

Healthcare rationing: the moral dilemma

➔ Anna Wagstaff

If Europe is to ensure that the latest therapies can be made available to all cancer patients who might benefit, getting maximum value from every euro spent on health will be essential. But who is to adjudicate that one patient can't have something they need, because another with different needs could derive greater benefit for the same money?

The rising cost of healthcare is triggering alarm bells across Europe, fuelled by a combination of the escalating cost of new treatments, rising expectations of patients and an aging population. Health spending has been outstripping growth in gross domestic product by some way over recent decades. Whereas 30 years ago it accounted for between 4 and 7% of GDP in the developed world, spending has now broken through 10% in many EU countries, is closer to 12% in some, and is still rising.

The current rate of growth is not sustainable. But what is a poor health minister to do? European electorates want a system in which doctors and patients are free to decide on treatment based purely on clinical need, with the public healthcare system footing the bill, regardless of the cost or the benefit of a treatment. This is not possible, but politicians don't want to tell them that.

Peter Smith, director of the Centre for Health Economics at the University of York in the UK, has been involved in an EU funded study to compare 'health bas-

kets' of what health systems are prepared to reimburse across nine Member States. "The big message is that politicians everywhere are scared of rationing," he says. "The health basket includes virtually everything. Or at least people say it does, even in countries like Poland and Hungary. But when it comes to the crunch, there are lots of informal ways of rationing medicines and other treatments."

Reimbursement bodies may decide to restrict funding to cover only part of the patient population for whom the drug is indicated, for example, to patients who have failed on at least two cheaper alternatives, or patients in an early stage of disease.

Budget constraints can result in hidden rationing. In the Netherlands, for instance, myeloma patients have supportive evidence to show that some hospitals are under-prescribing the proteasome inhibitor Velcade (bortezomib) for financial reasons. From the patients' perspective, this leads not just to rationing, but to unequal access, with some hospitals prescribing the drug more liberally than others.

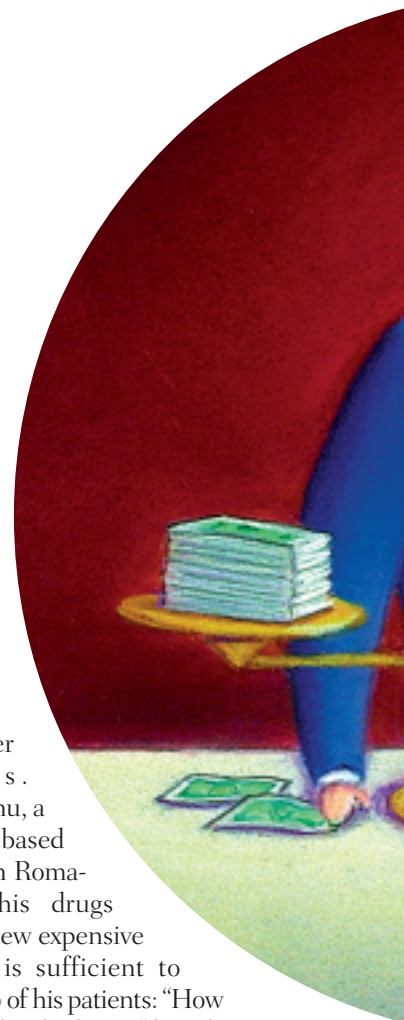
The situation becomes more extreme

in poorer countries.

Florin Băcanu, a community-based oncologist in Romania, says his drugs budget for new expensive treatments is sufficient to treat only 5% of his patients: "How am I to decide which 5%?" he asks. So-called 'informal payments' – bribery and corruption – in many central and eastern European health systems make the situation even more iniquitous.

Clinical or disease management guidelines can be another form of rationing, since they often implicitly reflect what is available in the region or country where they are being drawn up. In some cases, health economists have an explicit role in drawing up such guidance.

Waiting lists, reimbursement rates that fail to increase with costs, bureaucratic obstacles to accessing expensive drugs, punitive co-payment schemes or two-tier insurances that restrict access can all be seen as covert forms of rationing.





