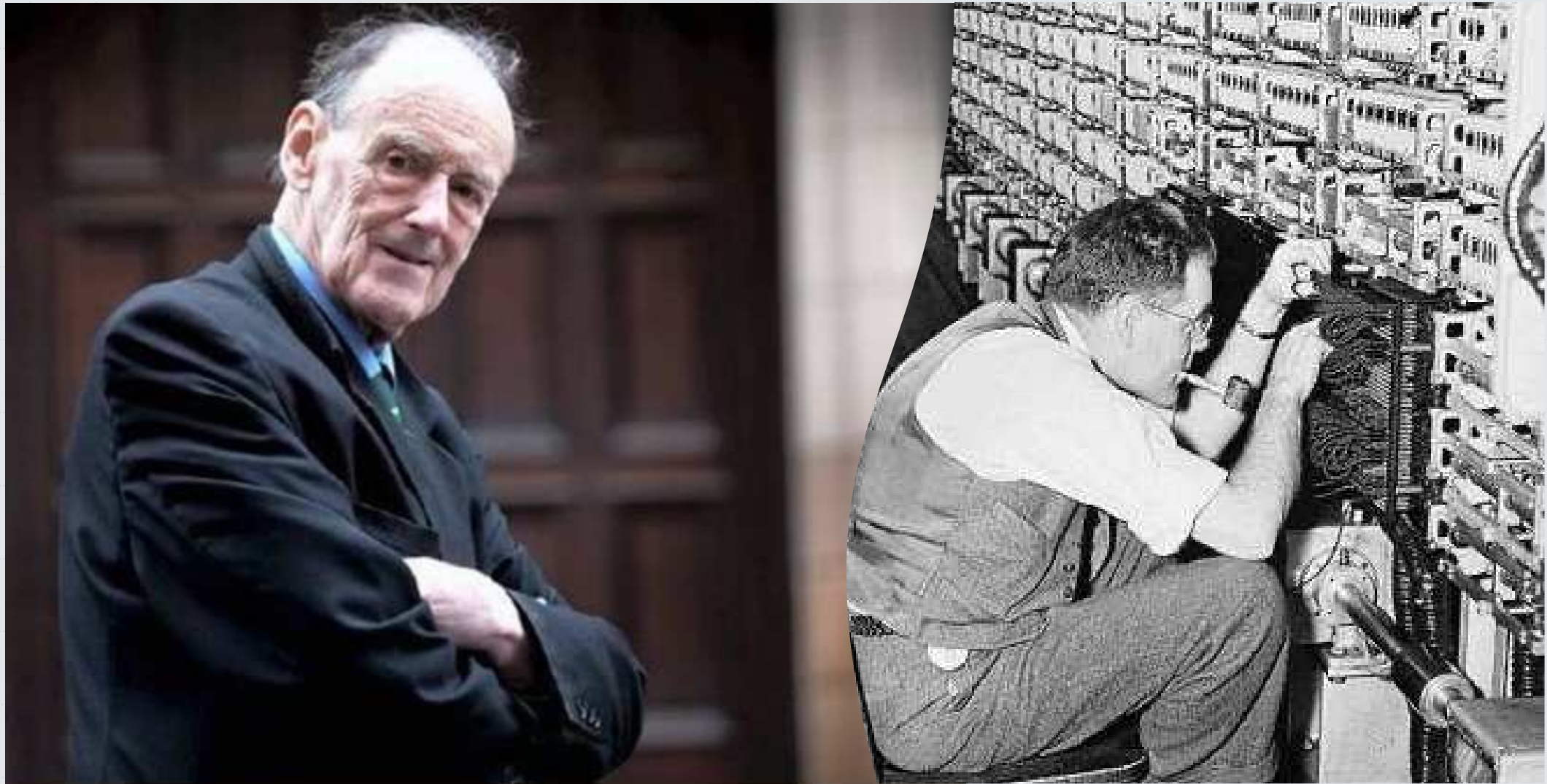


The Single Patient Record

Looking back to move forwards

A personal reflection..

An introduction



October 1950 – 75 years ago...

A. M. Turing (1950) Computing Machinery and Intelligence. *Mind* 49: 433-460.

COMPUTING MACHINERY AND INTELLIGENCE

By A. M. Turing

1. The Imitation Game

I propose to consider the question, "Can machines think?" This should begin with definitions of the meaning of the terms "machine" and "think." The definitions might be framed so as to reflect so far as possible the normal use of the words, but this attitude is dangerous. If the meaning of the words "machine" and "think" are to be found by examining how they are commonly used it is difficult to escape the conclusion that the meaning and the answer to the question, "Can machines think?" is to be sought in a statistical survey such as a Gallup poll. But this is absurd. Instead of attempting such a definition I shall replace the question by another, which is closely related to it and is expressed in relatively unambiguous words.

The new form of the problem can be described in terms of a game which we call the 'imitation game.' It is played with three people, a man (A), a woman (B), and an interrogator (C) who may be of either sex. The interrogator stays in a room apart front the other two. The object of the game for the interrogator is to determine which of the other two is the man and which is the woman. He knows them by labels X and Y, and at the end of the game he says either "X is A and Y is B" or "X is B and Y is A." The interrogator is allowed to put questions to A and B thus:

C: Will X please tell me the length of his or her hair?

Now suppose X is actually A, then A must answer. It is A's object in the game to try and cause C to make the wrong identification. His answer might therefore be:

"My hair is shingled, and the longest strands are about nine inches long."

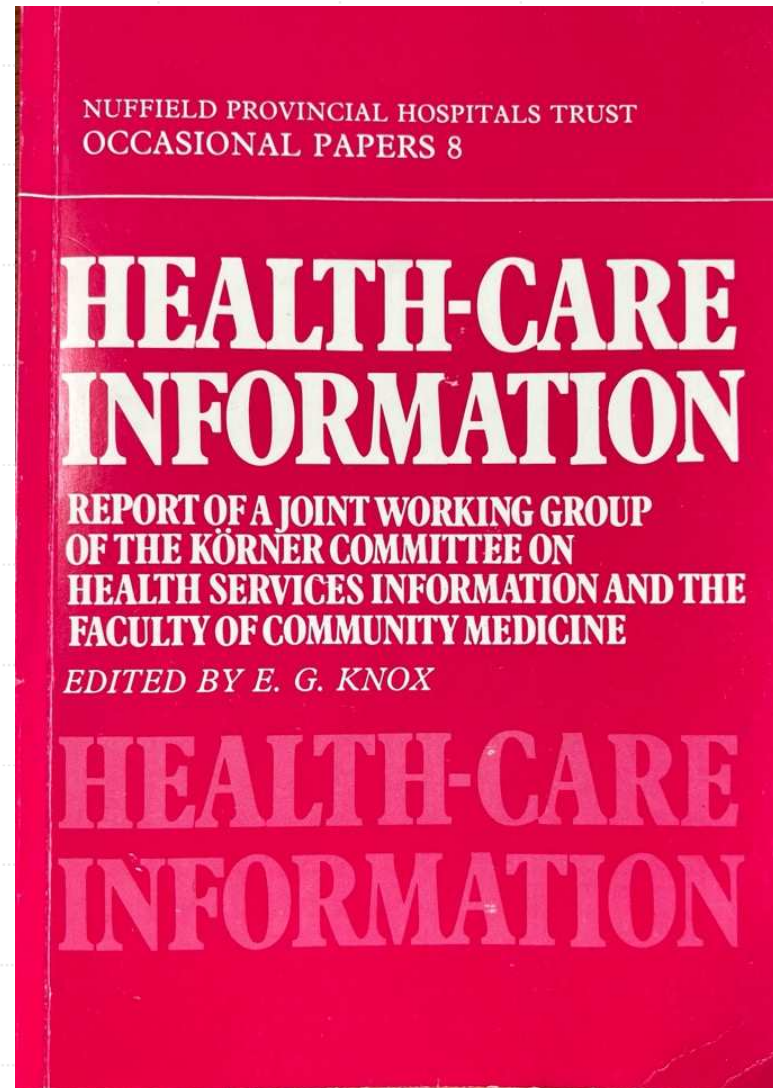
In order that tones of voice may not help the interrogator the answers should be written, or better still, typewritten. The ideal arrangement is to have a teleprinter communicating between the two rooms. Alternatively the question and answers can be repeated by an intermediary. The object of the game for the third player (B) is to help the interrogator. The best strategy for her is probably to give truthful answers. She can add such things as "I am the woman, don't listen to him!" to her answers, but it will avail nothing as the man can make similar remarks.

We now ask the question, "What will happen when a machine takes the part of A in this game?" Will the interrogator decide wrongly as often when the game is played like this as he does when the game is played between a man and a woman? These questions replace our original, "Can machines think?"



Turing, Alan M. 1950. "Computing Machinery and Intelligence." *Mind* 59, no. 236: 433-460.

Where it all began



December 1992

Getting Better with Information – the “shoebox”

The Strategy is guided by the following key principles:

Information will be person-based

Person-based systems will hold a healthcare record for each individual which can be referenced to that person's NHS number.

Systems may be integrated

Wherever practical, data will need to be entered on a computer only once. Subsequently, it may be available, in whole or in part, on other designated NHS systems. Steps will be taken to protect confidential information from unauthorised access.

Information will be derived from operational systems

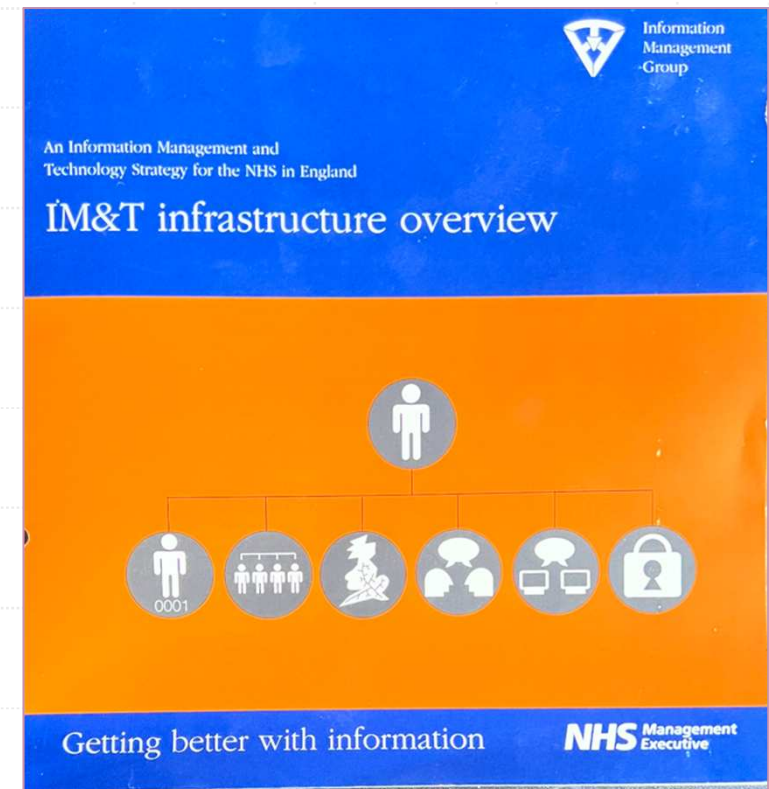
Subject to safeguards to maintain the confidentiality of personal health information, data will be obtained from systems used by healthcare professionals in their day-to-day work. There should be little need for different systems to capture information specifically for management purposes.

Information will be secure and confidential

Great care will be taken to ensure that the information held on computer will be available only to those who need to know it and who are authorised to know it.

Information will be shared across the NHS

Common standards and NHS-wide networking will allow computers to communicate so that information can be shared, subject to security and confidentiality safeguards.



October 1997 – The Health Information Bank

News

An independent 'Health Information Bank' could solve data security issues

Ambitious proposals that could provide a solution to the contentious issues surrounding patient privacy, confidentiality and security of health records have won cautious but enthusiastic support from British Medical Association officials.

If the plans reach fruition they could change the way clinicians practice medicine while providing an effective but simple new approach to the handling of patient data and patient records. Health information management could be seen to leap forward into the 21st century instead of limping along to the millennium on the back of structures that are solid, reliable, but distinctly tied to the early years of NHS computing.

The plans are the result of an interesting piece of lateral thinking by Dr Bill Dodd, a GP, an innovative former healthcare IM&T company director and a consultant — with a particular focus on the electronic patient record — to the NHS in Scotland and the Department of Health's Information Management Group. He has transposed the idea of a money bank — with all its inherent safeguards and securities built into it — across to the NHS to create the concept of a Health Information Bank where patient data can be deposited and withdrawn only according to certain safeguards by those authorised to know.

Three independent and non-governmental organisations would be established: a non-profit-making Health Information Bank modelled on existing technologies used by the banking sector, a non-profit-making Health Information Academy and a commercially oriented Health Information Corporation.

A patient could deposit their health record for safe keeping in the Information Bank, adding to it when appropriate, obtaining statements of the record contents and controlling how the record is used.

The financial sector's structure of several banks, with local branches, could be applied — providing a key advantage for security: dispersed databases.

The Bank would add value to its basic services by providing clear information about diagnoses, factual information about clinicians and institutions and

tation of the anonymised and aggregated data from the bank. It would, for example, process and supply information for contracting and billing to trusts and private institutions, provide them with benchmarking and other comparative management information, and would provide the Department of Health with information needed for central statistics.

Positive reactions

The idea has already brought warm praise from representatives of the British Medical Association (BMA) which, for the past couple of years, has been an ardent opponent of the NHS Information Management Group's NHS-wide network and its clearing service — which it believed did not offer adequate safeguards for the privacy and confidentiality of patient data.

BMA Secretary, Dr Mac Armstrong, told the *Journal*: "This is a very interesting concept which requires careful examination. From what I have seen of it so far the Health Information Bank could actually provide a solution to some of the most difficult questions facing us as to how we could exploit the opportunities that are there in the world of information technology for medicine."

"The fundamental question about ownership of patient data, one of the key issues in the data confidentiality debate is difficult to answer unless you start with a clean sheet of paper such as Dr Dodd is suggesting we do. His idea has merit and requires careful discussion", he added.

A senior figure in NHS administration and IM&T circles over the last 20 years, who preferred not to be named (and who described himself as a jaundiced administrator) said: "It seemed at first to be the sort of crackpot notion you get from medical directors who have never had to make anything work for themselves and who sit there dreaming up systems. The idea itself is absolutely brilliant — but how do you make it happen and how can it be kept safe from hackers?"

Dr Dodd says that the Health Bank could "dramatically alter clinical practice" because instead of "playing lip service" to the idea of a patient's right to know about his medical record the Health Information Bank really would enable patients to become active participants in clinical care. He denied that the Health Information Bank concept would make current IM&T technologies irrelevant: "It would be outside the existing IM&T strategy but the relevant information would be extracted from the existing recording systems. The problems of transferring information between healthcare organisations, however, would become much simpler as it would be through a single source."

"This approach would be a major step towards improving the quality of the record and enabling patient empowerment. It would protect the interests of the patient while enabling epidemiological and other research and legitimate commercial use of the information within the proper constraints of security and data protection", he said.

No costs or timescales have yet been worked out for implementing the Health Information Bank concept.

David Creatney



Bill Dodd. A new design for healthcare in the 21st century

NHS Executive unlikely to support centralised encryption-key holding

A confidential assessment of NHS encryption trials, presented to the Executive last month, has recommended that NHS key-management should shift to meet

2

The British Journal of Healthcare Computing & Information Management October 1997 Volume 14 Number 8

*British Journal of
Healthcare Computing and
Information Management*
*October 1997 Vol 14
Number 8*

December 1997 – First Caldicott Report

The Information Governance reset

DEPARTMENT OF HEALTH

The Caldicott Committee

Report on the Review of Patient-Identifiable Information

December 1997

25th March 1998

Information for Health

Soft launched at HC98 in Harrogate, Frank Burns wanted *Information for Health* published “before the daffodils have gone”



17th April 1998 – IfH Business Case

Restricted - Policy in Confidence

21

Benefit Table 5

Objective:	5 To ensure NHS professionals have reliable and rapid access to the medical (and relevant social) histories of all their patients on a 24 hour basis
Desired Outcomes:	A system for managing Patient Records so that accurate and meaningful information about a patient's health and relevant social history is available (subject to stringent arrangements for security and confidentiality) to those healthcare professionals with a need to know it, when and where they need it.
Benefits at Different Levels of Organisational Transformation:	
1. Localised Exploitation	<ul style="list-style-type: none"> Automation of current manual processes in the NHS (see Annex 3 for further details) Reduction in waiting times for test results Reduced lost/misplaced patient information, and procedure results => consultation can focus on diagnosis and treatment Improved clinical and administrative efficiency Reduced transcription errors
2. Internal Integration	<ul style="list-style-type: none"> Patients do not have to repeat their details unnecessarily - supports the progression to "seamless care" Efficient admission, discharge and transfer processes Reduced unnecessary investigative procedures and tests Improved quality of clinical decision making
3. Business Process Redesign	<ul style="list-style-type: none"> Improved consistency and quality of care through multi-disciplinary care protocols linked to order sets, drug alerts and warnings Reduced lengths of stay and lengths of episode for elective admissions through benchmarking analysis of performance against best practice
4. Business Network Redesign	<ul style="list-style-type: none"> Patient "smart" cards to carry the pertinent details of their health record at all times to ensure in the event of emergency that clinicians are always informed
5. Business Scope Redefinition	

Draft Version 0.1

17/04/98 12:16

Objective

To ensure that NHS professionals have reliable and rapid access to the medical (and relevant social) histories of all their patients on a 24 hour basis

Benefits

- Patients do not have to repeat their details unnecessarily
- Supports the progression to seamless care
- Efficient admission, discharge and transfer process
- Reduce unnecessary investigative procedures and tasks
- Improved quality of decision making

5th July 1998

"If I live in Bradford and fall ill in Birmingham, I want the doctors who treat me to be able to have access to my records"

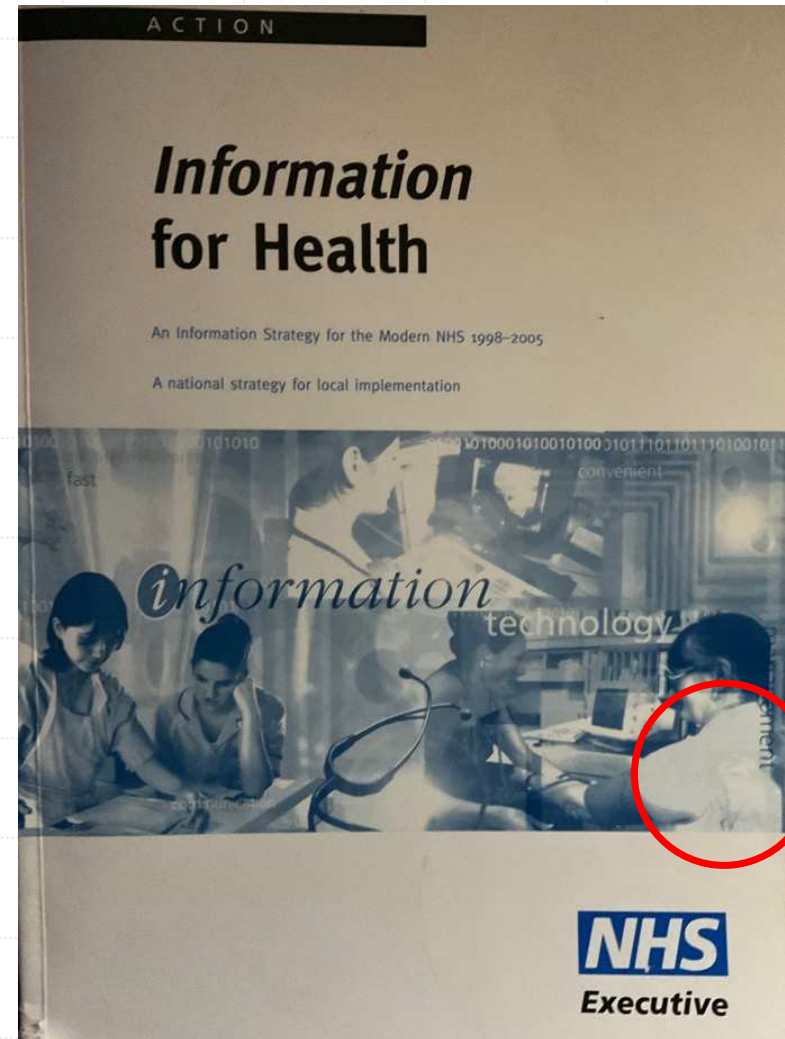
NHS 50th Earls Court



September 1998

The basis of the strategy was a commitment to develop:

- Lifelong electronic health records for every person in the country
- Round-the-clock online access to patient records and information about best clinical practice for all NHS clinicians
- Genuine seamless care for patients through GPs, hospitals and community services sharing information across the internet
- Fast and convenient public access to information and care through online information services and telemedicine
- Effective use of NHS resources by the provision of health planners and managers with the information they need.



