substitute where the public sector fails, but whether there can be a better match between the roles of state and private sectors, using their respective strengths to do better than either could alone.

In most countries such a "third way" means rebalancing an already complex mix of public and private roles in the health sector. The prime mover in this must be government. The possible actions governments can take to improve efficiency, equity, responsiveness, and quality in public sector health care are extensive-and the latest reforms in the NHS illustrate this.

Major departures from the past include: replacing fundholding practices with primary care groups; introducing clinical governance to improve the clinical quality of care; and giving the public access to 24 hour advice on health and illness via the telephone or on line.8 Of the four main objectives, responsiveness and quality seem to have a higher priority than equity and efficiency.

The policies combine a dual approach to improving performance. On the one hand there is strong central direction: clear national standards (for example, through the National Institute of Clinical Excellence⁸); more independent scrutiny of the quality of clinical care (for example, through the Commission for Health Improvement⁸); and the publication of national performance indicators.9 On the other hand there is an encouragement of "horizontal" networks-NHS organisations working in partnerships with others towards solving problems, not reinforcing old barriers (for example, health action zones¹⁰ and primary care groups8). This combination of strong vertical direction and vibrant horizontal networks is an emerging feature in successful European companies.¹¹ In the NHS achieving the "strong vertical" is all too easy; the "vibrant horizontal" needs a lot more thought.

The third way between public and private sector is less clear. Public-private partnerships in capital projects (the private finance initiative) need reforming but will remain. New methods of regulating private sector providers are out for consultation.12 Beyond that the path is as yet hard to make out. But the bald statement "what counts is what works"s suggests the UK government is at least open to ideas.

These two themes-reforming the public sector in health care and achieving a better balance between public and private sectors-are issues that will be explored in the forthcoming BMJ conference "Learning from the NHS."

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- 2 Bator F. The anatomy of market failure. In: Estrin S, Marin A, eds. Essen-
- tial readings in economics. New York: St Martin's Press, 1995:129-58. Arrow KW. Uncertainty and the welfare economics of medical care. 3 American Economics Review 1963;53:940-73.
- 4 Young P. Privatization around the globe: lessons from the Reagan
- administration. Houston: National Center for Policy Analysis, 1986. World Bank. Investing in people and growth. In: *World development report:* from plan to market. New York: Oxford University Press, 1996;123-32. 5
- World Health Organisation. European health care reforms: analysis of current strategies. Copenhagen: WHO Regional Office for Europe, 1996. 6
- Preker AS, Feachem RGA. Market mechanisms and the health sector in central 7 and eastern Europe. Washington, DC: World Bank, 1996. 8
- Department of Health. The new NHS. London: Stationery Office, 1997 http://wwwopen.gov.uk/doh). Department of Health. Performance assessment framework. London:
- Department of Health, 1999. 10 Department of Health. Health action zones. London: Department of
- Health, 1997 (EL(97)65). 11 Whittington R, Pettigrew A, Peck S, Fenton E, Conyon M. Change and
- complementarities in the new competitive landscape: a European panel study, 1992-1996. Organization Science, in press.
 12 Department of Health. Regulating private and voluntary healthcare: a
- consultation document. London: Stationery Office, 1999.

Medicine must change to serve an ageing society

Eradicate age discrimination and increase resources

octors and those responsible for commissioning and shaping health services have failed to acknowledge the rapid ageing of most societies. This worldwide phenomena is unprecedented, leaving us ignorant, fearful, and reluctant to tackle it face on. A conference in London last month examined how medicine and its institutions must change to serve a growing older population while still meeting the needs of younger people. Two issues dominated: age discrimination and resources.

Currently 20% of the population of the United Kingdom is over 60-12 million people. By 2031 this proportion will be nearly a third-18.6 million people.¹ Most will lead healthy and rewarding lives, but the numbers of people needing acute and long term care will inevitably increase. Rates of cardiovascular disease, dementia, and osteoarthritis among elderly people in the next century will be greatly determined by success or failure now in preventing such disease.

Health care is ill suited to perform well in a world with many more elderly people because it is ageist. Older people face arbitrary discrimination in their encounters with health professionals,2 and this probably reflects a wider ageism within society. Older people are excluded from research and many beneficial interventions, some of which would be lifesaving, and are insensitively managed.3

Recent changes in acute medical services in Britain have created an environment where ageism flourishes. More and more older people are admitted to fewer and fewer beds for shorter and shorter stays. Nearly a third of beds for acute cases are now occupied by people over 75, and the throughput per bed has more than doubled over the past 10 years in the geriatric sector.⁴ General practitioners are also under pressure, caring for increasing numbers of disabled elderly people in nursing homes.