CORBIS in healthcare products. "Any country is prepared to spend only so much on healthcare. The moral case is that it must be spent with maximum effectiveness," says Smith.

One way or another, he adds, this must involve measuring the benefit gained from what we spend. "As health economists, we often get people saying it is immoral to apply financial criteria on access to therapies. Our line would be that it is immoral not to apply economic criteria. If you don't, the implication is that some people are getting access in preference to others and with less cost-effective treatments."

Politicians have tended to duck these issues, preferring to muddle on with purchasing, pricing and reimbursement practices that have developed *ad hoc* over the years, often administered through opaque and unaccountable bodies.

"There is this huge tension between what everyone understands is a rational and coherent way of doing things, and political reality," says Smith. "I've heard many very senior and well-informed commentators say that fudging this issue may be more effective than being explicit, because you can't do it politically. You've got to have real political leadership and a really strong government if you are to ration access to medical care in a systematic and fair way."

In the absence of that political leadership and open debate, the strains between payers, the pharmaceutical industry and patients have been mounting.

CULTURE OF BLAME

The pharmaceutical industry has been accused of making vast profits by charging excessive prices for drugs that offer little benefit over existing therapies. They are also charged with failing to invest in innovative new therapies that could make a significant difference to patients in greatest need, and failing to invest in research to identify which patients are most likely to benefit.

Pharmaceutical companies accuse payers of unreasonably singling out the drugs budget for savings. Drug costs, they argue, represent only 10–20% of total healthcare expenditure on cancer. The prices reflect the cost and risk involved in researching and developing new drugs and devices, many of which never make it to market. Moreover, new therapies can keep patients and carers in productive employment and cut down on the need for hospital stays, thereby saving the country money. Furthermore, many cancer drugs have served patients well over several decades, while the patent price is only in force for 20 years – irinotecan, anastrozole and gemcitabine will all be coming off patent in the next few years.

Patients, meanwhile, accuse payers of denying them access to new therapies that may offer a hope of extending or improving their lives, and of being arbitrary, unfair and unaccountable in their decisions.

Patient groups, in their turn, have sometimes been accused of being little more than 'fronts' for drugs companies' marketing campaigns.

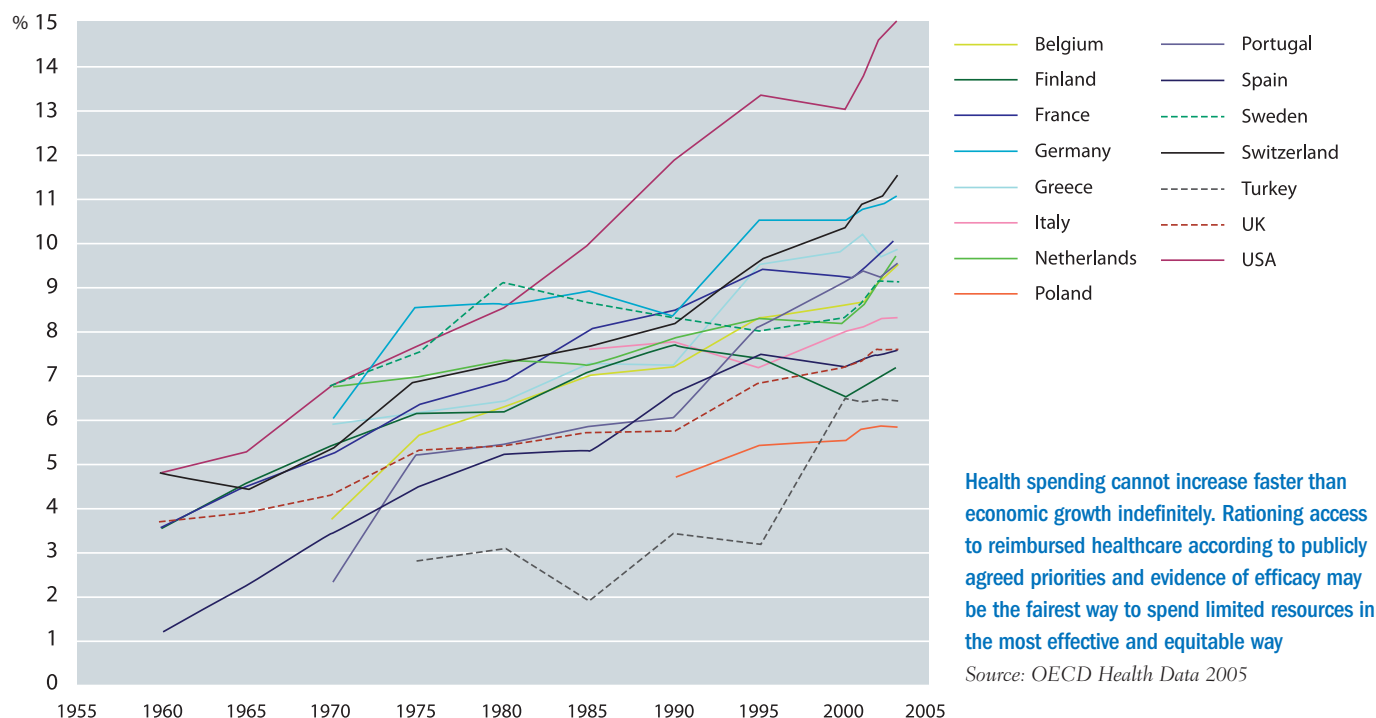
This atmosphere of mutual recrimination does not encourage a rational public debate.

