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Health Policy Matters

HELPING DECISION MAKERS PUT HEALTH POLICY INTO PRACTICE

This issue **PERFORMANCE MEASUREMENT IN THE NEW NHS**

Introduction

In place of the internal market all NHS organisations are to be subjected to a rigorous performance management process. The purpose of performance management is performance improvement. The NHS Plan sets out an agenda of work to develop a performance assessment framework, standards, information, inspection, incentives, intervention and earned autonomy. It is an organisation centred, 'top down', model. This may ensure that organisational performance is monitored but will it succeed in promoting performance improvement?

Organisations do not deliver performance improvement. Individuals working within organisations deliver performance improvement. The NHS Plan also stresses the importance of the patient experience. Patients want timely, safe, high quality care in a modern, clean environment. To be successful the performance improvement process must harness the talent and commitment of individuals working in the NHS toward continual improvement of the patient experience.

Performance improvement is for all. This is core business for all in NHS management. This is complex business. The challenge is to engage all front line clinical and support staff in a process of continual performance improvement which is consistent with the national performance management framework. A 'one size fits all' approach will not work.

John Flook, County Durham HA

Background

The collection of comparative data on health care organisations is not a new development. For many years data relating to aspects of the performance of hospitals, health authorities and general practitioners have been collected and disseminated in a wide variety of formats, but these data have not been used in a systematic fashion. However, in turning away from the NHS 'internal market', the current government put the focus firmly on the measurement of performance as a method of delivering improvements in effectiveness and efficiency.

The National Performance Assessment Framework (PAF), the NHS Plan and associated documents have outlined the new approach to managing the NHS in key areas of performance (see box).[1, 2, 3, 4, 5] A series of targets and priorities has been outlined in various policy initiatives eg targets for reductions in health inequalities and mortality rates for major killers such as cancer and coronary heart disease.[6] Health Authorities are obliged to incorporate many of these within their local Health Improvement Plans.

Whilst this approach offers tremendous possibilities for securing major improvements in all aspects of performance in the NHS, it is not without potential pitfalls. Experience elsewhere has shown that performance information does not always directly produce the desired results. In particular, lessons from business, from the former Soviet economy and from the broader public sector suggest that increased use of performance measures may bring with it the danger that unintended and potentially dysfunctional consequences will arise. This issue of *Health Policy Matters* aims to show how the full benefits of such systems can be realised and the pitfalls avoided.

This issue of *Health Policy Matters* has been written by Maria Goddard and Peter C Smith from the Centre for Health Economics at the University of York.

It explores some of the potential traps and pitfalls in performance management and offers some 'golden rules' to assist in developing a dynamic, inclusive, relevant and flexible process.

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Performance measurement policy: current state of play

The Performance Assessment Framework (PAF) incorporates both existing and new sources of data in order to build up a much broader picture of overall NHS performance than we have had before (see box). In particular, there has been a shift away from a purely financial focus to a broader strategy which encompasses important issues such as equity. Related initiatives such as the creation of national standards for key conditions through National Service Frameworks, guidance from the National Institute for Clinical Excellence (NICE) on effective treatments and the whole clinical governance movement, complement and reinforce the current approach to management through performance measurement and monitoring. Local schemes feed into and supplement the national system, although the former are less likely to be concerned with 'external' management, but focused on helping organisations to benchmark, learn from each other and monitor themselves 'internally'.

The NHS Plan announced further developments in a number of areas. The PAF which is currently focused mainly at Health Authority level, is to be extended to all NHS Trusts including those in primary care. All organisations (not just Trusts) are to be assigned traffic light status based on their performance: 'green' organisations will meet all core national targets and be in the top 25% of organisations in terms of PAF performance; 'yellow' will meet all or most targets but not be in the top 25%; 'red' will be failing to meet these standards. The aim is to focus on both absolute performance (progress against national targets) and relative performance (improvements in their own performance, taking into account different starting points and circumstances). A system of financial incentives (preferential access to a performance fund) and non-financial incentives (light touch inspection, greater autonomy and extra responsibilities) will be introduced. This latest development highlights the seriousness with which the performance agenda is being developed.

