

If you can't stand the heat...

The role of scientists in evaluating government policy

Professor Trisha Greenhalgh

Acknowledging critical insights from Jill Russell

Barts and The London
School of Medicine and Dentistry

www.smd.qmul.ac.uk

guardian.co.uk

Government drug adviser David Nutt sacked

Professor David Nutt asked to resign after his claims that ecstasy and LSD were less dangerous than alcohol

Mark Tran
guardian.co.uk, Friday 30 October 2009 17.54 GMT

A larger | smaller

Professor David Nutt, the government's chief drug adviser, has been sacked a day after claiming that ecstasy and LSD were less dangerous than alcohol.

THREE CRITICAL QUESTIONS

- What is the role of scientists in evaluating government policy?
- What does a “scientific” evaluation of government policy mean?
- What other kinds of policy evaluation are there?

1998

“If I live in Bradford and fall ill in Birmingham, then I want the doctor treating me to have access to the information he needs to treat me.”

Menu

Logged in as:

Clinician (with override) [139]
Main Base Room 1

LOG OFF

Clinician Options

Outstanding cases (114)

Database Search

General

Change Password

Heading

Case # 10635 No locked cases

Patient: Lallie Maitland-Edwards 26-Aug-44 (64 years)

Phone: Return No: 01233 722700

Current Location

51 Central Drive
Stoke-On-Trent ST3 2AP

Only show status for cases at this location

Waiting for clinician 114

On-line clinician [Lallie Maitland-Edwards]

Patient Details | Medical History | Event List | Summary Care Record | Current Consultation

Discontinued Repeat Medication

The practice system holds no record of Repeat Medication that has been recently discontinued

Acute Medication

Date prescribed	Medication Item	Dosage instructions	Quantity or duration	Reason for medication	Supporting information
01/12/2008	DIAMORPHINE HCl inj 10mg	START WITH 20MG/24 HOURS IN SYRINGE DRIVER, INCREASE AS PER PROTOCOL	10 10mg ampoule(s)		
01/12/2008	MIDAZOLAM inj 10mg/5ml	START WITH 20MG/24 HOURS IN SYRINGE DRIVER, INCREASE AS PER PROTOCOL	10 ampoule(s)		
01/12/2008	METOCLOPRAMIDE inj 10mg/2ml	START WITH 30MG/24 HOURS IN SYRINGE DRIVER AND INCREASE AS PER PROTOCOL	20 ampoule(s)		
01/12/2008	PARACETAMOL caps 500mg	TAKE TWO 4 TIMES/DAY	80 capsule(s)		

Administrative Procedures

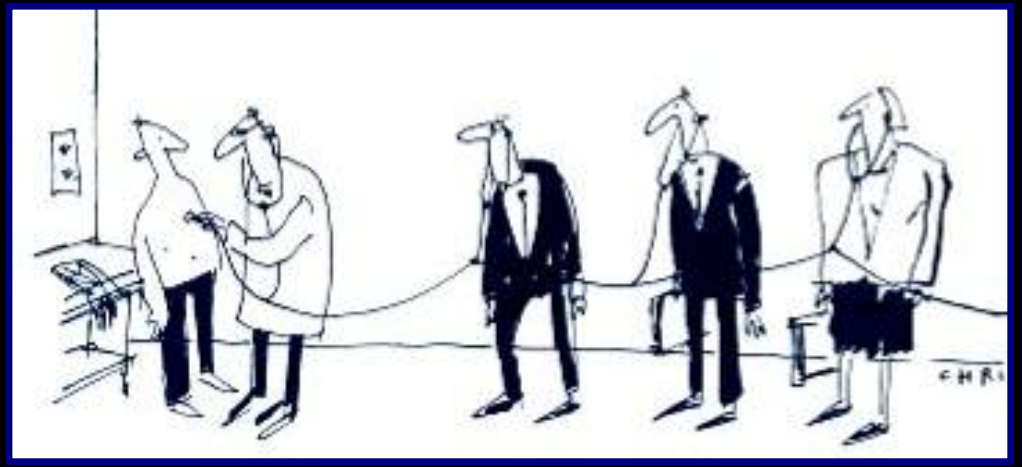
Date	Description	Supporting information
01/12/2008	Has a carer	Notes: James (Husband), family - 2 sons (Philip & Tom) who live locally
01/12/2008	DS 1500 Disability living allowance completed	Notes: completed

