Probophilia – a disease of our time

Adrian Kenny and Peter Davies

Adrian Kenny is a GP in Morayfield, near Brisbane, Australia. He used to be a GP in West Yorkshire. He invented the term probophilia and discussed it with Peter Davies, a GP in Halifax, West Yorkshire, who wrote it up.

Introduction

In this article we describe an increasingly common pathology that affects both organisations and individuals. It is a form of individual and collective madness and, when described clearly, it can be seen for what it is.

The syndrome is called probophilia. Its key performance indicator is mis-measurement done to assuage the system’s pathological need for verification.

The probophile places false confidence in numbers (1, 2), and uses these as his focus for justification of activity, whilst losing sight of what the organisation is actually set up to deliver. (3) The sufferer is either oblivious to his affliction, or if aware falls into learned helplessness and just does what the organisation demands (and sometimes cynically pockets the cash). As economists predict, even irrational men and women will ultimately align themselves with the prevailing economic incentives. (4) Mrs Thatcher commented that “you cannot buck the market” and maybe all too many employees have decided that you cannot buck the system either.

Probophilia is endemic in UK public services presently, yet:

- It is not compatible with either satisfying work or good service provision to patients or customers.
- It is not compatible with retaining and motivating good staff whether managerial or clinical.
- It is not compatible with the kind of disciplined, detailed, long term practice needed to achieve full mastery of a specialised skill. (5)
- It is not compatible with sensible expenditure of money, or with making any profit at all.
- It is not compatible with running any organisation successfully.
Some Initial Examples

As we are doctors we will illustrate the condition and its evolution mainly with examples from the medical field. However examples from other fields such as teaching (6) and police work are not hard to find and it is worth presenting some of these here.

For instance here is Philip Johnson (7) writing in the Telegraph

“Here is just a small example that can be fed into the Treasury’s Spending Challenge. Ten years ago my wife, a Montessori teacher, had a single sheet of paper containing guidance about how to deal with her young charges; now the expensively produced, glossy documentation associated with the Early Years Foundation Stage that is foisted upon 39,000 nurseries, both state-run and private, runs to many hundreds of pages. These have to be written, approved and the outcomes inspected by an army of officials. Special courses must be attended, wasting the time and money of all concerned. And are the children any better educated? If anything, the opposite is the case because the teachers are hidebound by rules and regulations. All initiative is stifled.”

Just how hidebound this is, is illustrated by the contrast between the breezy optimism of the former Education Secretary, Stephen Byers in 1998 (8):-

"By settling measurable targets backed up by annual reports we shall be ensuring that the public knows exactly what progress we are making to achieve these ambitious and challenging targets."

And by Robin Alexander’s 2009 report (9) into the results these targets achieved. As the Guardian editorial (10) puts it,

“The Alexander team have gone back to first principles. They have also delivered a shattering verdict.

At the core of the report is the conclusion that the government’s preoccupation with tests and standards has become the cuckoo in the primary school nest…. it is insistent that the prioritisation of measured standards in these fields, which Mr Rose’s terms of reference do not allow him to question, creates pressures - particularly intense at the start and finish of the primary phase - which
“increasingly but needlessly” compromise children’s right to a broad and balanced primary education. The most prominent casualties of this distortion…"

Further on, the article adds:

“In the past, reports of this authority and quality were often commissioned by governments which were genuinely concerned to obtain the full facts and best advice for dealing with difficult problems - and respectful of politically inconvenient conclusions too. Nowadays, largely because of political fear of inconvenient findings, such reports have to be privately financed and written independently, as this one has been.”

Jill Kirby (2) describes such findings as “The Reality Gap.” She describes how government may appear to meet its targets by altering them. Then:-

“After a while, however, reports of success fail to match people’s experience on the ground. The reality of failure becomes undeniable.”

We would add that for the probophile the discovery of the real failure of reality to live up to its key performance metrics will induce a severe degree of cognitive dissonance that is most distressing to the sufferer, but which may be highly amusing to more detached observers.

**Value and Failure Demand**

John Seddon (11) describes the two types of demand that an organisation or an individual worker may encounter. Both will keep the organisation and its workers busy but one is useful and the other is a curse. The two types of demand are **value** demand and **failure** demand.

Value demand occurs when for example a doctor treats an ill patient well and accurately. As doctors we are often surprised when the seriously ill patient goes “I know you’re busy, doctor. I’m sorry for bothering you…I know there are others more in need than me…but I’ve got this terrible chest pain!” This patient is making a value demand on the service and this is just the kind of activity that we should be busy with.

