in can linings. These are issues of major interest, not least because of the possible exposure of infants to these chemicals at critical stages of development. Sharpe has argued that, until appropriate in vivo experiments are done, phthalates and similar chemicals will continue to cause concern for testicular development.[12] Meanwhile the debate about phytoestrogens and women's health continues: on the one hand there is concern that any hormonally active substance can induce or exacerbate breast and uterine cancer, and on the other is the knowledge that these substances can be used as alternatives to hormone replacement therapy in the treatment of postmenopausal symptoms and osteoporosis.[13]

This is a fascinating area with important repercussions, and it is appropriate to investigate environmental causes of disease. Research is now being undertaken that will establish baselines for some key indices of reproductive health, which should allow future researchers to resolve the current uncertainties and determine the impact of endocrine disrupters on our health.

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Estimating the financial requirements of health care

The Wanless report is a pioneering effort—with a few omissions and errors

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Seemingly on the edge of financial shipwreck not so long ago, the National Health Service is now sailing on a springtide of money, promises, and hope. Mr Gordon Brown, chancellor of the exchequer, has added an extra billion pounds to swell an already unprecedented rate increase in the NHS's budget. Mr Tony Blair, prime minister, has reiterated the British government's commitment to achieving the average level of spending in the European Union. The great unmentionable, tax increases to fund the NHS's growth, has appeared on the agenda of political debate.

So why are the corridors of the NHS not ringing with the hosannas of grateful staff and patients? One reason is scepticism about the government's ability to deliver. Achieving the government's spending target depends on Britain not becoming a casualty of a global economic recession. Moreover, uncertainty is compounded by controversy about just how many more billions will be needed to achieve the target.

But there is a more fundamental reason for not being swept away by the government's pledges. This is that the target itself is a nonsense (interestingly, Mr Blair has himself watered down the commitment (p 1325)). The European Union average of spending on health care is a statistical artefact. In 1998 spending on health care in the union ranged from 6.8% of the gross domestic product in Ireland (much the same as in the United Kingdom) to 10.3% in Germany.[1] It is not self evident that averaging this out—whether on an income weighted basis (8.4%) or on an unweighted basis (7.9%)—provides any kind of guide to what the United Kingdom's level of spending should be.

Hence the importance of Mr Derek Wanless, former chief executive of NatWest Bank, charged by the chancellor of the exchequer to estimate the resources required to run the health service in 20 years time. His interim report attracted much attention for the wrong reason.[2] It appeared to rule out alternatives to general taxation as a method of funding health, an interpretation subsequently repudiated by Mr Wanless. In fact, the Wanless review, as the interim report explicitly recognises, was "not set up to examine the way in which those resources are financed." And its analysis of different methods of funding is a dutiful review of familiar arguments, with the occasional error thrown in. For example, it makes the patently wrong claim that "there is little scope for expression of individual choice under social insurance models." Given that the review's advisory group is made up entirely of officials, nothing else could perhaps be expected. The review's final report could usefully concentrate on its main task, estimating future financial requirements.

This task is challenging enough. The interim report sets out the questions to be asked, discusses the methodological problems involved, and invites comments on both. Inevitably it is more successful in identifying the factors likely to drive demands—demographic changes, technological developments, and rising public expectations—than quantifying their impact. Some specific conclusions do emerge. The effects of an ageing population are likely to be relatively modest. The costs of policy initiatives designed to bring NHS services up to European levels of excellence—as embodied in national service frameworks—can be costed, and are not likely to

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break the bank. But for the most part the report's analysis is forced to acknowledge uncertainty.

This is no criticism. The Wanless review is pioneering stuff. And if it succeeds only in identifying the parameters of uncertainty—the range of possible outcomes—it will have done much. It is also valuable in making explicit what previously has been left blurred. Thus, it pricks the assumption that clinical governance and the pursuit of quality are without cost. Accordingly, it intends to calculate how much it will cost to allocate 10% of medical and other staff time to these activities.