Clinical Observation and Findings

SUMMARY CARE RECORD: FINDINGS

- £235 million of a £12.4 billion IT programme
- Began with a politician’s promise
- Repeated delays, technical glitches, unforseen problems
- Non-adoption, resistance, abandonment
- “Ridiculously overgoverned”
- Multiple stakeholders, multiple versions of the story

Summary Care Records



NHS Connecting for Health

FORMER SHIPMAN PATIENT IN CONTROL

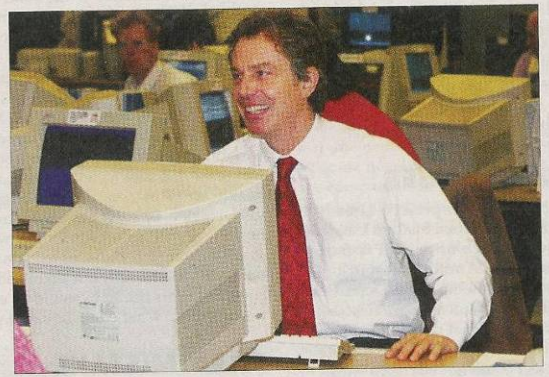
Margaret Rickson *79, retired*

17

SYSTEM FAILURE!

A Private Eye special report by RICHARD BROOKS

How this government is blowing £12.4bn on useless IT for the NHS

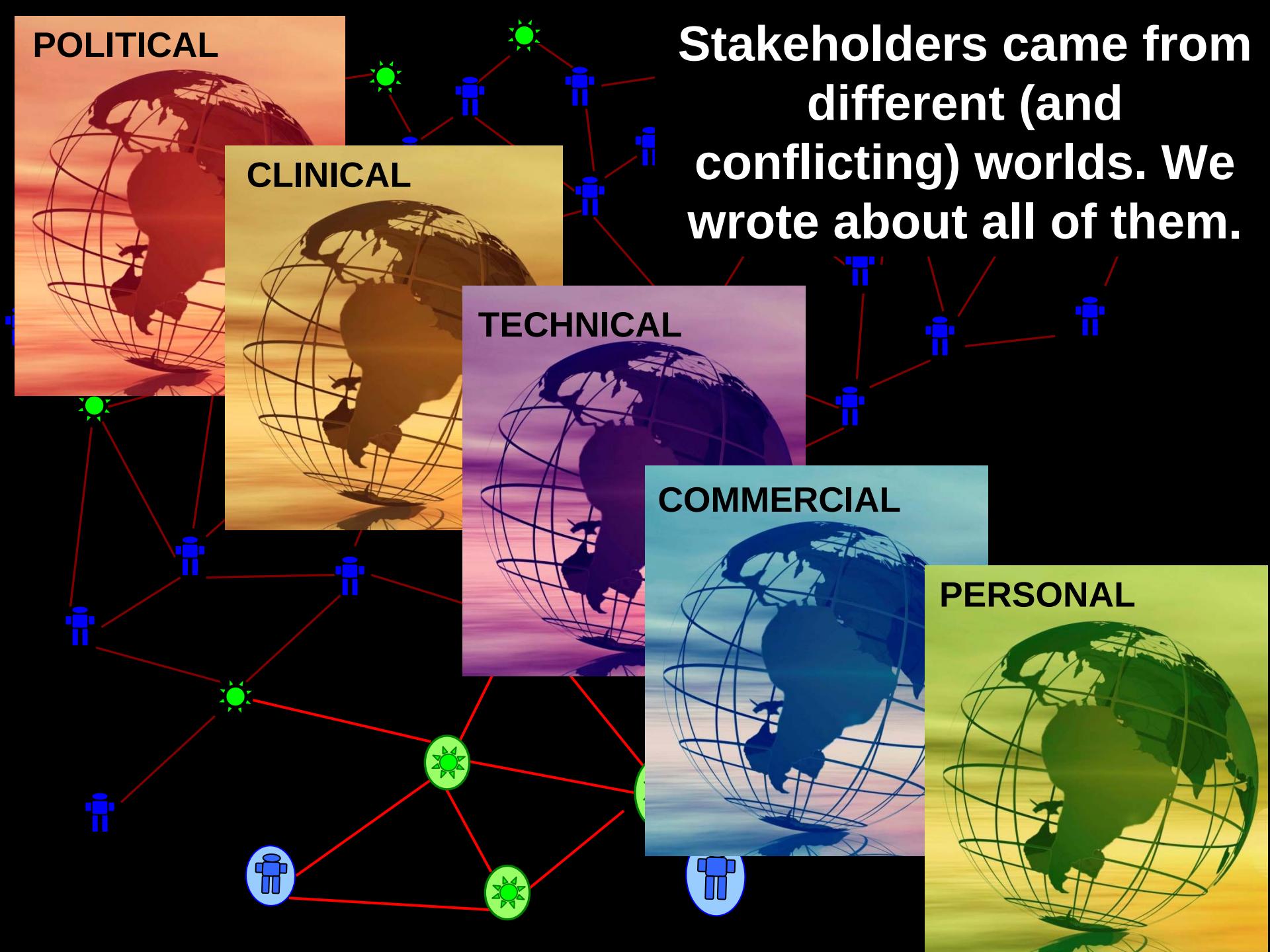


CLUELESS: Tony Blair, who can barely use a computer himself, naively believed that a grandiose IT project could transform the NHS

"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


POLITICAL
CLINICAL
TECHNICAL
COMMERCIAL
PERSONAL
Stakeholders came from different (and conflicting) worlds. We wrote about all of them.

BMJ

RESEARCH

Adoption and non-adoption of a shared electronic summary record in England: a mixed-method case study

Trisha Greenhalgh, director,[1] Katja Stramer, senior research fellow,[2] Tanja Bratan, research fellow,[2] Emma Byrne, research fellow,[3] Jill Rus

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Cite this as: *BMJ* 2010;340:c3111

ABSTRACT

Objective To evaluate a national p
and implement centrally stored ele
patients' medical records.

Design Mixed-method, multilevel

Setting English National Health Se
summary care record (SCR) was in
National Programme for Informatic
evaluation of the SCR considered i
national policy and its frontline im
in three districts.

THE DEVIL'S IN THE DETAIL

