

## Trust in performance indicators?

H T O Davies, J Lampel

*A system that does not trust people begets people that cannot be trusted*

### Abstract

**The 1980s and 90s have seen the proliferation of all forms of performance indicators as part of attempts to command and control health services. The latest area to receive attention is health outcomes. Published league tables of mortality and other health outcomes have been available in the United States for some time and in Scotland since the early 1990s; they have now been developed for England and Wales. Publication of these data has proceeded despite warnings as to their limited meaningfulness and usefulness. The time has come to ask whether the remedy is worse than the malady: are published health outcomes contributing to quality efforts or subverting more constructive approaches? This paper argues that attempts to force improvements through publishing health outcomes can be counterproductive, and outlines an alternative approach which involves fostering greater trust in professionalism as a basis for quality enhancements.**

(*Quality in Health Care* 1998;7:159–162)

Keywords: health outcomes; league tables

### Introduction

Controlling costs while improving quality and increasing access are challenges facing all healthcare systems. In response, the past decade has seen unprecedented reform of health systems. Although great diversity remains between different national systems (and even within some nations), recognisable within most healthcare systems in the developed world are the combined features of managed care and managed competition.<sup>1</sup>

If competition is to succeed in raising quality and controlling costs then good measures of quality are needed to inform the market. Further, if managers are to intervene successfully in the doctor-patient relationship then they too need information to counterbalance doctors' professional knowledge. It is no coincidence that the rise of managed care and managed competition has been accompanied by an explosion in performance indicators. The United States healthcare system has always been awash with data because of the need to bill patients—the problem has been turning

that data into worthwhile information. However, even in the supposedly data sparse National Health Service (NHS), performance indicators have mushroomed (box 1).

Performance measurement in the NHS has a history of seeking control and accountability. Performance measures have proliferated since the early 1980s, rising to 2500 indicators by 1988.<sup>34</sup> Amalgamating different measures into indices of performance such as the NHS late but unlamented efficiency index and the NHS labour productivity index has made for blunt instruments which have received less than enthusiastic support.<sup>35–37</sup> Subsequent measures may go under different guises—for example, *The Patient's Charter* and *The NHS Performance Guide*—but the intention is still the same: an ever-expanding collection of carrots and sticks with the hope of influencing quality improvements and cost control within the NHS.

The proposed new outcomes league tables<sup>38</sup> are merely a continuation of this trend. They reflect the underlying philosophy that more and better data, collated at the centre, will be a useful tool to bring about beneficial change further down the hierarchy. The NHS quasimarket reforms have further contributed to this culture with purchasers demanding detailed monitoring, and placing contractual obligations on providers to achieve given outcomes.<sup>4</sup> The latest white paper<sup>39</sup> and national performance framework<sup>9</sup> show little slackening of this philosophy and it is clear that the NHS can expect continued attention to measured indicators of performance in the context of national comparisons.

Box 1 *Performance measurement in the NHS.*

More recently, attention has turned away from performance indicators which measure processes (what was done), to those that measure outcomes (what was the result).<sup>2,3</sup> In this the United Kingdom lags far behind the United States in the extent and complexity of its published outcome measures—but recent initiatives are increasing the information in both professional and public domains.<sup>4–8</sup> The publication of consultation papers on a

Department of Management, University of St Andrews, St Katharines West, The Scores, St Andrews, Fife KY1 6 9AL, Scotland, UK  
Huw Talfryn Oakley Davies, lecturer in healthcare management  
Joseph Lampel, reader in strategic management

Correspondence to:  
Dr HTO Davies,  
Department of Management,  
University of St Andrews,  
St Katharines West, The Scores,  
St Andrews, Fife KY1 6  
9AL, Scotland, UK.  
Telephone 0044 1334  
462870; fax 0044 1334  
462812; email:  
hd@st-and.ac.uk

Accepted for publication  
26 June 1998

national framework for assessing performance<sup>9</sup> makes it clear that this trend towards greater use of outcome measures will continue in the United Kingdom. Proliferation and publication of outcome measures at local and national level is also an increasing phenomenon in other developed nations.<sup>10-15</sup>

#### **Pitfalls in performance indicators**

Three main problems are apparent with this approach. Firstly, it reflects end of process error detection rather than built in quality. Delays can often amount to years in producing the data and acting on the findings. It is not reassuring to patients to know that serious problems may only be detected and corrected years later.

Secondly, there are severe methodological problems with routinely gathered observational data which greatly limit their interpretation. This is particularly so of outcomes data which are prone to many serious and subtle biases.<sup>3 16</sup> Ambiguity over causation means that strong assertions and punishing actions are not warranted by the weak evidence provided by performance measures.