Areas of Performance Measurement Activity

- Health Improvement
- Fair Access
- Effective Delivery of Appropriate Care
- Efficiency
- Patient/Carer Experience
- Health Outcomes of NHS Care
- Human Resources (to be added in future)

'Dysfunctional consequences': the enemies of virtuous performance management

The performance management process can be thought of in terms of a continuous process of feedback which is illustrated in simple terms in Figure 1.

Aspects of the organisation are *measured*. This information is then analysed and interpreted in the light of environmental influences and organisational objectives. *Action* then occurs which alters the nature of the organisation. The impact of action on the health care system is evaluated and appropriate changes are made to the measurement system. The process continues in the light of this feedback. At the heart of any performance management system is the expectation that the process will eventually produce some beneficial change in behaviour and, as a consequence, outcome. However, if unintended and potentially harmful effects are also created, the net effect of any set of performance measures may be difficult to evaluate. It is, therefore, important at each stage of the above process to look beyond the improvements in the indicator being measured, in order to determine whether the measurement system is on balance beneficial.

Several types of unintended and dysfunctional consequences can

occur. These are defined below,[8] along with illustrative examples, some of which have emerged in recent research at the University of York.[9,10] To some extent these may overlap and interact but the basic classification helps to identify pitfalls. Potential strategies for overcoming some of the adverse consequences are outlined and later summarised, along with a discussion of the issues which may arise in selecting which strategies to use.

(1) Tunnel vision

'Concentration on areas included in the performance indicator scheme to the exclusion of other important unmeasured areas'

Examples: The focus on waiting lists has preoccupied NHS managers for years given their prime place in the performance measurement system. Other aspects of performance which are not easily or currently measured may have suffered as a consequence as resources are diverted towards achieving the specific targets set. Targets set for the proportion of prescribing using generic drugs may preoccupy managers and clinicians whilst other equally valid changes they wish to see in prescribing may be neglected.

The tendency to tunnel vision may be offset by devising a large number of measures which cover all relevant areas, ensuring that none are neglected. However, there will be a trade-off in terms of the cost and data collection burden.

