

Confidence in responsible care?

**The effects of performance indicators and moral issues
associated with their use**

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Summary

Social pressure to get more information about the quality of health care is increasing. This has also become a major priority for Government policy in recent years. The idea is for 'performance indicators' to be used to demonstrate the quality of care and allow comparisons to be drawn, so that all parties concerned can immediately see where care is up to scratch and where it is deficient. This process has two aims: transparency, and improving quality. Society must be able to see how public funds invested in healthcare are spent. This should offer choice to patients and insurance firms, and encourage healthcare providers and professionals to improve the quality of the care they provide.

It is clear that a fresh stimulus for improving the quality of healthcare was needed. This is not to say that nothing was done in this area in the past. The original design of the Healthcare Facilities Quality Act expected healthcare providers and professionals to put their quality systems in order themselves. In practice, this did not seem to work properly. The new approach (highlighting differences in quality and introducing external stimuli) should change this situation. It is expected that healthcare providers and professionals whose performance is poor will want to avoid damage to their reputation or a loss of market share. They will hope to achieve better results in a subsequent assessment, even if they may lack the internal motivation to improve quality. This effect could be enhanced even further by the use of (financial) rewards and penalties for high and low scores.

The question of whether this commercial approach, which has been introduced into other areas of public service over the past few years, is an effective means of achieving both aims (transparency and quality improvement) is a matter for often strongly-polarised discussion. Those in favour of this approach seem to dismiss the possibility of unwanted effects, while its opponents are already convinced that no good can come of it. An objective debate is vital if policy in this area is to be developed rationally. This report therefore hopes to make a contribution in the form of scientific data and an ethical analysis.

Performance indicators

Performance indicators are measurable elements of healthcare provision that act as a possible pointer to the quality of care. They act as signals: low scores signal that something might be going wrong, and that further analysis is needed to find out whether this is indeed the case. Indicators have to be reliable and valid if they are to fulfil this signal function adequately. By 'valid' we mean that they must actually measure what they are supposed to measure.

Findings of literature review

First, the facts. What can scientific research tell us about the effects and possible side-effects of the public use of performance indicators in healthcare? We have performed a systematic literature review to answer this question in our report. This review concentrates purely on clinical healthcare. We looked for publications addressing the effects of revealing performance scores on the behaviour of institutions and healthcare providers (whether or not quality improved, other behavioural effects); the effects of forms of (financial) rewards and penalties attached to these scores; the effects on the choice patterns of patients, insurance companies and referring doctors; effects on costs and bureaucracy.

The findings of the literature review show that the assumptions underlying the public use of performance indicators, and the expectations as to the effects of this approach, are not at present based on sound scientific evidence. With regard to encouraging better quality, we did find that this approach had some effect on the performance levels of institutions. Quality improvement initiatives were introduced after publication of performance scores that could reflect badly on the institution's image. But we found no evidence of this effect in terms of individual healthcare providers. When we found public reporting to have an effect on behaviour in this group, it seems that the effect does not take the form of quality improvement but of strategic behaviour, such as refusing high-risk patients or manipulating data. It does appear that the introduction of reward systems can have a beneficial effect on the behaviour of healthcare providers, but more research is needed to find out how this instrument can best be designed.

We have also found little evidence to support the expectation that patients, insurance companies and referring doctors would be guided by a comparison of performance scores when making choices. Patients do seem to be interested in the results of performance measurements, but they make only limited use of them when choosing among various healthcare options. They seem to give greater weight to the experience of people they know. Little research has been done into the choice behaviour of other parties that make choices. Insurance companies and referring doctors appear to have little faith in public performance figures, and so make little or no use of them.

We have little information as to the costs associated with public reporting and the implications of this approach for the administrative burden ('bureaucracy'). However, it is likely that there would be an increase in this burden in the early stages. It may well be that more efficient methods of data collection would reverse this trend eventually, but that is by no means certain at present.

Ethical aspects

The second part of the report looks into relevant ethical aspects of the public use of performance indicators. We start by clearing up the misconception that the requirement for public accountability is in conflict with the idea of professional autonomy. 'Autonomy' is not a green light to professionals allowing them to disclaim all responsibility for their actions. Professional autonomy and professional accountability are in fact two sides of the same coin. The room for manoeuvre in terms of autonomy is that which allows healthcare providers to offer their patients the best possible care. Society is entitled to demand that this is reflected in healthcare outcomes.

The principle underlying the new Government policy is that self-regulation in this area is too lax. The requirement to publicly report performance scores that can be compared with one another should bring into play a mechanism in which external stimuli (reputation, market share, rewards) also encourage less strongly-motivated institutions and professionals to make a serious effort to improve their quality. From an ethical point of view it is important that professionals are addressed differently. The approach should focus not primarily on their intrinsic motivation but principally on their sensitivity in terms of their image and economic benefits. The use of such stimuli can certainly be sensible if it has a positive stimulating effect. But our literature review also found indications of a negative effect on the motivation and behaviour of healthcare professionals. The moral implications of the relationship between the positive and negative consequences of the use of external stimuli are far-reaching. Healthcare professionals are not required to be saints; however, the core of their professional identity is determined by their focus on the well-being of other people. Undermining this would cause damage to society that would be difficult to repair.

The new role that patients would play in the new Government policy, i.e. 'healthcare consumers exercising choice', is also associated with a moral risk. It raises a contemporary moral ideal, that of self-determination. Another important aspect is that a patient's choices can help encourage healthcare institutions and providers to compete on the basis of quality. Policy documents refer to this as 'horizontal supervision'. However, the literature we have reviewed for this report indicates that patients do not as yet behave in this way. They are not guided by performance indicators when making choices. Further investigation is needed to ascertain what choice options in healthcare

patients really need. But even more important is the question of what this consumer role means for the relationship between healthcare providers and recipients, a relationship which is based on trust. Does this role still leave room for recognising that each party needs the other: healthcare providers with their specialist skills and expertise, patients with their specific needs and priorities, so that they can jointly decide what treatment or care is the most appropriate response to the patient's symptoms? And in broader terms, how will public confidence in healthcare be affected if people are continually reading reports that emphasise failing healthcare providers?

Furthermore, the political principle that 'quality must be measurable' can easily lead to a situation in which the relative importance of different performance indicators is obscured. Injustice and imbalance could result. 'Injustice' where healthcare providers are addressed and judged by outcomes which fail to take sufficient account of contextual factors over which they have no influence, for example the exact make-up of the patient population. 'Imbalance' can result from the choice of indicators that are perhaps insufficiently representative. All the energy and attention might then be brought to bear on improving a measurable aspect of care, without at the same time improving the quality of what underlies it. Another question is what the emphasis on measurability means for other parts of the medical profession, such as nursing and personal care, or other aspects such as the way patients are treated by healthcare professionals and how they perceive their healthcare experience, for which it may be harder to develop good performance indicators.

Finally, another important moral question is whether the costs and bureaucracy associated with the public use of performance scores is proportional to the rewards in terms of better quality and accountability. The results of the literature review would seem to indicate that this is still unclear. The social experiment which this undoubtedly is requires a cautious, gradual approach combined with ongoing assessment and investigation of the effects.

What next?

The debate on the public use of performance indicators has so far been conducted from firmly entrenched positions, and is often couched more in absolute terms, i.e. that this approach is either entirely rational or complete nonsense, than in examining specific opportunities and risks. This examination is vital if policies in this area are to be developed sensibly. All participants in the debate need to have an open mind, and the discussion must be held against a background of scientific data and ethical analysis. We hope that this report will contribute to the future debate.

It is vital for support to be generated and distrust overcome. This can be achieved by working on two fronts. The Government can help by turning away from imposing external

stimuli as the prime, or only, method of improving quality and appealing instead to the intrinsic motivation of professionals, enabling them to express this motivation in their work. It must be made quite clear that performance indicators will be used in such a way that no-one needs to fear being exposed without justification, or suffering professional damage without good reason. Another important condition is avoiding unnecessary bureaucracy.

As far as healthcare providers are concerned, the main challenge is to experience the demand for systematic quality improvement in a different way. Not as something imposed from outside, as a chore to be undertaken to avoid penalties or image problems, but as a core element of professional responsibility. Quality improvement should be an intrinsic part of the healthcare sector: a vital basic skill which professionals at all levels must develop. This aspect must be addressed in training, which is not sufficiently the case at present.

The approach we are arguing for would mean professionals in the medical sector, particularly scientific associations, taking ownership of the initiative. This would take the form not only of developing performance indicators for use in the context of internal quality systems but also in assessing which indicators are suitable for external use.

Further research is needed into the effects and side-effects of public use of performance indicators in the healthcare sector, the effects of reward systems, and patients' need for performance information when making healthcare choices. The representativeness of performance indicators is a key issue as they come to be developed. It is also important to ensure that aspects for which it is more difficult to develop good performance indicators, such as personal attention, the way patients are treated by healthcare professionals and other relationship factors, are not neglected.

1 Introduction

Background

Over the past few years, Government policy has come to increasingly focus on making the quality of healthcare visible and measurable by means of 'performance indicators'. The aim of this is twofold: to set up a transparent form of public accountability, and to encourage healthcare professionals to improve the quality of their service. This is a significant shift away from the previous quality policy that was more based on self-regulation. The new approach was taken in response to a lack of progress in achieving the desired improvement in patient care, along with continually escalating healthcare costs. Another important reason is the wish to offer patients (or consumers) more freedom of choice, thereby allowing them to increase both their autonomy as well as their responsibility for their own health. The shift in quality policy is part of the overall picture of change and reform that has taken place in the healthcare system over the past few years, and in which the actions of the market, competition, performance contracts and financial incentives have been key factors.

The development we are now seeing in healthcare is, of course, nothing new. The private sector has for decades been addressing the issue of how best to improve performance and what part measurement, accountability and holding parties to account play in this. Such debate intensified over the past ten years and moved into the arena of public services such as education, the police service, and transport. The debate has now reached the arena of healthcare.

Results of international research

Although the quality of healthcare in the Netherlands is in many respects high, there is clearly an urgent need for improvement. Studies conducted in various countries, and backed up by Dutch research, show that many patients (estimates range from 30 to 50 per cent) do not receive the care that recent scientific research indicates that they require (i.a. McGlynn 2003). Publications in the United States on avoidable errors in hospitals (45-90,000 deaths a year), and serious incidents in the UK (Bristol case) and

France (AIDS contamination), show the importance of preventing medication errors, hospital-related infection, operation-related incidents, falls, and other problems.

Some incidents that have occurred in the Netherlands in recent years (including Helmond [gynaecology], Weert [intensive care], Boxmeer [surgery] and Nijmegen [mortality figures for cardiothoracic surgery]) have also raised questions as to the quality and safety of healthcare. Care for (chronic) patients is by no means always provided in an efficient and patient-friendly manner. Improvements could be made in accessibility and throughput, and in multidisciplinary cooperation and integral patient care. Problems and incidents in nursing homes and care provided in patients' homes (understaffing, malnutrition, bedsores, inadequate hygiene) are widely covered in the media. In brief, there is considerable room for improvement in many areas of healthcare, and society is exerting increasing pressure on healthcare institutions and providers to take appropriate action.

Recent efforts aimed at improving care

It would be wrong to say that no attempts have been made to improve healthcare in recent years. Healthcare providers are subject to legislation in this area: the Individual Healthcare Professions Act; the Healthcare Facilities Quality Act; and the Medical Treatment Agreement Act. Most institutions and professional associations have taken seriously the issue of improving the quality of care (Sluijs 2003). Many guidelines for good care have been devised, and there have been several instances of peer review by professionals. Institutions and practices undergo accreditation (by accreditation bodies including the Netherlands Institute for the Accreditation of Hospitals [NIAZ], INK, ISO and the Dutch College of General Practitioners [NHG]). Systems for monitoring and improving quality throughout institutions have been set up. Large-scale improvement programmes and projects have been launched (including some conducted as part of the Doorbraak [Breakthrough] and Sneller Beter [Getting Better More Quickly] programmes). However, it is not yet clear whether the efforts made by those involved are having the desired effects.

In their policy paper 'Healthcare quality: high on the agenda', the Minister and the Secretary of State for Health, Welfare and Sport reported that much progress has been made in the past few years, but that more efforts must now be made to ensure transparency by measuring and demonstrating quality (Tweede Kamer [Lower House], 2006). Access to good indicators and measurement methods is vital if this goal is to be achieved. Quality data must be published in a way that allows direct comparison. The policy paper expressed the expectation that clearly visible quality differences would encourage healthcare professionals to enhance their performance. It also accepted that performance indicators were by no means the only instrument that could be used to improve the quality of patient care.

Defining the problem: empirical and ethical questions

Opinions diverge widely as to the effects and side-effects, and the benefits and drawbacks, of the new approach to making more visible and improving the quality of patient care. It is a matter for animated debate, in the media and elsewhere. Some commentators point to the citizen's right to have an insight into the quality of the provided care, and the stimulus that this should provide to improve this care. They also raise the issue of the need for responsible healthcare procurement in the new healthcare system. Others highlight the risks: the possibility of being unfairly held to account and the consequent contrary effects of this, increased bureaucracy and costs, and the loss of motivation among healthcare providers. The arguments for and against are largely based on personal views and expectations, or on the defence of vested interests. If we are to have a sound debate on the further development and application of performance indicators, then it is vital to know what research has been carried out into the effects and side-effects of this quality instrument, and to bring in the moral dimension as well.