The concept of the Electronic Health Record

Technology for the Electronic Health Record

Developing and maintaining the Electronic Health Record

'a key objective of this strategy is the creation of an electronic health record within primary care that is eventually universally accessible and which records the healthcare of individuals throughout their life'

- 2.71** A key objective of this strategy is the creation of an electronic health record within primary care that is eventually universally accessible and which records the healthcare of individuals throughout their life. The approach adopted will need to take account of the existing investment and track record in use of the messaging, and the overall global trends towards developing new technology based on the Internet.

Sharing Electronic Health Record data

- 2.72** Before reaching detailed decisions on the technological approaches, there needs to be a debate on the content, structure and use of EHRs with the health professional and managerial community, involving the views of patients, carers and the public whom they serve. However these issues are resolved, there will inevitably be a need to share patient data in a reliable, consistent and automated manner between organisations, through their corresponding systems and subject to appropriate security and confidentiality considerations.

Integrating data at source

- 2.73** One technological approach involves sending data from one system to another which is then subsequently automatically integrated into the database of the receiving system.

Objective

A key objective .. is the creation of an electronic health record within primary care which is universally accessible and records the healthcare of individuals throughout their life.


27th November 1999

IfH implementation

- Health Authorities should co-ordinate local **production of an initial Local Implementation Strategy** by March 31st 1999, together with **local NHS Trusts, Primary Care Groups (PCGs), Social Services and other local partners**, ensuring that health and social care professionals are at the centre of the decision-making process.
- The White Paper - The new NHS - Modern, Dependable - requires Health Authorities to ensure **collaboration between organisations**. Key features of the approach to implementing Information for Health reflect the **need for strong leadership, from Chief Executives and others, to address cultural change issues around the new requirements to manage information across "whole systems"**.

Key features include

- A requirement that **local organisations involved in improving health and the delivery of health and social care services undertake joint strategic planning for the development and use of information systems and technology and adopt a "whole systems" approach to such planning**
- explicit linkage between the local Health Improvement Programmes (HImPs) and the implementation of information systems as a key means of achieving the aims and objectives of the HImP.**



Health Service Circular

Series number: HSC 1998/225
Issue date: 27th November 1998
Review date: 27th November 1999
Category: Information Management
Status: Action
sets out a specific action on the part of the recipient with a deadline where appropriate

Information for Health: Initial Local Implementation Strategies

For action by:

- Health Authorities - Chief Executives
- Health Authorities - Directors of Public Health
- Health Authorities - Directors of Information Management & Technology
- Special Health Authorities - Chief Executives
- NHS Trusts - Chief Executives
- NHS Trusts - Medical Directors
- NHS Trusts - Nurse Directors
- NHS Trusts - Directors of Information Management & Technology
- Regional Directors

For information to:

- General Medical Practitioners
- Local Medical Committees
- Local Pharmaceutical Committees
- Local Authorities in England - Chief Executives
- Local Authorities in England - Directors of Social Services

Further details from:

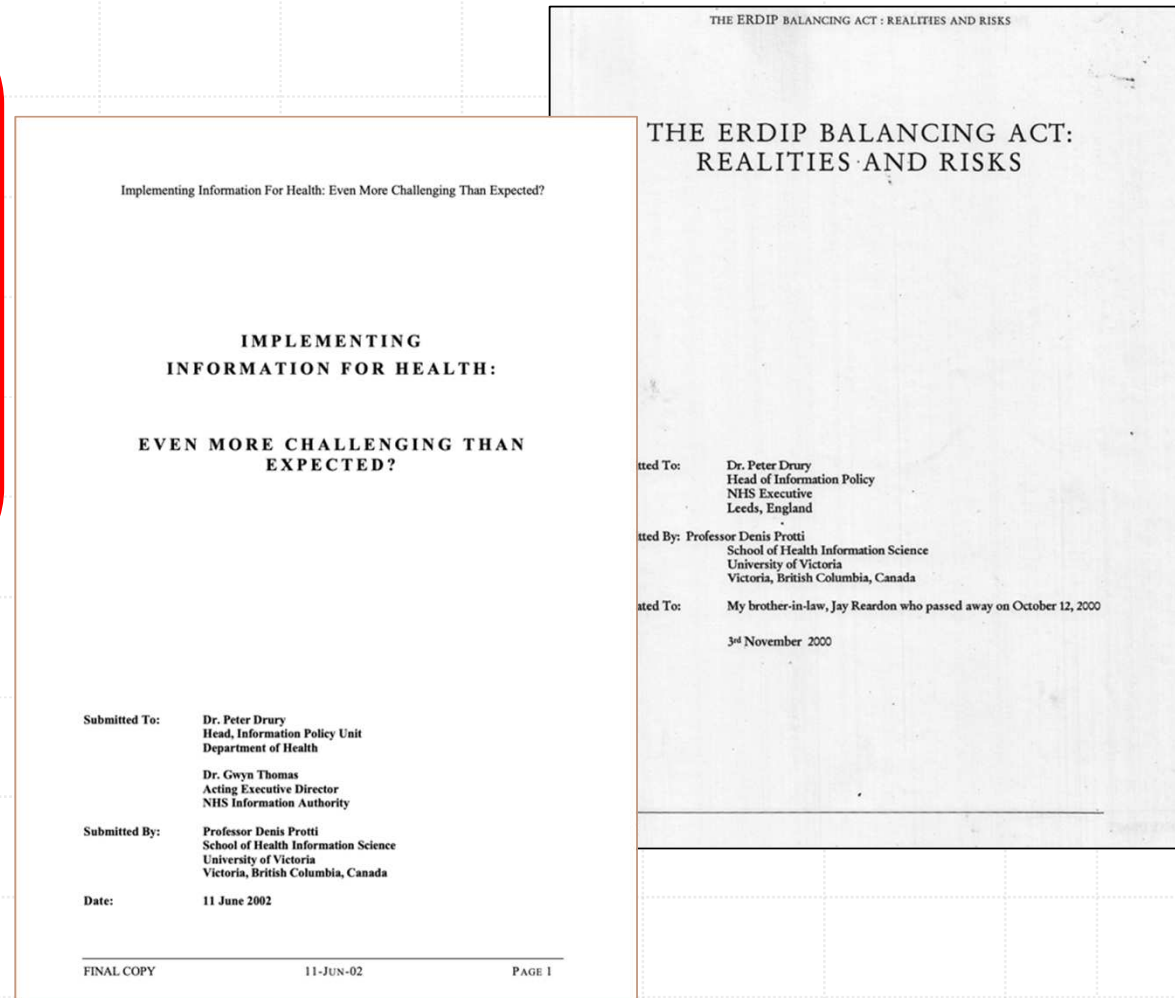
- Stan Lajca
- NHS Executive Headquarters
- Quarry House 1N23
- Quarry Hill
- Leeds LS2 7UE
- 0113 254 6046

27th November 1998 Page 1

3rd November 2000

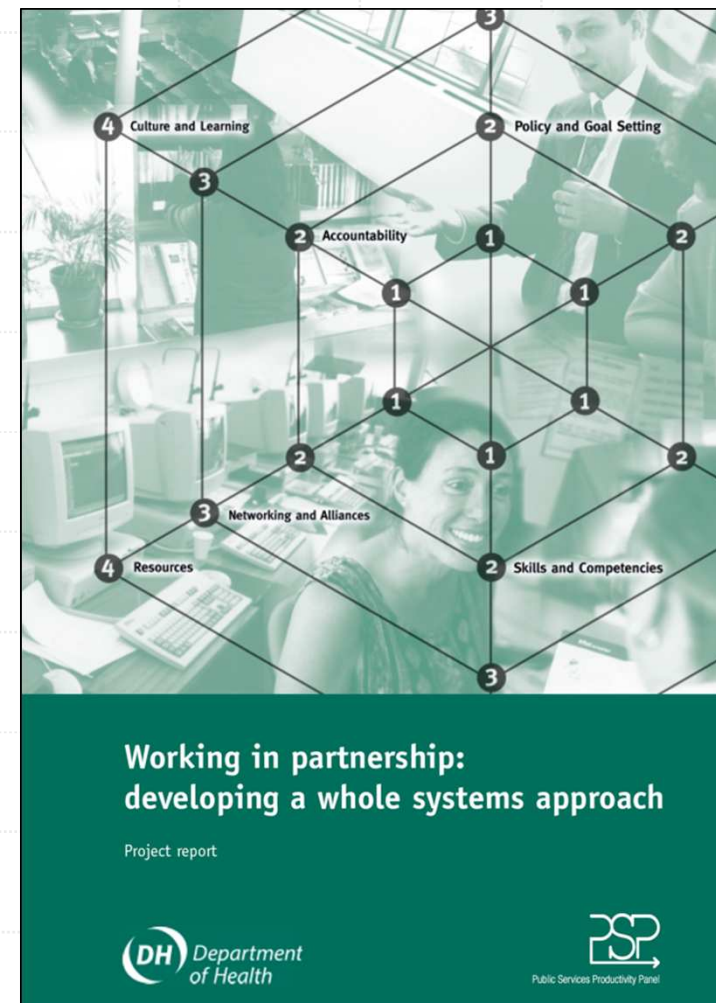
Recommendation 3: Get on with rolling out the NHS Number across the country such that every citizen has a plastic identification card which they should then be expected to produce at any encounter with the NHS (at least on those occasions where the NHS Number has not already been captured). As more organisations begin to incorporate the NHS Number into their systems, so it will become easier to make electronic linkages between systems.

Recommendation 4: Remove, as quickly as possible, the barriers to the use of the NHS Number by Social Services and others who are part of the EHR community but who do not currently have legal access to it. Use of the NHS Number is critical to the success of the EHR.



December 2000

- Public Services Productivity Panel
- Emphasis on the development of Local Implementation Strategies
- Supported by Secretary of State for Health – Alan Milburn ! – and the Chief Secretary to the Treasury
- Focus on whole system integrated working



January 2001

- Electronic Record Development and Implementation Programme (ERDIP) evaluation
- *Technical implementation only a small part in successful adoption. We repeatedly underestimate the organizational and cultural changes required.*

NHS Information Authority - ERDIP

Evaluation of Electronic Patient
Record Projects

January 2001



Prepared by the UK Institute of Health Informatics
For
The NHS Information Authority

January 2001

Building the Information Core : Implementing the NHS Plan

Reaffirmed and updated the 1998 strategy in the light of the NHS Plan (2000) making a number of commitments including.

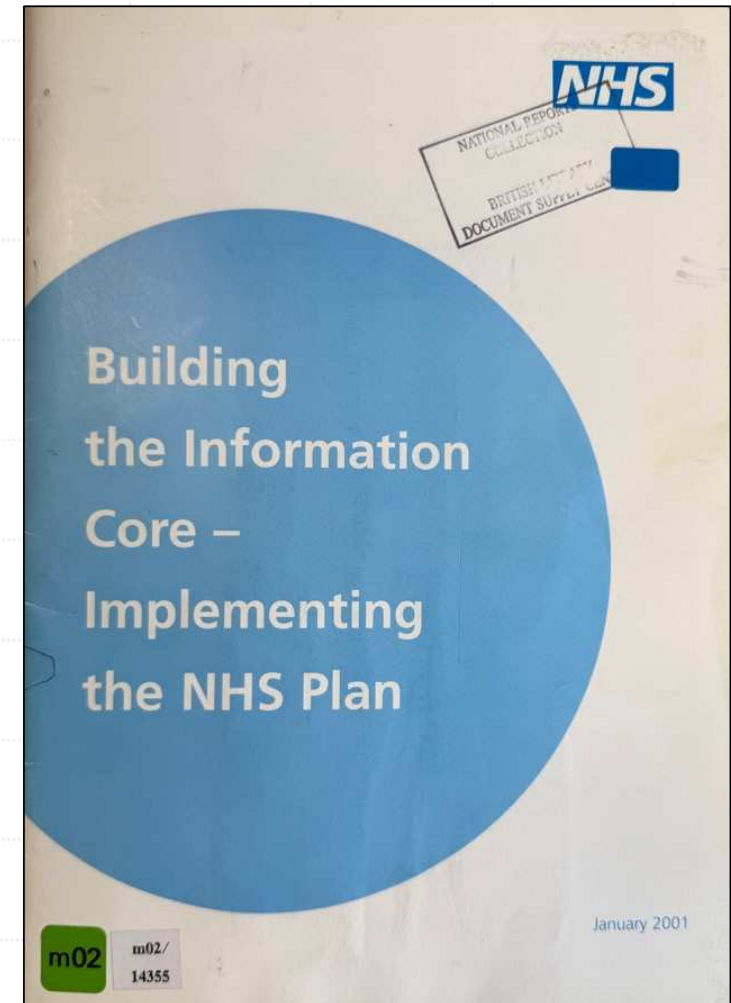
By 2005

- All trusts to have level three electronic patient records
- **The first generation of electronic health records**
- All local health services to have telemedicine, allowing patients to connect electronically with staff for advice.

Electronic records

An **electronic patient record** describes the concept of a longitudinal record of periodic care provided mainly by one institution. This will typically relate to the healthcare provided by an acute hospital.

The **electronic health record** is used to describe the concept of a longitudinal record of a patient's health and healthcare from cradle to grave. It combines information about the patient's contacts with primary healthcare with subsets of information associated with the outcomes of periodic care in the electronic patient record



Labour Party Manifesto 2001

“We will give every citizen a personal smartcard containing key medical data giving access to their medical records.”

Ambitions for Britain

Labour's manifesto 2001



18th February 2002

Prime Minister's Seminar on NHS Information Systems

At 4.00pm in No.10 Downing Street 21 men and one woman dramatically changed the direction of healthcare computing in England.

From the senior policy adviser, 26 February 2002

Dear Sammy,

PRIME MINISTER'S SEMINAR ON NHS INFORMATION SYSTEMS

The Prime Minister held a seminar on NHS information systems with your Secretary of State, the Chief Secretary, Lord MacDonald, Lord Hunt, Sir Richard Wilson, Nigel Crisp, and Sir John Pattison on 18 February 2002. Paul Corrigan, Andrew Pinder, Peter Gershon, Neil Holloway, Kevin Dean, John Hall, Ian Walker, Ed Richards, Dominic Hardy, William Perrin, Wendy Thomson, Michael Barber and I were also present.

Your Secretary of State opened by saying that IT was one of the key mechanisms for supporting NHS reform. The NHS was starting from a low base because over several decades there had been instances of high-profile project failures, and because of an historic lack of investment. The NHS spent between 1.5% and 2% of its budget on IT, compared with 6% in the US.

Continuing, Lord Hunt [now a minister in the Ministry of Justice] said that the vision for IT in the NHS was that it should underpin the reform programme and provide fast and convenient access to services, through booked appointments, electronic prescribing and electronic health records. Historically NHS IT had been dogged by too little managerial capacity and clinical ownership, but there was a real sense now that people were prepared to back IT developments. The key was to use stronger central direction to accelerate the pace of change and make more use of partnerships with the private sector.

Sir John Pattison [then lead Director for the NHS IT programme] said that the starting point for the IT programme in the NHS was the relationship between the patient and the clinician - from GP consultation through diagnosis and prescribing support, to booking a consultant appointment and supporting the care pathway through treatment in hospital. The priority now was to accelerate the development of broadband connectivity and focus on the main areas outlined by Lord Hunt [booked appointments, e-prescribing and e-records]. In terms of delivery the NHS Modernisation Agency [since disbanded] was working with clinicians to help change working practices and drive compliance with standards.

The Prime Minister said that in his view good IT was a pre-requisite for a modern NHS. At the moment, it did not have the information systems which would enable it to deliver first-class health services. The main issues to be tackled were how to ensure the NHS had the right systems how these systems were implemented locally by managers and clinicians and how we increased the pace of development.

Neil Holloway [then Microsoft UK chief executive] said that the private sector was increasingly focusing on defining adherence to core standards in areas such as data exchange. The NHS should adopt this approach. This avoided the need to specify that every part of the health service had the same system, but would ensure that they could communicate with each other.

Kevin Dean [Cisco] agreed that there was now a range of technologies which supported this approach, but they relied on ruthless central direction to ensure that everyone complied with standards.

Your Secretary of State added that, in the past, money allocated for IT had not been used for IT projects. The only way to ensure that this happened was to ring-fence it and insist that it was spent by the NHS against a set of national standards.

The Prime Minister said that it was clear that this needed a strong central focus within the department and that now was a good time to make progress because Primary Care Trusts would shortly be taking up their full responsibilities.

Nigel Crisp [then NHS chief executive] said that the NHS was now receptive to a central approach in this field and that funds should be earmarked centrally.

Andrew Pinder [Cabinet Office e-envoy] said that it was important to define a set of standards as quickly as possible as this would be the key building block for further developments. Electronic health records were another key component, but the Department of Health had to decide which of the pilot schemes it wanted to back to make quick progress. Increasing broadband capacity was equally vital, not least because this would enable electronic health records to be moved around the system.

Sir John Pattison agreed with these points and added that NHS staff would be receptive to changes in the way IT was delivered, even if working practices took some time to adapt.

The Prime Minister asked whether the programme could be accelerated. In the past, there had been uncertainties about the benefits and reliability of different technologies but these were now much clearer. Taking forward the programme faster than currently planned would help underpin the reform agenda and also provide visible evidence of NHS modernisation to patients and the public.

Peter Gershon [then head of the Office of Government Commerce] responded by reporting that the Office of Government Commerce was taking forward work to compress the time needed to procure systems. There was scope to reduce the time between project conception and the awarding of the contract if those involved had a clear idea what they wanted. The department needed to monitor private sector interest in the NHS IT programme to ensure it could meet demand.

The chief secretary asked whether the new NHS systems would be compatible with those used by Social Services to ensure efficient data transfer at the interface between the two sectors.

Sir John Pattison said that the department was currently exploring how medical records would be transferred, perhaps using a unique NHS identifying number, although this was not the only solution.

The Prime Minister asked about work in progress across government in this area and asked Sir Richard Wilson [cabinet secretary and head of the home civil service] for a paper outlining latest developments, including the possibility of a single identifier for individuals.

Summing up, the Prime Minister said that it was clear that good IT had a major role to play in helping secure fast and responsive NHS services. It was an area which had seen significant underinvestment in the past but one which would undoubtedly benefit from greater investment in the future. There would be further discussions in the context of the Spending Review. He agreed with the priority areas of work outlined by Sir John Pattison, but asked the Department of Health to look again at its implementation programme and accelerate it where possible. Greater central direction of the programme would help provide momentum and ensure that NHS organisations complied with standards. He would be grateful for a further paper on progress and options for faster implementation in due course.

I am copying this letter to the private secretaries to the chief secretary to the Treasury, Lord MacDonald, Lord Hunt and Sir Richard Wilson.

