The same was true for upper gastrointestinal endoscopy and coronary angiography in about one in four cases.⁵ In a randomly selected group of hospitals in the western United States the proportion of coronary artery bypass surgery that was inappropriate or equivocal varied among hospitals from 23% to 63%.⁶ In a study in the Trent region of Britain coronary angiography and coronary artery bypass operations were performed for inappropriate or equivocal reasons in about half of cases.⁷ And the same was true in the North West Thames region for 60% of cholecystectomies—regardless of whether they were performed in the public or private sector.⁸ Studies of the underuse of necessary care are now beginning; their previous absence is disturbing.

Two important conclusions may be drawn from the research. Firstly, inappropriate care is there if you look for it, and, more importantly, restricting the volume of care by global budgeting or planning does not eliminate it.² Secondly, the rates of less than appropriate care are too large to be ignored.

How could appropriateness ratings revolutionise health care? Purchasers could decide to buy services only from doctors who agreed to operate within guidelines based on appropriateness, or services that satisfied generally accepted criteria of appropriateness. Ratings could also be used to prevent the underuse of necessary care. Decisions about licensing and recertifying doctors could be partly based on audit of the appropriateness of the care provided.

As a doctor, I hope that doctors will use appropriateness guidelines to improve the care that they deliver. Suppose that, when a patient was being considered for one of the most common 100 or so procedures, this happened: the doctor and the patient would take a few minutes to enter into the office computer all the clinical data that were critical to determine whether the procedure should be done. In a few seconds the

computer could produce an appropriateness rating, an analysis explaining the rating, and an indication of the basis for the rating (that is, mostly scientific literature or expert opinion). The patient and doctor could do their own sensitivity analysis (that is, examine with the aid of the computer how changes in the patient's symptoms, signs, or responses to treatment would alter the appropriateness of the procedure) and explore extenuating clinical circumstances.

Of course, the above process represents only a starting point. None the less, it is time to assure our patients that, before they are subjected to a procedure or denied its use, its appropriateness has been explicitly verified. Methods to assess appropriateness are available. It is time they were used by doctors to eliminate both underuse and overuse of clinical interventions.

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Reforming the Swedish health services

Three different modes of financing and delivering health care scrutiny

In common with many other countries, Sweden is reviewing options for reforming its health services. The report of an expert group set up by the government to examine alternative ways of financing and delivering health services was published last year.¹ In line with the brief provided by the minister of health, the report analysed three models for the future. These models seek to build on the strengths of the existing system while at the same time tackling its weaknesses. A period of debate is now under way, and decisions are unlikely to be taken until after the election in September.

Sweden exemplifies the integrated approach to the provision of health services.² This entails a combination of public finance and public provision. At a local level county councils raise most of the resources for health care through income taxes, and they also manage the provision of hospital and primary care services. Swedish people enjoy ready access to a full range of services, and there is a strong commitment to equity in the delivery of services. Within this system democratic control of health services and accountability to the local public are particularly emphasised. Administrative costs are low, and this enables most of the available resources to be spent on direct patient care.

Against these strengths, several weaknesses have become increasingly apparent in recent years. These include the

existence of waiting lists for some hospital procedures, a perceived lack of choice for patients and responsiveness to users of services, and evidence of inefficient use of resources. Criticism has also been voiced at the relatively low priority attached to primary care and the poor coordination of health care, social care, and social insurance. The Swedish government has responded to these problems by taking several policy initiatives.

In the case of waiting lists, this has entailed the introduction of a guaranteed maximum waiting time of three months for certain hospital procedures. Primary care has been reformed through the development of a family doctor system in which general practitioners are transferring from salaried employment to independent contractor status. And in the case of health care for elderly people the coordination of services has been addressed by giving responsibility and budgets to municipal councils, which also have responsibility for delivering social care.

These national initiatives have gone hand in hand with a series of reforms promulgated at a local level by the county councils. These reforms have been made possible by the decentralised nature of the Swedish system, in which county councils carry the main responsibility for financing and delivering health care. The most significant developments

have occurred in Bohus, Dalarna, and Stockholm. While there are important differences between each of these counties, they share a concern to increase patients' choice and to provide stronger incentives for efficiency through separating the roles of purchaser and provider and by promoting competition among providers.

It is against this background that the expert group appointed by the government has set out three models for reform. The first model, described as the reformed county council model, represents a process of incremental adjustment to existing arrangements rather than a radical departure from the status quo. At its core is the suggestion that within all county councils there should be a separation of purchaser and provider roles and a greater emphasis on reimbursement based on performance.

In particular, politicians would concentrate on their purchasing role, leaving providers with greater responsibility for running and managing services. If this model was to be adopted, purchasers would buy services from both public and private providers. The result might be competition among providers, but this is not seen as a necessary consequence. As the report notes, the reforms already occurring within the county councils are in many ways similar to this model and are concerned as much to clarify management responsibilities as to promote market-like arrangements.

The second model is described as the primary care managed model. This involves transferring responsibility for health services from county councils to municipal councils. The expert group argued that this would bring benefits by locating political leadership closer to the citizens and by enabling better coordination between health services and services run by the municipalities. A further potential advantage is that primary care would receive higher priority than previously because county councils have been preoccupied with expanding specialist services.

In this model it is envisaged that municipal councils would allocate resources to general practitioners both to provide services and to purchase some hospital services as fundholders. The remaining hospital services would be purchased by the municipalities directly from providers of hospital and specialist care. These providers would compete with each other for contracts from the general practitioner fundholders and the municipalities. In this model various arrangements for hospital ownership are identified, the essential principle being that hospitals should function as independent units, receiving their resources through contracts negotiated with purchasers rather than through budget allocations.

The third model outlined by the expert group is described

as compulsory health insurance. This is the most radical of the three approaches, requiring not only the abolition of county councils but also the replacement of tax financing with a system of social insurance. As the report notes, those countries that have opted for social insurance, such as Germany and the Netherlands, have generally raised finance through payroll taxes paid by employers and employees. Under these arrangements there is a clear separation between insurers and providers. Providers are responsible for running their own affairs, usually on a private not for profit basis, and are reimbursed for the services they deliver.

For insurers, the expert group notes that various possibilities exist. One approach would be to establish a system of regionally based insurers; another would be to encourage competition among insurers. The difficulty with competition is that insurers may favour healthy people at the expense of those who are older and sicker. Given the continuing importance of equity in Sweden, the report argues that the main insurance alternative worth considering is a compulsory arrangement in which people are not assessed for risk. This would differ from traditional insurance and would best be administered by insurers that had monopolies within geographic regions.

In outlining these three models the report does not attempt to identify a preferred option. Rather, it compares their strengths and weaknesses against a series of criteria laid down in the health minister's brief. These criteria include not only ensuring consistency with equity and a need for public finance to continue as the main source of financing but also considerations such as freedom of choice for patients, democratic influence, and cost effectiveness. As such, it presents a striking and refreshing alternative to reports on health care reform commissioned by the government in Britain, which in the recent past have been characterised less by a search for the truth than by a quest for simple solutions to complex problems. The reality is that there are no easy alternatives and all systems score more highly on some criteria than others. In view of this the wise health policy maker should proceed with caution, treating with scepticism the arguments of those who claim to have the answer.³

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