the Programme Definition stage.

Cross - Organisational

- 1. NHS England, P&I Directorate
- 2. DH, Informatics Accountable Officer's department
- 3. Cabinet Office Major Projects Authority
- 4. NHS commissioning and provider organisations
- 5. ISCG member organisations (interface via care.data programme board)
- 6. Clinical Practice Research Datalink (CPRD)

Programme Interfaces

- 1. National Tariff System (NTS)
- 2. Data Service for Commissioners (DSC)
- 3. Secondary Uses Service (SUS)
- 4. GP Extraction Service (GPES)
- 5. Maternity and Children's Data Set (MCDS) this has its own SRO, business case and project board although it also sits within care.data governance and is a part of the programme

Internal (HSCIC) team interfaces

- 1. The programme will interface with all teams within the Data and Information Services Directorate to some degree.
- 2. Services Directorate.
- 3. Communications & media relations
- 4. Information Governance
- 5. Portfolio office

21 Key Risks and Issues

This sub-section outlines the main strategic risks for the care.data programme. A risk is considered strategic if it has a high overall retained risk value for the preferred option. These are shown below together with the proposed controls/mitigation.

Risk Category Description

Mitigation

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Termination or Failure to Start	Programme is unable to proceed due to lack of funding	Ensure that full engagement with DH finance directorate is maintained throughout the programme.
Termination or Failure to Start	Approvals required to proceed with the programme cannot be achieved quickly enough given the pressing need to make investments	Close management of Integrated Assurance and Approvals Plan and regular engagement with approvers to manage any issues or concerns.
Deployment	Lack of resources to manage and support implementation.	Consideration and agreement of a recruitment approach (aligned with other programmes in the directorate) to ensure best use of available resources to match agreed structure.
Deployment	Timescales and deadlines for delivery not achieved	Strong programme management to ensure deliverables are achieved. Clear communications between all stakeholders including NHS England to ensure expectations are realistically set.
Deployment	Supplier community unable to provide the products and services required.	Undertake market soundings and organise supplier events. Adopt commercial vehicles that allow participation of SMEs and niche suppliers. Apply open standards.
Design and Development	Delivered solution is not able to respond to future policy change and new requirements	Use of open technical architecture, contestable commercial architecture and agile development techniques to ensure platform is flexible, open and scalable.
Operational	Occurrence of Information Governance (IG) issues regarding the use of patient identifiable information within platform.	Information Governance directives on the handling of patient identifiable information will be followed. Ensure data de- identification is effectively built into the solution set.
Operational	Termination of the BT contract without securing some other means to land the CDS data, hence HES will stop and most of the care.data linkages will not be delivered.	 Assessment of options to: 1. Take a copy into HSCIC and develop the CDS validations etc. internally 2. Get a supplier to do it (could be BT) or 3. Extend the BT contract

22 Tolerances

Tolerance levels for the Define stage for the HSCIC care.data programme will be discussed and, as appropriate agreed, with the relevant governing body (i.e. delivery governance and the programme board).

23 Document submission

Briefs that are intended for submission to the HSCIC Portfolio Board must be endorsed by the Sponsor and SRO **prior** to submission (*note, this was the case in advance of the submission in December 2013*).

Note, the governance, structure and enabling activities for delivery by the HSCIC (as described in here and including the care.data business case approach) have been approved by the care.data programme board and are being detailed in a MoU for formal agreement between NHS England and the HSCIC.

Appendix A – Programme Governance Structure



Appendix B – Proposed delivery organisation chart **B1 - Overall structure** Programme Director Eve Roodhouse Senior Business Support Officer Programme Head Programme Manager Stakeholder Programme Head Common Capability Platform & Operating Programme Controls Data Access & Engagement and Data Delivery (8D) Manager (8C) Accelerators (8C) Comms Model (8D) Programme Manager Programme Assurance & Risk Project Manager (8A) Primary care (8C) Manager Manager Trevor Anders Technology (8C) Programme Manager Project Manager (8A) MCDS & ONE (8C) Programme Manager Planner Eva Simmonds Operating Model (8C) Programme Manager Project Support **Diagnostics and** Service Manager Officer x 2 Hospital Expansion (8C) TBC Information/ Data Business Analyst Lead Analyst (8B)

B2 – Data delivery workstream

Data Quality/ Information Governance Lead



B3 – Common Capability Platform & Operating Model