Final report of the independent evaluation of the Summary Care Record and HealthSpace programmes

Trisha Greenhalgh, Katja Stramer, Tanja Bratan, Emma Byrne, Jill Russell, Susan Hinder, Henry Potts

7th May 2010

Newsletter RSS Twitter 04 September 2010 | 19:44 GMT

Greenhalgh slams Burns SCR review

Tags: BMA Burns

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."


OPEN ACCESS Freely available online
PLoS MEDICINE
Essay
Evaluating eHealth Interventions: The Need for Continuous Systemic Evaluation
Lorraine Catwell, Aziz Sheikh*
OPEN ACCESS Freely available online
Essay
David W. Bates
OPEN ACCESS Freely available online
PLoS MEDICINE
Essay
Evaluating eHealth: How to Make Evaluation More Methodologically Robust
Richard James Lilford, Jo Foster, Mike Pringle
1 Division of Primary Care, School of Health and Population Sciences, University of Birmingham, Birmingham, United Kingdom, 2 School of Community Health Sciences, University of Nottingham, Nottingham, United Kingdom
3000+ hits
600+ downloads

Professor Aziz Sheikh

Professor of Primary Care Research & Development

General Practice section
Division of Community Health Sciences
The University of Edinburgh
Medical School, Teviot Place
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EH8 9AG
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Fax: (0131) 650 9119
Aziz.Sheikh@ed.ac.uk

"Health information systems should be evaluated with the same rigour as a new drug or treatment programme, otherwise decisions about future deployments of ICT in the health sector may be determined by social, economic, and/or political circumstances, rather than by robust scientific evidence."

"…systematically address each part of a chain of reasoning, at the centre of which are a programme's goals."

