From laggards to leaders: IT adoption by NHS trusts
Executive summary

The healthcare IT market for the NHS in England is changing rapidly. Trusts are facing new policy and business pressures, as a result of the ‘Liberating the NHS’ reforms and the huge financial demands being made of public services.

At the same time, the National Programme for IT in the NHS is winding down, even though elements of it will continue until 2016. The delivery of electronic patient records by the programme has been far less widespread than originally envisaged, and few trusts have anything like the advanced clinical functionality once envisioned.

Despite this, the retreat of the centre leaves huge uncertainty about where to target efforts in order to move forward. To address this gap, EHI Intelligence has been working on a Clinical Maturity Index for NHS hospitals.

This will help trusts to benchmark their progress and help suppliers to target their sales and support efforts more effectively. However, completing the CMI will require a major data collection exercise.

This report draws on the work underlying the index and uses information already collected for the EHI Intelligence NHS Trust Database to map the ‘landscape’ of systems adoption in NHS acute trusts in England.

It also gives an indication of where individual trusts sit in this landscape, which run the risk of being ‘laggards’; which have already emerged as ‘leaders’; and which may be looking to move from one category to another.

The EHI Clinical Maturity Index

As the starting point for the development of the EHI Clinical Maturity Index, EHI Intelligence went back to some of the early attempts to provide a roadmap for IT in the NHS.

These include the six ‘levels’ of EPR outlined in the 1998 IT strategy, ‘Information for Health’, and the Clinical 5 concept that was introduced to try and build clinical support for IT as the national programme struggled.

The continued relevance of these ideas, and the issues that trusts face in implementing them, were discussed with NHS IT directors, and, in the light of their comments, a more sophisticated model was developed.

The latest version of the model is included in this report for comment. However, completing it for all trusts will require a major data collection exercise.

The opportunity for suppliers: Data in the EHI Intelligence NHS Trust Database was used to determine which systems trusts have from each group. This showed that some trusts still have a long way to go in the procurement of core IT systems.

The only one of the groups to have a 100% installed base is the basic departmental systems, PACS and RIS. There are opportunities to sell to trusts in all other categories, and particular opportunities in e-prescribing, document management, and scheduling – only a third of trusts say they have scheduling in place.

The NHS IT landscape

For this report, therefore, we have used the thinking behind the CMI and the Clinical 5 data that has already been collected for the EHI Intelligence NHS Trust Database to draw a picture of the landscape of IT adoption by NHS trusts in England.

Grouping IT systems: For this report, NHS IT systems were grouped into nine groups. These recognise the importance of building on a strong base of patient administration and core systems and the large installed base of pharmacy, pathology, radiology information systems and picture archiving and communications in NHS trusts in England.

The groups then move on through core and specialist departmental systems, more sophisticated functionality - such as e-prescribing - systems that suggest trusts are removing their remaining paper and technologies - such as clinical portals - that suggest they are exposing information to more users.

Correlation with trust size and IT spending: Further analysis of the characteristics of different trusts does suggest that there is a reasonably close correlation between the number of staff in each trust and the amount of money that they spend on IT and their level of technology adoption.

However, there is a drop-off in both staff numbers and IT funding as trusts move from being ‘fast followers’ to ‘leaders’; perhaps because the ‘leaders’ tend to be slightly smaller, and perhaps because they tend to be using newer systems that are easier to maintain.

Laggards to leaders: The data also showed that trusts split naturally into four groups, which we have named ‘leaders’, ‘fast followers’, ‘make do and menders’ and ‘laggards’.

Trusts with IT systems in all nine groups have been designated as ‘leaders’, and trusts with systems in eight of the nine groups ‘fast followers.’ Systems in six to seven groups will make trusts ‘make do and menders’ and four or five groups ‘laggards’.

Percentage of trusts in each category: In total, just under a fifth of trusts (17%) emerge as ‘leaders’, a quarter (24%) as ‘fast followers’, just over two fifths (43%) as ‘make do and menders’ and just under a fifth (17%) as ‘laggards.’