Thirdly, there is a concern that performance measurement, which is in essence motivational or even coercive in nature, may in fact pervert behaviour and engender an adversarial and defensive culture detrimental to quality.<sup>17-19</sup>

#### **Escalation and supposed legitimacy**

So far, the response to these perceived difficulties has been more of the same: more performance measures; more contextual variables; more complex case-mix adjustment; and, of course, more expensive information technology to support the entire fragile edifice. This escalation is analogous to the ancient practice of blood letting: temporary relief was offered as proof of efficacy but the underlying condition actually remained unchanged. The ensuing return of the original symptoms simply provoked more vigorous application of treatment. Far from recognising that the treatment was part of the problem, the ministering physician saw an intractable condition that had to be attacked without compromise. Could the same be true of performance measurement in the NHS?

For a long time the legitimacy of quality control through performance measurement has been internal, based on the record of past success. Policy makers and administrators have reduced waste and limited professional autonomy through tightened control and accountability systems. Performance measurement and the associated administrative reforms have borne fruit: more is now done in the NHS than ever before and the rate of increase in expenditure on health care in the United Kingdom actually diminished in the 1980s. More recently, the legitimacy for doing more of the same has come from emulating the private sector. The private sector, it is claimed, shows how waste and inefficiency can be reduced by following new methods of process control.

Ironically this justification comes at a time when the private sector is increasingly aban-

doning control as the key mechanism for achieving better results. Less control, not more control, is the hallmark of excellent private sector companies. Here, we see more faith in human beings and their skill and creativity, rather than reliance on formal systems for their own sake.<sup>20</sup>

It is time that we recognised that performance measurement is addictive, requiring larger and larger doses to get a temporary fix. It is an approach that promises much but does not deliver—precisely because its stated intent is not matched by organisational realities. What is needed is not more incremental change, trying to rectify inadequacies in a system with inherent limits: this amounts to little more than a tightening of the screws. A more radical review is needed of how quality is facilitated in the complex setting of health care.<sup>21</sup>

In particular we need to be mindful of developing systems which promise information to reform service organisation and performance, but which are in fact political in origin, ritualistic in execution, and self sustaining in effect. There is increasing resistance across the public sector to the imposition of quality systems which make great demands on service providers in the name of accountability but which are unable to show beneficial impact.<sup>22 23</sup> In health care too we need to identify which information systems (or parts of systems) are instrumental in promoting beneficial change and which are simply ritualistic.<sup>24</sup> The opportunity costs of data gathering and the risks arising from perverse incentives are such that we can ill afford measurement systems which are merely political or managerial palliatives.

#### **An alternative approach**

There is an alternative approach already being explored in the successful businesses of the 1990s.<sup>20</sup> It is built around empowerment of individual people and trust in their motives and abilities. Professional staff in particular cannot be well controlled by simple performance indicators (however numerous): the very nature of a profession means that there is skill and expertise held by professionals which cannot be encapsulated by simple rules and regulations—that is, their tacit knowledge.

Thus successful management of professional staff relies on their integrity and ethics to avoid them becoming players working against the organisation's objectives.

The crucial difference is the underlying philosophy of the use of the data.<sup>25</sup> When data are used as carrots and sticks, aimed at motivating improved performance, we should not be surprised when staff and institutions become artful at grabbing the carrots and dodging the sticks. Beating the system, not improving quality, becomes the aim of the game. The same performance data can be used in very different ways however: when the data are perceived as enhancing knowledge, not judgmental, and staff know that their motivations are not in doubt, then the culture is set for quality gains. It is the contrast between published outcomes in league tables where the main intention is to

avoid falling down the table, and published outcomes to promote reflection on policy and practice.<sup>26-28</sup>

At the same time, it is important to emphasise that adopting a hands off approach will not in itself deliver high quality efficient services. Giving over control and trusting individuals and institutions implies much more than simply abdicating responsibility. There will always be a need for some monitoring and constraints—for example, budgets, statements of objectives, and broad operational parameters. Further, senior management have a right to expect placement of appropriate local systems which foster quality. These should encourage sharing of information and expertise in a way that acknowledges contextual factors and tacit knowledge. Practitioners need time and space to reflect on their practice in an atmosphere free from threats; they then need room to manoeuvre so that opportunities for improvements can be exploited. It is management's role to ensure that just such an environment is created. Alongside this, managers should recognise that hard data offer only a limited view of operational performance and difficulties. Therefore, although information systems are essential to support internal quality mechanisms, their use must be constrained to prevent data being overinterpreted and re-emerging as part of new control mechanisms.

### Learning organisations

Some of the most successful private sector organisations have embraced the concept of organisational learning as a means to providing better products or services, greater competitiveness, and higher profits.<sup>29-31</sup> In health care too some organisations are waking up to this approach.<sup>32</sup> Learning organisations are the antithesis of bureaucracies: they are decentralised, team based, and encouraging of open communication; collaboration replaces hierarchy, and the predominant values are those of openness and trust.