POLITICAL LEADERSHIP

Health economists like Smith argue that European citizens and leaders need to grasp the nettle and start a public debate about how to organise our health systems to provide the best possible treatment on a basis that is economically sustainable, respects the desired levels of universal and equitable access and rewards and stimulates true innovation

"You've got to have real political leadership if you are to ration healthcare in a systematic and fair way"

HEALTH SPENDING AS A PERCENTAGE OF GDP



THE PRICE OF LIFE

Debates of this kind are difficult even in the most congenial of atmospheres. Any discussion that involves putting a monetary value on a person's health, and life itself, is bound to be an ethical minefield. It may be easy enough to formulate hypothetical cases: *Is it justifiable to spend a million euros of public money on a therapy for a single terminally ill cancer patient, if that therapy offers only a marginal chance of extending or improving their life?* But most real-life decisions are far harder to call. What counts as marginal and, more importantly, who decides and how?

Patient groups will argue that the decision must be taken by the patient together with their doctor, on a purely clinical basis. No patient should be denied access to a drug that could improve their chance of survival. Patients whose cancer is clearly terminal should be allowed to choose between the limited options available. Coming to terms with an inevitable

death is a delicate process, and it is only humane to allow patients the chance to do it in their own way. Many patients don't want to prolong the process, and look primarily for a pain-free and dignified death. Others care desperately about a few extra weeks or months – perhaps to be there for their daughter's wedding, or the birth of a grandchild, or have time to sort themselves out and say their goodbyes.

That scenario, say the health economists, is only available in a perfect world. In reality, the pot of money is limited and can only be spent once. The €25,000 that pays for one patient's treatment with the angiogenesis inhibitor Avastin (bevacizumab) or the €17,000 for a cycle of EGFR-inhibitor Erbitux (cetuximab), could otherwise be put towards colorectal cancer screening, researching ways to prevent Europe's young women from taking up smoking, improving rehabilitation services for cancer survivors or extending good-quality hospice or home care.

Health economists say that current systems of rationing are carried out in an arbitrary and unaccountable fashion, at the level of reimbursement bodies, regional or local health authorities, individual hospitals or primary care practices, driven by the need to cut costs rather than to get the best and most equitable health benefits for the cash available. They urge Europe's citizens and politicians to grasp the nettle and start debating how to distribute the social health budget to give the greatest benefit in the fairest way.

