

# Our Vision for Interoperability: Making Integrated Care Happen

March 2015



## 1. Introduction

techUK is the leading trade association for the technology industry in the UK. We have over 850 company members, which collectively employ more than 500,000 people in the country.

Our Health and Social Care Programme works with and on behalf of over 300 technology suppliers, and in collaboration with the wider health and social care community. Our members are shaping and helping deliver tomorrow's health and social care by fostering an open and vibrant market in data, information services and technology solutions.

Members of techUK have been working with NHS England, Health and Social Care Information Centre (HSCIC) and their predecessors for many years in an advisory capacity on interoperability standards. We have participated in workshops, contributed to the development of the Interoperability Toolkit (ITK) and have produced an in-depth analysis<sup>1</sup> of what the NHS needs to do about interoperability, which concluded that the NHS needs to:

- Have productive and collaborative engagement with suppliers;
- Evangelise the benefits of information sharing by educating the business and clinical leaders of the NHS, not just the IT specialists;
- Apply the principles of the most successful information sharing system in the world (the Internet), which is based on open systems and open standards;
- Position ITK compliance as a positive process – encouraging it to succeed rather than be seen as a barrier to entry.

The conclusions we drew in late 2011 are just as relevant today. Nonetheless, recent developments including the publication of NHS England's Open API Architecture Policy (May 2014), have resulted in the need to clarify our position and add some further guidance.

techUK is supportive of both of the intention and direction of the Open API Architecture Policy and promotes the move towards supplier systems providing Open APIs as a key building block in enabling information sharing. Our paper provides further detail on how the supplier community can take this forward with the support of NHS England, HSCIC and health and care professionals – we therefore welcome NHS England's commitment to consider our recommendations in its policy developments.

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<sup>1</sup> "We should talk: Interoperability and the NHS", September 2011, <http://www.techuk.org/insights/reports/item/260-interoperability-and-the-nhs>

## 2. Open interoperability

techUK supports an open market whereby suppliers are able to offer open interfaces to connect disparate systems across the NHS. These can be either bespoke or generic (already publicly available), but where there is a nationally mandated interoperability standard using mechanisms such as ITK, the interoperability standard must be open, transparent and without encumbrances.

### 2.1 Specifications are open

All standards that are adopted nationally must be free to obtain and use by the suppliers implementing them. This requires that the specifications are easily available and should be compatible with both open source and propriety based implementation approaches.

### 2.2 Licence options

For any interface that is adopted into the ITK for use nationally, the IPR for the software interface (where applicable) must be available under one of the following terms:

- Public domain, or;
- Free to use and sub-licence.

### 2.3 Suppliers may make deployment/configuration/support charges

Funding for the development, support or operation of any supplier-developed interfaces should be provisioned through the contract with the customer(s), who are requesting the data to be shared in this manner.

Suppliers must not be charged for the licence to use the interface software, i.e. the NHS must not mandate interoperability standards for which there is a licence fee. Nor should suppliers have the ability to constrain or restrict other suppliers' use of their interface software.

techUK has a well-established position on how this should occur across all aspects of the market. Section 7 of this document reiterates that open interoperability must not be constrained by excessive/complex and/or costly regulation/accreditation.

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## **3. Information Sharing**

### **3.1 Information must be interoperable across the entire health and social care spectrum**

Data sharing agreements necessary for full interoperability in the NHS can be difficult to put in place. Sharing across health and social care is likely to be even more challenging, however, the interoperability programme should be able to rely on clear policies to enable effective information sharing across the entire spectrum of health and social care; public, private, independent and third sectors.

### **3.2 Non public sector providers**

The independent sector, dentists, the third sector, high street pharmacists etc., all play a role in providing care for patients. Data interchange across these providers must be included in order to contribute to a holistic electronic record. Interoperability should not just be for solutions used by the NHS and Local Authority social care.

### **3.3 Suppliers**

Subject to applicable legislation, data recorded and used in electronic solutions needs to be freely available between solutions, i.e. no supplier should be able to withhold information stored on their solution from access and use by another supplier - if the request is from the data owner (usually the supplier's customer) - subject to reasonable performance and customer-set governance constraints. Equally, no supplier should be able to constrain information sharing across the market through charging for access/sharing or unreasonably delaying transfer of data and information.

## 4. Business led, not technology led

### 4.1 Choose the best solution for the task

One of the pitfalls of letting technologists define informatics standards in relative isolation is that they often strive for the most technically elegant solution when a degree of pragmatism is likely to be most effective. Health informatics is littered with well-meaning but unused (or unusable) standards. We urge the NHS to be pragmatic and practical in setting NHS interoperability policies. This is likely to require interim positions to be taken, so some progress can be made before everything is resolved.

## 5. Market driven innovation

techUK's members have the most experience developing and implementing standards. We firmly believe that the NHS should set the policies for interoperability but not the specifications, except where, in exceptional circumstances, there is a pressing need to develop an interoperability standard to support a strategic initiative. As and when NHS England/HSCIC do need to develop standards in support of a strategic initiative, this should be done in an open and collaborative way with the supplier community, which techUK can help facilitate. Examples of a strategic initiative include Choose & Book, Commissioning Data Sets and Patient Demographic Service, but even for these, the principles set out in Section 2 must be applied.