Learning organisations have learning and adaptation as central characteristics rather than an emphasis on maintaining stability (box 2). They assume that those closest to the end product know most about key activities, and managers therefore encourage and support front line workers in identifying and implementing change. This requires explicit recognition of the importance and value of tacit knowledge and thus a rejection of command and control as the high road to better management. Hence knowledge is mobilised at the operational level to improve performance rather than wielded at a managerial level to demand (but not facilitate) ill specified improvements.

The rapid growth of evidence-based practice and the widespread uptake of clinical audit show that, given the opportunity, healthcare professionals are well motivated to pursue quality improvement and self development. Policy makers and senior managers should recognise and capitalise on this untapped potential. What healthcare professionals need are

#### LEARNING FROM FAILURE

Learning organisations fight the natural tendency to bury failures. They recognise that there is much to be learned from a detailed examination of failings. The atmosphere required for this to be effective must be free of recrimination and blame (prevalent in hierarchical systems).

#### CONTINUAL RE-EXAMINATION

Learning organisations are constantly reflecting on the effectiveness and efficiency of even apparently smooth running processes. In this way they avoid complacency and are better able to use new knowledge and technologies as these become available.

#### CLOSE UP KNOWLEDGE IS BEST

Learning organisations recognise that front line workers have the best grasp of operational processes (and their flaws). A key managerial skill therefore is tapping this knowledge and making it work for the organisation.

#### KNOWLEDGE MOBILITY

Learning organisations realise that compartmentalised knowledge unnecessarily constrains change. They seek to move knowledge around the organisation, sharing information and perspectives and building on tacit knowledge. This requires formal and informal contact between individual workers, rotating people between units, and developing multiprofessional and multi-function teams. Formal written circulation of information ignores the importance of less readily expressed tacit knowledge and is played down.

#### OUTWARD LOOKING

Learning organisations recognise the importance of looking beyond their own boundaries for new knowledge. They learn from customers, suppliers, and competitors. Investigations of customer satisfaction are used not for reassurance but to identify change; comparisons with competitors involve benchmarking and honest critical appraisal of existing processes.

*Box 2 Characteristics of learning organisations (adapted from Mintzberg et al<sup>30</sup>).*

systems which empower and enlighten rather than those which punish or reward.

### Balancing carrots and sticks

Shifting trends in performance management (especially in the public sector) have shown a declining reliance on mutuality or trust in professionalism as a basis for control and accountability. Instead, with quantitative measures of performance, emphasis is placed on competition, regulation, and supervision.<sup>33</sup> But monitoring of performance is just one way of tackling the principal-agent problem. Other approaches rely on encouraging a better alignment of objectives between principal and agent. If this can be achieved, then the

principal can trust the agent not to indulge in opportunistic behaviour. In turn the agent can trust that his or her activities will be judged in context, rather than evaluated in terms of abstract and often misleading measures—thus diminishing gaming.

In contrast, regulation, measurement, monitoring, close supervision, and exposure to (possibly damaging) competition may therefore be counterproductive: undermining trust and leading to a diversion of effort into unwanted (and wasteful) defensive practices. We have to ask then, what are the implications for performance management in health care of jettisoning trust in professional practice? And what is the role of performance indicators in contributing to a climate of (mis)trust?

### Conclusion

No single approach to performance management is likely to be supreme. For example, it seems likely that different systems will be better for ensuring basic competence, compared with those needed to foster clinical excellence. Performance indicators cannot capture the range and complexity of health service activity and are blunt and sometimes dangerous tools when used in the pursuit of quality – that is, if they have any impact at all.<sup>24</sup> Rather than escalating attempts at control a new paradigm is required which cedes that control generates greater trust and unlocks human potential.

We are grateful to numerous colleagues for many helpful discussions during the development of these ideas. In particular, we would like to thank Iain Crombie, Russell Mannion, Sandra Nutley, Peter Smith, Richard Thomson, and Kieran Walshe. The authors alone bear full responsibility for the view expressed.