Debate in the media: quotes from *NRC* and *De Volkskrant* (November and December 2005)

- *Putters (management expert)*: 'The tendency towards increased controls leads to a pathological obsession with figures and a haemorrhage of evaluation mechanisms. Dialogue with the patient, the trust that a doctor establishes with a patient, is the most important thing, and we are not measuring that'
- *Berg (professor, expert in indicators)*: 'Publication of information allows people to ask why an institution has scored poorly, and causes a cultural shift among doctors'
- *Vierhout (surgeon, Chairman of the Order of Medical Specialists)*: 'Doctors won't throw their autonomy overboard without a second thought: the term professional autonomy has an emotional weight for doctors'
- *Hoogervorst (Health Minister)*: 'People tend towards the good, but not always; ... nowadays it is quite obvious that everyone - including scientists, teachers, ministers - has to bear responsibility for his or her actions'
- *Cools (professor in Corporate Financing, investigates successful and struggling companies)*: 'Control can prevent disasters, but does not add value. A business culture that puts trust and freedom to make decisions at the centre increases motivation, reliability and productivity'
- *Cerfontaine (director of Schiphol airport)*: 'You have to believe in the quality and skills of professionals, and let them get on with their job. I believe in the power of professionals. If you know how to exploit that, then you've struck gold'.

In this report, we concentrate on the effects of using performance indicators as a quality improvement instrument based on external comparison and commercial stimuli. The issue of public accountability for quality on the basis of performance indicators is multi-faceted and can have slightly different meanings for different sectors of the healthcare

system. We are restricting our investigation to public accountability, based on performance indicators, for the quality of (clinical) care provided by (teams of) doctors, nurses, paramedics and other healthcare professionals in hospitals or medical practices.

Outline of the report

This report outlines current developments with regard to the introduction of (public) performance indicators in the healthcare sector (chapter 2), discusses the expectations attached to this new system (chapters 3 and 4), and reports on a literature review carried out to ascertain what is actually known about the beneficial and harmful effects of this instrument (chapter 5). After considering the ethical dimension (chapter 6) and the implications of our findings (chapter 7), we finally (chapter 8) draw up consideration points that are intended to serve as input into the (ethical) policy agenda to be addressed by the Government and other parties involved in healthcare quality policy.

2 Performance indicators: meaning and use

What do we understand by the term 'performance indicators' in this context? Who uses them, and for what purpose? What are the international developments in this field, and what is the situation in the Netherlands? These are the topics we will address in this chapter.

The term 'performance indicator'

An indicator is a measurable aspect of provided care that has been shown by scientific research, or is accepted by consensus among experts, to give an indication of the quality of that care (Campbell 2002). An indicator is thus not a direct or absolute judgement as to how good or bad the quality of care is; rather, it serves as a pointer. Low scores indicate that something may be going wrong, and that further analysis is desirable to find out whether that is actually the case. It is standard practice to distinguish between process indicators (which deal with the action of healthcare providers), structural indicators (which relate to the organisation of healthcare provision, and the conditions that need to be in place in order for this provision to be good) and outcome indicators (which relate to the effects the care achieved in patients).

Use of performance indicators

Indicators have been developed and used for a variety of purposes. For example, an insurance company may wish to contract or reward hospitals or medical practices on the basis of quality; the Government may wish to guarantee the quality and safety of care and make this visible to the public; institutions may wish to obtain information for their internal policy; or scientific associations may be creating indicators in the context of programmes such as the Sneller Beter [Getting Better More Quickly] and Doorbraak [Breakthrough] programmes. The purpose of the indicators has a significant effect on the way they are used and the requirements that can be imposed on them.

Indicators used with a view to enhancing quality are not a new phenomenon in healthcare. Statistics on mortality, referrals, procedures, complications and so on have been collected and presented to healthcare providers as feedback since time immemorial. In many cases, these figures are intended to serve as 'internal' stimuli to

improve quality. In this report we are concentrating on 'external indicators' (Berg 2002). External (performance) indicators are used to allow medical practices, healthcare institutions or healthcare systems to be assessed by outside parties (patients, the general public, the authorities (inspectors, politicians) and insurance firms with a view to improving inadequate care and developing policy initiatives to that end). However, various forms of indicators exist, with diverging aims, including:

- a. Performance indicator reports made to various parties for a number of reasons:
 - to the Government/inspectors: information that must guarantee that care is of sufficient quality and sufficiently safe, with powers to take action where necessary;
 - to insurance companies: information for use in entering into contracts, helping firms buy in care that is the best value for money;
 - to the general public: information made available to the public can help individuals assess the quality of care delivered in an institution or practice and help them make an informed choice when they need care;
 - to referring practitioners: information to referring healthcare providers that can help them give good advice to patients in need of additional care.
- b. Measures rewarding good performance and punishing poor performance on the basis of performance indicators, such as:
 - awarding or withholding certification (healthcare facility, medical practice), registration (medical practitioner) or contracts (healthcare facility, medical practice, professional);
 - financial bonus or penalty linked to inspection outcomes.

Quality control systems vary from one country to the next

External quality control systems vary widely throughout Europe. In addition to voluntary accreditation schemes (such as EFQM and NIAZ in the Netherlands), some countries (Scotland and France) operate compulsory hospital accreditation, and in Germany and Switzerland there is a statutory requirement to undergo external quality controls. Hospitals in Germany, Denmark and the United Kingdom are required to measure and publish performance indicators (Veit 2006, Mainz 2004, Bevan 2006). Since 2004 a system of generous financial bonuses for quality that performs well has been available for English GP practices with external accountability (*Pay for performance in UK*). In the United States, large-scale health plans and public programmes such as Medicare and Medicaid (with around 100 million participants in the two schemes) use existing data to give policymakers and citizens information on the quality of care (Soriano 2006). A recent review conducted by the Institute of Medicine (IOM) showed that the United States had a very large number of performance measurement programmes, both at national level and within specific health plans (IOM 2006). The IOM recommended that an independent national system of performance measurement be established in a new organisation that would also be responsible for developing scientific indicators. An inventory of current US

pay-for-performance programmes (P4P; programmes containing a financial incentive linked to quality indicators) also showed that there were 105 such programmes in 2005, and that this figure is expected to rise to around 160 in 2006 (Soriano 2006). Each programme takes a different approach, and the level of rewards varies widely. The US is engaged in an intensive debate at all levels as to the best way of handling these initiatives. Issues include how effective they are, what the level and nature of the financial reward should be, and consequences for public confidence in healthcare.

The situation in the Netherlands

A large number of initiatives aimed at developing quality indicators and performance indicators have also been taken in the Netherlands. Various bodies are involved, including the Healthcare Inspectorate [IGZ], the Netherlands Healthcare Insurance Providers' Association, the Ministry for Health, Welfare and Sport, the Order of Medical Specialists, and the Netherlands Federation of University Medical Centres [NFU]. A number of sets of indicators are used in the Netherlands, including: indicators for the quality of care in GP practices (NHG accreditation, indicators developed by the Centre for Quality of Care Research [WOK], Braspenning 2005); indicators for the quality of care in hospitals (IGZ 2005); the clinical indicators drawn up by the Order of Medical Specialists and the Institute for Healthcare Improvement CBO (project 'Spotlight on the quality of care'); the indicators for healthcare institutions in the context of purchasing care (Netherlands Healthcare Insurance Providers/ DTC knowledge centre; 2005); indicators for the quality of care in nursing homes and rest homes (Responsible care inspection framework; 2005); and indicators for the quality of mental health care (Netherlands local health authorities [GGZ Nederland] 2005). It is anticipated that this form of public accountability will become an increasingly significant aspect in all sectors of healthcare over the coming years, a fact that will make major inroads into the time and workload of managers and professionals in healthcare institutions and medical practices.

Publication of the performance indicators recently developed - partly by the IGZ - for healthcare institutions in the Netherlands is seen as an important instrument allowing the quality of provided care to be regularly (in this case once a year) and systematically (using a system of layered and phased monitoring) reported, thereby providing a stimulus to improve the quality of care. Many of the indicators were taken from the international literature by a group of experts. Although there has been considerable debate on the validity and reliability of performance indicators measurements, and how the results are reported in the press, it is noticeable that all hospitals take part and that the findings made during the periodic visits to hospital management teams are also the subject of debate between institutions and the inspectors. Let us consider one particular case:

Healthcare Inspectorate performance indicators

The Healthcare Inspectorate (IGZ) has worked together with the National Institute for Public Health and the Environment (RIVM) and the Rotterdam-based Institute of Health Policy and Management (iBMG) to devise performance indicators for hospitals. In May 2005 the IGZ produced its first report with performance indicators covering 2003. In its report, the Inspectorate described both the outcomes and the objectives of performance indicators: more efficient monitoring; providing a stimulus to improve quality; and greater transparency to assist patients in making choices. The IGZ drew a number of conclusions from the 2003 results, including:

1. Relatively inexperienced surgeons are performing high-risk operations in many hospitals. This is despite the fact that outcomes are known to be better when surgeons frequently perform these types of procedures. It would seem appropriate for these types of operations to be centralised in high-volume hospitals.
2. Drug monitoring leaves much to be desired in many hospitals. This is despite the fact that medication errors are known to be one of the principal sources of risk in hospitals.
3. Hospitals still make too little use of data on the effects of care (such as mortality and morbidity figures, pain measurement, throughput times and readmissions) as input into their management procedures.

In general, indicator scores were found to vary widely between institutions. It was also noted that many institutions were initially finding it very difficult to supply adequate data.

The second report, *The results show the difference 2004; performance indicators as an independent measure for the quality of care provided in hospitals* was published by the Healthcare Inspectorate in the middle of April 2006 (see www.igz.nl). This report presented the Inspectorate's findings and interpretations arising from the hospital performance indicators for 2004. It concluded that hospitals were more involved this time, and that transparency and comparison tables were incentives to improve performance. Hospitals had also introduced more guidelines and standards. For example, the minimum number of oesophageal cancer operations required to demonstrate competence was set at ten operations per hospital per year. More and better data was submitted in 2004 compared to 2003, and participation in (national) registration schemes increased. However, many departments were still found to lack a system for recording complications, and critical questions remain with regard to intensive care departments (for instance, understaffing issues). One significant problem remained in relation to the report drawn up in 2004 covering 2003, namely the lack of automation in hospitals, and, in particular, the absence of an electronic medication file.

Finally, it is not by chance that the fresh emphasis on external performance indicators coincides with the introduction of the new healthcare system. The new system expects insurance companies to base their purchasing policy on quality comparisons. This is only possible if adequate information is available in the public domain.

3 Expectations

The debate on the new policy approach aimed at using performance scores to monitor and improve the quality of care via public reporting often contrasts desirable and undesirable effects. This chapter describes the expectations and assumptions that underlie the public use of performance indicators, while also referring to the comments that are sometimes made in this context.

Expectations and assumptions

The expectation behind this policy approach is that more intensive external control, publication of performance indicators, and perhaps the linkage of measures and incentives to their outcomes will encourage institutions and healthcare providers to perform better. In particular, it is assumed that peer comparison will have a motivating force, and that institutions and professionals will want to measure up against their top-performing counterparts. Another assumption is that patients, referring doctors and health insurance companies will want to avoid poorer care. This selecting market effect should also act as an external stimulus to improve performance. These expectations are based on a number of assumptions that need to be critically weighed up on the basis of the available scientific literature:

1. Indicators offer a real insight into the quality of delivered care. A high score points to good, safe care, while a low score indicates that care is poor and dangerous.
2. Publication of performance scores leads to greater choice for patients, referring doctors and health insurance firms. The resulting way that these groups make choices encourages professionals, healthcare institutions and medical practices to work towards (greater) quality improvement and thereby enhances public confidence in healthcare.
3. Encouragements and penalties (which may be financial) attached to performance indicators stimulate professionals and institutions to improve care.

Comments

These assumptions are not universally accepted. Various comments have been made in the debate on this new approach to monitoring quality, including the following:

1. Many indicators are insufficiently valid. The essence of quality of care is hard to measure. If we want to truly judge quality on the basis of the current indicators, then we need to correct for a very large number of factors (Giard 2005 *inter alia*).
2. External evaluation leads to strategic behaviour such as suppression and avoidance (Werner 2005a *inter alia*). Care activities are focused purely on the measured aspects. Sensible activities that are not covered by an indicator are neglected. High-risk activities that are indeed indicated, and high-risk groups (risk selection, complicated patients, or patients from lower socio-economic groups) are avoided. Severe punishments following low scores are a particular barrier to honest reporting. This can lead to deliberate or unconscious forms of manipulation and fraud (Marshall 2004 *inter alia*).
3. The administrative burden associated with recording, analysis and reporting increases, as do the costs of care. This takes healthcare providers and the healthcare budget away from their primary task, and occupies additional management and administrative staff in 'bureaucratic' tasks of dubious benefit. External control and accountability systems require considerable additional efforts and investment, and it is unclear whether proportional benefits are gained.

4 Performance indicators as a measurement instrument

One of the issues in the debate on the public use of performance indicators relates to the expectation that performance measurements based on indicators give a genuine insight into the quality of care provided. This chapter considers the conditions under which this can be the case.

Criteria for measurement instruments

Indicators must meet certain requirements that are usually applied to measurement instruments. This means that they must be valid and reliable: they must measure what they are supposed to measure in a consistent and reproducible way. For example, they must be able to distinguish between institutions and professionals offering better or worse quality, and must be able to measure improvements. Reliable data must be available for collection. They must be comprehensible to those who receive information about them, and must be acceptable to concerned individuals or bodies. Indicators need to be developed through a careful procedure in order to meet these requirements. Furthermore, indicators must be tested in practice before being used as a means of demonstrating public accountability.

It is particularly important that indicators accurately represent the area to which they relate. For practical reasons, current systems often use a limited set of indicators that scarcely cover the quality of care in a particular area. There is also a temptation to select indicators that are easily measurable but have little to do with the quality of care (for instance, opening hours). Aspects such as the way patients are treated by healthcare professionals on a personal level are very important, but can be harder to measure and so are left out.