Once the market has created or adopted an interoperability standard, the NHS can then adopt it as the de facto standard for use in all new procurements and NHS-developed solutions. techUK can help to facilitate this process (please see Section 6).

As an example, IHE is an initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information. IHE promotes the coordinated use of established standards to address specific clinical needs in support of optimal patient care. The NHS should follow this model, which fundamentally relies on market collaboration and customer demand to standardise, not centrist regulation/accreditation.

## 5.1 The principles should be set by policy

The interoperability policies that the NHS should be setting might include, for example, an interoperability policy for electronic discharge. The policy might state that structured messaging should be used such that the content can be extracted from a source system and interpreted by a recipient system. It might even specify a minimum dataset (e.g. the Royal College of Physicians headings) but would not specify any detailed implementation approaches. The policy statement should provide guidance and interpretation of the policy. Using the electronic discharge example; scanned images such as faxes and scanned notes, Word documents and PDFs may be sent but only as an adjunct to a structured and coded message.

To encourage suppliers to align themselves with the direction of travel, we would recommend hosting one or more consultation meetings on the draft policies to seek industry feedback on the practicalities of achieving the objective. Once the policy has been agreed and finalised we think there should be a policy statement and mandatory compliance statement to the supplier community and all customers, so that the agreed solution is procured consistently.

## 5.2 Interoperability standards need to be fit for purpose

Healthcare informatics interoperability requires a multi-disciplinary approach of domain experts in the relevant fields. It cannot be left to any one professional group no matter how well intentioned. techUK encourages the NHS to ensure that candidate standards have had the appropriate due diligence from care professionals as well as technologists to ensure that they meet both today's needs and are future-proof.

## 5.3 The practice should be left to suppliers

Except in the case of a strategic initiative, the development and implementation of interoperability standards that conform to the policies should be left to suppliers to determine. Suppliers should be free to determine the technical details (e.g. EDIFACT, HL7v2, FHIR, XDS, openEHR, SNOMED etc.) and to implement the most appropriate solution for their product and their market. As long as buyers only contract for solutions that meet the policy, suppliers will produce products that deliver this, and non-standard approaches will diminish/disappear.



## 6. techUK to coordinate candidate standards

Once an interoperability policy has been implemented and accepted into general usage, it becomes a candidate NHS interoperability standard. techUK can support the process by which the NHS identifies candidate standards and the verification process required to formally adopt them.

This is not a regulatory process. The market should be free, working within the principles set out in this document, to innovate and offer solutions compliant with the policy set. Market dynamics will determine where it makes sense to adopt a single delivery model and where multiple solutions will work. Customer buying behaviour will modify supplier development behaviour.

## 7. Accreditation

Accreditation can add value but should be light-touch and self-accredited by default, otherwise it can lead to the creation of a two-tier market. As and when accreditation is required, it should act as a 'contract' between the supplier and each individual NHS Trust. NHS England and HSCIC can add value by engaging with industry to determine the most appropriate guidance for Trusts concerning accreditation. techUK published a paper on accreditation, which outlines our views in detail.<sup>2</sup>

## 8. Knowledge and skills across the NHS

### 8.1 The need for increased capacity in health informatics

techUK has spoken many times about the need for more informed customers. We see that the level of expertise in health informatics and interoperability, in particular in the NHS in England, has dropped to an all-time low in comparison with other countries. There is an urgent need for far more investment in health informatics education, training and R&D. We believe that procurements that put interoperability centre-stage will lead to joined-up health and social care services where patient information is shared both within and across the health economy.

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<sup>2</sup> techUK's Position on EPR Supplier Accreditation, May 2014, <http://www.techuk.org/insights/opinions/item/1582-statement-on-epr-supplier-accreditation-in-the-nhs>

## 9. Standards pragmatism

Interoperability is about sharing information, in context, between two systems. This is not difficult – the modern world is full of systems that exchange data, internet based businesses being prime examples. The problem with health informatics standards is that:

- i. There are too many;
- ii. There is a desire for absolute precision before anything is used;
- iii. Standards are often too expansive and complex.

Health is quite unique in this regard; in most other sectors standards are small, agile and incremental, and are therefore much quicker to release and evolve.

We must adopt more pragmatic and incremental approaches to designing, releasing and evolving health informatics standards; learning from the realities of processes and behaviours that have allowed us to create the Internet, the Web and Wikipedia and apply them to health informatics.

There will always be more than one way to do things. From competition comes choice and ultimately consensus that is determined by market preference, not standing committees.



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**techUK is the leading trade body for the technology industry in the UK.**

We have more than 850 companies as members and collectively they employ more than 500,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium sized businesses.

techUK's health and social care programme provides a forum for our industry to help develop, articulate and champion an open and vibrant market in data, information services and technology solutions in the health and social care sector.

We work with and on behalf of over 300 technology suppliers and in collaboration with the wider health and social care community, including but not limited to the Department of Health, NHS England, Health and Social Care Information Centre and the Academic Health Science Networks. We provide market insight, thought leadership and stakeholder engagement to shape market developments, strategies and investment.

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