Why national eHealth programmes need dead philosophers

Wittgensteinian reflections on the reluctance of policymakers to learn from history

NHS told to abandon delayed IT project
£12.7bn computer scheme to create patient record system is to be scrapped after years of delays

Denis Campbell, health correspondent
The Guardian, Thursday 22 September 2011

The NHS has spent billions of pounds on a computerised patient record and booking system, which has never worked properly. Photograph: Martin Godwin
Key messages

1. Policymakers often stubbornly repeat the mistakes of the past – especially with big IT projects.

2. The in-depth ‘n of 1’ case study is under-rated as an analytic approach.

3. Insights from philosopher Ludwig Wittgenstein are surprisingly relevant to this issue.
Craving for Generality and Small-N Studies: A Wittgensteinian Approach towards the Epistemology of the Particular in Organization and Management Studies

Haridimos Tsoukas

Acknowledging inspiration from Hari Tsoukas

In Buchanan D et al (eds) Handbook of O&M Studies
MODERNISING
INFORMATING
INTEGRATING

THE OLD SYSTEM
Inconsistent
Error-prone
Fragmented
Unaccountable
Inefficient
Doctor-centred
Reactive

THE NEW SYSTEM
Evidence-based
Safe
Connected
Accountable
Efficient
Patient-centred
Proactive

The latest IT policy doc
HOW TO OPT OUT

ALL patients are allowed to opt out of the electronic medical records system if they wish.

Everyone is due to receive a letter explaining that their GP will be uploading their details onto the database.

They are supposed to be notified at least 12 weeks before their details go ‘live’ on the system.

A helpline number, or visit a website to do so.

The summary records contain basic medical information including illnesses, vaccination history, and could include medication patients have been given – although there are concerns about the accuracy of some of this information.

Ages and addresses are also included.
How this government is blowing £12.4bn on useless IT for the NHS

"Waste and inefficiency in the NHS is intolerable", declared Health Secretary Patricia Hewitt one year ago amid mounting deficits. "A penny wasted is a penny stolen from a patient." This is the story of the theft of 1,240,000,000,000 pennies from patients through an IT such was the development of the healthcare IT market that by March 2003 McKinsey’s Bennett reported that there were 27 "entirely viable and interesting vendors" with suitable software packages to sell.

Yet in February 2002 when Pattison crossed
NHS IT programmes: competing narratives

The policy story
- Central procurement
- Standardisation
- Tight governance
- State-of-the-art security
- Transparency
- Patients at the centre

The critical story
- State domination
- Loss of contingency
- Loss of local control
- Loss of workability
- Data overload
- Technology at the centre
INFORMATION TECHNOLOGY, CONTROL AND POWER: THE CENTRALIZATION AND DECENTRALIZATION DEBATE REVISITED*

BRIAN P. BLOOMFIELD

ROD COOMBS

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ABSTRACT

This article addresses the conceptualization of power in relation to the use of computers in organizations. Commonly held views that the application of computer based information systems leads to either a centralization or a decentralization of power and control are that computers and information systems can be used to achieve both.
Senior Connecting for Health executive: “Why do you have to call it ‘The Devil’s in the Detail’?
Trish: “Because the devil IS in the detail”
Senior CFH executive: “You do realise, this is going to be a reputational risk for us?”
“They live in a world of contracts and requirements. That is the kind of world they live in”.

Ex GP academic, now advisor to commercial IT company
THE POLITICAL WORLD: SCR is a tool for achieving manifesto promises e.g. more efficient public spending.

THE CLINICAL WORLD: SCR will improve patient care.

THE TECHNICAL WORLD: SCR is an elegant design.

THE COMMERCIAL WORLD: SCR must bring returns for shareholders.

THE PERSONAL WORLD: What about my privacy?

THE ACADEMIC WORLD: SCR programme raises huge theoretical, methodological and philosophical questions which go beyond the particular problem of national IT programmes.
1. ‘Modernist’
- Technology centred
- Futuristic, utopian, hopeful
- Sanitised, failure-free ‘smart’
- Large-scale, integrated, and increasingly sophisticated
- Frames ICTs as empowering, benign, safe, good match to need
- Efficiency: savings will occur

2. ‘Humanist’
- Person-centred
- Cautious, pragmatic, realistic
- Explores personal, material and ethical aspects of technology use
- ICTs seen as offering (at best) partial solutions to problems
- ICTs not morally neutral – can be a tool of surveillance or control

3. ‘Political economy’
- Critical academics/clincians
- Highly critical of the ‘techno-industrial complex’
- Questions effectiveness and efficiency claims for ICTs
- Questions ICT as ‘solution’

4. ‘Change management’
- Recognises complicatedness of large-scale ICT programmes
- Sees solution in terms of good project management / processes
- Does not recognise or address inherent conflicts of interest
- Often appears as footnote / afterthought / appendix

Competing discourses in NHS IT
Non-adoption of the SCR and HealthSpace has numerous, complex and interacting explanations for which there is no easy fix.
Dear Drs. Hamish Meldrum and Laurence Buckman,

We have noted that the BMA is discussing the issue of the Summary Care Record in the LMC afternoon session on Friday and will be interested to learn the outcome of these discussions. To help inform your thinking, we thought it would be useful if you knew the Government position on the issue.