Questions relating to performance indicators

Giard summarised the growing scientific concern over the inappropriate use of performance indicators (Giard 2005). As indicators are often insufficiently representative of the quality of care, and as they are sometimes incorrectly calculated or misinterpreted,

the conclusions drawn are incorrect and the action taken to improve the situation is misplaced. Considerable attention needs to be devoted to proper methodological and statistical processing, correcting raw data for influences (such as the composition of the patient population and the context of the healthcare institution or medical practice) and random variation (data relating to reliability intervals). To date, insufficient attention has been paid to measurement method and data quality.

Determining practical feasibility is another very important aspect, as a large proportion (up to 50 per cent) of the selected indicators turn out to be unmeasurable when they are tried out in practice (Wollersheim 2006). Kievit and Legemaate commented on the IGZ volume indicators (Kievit 2005). The number of high-risk operations is regarded as a predictor of good quality in this system. As research has found that this prediction is unreliable, they argue for indicators that give an insight into the outcome of care. But where the outcome risk is low and the difference in risk is small, a very large number of patients (usually more cases than are seen in a year in Dutch hospitals) are needed to obtain significant data on the differences. Data from more than 12,000 patients undergoing surgery in a year would be needed to show, for example, that a rare complication of surgery (such as bile duct injury) is significantly elevated in an institution. Much greater account needs to be taken of this type of problem when interpreting IGZ indicators.

However, the group that developed the indicators for the IGZ (Berg 2005) considered the idea of a completely valid set of performance indicators (in the sense of representativity and comparability) is utopian. In addition, the burden of recording information is becoming so great, and the data is becoming so difficult to understand once it has undergone statistical processing, that making use of any detailed information is problematic. If we regard indicators as pointers, then it is not necessary for them to be completely valid in order that they can be used in an appropriate manner. But the question is whether performance indicators designed for external use are always interpreted in this way.

The aim of the indicator is important. Quality requirements in terms of validity and reliability must be high if parties are to be held to account. However, if the indicators are just to be used as a pointer or an overall source of guidance, then requirements can be less stringent.

Proposals for scientifically responsible sets of indicators

Two significant international reports on the development and application of performance indicators in healthcare were recently published. One was by the highly respected US Institute of Medicine (IOM) and one by the OECD (Organisation for Economic Co-operation and Development).

At the end of 2005 a committee of 32 American experts working under the auspices of the IOM was established. It was commissioned by the US Congress to publish a paper on the strategy that should be actively pursued in order to achieve the quality objectives laid down in the preceding report *Crossing the Quality Chasm: A New Health System for the 21st Century* (safety, efficacy, focus on the patient, timeliness, efficiency and accessibility). Its report was published in early 2006. The report *Performance Measurement. Accelerating Improvement* published in late 2005 (IOM 2006) argued for a compulsory and consistent set of national standards of public performance indicators for treatment and care.

It listed the following criteria for good indicators: they should be capable of being generally applied; they should fit into a broad perspective on healthcare; they should be relevant to patient care; they should be based on scientific evidence; they should be reliable; and they should take account of areas that are hard to measure and populations that are hard to reach. The report also presented a research agenda covering the methodology for the design and responsible use (correction for risk, sample size, and fair comparison) of new indicators; investigation into the best reporting method; use by consumers; and the relationship between measurements and improvements or unintended consequences. The committee argued for an independent quality institution to be funded by the US Government (the National Quality Coordination Board) and given far-reaching powers. This body would be responsible for guaranteeing accurate and reliable measurement and supporting local improvements through actions such as the provision of advice and conducting audits in consultation with accreditation and certification bodies. A comparable policy in relation to public performance indicators could be considered in the Netherlands.

A group of experts¹ from 23 OECD countries (a group of democratic states with market economies and human rights) has looked at the question of what concepts or dimensions of the quality of care should be measured, and how this should be done. The starting point was that the set of indicators should be suitable for use in any country. The OECD experts finally agreed on three criteria for selecting indicators (Kelley 2006):

1. The importance of what is being measured; i.e. the importance of the disease or risk in question, the political importance and the possibility of improvement
2. The scientific accuracy of the measurement; i.e. it must be evidence-based and meet validity and reliability criteria
3. Applicability; i.e. easy to measure in any country and presenting the smallest possible burden

¹ The Health Care Quality Indicator Project (HCQI)- Expert Group

The OECD conclusions were strongly influenced by the Netherlands AIRE project (de Kooning 2006) in which a set of criteria for good indicators were developed.

Validity of indicators: percentage of Caesarean sections

The percentage of Caesarean sections has risen sharply in recent years. In 1980 4.5 per cent of all births in the Netherlands were by Caesarean section. This figure had tripled to 13.5 per cent in 2002, although it is low in comparison to other countries (England 21.3 per cent; United States 25.7 per cent; and Brazil, the highest figure in the world 47.7 per cent). In 1985 the World Health Organisation (WHO) indicated that an average of between 10 and 15 per cent was acceptable. It was recommended that Caesarean sections should only be performed when strictly necessary, as the procedure causes more complications to the mother than a natural birth.

The Healthcare Inspectorate (IGZ) decided to introduce 'percentage of births by Caesarean section' in 2003, following the US example and in response to the rising rate of Caesareans. This was against the advice of the Netherlands Association for Obstetrics and Gynaecology (NVOG), which took the view that too many distorting variables (such as the average age of the woman, the fact that some institutions act as secondary reference centres for complicated births, and the presence of a perinatal intensive care unit) that could have a marked impact on the outcome were in play. The NVOG would have preferred the VOKS (obstetrics quality mirroring) system to be used. This system corrects the percentage of births by Caesarean section in an institution for 15 factors. Although the validity of this indicator in respect of measuring the quality of care has not been established either, it is widely accepted among the profession and is already used in the National Obstetrics Registration System (LVR) and in the NVOG's quality inspections. Clinics that regularly come below the fifth percentile or above the ninety-fifth percentile in the proportion of births by Caesarean section provide good reasons for close examination of their obstetric practice. Following some political debate, the IGZ eventually adopted this approach. As a result, the NVOG needed to explain the term 'VOKS percentile', which is not easily understood by a lay person (see www.nvog.nl, 'voorlichting' page, for an explanation in Dutch). The NVOG is, in the meantime, in the process of converting guidelines into indicators, with a view to improving the transparency of provided care.

Validity of indicators: prevalence of pressure ulcers

One of the performance indicators that most strongly strikes people is the 'prevalence of pressure ulcers' or number of 'bedsores'. A considerable amount of scientific research has been carried out into this issue.

The doctoral thesis written by Bours showed that the prevalence of pressure ulcers was strongly affected by a number of variables, including advanced age, nutritional status, lack of mobility, paralysis, dehydration and incontinence. Institutions treating a relatively high proportion of patients with these unfavourable factors score poorly on this indicator (Bours 2003). Where prevalence figures vary widely between hospitals (as is the case with

pressure ulcers), a lower score does not necessarily indicate poorer care. As a result, further information and analysis is needed.

Bours developed a model to correct for the aforementioned factors. She also analysed the reliability of data as the spread between nursing homes in respect of patient numbers seemed to be high, and it is known that measurements taken on smaller numbers of patients are less accurate. These models were applied to 43 Dutch nursing homes caring for a total of 6,280 patients. The performance rankings of the homes varied markedly according to whether or not these models were applied. The differences also seemed to be largely artificial in view of the wide confidence intervals.

5 Effects and side-effects of public performance indicators

This chapter sets out the findings of a literature review carried out for this report. We attempted to find out what the scientific literature has to say on the efficacy of publishing performance scores as instruments for improving quality, either alone or in combination with forms of reward and punishment.²

Effects of public reporting on care provision

Publishing quality data with a view to improving the quality of care is intuitively attractive, but there is as yet little evidence of its efficacy. One of the first studies to be conducted in this area related to the publication of mortality data for heart surgeons and hospitals in New York State (the CABG project: *Coronary Artery Bypass Graft*). Following publication of this data, mortality fell by 21 per cent (by 41 per cent after correction for risk factors such as how far disease had progressed in the patients undergoing surgery) (Hannan 1994). This positive figures prompted much discussion. The question was whether the improvement was a consequence of changes in the behaviour of those selecting care (patients, referring doctors, insurance companies) or changes in the quality of care provided by hospitals and doctors? In addition, mortality rates following heart surgery were falling all over the country, including areas where quality data was not published. Strategic conduct, such as avoiding high-risk patients, and falsification of figures may also have been involved. It was finally concluded that the way data was analysed in statistical models had a significant impact on outcomes and conclusions (Shahian 2001). All this calls the evidential force of this study into question. Later studies also fail to

² A trawl of peer-reviewed literature was performed in November and December 2005 using MEDLINE, CINAHL, Cochrane and EPOC trial databases.

The following search terms were used:

MeSH terms: Consumer satisfaction; Disclosure; Health care quality, Access and evaluation; Information dissemination; Physician incentive plans; Quality indicators, health care; Quality of health care

Free search terms: Bureaucracy; Health care indicator; Pay for performance; Performance indicators; Provider profiling

We included only articles written in English or Dutch. All study designs were covered, and the research had to have been carried out in one of the following settings: community care, primary care, hospital care and nursing home care. Two reviewers assessed the articles on the basis of the title and abstract. Going back to 1990 we found ± 150 studies with a comparative component (from retrospective epidemiological trials to randomised controlled trials (RCTs)); 16 of these were longitudinal trials, 17 were uncontrolled before-after (BA) trials, 12 were controlled BA trials (CBA) and 14 were RCTs / controlled clinical trials.

produce much evidence in support of the assumption that the quality of care improves when performance indicators are published (Marshall 2000, Werner 2005a).

The most valuable evidence for efficacy would come from randomised and controlled experimental studies, but only a few of these have so far been published. For example, the review article published by Marshall *et al.* included 21 studies, only one of which had a randomised design (Marshall 2000). This review showed that only hospitals responded to performance data, and even then to a limited degree only. No evidence of influence on patients, care purchasers or doctors was found (Marshall 2000).

A number of RCTs have been published recently (Hibbard 2003, Beck 2005, Hibbard 2005a). These show that publishing data on quality of care leads to more initiatives aimed at improving quality. Fear of a bad reputation following publication of poor performance data seemed to be an important driver behind the decision to undertake action to improve quality (Hibbard 2003). Institutions that achieve a satisfactory score are less motivated to strive for improvement.

The United Kingdom has had good experience with the publication of hospital performance data. A star grading system (0 to 5 stars) has been devised to present the performance of healthcare institutions in a simple way, using one composite indicator. A recent article indicated that longitudinal performance data had improved dramatically since the system was introduced (Bevan 2006). For example, the percentage of patients on a waiting list for more than six months fell from 26.1 per cent to 5.0 per cent between 1999 and 2005. Though serious doubts persisted at management level as to the validity of this star system (Mannion 2005), the authors found it to be effective in improving the aspects of care that were evaluated by the system (Bevan 2006).

In an effort to eliminate distrust, Scotland experimented with the publication of performance scores based on indicators that had been broadly accepted in advance by all parties concerned. However, following publication it appeared that hospitals were still not using the data to improve the quality of care. Doubts as to the quality of the indicators was still a barrier (Mannion 2001).

Fear of a negative impact on an institution's reputation appears, as stated above, to be an important driver in motivating efforts to improve quality (Hibbard 2003, Devers 2004). Hospitals generally take little action following the publication of performance scores. They certainly do nothing if they consider their performance to have been satisfactory (Luce 1996). In contrast, hospitals that perform poorly are more likely to take action (Berwick 1990, Weiner 2006). Lack of confidence in the accuracy of the data seems to hold organisations back from really addressing quality. In the early years of the US public reporting system, more than two-thirds of hospital managers said that the mortality data as published could not be used in improving quality. However, they did

use the data for other purposes. Three-quarters of hospital managers used the data for benchmarking and to give feedback to doctors (Rainwater 1998). Distrust was seen both among hospital management and among doctors (Davies 2001, Mannion 2001).

The limited amount of research carried out into doctors' attitudes to the benefits of public reporting indicates that most doctors are sceptical. They often regard the outcomes as unusable, and doubt the validity of the data (Marshall 2000). No studies have been found showing that doctors actually change their behaviour in order to improve the quality of care. But in interviews doctors do say that public reporting has a certain impact. 22 per cent of a group of New York cardiologists surveyed said that they used published mortality figures in discussions with patients, and 38 per cent said that the figure affected their referral behaviour (Hannan 1997). In a more recent survey of 120 cardiac surgeons, the majority (79 per cent) stated that their decision as to whether or not to perform a bypass operation on individual patients was affected by the publication of mortality figures (Narins 2005). They were more cautious particularly in respect of patients in a critical condition. Many (83 per cent) admitted that patients who might have benefited from a bypass did not receive it because of the publication of mortality figures. It is true that published mortality figures are corrected for high-risk patients, but 85 per cent of the cardiologists thought that the correction was insufficient.

External pressure in the form of public reporting, and the associated stimuli, can have a perverse effect on professional behaviour: this is the conclusion of an analysis of a large number of psychological studies (Deci 1999). This is because the use of these instruments is thought to undermine the intrinsic motivation of healthcare providers. One of the consequences of this is that their professional performance becomes worse instead of better. The use of performance indicators appeared to cause a deterioration in the quality of care provided to vulnerable patient groups (in terms of race, socio-economic class or age) who were perceived, rightly or wrongly, as being at greater risk (Schneider 1996, Peterson 1997, Peterson 1998, Burack 1999, Mukamel 2000, Schneider 2002, Keogh 2004, Narins 2005, Werner 2005b). Various authors have pointed out undesirable effects such as risk selection, unnecessary procedures being carried out to meet targets, misrepresentation of data, concentration on short-term quality improvement effects, skewed focus on only those aspects of quality that are covered by assessment, and hampering innovation (Leatherman 1999, Freeman 2002, Marshall 2004, Werner 2005a, Bevan 2006, Mason 2006). These findings are not always based on carefully conducted research, but should give us pause when considering the introduction of public reporting and other external stimuli. In any event, it is very important that such instruments enjoy broad support within an organisation in order to prevent perverse effects (Mannion 2003, IOM 2006).