At the other end of the scale a colleague had to answer a complaint because a patient thought the service was terrible when his appointment to have a wart removed was delayed. The letter writing and accounting consumed hours of
time of many people that could, and should, have been used on value demand, rather than being squandered on failure demand.

Failure demand is bad because it takes attention away from delivering value demand. It is intrinsically wasteful as it is useless and expensive. It costs a lot to deliver no value whatsoever. Furthermore it has the tendency to actually hinder the delivery of value demand. For example as Jill Kirby (2) describes,

“In both spheres-banking control and child protection- the Labour Government has, since 1997, introduced detailed and innovative new systems of governance. In both cases, the very existence of those systems, far from preventing problems, appears to have contributed to them.”

Delivering to failure demand, rather than to people’s needs, will frustrate (to the point of stress, burn out, depression, increased staff turnover and early retirement) those well trained, experienced and qualified staff who actually want, and who are able, to deliver to value demand. Probophilia functions to increase failure demand, and so is utterly inimical to the smooth delivery of service and of value. In the UK we have had to tolerate a government of probophiles for the last thirteen years. As James Purnell (12) put it in the Guardian

“It brings home the nature of Labour’s present predicament, which is that while things would have been worse without us, the principle of vitality and vision that must animate a Labour government is on life support. The words are managerial, the values administrative and the vision technocratic.”

It is just as Mr Purnell says. It was probophilia that sapped the vitality from the last Labour Government.

There is no key performance metric for the enthusiasm and grit that just gets things done because they matter- and leaves the analysis of why they matter to the academics. Probophilia is ultimately a fatal affliction to any organisation that fails to eradicate it, and the British Government’s Departments of State, armies, police, customs, immigration service, local councils, schools and hospitals are prime current casualties. When a failing hospital such as Mid-Staffordshire can be rated excellent (13,14), and a children’s social services department such as Haringey be well rated before the Baby P case (15) then we know that the ministerial rhetoric about services and actual delivery are severely disconnected.
Director of the Patients Association Katherine Murphy said:

“How can any patient have trust in the managers and systems that have allowed this disaster to run and run? It is not enough for the Chairman and Chief Executive to take the fall for this. Government targets have directly impaired safe clinical practice and money and greed for Foundation Trust benefits has taken priority over patients’ lives.”

In manufacturing, Toyota is the company that is best known (historically at least) for its relentless focus on value demand, and its stringent efforts to keep failure demand to the absolute minimum possible. (16) We will learn more from them when we consider treatments.

How does probophilia arise?

As with most diseases a soil and seed model is useful to describe the evolution of probophilia. There is a mixture of certain internal character traits in the probophile, coupled with an environment that encourages expression of these flaws. In a truly competitive environment these flaws would be eliminated quickly, but nestled in a welcoming host environment they establish roots and spread.

The most fertile soil for probophilia is a large organisation (whether public or private) in which the focus over time has shifted from what it is supposed to be delivering, to a series of proxy measurements that may or may not be accurate representations of what the organisation should be doing. The probophiles will pour over the spreadsheets and coloured pie charts, and write ever longer and more politically acceptable analyses for each other’s internal and organisational needs. They will also produce many, large glossy reports for the public to read. They will do this activity without ever going back to think about what the organisation’s purpose is, and whether their activities are actually helping to deliver this. The measurements will be taken as sacrosanct, and dignified as key performance indicators, but may or may not be good measures of anything. (1,2)

Probophiles flourish in organisations where the direct contact between service providers and service users is limited. They flourish in organisations where there are many intermediate layers between service provision and expenditure and service receipt.
Probophilia is a tragic affliction, causing major harm, despite most of those afflicted having the best of intentions. Many individual workers are well aware that there is something significantly wrong with how their enterprise is run, and that there is a disconnection between what they want to achieve for clients, and what they are required do by management or statute. Sadly they will either be unable, or will feel unable, to challenge the idiocy they are required to enact.