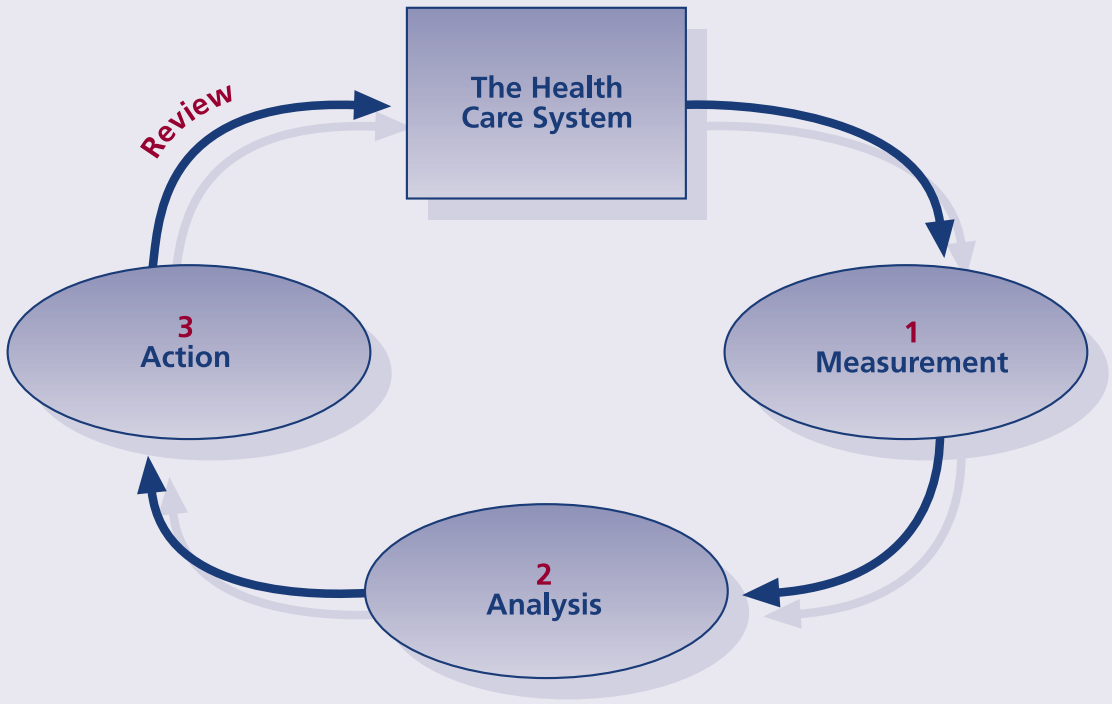
(2) Sub-optimisation

'The pursuit of narrow local objectives by staff at the expense of the objectives of the organisation as a whole'

Example: Targets set for the hospital sector, such as higher rates of day case surgery or shorter lengths of stay, do not acknowledge the increased burden implied for primary care or social services.

Giving joint responsibility to all relevant agencies to achieve good performance may be an effective way of minimising sub-optimisation. The NHS Plan promotes partnerships between health care organisations and agencies such as education and social services departments, making them jointly responsible for improvements in

Figure 1: Performance Measurement Process



performance in some areas. Joint targets are set in the performance assessment frameworks for health and social services. Access to the performance fund will also be used to reward joint working and traffic light status will reflect how well organisations work in partnerships with others.

(3) Measure fixation

'Pursuit of success as measured rather than as intended'

Example: The 5 minute waiting time target for dealing with A&E patients led, in some hospitals, to the employment of the so-called 'hello' nurse who merely made contact with the patient within the first 5 minutes in order to meet the target. However, this is costly and the ultimate impact on patient satisfaction or outcome may be limited. Similarly, the 2 week maximum waiting time target for outpatient cancer patients may distort the flow of people who have cancer in favour of those who may have it, and *may* lead overall to a lengthening of the average time that cancer patients will have to wait.

Greater involvement of front line staff in setting targets would ensure all potential implications are thought through and would help to reduce the tendency towards measure fixation.

(4) Myopia

'Concentration on short-term issues to the exclusion of long-term considerations which may only show up in performance measures in many years time'

Example: Curative services (as measured by short-term process) may be given higher priority than preventive services (as measured by long-term outcome). Similarly, GP budgets may be affected adversely in the short-term by costly prescribing (such as Zyban for smoking cessation). However, in the longer-term this may produce better outcomes as well as saving resources elsewhere.

Setting targets which seek improvements over time rather than on an annual basis may offset myopia: eg the 10 year improvement target for mortality rates from major diseases by 2010 – although 10 years is still a relatively short time and suggests changes in acute rather than preventive care. Use of process rather than outcome measures (e.g. targets for screening uptake) will ensure progress is being made towards long-term goals. Nurturing long-term career prospects amongst staff (through contractual arrangements and staff development programmes) may also work towards fostering a long-term view.

(5) Complacency

'Lack of ambition for improvement brought about by adequate comparative performance'

Example: An apparently middling performance when judged against others on surgical survival can appear satisfactory and inhibit attempts to strive for further clinical improvement. The need to stay out of the headlines and just ensure they were doing 'OK' is perceived as a strong incentive by many managers who have reported that they knew they probably could do better, but were happy to be in the middle of the range and not attract attention.[10]

One way of dealing with this is to set targets for continuous improvement based on own past performance rather than on performance relative to others. The traffic light system may encourage complacency amongst the yellow light organisations unless the associated incentive scheme makes the extra effort to become green light worthwhile.