The only European country to go any distance down this road is the UK, which established NICE (the National Institute for Health and Clinical Excellence) for exactly this purpose. Since 1999 NICE has been charged with evaluating the cost-benefits of new medical devices and therapies with a view to recommending whether they represent an effective use of National Health Service (NHS) resources.

It does this using transparent cost–benefit modelling and an evaluation procedure that involves major stakeholders.

THE QALY

It sets the value of a ‘quality-adjusted year of life’ – a QALY – at around £20,000 (€30,000), and compares the benefit of each additional QALY above the current standard of care to the additional cost of the new treatment. For most cancer therapies the threshold is actually closer to £30,000 (€44,600), as NICE can also take into account additional criteria such as the seriousness of the disease, the availability of alternative therapies, and consideration of equity or fairness in the distribution of health-care resources.

The strength of NICE is its consistency, transparency and accountability, and the attempt to establish uniform rules that ensure all patients are treated in a similar manner has proved popular with many health professionals, but it has been attacked and undermined by the mass media when decisions have gone against particular treatments or patient groups. Other countries use similar concepts in making health economic decisions – Netherlands, for instance, sets the value of a QALY at around €18,000 – but only in the UK has it been explicitly used to deny some patients access to drugs that could benefit them.

Roger Wilson, a leiomyosarcoma survivor and founder member of the patient group Sarcoma UK, was recently involved in the NICE cost–benefit analysis of Glivec [imatinib] for GIST patients. He fully supports the principle of cost–benefit analysis, but argues that using a single QALY figure to deny potentially

beneficial therapies to whole classes of patients is morally indefensible.

“Having a regulator along NICE lines, which takes evidence, reviews it systematically, qualifies it with the views of patients and expert clinicians and looks at its implementation within the context of the NHS, is absolutely essential. The problem is coming up with a single number to represent the QALY for an incredibly diverse group of patients. You can have people with a relatively poor prognosis and a poor quality of life, and people with a relatively good prognosis and a good quality of life, and they are just bunched together. And that is just wrong.”

A review of the ‘European perspective on the costs and cost-effectiveness of cancer therapies’ recently published in the *Journal of Clinical Oncology* (Drummond and Mason 2007) concluded that “in general the guidance issue by NICE for cancer drugs has been positive, with 52% of the recommendations being for first-line use only. Only in a few instances have the indications for use suggested by NICE been more restrictive than those granted in the licence.”

However, there have been some restrictions, and they have not gone down well with patients. NICE spent two and a half years considering the use of Temodal [temozolomide] for patients newly diagnosed with glioblastoma multiforme – an aggressive brain tumour for which there are few therapeutic options. NICE concluded that the drug represented a good use of NHS money, but only in healthier patients – those with a WHO performance status of 0 or 1.

Kathy Oliver, secretary of the International Brain Tumour Alliance, says that while the study results did show that in

general patients with worse performance status responded less well to the drug, some did benefit. “It is a great fear held by patient advocacy groups that in limiting access to new therapies to subsets of people, somewhere along the line a patient who could benefit from a treatment will be excluded,” she said.

She believes the QALY is a flawed measurement because it does not take into account aspects of carer and patient situations, or the value that patients, families and caregivers place on extended survival in diseases with a poor prognosis. “In these situations, even a short extended survival is important to patients, providing, of course, that they experience a good quality of life,” she says.

The QALY has also been accused of discriminating against patients with rarer cancers, because the smaller size of the market pushes up the cost of the drug. The fact that the overall cost to the health system remains relatively low because there are very few patients to treat is not taken into account.

EYEING UP NICE

Despite these concerns, other European countries have been eyeing NICE with interest and appear to be heading in a similar direction. Data published in an *Annals of Oncology* supplement (Wilking and Jönsson 2007) indicate a sharp increase in evaluations of new therapies (health technology assessments or HTAs) for cancer between 1991 and 2005. The Netherlands, France, Spain, Sweden and the UK account for the majority of assessments over that period, but other countries are beginning to beef up the capacity and status of their own health technology bodies to look at the value of treatments.