In brief, publishing performance scores seems to result in efforts aimed at improving quality if the image of the healthcare institution might be affected. In this case the

initiative is usually taken by management. Doubts about the quality of the performance indicators and the benefits of efforts associated with data collection are significant barriers to their use. As far as individual doctors are concerned, publishing performance scores almost always seems to have a negative impact on behaviour. Strategic behaviour, such as refusing high-risk patients, is widely reported.

Effects of financial rewards and penalties on care provision

There have been experiments with financial rewards and penalties linked to performance outcomes as a further incentive to improve quality. Financial rewards have been common in the US for a considerable time, and are continuing to gain ground there (Pedersen 2000, Sorian 2006). The United Kingdom introduced a compulsory payment scheme for GPs in 2004, in which doctors could boost their earning by 20 to 30 per cent depending on their performance as measured by 147 quality indicators (Roland 2004, Smith 2004). Similar 'pay for performance' systems are now being trialled in the Netherlands.

From an economic point of view it would be expected that doctors and healthcare providers would respond to reward systems by behaving in ways that would earn them the maximum profit and would try to avoid the negative consequences (Heffner 2001). Depending on the reward system used, the effects may be in terms of quantity (more patients equals higher payment) or quality (delivering better quality equals higher payment) (Conrad 2004). However, the real question is whether a doctor would be influenced by financial rewards in this way, or whether they normally strive to offer their patients the best possible care (Gray 2004, Landon 2004). So payments based on quality should go hand in hand with professional standards. Aspects of care that are evaluated in terms of quality must be regarded as clinically significant by the professionals (Roland 2004).

Various reviews have been conducted into the efficacy of using rewards and punishments in relation to the quality of care (Armour 2001, Dudley 2004, Town 2005). One review (of poor methodological quality) looked at the effect of financial rewards on doctors' behaviour (Armour 2001). This review of six studies (two of which were RCTs) concluded that rewards which entailed a financial risk for individual doctors seemed to be effective in reducing the costs incurred by the doctor. The efficacy of financial bonuses on the quality of care was unclear (Armour 2001).

Dudley (2004) showed that the impact of a financial reward depended on various factors, including the way rewards were distributed. Their review looked at nine RCTs, all of which had an impact on the effects of financial rewards based on performance data. It found that schemes rewarding individual doctors were more likely to have a beneficial impact on the quality of care than schemes rewarding group practices. Another finding

was that rewards in the form of bonuses paid for reaching a particular target were less effective than bonuses taking the form of a fee for service or a higher rate. The investigators found no consistent relationship between the level of the reward and the size of the effect. Rewards that could affect the reputation of the healthcare provider were found to be more effective. Hospitals with a low performance score were more likely to take part in activities aimed at improving quality, particularly if the results were published (Dudley 2004).

In one of the few (non-randomised) controlled trials to have been carried out, hospitals in the US were divided at regional level into hospitals operating pay for performance schemes and hospitals not operating such schemes. The quality of care was assessed on the basis of three performance indicators. Rewards were paid for performance above a specific norm. Follow-up measurements found a slight improvement (0 to 2.6 per cent) in the performance indicators, but a significant improvement was found for only one indicator in the group receiving a financial reward. In addition, the hospitals which initially outperformed the benchmark improved less, but they were receiving the most money (Rosenthal 2005).

The limited effectiveness of pay for performance can perhaps be attributed to excessively low pay. In their review of eight RCTs, Town *et al.* restricted themselves to examining the impact of financial rewards on preventive first-line care in the areas of immunisation and cancer screening (Town 2005). The only study examined in this systematic review that was found to produce beneficial effects (sufficient to boost vaccination levels) involved payment of a fee for service in the case of flu vaccinations carried out by GPs where a payment of \$0.80 per vaccination was offered where the vaccination rate was at least 70 per cent and \$1.60 per vaccination where the vaccination rate was at least 85 per cent (Kouides 1998).

Higher payments may well be more effective, but this can lead to negative effects (data massage and manipulation). The level of reward must be proportional to normal earnings and the investment needed to obtain the reward (Armour 2001). One disadvantage of financial rewards can be that healthcare providers which are already performing well receive most funding without having to improve the quality of their performance any further (Dudly 2004). The risk of strategic behaviour also exists. This means that attention will be concentrated on the type of care in respect of which bonuses are calculated, at the expense of aspects or areas in respect of which parties are not held to account (Bevan 2006).

One of the most wide-ranging experiments in the area of pay for performance has been carried out in the United Kingdom (see also the example below, under Pay for performance in the UK). This experiment showed significant improvements in care going

hand in hand with unwanted side-effects (high costs and strategic behaviour on the part of some practices).

In short, the behaviour of healthcare providers can be affected by financial rewards. This probably depends on the level of the reward, the form which the reward takes, and on whether it is paid to individuals, groups, or institutions. However, this does not mean that quality always improves as a result. Further research is needed to determine the efficacy of various reward systems.

Pay for performance in the UK

Politicians in many countries are showing great interest at the moment in the use of financial stimuli to improve patient care and the healthcare system. In the United Kingdom, this has resulted in the Quality and Outcomes Framework (Roland 2004). New GP contracts were agreed in this context in April 2004. Under this contract, the performance of GP practices was measured on the basis of 147 indicators in four areas: clinical patient care, practice organisation, patients' experience and service provision. Performances were expressed in points, with financial rewards rising as the score increased. GPs could boost their earnings by up to 20 per cent. The initiative was welcomed by GPs with enthusiasm. Scores in the first year were unexpectedly high (averaging 91.3 per cent of the maximum possible score). It is not clear at present how significant the improvement was and what the effects have been on aspects of care that were not measured, as no measurements have been done beforehand. It appears that GPs have invested heavily in ICT equipment, that they are concentrating more on complex medical problems (particularly patients with comorbidity) and that nurses are carrying out more chronic routine procedures. Benefits have been reported (such as increased availability of data and greater exchange of information), but drawbacks have also been mentioned (such as increased bureaucracy). There are indications that the rewards have led to some undesirable behaviour, such as data manipulation of access times and removing patients from the data files who drag down the score. It was initially anticipated that GPs would achieve on average 75 per cent of the maximum score available. In the first year after the launch of the system it was found that care met the standard laid down in the case of 83.4 per cent of patients. This high score may perhaps partly be due to the exclusion of certain patients from assessment. This is permitted under the system, but 9.5 per cent of patients with mental problems were excluded (Doran 2006). The system turned out to be more expensive than expected because many more GPs met the standards than had been expected (Timmins 2005).

Performance indicators for GP practices (Tacken 2005)

A similar Dutch system examines the clinical activity of healthcare professionals, consults patients, and assesses the quality of management. All these aspects can be measured by the WOK and made available as quality indicators (139 in total). Measurements are carried out as part of the NHG accreditation scheme.

In the WOK project on Transparency of General Practitioner Care, work is also being carried out on the development of a system for testing, improving and rewarding care provided by healthcare insurance firms (the rewards to be based on indicators and quality scores). Practices can receive bonuses of up to 8 to 10 per cent of their income as a reward for good performance. The system has been trialled in 25 practices and found to be feasible. It is now to be used in 150 practices.

Effects of public reporting on the behaviour of parties making choices

Patients, referring doctors and health insurance firms all make healthcare choices, and can use performance indicators to varying degrees. In 1986 the US Health Care Financing Administration published mortality figures for hospitals in the public domain for the first time. Since then the amount of healthcare information available in America has risen steadily (Davies 1999). The same trend can be seen internationally (Marshall 2002). Information flow is also building up in the Netherlands: for example, 98 hospitals now publish the basic set of performance indicators drawn up by the Healthcare Inspectorate (IGZ) on the Internet (www.ziekenhuizentransparant.nl). Over two hundred nursing homes and care homes have recently started publishing data on the quality of care (www.kiesbeter.nl). The question is how far selecting parties actually make use of performance indicators.

Little controlled research has so far been conducted into the effects of public reporting on the choice behaviour of patients or healthcare consumers. Most information comes from surveys. These indicate that the number of consumers interested in receiving healthcare information is as yet limited. Measurements conducted in the US indicate that quality information relating to hospitals, health insurance companies and doctors is looked at by 21 per cent, 20 per cent and 11 per cent of consumers respectively. These figures remained stable from 2000 to 2004 (Lee 2005). Other research showed that the number of patients looking at quality information rose gradually from 27 per cent in 2000 to 35 per cent in 2004 (Werner 2005a). In the Netherlands, the Dutch Consumers' Association investigated how consumers assess the IGZ basic set of performance indicators described above. This showed that consumers were principally interested in information relating to a hospital's medical efficacy and patient safety. When asked the hypothetical question of whether they would actually use the indicator information, the percentage replying in the affirmative varied from 59 to 85 per cent. The extent to which quality information played a part in the choice process depended on the respondents' experience of hospitals, the nature of their condition (chronic or acute), their level of educational attainment and the type of insurance cover they had (public or private) (Dutch Consumers' Association 2005).

So, receiving information does not necessarily mean that patients will subsequently base their choice on that information. Only a small minority (2 to 19 per cent) of patients do go

on to make a choice in the light of performance indicators (Mennemeyer 1997, Vladeck 1988, Marshall 2000, Lee 2005, Narins 2005, Werner 2005). Patients even continue to attend hospitals with high mortality figures. They seem to be influenced more strongly by isolated press reports of inopportune deaths than by systematically collated mortality data (Vladeck 1988, Mennemeyer 1997). One study was found showing healthcare information to have a marked effect on patients' decisions. This study investigated the impact of publishing CABG mortality figures in New York State on hospitals' and doctors' market share before and after publication. The market share of hospitals with better outcomes grew significantly more than that of hospitals which performed less well; and high-scoring doctors reported a sharper rise in payments for their services than their lower-scoring colleagues (Mukamel 1998). However, the effect declined over time, suggesting that the market responds most strongly to new stimuli.

It is possible that the percentage of patients making choices would be much higher in a completely unregulated healthcare market. In Taiwan, where insurance firms pay for all visits to doctors, patients have complete freedom of choice. In this situation half of the patients say that they have compared the quality of doctors at one time or another. When asked the hypothetical question as to whether they would be prepared to switch to another doctor, 77 per cent said that they would if they found out that their own doctor was performing poorly (Cheng 2004). The introduction of the new basic insurance system in the Netherlands also offered patients complete freedom of choice in the sense that insurance companies were required to accept any person wanting basic cover. Under the old system, around 3 per cent of the population switched insurance companies each year. In January 2006, 38 per cent of consumers said that they were considering switching to another health insurance company, and 9 per cent had already decided to do so. The main reason given was that they had received an attractive offer (level of cover compared to the premiums) from a group insurance scheme (58 per cent), or that they found their current premiums to be too high (42 per cent). So the motivation to switch was principally financial rather than as a result of differences in quality (Delnoij 2006). More recent surveys (17 February 2006) suggest that the number of individuals making the switch has increased to 25 per cent (source: TNS NIPO/RTL Nieuws).

The use that patients make of healthcare information is also affected by their state of health. Patients who are ill prefer not to choose, and would rather be able to rely on healthcare being of good quality wherever they go. In contrast, healthy consumers might like to collect information on the quality of care at an earlier stage and make a choice on that basis. A considerable amount of research has been carried out to find out 'whether' and 'how' consumers and patients look at healthcare information, and whether or not they then go on to use it. A number of conditions must be met before a patient (in many cases a 'healthy consumer') can take decisions on the basis of healthcare information: the information must be available; the patient must be aware of the information and have access to it; the patient must be capable of understanding the information and have faith

in it; the patient must take action on the basis of this healthcare information (Werner 2005a).

Various studies have been carried out into how comprehensible the information provided is, and how important it is perceived to be. In general, information relating to 'adverse events' (such as contracting an infection while in hospital) is least well understood, while indicators expressing patient satisfaction are best understood (Hibbard 1996). There is a direct correlation between how well a quality indicator is understood and how important it is thought to be: the better it is understood, the greater the importance attached to it (Hibbard 1997). Explicit quality information, whether positive or negative, does weigh heavily in the choices patients make (Hibbard 2002). The way information is presented affects how comprehensible it is, and how well patients understand it and how far they use it in making decisions. Visual aids can help patients choose better-performing healthcare providers or insurance firms (Hibbard 2002). If the best-performing hospitals appear at the top of a coloured bar display, people are more able to say which hospitals perform well and which perform poorly (Hibbard 2005b). Retention of information is not affected by level of educational attainment, income, or age (Hibbard 2005b). Younger people are more used to making choices and using ICT in the process.

Information should ideally link in to the basic cognitive processes used when making decisions (Vaiana 2002). Information must be given from the patient's point of view. The complexity of the information provided is often an obstacle: patients become confused particularly when reports compare different healthcare providers and none of the providers scores well for all elements tested. Patients appear to have difficulty in weighing up the various elements in the reports against each other (Hibbard 2001). Other problems are associated with the terminology used; the relationship between an indicator and quality of care; and with whether or not high or low scores for an indicator represent high quality (Jewett 1996, Werner 2005a). The source of information also affects the use of healthcare information by patients. Descriptive studies show that patients have more confidence in the experience of family and friends than in scientific evidence (Mennemeyer 1997, Marshall 2000). Consumers also appear to distrust government information (Werner 2005a); they prefer to receive data from independent (in some cases commercial) bodies (Magee 2003).

