Changing the measure of quality in the NHS: from purchasing activity to purchasing protocols

Traditionally, activity has been the principal measure of performance in the NHS: the more health care provided, the better. Statistics are produced showing more finished consultant episodes and more procedures as evidence of improvements in the health service. Using activity to measure performance assumes a direct relation between activity and improved health and, implicitly, that greater activity signifies improved quality.

Purchasing protocols
It is our contention that a key to improving quality in the NHS is for health care commissioners to stop purchasing activity and to begin purchasing evidence-based protocols. Purchasing procedures or even packages of care guarantees nothing about the expected content and scientific basis of those services, whereas when a protocol is purchased we know that, if it is followed, the most effective set of actions will be taken. Thus when dealing with operations for glue ear, for example, it might be that the sequence of audiometric testing and the guarantee of testing immediately before surgery would be included as part of a protocol. Since the protocol defines an appropriate package of care, it is the protocol that should be purchased.

One of the hopes of the recent health reforms was that the NHS would move away from measuring quality through activity to a more comprehensive approach. Health authorities were meant to become intelligent purchasers of health care and, through their purchasing decisions, the driving force behind improving the quality of health care. However, although quality has become one of the key terms of reference in the public debate about health care and most contracts between purchasers and providers now include clauses to the effect that quality will be ensured and monitored, this is more often at the level of rhetoric than reality. For example, it is rare to find contracts which specify what is meant by quality and how it will be monitored. Quality is often reduced to merely a catch phrase, continuously repeated by purchasers and providers, but which fails to alter the traditional way health services are provided in the NHS. This is reinforced by the way the Department of Health has also failed to move beyond using activity as an implicit measure of quality and performance, as evidenced by the construction and use of the Health Efficiency Index, which is merely a glorified aggregate activity/expenditure ratio.1

The Department of Health and health authorities have failed to address the central issue of whether the activity being paid for is worth while. The key question is not how many services are being provided or how long the people wait for them but whether these services lead to a significant improvement in health. From this perspective quality involves measuring the effectiveness of health services.2

International evidence shows that many health care interventions either are totally ineffective (such as gastric freezing, extracranial-intracranial bypass) or, where notionally effective, are often used in cases where patients are unlikely to benefit and are therefore inappropriate. For example, a series of landmark studies carried out at the RAND corporation3 found widespread inappropriate use of health services for several medical procedures. For coronary artery surgery the RAND method found that 30% of patients underwent surgery for equivocal reasons and 14% for reasons judged to be inappropriate.4 Comparable levels of inappropriateness were found for several other services studied.

Similar levels of inappropriate care were documented in England.5 Since then there has been growing evidence in the United Kingdom which confirms that inappropriate care is widespread in the NHS. For example, dilation & curettage in young women, though rarely indicated, is commonly performed;6 surgery for glue ear is often unnecessary;7 and tubal surgery for infertile women with more than mildly blocked tubes has been documented to be ineffective.8 Care is also often inappropriate by failing to adopt interventions of demonstrated effectiveness. The most comprehensive review of a service area, that of pregnancy and childbirth, highlighted several practices which should be adopted in the light of the best evidence available— for example, prophylactic use of antibiotics with caesarean section and administration of corticosteroids before preterm delivery.

The findings of inappropriate care are complemented by studies throughout all industrialised countries which show widespread variation in the use of medical procedures between small geographic areas.9 10 This variation is unsettling for the medical profession since these studies suggest that the use of services depend more on where a patient lives than on need.

The international nature of this evidence suggests that inappropriate care is not system specific but may be inherent within medicine itself. Health care researchers have concluded that a principal cause of inappropriate care is the tremendous uncertainty associated with medical decision making. "Uncertainty creeps into medical practice through every pore. It is difficult . . . to appreciate how easy it is for honest people
to come to different conclusions." This suggests that poor quality is often due to the lack of a clear consensus based on sound scientific evidence of what constitutes appropriate care. One approach to decreasing medical uncertainty and improving the appropriateness of care is the development of practice protocols. Protocols are algorithms, sets of rules or statements which define a set of conditions or indications which are necessary before a clinical action is undertaken. For example, in a protocol for coronary artery bypass grafts angiographic findings of left main coronary artery disease in patients with angina would be included as an indication; however, single vessel disease with minimal symptoms would probably be ruled out as inappropriate.

Increasingly, the scientific foundation for these protocols is emerging as researchers review and summarise the best evidence of effectiveness. Practice protocols then, are a set of agreed optimal clinical decisions, based upon the best scientific evidence, which should be made when managing a patient with a given history and clinical presentation. With doctors helping to develop protocols and health authorities explicitly purchasing protocols, an important dimension of quality of care would become an integral part of health service activity.

Facilitating an efficient health service

Purchasing protocols rather than procedures would also facilitate the development of a more efficient service. For example, one of the contradictions of the current system of purchasing is that often an appropriate course of clinical action is “watchful waiting” — that is, doing nothing for a period — in (say) benign prostatic hypertrophy or glue ear. However, providers are not paid for watchful waiting, and contracting is rather challenged by the notion of paying providers for doing nothing! Paying a provider to follow the protocol independent of whether this results in an operation being carried out would allow physicians to opt for inactivity when doing nothing is the most appropriate course of action.

Moving from a health service which focuses on activity to one which purchases protocols has several other advantages.

Firstly, it will mean that purchasers will tend to buy services in which there are well established protocols. This will create an incentive for providers to develop protocols and, when evidence is lacking, to invest in research to develop the scientific foundation from which protocols would emerge. Furthermore, purchasing protocols ensures that clinicians will adopt the best standards of care, since health authorities are unlikely to pay for services where clinicians do not follow the agreed protocol.

Secondly, one of the byproducts of collecting the detailed clinical information necessary to monitor the protocols is the development of a comprehensive database. Because this database will contain detailed information on indications it will be useful for epidemiological analysis of disease and for monitoring access to services. Furthermore, suitably adjusted for case mix, the database could be useful for further outcomes research on the service.

More generally, the increasing use of protocols in the delivery of care will gradually begin to change the expectations of those who demand care. Doctors will begin to see protocols as the standard of care and, in turn, will alter referral patterns. For example, if general practitioners know that certain patients they refer will not have an operation because the protocol recommends (say) watchful waiting, they will be less likely to refer cases which are inappropriate. More importantly, if the protocols are explicit and widely disseminated, perhaps the public will begin to understand what constitutes appropriate care. This will not only alter patients’ expectations so that they will no longer demand inappropriate services but also increase the accountability of doctors. The net result is that demand will become more appropriate.

Only by changing the unit of account away from activity can we ensure that quality will become an integral part of health care delivery. By purchasing protocols as opposed to procedures the incentives will be put in place which will drive the system towards “appropriate demand.” As we become more confident that inappropriate care is being reduced, then purchasers can concentrate on reallocating resources away from services that are only marginally effective and towards those which would maximise health in the population.

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