Broadly, our view is that we see a need for both patients and clinicians to be able to access patient records in an electronic form. This is part of our thinking about making information transparent and available, while involving patients in decisions about their healthcare.
MENU OF SCR REVIEWS

Greenhalgh et al (independent)
• Content of the SCR
• Opt-out process AND

1. Scale & complexity of NPfIT
2. Multiple stakeholders
3. Insoluble tensions & paradoxes
4. Complex nature of knowledge
5. Inappropriate change model
6. Balance between ‘hard’ & ‘soft’
7. Technical development
8. Clinical engagement
9. What happens at the front line
10. Role of government

Keogh / Sadler (civil servants)
• Content of the SCR
• Opt-out process
Burns slams Greenhalgh SCR review

"I am pleased that a consensus has emerged about the importance of the SCR in supporting safe patient care, as long as the core information contained in it is restricted to medication, allergies and adverse reactions. Coupled with improvements to communication with patients which reinforce their right to opt out, we believe this draws a line under the controversies that the SCR has generated up to now."

Burns S, DoH press release, 11th October 2010
Greenhalgh slams Burns SCR review

15 Jun 2010

The leader of the independent Summary Care Record review has described the government's promise to doctors to conduct another review as an "absolute disgrace."

Health minister Simon Burns wrote to the British Medical Association promising a review last week, and his letter was read out at the Local Medical Committees' conference as it debated the SCR.

In an interview with E-Health Insider, Trisha Greenhalgh, professor of primary healthcare and director of the Centre for Life Sciences at Barts and The London School of Medicine and Dentistry, said the review would be a "cosmetic consultation" and "like shifting the chairs on the Titanic."
Research question

WHY ARE POLICYMAKERS SO RELUCTANT TO LEARN FROM HISTORY?

Study design: re-analysis of mixed-method dataset from large, in-depth national case study
In-depth case study: two paradigms

The ‘Yin’ paradigm
Experimental epistemology

“What is this a case of?”

Rigour: reproducibility of measurement

The ‘Stake’ paradigm
Constructivist epistemology

“What is going on here?”

Rigour: authenticity, plausibility, criticality
APPEALING WORK: AN INVESTIGATION OF HOW ETHNOGRAPHIC TEXTS CONVINCE*

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This paper examines how written research accounts based on ethnography appeal to readers to find them convincing. In particular, it highlights the role of rhetoric in the readers’ interaction with and interpretation of the accounts. Extending relevant work in the literatures of organization studies, anthropology and literary criticism, the paper develops three dimensions—authenticity, plausibility and criticality—central to the process of convincing. Further, through the analysis of a sample of ethnographic articles, it discloses the particular writing practices and more general strategies that make claims on readers to engage the texts and to accept that these three dimensions have been achieved. Through authenticity, ethnographic texts appeal to readers to accept that the researcher was indeed present in the field and grasped how the members understood their world. Strategies to achieve authenticity include: particularizing everyday life, delineating the relationship between the researcher and organization members, depicting the disciplined pursuit and analysis of data, and qualifying personal biases. Through plausibility, ethnographic texts make claims on readers to accept that the findings make a distinctive contribution to issues of common concern. Plausibility is accomplished by strategies that normalize unorthodox methodologies, recruit the reader, legitimate atypical situations, smooth contestable assertions, build dramatic anticipation, and differentiate the findings. Finally, through criticality, ethnographic texts endeavor to probe readers to re-examine the taken-for-granted assumptions that underly their work. Strategies to achieve criticality include: carving out room to reflect, provoking the recognition and examination of differences, and enabling readers to imagine new possibilities.
“The existence of the experimental method makes us think we have the means of solving the problems which trouble us, but problem and method pass one another by.”

Wittgenstein

"What is this a case of?"
Generalisation by theoretical abstraction
Many ‘cases of X’ \(\rightarrow\) predictive statements about ‘X in general’

"What is going on here?"
Generalisation by enriched understanding of language in context
Immersion in the detail of case X \(\rightarrow\) see more when look at case Y
Senior Connecting for Health executive: “Why do you have to call it ‘The Devil’s in the Detail’?"

Trish: “Because the devil IS in the detail”

Senior CFH executive: “You do realise, this is going to be a reputational risk for us?”

Senior civil servants do not do DETAIL!

[Why not?]
A tiny case within the HUGE case of the NPfIT

The small IT company

The IT arm of the DoH

Prettymuch Anytown
Primary Care Trust

The legacy IT system

Subcontractor

Connecting for Health

The small IT company

Patients

Graphnet

GPs
“The people from [IT subcontractor] who came to do the penetration testing weren’t briefed properly and we weren’t either. We said to them, we need to understand exactly what you want to do and if you think we should do something more around security. We were expecting them to access HealthSpace and make sure it was secure, see if it was all working. But they assumed they were coming to look at our end, not check their end. We wanted to access HealthSpace to see if it was all set up and working. They said, we just want to let this tool run on your network, and we said, no thank you, it’s a live system as it’s up and running, we don’t want to let it jeopardise the whole system as it’s up and running. We were happy to let them have access to HealthSpace but then they started up with we just want to let this tool run on your network and we said no thank you, it’s a live system, and it’s not clear what they had been told to do was to be targeted towards a live system, and we didn’t realise either. So they went away again.”