Rogers’ bell curve: This gives a distribution that is very similar to the well-known bell curve of the technology adoption lifecycle developed by Everett Rogers. Rogers argued that ‘leaders’ and ‘fast followers’ are usually larger, more prosperous and therefore more risk oriented.

Correlation with trust size and IT spending: Further analysis of the characteristics of different trusts does suggest that there is a reasonably close correlation between the number of staff in each trust and the amount of money that they spend on IT and their level of technology adoption.

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The adoption of IT by acute trusts in England

Despite this broad correlation, detailed tables giving an indication of where trusts sit in this IT landscape show the market cannot simply be segmented by trust size and income.

Foundation trusts, teaching trusts, and large trusts appear in all of the ‘laggards’ to ‘leaders’ tables in the report, as do non-foundation trusts and small, specialist trusts.

Limitations to the tables: There are some limitations to the tables. These relate to the quality of the data and when it was collected (in late 2011, although all trusts have the ability to update their profile) and to boundary issues (since just one extra system would move ‘up’ some trusts).

They also relate to the changing market (since the position of some trusts depends on recent mergers, while others are likely to vanish as a result of mergers or take-overs because they cannot attain foundation status).

Further discussion: Despite this, the tables show it is important for suppliers to focus on a trust’s actual position – its level of technology adoption – when deciding where to target sales efforts and the nature of those sales efforts.

Laggards: Some trusts fall into the ‘laggards’ category because of the date at which information about their core systems was collected. Several trusts in this category have subsequently gone out to tender for new PAS and EPR systems, or for technology to support a ‘best of breed’ approach. Others may tender in the near future.

Make do and menders: This category includes some trusts running systems delivered or supported by the national programme, which they may want to replace or extend. It also includes some very large trusts with little IT at the moment, but ambitious IT plans to build on what they have, generally by taking a ‘best of breed’ approach.

Since 43% of acute trusts appear in this category, with a combined annual IT budget of £250m, the ‘make do and menders’ are by far the largest opportunity for suppliers; and the group they need to convince of the merits of both their approaches and their systems.

Fast followers: Trusts in the ‘fast followers’ category are large in size, financially solvent and liable to take risks with their IT to achieve ambitious ends. They also have a substantial IT base that they want to update or extend, and some have ambitious plans linked to new building projects or business models.

This means that they represent another potentially lucrative group for suppliers; but they will need to understand where their systems fit with what trusts have and the scale of their ambition.

Leaders: The trusts in the ‘leaders’ category have a good IT set up in place and are now in the process of building on it with a further wave of innovative features. Some of the trusts in this category went outside the national programme to secure their position.

As such, they are an interesting group for suppliers who want to work with ‘first movers’ for new technologies or ideas, but they may be less interested in ‘mass market’ approaches.

Conclusion:

Unlike similar models, the CMI being developed by EHI Intelligence is being built specifically for the NHS. It takes account of the nuances of the systems adopted by NHS trusts, and recognises that there are different routes for them to take to acquiring sophisticated clinical and business functionality.

We will be doing more work on the CMI, so input is welcome from both NHS IT directors and suppliers to the market.

This report has taken the thinking behind the CMI and data in the EHI Intelligence NHS Trust database to create a ‘landscape’ for IT adoption in the NHS and assign trusts to different points in that landscape.

It shows that traditional ways of segmenting the market may be useful, but only up to a point. Although there is some correlation between trust staff numbers, IT spend, and IT adoption, the fit is not perfect; small and specialist trusts can be ‘leaders’, just as big, foundation and teaching trusts can be ‘laggards.’

Trusts are better categorised according to the number and type of system that they already have installed. Identifying whether trusts are ‘laggards’, ‘make do and menders’, ‘fast followers’ or ‘leaders’ also gives important clues to suppliers about the type of IT they may be looking for and the kind of approach to which they may be open.

Recent activity in the market suggests there are significant opportunities for suppliers that can get it right. Many ‘laggards’ and ‘make do and menders’ are looking to improve their lot – if not to become ‘leaders’ themselves – while ‘fast followers’ and ‘leaders’ are looking to build on what they have – or take up further, exciting new technologies to extend their position at the front of the pack.
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