- 1 Reinhardt UE. A social contract for 21st century health care: three-tier health care with bounty hunting. *Health Econ* 1996;5:479–99.
- 2 Davies HTO, Crombie IK. Assessing the quality of care: measuring well supported processes may be more enlightening than monitoring outcomes. *BMJ* 1995;311:766.
- 3 Davies HTO, Crombie IK. Interpreting health outcomes. *Journal of Evaluation in Clinical Practice* 1997;3:187–200.
- 4 Long AF, Dixon P. Monitoring outcomes in routine practice: defining appropriate measurement criteria. *Journal of Evaluation in Clinical Practice* 1996;2:71–8.
- 5 Calman KC. The ethics of allocation of scarce health care resources: a view from the centre. *J Med Ethics* 1994;20:71–4.
- 6 Frater A. Health outcomes: a challenge to the status quo [editorial]. *Quality in Health Care* 1992;1:87–8.
- 7 Dickson N. League tables: use for patients. *Quality in Health Care* 1995;4:1.
- 8 Walshe K. Indicators won't turn the tables. *Health Service Journal* 1997;107(5562):24.
- 9 NHS Executive. *The new NHS modern and dependable: a national framework for assessing performance*. London: NHS Executive, 1998.
- 10 Skolnick AA. Joint Commission will collect, publicize outcomes. *JAMA* 1993;270:165–71.
- 11 Epstein MH, Kurtzig BS. Statewide health information: a tool for improving hospital accountability. *Joint Commission Journal on Quality Improvement* 1994;20:370–1.
- 12 Epstein A. Performance reports on quality—prototypes, problems and prospects. *N Engl J Med* 1995;333:57–61.
- 13 McKee M, James P. Using routine data to evaluate quality of care in British hospitals. *Medical Care* 1997;35:OS102–11.
- 14 Anderson BG, Noyce JA. Clinical indicators and their role in management. *Australian Clinical Review* 1992;12:15–21.
- 15 Bloomberg MA, Jordan HS, Angel KO, et al. Development of clinical indicators for performance measurement and improvement: an HMO/purchaser collaborative effort. *Joint Commission Journal on Quality Improvement* 1993;19:587–95.
- 16 Nutley S, Smith P. League tables for performance improvement in health care. *Journal of Health Services Research and Policy* 1998;3:50–7.
- 17 Smith P. Outcome-related performance indicators and organizational control in the public sector. In: Holloway J, Lewis J, Mallory G, eds. *Performance measurement and evaluation*. London: SAGE, 1995:192–216.
- 18 Smith P. On the unintended consequences of publishing performance data in the public sector. *International Journal of Public Administration* 1995;18:277–310.
- 19 Goddard M, Mannion R, Smith PC. All quiet on the front line. *Health Service Journal* 1998;108(5604):24–6.
- 20 Whitney JO. *The economics of trust: liberating profits and restoring corporate vitality*. New York: McGraw-Hill, 1993.
- 21 McKee M, Rafferty A, Aiken L. Measuring hospital performance: are we asking the right questions? *J R Soc Med* 1997;90:187–91.
- 22 Power M. *The Audit Society: rituals of verification*. Oxford: Oxford University Press, 1997.
- 23 Davies HTO. Book review: the Audit Society rituals of verification by Michael Power. *Quality in Health Care* 1998;7:(in press).
- 24 Davies HTO. Performance management using health outcomes: in search of instrumentality. *Journal of Evaluation in Clinical Practice* 1998 (in press).
- 25 Thomson RG, McElroy H, Kazandjian VA. Maryland Hospital quality indicator project in the United Kingdom: an approach for promoting continuous quality improvement. *Quality in Health Care* 1997;6:49–55.
- 26 Green J, Wintfeld N. Report cards on cardiac surgeons: assessing New York State's approach. *N Engl J Med* 1995;332:1229–32.
- 27 Camp RC, Tweet AG. Benchmarking applied to health care. *Joint Commission Journal on Quality Improvement* 1994;5:229–38.
- 28 Krivenko CA, Chodroff C. The analysis of clinical outcomes: getting started in benchmarking. *Joint Commission Journal on Quality Improvement* 1994;5:260–6.
- 29 Brown JS, Duguid P. Organizational learning and communities of practice. *Organization Science* 1991;2:40–57.
- 30 Dodgson M. Organizational learning: a review of some literature. *Organizational Studies* 1993;14:375–94.
- 31 Garvin DA. Building a learning organization. *Harvard Business Review* 1993;71:78–91.
- 32 Sewell N. Do you work in a learning or improving organisation? *British Journal of Health Care Management* 1997;3:315–7.
- 33 Hood C. Controlling public management. *Public Finance Foundation Review* 1995;7:3–6.
- 34 Ham C, Woolley M. *How does the NHS measure up? Assessing the performance of health authorities*. Birmingham: National Association of Health Authorities and Trusts, 1996.
- 35 Appleby J. *A measure of effectiveness? A critical review of the NHS efficiency index*. Birmingham: National Association of Health Authorities and Trusts, 1996.
- 36 Appleby J. Promoting efficiency in the NHS: problems with the labour productivity index. *BMJ* 1996;313:1319–21.
- 37 Radical Statistics Health Group. NHS indicators of success what do they tell us? *BMJ* 1995;310:1045–50.
- 38 McKee M. Indicators of clinical performance. *BMJ* 1997;315:142.
- 39 Secretary of State for Health. *The new NHS: modern, dependable*. London: The Stationary Office, 1998.
- 40 Mintzberg H, Ahlstrand B, Lampel J. *The strategy safari*. New York: Free Press, 1998.