“The fear is that somewhere along the line a patient who could benefit from a treatment will be excluded”

Germany created IQWiG (Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen) in 2004, Belgium now has the Belgian Health Care Knowledge Centre (KCE), while in Italy, where reimbursement decisions have been partially devolved, some larger regions such as Lombardy and Emilia Romagna have begun conducting their own HTAs. It is often unclear, however, what role these assessments play in determining reimbursement decisions.

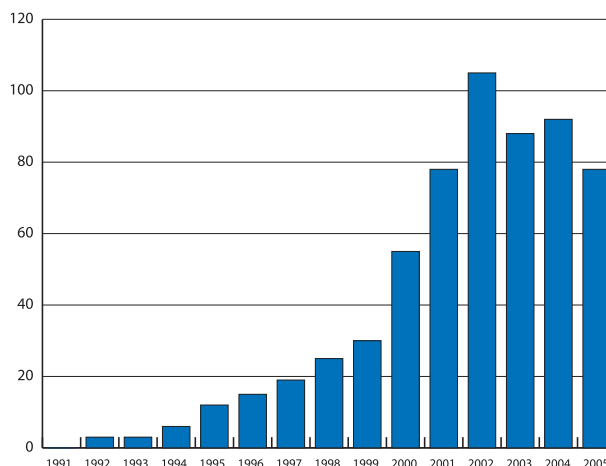
So far, these developments have sparked little public interest, even in Germany, where IQWiG has come in for heavy criticism from the medical profession and patient advocacy groups – for example over its recommendation that allogeneic unrelated stem cell transplants in adults with acute leukaemia should no longer be performed except in clinical trials. Ulrike Holtkamp, a doctor who works for the German Leukaemia and Lymphoma advocacy group, says the methodology that led to this conclusion has been roundly criticised, and within the medical profession the decision was widely interpreted as having been driven by financial considerations. She says, however, that the debate hardly spilled into the mass media, and the public remains largely unaware of IQWiG, and the possibility that it could be used to restrict their access to healthcare.

In parallel with the development of HTA machinery have come increased demands on pharmaceutical companies to provide their own cost–benefit analysis when they apply for a new product to be listed for reimbursement. This is now a standard requirement in Belgium, Finland, Hungary, the Netherlands, Portugal, Sweden and the UK.

A rising trend. The number of health technology assessments of cancer therapies rose from none in 1991 to 102 in 2002 (the drop off in 2003–2005 is probably due to delays in data registration). HTAs look at the impact of a new therapy in terms of its efficacy, cost and other criteria, such as effect on quality of life and the requirements for service delivery

Source: Jönsson and Wilking. *Ann Oncol Suppl 3*, 2007, p60

CANCER TECHNOLOGY ASSESSMENTS



The system used in France offers an interesting contrast to the UK. Like NICE, the French authorities evaluate new therapies to estimate the additional benefit offered above existing treatments, which is measured in terms of an index of medical benefit (ASMR) from 1 (high) to 5 (no additional benefit). They then determine the price they are prepared to pay based largely on the ASMR. “The decision to reimburse a drug or not is taken without taking into account the cost of the drug, but the price reflects the medical interest in the drug,” explains Laurent Borella, director of the Tumour Banks and Innovative Drugs Department at INCa, France’s national cancer institute. Reimbursement at the negotiated price can even cover off-label use in accordance with national guidelines issued by INCa – this was the system under which newly diagnosed French HER2+ breast cancer patients were able to get access to Herceptin (trastuzumab) in advance of approval by the European Medicines Agency, EMEA.

This does not explain how France will contain its large and rapidly growing drugs bill. The strategy, says Borella, is to concentrate on using drugs more effectively. Each hospital has to agree a ‘quality drug plan’ with the regional authorities and must comply with national guidelines for innovative drugs in order to be funded for their use. He also mentions INCa’s PHARE trial in the context of this strategy. PHARE is comparing the effect of six months versus twelve months of Herceptin as an adjuvant. “If it turns out that six months is just as good, we will have halved our Herceptin bill,” he says.