There are curious omissions in the report. It rightly argues that consumers of the future will require choice, speed, and comfort. But while it assumes that patients may increasingly want single rooms with en suite bathrooms, it fails to address the resource implications of consumer demands for free choice of specialists and hospitals. Nor is there any discussion of the role of the private sector. This will probably remain marginal in total, as in most European countries, but it is relevant for planning the labour force for health care and other issues considered in the review. Most importantly, the report does not discuss how effectively and efficiently the NHS uses existing resources. The report concedes that this is "a key question" but considers it to be beyond its scope. Given that variations in efficiency and effectiveness are the norm in the NHS, this is a huge omission.[3] And while it is sensible for the Wanless review to avoid politically charged issues like considering how health care should be funded, organised, and structured in order to make the most of available resources, its final report should be read in this wider context.

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Chest pain in people with normal coronary anatomy

Addressing patients' fears is a priority

Coronary angiography is often necessary for patients with chest pain, but 20% to 30% of examinations show normal anatomy.[1] The use of angiography itself can contribute to symptoms in these patients, and non-organic factors are often overlooked. Providing a diagnosis may be less important than addressing a patient's concerns and fears.

Potentially irrevocable changes in social circumstances may occur while a patient is on a long waiting list. The mean waiting time from the general practitioner's referral to angiography was 261 days in the United Kingdom in 1994 and about 60 days in Canada in 1993.[2 3] These delays provide ample time for adverse changes in lifestyle, work patterns or even losing a job, restriction in social and leisure activity, and disruption of family life. Such changes are directly related to time on the waiting list for coronary bypass grafting, and the same is probably true for angiography.[4] This means that patients can be told, after angiography, that there is no evidence of heart disease and be sent home to a lifestyle geared to the original diagnosis. It may be difficult or impossible for the patient to reconcile this discrepancy.

Angiography itself may provoke anxiety.[5] It involves a hospital visit, signing a consent form for a procedure with a small but definite morbidity, and the knowledge of possible progression to surgery if serious coronary disease is detected. Similar concerns among patients have been reported after echocardiography: patients were left with anxiety about the heart despite a normal test result and reassurance by the cardiologist.[6]

Patients are justifiably concerned if chest pain recurs and there has been no adequate explanation or treatment. Clinicians may spend less time counselling patients with normal anatomy than those with coronary disease, perhaps in the belief that the patients with disease require greater attention.[7] The patient's anxiety may be increased by a spurious diagnosis such as coronary artery spasm or syndrome X, the continued prescription of antianginal drugs, or more tests.[8] All these may contribute to chronic pain.[9]

An alternative non-cardiac diagnosis can be difficult to make, but addressing the patient's concerns may be more important than providing a medical diagnosis.[10] Recent work has confirmed the contribution of patients' perception of their illness to seeking help and to their recovery after acute myocardial infarction.[11] Moreover, if these concerns can be elicited in a structured way, it is possible to modify them favourably with a brief psychological interaction.[12] Patients with a high level of anxiety about their health have a lower perception of reassurance than patients with low or medium anxiety and may require additional help.[13] Patients with more troubling symptoms, would benefit from a follow up visit for more discussion four to six weeks after the visit to the cardiac clinic.[5] This could take place either with a cardiac nurse or doctor in the cardiac clinic or with their general practitioner. In this session the nurse or doctor should elicit the patient's perceptions of illness in an objective way, exploring their origins and attempting to modify them by offering an acceptable alternative way of viewing the symptoms.[14] Collaboration between specialists and general practitioners is essential to ensure consistency of advice and management, including the withdrawal of antianginal medication. Other drugs or psychological treatments may have a role for patients with continuing symptoms and disability, which often coexist with psychological problems, such as anxiety and depressed mood.[15]

The impact in the United Kingdom of rapid access clinics and one stop chest pain clinics is uncertain.

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