April 2002

The Wanless Review

"Current use of information and communication technology (ICT) is extremely poor,

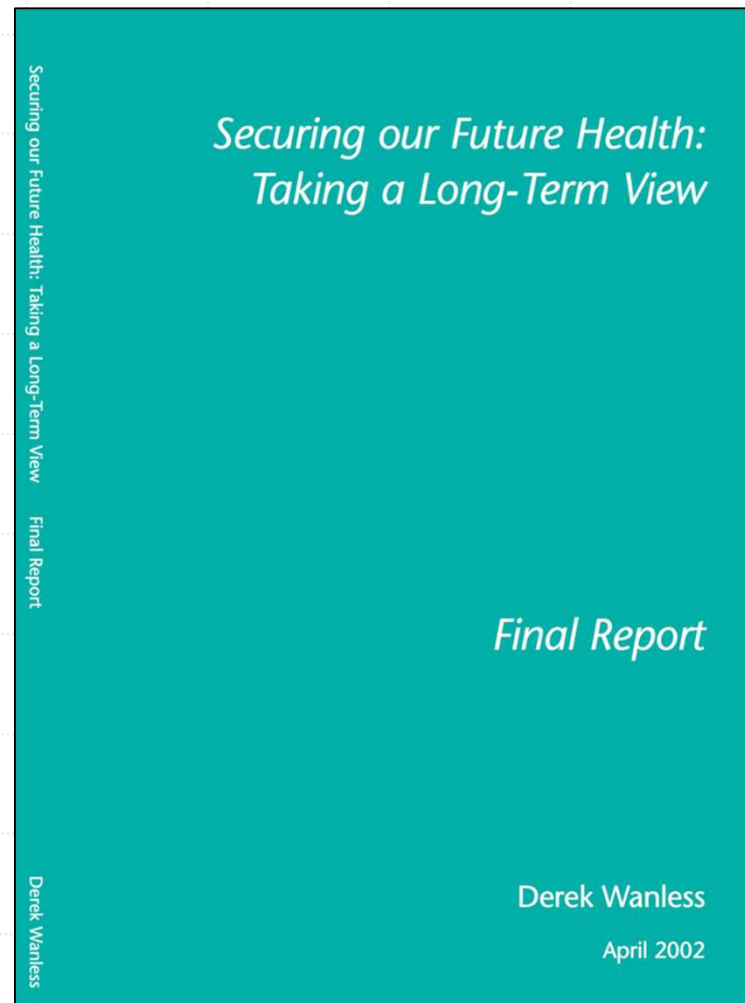
If more decisions were taken in a holistic way, recognising the inter-relationships between many of the resources in the system, the health service would be more effective. For example, better integration of health and social care for older people could reduce 'bed blocking' to low levels and free up expensive hospital beds for many more patients.

Improving the use of information and communication technology (ICT) in the health service is a key issue in improving quality and productivity;

The health service makes very poor use of ICT. There are examples of successful use of ICT at local level, but systems have typically been developed and installed in a piecemeal fashion. This prevents the effective integration and sharing of information across a wide range of health care providers.

The health service's annual ICT spending per employee was lower in 2000 than in any other sector of the economy considered. The UK health service also spends a significantly lower percentage of its budget on ICT than the health services of comparator countries.

The majority of respondents identified the importance of the planned Electronic Patient Record (EPR) and the need to integrate ICT applications across primary and secondary care and also into social care. "



11th June 2002

The Protti report

"Into this increasingly complex world we are trying to introduce information technology fully realising that one cannot buy an EPR or an EHR off the shelf, as it is something that develops incrementally over a number of years. Whilst, the EPR/EHR is not about technology but more about a long-term cultural change programme, the technology can enable that cultural change to occur.

Much research has been done in an attempt to identify the key factors that predict EPR/EHR implementation success. Over 150 factors have been identified, but only two, "top management support" and "user involvement" are consistently associated with successful implementations.

In a nutshell, it is people, not technology, that make the difference between success and failure"

Implementing Information For Health: Even More Challenging Than Expected?

IMPLEMENTING INFORMATION FOR HEALTH:

EVEN MORE CHALLENGING THAN EXPECTED?

Submitted To: Dr. Peter Drury
Head, Information Policy Unit
Department of Health

Dr. Gwyn Thomas
Acting Executive Director
NHS Information Authority

Submitted By: Professor Denis Protti
School of Health Information Science
University of Victoria
Victoria, British Columbia, Canada

Date: 11 June 2002

12th June 2002

Delivering 21st Century IT Support for the NHS

"There remain a number of critical barriers to the effective use of IT including:

- small amounts of protected IT funding that has had low priority for many Trusts leading to very low levels of investment;
- lack of a cohesive, nationally-led IT architecture for data and system standards that allow information and processes to follow the patient's journey through the NHS seamlessly;
- the need to improve coordination of IT resources and procurements to increase the pace of implementations and provide fast, better value for money IT projects;

"The programme focuses on the NHS but we also intend to take forward in parallel developments in Social Care IT so the two services are integrated as local communities are ready.

"These changes will require closer working with industry partners and a greater emphasis on national procurement arrangements.

"We will work closely with the Modernisation Agency to change working practices so that IT is used effectively.

"By March 2003 we will

- Define data standards and interchange standards
- Create first stage of National Health Record Service
- Agree XML based EPR System Specification, using open standards



Delivering 21st Century IT Support for the NHS

National Strategic Programme

26th March 2003

“The purpose of ICRS is to support the provision of high quality care across whole health communities, linked to national services and conformant to national standards. ICRS is the:

- ***Integrated***, operating across the care continuum,
- ***Care***, covering both health and social care,
- ***Record***, single record based around the patient,
- ***Service***, to reflect a need to address not only the functionality required of the information systems but also the nature of the supporting services which will be required to effectively support professionals in the delivery of the care process.



Integrated Care Records Service

High Level Overview of Requirements

26th March 2003

“ICRS incorporates the Information for Health concepts of both the organisation-specific Electronic Patient Records and also the cradle-to-grave Electronic Health Record.

The major change proposed is to move away from the concept of a number of separate information systems based primarily around organisational structures to a situation in which professionals are provided access to the one integrated service based around the patient”.

NHS National IT Programme
INTERNAL DRAFT ONLY
COMMERCIAL IN CONFIDENCE

ICRS
High Level Requirements
Module Description



National Programme for
Information Technology

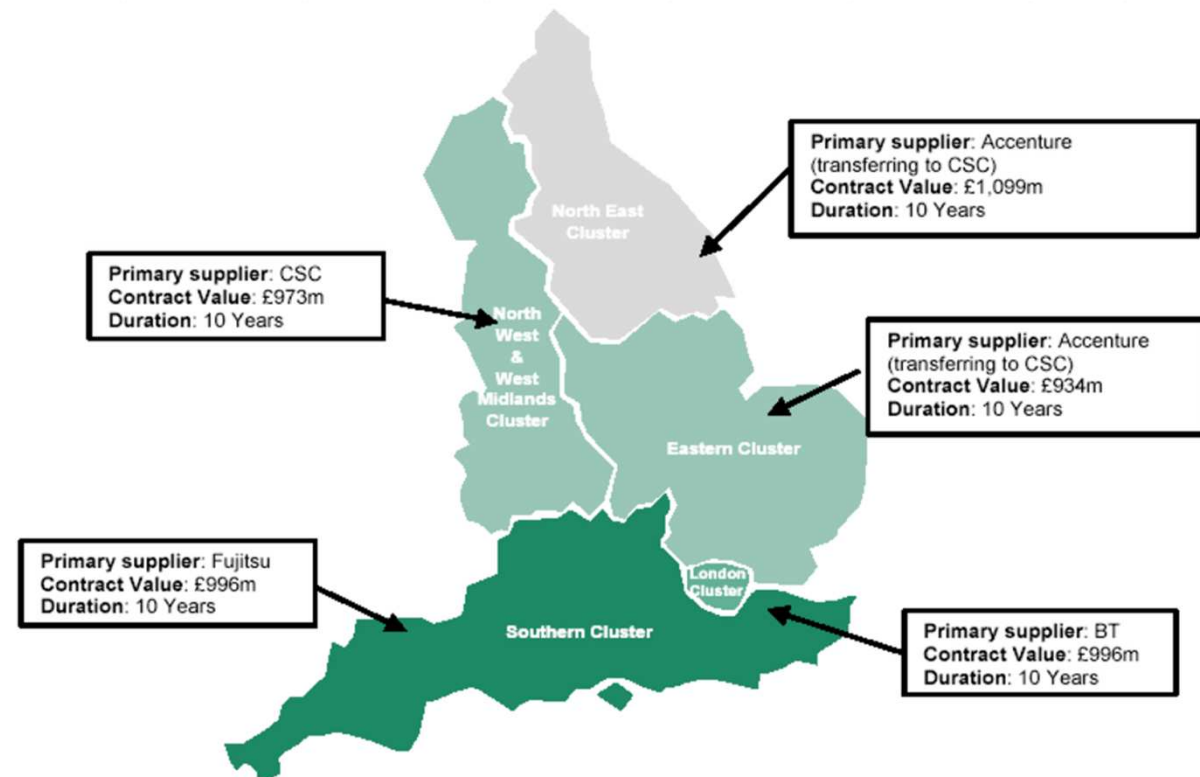
Integrated Care Records Service

High Level Overview of Requirements

6th/7th December 2003

Final consolidation of the NPfIT business cases.

Majority of the NPfIT Contracts awarded in December 2003 and January 2004



26th March 2007

1. The delivery of the patient clinical record, which is central to obtaining the benefits of the programme, is already two years behind schedule and no firm implementation dates exist.
2. The Department has not sought to maintain a detailed record of overall expenditure on the Programme and estimates of its total cost have ranged from £6.2 billion up to £20 billion.
3. The Department's investment appraisal of the Programme did not seek to demonstrate that its financial benefits outweighed its cost.
4. The Department is maintaining pressure on suppliers but there is a shortage of appropriate and skilled capacity to deliver the systems required by the Programme, and the withdrawal of Accenture has increased the burden on other suppliers, especially CSC.
5. The Department needs to improve the way it communicates with NHS staff, especially clinicians.
6. We are concerned that leadership of the Programme has focused too narrowly on the delivery of the IT systems, at the expense of proper consideration of how best to use IT within a broader process of business change.
7. The Department should clarify responsibility and accountability for the local implementation of the Programme.
8. The use of only two major software suppliers may have the effect of inhibiting innovation, progress and competition.
9. At the present rate of progress it is unlikely that significant clinical benefits will be delivered by the end of the contract period.



House of Commons
Committee of Public Accounts

Department of Health: The National Programme for IT in the NHS

Twentieth Report of Session 2006–07

Report, together with formal minutes, oral and written evidence

*Ordered by The House of Commons
to be printed 26 March 2007*

HC 390
[Incorporating HC 1360-i of Session 2005-06]
Published on 11 April 2007
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London: The Stationery Office Limited
£20.00

14th January 2009

Recent progress in deploying the new care records systems has been very disappointing, with just six deployments in total during the first five months of 2008–09.

By the end of 2008 the Lorenzo care records software had still not gone live throughout a single Acute Trust.

The planned approach to deploy elements of the clinical functionality of Lorenzo (release 1) ahead of the patient administration system (release 2) is untested and therefore poses a higher risk than previous deployments under the Programme.

Of the four original Local Service Providers, two have left the Programme, and just two remain, both carrying large commitments.

The termination of Fujitsu's contract has caused uncertainty among Trusts in the South and new deployments have stopped.

The Programme is not providing value for money at present because there have been few successful deployments of the Millennium system and none of Lorenzo in any Acute Trust.

Despite our previous recommendation, **the estimate of £3.6 billion for the Programme's local costs remains unreliable.**

The Department hopes that the Programme will deliver benefits in the form of both financial savings and improvements in patient care and safety.

Little clinical functionality has been deployed to date, with the result that the expectations of clinical staff have not been met.

The Department has taken action to engage clinicians and other NHS staff but there remains some way to go in securing their support for the Programme.

Patients and doctors have understandable concerns about data security.

The Department does not have a full picture of data security across the NHS as Trusts and Strategic Health Authorities are required to report only the most serious incidents to the Department.

Confidentiality agreements that the Department made with CSC in respect of two reviews of the delivery arrangements for Lorenzo are unacceptable because they obstruct parliamentary scrutiny of the Department's expenditure.



House of Commons
Public Accounts Committee

The National Programme for IT in the NHS: Progress since 2006

Second Report of Session 2008–09

*Report, together with formal minutes, oral and
written evidence*

*Ordered by the House of Commons
to be printed 14 January 2009*

HC 153
[Incorporating HC 737-i, Session 2007–08]
Published on 27 January 2009
by authority of the House of Commons
London: The Stationery Office Limited
£0.00

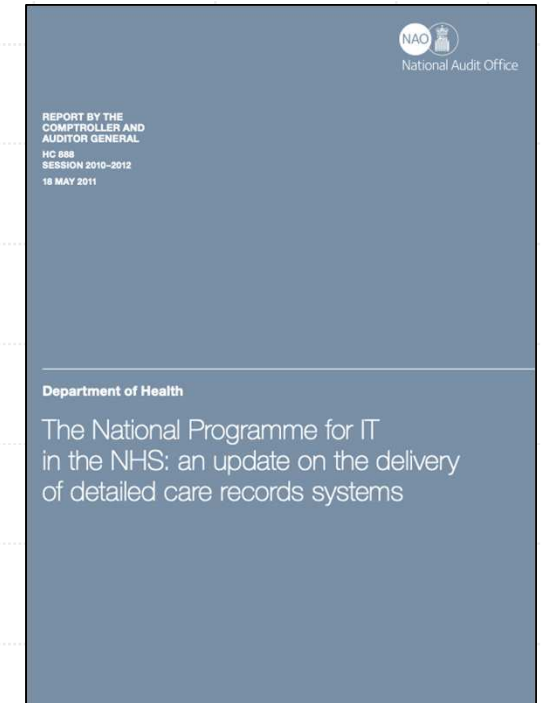
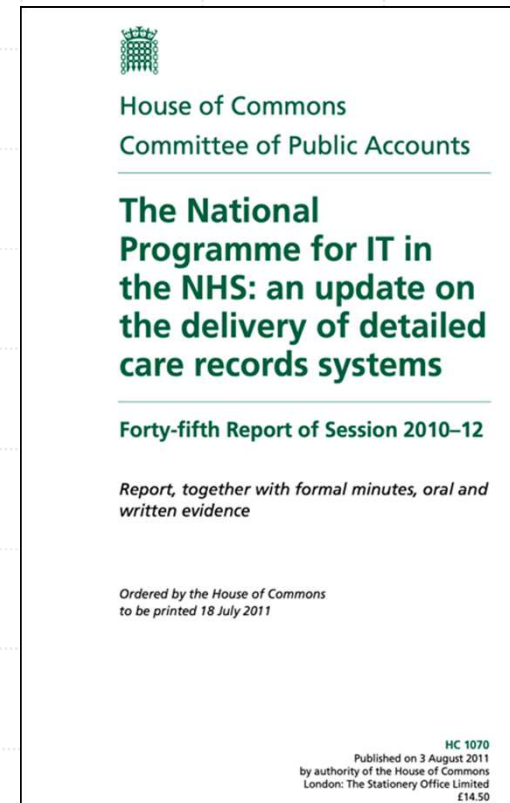
7th February 2009

- Richard Granger leaves Connecting for Health
- He is replaced by Christine Connelly



Summer 2011

- NAO & PAC reports
- Christine Connelly leaves the post Granger era, and Katie Davies starts
- NPfIT – after struggling – is finally put to rest



21st May 2012

A “ten year framework” for the Lansley era

Key elements of the strategy include:

- Information used to drive integrated care across the entire health and social care sector, both within and between organisations
- A commitment that, by 2015, anyone in England will be able to access their GP health record online as well as book appointments with their GP or request repeat prescriptions online
- A longer-term commitment that all health and care records held by hospitals and other service providers will be made securely available to patients, enabling them to become much more involved and in control of their own healthcare
- There will be clear national standards in place to ensure that locally developed IT systems can “talk” to each other and exchange information effectively and securely



The power of information:

Putting all of us in control of the health and care information we need

15th July 2013

Launched in 2002, the National Programme was designed to reform the way that the NHS in England uses information. While some parts of the National Programme were delivered successfully, other important elements encountered significant difficulties. In particular, there were delays in developing and deploying the detailed care records systems.

The public purse is continuing to pay the price for failures by the Department and its contractors.

Recommendation: The Department must manage the re-set contract with CSC robustly, so that its negotiating position is protected for the future.

The full cost of the National Programme is still not certain. The Department's most recent statement reported a total forecast cost of £9.8 billion. **Recommendation:** Given the scale of the sums involved, the Department should report to Parliament details of all the additional costs of the National Programme, including legal costs, as soon as they are known.

The benefits to date from the National Programme are extremely disappointing. The Department's benefits statement reported estimated benefits to March 2012 of £3.7 billion, just half of the costs incurred to this point. **Recommendation:** The Department should set out how it will support local trusts to secure benefits, and should track and report benefits achieved in the coming period.

It is important that Parliament is updated about what has been delivered for the billions of pounds that have been invested in the National Programme. **Recommendation:** The Department should provide the Committee with an annual update of the costs and benefits of the programmes previously managed under the National Programme.

After the sorry history of the National Programme, we are sceptical that the Department can deliver its vision of a paperless NHS by 2018. We have reported previously on the shortcomings of the National Programme, which included poor negotiating capability, resulting in deals which were poor value for money and weak programme management and oversight. **Recommendation:** If the Department is to deliver a paperless NHS, it needs to draw on the lessons from the National Programme and develop a clear plan, including estimates of costs and benefits and a realistic timetable



House of Commons
Committee of Public Accounts

The dismantled National Programme for IT in the NHS

Nineteenth Report of Session 2013–14

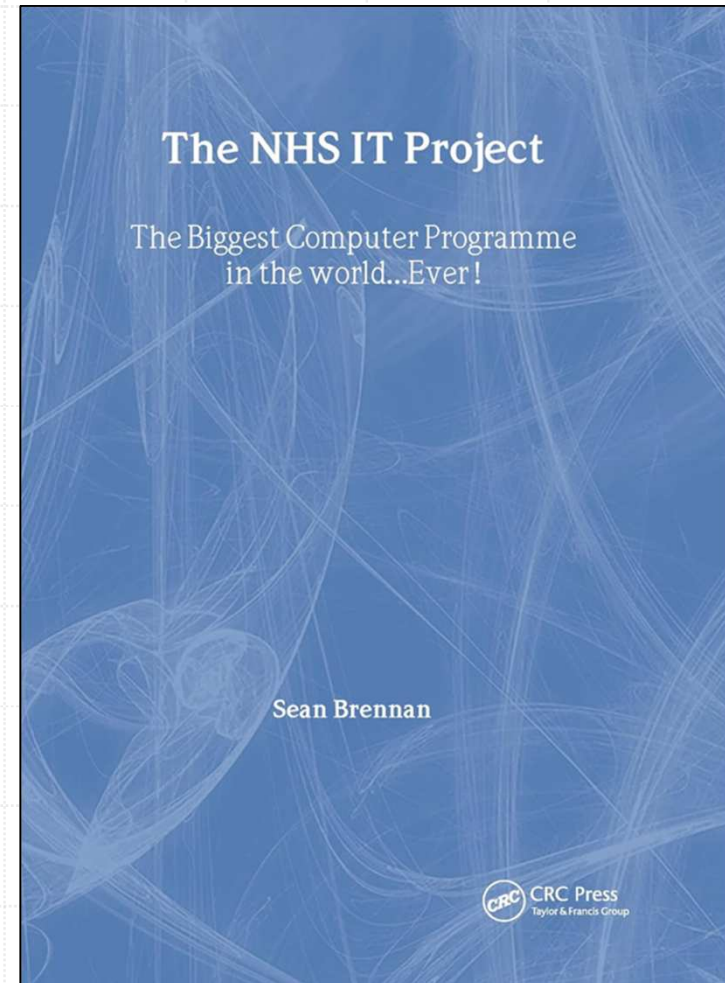
Report, together with formal minutes, oral and written evidence

*Ordered by the House of Commons
to be printed 15 July 2013*

HC 294
Published on 18 September 2013
by authority of the House of Commons
London: The Stationery Office Limited
£10.00

NPfIT history book

- NPfIT history by someone else who was there

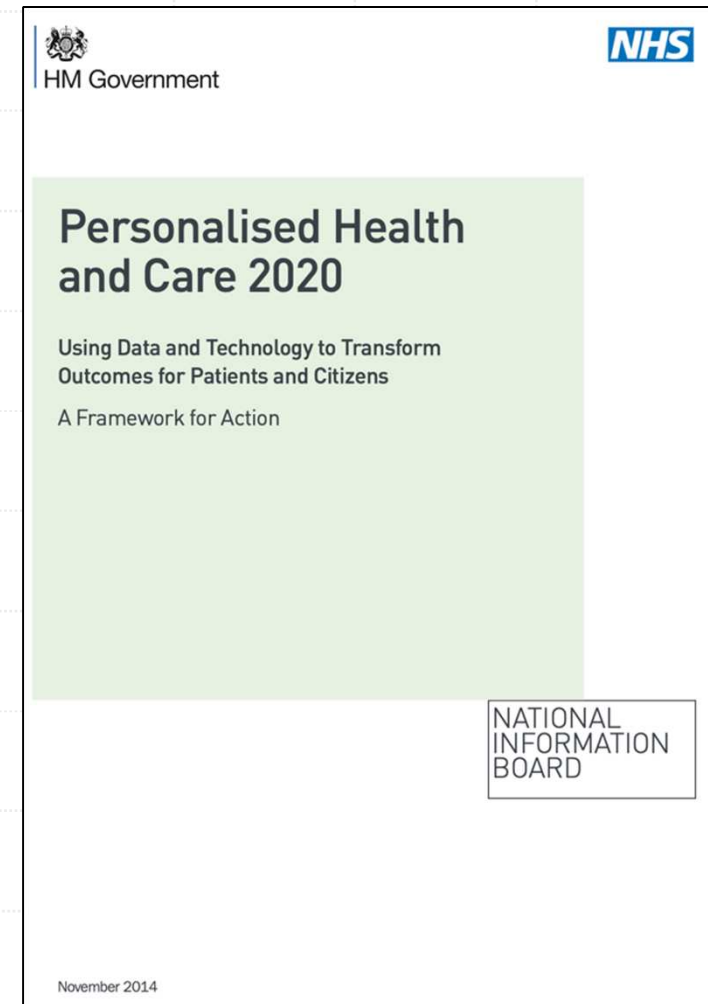


13th November 2014

The Kelsey era

"The opportunity is now."