Patients are not the only parties who make choices: health insurance companies and referring doctors are also significant selectors. Little research has been conducted to date on the effects of public reporting on choice behaviour in this group either. The small number of studies we found were mainly interview studies. Neither health insurance firms nor referring doctors have much confidence in the data. Insurers are generally quite interested in performance indicators (Marshall 2000, Werner 2005a). Limitations in the data and the way it is corrected for distorting variables, such as patient age and disease features, are put forward as reasons for reluctance to use the data. Process

indicators and patient satisfaction data are used more often than outcome indicators in making choices (Hibbard 1998). Referring doctors remain strongly resistant to public reporting. GPs in Scotland mainly use waiting lists to select a consultant for their patient, and only 16 per cent of GPs used the published performance indicators. Distrust was common: almost all (90 per cent) wanted to know more about the indicators before using them, and 76 per cent thought that the indicators needed to be presented more accurately and in a more complete form (Mannion 2003).

In short, studies to date indicate that parties making healthcare choices are interested in performance indicators, but make limited use of them when selecting healthcare providers. The effect of performance indicators on patient behaviour depends on:

- how aware patients are of their freedom of choice;
- the comprehensibility of the data: content, quantity, complexity and form of display;
- assumed independence of the source of the data;
- how closely the data relates to the patient's situation;
- the expected effort (in terms of time and money) associated with making choices on the basis of information;
- the patient's age and familiarity with ICT.

Lack of trust in data is a particular barrier to its use by referring doctors and insurance firms.

Effects of public reporting on costs and bureaucracy

Little attention appears to have been paid so far by researchers to the costs of publishing performance scores. Along with the costs incurred in developing good performance indicators, measurement methods and information systems, the process of collecting, processing and analysing data is also associated with costs. Publishing data also costs money, and finally the actions needed to improve the quality of care are expensive. It has been estimated that publishing mortality data for Pennsylvania hospitals costs \$17 per patient discharged (at 1989 prices). This amounts to 0.36 per cent of the total expenditure budget of a small hospital and 0.27 of the budget of a large hospital (Leatherman 1999). This is a considerable investment if we bear in mind that only one indicator is taken into account in this cost evaluation.

It is unclear whether the use of performance indicators leads to an increase in bureaucracy. The introduction of eighteen performance indicators in VA hospitals in the United States appeared to increase bureaucracy in the initial stages, but later on led to a decline (Perlin 2004). Hospitals altered their infrastructure and organisation to enable them to collect quality data more easily. This eventually led to an improvement in the quality of patient care and a simultaneous reduction in the use of resources (Perlin 2004). In the UK bureaucracy rose by 12 per cent after the introduction of diabetes care

contracts in GP practices (Guthrie 2003). Both studies used a defective study design with uncontrolled before and after measurements. No real conclusions can be drawn from these contradictory results.

In short, we have very little information as to the costs and bureaucracy associated with the use of performance indicators, and so can make no statement on the issue of cost. The few studies that have examined bureaucracy indicate that the introduction of performance indicators leads to a rise in bureaucracy. Infrastructure and organisation have to be adapted so that data can be collected. However, there are indications that bureaucracy may decline in the longer term as processes are optimised.

6 Ethical aspects

The preceding chapter looked at what we know about the possible role of public performance indicators as an instrument for improving the quality of care. What do we hope to achieve from this instrument? And is this expectation being met? What other unintended consequences may occur? Put this way, it seems that we are dealing with a purely technical or organisational matter. But that is not the case: morally loaded values, convictions and ideals lie just below the question of how quality can best be improved.

The term 'quality'

This starts with the term 'quality' itself. Quality means that something does what you can expect it to do. This is true of the quality of healthcare too. Harteloh and Casparie define the concept as 'an optimum relationship between expectation and achievement in respect of a particular aspect of healthcare' (Harteloh 2001). But not all parties concerned are agreed in advance as to what can be expected of good care. Though not purely subjective, the question of what we understand by 'good care' is often a matter of context and perspective, and therefore a subject of enduring debate between the parties involved in healthcare: professionals, institutions, patient organisations, the Government, and insurance companies. The diverging roles, responsibilities and interests of the participants in this debate mean that their emphasis of aspects of quality can differ, overlap, and sometimes even conflict (Van Herk 1997). These aspects can be the clinical and technical aspects of medical intervention (how appropriate and safe it is), the organisational dimension of good healthcare (access, waiting lists, continuity), relational aspects (how patients are treated on a personal level and respect for privacy and autonomy), and how appropriate care is on a meso- and macro-level.

Different perspectives and objectives of course also colour the discussion on the possible role of performance indicators in assessing the quality of care. Inspectors wish to use them for control purposes, particularly with regard to the safety of care. Institution management teams see them as instruments for use in setting priorities and allocating budgets. Insurance firms want to use them to enhance their profile and competitive position ('we have contracts with the best healthcare providers'). Patient organisations expect publication of performance scores to make patients better informed and able to

choose and subsequently obtain the care they really need (where this need is not urgent). Finally, the healthcare providers see performance indicators as having a role principally as an extension of their existing internal quality systems, aimed at improving the primary process.

It is important that these varying objectives are clarified in the debate on performance indicators (Van Herk 1997, Berg 2005). Who wants to use them for what purpose, and why? Only then can we engage in a meaningful discussion on the benefits and drawbacks of performance indicators. If the intended use of performance indicators is not specified, any statement as to their validity, or (unintended) effects, quickly loses any relation to reality.

This report addresses the role attributed to performance indicators in the Government's quality policy. The recent policy paper on this issue showed that most if not all of the objectives listed above are relevant (Tweede Kamer [Lower House] 2006). The publication of comparative performance scores is intended to encourage the parties involved in healthcare to keep each other 'up to the mark' in respect of permanent improvements to quality; while the inspection system is intended to provide data for monitoring minimum performance standards. This latter aspect is referred to in the policy paper as 'vertical supervision', in contrast to 'horizontal supervision' which consists of the expected choice behaviour of 'healthcare consumers', referring doctors, insurance firms, and sources of funding. The disclosure of quality differences brought about by this mechanism and other means should encourage healthcare providers to improve the quality of their service, referred to in the policy paper as 'value for money'. Public accountability, external controls, increased choice and demand guidance, better care and more appropriate care: all these factors are linked together in the new policy approach.

Public accountability and professional responsibility

The term 'transparency' is a central concept in the current quality policy. It is understood to mean the process of making the quality of healthcare visible to all parties concerned. In view of the important place held by healthcare in society, this requirement for public accountability seems nothing less than self-evident. This is particularly true in view of the general trend in society towards greater openness and accountability for services provided in all kinds of areas.

The question is how public accountability relates to the particular nature of medical (or in general 'professional') behaviour. The term '(medical) professional autonomy' soon arises in this discussion. This phrase describes the freedom of action that doctors and other healthcare providers need so that they can properly bring their particular skills and expertise to bear on a patient's specific symptoms or needs. The core of professional

autonomy relates to freedom of action in respect of diagnosis and therapy. Other aspects, such as entitlement to practice and monitoring the competence of healthcare professionals, are also involved (Hulst 1999). The basic assumption is that lay people do not have the specific knowledge or the insight gained from training and experience to be able to judge professional behaviour (Kultgen 1988).

Professional autonomy can easily be misunderstood as *carte blanche* to professionals, allowing them (as a profession) to evade responsibility for their actions. That is why the term has such a loaded past. Sociological analyses conducted since the 1970s have in some cases strongly emphasised their use as instruments of power: some professions, such as doctors, could expand their social position and economic interests, and defend themselves against interference by society, by claiming professional autonomy. Regarded in this way, professional autonomy is first and foremost an ideological cloak for privilege, paternalism and closing ranks (Kultgen 1988).

However, more recent analyses have concentrated more on the importance of professional autonomy as a counterweight to all kinds of external forces, such as bureaucratisation, economisation and legalisation, that might make doctors or other professionals reluctant to fulfil the responsibility that we as society have conferred on them (Freidson 2001). Hulst and Schepers stress that professional autonomy is essential to enable doctors and other healthcare professionals to focus fully on the welfare of their patients (Hulst 1999). What this means is that doctors, while of course having to obey the law, are bound in the exercise of their profession by nothing other than medical professional standards; i.e., what is regarded within medicine (medical science and medical ethics) as acceptable (Hulst 1999). It does not follow from this that professionals do not have to be accountable; rather, it sets out the context within which such accountability can be expected. This principle is enshrined in law in the Medical Treatment Agreement Act (WGBO, article 7: 453 of the Civil Code). It would therefore be more appropriate to speak of 'the inherent professional accountability' of doctors and other healthcare providers rather than their 'professional autonomy' (Den Hartogh 1997).

Partly in response to this criticism from society, the professions concerned often lay strong emphasis on the idea of 'professional accountability'. The *Charter on Medical Professionalism*, which was published four years ago in highly-respected medical journals and enjoyed broad support, is a good example of this (ABIM 2002). The preamble states that: '*professionalism is the basis of medicine's contract with society*'. This 'contract' asks for public trust, and the profession must show itself worthy of such trust:

To maintain the fidelity of medicine's social contract during this turbulent time, we believe that physicians must reaffirm their active dedication to the principles of professionalism,

which entails not only their personal commitment to the welfare of their patients but also collective efforts to improve the health system for the welfare of society.

This responsibility for the social dimension of healthcare is developed in the Charter, for example in respect of appropriate intervention (fair distribution of scarce resources) and striving for continuous improvements in quality. The latter aspect does not relate purely to increasing clinical competence, avoiding errors and guaranteeing safety, but also to optimising healthcare outcomes:

Physicians must actively participate in the development of better measures of quality of care and the application of quality measures to assess routinely the performance of all individuals, institutions, and systems responsible for health care delivery. Physicians, both individually and through their professional associations, must take responsibility for assisting in the creation and implementation of mechanisms designed to encourage continuous improvement in the quality of care.

The English Royal College of Physicians adopted a similar position in 2005 (RCP 2005), arguing for a new definition of professionalism in which cooperation with the patient would be central. We could also quote the new Dutch doctors' oath in this context: 'I will act openly, be willing to undergo review, and recognise my responsibility to society' (Doctors' oath review commission 2003).

We can conclude that the demand for public accountability is not in conflict with the particular nature of the exercise of medicine. Doctors cannot evade their responsibility by referring to 'professional autonomy'. At the same time, the publication of the Charter with its emphasis on restoring trust and drawing a line under openness and testing in the new era shows that more still needs to be done. But we cannot yet draw any conclusions as to how that trust can best be earned and what forms of public accountability might contribute to it (and what forms would not).

It is clear in any case that complete external transparency is an illusion. Medicine is far too complex an issue for this. Giving patients a greater say, and access to sources of medical knowledge via new technology, does not lead to 'deprofessionalisation' in practice (Hulst 1999). This is because, firstly, patients (lay people) are unable to put fragments of medical knowledge in a broader theoretical context and so remain dependent on medical expertise to interpret what they find on the Internet. Another important element is that applying medical knowledge in specific situations demands judgement skills developed by training and experience. In this context, Stegeman describes a 'second kind of knowledge' that is hard to explain. It synthesises information and is based on refining skills like pattern recognition, clinical acuity and intuition (Stegeman 1997). It is the combination of theoretical and intuitive understanding that makes the practice of medicine so complex. It is also why patients continue to depend

on doctors, and why society has to entrust the provision of healthcare to professionals who have acquired the relevant combination of knowledge and experience (Davies 1998).

It is therefore inevitable that the practice of medicine will often appear somewhat mysterious to lay people. This does not detract from public accountability. One approach consists of healthcare providers maintaining their own quality systems and accepting responsibility for their implementation. Outcome-related performance indicators can play an important part in this, alongside forms of process testing. The second approach is the one set out in the policy paper referred to above. Under this kind of system, quality is directly indicated by a comparison of measurable outcomes in a manner comprehensible to lay people. Compulsory publication of performance scores must make quality (differences) immediately visible to all parties concerned with the care. Of course, these two approaches are not in direct opposition to each other, and could work in tandem. The principles of each approach are summarised below:

Differences in views in respect of effective improvements to quality in healthcare	
<u>Internal evaluation and quality improvement</u>	<u>External evaluation and control</u>
quality improvement is the responsibility of medical professionals	quality improvement is the responsibility of society
professionals take the lead in quality improvement	the Government, insurance companies, managers take the lead
change based primarily on intrinsic motivation	change based primarily on external stimuli and control
emphasis on trust, autonomy of and self-regulation by professionals	emphasis on transparency and external accountability
emphasis on valid information about healthcare (essential aspects, complete data)	emphasis on reliable information about healthcare (key indicators, minimum acceptable levels of care)

External stimuli and intrinsic motivation

The former approach referred to above assumes that the healthcare providers concerned will themselves be sufficiently motivated to take the issue of implementing adequate quality systems seriously. Until recently, this assumption also underlay the Government's policy which was based on self-regulation by healthcare providers. The 1996 Healthcare Facilities Quality Act was originally designed according to this principle. The current approach is based on observation that self-regulation is too lax and that external stimuli are needed to bring about real improvements in quality (Council for Public Health and Health Care [RVZ] 2001, Tweede Kamer [Lower House] 2002). The sector could be accused of not having done enough to put its own house (quality system)

in order. Six years after the introduction of the Quality Act, less than half of all institutions had an integral quality assurance system despite being legally required to introduce such a system (IGZ 2002).

The external stimuli built into the new approach comprise firstly what Berg *et al.* have called the 'burning platform' effect (Berg 2005): publication of results makes things hot for institutions and healthcare providers that are clearly underperforming their counterparts. It is not even necessary for third parties to change their behaviour as a result. Fear of damage to reputation is of itself a strong stimulant to do better next time (see chapter 5). 'Turning the heat up' can also help break down inherent resistance to change in organisations, which is often a source of deep frustration to well-intentioned individuals (Berg 2005). Additional stimuli must come from the indirect or direct financial consequences that can be associated with disclosure. Critical choice behaviour on the part of well-informed 'consumers' can cause poorly performing providers to lose customers. Insurance companies might relate their purchasing policy to performance requirements. The intention is for contracts to be withheld from institutions delivering inadequate quality (Tweede Kamer [Lower House] 2006). External stimuli should in this way complement the motivation that the sector so clearly lacks.