**How does probophilia progress?**

To become a probophile requires an awareness there is something wrong with the organisation they work for, and then a willingness to try to do something about it. This is no bad thing in itself, but the willingness is sadly unmatched by any perspective or ability to deliver results. This lack of perspective and ability may be intrinsic to the probophile (17), or result from the probophile being given a time consuming but minor task to distract him or her from what really needs to be done or said. Many senior managers are happy to keep staff employed on probophilic errands- it keeps them out of mischief, provides a ready supply of facts, figures and charts for the strategic health authority, and makes it look as if all the government targets have been met. Bear in mind that for PCT and acute trust chief executives the priorities are to stay within budget, meet all targets, and not get (publicly) caught out by a disastrous clinical problem. (e.g. the mortality rate at Mid-Staffordshire hospital). (13,14) Many staff in the NHS are currently being employed purely for probophilic purposes, to give managers and politicians statistical ammunition, and not to help improve patient care. Sometimes managers get caught out as they “buff the figures” to meet targets as examples from A+E departments show. (18,19)

The consequences of not meeting, or at least appearing to have met, the organisation’s targets are grave as most NHS senior managers know. When one NHS Trust Chairman, David Bowles, had the courage to speak out about this excessive focus on targets, and the consequent risk of neglecting basic patient safety issues, he had to resign before he would have been sacked. (20) His seniors at the Strategic Health Authority publicly disowned him, and denied there was any substance to his concerns.

As three independent reports into NHS culture, commissioned by the former health minister Lord Darzi, showed (21)

"The NHS has developed a widespread culture more of fear and compliance, than of learning, innovation and enthusiastic participation in improvement."
“Most targets and standards appear to be defined in professional, organisational and political terms, not in terms of patients’ experiences of care.”

Dissing your own abilities

In a world of “six sigma” and “continuous quality improvement” it is quite possible to talk a good game about “audit cycles”, “reconfigured care pathways” and “continuous quality improvement” without ever being in a position to deliver improved service to customers. As Earl Kirsten (17) describes well, too many organisations confuse the talking with the doing, and end up promoting those who say the right things, rather than those who do the right things.

Indeed many organisations dismiss their core activity as “merely technical” and so inadvertently demean their staff, with resulting demoralisation, and also a diminishing of the regard the company holds for itself. Many activities, for example, hip replacements, are at one level, merely technical- that is there is a technique for doing them successfully. But to confuse the technique for the job is a category error of huge proportions. It confuses a means with an end, and it totally disrespects the time, energy and disciplined practice (5) that the surgeon has contributed to learning how to do the operation in the first place. Now the surgeon may be partly doing the operation because he enjoys the technical side of surgery. (“Boys with toys,” as we used to mischievously describe it at medical school.) However to fail to honour the overall purpose- here of enabling the patient to walk better and in less pain- is to fail to understand the nature of the medical enterprise and the combination of knowledge with caring that makes for truly effective and humane and therefore valuable medicine.

The probophile will look at the surgeon’s activity, and measure many basic things about it, but they do so without insight or understanding, and so make partial measurements, from which they construct partial representations of the surgeon’s work. They will then mistake the part for the whole, and drag the surgeon into a discussion of how he does one or other part of the work. So they might focus on the fact that his clinic overruns, without considering that he is giving his patients full and accurate information about the pros and cons of surgery in their case. The fact that the surgeon has to see too many patients too quickly is lost in the performance analysis. And if the surgeon cuts consultations short, and gives inadequate explanations his hospital will have to deal with aggrieved patients complaining about rudeness and arrogance and suing for negligence, which diverts funds and attention from doing the job right in the first place, even if the clinic does overrun.
So an attempt at quality improvement may perversely reduce quality, and squander resources on management of failure, rather than delivery of value.

If the surgeon worked for a Toyota like company (9) he would be making his own measurements, and reviewing his own processes, and have time set aside for doing this reflection. In the NHS he is probably trying to fit meetings in amongst everything else, and wondering where all the time goes. A lot of his time is being consumed by failure demand, rather than value demand.

Further Progress

After their success in getting the orthopaedic clinic to run to time the probophile will then be promoted to higher levels of the organisation. Here they will encounter many central governmental targets and learn that these are what matter if quality health care is to be delivered. Compliance with, and achievement of, (20, 21) targets are what distinguish senior managers from the peripheral and merely technical, but however skilful, staff. The targets set define the strategic thrust and measure the outcomes of the organisation and what could be more important than that? And who can be against quality and in favour of low quality? No one. But who actually knows how to define quality and measure and maintain it? Very few, and even those few all have different conceptions of what high quality is.

Probophiles come to represent the organisation to staff, and ensure that only carefully selected information passes the other way. The flow is entirely from the top downwards, and the probophile is always looking upwards for succour. As Liam Byrne (22) describes,

“We need to give people real choices by locking down rights and entitlements and giving people fast means of redress ... In recent years power was basically pointing in the wrong direction. It was pointing up to senior civil servants and ministers in Whitehall and not pointing out to people. That helped create in too many places a culture of heads down, get the job done, deliver on the targets and tick the boxes.”