(6) Misrepresentation

'The deliberate manipulation of data by staff – ranging from 'creative' accounting to fraud – so that reported behaviour differs from actual behaviour'

Example: Adverse patient satisfaction reports may be unaccountably lost or activity figures may be artificially boosted by various methods. This is most likely to arise where staff do not think the measures are important and thus try to reduce the amount of time they spend getting accurate data.

Misrepresentation can be addressed by ensuring data are audited and interpreted by independent experts who will be alert to the scope for data manipulation. The proposals to involve the Audit Commission and the Commission for Health Improvement in performance assessment may help. Gathering views of front-line

staff on which measures are important and which are seen as just a paper exercise would be useful.

(7) Gaming

'Altering behaviour in order to obtain strategic advantage'

Example: Trying to 'go easy' on achieving targets set in one year in order to avoid demanding targets for future years. If targets are based on year-on-year improvement there is a danger of creating a 'ratchet effect' where good performance in one year is punished with higher future targets. Such a system offers little incentive for trying to improve behaviour. The classic case in the NHS has been the efficiency index targets and research shows managers realise gaming occurs and try to hold back on performance in order to have less demanding targets set for them by regional offices – analogies have been made to playing a 'game of chess'.[9] Similarly, GPs may game the system in relation to targets for the generic prescribing where they may deliberately under-perform in the baseline year in order to receive modest targets for the following year.

Gaming can be addressed by measuring performance of an organisation and setting targets without reference to their own past performance – eg by setting benchmarks based on performance relative to similar organisations. However, one problem which usually arises with this approach is the definition of what constitutes a 'similar' organisation, as most organisations will differ along a number of dimensions. This issue will need to be tackled in order to facilitate the measurement of relative performance which is at the core of the NHS Plan. Failure to do this adequately may produce false inferences – this is considered below.

(8) Misinterpretation

'Incorrect inferences about performance brought about by the difficulty of accounting for the full range of potential influences on a performance measurement'

Example: A high rate of 'did not attend' at an outpatient clinic may be due to factors other than the actions of the clinic (such as the method of appointment setting). It may have more to do with factors such as patient characteristics which are outside the control of the organisation but are not taken into account in the measurement. The classic case of failing to take fully into account case-mix in interpreting mortality rate 'league tables' is also relevant.

Using expert advice to interpret the data and taking care to present the results in ways which limit the potential for misinterpretation will help to offset this. Recognition of the limitations of performance indictors in the way in which they are used (eg not relying on them for control purposes but using them as signposts to direct further investigation) is also important. Using local knowledge in order to make sense of apparent variations in performance is vital.[11,12]

(9) Ossification

'Organisational paralysis due to an excessively rigid system of measurement'

Example: Using day case rates as an indicator of performance in gynaecology may inhibit the adoption of latest techniques for treating cases on an outpatient basis.

To avoid the danger of ossification, it is essential that performance measures are reviewed regularly and that flexibility is built in so that they are responsive to changes in practice. However, a balance must be struck because if measures change constantly, this would be disruptive to those involved in collecting data and would also make it difficult to track changes over time.

Tackling dysfunctional consequences

Some of the techniques available to mitigate the dysfunctional consequences have been outlined above. However, not all of them will help to address every problem and some may exacerbate other problems and be contradictory in some circumstances. The techniques and the potential effects on each of the dysfunctional consequences are illustrated in Figure 2. Positive (+) and negative (-) impacts of the strategies are indicated for each dysfunctional consequence.