There is now, in 2014, the opportunity to address these issues, establishing both new priorities for the short term and a radically new direction for the next decade. On 23 October health and care leaders in England published the Five Year Forward View, which set out a new direction for the health and care system. This new approach is based on central standards, with explicit and extensive permissions to unleash local energy and enterprise.



September 2016

Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England

Findings

1. Digitise for the correct reasons
2. It is better to get digitisation right than to do it quickly
3. 'Return on Investment' from digitisation is not just financial
4. When it comes to centralisation, the NHS should learn, but not over-learn, the lessons of NPfIT
5. Interoperability should be built in from the start
6. While privacy is very important, so too is data sharing
7. Health IT systems must embrace user-centered design
8. Going live with a health IT system is the beginning, not the end
9. A successful digital strategy must be multifaceted, and requires workforce development
10. Health IT entails both technical and adaptive change

Phases of Digitisation

Phase 1: Now-2019

Phase 2: 2020-2023

- Approved plan
- £ (shared central/local)
- Be part of local network
- Work on own progress
- Partner w/ Group A & B
- Support regional interoperability
- By 2023, be digitally mature

Phase 3: Not ready to digitise (order of 10%)

201 202 203

Health and Care
Innovation
EXPO 2016

September 2016

Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England

Recommendations

1. Carry out a thoughtful long-term national engagement strategy
2. Appoint and give appropriate authority to a national CCIO
3. Develop a workforce of trained clinician-informaticists at the Trusts, and give them appropriate resources and authority
4. Strengthen and grow the CCIO field, others trained in clinical care and informatics, and health IT professionals more generally
5. Allocate the new national funding to help Trusts go digital and achieve maximum benefit from digitisation
6. While some Trusts may need time to prepare to go digital, all Trusts should be largely digitised by 2023
7. Link national funding to a viable local implementation/improvement plan
8. Organise local/regional learning networks to support implementation and improvement

Phases of Digitisation

Phase 1: Now-2019



Group C: Not ready to digitise

Order of

201 202 203

Phase 2: 2020-2023

- Approved plan
- £ (shared central/local)
- Be part of local network
- Work on own progress
- Partner w/ Group A & B
- Support regional interoperability
- By 2023, be digitally mature



27th September 2017

- NHS IT Strategy
- The placemat

Better Health, Better Care, Lower Cost				
Empower People	Enable Clinicians	Integrate the Health and Care System	Better Management Information	Build the Future
NHS.UK	Global Digital Exemplars and Fast Followers	Regional Interoperability Hubs	Single Source of Truth	Life Sciences and Research Platform
Apps Library	Digital Academy and Workforce Education	Urgent and Emergency Care	Frictionless Performance Management	Genomics and Precision Medicine
Developers' Ecosystem	GPSoC refresh	Elective Care	Population Health Dashboard	Machine Learning and AI
WiFi and Home Page	Extended Summary Care Record	Mental Health	Analytics Capability	Bioinformatics Institute
NHS Online	e-Prescribing	Women and Children	SUS for Transactions	
	Decision Support	Chronic/Co-morbid disease		
	Integrated Care Plans	Social Care		
← Foundational Infrastructure Projects →				
Patient Identity				
Information Governance and Transparency				
Interoperability and Enterprise Architecture				
Personal Health Record and APIs for Apps				
APIs / Standards				

2017 – The Target Architecture

Unpublished but coherent

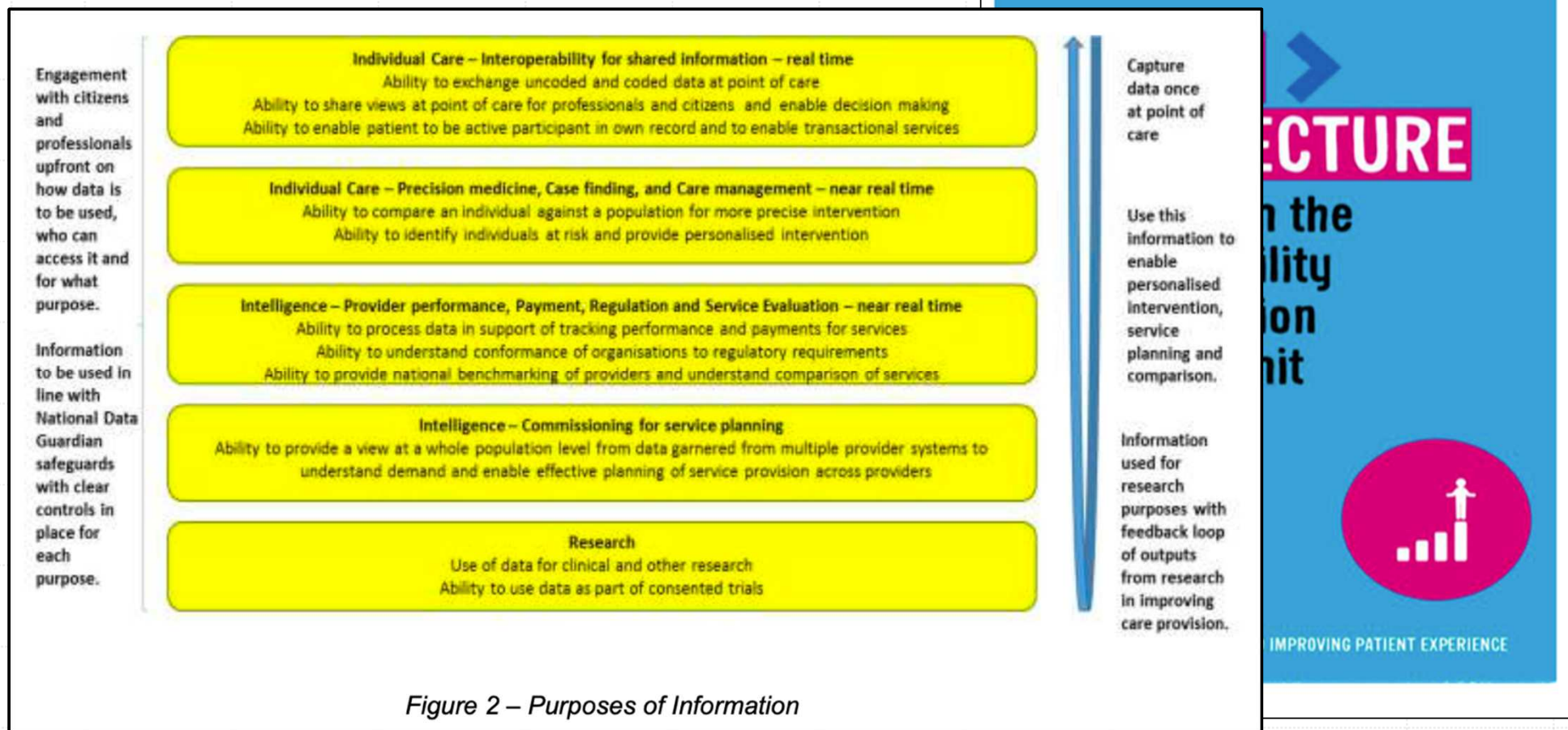


Figure 2 – Purposes of Information

September 2018

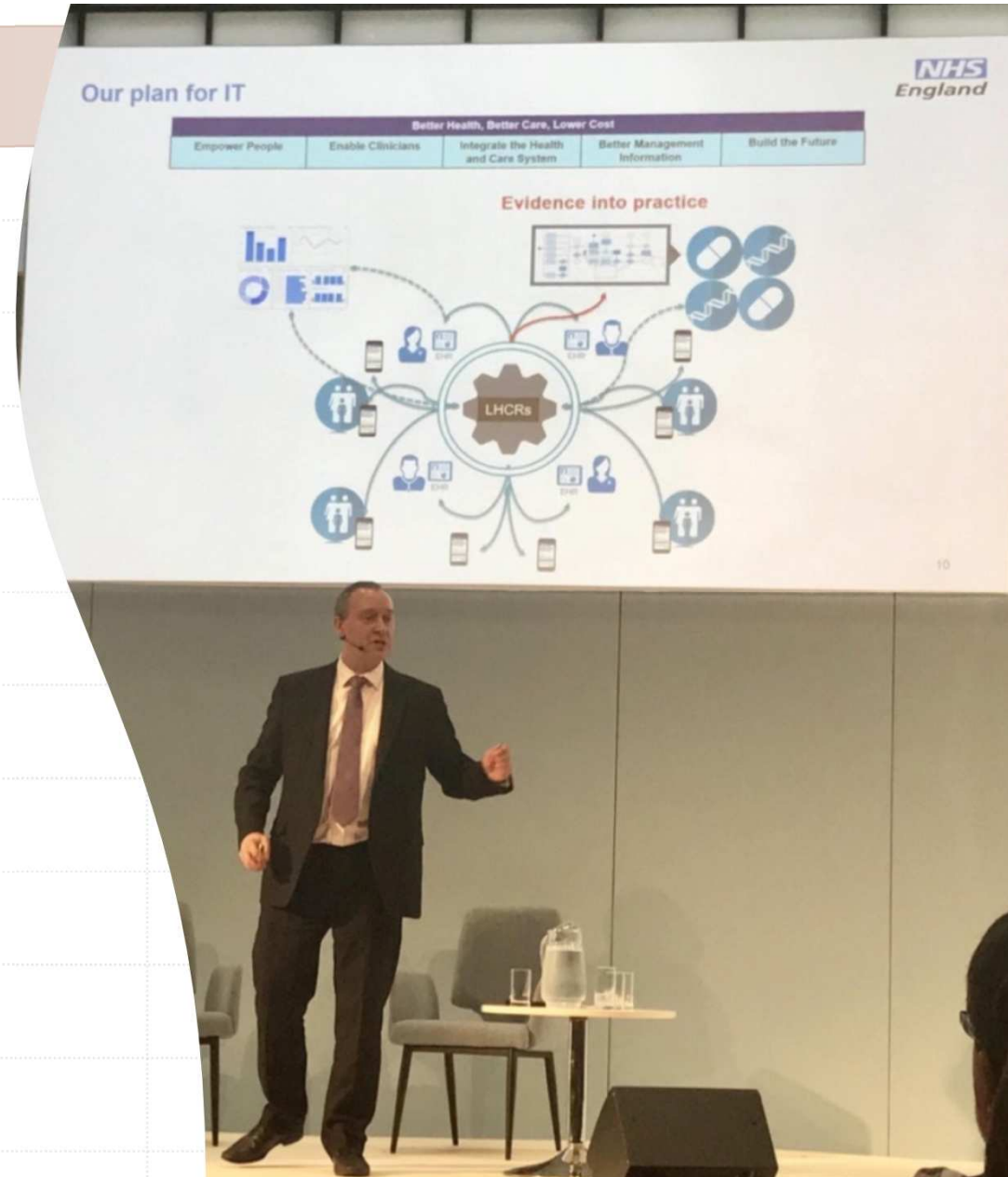
We will publish robust standards **in the coming weeks** that IT systems must meet if they're going to be bought by anyone in the NHS. No system will be allowed to be bought that does not meet these standards. Existing systems will have to be upgraded to meet them. The standards will be simple, setting out the APIs that allow for the right people to interrogate other systems for data. They'll set out the standards of permissions required, and the privacy and cyber security requirements. The standards will be open, so that anyone can see them, and anyone writing code for use in the NHS knows what the standards are before they start.

At the core of interoperability in the health and care system is the patient record. And by an electronic patient record I don't mean an application or a particular company's software. I mean the record – the data.



September 2018

- Matthew Swindells “Plan for IT”
- Local Health and Care Records – a precursor of the SPR – were at the heart of his vision.



17th October 2018

The “Tech Vision”

Guiding Principles

- user need
- privacy and security
- interoperability and openness
- Inclusion

Architectural principles

1. Put our tools in modern browsers
2. Internet first
3. Public cloud first
4. Build a data layer with registers and APIs
5. Adopt the best cyber security standards
6. Separate the layers of our patient record stack: hosting, data, digital services

SPR RFI Page 4


- “We expect that all responses to the RFI will adhere to [NHS architectural standards](#).”

The image shows two overlapping screenshots of NHS websites. The top screenshot is from the GOV.UK website, displaying a policy paper titled 'The future of healthcare: our vision for digital, data and technology in health and care' published on 17 October 2018. It includes an introduction and a table of contents. The bottom screenshot is from the NHS England website, showing the 'NHS architecture principles' page, which states that these principles represent best practice in designing digital architecture for health and social care services in England, published on 22 October 2020.



19th February 2019

- NHSX set up – joint DHSC/NHSE unit
- Matthew Gould comes in as Director General
- July 2019 – Matthew Swindells leaves NHSE
- September 2019 – Will Smart leaves
- Another example of “regime change” and a loss of corporate memory

TopicsGovernment activity


[Home](#) > [Health and social care](#) > [Research and innovation in health and social care](#)

News story

NHSX: new joint organisation for digital, data and technology

The unit will take forward digital transformation in the NHS, allowing patients and staff to benefit from the latest digital systems and technology.

From: [Department of Health and Social Care](#)
Published 19 February 2019



A new joint unit, NHSX, will be created to bring the benefits of modern technology to every patient and clinician. It will combine the best talent from government, the NHS and industry.

NHSX will aim to create the most advanced health and care service in the world to diagnose diseases earlier, free up staff time and empower patients to take greater control of their own healthcare.

Currently, much NHS technology relies on systems designed for a pre-internet age. Patients are not getting the care they need because their data does not follow them round the system.

Change has been slow because responsibility for digital, data and tech has been split across multiple agencies, teams and organisations. NHSX will change this by bringing together all the levers of policy, implementation and change for the first time.

Related content

[The future of healthcare: our vision for digital, data and technology in health and care](#)

[Defence Cyber Protection Partnership: communications materials](#)

[Regulatory Article \(RA\) 1601: remotely piloted air systems open A1 sub-category \(fly 'over' people\)](#)

[VAT: zero rating e-publications](#)

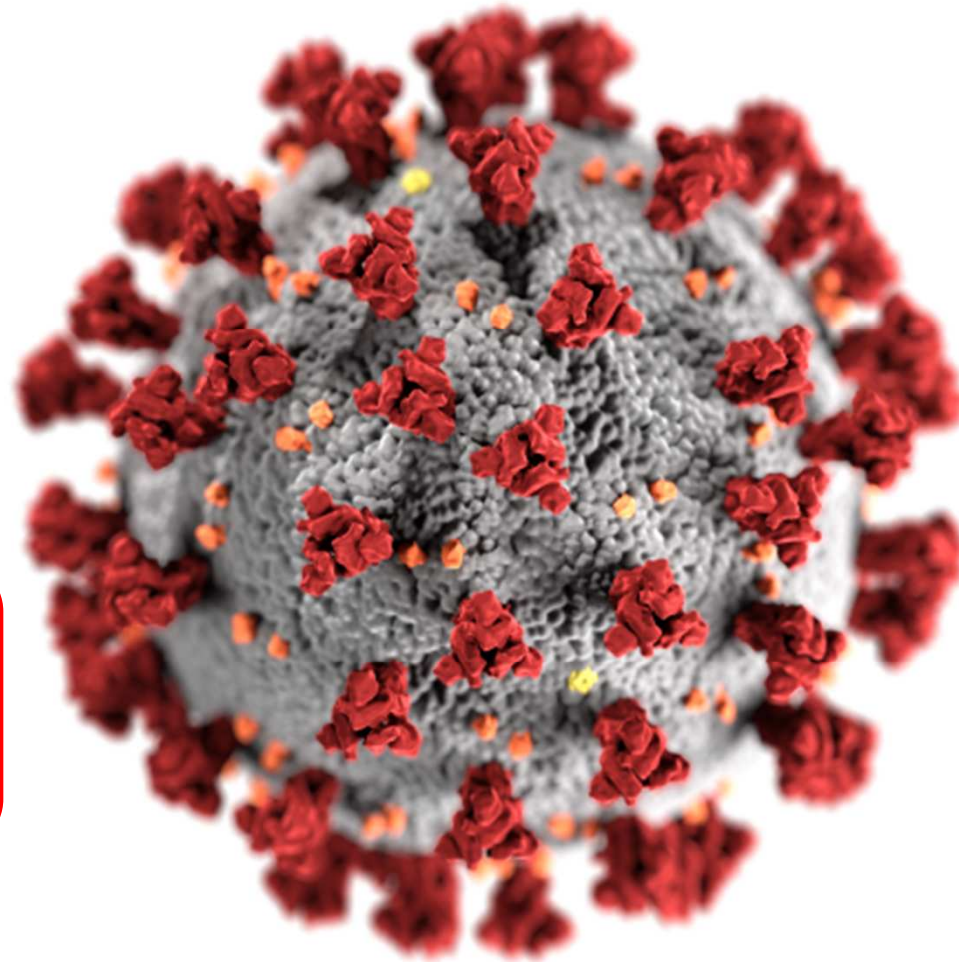
[Supplier Cyber Protection Service](#)

23rd March 2020

WHAT

Accelerated adoption of technology – remote consultation, remote monitoring, vaccination programmes etc

Deployment at pace of the existing national patient record – the Summary Care Record with Additional Information



WHAT DID WE LEARN

Laser-like focus on a few critical objectives

Empowering local systems to take decisions

System-wide collaboration through a shared, common purpose

A national patient record – who knew ?

Core **Summary Care Record**

- current medication
- allergies and details of previous reactions to medicines
- name address, DoB and NHS No of the patient

With **Additional Information**

- significant medical history (past and present)
- reason for medication
- anticipatory care information (such as information about the management of long term conditions)
- end of life care information
- immunisations

Timeline of the Summary Care Record

When	What
2002–2004 – Concept	NPfIT launched; aim to create national electronic patient summary.
2007 – Pilot Sites	First SCR in Bolton and Bury; limited content (medications, allergies).
2008–2010 Rollout and Debate	National rollout begins; public concern about privacy and consent.
2011 – Programme Changes	NPfIT dismantled; SCR transferred to HSCIC, then NHS Digital.
2013–2015 – Broader Access	Out-of-hours and pharmacy access; 50M+ records live.
2016–2019 – Enhanced SCR (SCRa)	Added medical history, preferences; wider access for clinicians.
2020–2021 – COVID-19 Expansion	Emergency wider access; content temporarily expanded.
2022–Present – Transition Era	Shift to regional Shared Care Records under ICSs.

w/c 30th March 2020

Patients with SCR Additional Information (SCR AI)

Week Commencing
30 March 2020

Region
All

STP
All

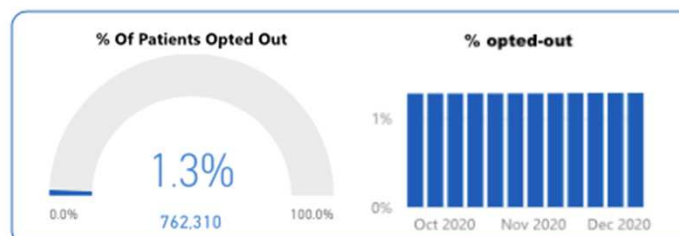
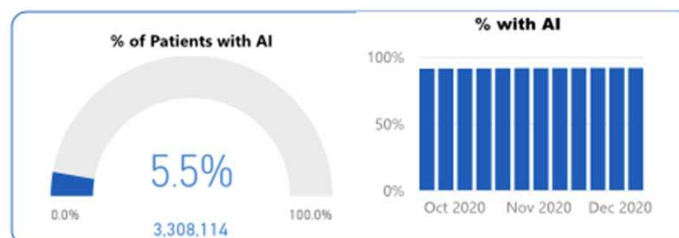
CCG
All

Practice Name
All

Clear filters

Practice CCG STP

ODS Code	Practice Name	GMS Patient Count	AI Count	% with AI	Opt-out Count	% Opt-out	Week Commencing
A81001	THE DENSHAM SURGERY	4,122	159	3.9%	101	2.5%	30 March 2020
A81002	QUEENS PARK MEDICAL CENTRE	19,219	139	0.7%	223	1.2%	30 March 2020
A81004	BLUEBELL MEDICAL CENTRE	11,017	278	2.5%	121	1.1%	30 March 2020
A81005	SPRINGWOOD SURGERY	8,149	56	0.7%	19	0.2%	30 March 2020
A81006	TENNANT STREET MEDICAL PRACTICE	14,750	177	1.2%	123	0.8%	30 March 2020
A81007	BANKHOUSE SURGERY	9,892	82	0.8%	98	1.0%	30 March 2020
A81009	VILLAGE MEDICAL CENTRE	8,441	84	1.0%	57	0.7%	30 March 2020
A81011	CHADWICK PRACTICE	11,815	171	1.4%	45	0.4%	30 March 2020
A81012	WESTBOURNE MEDICAL CENTRE	5,023	59	1.2%	40	0.8%	30 March 2020
A81013	BROTTON SURGERY	6,809	158	2.3%	61	0.9%	30 March 2020
A81014	QUEENSTREE PRACTICE	3,879	1,263	32.6%	74	1.9%	30 March 2020
A81016	PARK SURGERY	10,518	668	6.4%	121	1.2%	30 March 2020
Total		60,076,429	3,308,114	5.5%	762,310	1.3%	



Percentage of patients with Additional Information at STP level - Latest Week O...