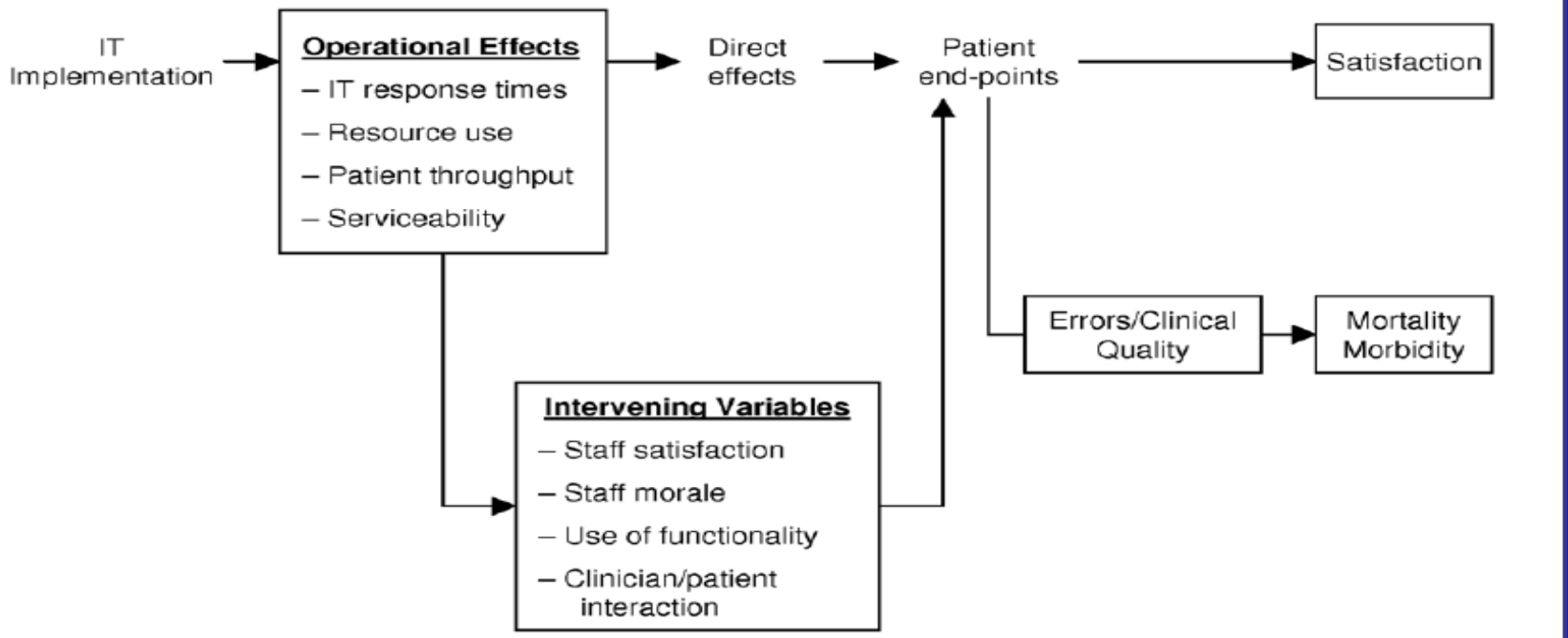


Figure 1. Causal chain showing levels where IT may impact. The potential impact of IT at different levels in a health care organisation. These boxes show endpoints that can be measured at different stages of the causal pathway. These endpoints include system effects (operational effects), effects on mediating variables, and endpoints at the patient level such as clinical errors and their sequelae.
doi:10.1371/journal.pmed.1000186.g001