In its recent report on the provision of social services, the Scientific Council for Government Policy pointed out that this approach to policy, transferred from the private sector, was already in use in other public sectors (WRR 2004). Measurement and management are the dominant themes in welfare and education as well. This approach is in line with the Government's strongly-felt need for 'disentanglement' of responsibilities. There needed to be an end to the situation in which Government was viewed as being responsible for the operation of healthcare and other forms of professional service provision, while the detailed knowledge necessary to get a sufficient grip on these sectors was lacking. A solution is being sought in the application of external controls and competition on the basis of quality. Performance indicators, focusing on formalising, measuring and comparing results, and external stimuli, are key to this approach. The WRR is critical of this, warning of the danger of measuring performances without any knowledge of the context in which they are being delivered, which makes them hard to interpret. This would indeed lead to competition on results, but not on quality. Even more important is the 'problem of confidence' that the WRR sees here. It points to the pessimistic attitude to human behaviour that informs the underlying management philosophy, namely that 'the way people act is shot through with opportunism, guile and deception' (WRR 2004). Professional behaviour is no exception to this. That is why external controls and incentives are needed to ensure that professionals continue to act responsibly and do not abuse their position. Such 'institutionalised distrust', to use the WRR's term, starts a vicious circle and is a self-fulfilling prophecy. Dealing with professionals as individuals who are insufficiently motivated to deliver quality without prompting actually stimulates and justifies opportunistic conduct (Davies 1998).

The two themes of trust and distrust were frequently raised during the expert meeting held to prepare this report. We can distinguish between three groups when it comes to efforts aimed at improving quality in the healthcare professions: a small group of pioneers already motivated to improve quality; a large group in the middle; and a small group of 'bad guys': the structural rotten apples that are to be found in any profession. The distrust perceived in Government policy raised the question of how they should be dealt with. The point was made that an approach making the entire profession subject to a form of external control was not the only way to bring the 'bad guys' to heel, if that is the intention. Another question is what would be achieved by this approach. The motivated pioneers are not the problem, and shifts in Government policy would not divert them from doing what they regard as important. The key thing is to get the middle group on board: the question is whether this can best be done by dealing with all members of the profession as 'potential rotten apples'. Would this not undermine precisely what you are wanting to encourage: intrinsic motivation to exercise a profession properly (Reinders 2006)?

A recent issue of the journal of the Dutch Christian Democrat party, *Christen Democratische Verkenningen*, was devoted to this issue and showed that the question applies to sectors other than healthcare as well. Several articles in this journal argued for a renaissance of professional ethics in various ways. The basic message was: the authorities should give up their obsession with measurement and management, which was demotivating. Instead of this they should challenge professionals to commit themselves personally to their profession and their expertise (Van den Brink 2005, Verbrugge 2005).

Behavioural science research mentioned earlier in this report shows that intrinsic motivation - people's inherent desire to do a good job - is an important anthropological constant. It is based on the spontaneous satisfaction that people gain from effectively performing tasks that they themselves consider to be important. As such, it is 'a prototypic instance of human freedom or autonomy' (Deci 1999). But the research also seems to indicate that this intrinsic motivation can easily be undermined if performance comes to be dependent on external stimuli, such as the bonus systems common in the private sector. The German management expert Sprenger believes that introducing systems of this kind set in train a dynamic that confirms expectations: the more people are directed by external stimuli, the less reason they have to trust their own motivation. So more and stronger external stimuli are needed to persuade people to act as they are supposed to. This comes at a high price. Guidance through external stimuli leads to strategic behaviour or 'internal resignation'. Risk-avoidance takes precedence, and striving for improvement and innovation has no chance (Sprenger 2005).

Here we are not talking about employees of private companies, but healthcare professionals. Of course it would be wrong to act as if doctors and other healthcare professionals were a particular breed of person, guided purely by altruistic motives. Healthcare professionals are not saints, and are not required to be (Hilhorst 2004). Nevertheless, there is a moral core to their professional identity predicated on a drive to help others (Koehn 1994). This means that undermining their intrinsic motivation in this context is more dangerous than would be the case for (some) other professions. That is because if the immanent sense of their own action disappears, so too might their focus on the welfare of others. This would lead to a 'moral erosion' of professional identity (Verbrugge 2005). This is what Hilhorst has to say on the matter: 'if policymakers increasingly use guidance instruments based on external stimuli (...) this raises the serious risk of pushing out altruistic motivation' (Hilhorst 2004). If society no longer believes in the service ideal of the professions, who could expect professionals themselves to keep doing so?

It is clear that a quality policy based primarily on external stimuli is associated with moral risks. As well as undermining the intrinsic motivation of professionals, there could conceivably be direct consequences in the form of strategic or 'perverse' behaviour for patient care. This would happen if, for example, doctors refused to treat high-risk patients for fear of receiving a lower performance score, or if the time and attention doctors devote to aspects of care covered by a performance indicator led them to neglect aspects that are no less significant but are not measured in the same way. Data manipulation and other forms of fraud can be detrimental to the interests of patients and citizens in more subtle ways (Trappenburg 2005).

But are we painting too gloomy a picture? In the first place, motivation is never purely an 'internal' matter. Intrinsic and extrinsic motivation can complement each other. Secondly: there are various forms and degrees of external stimulus. Our literature review shows that the extent to which external stimuli can be expected to lead to strategic or undesirable behaviour increases when certain outcomes (high or low scores) are associated with direct and serious consequences. In this respect there is a clear difference between stimuli based on the fear of damage to reputation associated with disclosure (burning platform effect') and stimuli in the form of direct (financial) penalties (Berg 2005). In the third place, a certain amount of strategic behaviour is an inevitable side-effect of any attempt to capture the attention of the entire profession. The question then is not whether this happens, but to what extent and whether it remains within reasonable limits. This is probably also related to how far loss of intrinsic motivation should be regarded as a real problem.

Two extreme positions must be rejected in any event. On the one hand, the position that introducing external stimuli in order to improve quality is tantamount to undermining professional ethics and intrinsic motivation, and so is always reprehensible. The fact that

the intrinsic motivation of well-intentioned professionals can also be damaged by allowing 'rotten apples' to fester shows that this position is untenable. But on the other hand we should also distance ourselves from the idea that achieving optimum performance needs full external guidance by professionals in the form of an all-embracing system of monitoring, rewards and punishments. Such a system is not only extremely difficult to put in place, but will also rapidly turn out to be counter-productive and associated with all kinds of morally unacceptable consequences, some of which are discussed below.

So the key question is whether and how external stimuli can be introduced in such a way that the positive stimulating effects which might result outweigh the negative ones. This is a highly topical issue in other contexts as well: for example, in respect of the effects on tax morale of an alert and stringent detection and punishment policy pursued by the tax authorities (Feld 2006). It seems evident that there is a tipping point in the relationship between primarily positive and primarily negative outcomes, after which any increase in external pressure no longer stimulates the intrinsic motivation of those concerned, but undermines it instead.

The patient as 'healthcare consumer'

A central role has been given to patients in the Government's new quality policy. Their emancipation, becoming 'healthcare consumers with choice' is presented as an important reason for asking healthcare providers to deliver measurable and visible quality (Tweede Kamer [Lower House] 2002). The profession's previous system of self-regulation is inadequate in this regard and needs to give way to a new approach that 'puts the perspective of the healthcare consumer at the heart of matters' (Tweede Kamer [Lower House] 2006).

This clearly raises a contemporary moral ideal: the ability to choose, to decide for yourself what you think is important, and to shape your own life. The ideal of self-determination, though perhaps presented in a particular way and with a particular accent. We are dealing here not so much with the patient as a mature citizen (as was established in the debate on patients' rights) but also with the patient as a consumer making choices, a purchaser of 'healthcare' (RVZ 2003). The question is: what can stand in the way of this? The ideals of self-determination and its counterpart, responsibility for oneself, are core elements of modern views on humanity and a good life. These values can be pre-eminently expressed in the economic aspects of existence. As healthcare and other forms of public service are increasingly regarded as normal economic activities, it is quite logical that more individual freedom of choice should be demanded here as well (Hilhorst 2004). There would seem to be good grounds for this, as healthcare still fails to take sufficient account of patients' actual needs.

Of course, all of this takes place in a context in which other values also exist. Broadening choice is instrumental in terms of making healthcare more appropriate and improving its quality. The involvement of the market should bring many benefits, and in particular lead to cost savings. But even those who doubt this must agree that greater transparency and choice will achieve some change for the good in healthcare.

But that is not the end of the story. Firstly, the findings of the literature review carried out for this report show (once again) that patients are not (yet) really comfortable with their role as healthcare consumers exercising choice. The situation may be different for specific patient groups (for example, people with chronic illnesses), but in general patients still seem little inclined to change their selection behaviour in response to performance scores achieved by healthcare providers and hospitals. This is also shown by a recent study by the Netherlands Organisation for Health Research and Development, ZonMw (Groenewoud 2006). The explanation may lie partly in the fact that the nature of the information is not closely enough attuned to their specific needs, and to what they might regard as quality of care in the light of those needs. That is why people are more likely to consult people with the same condition, relatives and friends with relevant experience. And a factor that may be pertinent to referring doctors and insurance companies might play a part here as well: people realise that they cannot simply take performance scores at face value. They know that things are often more complicated in practice.

Of course, this does not rule out the possibility that patients might make greater use of certain selection information now and in the future, particularly if this is consistently held up as an ideal. It could also be argued that the moral ideal will not lose its shine if people do not use the options for choice offered to them. They are not obliged to choose, but merely given the opportunity. One question is whether the material and social costs of providing this performance information, which is apparently seen as being of limited use, outweigh the benefits of doing so (Trappenburg 2005).

But we have still not reached the most important question from a moral point of view. What is the relationship between concepts such as self-determination and freedom of choice where healthcare is concerned? Which values are central? Do these concepts fit in, and if not, what is their purpose? In her latest book Mol contrasts 'the logic of choice' with 'the logic of care' (Mol 2006). She is using the first term to describe how increased choice in all areas of life, including healthcare, is presented as a self-evident ideal. The second term refers to how healthcare providers and patients have learned to work together to search for the best response to the challenges faced by those having to live with illness. Mol states that patients are dependent on their illness and their body. This colours their perspective and determines their options. They are unable to take the observer's perspective of their own existence that the 'logic of choice' presents to us. Illness is a constant reminder that patients do not stand above their lives, but in the

middle of them. The question is not what you would like, but what has to happen here and now. In that situation the 'logic of choice' has little to offer. And more importantly, this emphasis on choice drives a wedge between doctors and patients, threatening to undermine care (Mol 2006).

The question is whether the dichotomy between the logic of 'care' and the logic of 'choice' is not being expressed in excessively stark terms here (Schermer 2006). This is clearly not Mols' intention, but her analysis could easily be (mis)understood in this way. The assumption that care and choice are mutually exclusive is in any case fruitless. Good care also means enabling patients to shape their own lives by making meaningful choices (Nussbaum 2006). But an important question is clearly whether the principle of helping patients choose, and the underlying ideal of autonomy, is well served by placing patients in a consumer role vis à vis doctors and other healthcare professionals.

The WRR warns against this as well. The council describes the introduction of a term like 'consumer' as a 'typical example of stolen rhetoric that in practice clouds the relationship between professionals, institutions and those needing their care, and puts this relationship under pressure' (WR 2004). This is quite another viewpoint of what has been described in recent policy papers as 'keeping up to the mark'. And it also shows that even if there may be gains to be made in terms of quality and appropriateness (though this is uncertain), something could be lost as well. Will the publication of performance scores and the resulting selection and comparison behaviour not cause doctors and patients to regard each other differently? Patients would no longer be just patients, but would be critical observers and judges as well. They would see in ever-increasing detail what is good and what is bad about healthcare provision. Doctors would not simply be healthcare providers, but suppliers of services that might be better or more attractive round the corner. The question is: does this damage the vulnerable fabric of healthcare relationships that by their very nature need 'institutionalised trust'? (Koehn 1994, Freidson 2001, Tonkens 2003). More generally, what consequences might this have for the public's basic trust in healthcare: the expectation that healthcare providers are competent and act in patients' interests. Would consistently publicising the fact that this is not always the case not affect the public's confidence in care? These kinds of hypothetical consequences need to be carefully examined.

Measurability and justifiability

Quality must be measurable. That is the starting position of the Government's recent policy paper (Tweede Kamer [Lower House] 2006). An intriguing phrase that seems to brook no contradiction. But we need to ask what 'measurability of quality' actually means. After all, we are talking here not about the quality of a straightforward product, but about the complex issue of the quality of healthcare. Can all the relevant aspects of healthcare

be counted and measured? Is healthcare that cannot (easily) be measured of inferior quality? Is measuring the only way of tracking the quality of care?

Performance indicators are 'measurable elements of healthcare provision that act as a possible pointer to the quality of care' (Advisory Council on Health Research [RGO] 1990, see also chapter 2). Looked at in this way, an abnormal score is a reason for further investigation, a process which may indicate that certain aspects of healthcare provision need to be improved. It is one possible pointer, because we cannot rule out the possibility that a bad score may be due to context-specific factors that were not allowed for in the measurement (for instance, a certain patient population structure).