There is no easy off-the-shelf solution. Judgements will have to be made about the relative

Figure 2: Tackling Dysfunctional Consequences

TECHNIQUE	DYSFUNCTIONAL CONSEQUENCES								
	Tunnel vision	Sub-optimisation	Measure fixation	Myopia	Complacency	Misrepresentation	Gaming	Misinterpretation	Ossification
Involve staff at all levels in the development and implementation of schemes	+	+	+	+	+	+	+	+	+
Retain flexibility in the use of performance indicators and do not rely on them exclusively for control purposes	+	+	+	+	+	+	+	+	+
Seek to quantify every objective no matter how elusive	+		+	+	+		+	-	+
Keep the system under constant review	+	+	+		+	+	+		+
Set year-on-year targets to promote continuous improvement					+		-		
Measure patient satisfaction to capture adequacy of process	+	+	+	-		-	-		
Seek expert interpretation of the performance indicator scheme			+		+	+	+	+	
Maintain careful audit of data						+	+	+	
Nurture long term career prospects amongst staff				+	+		-		
Keep only a small number of indicators	-		-				-	+	-
Develop performance benchmarks independent of past activity							+		

+ = positive impact - = negative impact

importance of different adverse outcomes, especially if a strategy to avoid one consequence exacerbates another. For example, as illustrated earlier, setting year on year targets may tackle complacency but at the same time may encourage gaming. A portfolio of techniques may be needed to address such issues. Additionally, there are cost implications associated with different strategies – e.g. having a small number of indicators may be cheap, but may fail to give as full a picture of performance as a potentially costly larger set of indicators.

Implications at the local level

The current system has set in place an extensive national performance framework directed at virtually all NHS organisations. It is very much driven from the top down as an external process aimed at providing key information in a highly systematic and summarised way. Substantial benefits may accrue from having such information available in the NHS and it should be possible to demonstrate in future measurable improvements in all areas covered by the Performance Assessment Framework. However, no system is perfect and in delivering policy goals, dysfunctional consequences may be created. To some extent these may be offset by adoption of the techniques outlined above.

What does this mean for staff at a local level? The most important thing is to remember that the performance indicators should be treated as just that – *indicators*, rather than anything else – or 'can-openers'.[13] If they highlight particular issues which initiate further investigation at a local level, they are serving their purpose. It is only by delving beneath the surface of the indicators that the full story can be obtained and appropriate action identified. For instance, apparently longer lengths of stay than comparable hospitals in a particular specialty may, on further investigation, be attributed more to administrative practices on the wards than to medical practices. If ward rounds are made late in the day it may be too late to organise transport for those patients ready to be discharged, necessitating a further overnight stay. If the provision of comparative performance data highlights this sort of issue it can potentially be a powerful catalyst for local change.

However, making sense of performance data at a local level and drilling down beneath the surface of the statistics may require a significant investment in analytical capacity and resources. One issue is how to make 'sensible' comparisons.[14] Do you identify similar organisations in order to compare like with like? If so, on what dimensions should they be similar? Or do you look at performance relative to a national average figure? But does the average represent good performance? You could compare your own performance over time, but will this tell you whether you are doing as well as may be expected? Careful analysis is needed if performance data is to be useful. Local organisations need to be ready to invest in appropriate expertise if they wish to make full use of the data for local purposes.

In future, subsequent developments may well take the form of more locally based 'internal' processes which aim to encourage organisations to learn from each other and to manage their own performance in order to make improvements. Performance targets will be incorporated into local accountability agreements and staff at all levels are likely to be involved in devolved systems such as benchmarking. Local systems can be designed in a way which avoids many of the dysfunctional consequences identified above. For example, freedom to choose indicators focusing on important local issues will reduce the tendency to tunnel vision, measure fixation and misrepresentation. Similarly, knowledge of local factors outside the control of organisations, but which may affect performance, will reduce the potential for misinterpretation. The Audit Commission has produced general guidance about how to