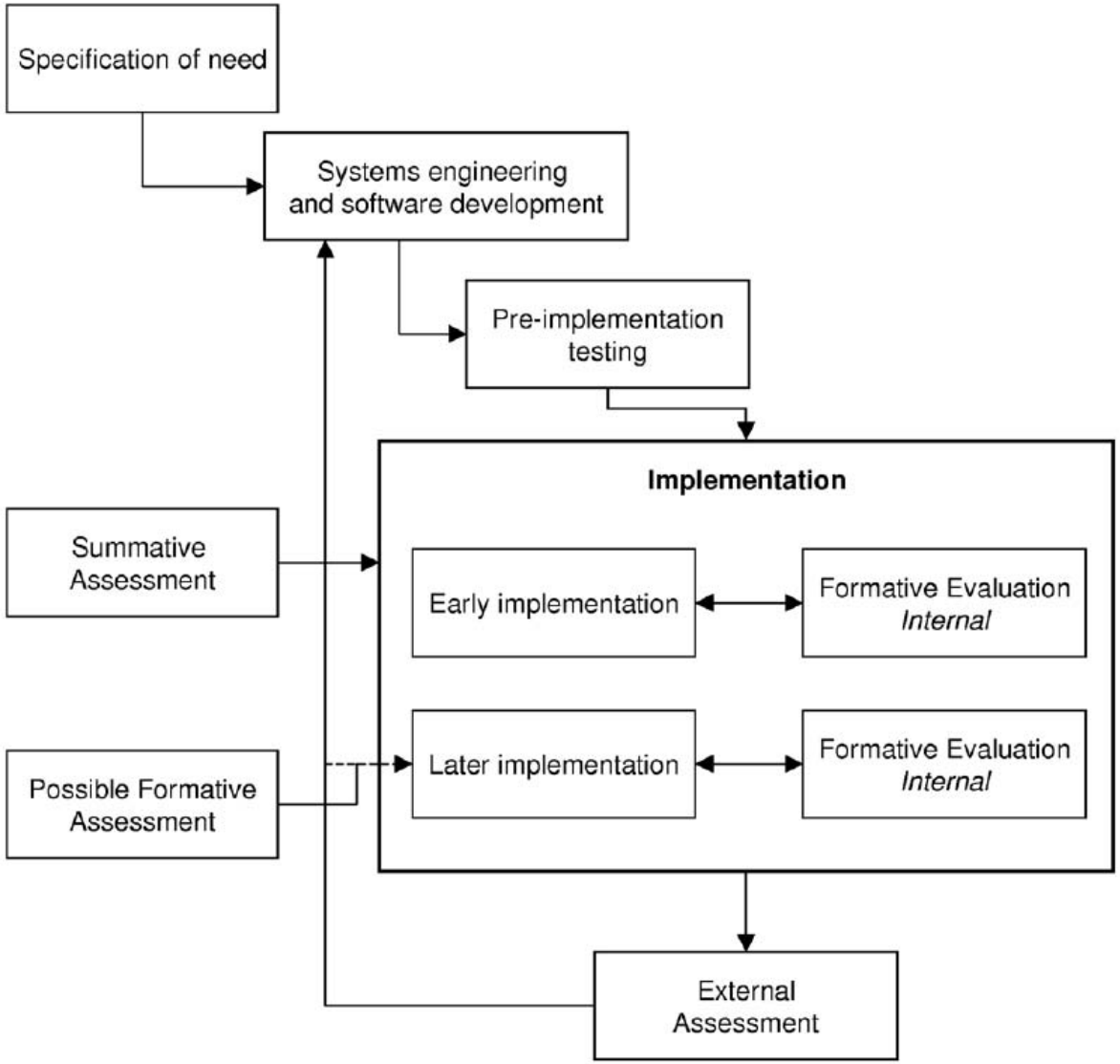
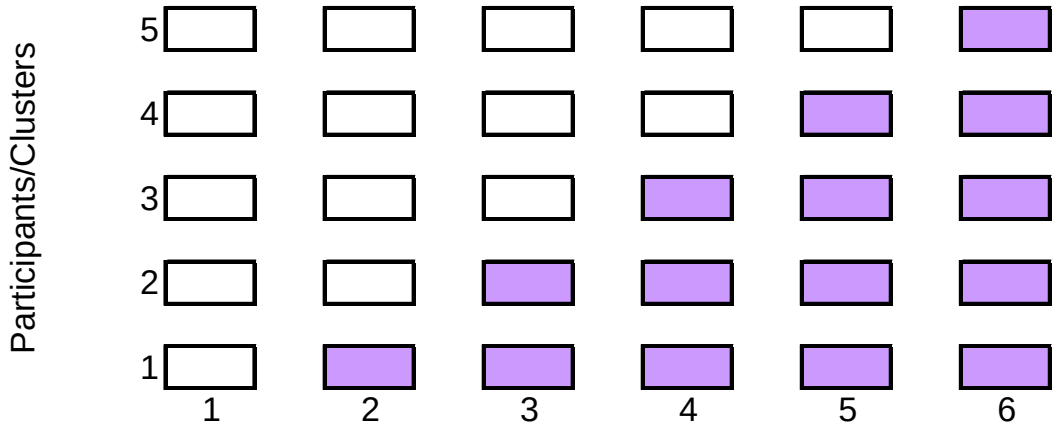


Figure 2. Diagrammatic representation of development and deployment of IT systems. Diagrammatic representation of the development and deployment of IT systems to demonstrate the ideas of internal versus external assessment on the one hand and formative versus summative evaluation on the other.
doi:10.1371/journal.pmed.1000186.g002



Shaded cells represent intervention periods
Blank cells represent control periods
Each cell represents a data collection point

"The step-wedge design appears to have particular promise in the evaluation of eHealth systems. The largest project commissioned under the NPfIT follows the step-wedge design."