The bigger picture of overall organisational failure becomes invisible to the probophile, and to their senior leaders. The staff may be well aware of it happening. In the USA this phenomenon was well documented in the Nut Island incident (23) in which the engineers knew the old sewage plant in Boston could
easily be overwhelmed, but where management turned a blind eye until it actually did happen.

Over time, and with promotions, probophiles come to distrust their former colleagues, and regard all as suspect for failure to respond enthusiastically to guidelines and initiatives. Probophiles become utterly unable to conceive of individual agents acting excellently on their own initiative, (24) and so agitate for “defined standards”. They believe that people respond only to carrots and sticks, and are fundamentally, “knaves” being out for what they can get, not for what they can do. (25)

Probophiles believe that excellence will come about as a result of compliance with regulation and guidelines, which are better written centrally (by experts) than locally (and with variability). A key belief of probophiles is that local discretion should be severely limited, as variation is clearly unacceptable, and heaven forbid, inequitable. The syndrome of central credit and local blame emerges.

Probophiles may advocate for “reflective practice” (26) but in practice they are surprisingly unreflective. This is somewhat surprising as “reflection in action” and being part of a “learning organisation” (27) are often touted as their higher values. Probophiles often teach others that which they most need to learn for themselves, sometimes by good example, but more often by dire warning. As we saw earlier (21)

“The NHS has developed a widespread culture more of fear and compliance, than of learning, innovation and enthusiastic participation in improvement.”

So much for “An organisation with a memory” and “Building a safer NHS for patients - implementing an organisation with a memory” (27)

Probophiles often talk about communication, but this is dangerous as few of those who talk about communication can actually communicate. Although they talk, they vigorously avoid any genuinely independent views preferring to talk about “networked opinion” and “stakeholders” whilst all the time behaving in a way that indicates compliance and approval is the only form of engagement required. The more open they say their office door is, the more closed shut are their minds. Then they make pleas for “clinical engagement.” (28) But the doctors are aware that the managers are making this request through the blinkers of
central government policy and that really compliance rather than commitment is wanted.

A particularly peculiar feature of probophile’s learning is their love for newness, and their somewhat confabulated version of an organisation’s history. They do not understand the condescension of posterity, and anyway the organisation they work for will be renamed, or redisorganised (29) in a few years time. Posterity does not happen much in their world, and the pressure of an ever rolling present is a burden they have to carry. The recent decision by Andrew Lansley to completely get rid of Strategic Health Authorities and Primary Care Trusts (30) is a prime example of this phenomenon, although as authors who vigorously oppose the activities of probophiles we regard this action as a good start on draining the swamp!

Probophiles show much ingenuity in reinventing and renaming measures thereby revalidating the illusion of progress whilst not actually making any. For example the evolution of Calder Hall into Windscale into Sellafield did not alter the fact that the name referred to a nuclear power station. Indeed it could be argued that name changing is a form of fancy dressing that alters no underlying reality. So for example altering “Calderdale Primary Care Trust” to “NHS Calderdale” made no difference to the function of the organisation or how it was perceived. Yet much debate and thought went into the change. Why? Likewise altering the name of the Department of Education several times has not made the organisation work any better, or ensure our children are educated any better. Indeed the frequent name changes could be seen by more cynical observers as a key performance indicator of a failing department.

If renaming is not enough then changing the definition of a problem allows the numbers to be counted accurately, but not compared with previous figures. We have seen this tactic used for many years in relation to the headline unemployment total where the purpose of the figure has been to disguise rather than reveal the extent of economic inactivity in the UK workforce. (31)

Probophiles have no consciousness of the irony of Goodhart’s Law, and so measures become targets, which get achieved, but lead to no achievement in practice. So for example former Prime Minster Blair was easily embarrassed when a voter asked him about the impact of his government’s 48 hour GP access target and its unintended consequence that she was unable to book any further forward than 48 hours! The doctors had achieved the target whilst subverting its
intention. The DH and PCT staff had monitored the target and dutifully documented it being achieved.

The workers in a probophilic system soon learn that what is measured and counted is the written record of care, and not what is actually done. The representation of activity becomes an activity in its own right, and the phenomena of “preparation for the QOF visit” and “writing up the nursing notes” are readily recognisable consequences.