The health needs of most older people are the same as for everyone else, but the oldest old, and those

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¹ Preker AS. The introduction of universality in health care. London: IIHS 1989

with chronic diseases or disability are characterised by multiple pathology, non-specific presentations, a high incidence of secondary complications, and the need for intensive rehabilitation. They need a generalist approach to assessment and treatment and are poorly served by a superspecialist profession. Even doctors who specialise in caring for elderly people often prefer curing acute illnesses to using their skills in chronic disease and rehabilitation.⁵

To combat age discrimination health professionals and their institutions must acknowledge and document it and then act to eradicate it. These actions need to go on at all levels of the service, including hospital departments and general practices. The General Medical Council, the royal colleges, and specialist associations can all guide their members through the process and must recruit older users of the health service to help them. The charity Age Concern continues to lobby for legislation to outlaw age discrimination3 6 and also campaigns for a government inquiry into ageist practices in the NHS. Steps have already been taken to redress the imbalance of research in older people. The major research funding agencies now refuse to fund trials with an arbitrary age limit for recruitment. Longer term measures will begin at medical school, where modern teaching methods can be used to foster enthusiasm among medical students for older people and their problems. Partnerships with older people will enhance core teaching, as well as empower older health service users to shape the curriculum. Later on, all doctors could acquire the necessary skills by doing six months in geriatric medicine during training.7

Reshaping the health service around older patients need not be painful and can start now. Even small adjustments to the ward, clinic, or surgery can make a difference. For example, admission wards with access to a breadth of expertise are better for patients with multiple problems than direct admission to a specialist (say orthopaedic) ward. Individual doctors can also make a difference by seeking out and removing their own prejudices. More sweeping changes will have to follow, however, including: engaging older people in the commissioning and design of services; accepting that undergraduate and postgraduate training produces doctors whose aspirations don't match the needs of their patients; finding and protecting money to pay for care of older people; returning to an emphasis on rehabilitation and convalescence; and changing the way we think. If the health service could be made fit for older people, it would be fit for everybody.

But there is no escaping the conclusion that a health service that will serve an ageing population well will need substantially more money than is available now. Older people probably bear the brunt of rationing within the health service. Many of those who fought in the second world war, rejoiced in the creation of the welfare state, and paid for it throughout their working lives now feel let down. Many are bitter that the government has failed to produce any response to Royal Commission on Long Term care for Elderly People that was published in March. It recommended that the personal care element of the package should be free and funded by taxation.⁸

There is still no consensus on where extra money for the health service should come from, but Professor Sir John Grimley Evans, a gerontologist from Oxford, who closed the conference, said there should be no further discussion of rationing until NHS funding is brought in line with other comparable European countries. The yearly average spend per head in the UK is 25% lower than the European average. If the government does not increase expenditure on the NHS substantially and if the health professions do not manage to counter ageism then the NHS may fail to meet the challenge presented by an ageing society.

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- 2 Bowling A. Ageism in Cardiology. BMJ 1999;319:1353-5.
- 3 Age Concern. Turning your back on us. London: Age Concern England, 1999.
- 4 NHS hospital activity statistics. England 1987/8-1997/8. Stats Bull 1998;31.
- Kurian J. Geriatric medicine: is there still an image problem? www.bmj.com/cgi/content/full/319/7221/1358#responses
 Rivlin M. Should age based rationing of health care be illegal? *BMJ*
- Rivlin M. Should age based rationing of health care be illegal? *BMJ* 1999;319:1379.
 Ebrahim S. Demographic shift and medical training. *BMJ*
- Bernami S. Denographic sinit and incurcal daming. *Bity* 1999;319:1358-60.
 Royal Commission on the Funding of Long Term Care. *With respect to old*
- age: long term care-rights and responsibilities. London: Stationery Office, 1999 (Cmnd 4192-1).

Cardiac troponins in chest pain

Can help in risk stratification

espite a fall in the age adjusted prevalence of cardiovascular disease in the developed world,¹ the number of patients presenting with chest pain is rising. Greater public awareness of the importance of chest pain has lowered the threshold for seeking medical help, while improvements in our ability to manage acute coronary syndromes necessitate prompt and accurate identification of ischaemic cardiac pain. Most patients who present to accident and emergency departments will have non-cardiac pain and others, with ischaemic pain, will be at low risk of serious adverse events in the short term. In contrast, many of those at high risk have no diagnostic clinical or electrocardiographic findings at presentation (about 50% of patients ultimately diagnosed as having an acute myocardial infarction, and 65% of those with unstable angina, present with non-diagnostic electrocardiograms).² The major challenge is therefore determining the risk of an individual patient.

There are two components to such risk. "Acute risk" is determined by the volume and severity of ischaemic myocardium (usually reflected in electrocardiographic changes) and the extent of myocardial injury (indicated by troponins and cardiac enzymes).

¹ Khaw. K. How many, how old, how soon? BMJ 1999;319:1350-2.