Original paper (10-PLME-PI-5081) resubmitted to PLOS June 2010

WHY DO EVALUATIONS OF E-HEALTH PROGRAMMES FAIL? AN ALTERNATIVE SET OF GUIDING PRINICPLES

Trisha Greenhalgh*, Jill Russell**

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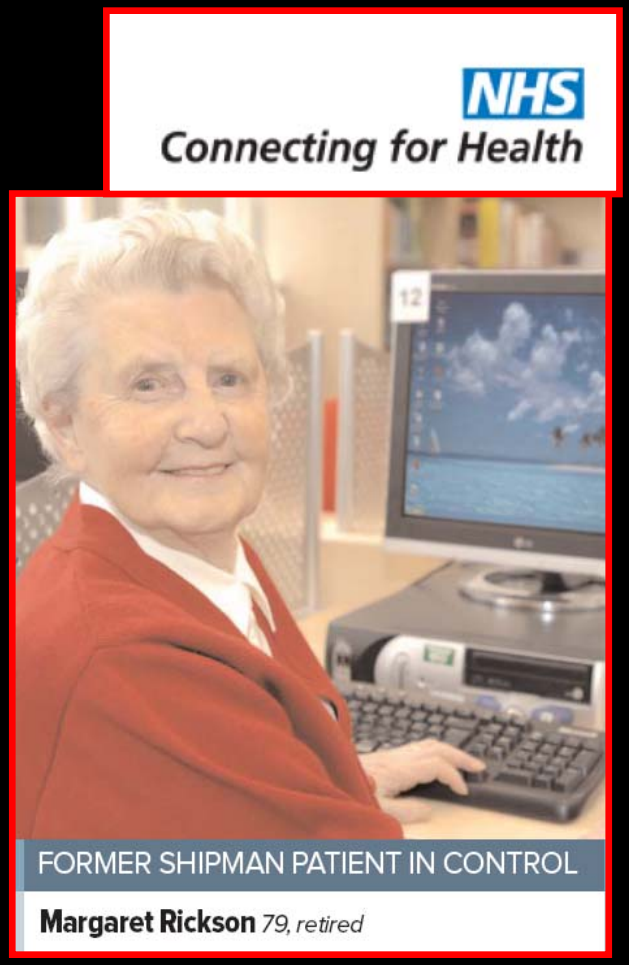
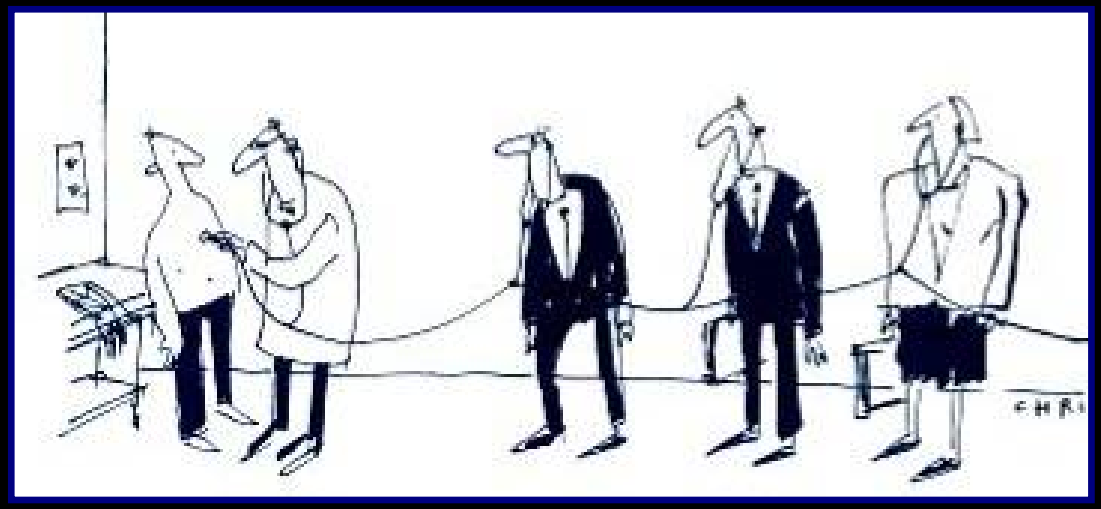
** Division of Medical Education, University College London

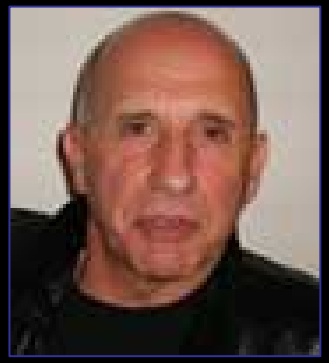
WE SAID "…the authors of the empirical study flagged as an exemplary illustration of the step-wedge design abandoned it in favour of a largely qualitative case study because they found it impossible to establish anything approaching a controlled experiment in the complex, fast-moving and politicised context in which their study was conducted".