The tragedy of the probophilic efforts is that the more energetic they are the more damage they do to the organisation. Since probophiles always have to be busy, they do progressively more damage to their organisations. They have no concept of inadvertent effects. Unlike their medical workforce they do not start from a sobering encounter with a cadaver, and Hippocrates’ great dictum, “First, do no harm.” As doctors mature they come to realise how exacting an instruction Hippocrates words are to live up to, and the “furor therapeuticus” of their earlier years usually mellows. Probophiles have no concept of “doing nothing” or “watchful waiting.” At medical school in Leeds, Martin Nelson, one of the orthopaedic consultants came out with the classic saying,

“It is very important to be seen to be doing something…even when in fact that something is actually nothing.”

Probophiles have no such sense of irony. When they hear that “something must be done” they set about doing something, rather than sensibly waiting for the hubbub to die down. Their interventions tragically get bolder and dafter the older they become. Hubris leads onto nemesis, followed by redeployment. Those whom the Gods would destroy, they first make mad. And sadly probophiles become deeply mad, lost in a world of abstractions that bear hardly any relationship to the world.

So now we can see the depth of the tragedy of probophilia. Mis-measurement, self-delusion, self-importance, arrogance, disrespect, an inability to observe and a complete failure even to begin to comprehend the beginnings of their ignorance allied to an obsessive compulsive drive that something must be done leads to a disaster for those people and organisations afflicted by the illness. The illness occurs in devastating outbreaks that claim many victims, both amongst the afflicted and with severe collateral damage to bystanders.

It is a serious illness and we need a plan for dealing with it.
Management

When organisations come to realise the prevalence and severity of their probophilic infestation they need to take action to remove the source of the problem. Often such a realisation arises when there is a change in management or government. For example the new coalition government has made a good start on this treatment for the NHS by closing down many organisations and QUANGOs that are natural habitat for probophiles. (32)

It appears committed to measuring outcomes that matter rather than processes that do not, but defining clear outcome measures, and defining who is responsible for contributing to the outcome is far from easy. (33) At least it is a step in the right direction, away from probophilic obsession about processes, and a return to thinking first about, “What do we want to get out of the system?” and secondly, “how will we know we have got this?” and thirdly “What processes will we need to achieve this?” For probophiles procedures are valued ends in themselves and deviation from procedure is seen as bad in and of itself.

A better way

Quite simply, organisations need to re-focus on value demand: on measuring the things that really matter to the people who buy and use their products and services.

In the NHS’s case what needs to happen is:

- It wakes up and remembers that its main function is to heal the sick.
- It remembers that the aim is get patients to flow through its parts on basis of their need, not the system’s.
- Anything that helps a sick patient progress through the system more smoothly is helpful.
- Anything that hinders the flow of patients through the system is bad both for patients and staff.
- Continuity and flow beats silo thinking (3).

There are models available that might have some lessons for the NHS – and the organisations that make it up. These tend to be based on systems (11), and the simpler they are the better.
Toyota (9), despite its recent problems, has long led the world on manufacturing excellence. Their whole philosophy is based on flow and removing hold-ups to flow. Each team looks at its own performance and defines its own very exact protocol, and monitors their ability to improve regularly. Although at one level the system is very procedural and prescriptive, at another it opens up the option for local teams to reflect on performance, and alter their working protocols as necessary. The system is notable for being decentralised yet co-ordinated, and for the engagement of workers with their work and their colleagues. As far as a manufacturing company can, Toyota seems to avoid the problem of managers telling engineers how to do their job. Their production efficiency overall is excellent and emerges from the centre’s trust that the teams in the periphery will work as part of the whole, and not as rogue units.

On a similar theme, Taylor (34) describes how US Air Force Colonel John Boyd realised that he had to push as much power and resource to his pilots as possible. They were the ones who actually did the work and won or lost the war, in lots of individual engagements. The staff at headquarters had one job which was to get the resources to the pilots.

“USAF Colonel John Boyd developed a concept in the 1960s and 1970s for cold war era fighter combat that is helpful. His view was that fighter pilots would win dogfights if they could go through the loop of observation, orientation (and analysis) decision making, and action (OODA), more effectively than the enemy. Better OODA loops by fighter pilots became the goal of fighter design, pilot training, and every other decision process throughout Fighter Command. (OODA loops higher up the organisation were simply aimed at making pilot OODA loops more effective).