It remains to be seen whether this approach is economically sustainable. However, it is an attractive option because patients will continue to have some of the fastest and widest access to new drugs in Europe, and the approach fits well with the new paradigm of targeted therapies. The future lies in finding the right combination of therapies for the right patients, and the chances are that many of the hugely expensive ‘targeted’ therapies com-

The public remains largely unaware that IQWiG could be used to ration their healthcare

ing on the market are only failing to impress because we still don't know how best to use them or in whom. Focusing efforts on finding that out – boosting effectiveness rather than cutting the cost side of the equation – surely makes sense. Whether the tax payer should be footing the entire bill for that research – as they are in the PHARE trial – is another question.

RISK SHARING

One possible solution gaining in popularity is risk sharing, where reimbursement authorities reach a provisional agreement based on early evidence, with provision for revising that agreement according to longer-term evidence of how the therapy performs in practice. This option, which could allow for raising or lowering the reimbursement price and/or restricting or widening indications for use, is being weighed in a number of European countries.

Post-launch studies give a chance to see the effectiveness of a product in the real world: used in a normal clinical settings by normal doctors in an unselected group of patients with a normal age range, mix of comorbidities and normal adherence to their prescription. They could look at the most cost-effective dosage, as in the PHARE trial. They could also provide an opportunity to gather data that could help

better identify which patients respond best, who is resistant to treatment and who is more liable to side-effects. This approach could give pharmaceutical companies an incentive to work with clinical practitioners and patient groups and payers to maximize the clinical benefit from their product – which has to be better than hurling accusations at one another.

The agreement reached this June between Janssen-Cilag (Ortho Biotech) and NICE over the reimbursement of Velcade (bortezomib) for myeloma patients shows what can be achieved in a collaborative approach.

Having had their application for reimbursement rejected by NICE at the end of last year, Janssen-Cilag came back with a proposal that all patients for whom Velcade is indicated be offered a maximum of four cycles of treatment. Those who respond fully or partially – determined by a 50% or greater reduction in serum M-protein – will be able to continue treatment with full reimbursement. Where this response is not achieved, treatment will be stopped and the manufacturer will refund the cost of the four cycles of treatment.

The agreement doesn't represent a blueprint that can be universally applied – many cancers and cancer drugs are less amenable to early measurement of ben-

efit. However, Pfizer is negotiating a similar 'response scheme' with local health authorities in England for Sutent [sunitinib] for use by GIST patients who have developed resistance to Glivec [imatinib]. Many health economists will nod approvingly at this creative approach to risk sharing, and the French may acknowledge it as a step in their direction – looking for ways to use the drug where it is most effective. The agreement also goes a long way to answer the objection to using a single benefit measure for a highly differentiated group of patients.

What it does not do is allay all fears that some patients may be excluded, perhaps because they are slow to respond to the drug. This is a worry for myeloma advocacy groups such as Myeloma UK, although they have welcomed the agreement as "a creative way to ensure that this important drug can be made available to patients". Jacky Pickles, one of the 'Velcade 3' who had been campaigning for access to the drug, presented the decision as a victory for the principle that no myeloma patient should have to die without first being given the chance to try Velcade. "It could keep us alive long enough for a cure to be found."

Jesme Baird, board member of the European Cancer Patient Coalition and Medical Director of the Roy Castle Lung Cancer Foundation in the UK, believes that all patients should take heart from the Velcade agreement. "Ultimately I and anyone who represents patient organisations will be in favour of anything that will get drugs to people who respond. We all know that in the next 20 years there's going to be a huge number of these new targeted therapies coming down the line. The good thing about the Velcade announcement is that at least there are some people out there in industry and in the technology appraisal bodies who are talking to each other and looking at how we will be able to afford these things."



The Velcade 3. Myeloma patients Jacky Pickles, Janice Wrigglesworth and Marie Morton led a campaign to reverse the initial NICE recommendation not to reimburse Velcade (bortezomib). They welcomed the novel 'money-back' agreement