In the case of indicators used internally (within a medical practice or healthcare facility, but also in respect of peer comparison), those concerned have sufficient understanding of the complexity of the operation that they can assess the relative significance of different indicators. This is not necessarily the case in respect of external comparisons. So we have a contradiction here: external comparisons are most context-sensitive, but in this situation the opportunity for taking context information into account when interpreting outcomes is smallest (Berg 2002). When used in external comparisons, performance indicators lose their indirect 'signalling function' and are treated as straightforward results.

The methodological question (see the earlier discussion on 'validity' in chapter 4) is whether or not too much is expected of these indicators. From a moral point of view it is important that one of the aims of making quality measurable is to allow healthcare providers to be questioned about their performance and to hold them to account if necessary. There is nothing against this in principle, but it must be done fairly. Holding healthcare providers to account for performance scores that do not take sufficient account of relevant context factors would be unjust (Russell 1998, Wistanley 1996).

In a strictly 'utilitarian' argument, the moral quality of a system of performance indicators implemented as a guidance instrument depends purely on the question of whether it produces good results. The issue of whether the system can be justified is seen as secondary. What counts is whether the 'burning platform effect' of publishing performance outcomes motivates the parties concerned to do better next time they are measured, and whether this leads to better care on balance.

But in the meantime the parties concerned would be entirely within their rights to feel it unfair for them to be held to account for outcomes over which they have little influence. Think of a GP practice with a relatively poor score that can be (partly, largely or entirely) explained by the fact that it is located in a deprived area. In an ethical perspective that sees respect for individuals as a priority, justifiability is a moral value independent of utility. From this point of view publication of scores that are not sufficiently weighted for

context, or that are unreliable because they are based on too few observations, is morally unacceptable even if it were to lead to better care. Furthermore, even a strictly utilitarian approach needs to take account of justifiability as the energy and behaviour of healthcare professionals who feel that they are being unjustly treated may be devoted to actions that work against the intended effect of the system, with contrary effects.

Proposals for a 'code of ethics for performance indicators' (Goldstein 1996) have been made in the context of a similar debate on boosting quality in the education system. The aim is to prevent publication of scores leading to unjustified damage. In order to protect those concerned against such damage, the code allows the publication of indicators that can be significantly affected by external factors only if it is clearly stated how these factors are taken into account. Furthermore, individuals and institutions must have the right of appeal if they believe that they have been unjustly held to account for outcomes over which they themselves have too little influence.

A second question connected with the issue of 'quality must be measurable' relates to the selection of performance indicators. Of course, not everything is measured: only some elements which are regarded as representative for a broader area of care are examined. This gives rise to methodological and moral issues, as the system may be skewed if it is not sufficiently representative. All the energy and attention might then be brought to bear on improving a particular indicator, without at the same time improving the quality of what underlies it. The situation may even deteriorate as less attention is devoted to aspects that are important but are not sufficiently considered in the measurement system. In order to overcome this risk we would need to look for indicators that do not lend themselves to improvement in isolation, but do they exist?

Thirdly we have the question of what 'quality must be measurable' means for less clinical forms of care, such as nursing and care activities, for which it may be much harder to develop sufficiently validated performance indicators (Berg 2003, Hamers 2005). Does 'must be measurable' mean that aspects which are more difficult to measure, such as the way patients are treated on a personal level, will be excluded from the quality policy, or be given less attention? Or could suitable ways of making the quality of such aspects measurable and comparable be devised?

Finally: how does improving particular aspects of care relate to improving care as a whole? Until that question is settled it is clear that performance indicators that happen to be available, or that will clearly be the easiest to develop, will be used. In arguing for the development of performance indicators from a public health perspective, Klazinga *et al.* have expressly rejected this lack of direction (Klazinga 2001). It should be emphasised that the development of indicators is not a value-free administrative or purely scientific task. In the final analysis its purpose is to decide how the quality of healthcare can best be shaped in the 21st century. This position is in line with one of the central

recommendations in the WRR report: 'It is precisely because fewer resources are available and the services provided are growing in extent, range and complexity that the focus must be brought to bear on matters of content and standards rather than procedural issues' (WRR 2004).

Costs and bureaucracy

The literature review carried out for this report shows that little is currently known about the impact of comparing the quality of healthcare provision by using performance indicators in terms of financial costs and administration ('bureaucracy'). It is however clear that the costs must not be underestimated, and that bureaucracy may in any case rise dramatically to start with, though smart data collection systems may later on reverse this trend. Costs will of course also depend on how ambitious the implementation of the system is.

The term 'bureaucracy' often immediately gives rise to negative prejudice. It is seen as carrying out or imposing pointless administrative tasks, wasting the human and other resources that would be better devoted to the primary process of delivering healthcare. It is very easy to find healthcare professionals who have precisely this in mind when they talk about the 'bureaucracy' involved in recording performance data. But this implicit prejudice is not necessarily correct. Quality cannot be improved if we do not evaluate processes and outcomes; and this is inevitably linked with the requirement to record data, a form of bureaucracy. This applies to internal systems as well. The task consumes funds and labour that are lost to the primary process if budgets remain the same. Whether this is a good or bad thing depends on what is achieved in terms of more responsible care. Does the care actually improve: does it become more appropriate, more transparent, more demand-led, safer? If so, the costs will be partly offset by savings and could in any case be regarded as worthwhile in view of the achievements they produce. The use of manpower in administering quality data is not necessarily a problem if it means that hands-on medical staff can do their job better.

But is that the case? Are the costs and bureaucracy involved in making the quality of healthcare comparable by means of performance indicators proportionate to the outcomes in terms of better and more responsible care? The information in this report shows that this question remains open. There is as yet no firm evidence to uphold the assumption that the approach taken in the new Government policy will lead to more choice for healthcare users and encourage healthcare providers to compete on quality.

So this is something of a policy experiment. Time will tell which specific forms of using performance indicators in healthcare are cost-effective, and which are not. Evidence-based policymaking does require ongoing evaluation and investigation of effects. One important message to emerge from this report is that this aspect is too often neglected. It

is too often assumed that the system originally put in place can continue without adjustment.

Evaluation and confirmation is important not only to avoid wasting funds and energy that could indeed have been better devoted to actual healthcare, but also in order to maintain support among the profession and to flag up any negative effects (such as loss of public confidence in care, or high costs) in good time. It must be clear to the healthcare providers concerned (institutions and professionals) that collecting and publishing performance scores is a worthwhile exercise. Should this confidence be lacking, motivation to take part would be undermined and evasive or strategic behaviour would be encouraged, to the detriment of transparency and quality of care.

In the meantime it is important to be careful not to devote more attention to the continuing uncertainty as to the desired effects than to the no less great uncertainty as to the extent to which undesirable effects must also be taken into account. It would be unfair to present one as an unproven assumption and the other as a fact. This investigation into the effects of the system must look at both aspects.

7 Discussion: responsibility, quality and confidence

Hospitals, medical practices and professionals need to work on continuous quality improvement. They must also be accountable to society for the care they provide and its quality. This two-part message - quality and accountability - is of course nothing new. The same applies to the conclusion that much remains to be done on both fronts.

However, what is new is the urgency with which this message is being put across. Society demands transparency, and will no longer accept (extremely) mediocre care. It is also part of the modern perception of the medical profession that its practitioners should be more approachable on this aspect. The various professions, and the sector as a whole, are increasingly aware of this. All healthcare professionals and all institutions have a (professional) responsibility to offer the best possible care, and to show society that they take this duty seriously. The debate is therefore not so much about these twin responsibilities, but about how they can best be put into practice. What approach, what models, are most suitable here? The problem is not capturing the attention of those who are in the vanguard, and of course there is always a small group of rotten apples who will never be persuaded to behave responsibly. The question is how to get the large group in the middle on board.

The new aspect in this context is really the way in which both aims have been linked together in recent policy papers. The aim of making a particular form of public accountability (output measurement) compulsory is to tighten up on efforts to improve quality, or at least to make them less dependent on the goodwill and commitment of the healthcare providers concerned. Publication of performance scores must trigger a mechanism of external stimuli that will encourage institutions and professionals that may be somewhat lacking in inherent motivation to strive for continuously improving care.

Need for an objective debate

The debate on this approach is starkly polarised. Those in favour of this approach seem to dismiss the possibility of unwanted effects, while its opponents are already convinced that no good can come of it. This is also due to conflict between parties involved in healthcare brought about by current changes in healthcare, of which this new approach to quality policy is a part. The authorities, healthcare insurance firms and managers still see healthcare providers to some extent as reluctant individuals or organisations focused mainly on protecting their own interests. This view is regularly confirmed: significant developments in patient care are sometimes held back because of self-interest. Healthcare providers in turn often see the Government, policymakers and insurance firms as bodies that want to determine and control their work from above and outside. They feel that their skills and integrity are not recognised.

It is clear that this polarisation and mutual suspicion is not helpful to the objective which all parties support, that of improving the quality of care. This report therefore attempts to address the new policy design (linking public accountability and quality improvement) as objectively as possible.

Opportunities and risks

In the first empirical section we looked at the scientific evidence. How far can performance indicators be used to make quality measurable and comparable? And what do we know about the effects of this approach? Does it in fact lead to better care? Though no firm conclusions can be drawn from research, we can perhaps say that linking accountability and improvement produces both opportunities and risks. There are indications that this can work under certain conditions, but there is also a risk of strategic behaviour and perverse effects. The way in which the new system is established seems to be of particular importance: the extent to which healthcare providers can connect the accountability required of them with what they themselves regard as important in the exercise of their profession, allowing them to take professional accountability on board. This is also the message of the ethical analysis set out in the second part. There may well be nothing wrong with external stimuli and accountability in terms of results, but the whole point is that this must not undermine the intrinsic motivation of professionals and public confidence in care, but rather support and strengthen it.

Of course, the relationship between opportunity and risk is an important question, but one that is not easy to answer. Is it possible to use the opportunities to bring about real improvements in quality and confidence while at the same time limiting the risks of perverse effects? That is what is at stake in the social experiment which this process will inevitably be. As the forms of social capital that are involved, such as professional motivation and public confidence, are easier to destroy than rebuild, caution is vital in

experiments of this kind. In this context what is needed is a gradual approach and thorough investigation of the effects. The first step is to use performance indicators to make quality differences visible and comparable. Once this has been found to be realistic and responsible, further steps can be taken, such as perhaps introducing financial or other consequences linked to particular performance scores. Where performance indicators are used for more 'ambitious' objectives, their use must be subject to more stringent conditions. All public use of performance indicators must in any case be subject to certain conditions: they must be tested for validity and representativity; they must be developed by or in consultation with the profession; they must fit in with existing quality improvement systems; and protection against unjustified damage to individuals or institutions must be built in.

One of the problems with the way in which the Government and other parties are now trying to impose public accountability and quality improvement is that it sometimes seems as if the emphasis lies primarily on presenting figures, with less attention paid to the connections between various quality improvement systems (guidelines, performance indicators, DTCs, internal quality systems, specific improvement programmes). This may have something to do with the central role that has been given to 'selecting parties' (insurance firms, sources of funding, patients) in the new policy as the primary focus of public accountability. After all, the aim is that their selection behaviour in response to these figures will encourage institutions and healthcare providers to offer optimum care.

The role of patients

However, the evidence for expectations related to patients' selection behaviour appears to be shaky. In any case, research conducted to date does not indicate that a public accountability system based on publication of performance scores has a decisive effect on the healthcare choices patients make. This expectation may also be based on an inaccurate view of what kinds of choices patients want. Much more research is needed into this. For most people it appears that their main priority in the event that they fall ill is for them to receive reliable care in their own surroundings that meets the highest standards. They expect the Government, insurance companies and healthcare providers to guarantee this. A small, but perhaps growing, group might want to use performance scores and exercise choice in the light of these scores. Most people seem more interested in having well-informed, independent 'guides' to healthcare who can help them choose, or who would negotiate with healthcare providers and insurance firms to obtain the best care on behalf of patient groups. If the public is to be more involved in healthcare than is the case at the moment, by appealing to individuals' sense of responsibility for their own health and by offering choice, then much more support will have to be offered to help people find, accurately interpret, and use information on healthcare provision.

A more realistic view of the patient's role would require, but also give scope for, accepting that outcome measurements and performance figures are not the Holy Grail. The whole point is for people to receive the best care. What system is needed to bring this about, and under what conditions can performance indicators, external control, and financial incentives be helpful?

Working to improve quality

It is vital in any event for support to be generated and mutual distrust to overcome. This can be achieved by working on two fronts (Tjeenk Willink 2006). The Government can help by turning away from imposing external stimuli as the prime, or only, method of improving quality and appealing instead to the intrinsic motivation of professionals, enabling them to express this motivation in their work. It must be made quite clear that performance indicators will be used in such a way that no-one needs to fear being brought into the spotlight without justification, or suffering professional damage without good reason. Another important condition is avoiding unnecessary bureaucracy.

As far as healthcare providers are concerned, the main challenge is to experience the demand for systematic quality improvement in a different way. Not as something imposed from outside, as a chore to be undertaken to avoid penalties or image problems, but as a core element of professional responsibility. Quality improvement must be experienced as an intrinsic part of working in the healthcare sector: an essential basic skill that must be developed by professionals at all levels (doctors, other medical professionals, managers, directors and policymakers).

The approach we are arguing for here would mean that healthcare professionals, with the scientific associations at the forefront, should take ownership of the initiative and occupy the primary position with regard to improving quality. This would relate not only to the development of performance indicators for use in the context of internal quality systems, but also to the debate on the issue of what indicators are suitable for external use, and under what conditions. The example below shows how this could be achieved.