Senior manager, Newtown PCT (SR23)

What’s going on here? Includes:

1. Mutual misunderstanding
2. Mutual mistrust
3. Practicalities of information governance
4. How power plays out in the subcontractual relationship
5. Demarcation disputes
6. Technical complexity/confusion
7. Assumption that one part of the system needs a “fix”
Patients blamed the software and/or local staff

“…the times I’ve tried to get onto it, it keeps coming up with the same thing, ‘your GP isn’t launched yet, your GP isn’t taking part in this yet.’ is all it says. […] and the surgery manager, she said, ‘Oh I don’t know nothing about that, I’ve never heard about it.’”

Person with diabetes (SR04)
Local staff blamed the patients

“Well there’s definitely data in the table for the Y---surgery, so I don’t know why the person can’t see that, maybe if they check their password, make sure they’ve done their permissions correctly….”

PCT project manager (SR09)
Connecting for Health blamed the IT company…

“Graphnet, they basically acknowledged that further testing wasn’t going to achieve anything and that they would need to implement a fix within their system. […]”

Staff member, HealthSpace team, Connecting for Health (SR17)
…and the GPs and local managers

“…they [Connecting for Health] said this isn’t a HealthSpace problem, this is, it looks like it’s a local problem so it’s probably because either your GP hasn’t uploaded his, your records onto the HealthSpace website yet, or it’s something to do with the IT people on your local NHS area who are responsible for getting your doctor’s records onto the HealthSpace site.”

Person with diabetes (SR04)
The IT company blamed Connecting for Health

“As far as we’re concerned we’ve done everything we need to do, and it’s back to them. Is it overregulation? Is it overtesting? Probably a bit of both. We’ve done our bit ages ago and for some reason it’s not moving ahead.”

Senior executive, Graphnet (SR22)
Clinicians blamed the relationship between CfH and the IT company

“Basically it seems to be a Graphnet / Connecting for Health axis that is required to resolve it.”

Hospital consultant (SR20)
Key project managers were unsure of their role

“…because the HealthSpace part from our perspective was never a formal project, if it had been a formal project, if it had been part of Anytown Integrated Records, PID and business case, that we were formally integrating HealthSpace then…. It’s always been kind of like a side thing. I’m only vaguely involved – I just see the emails.”

PCT IT manager (SR19)
Comment

The actors in this case fragment are from different ‘worlds’. They bring different professional and institutional perspectives which are brought to bear dynamically, in the here-and-now, as the action unfolds.

It is not that anyone disagrees in the abstract about what the security standards are. The thorny question is whether this subcontractor may be permitted access to this system, having turned up today with an ambiguous brief.
## TWO COMPETING ACCOUNTS

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“What is this a case of?”

- tension between
  - central procurement vs local legacy systems
  - tight governance bringing loss of local control
  - etc

Collect other cases with a view to making 'statistically' generalisable statements about these phenomena

“The key finding is not that the individual actors / organisations illustrate generic issues but that, through a failure to achieve sensemaking, in this particular instance they do not accomplish anything jointly.

Authentic, plausible and critical account of this case; approach to next case is more enriched and subtle
Focusing on the detail of the fragment thus allows us to make the crucial Wittgensteinian frame shift “from a dead, mechanically connected world to a living world of responsive relations” (Shotter & Tsoukas 2011)
Senior Connecting for Health executive: “Why do you have to call it ‘The Devil’s in the Detail’?

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Conclusion

Policymakers do not learn from history because (especially in very large, complicated projects), they continually draw back from engagement with the richness of the case in order to make it manageable (Gigerenzer’s ‘bounded rationality’). This is the flawed foundation for their hubris.
hu·bris/ (h)yo obris / Noun
1. Excessive pride or self-confidence.
2. (in Greek tragedy) Excessive pride toward or defiance of the gods, leading to nemesis.

Karl Weick: “Richness restrains hubris”
Implications  (Milbank Quarterly 2011; 89: 533)

We need to value the single, in-depth case study more.

Academics need to develop more imaginative ways of conveying their findings to policymakers, who naturally resist engaging with richness.

Why National eHealth Programs Need Dead Philosophers: Wittgensteinian Reflections on Policymakers’ Reluctance to Learn from History

TRISHA GREENHALGH, JILL RUSSELL, RICHARD E. ASHCROFT, and WAYNE PARSONS
Thank you for your attention

Professor Trisha Greenhalgh
The history of NHS IT policy

1983 Griffiths Report
1993 Management Information Systems
1998 Information for Health
2000 The NHS Plan
2000 ERDIP (Electronic Record Demonstration Project)
2002 Delivering 21st Century IT Support for the NHS
2004 Better Information, Better Choices, Better Health
2004 National Programme for IT
2008 NHS Informatics Review (‘Swindells Report’)
2010 Liberating the NHS: An Information Revolution