"eHealth 'interventions' may lie in the technical and scientific world, but eHealth dreams, visions, policies and programmes have personal, social, political and ideological components, hence typically prove fuzzy, slippery and unstable when we seek to define and control them"

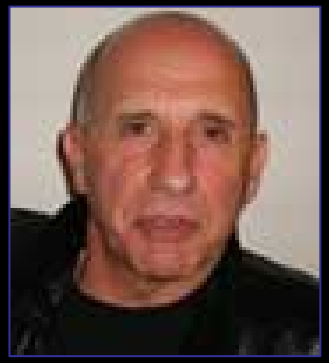
Greenhalgh and Russell



Professor Saville Kushner, UWE

“The [positivist evaluation] model is elegant in its simplicity, appealing for its rationality, reasonable in asking little more than that people do what they say they will do, and it is efficient in its economical definition of what data count….”

BUT…..



Professor Saville Kushner, UWE

1. Programmes have multiple and contested goals, so no single goal can be a fixed referent for “success”
2. Outcomes are not stable: they erode and morph over time and in different contexts
3. The causal link between input and outcome is interrupted by numerous intervening variables
4. Programme learning which leads away from initial objectives threatens failure against outcome criteria

"Expressing findings as statistical relationships between variables may draw attention away from people taking action. In the real world of eHealth implementation, designers design, managers manage, trainers train, clinicians deliver care and auditors monitor performance; people exhibit particular personality traits, express emotions, enact power relationships and generate and deal with conflict. Technologies also 'act' in their own non-human way: for example, they boot up, crash, transmit, compute, aggregate and permit or deny access."

Greenhalgh and Russell

“RIGOROUS” EVALUATION

Positivist

- Quasi-experimental
- Methodologically robust
- Values objectivity and disengagement
- Seeks to determine causal relationship between abstracted variables
- Takes reality as a given
- Seeks to resolve ambiguity/contestation

Critical-interpretivist

- Naturalistic
- Theoretically robust
- Values reflexivity and engagement
- Seeks to produce a meaningful account of *these* actors in *this* context
- Questions reality, especially power relationships and taken-for-granted assumptions
- Views ambiguity and contestation as data

THREE TYPES OF EVALUATION OF GOVERNMENT PROGRAMMES

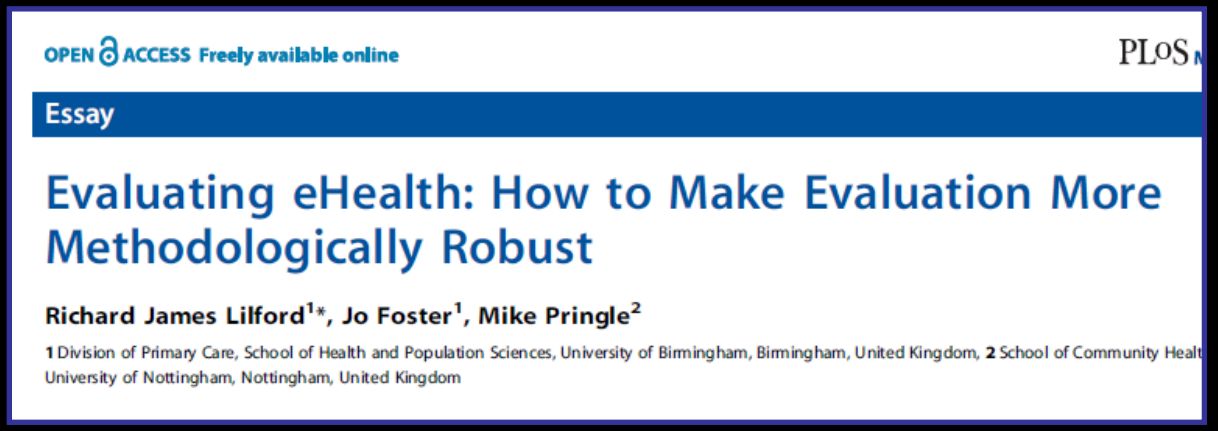
- Bureaucratic evaluation
- Autocratic evaluation
- Democratic evaluation

Macdonald (1970s)

BUREAUCRATIC EVALUATION

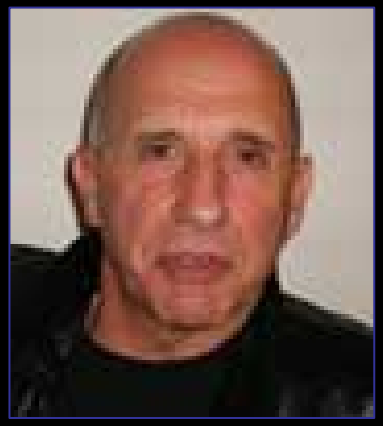
- Evaluators are there to *serve* the government
- Evaluation = *management consultancy*
- Evaluator *does not question* the values or goals of the client
- Recommendations take the form of *endorsement*
- Quality judged in terms of *client satisfaction*
- Published by *government*