Measure Range new ● 5. 80-100%



w/c 7th December 2020

Week Commencing
07 December 2020

Region
All

STP
All

CCG
All

Practice Name
All

Clear filters

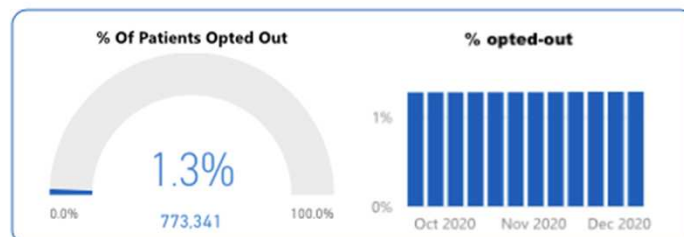
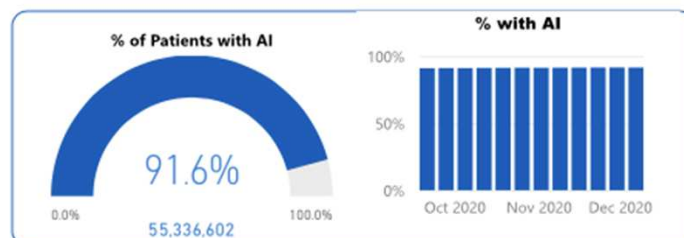
Practice

CCG

STP

ODS Code	Practice Name	GMS Patient Count	AI Count	% with AI	Opt-out Count	% Opt-out	Week Commencing
A81001	THE DENSHAM SURGERY	4,087	3,463	84.7%	96	2.3%	07 December 2020
A81002	QUEENS PARK MEDICAL CENTRE	18,976	14,814	78.1%	227	1.2%	07 December 2020
A81004	BLUEBELL MEDICAL CENTRE	11,002	10,715	97.4%	124	1.1%	07 December 2020
A81005	SPRINGWOOD SURGERY	8,173	7,878	96.4%	18	0.2%	07 December 2020
A81006	TENNANT STREET MEDICAL PRACTICE	14,661	14,203	96.9%	128	0.9%	07 December 2020
A81007	BANKHOUSE SURGERY	9,920	9,719	98.0%	96	1.0%	07 December 2020
A81009	VILLAGE MEDICAL CENTRE	8,344	8,069	96.7%	57	0.7%	07 December 2020
A81011	CHADWICK PRACTICE	11,799	11,551	97.9%	48	0.4%	07 December 2020
A81012	WESTBOURNE MEDICAL CENTRE	5,072	4,934	97.3%	42	0.8%	07 December 2020
A81013	BROTTON SURGERY	6,892	6,688	97.0%	69	1.0%	07 December 2020
A81014	QUEENSTREE PRACTICE	3,942	3,787	96.1%	72	1.8%	07 December 2020
A81016	PARK SURGERY	10,461	9,469	90.5%	122	1.2%	07 December 2020
Total		60,407,934	55,336,602	91.6%	773,341	1.3%	

Patients with SCR Additional Information (SCR AI)



NHS
Digital

Percentage of patients with Additional Information at STP level - Latest Week O...

Measure Range new ● 5. 80-100%



22nd June 2021

“Data Saves Lives” draft

“Before we publish the final version of the strategy later this year, including a more detailed implementation plan, we want to hear your views”

13 June 2022 – final version



Department
of Health &
Social Care

Policy paper

Data saves lives: reshaping health and social care with data

Updated 15 June 2022

Applies to England

Contents

- Ministerial foreword
- NHS England Transformation Director foreword
- 1. Improving trust in the health and care system's use of data
- 2. Giving health and care professionals the information they need to provide the best possible care
- 3. Improving data for adult social care
- 4. Supporting local and national decision-makers with data
- 5. Empowering researchers with the data they need to develop life-changing treatments, diagnostics, models of care and insights
- 6. Working with partners to develop innovations that improve health and care
- 7. Developing the right

Ministerial foreword

The use of NHS data was at the forefront of this country's fight against coronavirus (COVID-19), helping us to remove restrictions and return on the path to normal life.

Now that we are living with COVID-19, we must keep this momentum going, and apply it to the long-term challenges ahead of us, including tackling the COVID backlog and making the reforms that are vital to the future of health and care.

Earlier this year, I made a [speech setting out my 4 priorities for reform in health](#):

1. Prevention.
2. Personalisation.
3. Performance.
4. People.

We cannot deliver the change that we need to see – and our 10-year plans for [cancer](#), [dementia](#) and [mental health](#) – unless we embrace the digital revolution and the opportunities that data-driven technologies provide.

There is so much more to do if we are to make the NHS and social care more data driven, and reassure people that their data will be handled safely and ethically.

This strategy shows how we will use data to bring benefits to all parts of health and

31st August 2021



NHS Search

About us Key tools and info COVID-19 response News archive Blog archive Contact us

Home > Digitise, connect, transform > What Good Looks Like

NHS England - Transformation Directorate

Contents

- [The challenge](#)
- [What is the WGLL framework?](#)
- [How we're supporting you](#)
- [What does good look like for Integrated Care Systems?](#)
- [What does good look like for your organisation?](#)

What Good Looks Like framework

First published 31 August 2021
Updated 4 October 2021 – [see updates](#)

The challenge

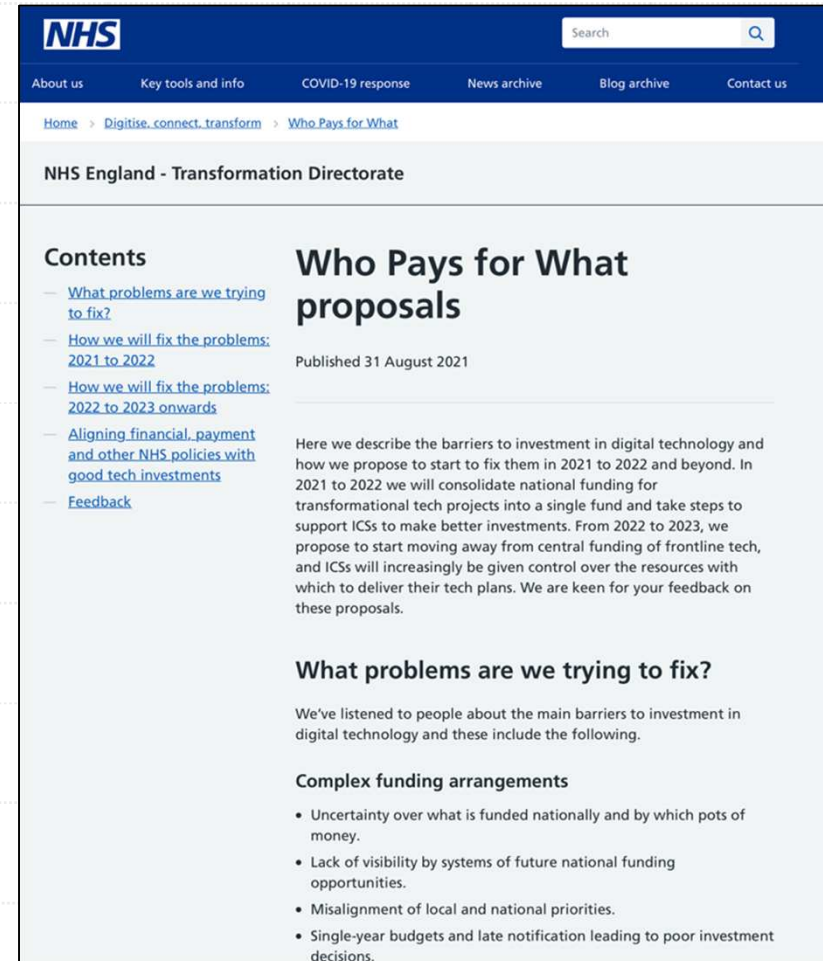
The pandemic enabled us to achieve a level of digital transformation that might have otherwise taken several years. As we move into the recovery period, it is critical that we build on the progress we've made and ensure that all health and care providers have a strong foundation in digital practice.

Local leaders have long understood the need for system-wide planning and delivery, to provide personalised care and support for those who need it, and to help everyone live healthy lives.

The What Good Looks Like (WGLL) programme draws on local learning. It builds on established good practice to provide clear guidance for health and care leaders to digitise, connect and transform services safely and securely. This will improve the outcomes, experience and safety of our citizens.

31st August 2021

- Set up Unified Tech Fund – for 21/22
- Proposed national / local split of responsibilities on funding



The screenshot shows the NHS website's 'Who Pays for What proposals' page. The page has a blue header with the NHS logo and a search bar. Below the header is a navigation bar with links: 'About us', 'Key tools and info', 'COVID-19 response', 'News archive', 'Blog archive', and 'Contact us'. The main content area has a breadcrumb trail: 'Home > Digitise, connect, transform > Who Pays for What'. The page title is 'Who Pays for What proposals', published on 31 August 2021. The page content includes a 'Contents' section with links to 'What problems are we trying to fix?', 'How we will fix the problems: 2021 to 2022', 'How we will fix the problems: 2022 to 2023 onwards', 'Aligning financial, payment and other NHS policies with good tech investments', and 'Feedback'. The main text describes the barriers to investment in digital technology and the proposal to consolidate national funding for transformational tech projects into a single fund. It also includes a section titled 'What problems are we trying to fix?' which lists four key issues: uncertainty over funding, lack of visibility by systems, misalignment of priorities, and single-year budgets leading to poor investment decisions.

NHS

Search

About us Key tools and info COVID-19 response News archive Blog archive Contact us

Home > Digitise, connect, transform > Who Pays for What

NHS England - Transformation Directorate

Who Pays for What proposals

Published 31 August 2021

Here we describe the barriers to investment in digital technology and how we propose to start to fix them in 2021 to 2022 and beyond. In 2021 to 2022 we will consolidate national funding for transformational tech projects into a single fund and take steps to support ICs to make better investments. From 2022 to 2023, we propose to start moving away from central funding of frontline tech, and ICs will increasingly be given control over the resources with which to deliver their tech plans. We are keen for your feedback on these proposals.

What problems are we trying to fix?

We've listened to people about the main barriers to investment in digital technology and these include the following.

Complex funding arrangements

- Uncertainty over what is funded nationally and by which pots of money.
- Lack of visibility by systems of future national funding opportunities.
- Misalignment of local and national priorities.
- Single-year budgets and late notification leading to poor investment decisions.

23rd November 2021

Wade-Geary review

- Fold NHSX, NHS Digital and Improvement all back into NHS England



The screenshot shows the GOV.UK website for an independent report. The header includes the GOV.UK logo, navigation links for 'Topics' and 'Government activity', and a search icon. The breadcrumb trail reads: Home > Health and social care > National Health Service > Putting data, digital and tech at the heart of transforming the NHS. The Department of Health & Social Care logo is displayed. The main heading is 'Independent report Putting data, digital and tech at the heart of transforming the NHS', published on 23 November 2021. A grey bar indicates 'Applies to England'. A 'Contents' sidebar lists sections: Purpose and scope of the review (highlighted), The current position, Mindset: a patient and citizen centred approach, Operating model: a joined-up centre driving digital and data transformation, Organisational consequences, Enablers for change, Implementation and next steps, and Concluding remarks. A 'Print this page' button is at the bottom of the sidebar. The main content area is titled 'Purpose and scope of the review' and contains two paragraphs of text.

GOV.UK

Topics Government activity

Home > Health and social care > National Health Service > Putting data, digital and tech at the heart of transforming the NHS

Department of Health & Social Care

Independent report

Putting data, digital and tech at the heart of transforming the NHS

Published 23 November 2021

Applies to England

Contents

- Purpose and scope of the review
- The current position
- Mindset: a patient and citizen centred approach
- Operating model: a joined-up centre driving digital and data transformation
- Organisational consequences
- Enablers for change
- Implementation and next steps
- Concluding remarks

Print this page

Purpose and scope of the review

Digital technology is transforming every industry including healthcare. Digital and data have been used to redesign services, raising citizen expectations about self-service, personalisation, and convenience, and increasing workforce productivity. The pandemic has accelerated the shift to online and changed patient expectations and clinical willingness to adopt new ways of working. In addition, it facilitated new collaborations both in the centre of the NHS and wider local health and care systems. Together, these changes have enabled previously unimaginable progress in digitally enabled care pathways.

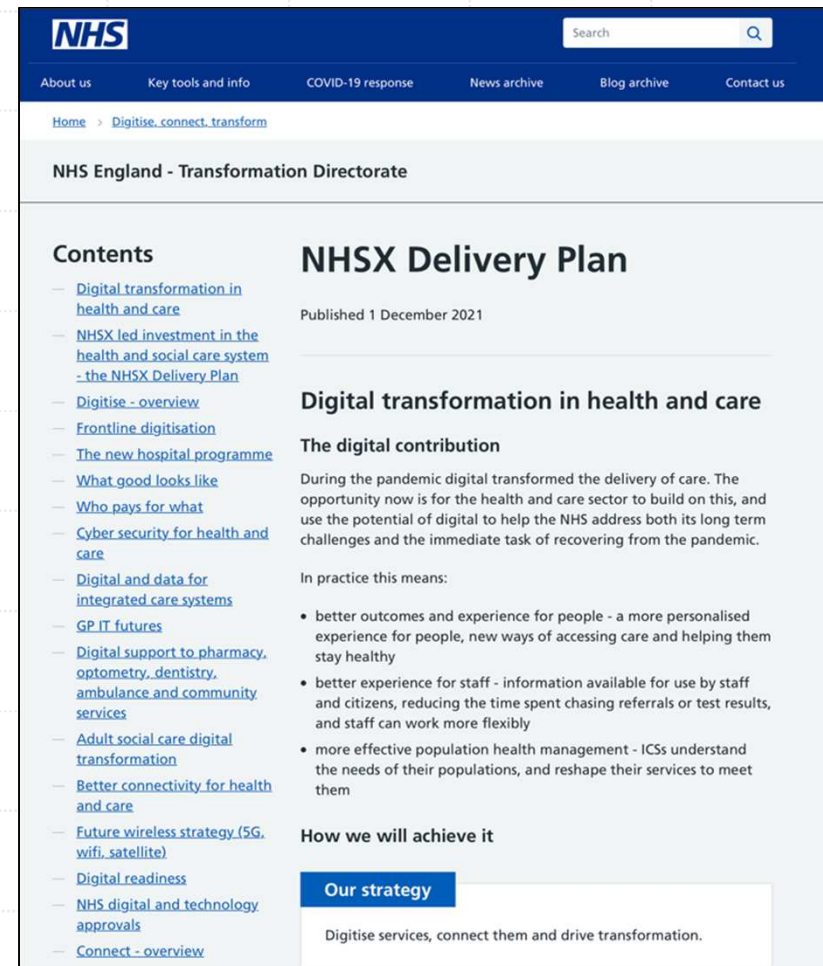
The goal of this review is to build on this progress and ensure the national NHS (defined as NHS England and NHS Improvement (NHSEI), NHSX (X) and NHS Digital (D)) can lead the transformation of the wider healthcare system, supporting integrated care systems (ICSSs) to deliver better citizen health. This is not about centralisation – it's about empowering the centre to have the mindset, operating model, skills, capabilities and processes to provide the right leadership and support to ICSSs, so that together the NHS delivers improved citizen and patient outcomes.

The scope is deliberately focused, based on the hypothesis that having the right capabilities and set up at NHSEI, X and D is a necessary, albeit not sufficient condition, for the task of transforming the NHS. Both a highly functioning national and local leadership of ICSSs are required – in essence 2 sides of the same coin.

1st December 2021

NHSX Delivery Plan

- “Digitise, Connect and Transform”



The screenshot shows the NHSX Delivery Plan webpage. The header features the NHS logo, a search bar, and navigation links: About us, Key tools and info, COVID-19 response, News archive, Blog archive, and Contact us. Below the header, a breadcrumb trail reads 'Home > Digitise, connect, transform'. The main heading is 'NHS England - Transformation Directorate'. The page is divided into two columns. The left column, titled 'Contents', lists 17 links with blue minus icons: Digital transformation in health and care, NHSX led investment in the health and social care system - the NHSX Delivery Plan, Digitise - overview, Frontline digitisation, The new hospital programme, What good looks like, Who pays for what, Cyber security for health and care, Digital and data for integrated care systems, GP IT futures, Digital support to pharmacy, optometry, dentistry, ambulance and community services, Adult social care digital transformation, Better connectivity for health and care, Future wireless strategy (5G, wifi, satellite), Digital readiness, NHS digital and technology approvals, and Connect - overview. The right column is titled 'NHSX Delivery Plan' and includes the publication date 'Published 1 December 2021'. It contains a section 'Digital transformation in health and care' with a sub-section 'The digital contribution'. This section explains that during the pandemic, digital transformed the delivery of care, and now the opportunity is to build on this to address long-term challenges and recover from the pandemic. It lists three points: better outcomes and experience for people, better experience for staff, and more effective population health management. Below this is a section 'How we will achieve it' with a sub-section 'Our strategy' which states: 'Digitise services, connect them and drive transformation.'

NHS Search

About us Key tools and info COVID-19 response News archive Blog archive Contact us

Home > Digitise, connect, transform

NHS England - Transformation Directorate

Contents

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- [Digitise - overview](#)
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- [The new hospital programme](#)
- [What good looks like](#)
- [Who pays for what](#)
- [Cyber security for health and care](#)
- [Digital and data for integrated care systems](#)
- [GP IT futures](#)
- [Digital support to pharmacy, optometry, dentistry, ambulance and community services](#)
- [Adult social care digital transformation](#)
- [Better connectivity for health and care](#)
- [Future wireless strategy \(5G, wifi, satellite\)](#)
- [Digital readiness](#)
- [NHS digital and technology approvals](#)
- [Connect - overview](#)

NHSX Delivery Plan

Published 1 December 2021

Digital transformation in health and care

The digital contribution

During the pandemic digital transformed the delivery of care. The opportunity now is for the health and care sector to build on this, and use the potential of digital to help the NHS address both its long term challenges and the immediate task of recovering from the pandemic.

In practice this means:

- better outcomes and experience for people - a more personalised experience for people, new ways of accessing care and helping them stay healthy
- better experience for staff - information available for use by staff and citizens, reducing the time spent chasing referrals or test results, and staff can work more flexibly
- more effective population health management - ICSs understand the needs of their populations, and reshape their services to meet them

How we will achieve it

Our strategy

Digitise services, connect them and drive transformation.