Later in life Boyd argued that driving power to the edge was critical to survival and success for most, large complex and adaptive organisations operating in uncertain, dynamic environments. The organisation’s guiding imperative had to be to make edge teams as effective as possible. Objective-driven incentives should be used to influence resource requests and guide these edge team decisions, rather than resource allocation and method driven commands. In plain English, agree what they should do and then give them the support and the resources to do it.”

This type of thinking is antithetical to centralising tendency of probophilia. The underlying rationale of the current UK coalition government handing ‘power to the professionals’ and responsibility for commissioning to GPs in the NHS as described in the recent DH white papers (30, 32, 33) can be seen as a desire to
move towards the way of Boyd and Toyota, and away from the way of the probophile. But will it succeed? Is the commitment genuine enough, or will, for example, the NHS Commissioning Board – with its responsibility for financial control and meeting the NHS Outcomes Framework – become the new probophile? Or have GPs and other professionals become so habituated to an ingrained command-and-control structure that they will not be willing to transcend their learned helplessness? Time will tell, but we suggest the following parameters of success:

- A clear focus on delivering what the customer needs.
- A clear focus on what needs to be done to get clinicians and patients to interact more effectively with each other in the organisation’s primary encounter- the consultation.
- Free flow of patients across interfaces of care on basis of need.
- Free flow of information between colleagues to keep patient treatment continuous and courteous.
- An absence of intermediate management artefacts, mis-measurements and other status reports.
- An absence of failure demand.
- An absence of silo thinking.
- Far fewer top-down instructions and directives.
- An absence of structural reorganisations that do not alter the patient’s experience.
- A reduction of target-focused external inspection.
- Management respect for, and trust in, front line staff.
- Front line staff reviewing their own performance and implementing changes as necessary in their specific circumstances.
- The centre learning to trust the periphery, and respect its initiative.

Until such indicators are met the prognosis for the NHS, and most UK taxpayer funded services, is bleak indeed; the likelihood is higher costs and lower value that we can ill-afford.

Conclusion

Probophilia is an established problem in many organisations, both public and private. Fundamentally it is based on the ability of spreadsheets to analyse data without any matching ability going into primary thought about what data is being measured or why it counts for anything. (1) The result is a tyranny of false measures. Those organisations that will flourish in future will be those that can
make true and accurate measurements of their processes and outcomes, and view them from multiple viewpoints to make it easier for their staff to deliver the relevant service to service users.

Until probophilia is eradicated the prognosis for many UK taxpayer funded services, and some private businesses, is bleak indeed, with the likelihood of higher costs and lower value.

References

10. Guardian That’s the way it is editorial 21.2.2009 http://www.guardian.co.uk/commentisfree/2009/feb/21/primary-school-tests
13. Telegraph (19.3.09) Heads should roll over the Staffordshire hospital scandal http://www.telegraph.co.uk/comment/5010722/Heads-should-roll-over-the-Staffordshire-hospital-scandal.html
14. Smith, R. (17.3.09) Daily Telegraph NHS targets 'may have led to 1,200 deaths' in Mid-Staffordshire
http://www.telegraph.co.uk/health/healthnews/5008442/NHS-targets-may-have-led-to-1200-deaths-in-Mid-Staffordshire.html

15. Lawrance, J (2008) A three-star report – and a tortured child Independent 15.11.08


17. Kirsten, E. The art of demotivation

18. HSJ reporter (2009)Trust admits doctoring A&E waiting time figures HSJ

http://news.bbc.co.uk/1/hi/uk/7249514.stm (accessed 25.11.09)

20. Donnelly, L (25.7.2009) Hospital chairman quits over dangerous targets
http://www.telegraph.co.uk/health/healthour-hospitals/5908612/Hospital-chairman-quiots-over-dangerous-targets.html

21. Smith, R (18.2.2010) NHS puts targets ahead of patients reports warned

22. Wintour, P and Watt, N (Guardian 26.6.09) Labour ready to abandonTony Blair’s public service targets
http://www.guardian.co.uk/politics/2009/jun/26/labour-public-service-targets


Cambridge University Press, UK


28. Improvement Foundation  Clinical Engagement
   http://www.improvementfoundation.org/page/our-approach/clinical-engagement
30. DH 2010 Liberating the NHS white papers
31. Nelson, F. Cameron must take this chance to end the giant evil of welfare dependency Spectator 1.8.10
32. DH 2010 Liberating the NHS: Report of the arms-length bodies review.
33. DH (2010) NHS outcomes framework
   http://nhsoutcomesframework.dh.gov.uk