Denmark: the development and use of indicators as part of a bottom-up quality (improvement) system

The Danish National Indicator Project was launched as a national multidisciplinary quality improvement project in 2000 (Mainz 2004). It was a joint venture between the Health Ministry, the fourteen Danish provinces and the scientific and professional associations representing doctors, nurses and paramedics. In the first two years a group of healthcare providers developed disease-specific evidence-based indicators at national level. The development of these indicators was a defined and transparent process, taking account of clinical indicators for six syndromes: cerebral haemorrhage, hip fractures, schizophrenia, acute gastrointestinal surgery, heart failure and lung cancer. All Danish hospitals were

required to take part. Once a month healthcare institutions (practitioners and managers) were given feedback on their own data (with averages and spread), a comparison with agreed benchmarks and a longitudinal trend analysis. The data was corrected for patient population composition twice a year by clinical epidemiologists. Analyses were performed at national, regional, institution and practice level. The project was integrated into a quality improvement system based on national and regional audits in which healthcare providers discussed the findings and initiatives aimed at improving the situation. Once all the results had been analysed and interpreted, they were published in easily comprehensible versions. Patient associations were involved in devising explanations comprehensible to lay people. Healthcare providers are very keen on the project, and the costs are very reasonable (about a million euros a year for the whole country). Work is taking place at the moment to expand the number of syndromes and to bring in primary care (see <http://www.nip.dk>). The development costs per syndrome are estimated at 100,000 euros.

There is also room for more differentiation. Quality cannot easily be translated into outcome indicators in every situation. For example, in the care sector it is clear that process elements need to be considered as well as outcomes in terms of client satisfaction. Structural elements may be significant signals in other evaluation contexts. Of course, the aim of the evaluation is the key issue when differentiating the approach in this way: what is the exact 'guidance context' and what parties are involved in it? Are we trying to ascertain how safe or appropriate the care is, whether guidelines are being followed, or to look at the organisational or relationship aspects of the care? Where are the overlaps, where can programmes be brought together, where is there a risk of pointless duplication and bureaucracy? What data do insurers need to pursue a responsible purchasing policy? How could internal and external assessment work in tandem where necessary?

This room for differentiation also affects how accountability is shaped. Public accountability does not necessarily have to take the form of reporting performance figures for a large number of indicators. It could also mean healthcare providers showing society that they operate proper internal quality systems. This was precisely the approach taken in the early years of the Healthcare Facilities Quality Act. It was abandoned because it was seen that some institutions did not have proper internal systems, and it was believed that external stimuli were essential to force them to put their house in order. An indirect approach of this kind can only be justified if it does not serve as an excuse for non-commitment. This requires criteria that will reassure society and the Government that institutions are taking quality improvement seriously, and are consistently working to achieve it. Certification, accreditation, peer review, contracting and possibly bonuses or payments linked to quality can play a part here. Further research into the most suitable forms of systems in various settings is vital before definitive models are introduced. Other countries, such as the United States and the

United Kingdom, are facing the same issues and are also experimenting with models (see, for example, the report of the Institute of Medicine (IOM 2006)).

The approach we are arguing for here also means that professionals will be required to accept responsibility for quality, and held to account if necessary. We do not as yet have a universal guarantee that the quality system would function well or that all those affected would actively participate. One of the reasons for this is that the knowledge and skills required are still somewhat lacking; also, the time needed for this has in many cases not been allowed for, and some professionals do not yet have the right attitude. The question is: how can these obstacles be overcome, and what part should the Government, insurance firms and other parties play in this?

Particular attention needs to be paid to the issue of how quality, quality improvement, transparency, accountability, practitioners thinking about how they and their colleagues work, and similar issues can best be incorporated into training of healthcare professionals (students, vocational courses). These activities must become a normal part of healthcare work, and the foundations must be laid when future professionals are undergoing training. The options for doing so exist as these kinds of skills are increasingly being described in the framework plans for health education and training (including CANMEDS). However, it is still true to say that these kinds of skills are hardly ever properly integrated into curricula.

Well-designed evaluation research is vital to determine how these various initiatives should be shaped and assessed, and whether they can gradually be made more ambitious.

In conclusion

Looking at the reaction to the change in Government policy, it is clear that the professions have picked up the challenge. They are now actively involved in developing indicators that will wherever possible make quality measurable and visible. This activity has been forced on them; but this does not detract from the fact that it gives the professions concerned the opportunity to show that they are taking on board their professional responsibility by developing, maintaining and using quality systems (RVZ 2005). They must be given the opportunity to combine what outside parties are asking of them with their internal beliefs.

8 Points for action

The points for action listed below are primarily intended as building blocks for the Government's 'Agenda on ethics and health'. They show which aspects of the development discussed in this report deserve a place on this agenda; this final chapter also addresses other, non-governmental, parties involved in healthcare.

- 1. More debate is needed on the opportunities and risks associated with the public use of performance indicators if a sensible policy in this area is to be developed. It is important that all parties involved in healthcare take part in this. The Government can stimulate this debate.**

The debate on the public use of performance indicators has so far been conducted from firmly entrenched positions, and has often been couched more in absolute terms, i.e. that this approach is either entirely rational or complete nonsense, than in examining specific opportunities and risks. This examination is vital if policies in this area are to be developed sensibly. All participants in the debate need to have an open mind, and the discussion must be held against a background of scientific data and ethical analysis. We hope that this report will contribute to the future debate.

- 2. The public use of performance indicators is a social experiment that requires a cautious, gradual approach combined with ongoing assessment and investigation of the effects.** All public use of performance indicators must in any case be subject to certain conditions: they must be tested for validity and representativity; they must be developed by or in consultation with the profession; they must fit in with existing quality improvement systems; and protection against unjustified damage to individuals or institutions must be built in. Pointless administration must be avoided by making the greatest possible use of existing data collection systems.
- 3. Public accountability and quality policy are part of the professional responsibility of healthcare providers. It is important that they are given the opportunity to take the initiative in terms of both responsibilities, and to show that they are worthy of society's trust.**

Healthcare providers can be expected to regard responsibility and improvement as

core elements of their professional responsibility. The Government can contribute to this by turning away from imposing external stimuli as the prime, or only, method of improving quality and appealing instead to the intrinsic motivation of professionals, enabling them to express this motivation in their work.

4. The development of performance indicators requires input from the professionals concerned themselves. This is important to the quality of the instrument, but also in order to build support among those who will be required to use it.

The scientific associations representing the various professions play a key role in this. Their involvement should not be limited to developing indicators for use in the context of internal quality systems; they can also make a vital contribution to deciding which indicators are suitable for external use.

5. Attention to quality, quality improvement, transparency, accountability, practitioners thinking about how they and their colleagues work should be structurally integrated into training for all healthcare professionals.

Though these skills are increasingly being described in framework plans for health education and training, not enough attention is devoted to them in the curricula at present.

6. More research is needed into various aspects of the development discussed in this report. The Government can act to stimulate or encourage this.

- The scientific research that has been conducted into the public use of performance indicators is often of inadequate quality or incomplete. Further research into the Dutch situation is necessary, and should look both at the effects which policymakers would like such a system to have (or assume that it will have), and also at the possible undesirable or perverse (side-) effects in terms of the quality of care and patient confidence.
- The data presented in this report indicates that the behaviour of healthcare providers may be affected by financial rewards (pay for performance), but little good-quality research has been carried out in the context of the Netherlands. It is still unclear which form and manner of (financial or other) reward or sanction is most effective.
- Particularly in the case of external use of performance indicators, much depends on them being sufficiently representative of the area of care that the indicator in question is intended to evaluate. It is not yet sufficiently clear whether and how this requirement can be met in practice.
- The adage 'quality must be measurable' must not lead to a situation in which aspects for which it is more difficult to develop good performance indicators, such as personal attention, the way patients are treated by healthcare professionals and other relationship factors, are neglected.

Further research is needed to ascertain which indicators are most suitable for these aspects.

- Finally, more research is needed into patients' selection behaviour and how their needs can best be addressed. Research carried out to date does not support the Government's expectation that patients will be guided by performance measurement outcomes when choosing between different healthcare providers. Patients seem more likely to be guided by the experience of friends and relatives. It appears that many people want to be able to rely on well-informed and independent care guides when making healthcare choices. The public will need more support in finding, correctly interpreting, and using information on healthcare provision. Further research must indicate how this can best be achieved.

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Appendix 1

Health Council

Composition of the Medical Ethics and Medical Law Advisory Group

Prof. JA Knottnerus; Health Council, The Hague, *chairman*

Prof. JKM Gevers, professor of medical law; AMC, Amsterdam University, *vice-chairman*

Prof. ID de Beaufort, professor of medical ethics; Erasmus MC, Rotterdam

Dr GCML Christiaens, gynaecologist; Utrecht University Medical Centre

Prof. JCJ Dute, professor of medical law; Maastricht University

Prof. RPTM Grol, professor of quality promotion and monitoring in general practice; St Radboud University Medical Centre, Nijmegen

Prof. GRJ de Groot, professor of medical insurance law; Amsterdam Free University

Prof. JCJM de Haes, professor of medical psychology; AMC, Amsterdam University

RM den Hartog-van Ter Tholen, Ministry of Health, Welfare and Sport, The Hague, *advisor*

Prof. GA den Hartogh, professor of ethics; Amsterdam University

Dr AC Hendriks, medicolegal expert; Equal Treatment Commission, Utrecht

Dr WLM Kramer, paediatric surgeon / paediatric traumatologist; Wilhelmina Paediatric Hospital, Utrecht University Medical Centre

Prof. FE van Leeuwen, professor of epidemiology; Netherlands Cancer Institute, Amsterdam

Dr J Legemaate, medicolegal expert; Royal Netherlands Association for the Promotion of Medicine [KNMG], Utrecht

Prof. M de Visser; vice-chairman of the Health Council, The Hague

Prof. GMWR de Wert, professor of biomedical ethics; Institute for Medical Ethics, Maastricht University

Prof. MA Verkerk, professor of medical ethics, Groningen University Hospital

Prof. DL Willems, professor of medical ethics; AMC, Amsterdam University

A Bood; Health Council, The Hague, *scientific secretary*

Dr WJ Dondorp; Health Council, The Hague, *scientific secretary*

Appendix 2

Council for Public Health and Health Care

Composition of the Council for Public Health and Health Care (RVZ)

The activities of the CEG/RVZ come within the remit of the Council for Public Health and Health Care. The report *Confidence in responsible care? Effects of, and moral issues associated with, the use of performance indicators* was adopted by the Council at its meeting on 18 May 2006.

Members of the Council

Chairman:

MH Meijerink

Prof. ID de Beaufort

H Bosma

Prof. DDM Braat

MJM Le Grand-van den Bogaard

Prof. TED van der Grinten

JMG Lanphen

AA Westerlaken

General secretary:

P Vos

Composition of the Centre for Ethics and Health (CEG)/RVZ Forum

The Forum was established to support the work of the CEG/RVZ in compiling monitoring reports. The Forum acts as a sounding board and fulfils the function of raising issues, giving advice and initiating action in the drafting of reports.

MEMBERS

G Abrahamse-van den Bosch, healthcare policy officer, Protestant Christian Senior Citizens' Association, Zwolle

Prof. GH Blijham, chairman of the Executive Board, Utrecht UMC

Prof. WJHM van den Bosch, professor of general practice, St. Radboud UMC, Nijmegen

J van Dam, nursing consultant, Leusden

H van Dartel, lecturer of medical ethics and law, LUMC, Leiden

Prof. MHF Grypdonck, professor of nursing science, Utrecht UMC

Prof. H Jochemsen, senior lecturer of medical ethics, Prof. Dr. GA Lindeboom Instituut, Ede

Prof. J Legemaate, legal advisor, KNMG, Utrecht and professor of medical law, Amsterdam Free University (until 1 January 2006)

M Morskieft, Kantel Konsult, Nijmegen

AK Ramdhani, expert in spiritual care, MC Haaglanden, The Hague

Prof. MJ Trappenburg, professor in the patient's perspective, EUR, Rotterdam

E van der Veen, chairman of the Executive Board, Agis Groep, Utrecht

MI Verstappen, director-general, GGD Amsterdam

Prof. GAM Widdershoven, professor of medical law, Maastricht University

Prof. DL Willems, professor of medical ethics, AMC, Amsterdam University

FROM THE RVZ

Prof. ID de Beaufort, professor of medical ethics, Erasmus MC, Rotterdam, member of the RVZ and chairman of the Forum

JMG Lanphen, GP, member of the RVZ and vice-chairman of the Forum

Dr AJ Struijs, project coordinator for CEG/RVZ

L Romein, CEG project secretary

Appendix 3

Preparation of the report 'Confidence in responsible care?'

AUTHORS

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EXPERT MEETING

Dr H Wollersheim and Dr MJ Faber conducted a systematic literature review in preparation for this report. The findings were presented and discussed at an expert meeting held on 13 March 2006. The minutes of this meeting can be found at www.ceg.nl.

PARTICIPANTS AT THE EXPERT MEETING

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- Dr AJ Struijs, RVZ/CEG
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Appendix 4

Abbreviations used

BIG (Act)	Individual Healthcare Professions (Act)
CBO	Institute for Healthcare Improvement
CABG	Coronary Artery Bypass Grafting (=bypass surgery)
CANMEDS	Canadian Medical Education Directions for Specialists
CEG	Centre for Ethics and Health
CINAHL	Cumulative Index to Nursing and Allied Health Literature
EFQM	European Foundation for Quality Management
EPOC	Effective Practice and Organisation of Care
IGZ	Healthcare Inspectorate
INK	Dutch Institute for Quality. Since 2000 the official title of this body has been INK
IOM	Institute of Medicine
ISO	International Standards Organization
NHG	Dutch College of General Practitioners
NIAZ	Netherlands Institute for the Accreditation of Hospitals
OECD	Organisation for European Cooperation and Development
RCT	Randomized controlled trial
RVZ	Council for Public Health and Health Care
UMC	University Medical Centre
VOKS	Obstetrics Quality Mirroring System
WOK	Centre for Quality of Care Research (St Radboud University Nijmegen & Maastricht University)