11th February 2022

Joining Up Care

- Recognition of the need to embrace a wider community than just the NHS

The screenshot shows the GOV.UK website for a policy paper. The header includes the GOV.UK logo, a menu icon, and a search icon. The breadcrumb trail reads: Home > Health and social care > Social care > Health and social care integration > Health and social care integration: joining up care for people, places and populations. Below the breadcrumb is the Department of Health & Social Care logo. The main title is 'Policy paper Health and social care integration: joining up care for people, places and populations', updated 11 February 2022. A section titled 'Applies to England' is present. The 'Contents' section lists: Foreword: Rt Hon Sajid Javid, Health Secretary and Rt Hon Michael Gove, Secretary of State for Levelling Up, Housing and Communities; Executive summary; 1. Introduction: delivering more integrated services for the 21st century; 2. Shared outcomes; 3. Leadership, accountability and finance; 4. Digital and data; 5. The health and care workforce and carers; 6. Conclusion: impact on people and next steps. A 'Print this page' button is at the bottom left. The 'Foreword' section by Rt Hon Sajid Javid and Rt Hon Michael Gove states: 'The storms we have weathered over the past 2 years have been a great test, but also a great teacher. We have learned, most notably from our world-leading vaccination programme, that we are stronger when we work together and are united in our purpose and resolve. We have also seen the moral outrage of persistent health disparities, mirroring other disparities in our society, illuminated as never before in our lifetimes. We have been reminded, once more, of the inextricable link between health services and social care. So, as we recover and level up, it is right that we draw on our experience of the pandemic to bridge the gaps between health and social care, between health outcomes in different places and within society that are holding us back.'

GOV.UK

Home > Health and social care > Social care > Health and social care integration > Health and social care integration: joining up care for people, places and populations

Department of Health & Social Care

Policy paper
Health and social care integration: joining up care for people, places and populations
Updated 11 February 2022

Applies to England

Contents

Foreword: Rt Hon Sajid Javid, Health Secretary and Rt Hon Michael Gove, Secretary of State for Levelling Up, Housing and Communities

Executive summary

1. Introduction: delivering more integrated services for the 21st century
2. Shared outcomes
3. Leadership, accountability and finance
4. Digital and data
5. The health and care workforce and carers
6. Conclusion: impact on people and next steps

Print this page

Foreword: Rt Hon Sajid Javid, Health Secretary and Rt Hon Michael Gove, Secretary of State for Levelling Up, Housing and Communities

The storms we have weathered over the past 2 years have been a great test, but also a great teacher.

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So, as we recover and level up, it is right that we draw on our experience of the pandemic to bridge the gaps between health and social care, between health outcomes in different places and within society that are holding us back.

14th February 2022

Convergence

- The concept of convergence emerges from Tim Ferris, NHSE Director of Transformation
- Many interpreted his vision of convergence as being based around aggregation of hospital based EPRs

Dear Regional Director,

We are writing in relation to the Long Term Plan commitment for all NHS secondary care providers to meet a core level of digitisation by March 2025, reiterated in the operational planning guidance for 2022/23, given the patient safety and quality imperative of electronic patient records (EPRs) to support the recovery and sustainability of the NHS and care.

Regional support

Our primary focus is to achieve universal EPR coverage across all ICSs (i.e. to level up EPR provision). We are also encouraging ICSs to work towards the managed convergence of EPRs over time, to reduce the number of EPRs across acute care, community services, mental health, ambulance services, primary care, and social care. The primary benefits and drivers are to provide critical, realtime access to all health related information for caregivers. It will also enable more simplified access for patients to their own data.

We will need your assistance with this initiative. We will require you:

- Regional leadership to ensure that every ICS has a plan, and to broker necessary discussions across partner ICSs and providers, to ensure coverage and convergence of EPRs;
- Strategic and clinical engagement to ensure clinical and operational readiness within each ICS;
- Financial support to help ICSs and providers find affordable EPR financing solutions as part of their business case
- Dedicated coordination and support from the Regional Directors of Digital Transformation / Regional CIOs (who have already been briefed) working to the system CIO, Sonia Patel, to support this important agenda.

EPR roadmap by ICS

As an early step, to provide a qualified view of what can be achieved, we need to get a firm understanding of the current position for each ICS. This includes:

- The plans, and associated costs and constraints, that each ICS has to meet the core level of digitisation for NHS secondary care providers,
- and the strategy for the convergence of EPR provision within the ICS, demonstrating how the plans above support this strategy.

We would like your help with this and would be grateful if you could oversee the collection of this data for your region. Attached is a data submission form that the region is asked to complete with each ICS. The data needs to be submitted on our online platform by 5pm on 25 February 2022. Please follow the link below to complete the submission per ICS:

<https://forms.gle/bTwEwLYkMMX4SMQQ8>

Please note, we will look to reuse this information to support the local three year Digital Investment Plan process that will start shortly, so as to reduce the burden on ICSs.

Support offer

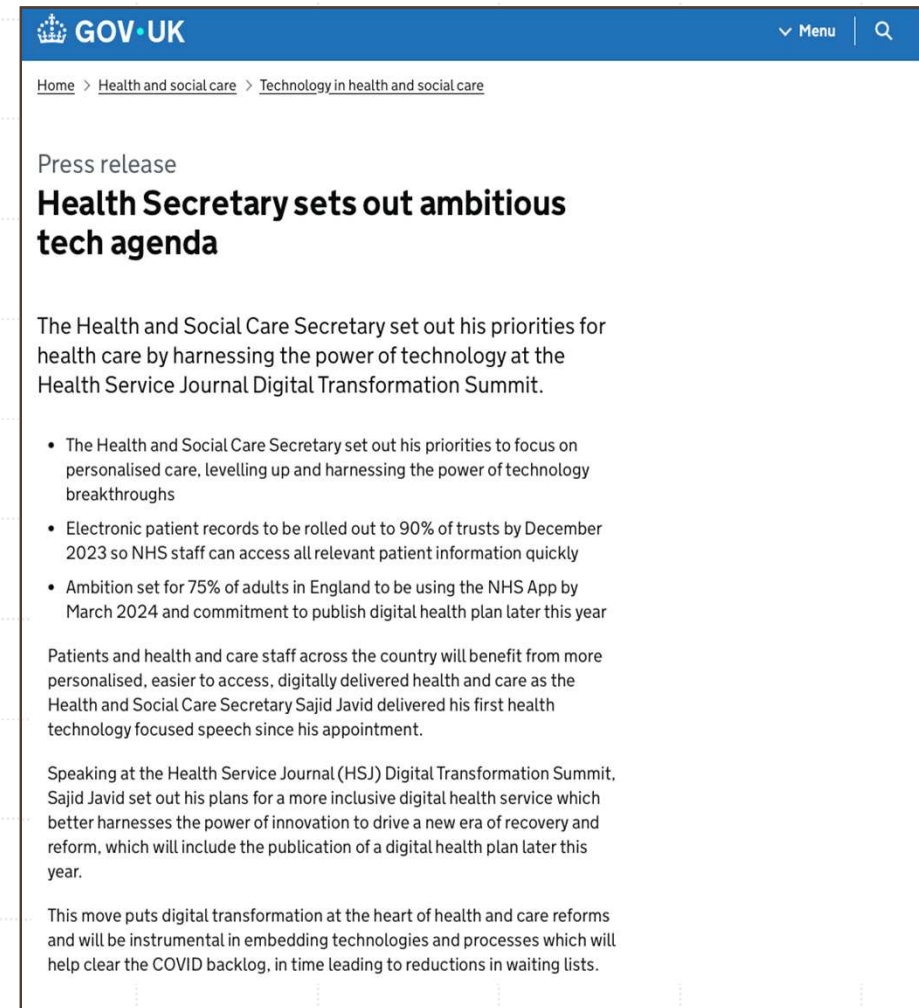
The NHS Transformation Directorate and NHS Digital will be providing increased support for systems and providers to plan and implement. Specifically we are agreeing a revised business case template and process to expedite investment approval; we are agreeing a set of core requirements for an EPR and discussing these with EPR vendors in order to expedite implementation timeframes and secure better value for money; and we are providing advice, guidance and implementation support to accelerate and de-risk all parts of the process. This will include a strong focus on sharing and learning best practice from organisations that have already been on this journey. We will use the ICS returns collected through this exercise to further refine our central support offer to ensure the support we provide is well aligned with local needs.

We'd like to thank you in advance for your support in this matter, and in working to the tight timeframes required to complete this essential exercise. If there are any questions please email frontline.digitisation@nhs.net.

24th February 2022

Sajid Javid

- Electronic patient records to be rolled out to 90% of trusts by December 2023 so NHS staff can access all relevant patient information quickly
- Ambition set for 75% of adults in England to be using the NHS App by March 2024 and commitment to publish digital health plan later this year



The screenshot shows a GOV.UK press release page. The header is blue with the GOV.UK logo and a search icon. The breadcrumb trail reads: Home > Health and social care > Technology in health and social care. The main heading is 'Press release' followed by 'Health Secretary sets out ambitious tech agenda'. The text states that the Health and Social Care Secretary set out his priorities for health care by harnessing the power of technology at the Health Service Journal Digital Transformation Summit. A bulleted list highlights three key priorities: 1) The Health and Social Care Secretary set out his priorities to focus on personalised care, levelling up and harnessing the power of technology breakthroughs; 2) Electronic patient records to be rolled out to 90% of trusts by December 2023 so NHS staff can access all relevant patient information quickly; 3) Ambition set for 75% of adults in England to be using the NHS App by March 2024 and commitment to publish digital health plan later this year. The text continues to state that patients and health and care staff across the country will benefit from more personalised, easier to access, digitally delivered health and care as the Health and Social Care Secretary Sajid Javid delivered his first health technology focused speech since his appointment. It also mentions that speaking at the Health Service Journal (HSJ) Digital Transformation Summit, Sajid Javid set out his plans for a more inclusive digital health service which better harnesses the power of innovation to drive a new era of recovery and reform, which will include the publication of a digital health plan later this year. Finally, it states that this move puts digital transformation at the heart of health and care reforms and will be instrumental in embedding technologies and processes which will help clear the COVID backlog, in time leading to reductions in waiting lists.

GOV.UK

Home > Health and social care > Technology in health and social care

Press release

Health Secretary sets out ambitious tech agenda

The Health and Social Care Secretary set out his priorities for health care by harnessing the power of technology at the Health Service Journal Digital Transformation Summit.

- The Health and Social Care Secretary set out his priorities to focus on personalised care, levelling up and harnessing the power of technology breakthroughs
- Electronic patient records to be rolled out to 90% of trusts by December 2023 so NHS staff can access all relevant patient information quickly
- Ambition set for 75% of adults in England to be using the NHS App by March 2024 and commitment to publish digital health plan later this year

Patients and health and care staff across the country will benefit from more personalised, easier to access, digitally delivered health and care as the Health and Social Care Secretary Sajid Javid delivered his first health technology focused speech since his appointment.

Speaking at the Health Service Journal (HSJ) Digital Transformation Summit, Sajid Javid set out his plans for a more inclusive digital health service which better harnesses the power of innovation to drive a new era of recovery and reform, which will include the publication of a digital health plan later this year.

This move puts digital transformation at the heart of health and care reforms and will be instrumental in embedding technologies and processes which will help clear the COVID backlog, in time leading to reductions in waiting lists.

7th April 2022

The Goldacre Review

- 112 pages and 161 recommendations
- A more decentralized approach leaving data where it is and taking the application to the data

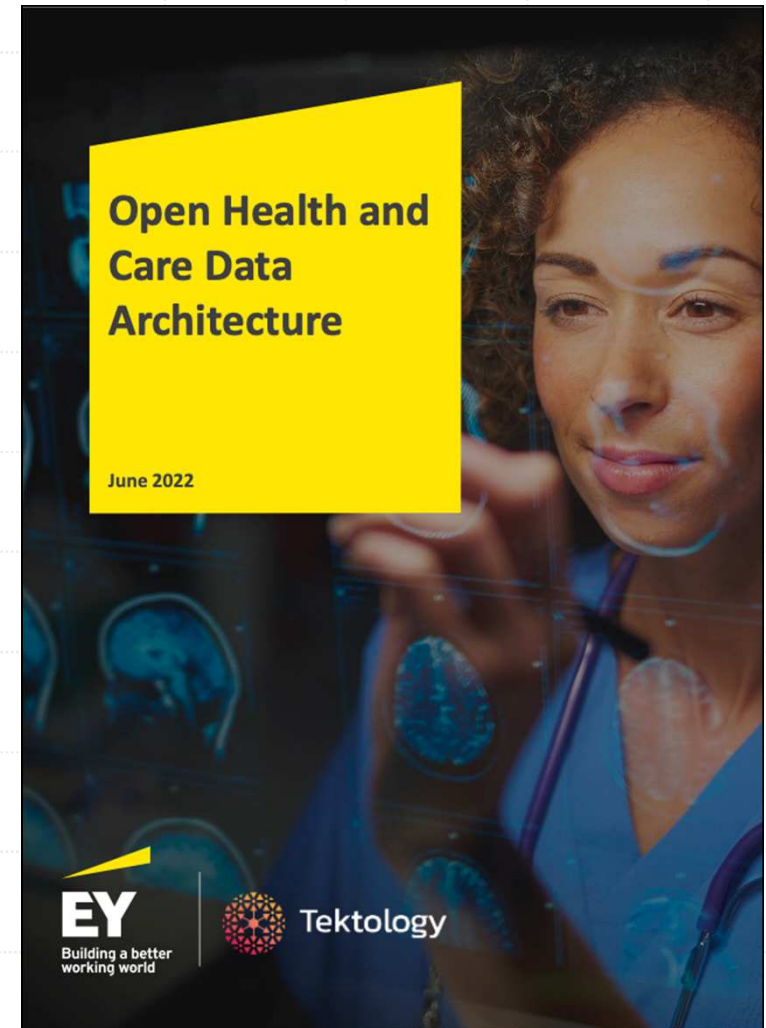


June 2022

Another chapter in the continual development of architecture for NHS England.

Advocated adoption of open standards and the separation of data from application.

This was actually very good, but remained unpublished.



15th June 2022

Sajid Javid

- Electronic patient records to be rolled out to 90% of trusts by December 2023 so NHS staff can access all relevant patient information quickly
- Ambition set for 75% of adults in England to be using the NHS App by March 2024 and commitment to publish digital health plan later this year


The screenshot shows the GOV.UK website interface. At the top, the GOV.UK logo is on the left, and a 'Menu' button and search icon are on the right. Below the header, a breadcrumb trail reads: 'Home > Health and social care > Technology in health and social care > Data saves lives: reshaping health and social care with data'. The main content area features the Department of Health & Social Care logo on the left. The central focus is a blue banner with the text 'Policy paper' in small white font, followed by the title 'Data saves lives: reshaping health and social care with data' in large white font, and 'Updated 15 June 2022' in smaller white font. Below the banner, a light grey box states 'Applies to England'. To the left of the main text, a 'Contents' section lists: 'Ministerial foreword', 'NHS England Transformation Director foreword', and a numbered list: '1. Improving trust in the health and care system's use of data' and '2. Giving health and care professionals the information they need to provide the best possible care'. To the right of the contents, the 'Ministerial foreword' section begins with the text: 'The use of NHS data was at the forefront of this country's fight against coronavirus (COVID-19), helping us to remove restrictions and return on the path to normal life.' It continues with: 'Now that we are living with COVID-19, we must keep this momentum going, and apply it to the long-term challenges ahead of us, including tackling the COVID backlog and making the reforms that are vital to the future of health and care.' The final line reads: 'Earlier this year, I made a [speech setting out my 4 priorities for reform in health:](#)

29th June 2022

A plan for digital health and social care

“When all the people involved in meeting a person’s health and social care needs – including that person, their family and unpaid carers – can see what each of them has done and is doing, in real time, they can co-ordinate as one team to meet that person’s needs and preferences.”

“Our expectation is that, by March 2025, all clinical teams in an ICS will have appropriate and secure access to a complete view of a person’s health record, including their medications and key aspects of their history. Non-clinical staff in social care settings will also be able to safely access appropriate information and input data into digital records in real time”

 **Department of Health & Social Care**

NHS England

Policy paper

A plan for digital health and social care

Published 29 June 2022

Applies to England

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[Foreword by Sajid Javid, Secretary of State for Health and Social Care](#)

[Foreword by Dr Timothy Ferris, National Director of Transformation](#)

[Summary](#)

[Our starting point](#)

[Section 1: embedding digital technologies](#)

[Section 2: our vision for a digital future](#)

[Appendix A: our action plan for delivering a digital future](#)

[Appendix B: national digital channels roadmap \(NHS App and website\)](#)

[Print this page](#)

Foreword by Sajid Javid, Secretary of State for Health and Social Care

We are now embarking on a transformative programme of reforms that will make sure the NHS is set up to meet the challenges of 2048, not of 1948, when it was first established, and also to make the vital changes that are so urgently required in social care.

The long-term sustainability of health and social care is dependent on having the right digital foundations in place, and so digital transformation must be the linchpin upon which all of these reforms are based.

This landmark document shows how we will take forward the brilliant advances that we have made during the pandemic, along with our acquired learning from decades of attempts at digital transformation before COVID-19.

We’ve already made huge progress. Over 28 million people now have the NHS App in their pocket, over 40 million people have an NHS login, and most NHS trusts have an electronic patient record system in place. This is on top of unprecedented investment in the digitisation of adult social care, including £150 million of funding for digital adoption that we announced in our recent white paper.

This plan sets out that health and social care will be delivered in a fundamentally different way, taking forward what we have learned from the pandemic, and from tech pioneers across the world. The aim is something that we can all get behind: a health and social care system that will be much faster and more effective, and deliver more

Autumn 2022 – Project Emerald

- Emerald was the plan to interconnect all the existing shared care record platforms to create a single “virtual” patient record.
- It came to a grinding halt after the digital budget was cut to fund the NHS pay award settlement.

Project Emerald

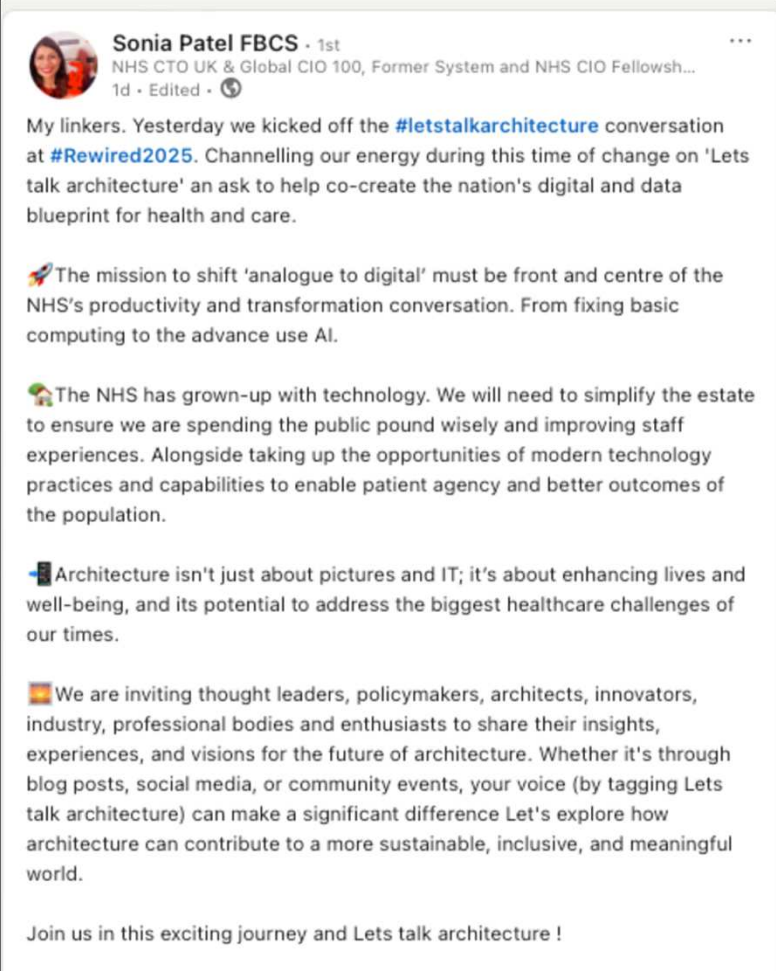
A narrative for inter-ShCR
interoperability

Version History

Version	History	Author	Date
0.1	First draft	ShCR Programme : Emerald Project Team	23/08/2022
0.2	Updated following meeting with CTO team and others	John Farenden	31/08/2022

March 2025 - #letstalkarchitecture

- Announced at Rewired conference in March 2025 it was a move towards encouraging dialogue.
- While a positive move it was unfortunate to coincide with the announcement of the abolition of NHS England and subsequent integration into the DHSC



Sonia Patel FBCS · 1st
NHS CTO UK & Global CIO 100, Former System and NHS CIO Fellowsh...
1d · Edited · 🌐

My linkers. Yesterday we kicked off the [#letstalkarchitecture](#) conversation at [#Rewired2025](#). Channelling our energy during this time of change on 'Lets talk architecture' an ask to help co-create the nation's digital and data blueprint for health and care.