Summary of Local Action on Performance Measurement

- Use national data as a 'can-opener' to highlight local issues worthy of investigation
- Drill down beneath surface of national statistics
- Invest in analytical capacity to make sense of data and facilitate comparisons
- Develop local indicators, targets and monitoring schemes
- Take a 'bottom-up' approach locally and involve staff at all levels
- Use performance measurement as a catalyst for local change not just to fulfil central objectives

set and monitor local performance targets.[15] Initiatives developed from the 'bottom-up' may be successful because they create a sense of ownership and belonging and tip the balance away from central control. A scheme involving the collection and dissemination of clinical outcome data from 26 intensive care units has illustrated the scope for achieving useful results from a collaborative clinician venture when previous top-down approaches had failed.[16]

The national framework provides the context within which local developments should take place. However, it is for NHS organisations to decide what is meaningful and important for their local communities and to make progress with measuring and monitoring of performance in these areas. The key to successful performance management is to maximise the obvious beneficial consequences of measurement and monitoring whilst minimising the unintended effects. This is the challenge which lies ahead for all staff in the new NHS.

References & resources

1. NHS Executive. *The NHS Performance Assessment Framework*. Leeds: NHS Executive, 1999.
2. NHS Executive. *A First Class Service: Quality in the new NHS*. Leeds: NHS Executive, 1998
3. Department of Health. *The NHS Plan*. London: The Stationery Office, 2000. (Cm. 4818-I).
4. NHS Executive. *Quality and Performance in the NHS: Clinical Indicators*. Department of Health, 1999.
5. Department of Health. *Quality and Performance in the NHS – NHS Performance Indicators*. Leeds: Department of Health, 2000.
6. Department of Health. *Saving Lives: Our Healthier Nation*. London: The Stationery Office, 1999. (Cm.4386).
7. Marshall M N, Shekelle P G, Leatherman S and Brook R H. The public release of performance data – What do we expect to gain? A review of the evidence. *Journal of the American Medical Association* 2000; 283(14): 1866-1874.
8. Smith PC On the unintended consequences of publishing performance data in the public sector. *International Journal of Public Administration* 1995; 18: 277-310.
9. Goddard M, Mannion R & Smith PC. Enhancing performance in health care: a theoretical perspective on agency and the role of information. *Health Economics* 2000; 9: 95-107.
10. Goddard M, Mannion R, Smith PC. Assessing the performance of NHS Hospital Trusts: the role of 'hard' and 'soft' information. *Health Policy* 1999; 48: 119-34.
11. Appleby J & Thomas A. Measuring performance in the NHS: what really matters? *British Medical Journal* 2000; 320:1464-67.
12. Mulligan J, Appleby J & Harrison A. Measuring the performance of health systems. *British Medical Journal* 2000; 321:191-2.
13. Carter N. Performance indicators – backseat driving or hands off control? *Policy & Politics* 1989; 17(2): 131-138.
14. Deeming C. Performance indicators: making information out of data. *Health Care UK* Spring 2000; London, Kings Fund.
15. Audit Commission. *A Measure of Success: setting and monitoring local performance targets*. London, Audit Commission, 1999.
16. Rowan K and Black N. A bottom-up approach to performance indicators through clinician networks. *Health Care UK* Spring 2000; London, Kings Fund.

Additional Resources:

http://www.doh.gov.uk/nhsperformanceindicators

http://www.doh.gov.uk/indicat

http://www.doh.gov.uk/paf

http://www.audit-commission.gov.uk

Audit Commission. *Aiming to Improve: the principles of performance management.* Management Paper. London: Audit Commission, 2000.

Audit Commission. *On Target: the practice of performance indicators.* Management Paper. London: Audit Commission, 2000.

Department of Health. The PSS performance assessment framework indicators in *Social Services Performance in 1999-2000*. London: Department of Health, 2000.

Health Care UK (Spring 2000) – various articles on performance management.

NHS Executive. *A First Class Service: Quality in the new NHS*. Leeds: NHS Executive, 1998.

NHS Executive. *Improving Quality and Performance in the New NHS*. HSC 2000/023

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