

EDITORIALS

England's national programme for IT

From contested success claims to exaggerated reports of its death

Trisha Greenhalgh *professor of primary health care*¹, Justin Keen *professor of health politics*²

¹Centre for Primary Care and Public Health, Queen Mary University of London, London E1 2AB, UK; ²Leeds Institute of Health Sciences, University of Leeds, Leeds, UK

The national programme for IT, which promised to revolutionise care in the English NHS, was originally planned to run for two years and nine months from April 2003.¹ Policy documents predicted that by the end of that period, a near paperless working environment would be the norm. This would include electronic systems for booking outpatient appointments, referring patients, producing discharge summaries, and transferring prescriptions between general practice and community pharmacies.²⁻⁴ In emergency care, key clinical details would be available at the touch of a button wherever in the NHS the patient presented.⁵ Patients would be “empowered” by remote access to their NHS records.^{1 5}

The reality was different. Contracted deadlines for delivering key systems were repeatedly missed.⁶⁻⁸ Technologies that were meant to make tasks and processes more efficient at the clinical frontline were more cumbersome and time consuming, and in some cases less safe, than their paper equivalent.⁷⁻¹¹

Ten years on, only a handful of hospitals can be described as paperless, and most communication between NHS organisations still occurs by snail mail, fax, or patient messenger.¹² Extracts of patients' NHS records, stored on a national spine, have led to few if any dramatic life saving decisions. This is partly because they are little used; their accuracy and clinical value are contested; and many doctors view the risks of data breaches to be over-riding.^{7 13} The patient portal to the NHS spine has been abandoned.¹⁴

The national programme for IT brought some genuine (although mostly non-cash releasing) benefits. There have been substantial improvements in the technical knowledge base underpinning information systems in the NHS, in organisational capacity to introduce any new IT system, and in information governance processes and procedures. Furthermore, some systems (notably those for archiving images) that are now used routinely are thought to work better than their pre-electronic equivalents.^{12 15}

In view of this mixed picture, we should not be surprised that two competing narratives prevail. One, articulated on 2 June this year by Jeremy Hunt, secretary of state for health, is that the programme was a “huge disaster [that] became impossible to deliver.”¹⁶

The other, expressed in a “final benefits statement” released by the Department of Health this month and based on data collected up to March 2012, claims that the programme has been broadly successful and is now on course to realise serious financial benefits.¹⁷ That report acknowledges that its £7.3bn (€8.6bn; \$11.3bn) costs substantially outweigh the £3.66bn estimated benefits, but predicts that, if we are prepared to wait until 2022, financial benefits may be £10.69bn, outweighing costs of £9.78bn.

Given these huge sums, it is not surprising that the public accounts committee asked the National Audit Office to review the estimates.¹⁸ The office concluded that some possible costs had not been included and those that were included could well increase. Furthermore, two thirds of the predicted financial benefits are still to be realised and depend on successful implementation and continued use of the systems, which the office considers will be challenging to achieve.

Implementation, and measurement and attribution of costs and benefits, will have to be undertaken against the background of current (and any future) NHS reforms. At a public accounts committee hearing on 12 June 2013, it was revealed that hospital trusts installing systems that were part of the national programme for IT are given cash payments averaging £3m.¹⁹ MPs pointed out that if the financial benefits were assured, these payments would not be necessary.

In sum, the financial break even for the national programme for IT is predicted to occur around 2021. It rests on an unlikely best case scenario in which technology problems have been overcome, professional concerns about confidentiality have been resolved, and power struggles and legal wrangles with suppliers have melted away. The Department of Health anticipates being able to control clinical behaviour remotely via expert systems from Whitehall, imposing order on a disorderly NHS.

We believe that NHS informatics sits at a strategic crossroads. One road has been mapped out in the secretary of state's proposed “information revolution,” whose techno-utopian vision consists (once again) of paperless hospitals, remotely accessible online records, and a high degree of interoperability between

sectors.^{20 21} Notwithstanding Hunt's claim that informatics decisions will be locally controlled, his savings forecast of £4.4bn seems to rest on the assumption of universal uptake of preferred systems within the NHS, bug-free technology, and an unlikely harmony among the scheme's multiple stakeholders. There is a sense here of *déjà vu*, of failing to learn from history.²²

The alternative route is a genuine bottom-up (or, perhaps, middle-out²³) change model, freed from the fetters of heavy handed state control. The Cabinet Office is taking the lead, encouraging government departments to allow small contracts, in the order of tens of thousands of pounds, and with short delivery times.²⁴ But although the arguments in favour of this approach are powerful, the NHS's organisational memory relates to a "waterfall" model of large contracts and central standardisation. It does not currently have the technical or regulatory infrastructure, or indeed the culture, to encourage these more agile solutions to multiply rapidly (in the manner of smartphone apps).

Perhaps the most important first step in this uncertain territory is to abandon the utopian dream of ubiquitous, calm computing, easy to implement and able to transcend the realpolitik of a fragmented cash constrained NHS.²⁵ In this real world, money may be more productively spent on improving and augmenting the best of the NHS's current systems; exploiting mobile technologies and social media; and pinning down exactly where the costs, risks, and benefits of a new technically hybrid informatics service lie.

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