🚀 The mission to shift 'analogue to digital' must be front and centre of the NHS's productivity and transformation conversation. From fixing basic computing to the advance use AI.

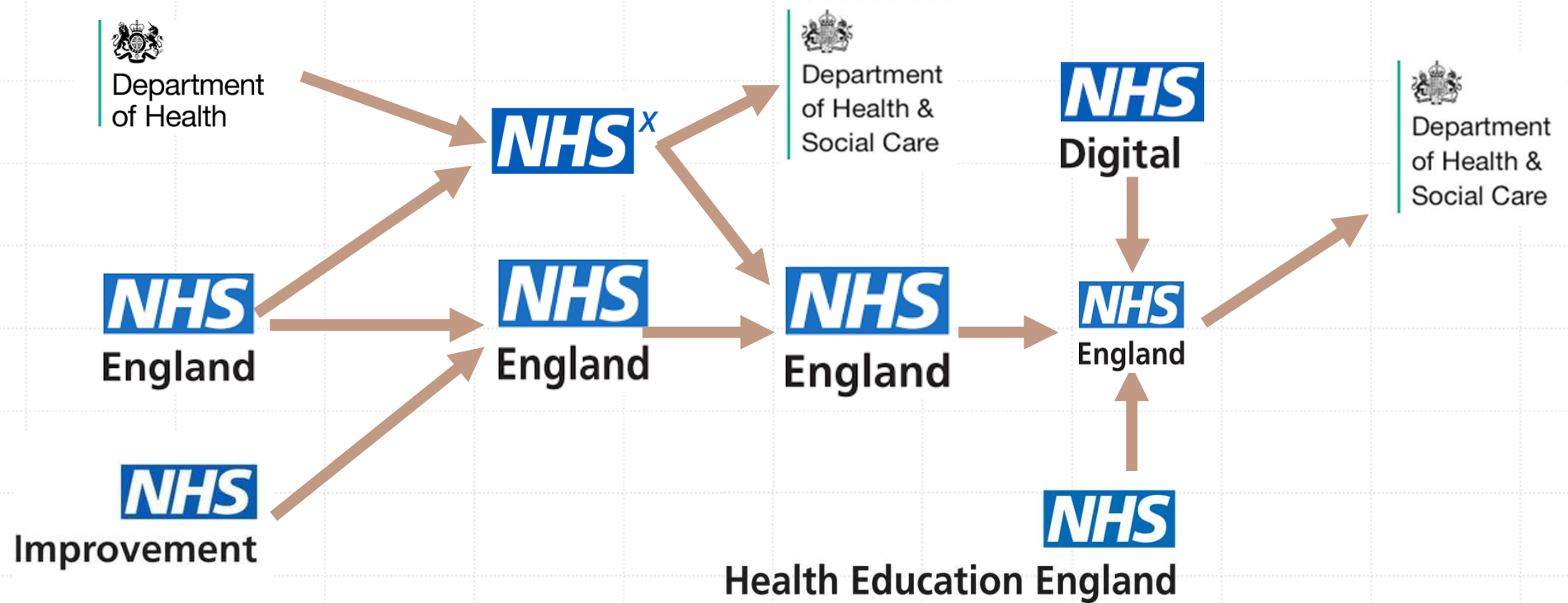
🏡 The NHS has grown-up with technology. We will need to simplify the estate to ensure we are spending the public pound wisely and improving staff experiences. Alongside taking up the opportunities of modern technology practices and capabilities to enable patient agency and better outcomes of the population.

🏢 Architecture isn't just about pictures and IT; it's about enhancing lives and well-being, and its potential to address the biggest healthcare challenges of our times.

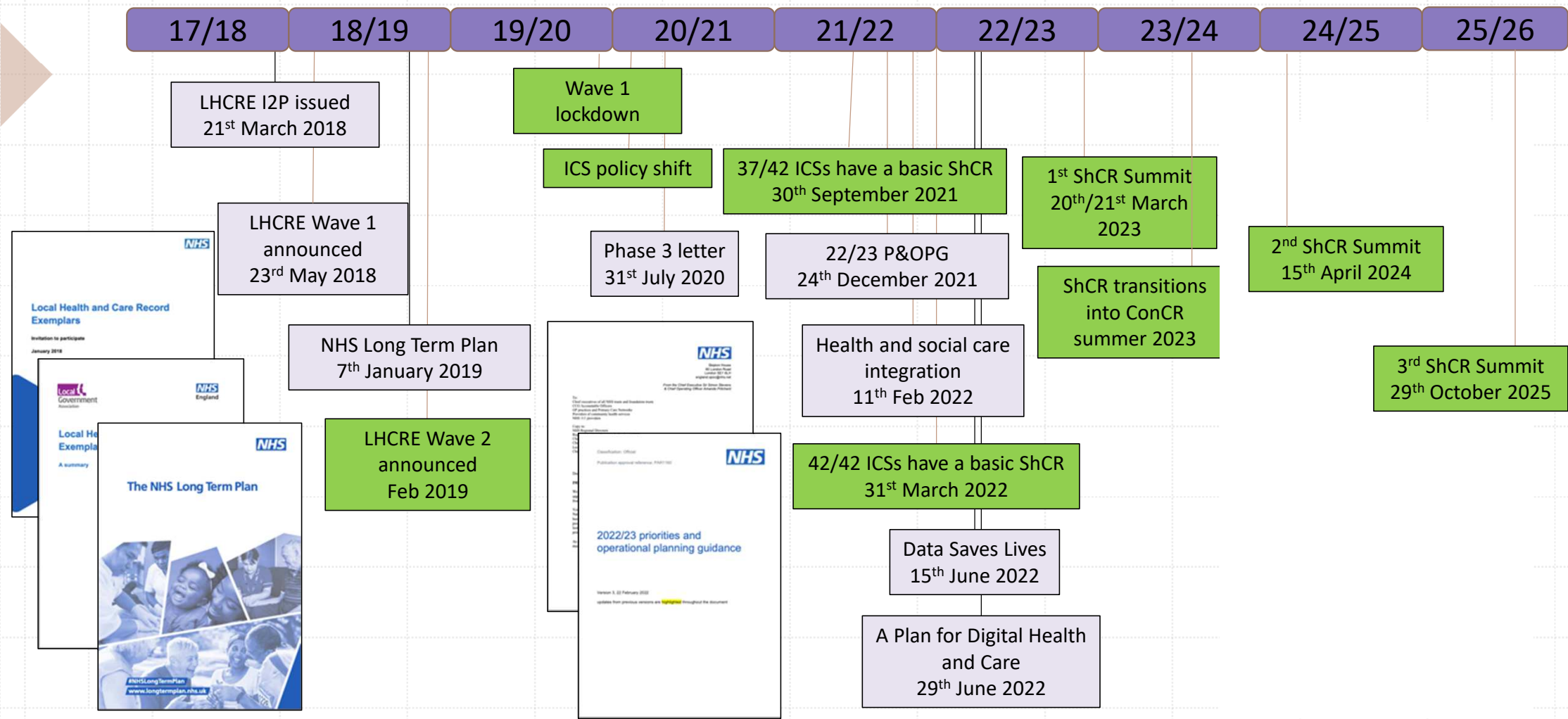
🇮🇳 We are inviting thought leaders, policymakers, architects, innovators, industry, professional bodies and enthusiasts to share their insights, experiences, and visions for the future of architecture. Whether it's through blog posts, social media, or community events, your voice (by tagging Lets talk architecture) can make a significant difference Let's explore how architecture can contribute to a more sustainable, inclusive, and meaningful world.

Join us in this exciting journey and Lets talk architecture !

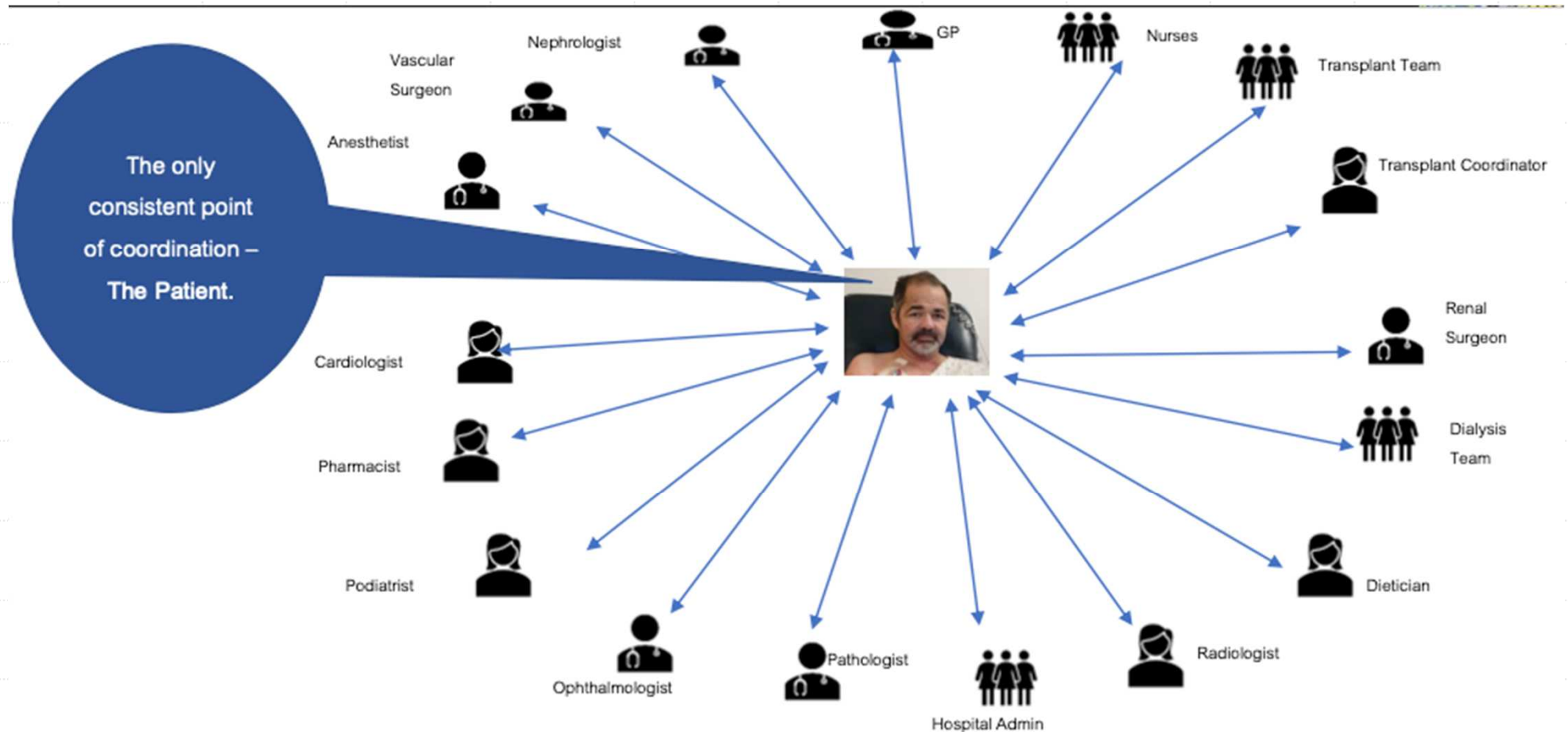
Continual national reorganisation



Timeline of the LHCRE-ShCR journey



The patient perspective – “Lost in the maze”



<https://youtu.be/2GCZ7VHDWxs>

The Single Citizen Record in Catalunya



Journey to a single citizen record Jordi Piera Jiménez



<https://youtu.be/JCJTCFa0e98?t=15710>

Evolution of Connecting Care Records

Progression of shared records and coverage across England, with continued improvements in content, connections, compliance with standards and uniformity.

LHCR 2018-2020

Local Health Care Records across 7 exemplar regions

MVS1



ShCR 2020-2023

42 ICB focused ShCRs

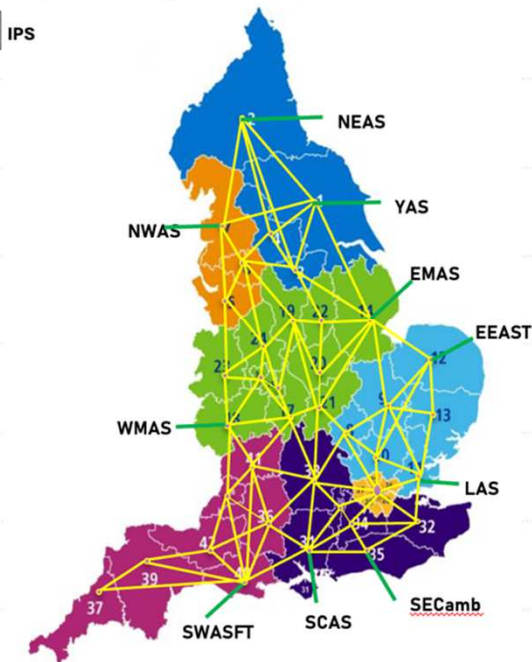
Digital Maturity (L2 Criteria)



ConCR 2023-2026

42 ShCRs connected nationally – enabling person-related information at the point of care regardless of the patient's location or care setting

IPS



Lancashire & South Cumbria

1,200 hospital admissions avoided.



NHS Mid and South Essex

£3.7m efficiencies each year.



Mid & South Essex

£3.6 million in annual efficiencies.



Great North Care Record

£18m in time-savings each year.



London Care Record

£4.6m of time-saving each month.



LLR ICB

£768K staff time freed per year.



Humber & North Yorkshire

£2.1 million saved in the first year.



Nottinghamshire social care staff

95 hours saved per worker annually.

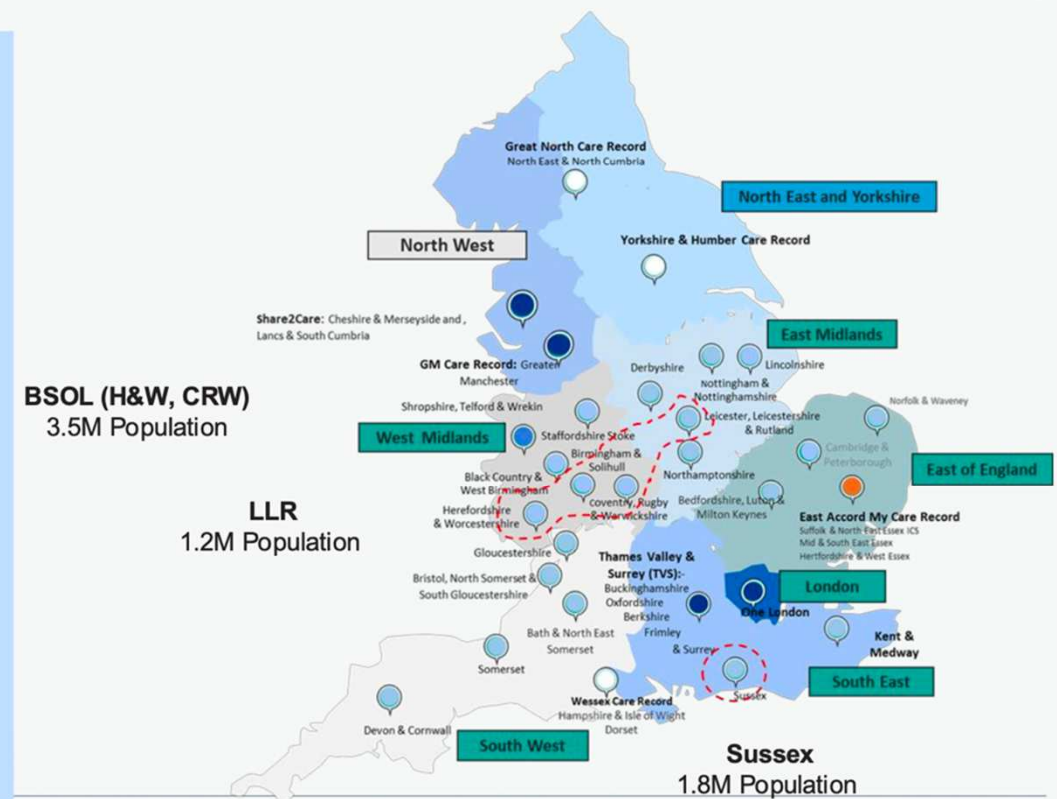


Integrating Shared Care Records

FoT Objective – A three month first of type MVS 1.0 **connecting three shared care records** via the **National Record Locator (NRL)** to support our agreed interoperability use case of **Urgent and Emergency Care (UEC)** across England so they are optimised for **national interoperability**

ConCR FOT

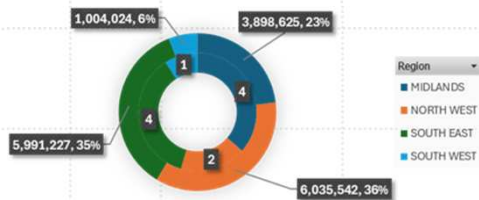
- 3 Shared Care Records (ShCR) connected via NRL (publishing):
 - Birmingham and Solihull (Intersystems)
 - Leicester, Leicestershire and Rutland (LLR) (Interweave)
 - Sussex (Plexus)
- Ambulance services already live (Consuming)
 - London Ambulance Services (LAS)
 - South West Ambulance Services Foundation Trust (SWASFT)
 - East of England Ambulance Service
 - North West Ambulance Service
 - South East Coast Service
- Patient Summary via NCRS as UI (PDF)



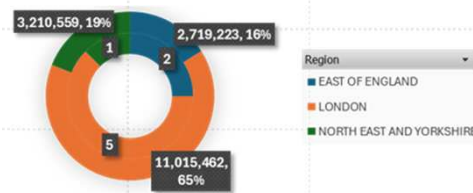
ConCR National Interoperability

Objective - By March 2026, **shared care records across all ICSs in England will be optimised for national interoperability** – Enabling authorised health and care professionals to securely access person-related information at the point of care regardless of the patient's location or care setting and resolves cross border care challenges.

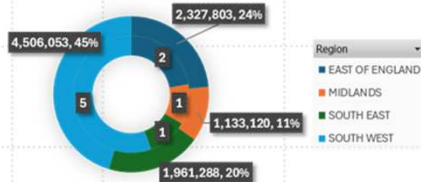
Graphnet, 11 ICSs, c16.9M population



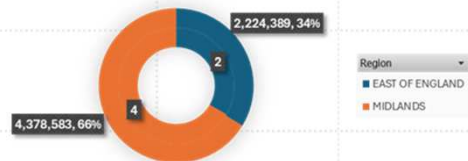
Oracle, 8 ICSs, c16.9M population



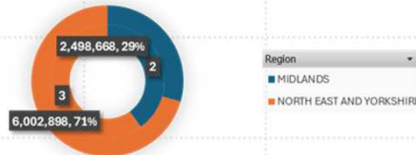
Orion, 9 ICSs, c9.9M population



Intersystems, 6 ICSs, c6.6M population



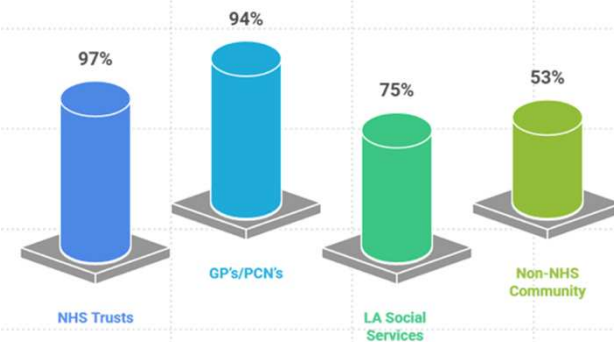
Interweave, 5 ICSs, c8.5M population



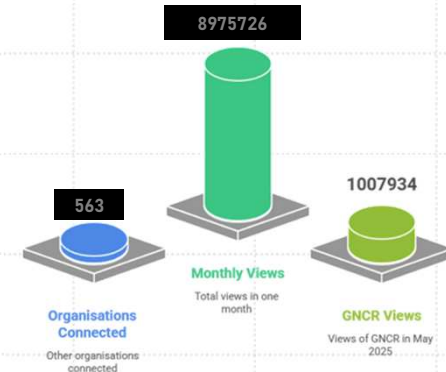
Other, 3 ICSs, c4.3M population



Connectivity Rates of Healthcare and Social Services



* **NHS Trusts** includes Acute, Community, MH, Specialist and Ambulance Trusts



* **Other organisations** include Hospices, NHS Trusts, Care Homes, Community Pharmacy, Independent sector, Community Services, Dentistry, Out of Hours GP, Local Authorities and other ShCRs

11th January 2024 – Alder Hey



21st October 2024

The Guardian UK

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NHS

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Advertisement

Wes Streeting unveils plans for 'patient passports' to hold all medical records

Health secretary launches consultation on government's move to transform NHS in England from 'analogue to digital'

Pippa Crerar and Denis Campbell
Mon 21 Oct 2024 00:01 BST

Share



Wes Streeting, the health secretary, plans to transform healthcare in England. Photograph: Thomas Krych/Zuma Press Wire/Rex/Shutterstock

Wes Streeting is to unveil plans for portable medical records giving every NHS patient all their information stored digitally in one place on Monday, despite fears over breaching privacy and creating a target for hackers.