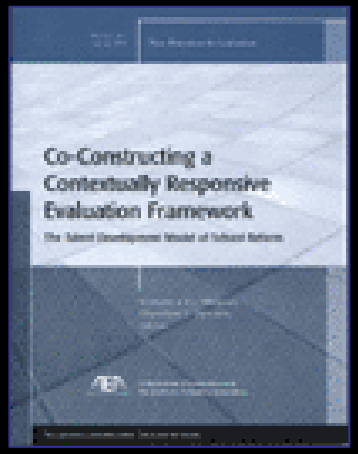
AUTOCRATIC EVALUATION



- Evaluators provide a *conditional service* to government: non-endorsement of policy is a possibility
- Evaluation = *scientific enquiry*
- Evaluator is an *independent academic* who demands non-interference by client
- Recommendations take the form of *scientific findings*
- Quality judged in terms of *objectivity* and *scientific rigour*
- Published by *government* and in *academic journals*

DEMOCRATIC /DELIBERATIVE EVALUATION





Democracy and Evaluation

ERNEST R. HOUSE
University of Colorado at Boulder, USA

This contribution is based on a keynote address to the 2004 European Evaluation Society Conference in Berlin.

- Evaluators provide a *service to society*
- Evaluation = *informed citizenry*
- Evaluator is a *broker* in the exchange of information between groups (some of whose voices are seldom heard)
- Recommendations take the form of *illumination*
- Quality judged in terms of *inclusivity, fair representation, confidentiality, dialogue*
- Published in *multiple formats* for different audiences

AN ALTERNATIVE SET OF GUIDING PRINCIPLES FOR eHEALTH EVALUATION

1. Be very clear and reflexive about your own role as an evaluator and the expectations placed on you.
2. Put in place a governance process which formally recognises that there are multiple stakeholders (hence contested goals, different definitions of success etc).
3. Promote dialogue between stakeholders e.g. by feeding back anonymised data between them.
4. Take an emergent approach.
5. Consider the macro level of the socio-political context in which the programme is being introduced

AN ALTERNATIVE SET OF GUIDING PRINCIPLES FOR eHEALTH EVALUATION

6. Consider the meso level of the different organisations involved – hence how structure/culture etc provides opportunities and constraints for actors.
7. Consider the micro level of the people involved – e.g. beliefs, values, motives, hopes, fears, capabilities.
8. Consider the technologies involved e.g. their inbuilt constraints, assumptions and expectations.
9. Use narrative as a sensemaking tool to produce meaningful accounts of actions in context.
10. Capture attempts by stakeholders to redraw the boundaries of the evaluation or contest its findings.

THREE CRITICAL QUESTIONS

- What is the role of scientists in evaluating government policy?
  - Scientists may contribute evidence but they cannot and should not control the deliberative process by which society decides what is right and reasonable
- What does a “scientific” evaluation of government policy mean?
  - It means that the evaluators should address the task of producing abstracted variance models and remain “rigorously disengaged” from the social, political and ideological context of the programme
- What other kinds of policy evaluation are there?
  - Bureaucratic ☹ and democratic ☺

PEER REVIEWERS' COMMENTS ON 'THE DEVIL'S IN THE DETAIL'

"This is a remarkable evaluation. It is primarily qualitative and is placed within a sophisticated understanding of the theoretical literature. I congratulate the research team on this thorough and useful piece of research"

Original paper (10-PLME-PI-5081) resubmitted to PLOS June 2010

WHY DO EVALUATIONS OF E-HEALTH PROGRAMMES FAIL?
AN ALTE TIVE SET OF GUIDING PRINICPLE

ED x 2

ACCEPTED ON APPEAL

Trisha Greenhalg

* Healthcare Innovation and Po The London School of Medicine and Dentistry

** Division of Medical Education, U Colleg

ANONYMOUS REVIEWER SAID "…In this reviewer's opinion, the eHealth evaluation field would be worse off if evaluators attempted to follow the authors' unclear advice."



Thank you for your attention

Professor Trisha Greenhalgh

Acknowledging critical insights from Jill Russell