The health secretary is launching a major consultation on the government's plans to transform the NHS from "analogue to digital" over the next decade. It will offer "patient passports" containing health data that can be swiftly accessed by GPs, hospitals and ambulance services.

New laws are also set to be introduced on Wednesday to make patient health records available across all NHS trusts in England. It will speed up patient care, reduce repeat medical tests and minimise medication errors, he said.

The digital data bill will standardise information systems across the NHS, making it possible to share electronic records across all parts of the service, and bringing them together in a single patient record on the NHS app.

The digital data bill will standardise information systems across the NHS making it possible to share electronic records across all parts of the service and bringing them together in a single patient record on the NHS app.

Dilbert knows...



July 2025



Fit for the Future - NHS Ten Year Plan

“We will reinvent the NHS through 3 radical shifts:

- hospital to community
- analogue to digital
- sickness to prevention”



June 2013 -The G20 Health Innovation Challenge

Towards a new era in health care

In order to overcome these issues and allow health to contribute to our economies health, we need to rethink our healthcare systems. To a large degree, we already know that achieving truly sustainable healthcare systems depends on several disruptive shifts in thinking:

- We need to invest more in preventive care and early preventive forms of treatment as they offer better health outcomes and return on investment than point-of-care treatment.
- There should be a better balance between care that takes place in patients' homes and community settings, rather than in institutions such as hospitals.
- We need to improve the diffusion of innovation through the healthcare system, rather than focus on new inventions alone.



(re)Birth of the Single Patient Record

Wes Streeting unveils plans for 'patient passports' to hold all medical records

Health secretary launches consultation on government's move to transform NHS in England from 'analogue to digital'

Secretary of State Announcement
Plan for a single patient record via the NHS App



Cohort 2 Public Deliberations and Inclusive Engagement
Capturing Initial views and expectations around a SPR

'30 Pager'
Describing what we mean by a single patient record and how we might deliver it

Strategic Programme Brief
Defining route forward and unlocking funding for 25/26

SPR Test & Learn Phase

- Discovery work
- Technical PoCs
- Early Use Cases



2024

2025

Lord Darzi's Report
Finding 'there must be a major tilt towards technology to unlock productivity'



Design workshops focussing on

- 1) nomenclature, ownership of the record, and comprehensiveness,
- 2) Functionality, benefits and technical aspects,
- 3) Drawing together cross-directorate colleagues

Clear commitments for a Single Patient Record forms part of the **10 Year Health Plan**



SPR - Testing and learning



Test & Learn

Test & Learn phase focuses on three core areas

Discovery (12 weeks)

understanding needs and feasibility

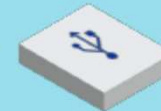
- Assess practicality, usability, benefits
- Sharing data regionally, enabling patient inputs and generating insights
- Exploring operational impacts
- Structured supplier engagement



Technical Proofs of Concept (PoC)

testing possible designs

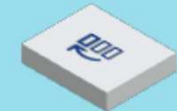
- Test 3 architectural options
- Evaluate performance, integration, scalability and interoperability with 4 suppliers



Early Use Cases

real-world examples to build evidence

- Focus on maternity care
- Following use cases to be explored include submitting blood pressure via the NHS App
- Build on existing aligned projects to refine and avoid duplication



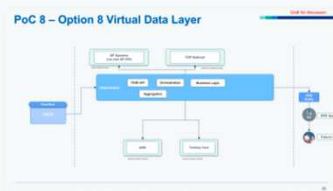
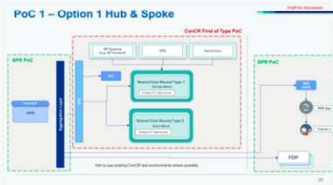
SPR technical PoCs

The technical proof of concepts (POC) work is about validating the architectural approach and assessing the viability of each short-listed option, by building a proof-of-concept data layer. The PoC will be tested against a set of hypotheses, which will input into the decision making of the final logical architecture option for the complete build of SPR.

What we are building

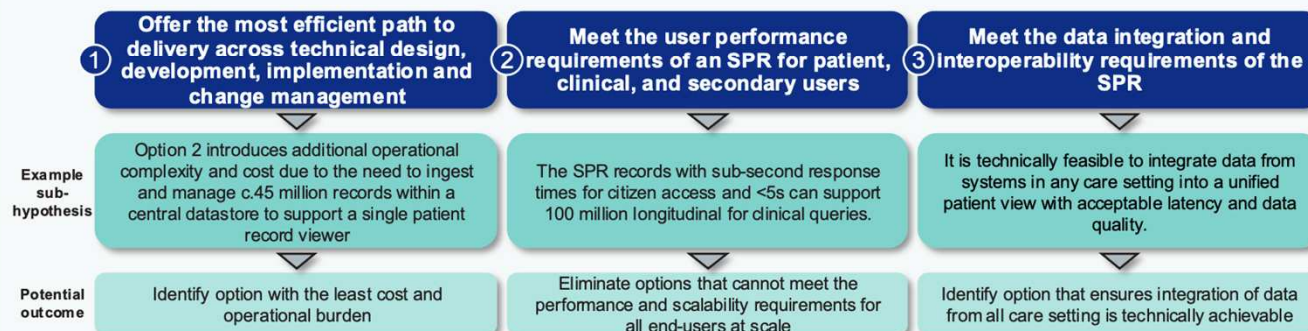
Working prototypes that enables **near real-time, access** to synthetic patient data from multiple systems, using the three logical architectures shortlisted through the Options Appraisal:

- **PoC 1** – Hub and Spoke building on the ConCR First of Type delivery
- **PoC 2** – Central Integration Model building a central FIHR store connected to multiple care settings
- **PoC 8** – Virtual Layer leveraging the NHS-owned Interweave



What we want out of these PoCs?

- **Validate hypotheses** developed by the programme team and wider stakeholder workshops during the technology options appraisal. The shortlisted logical architectures...

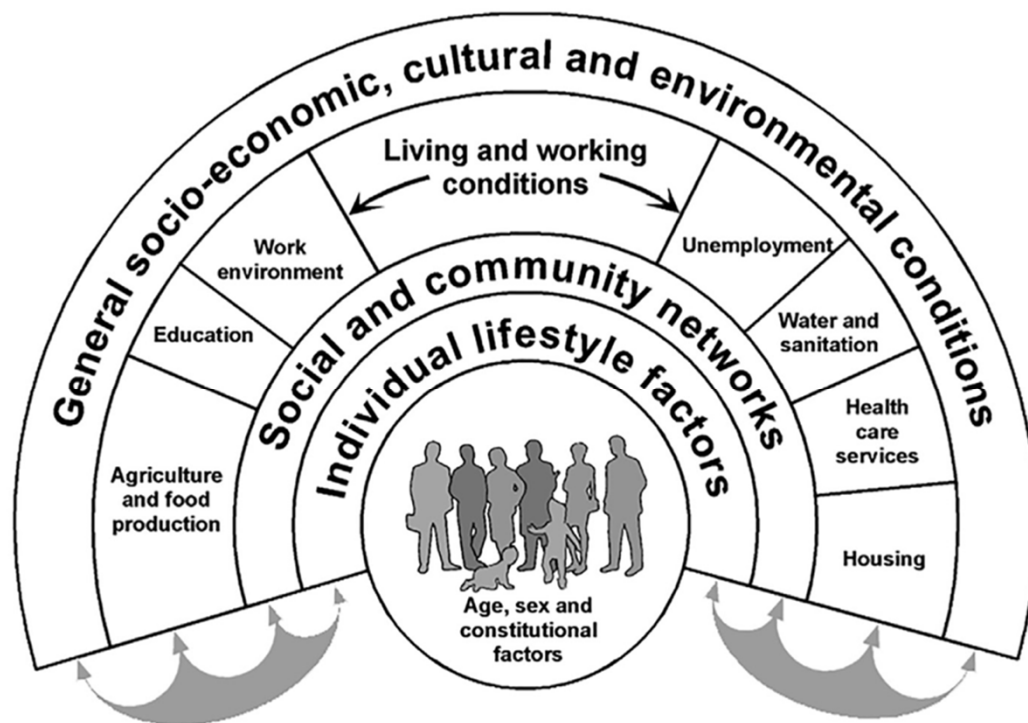


- **Supporting the critical path of delivering a programme business case by December 2025 through:**
 - Providing clear insight into **effort** of full build or bid
 - **Assessment of how the options could be combined** within the full SPR
 - Robust analysis of the **preferred option** for delivering an SPR
- **Artefacts** that will feed into the architecture approvals
 - Lessons learnt
 - Architecture and engineering drawings and plans
 - Risk and remediation logs (including blockers)

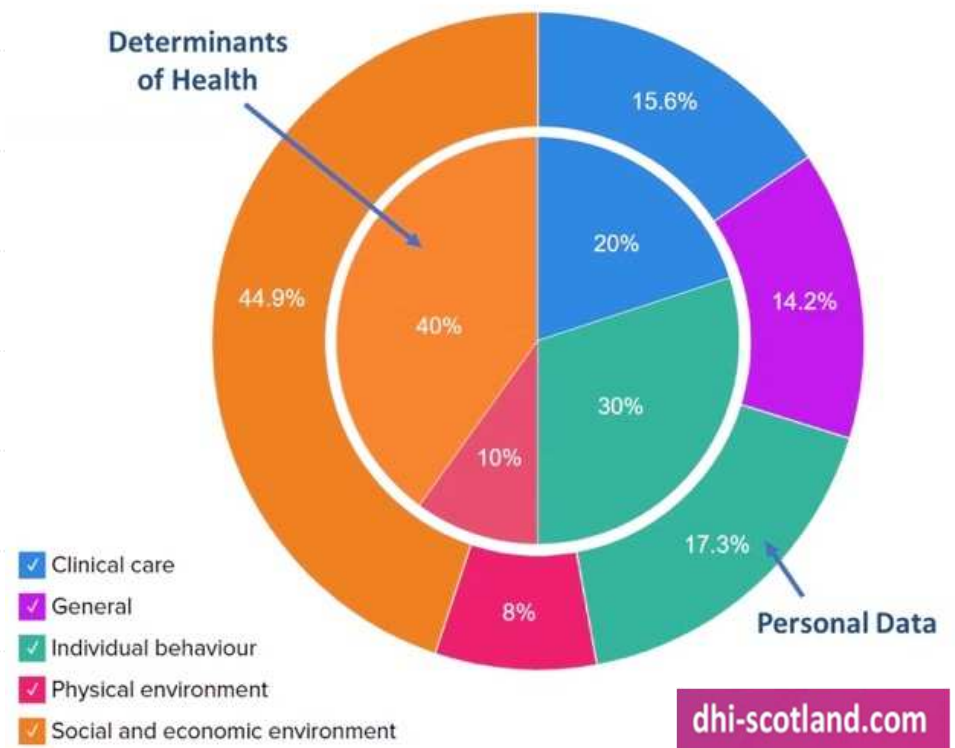
Learning from the past – at last !



But NHS care is a small part of the picture



Source: adapted from Dahlgren and Whitehead, 1991



So what should we learn from the past ?

- Don't always happen quite as published :-)
- Don't always happen in a logical order but that's OK
- Keep returning to haunt us

Promises,
commitments,
strategies,
plans and dates

Politicians

- Should engage more with the professionals who will have to implement their policies
- Seek SpADs with relevant practical experience
- Don't over promise and then under deliver

- The one and only constant
- Should we not design around them ?
- But remember - the NHS is only part of the picture

People who
receive care

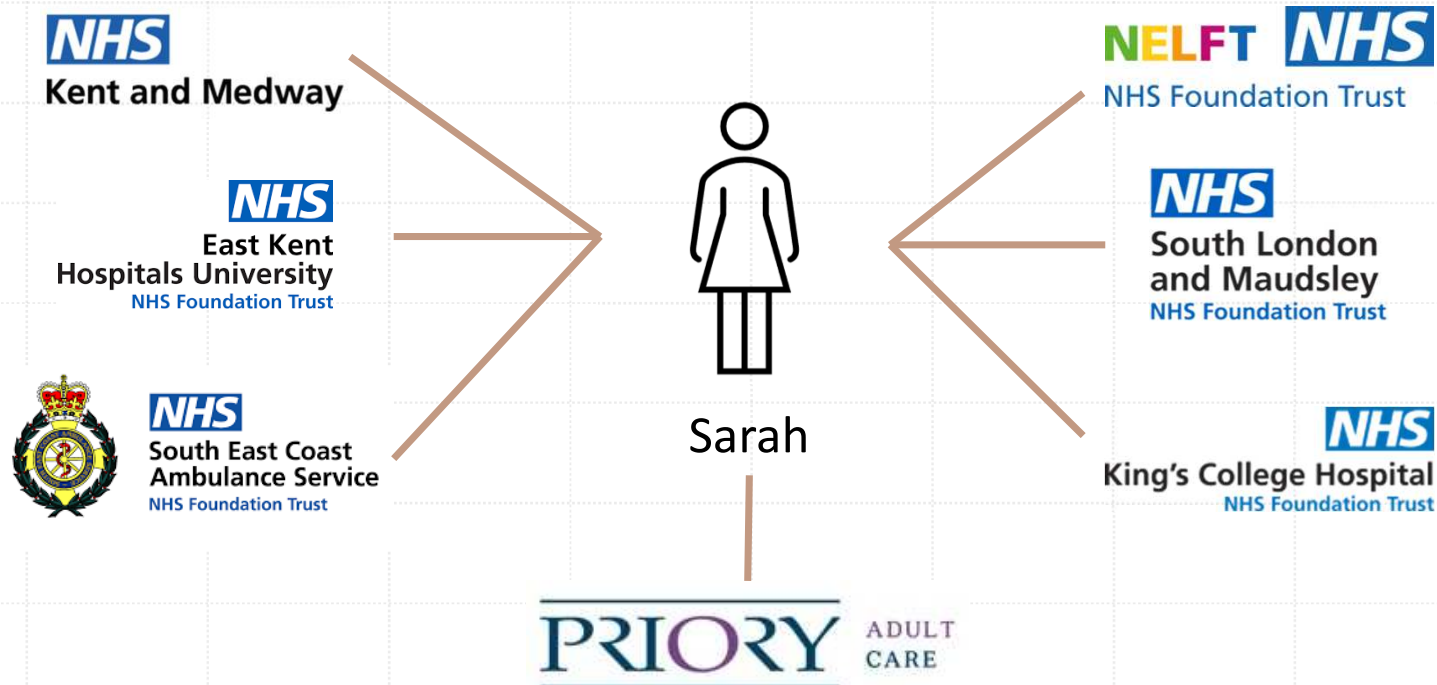
Regime change

- Reluctance to learn lessons and loss of corporate memory creates great distraction and duplication of effort
- Too much "ego"; too little humility

How are we doing for time ?



Sarah's story



29th December 2019



Coroner's report

The inquest revealed that communication between those involved in her care was inadequate and, as **each ran separate clinical records systems**, they could not access crucial information which could have made a difference.

The White House were not sent copies of clinical correspondence and at the time did not have access to GP records, although since Sarah's death do now have access to GP records.

The mental health team at NELFT were responsible for managing Sarah's Community Treatment Order (CTO) despite the fact that she was placed out of their geographical area but were not aware she had been seen by either the South East Coast Ambulance Service or by Queen Elizabeth, the Queen Mother Hospital in Margate.

Neither the paramedic at South East Coast Ambulance Trust who attended Sarah on 23rd December or the Emergency Department nurse who saw her at the Queen Elizabeth, the Queen Mother hospital on 24th December 2019 were aware that Sarah was on a Community Treatment Order.

"If information been shared between different health care organisations, particularly crucial information about Sarah's Community Treatment Order, it is highly likely she would still be alive today."

South East Kent Coroner

Stop thinking in silos



The challenge - striking the balance

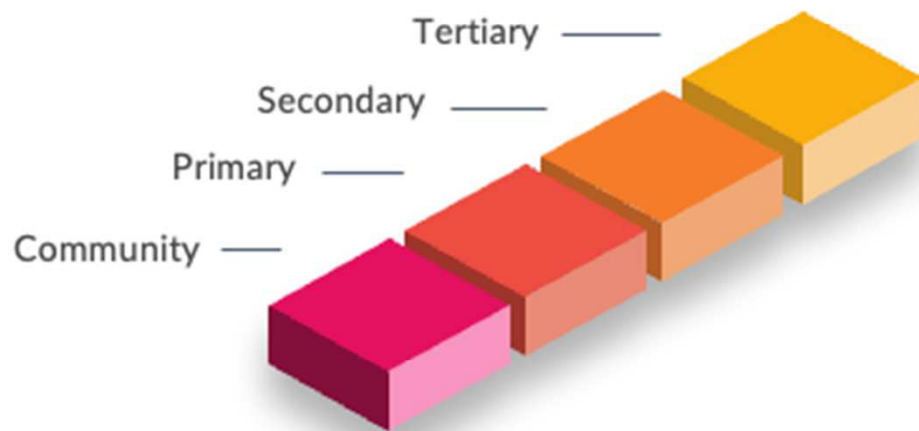
- Between ambition and realism
- Between innovation and legacy
- Between central and local



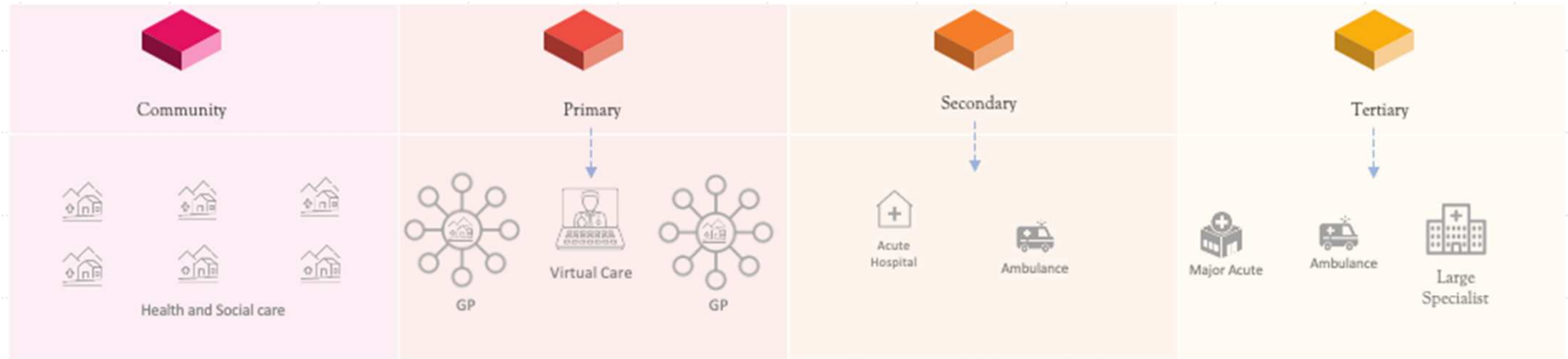
90° thinking

Healthcare Yesterday

(FUNCTIONAL)



Thinking differently



Let's challenge our perceptions and paradigms

We don't
see things
as they are,
we see them
as we are

-Anais Nin

Thank you

