with the NHS and the freedom to step off the treadmill of piece rate NHS dentistry to devote time to private work. Furthermore, although dentistry has become a far more expensive component of health care, public protest has been surprisingly muted; demand for treatment of minor irregularities of teeth is influenced solely by ability and willingness to pay.[10]

Most important are the lessons for other sectors of the NHS. Direct charges for health care must be accompanied by rigorous and frequent appraisals of the public health, particularly in areas where the population might fall between the traditional providers and the as yet underfunded community services. Plans for further expansion of mixed public and private financing should also remove duplicative services; introduce integrated, cost effective monitoring; and allow implementation of policy. However, commercial motivation is powerful and persuasive and does not necessarily work in the interests of patients. In any event, health services research is crucially important to evaluate the results of this privatisation experiment, not least to inform the debate about future health care funding.

Perhaps the most surprising aspect of these developments has been the failure to recognise dental services as a model for mixed funding. In two years, more than a million people are likely to be contributing to private dental capitation schemes in Britain, and already expenditure on one dental surgical procedure, third molar removal, is as great in the private sector as it is in the NHS.[11] In this context, the mixed franchise proposal is common sense. Yet the white paper *Improving NHS Dentistry* makes almost no mention of private care or how it can be integrated with NHS care.[3] There is still no forum where purchasers and providers can discuss this interface or plan how best to target funding or improve clinical and cost effectiveness. If mixed public and private funding of dentistry is occurring by default, there is little hope for rational planning in the rest of health care.

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Hospital at home

An uncertain future

Providing services traditionally associated with secondary care in the community is a feature of health policy both in Britain and abroad. "Hospital at home" is currently a popular response to the increasing demand for hospital beds. Cutting costs by avoiding admission and reducing length of stay in hospital is a central goal of such schemes. Changes in medical technology, improvements in housing, and an increasing emphasis on primary care have all encouraged the idea that some hospital services can be provided safely and more cheaply in the community.

A national survey of purchasing authorities in Britain shows that most authorities are either supporting, or planning to support, a hospital at home scheme (S Iliffe and A Haines, unpublished data). All 136 health authorities, commissions, and health boards were asked to report planned or operational hospital at home schemes in their district. Hospital at home was defined as the provision of a service that prevented hospital admission, or facilitated early discharge from hospital. The purchasing authorities were also asked whether they provided specialist paediatric or mental health services or supported schemes that made use of intensive technologies such as renal dialysis or home parenteral nutrition. Seventy six per cent of those surveyed replied, and they reported 139 existing and 100 planned hospital at home schemes. Of these, paediatric and mental health services made up 21% and 12% of schemes in operation, and a further 15% and 21% of planned schemes. Only 15% of existing or planned schemes were providing or planning to provide specific technological services. A more detailed profile of hospital at home in Britain is currently being prepared by the Policy Studies Institute (N Fulop, personal communication).

Broadly speaking, hospital at home schemes are community or hospital based. Community based schemes build on existing resources, including district nurses and domiciliary provision of other services such as physiotherapy and occupational therapy. Clinical responsibility is usually assumed by general practitioners. In hospital based schemes, consultants provide clinical responsibility, and services are provided on an outreach basis with varying degrees of integration with community services.

Considerable heterogeneity exists within this framework. Some schemes are designed to care for specific conditions, such as the home ventilation service provided to patients requiring long term mechanical ventilation in south London.[1] Other schemes provide specialist services, such as administration of intravenous antibiotics or parenteral nutrition.[2] Much more common are schemes to care for patients discharged early from hospital after surgical, especially orthopaedic, procedures.[3-6] Some schemes have an open door policy, admitting patients with an unrestricted range of conditions.[7]

This concentration on personal, nurse led care rather than provision of technical services is in contrast to the development of home care in other countries. In North America in particular, high technology home care, such as intravenous drug administration and blood transfusion, is well established.[8] These schemes usually have close ties with acute hospitals and may be encouraged by the different structure of incentives in insurance based systems of health care.

It is, of course, essential that new types of service provision are formally evaluated before they are widely adopted. There is little published research on the relative costs and benefits of different forms of hospital at home in comparison to traditional hospital care. There are some randomised studies of the early discharge of patients after specific surgical procedures, including hernia repair, abdominal hysterectomy, and cholecystectomy.[9 10] However, these were published 20 years

ago and their relevance today is limited, given the overall reduction in length of hospital stay, the use of day case surgery, and the introduction of minimally invasive surgery. More recent studies have suggested that hospital at home is a safe and acceptable way of delivering care to patients after repair of a fractured femur[3 5 6 11 12] or hysterectomy.[13 14] Another recent study, comparing patients with access to hospital at home to those with no access to the service, reported that hospital at home can be cheaper per bed day than hospital care for patients with a fractured femur.[4] However, these studies were non-randomised and therefore prone to selection bias. One recent randomised study of elderly patients was limited by its small size.[7] Three randomised trials of hospital at home are currently under way in Britain (UK Collaborative Group on Research and Development of Hospital at Home, North Thames Regional Health Authority),[15] and the first results should be available in 1997. Until the results of these, and other, studies are available, it will be unclear whether hospital at home schemes represent a new, cost effective direction for health service provision or are merely a substitute technology of limited value and lifespan.

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Health and human rights

Protecting human rights is essential for promoting health

When the World Health Organisation redefined health as "a state of complete physical, mental and social well-being"[1] it not only expanded health far beyond medicine, it openly acknowledged the vast accumulated knowledge about the central role of societal determinants of population health. Despite the public's belief to the contrary, medical care is a relatively minor, albeit important, contributor to health,[2] far outweighed by societal factors, of which social class has been the most extensively studied.[3 4]

In 1988, a seminal report by the United States Institute of Medicine defined the mission of public health as "ensuring the conditions in which people can be healthy."[4] In turn, this required those working in public health to consider the societal nature of these essential conditions in which people could achieve the highest attainable standard of physical, mental, and social wellbeing. Paradoxically, the discipline of public health has generally ignored the societal roots of health in favour of medical interventions, which operate further downstream. For example, public health efforts at preventing and controlling sexually transmitted diseases have focused on diagnosis and treatment, along with educational programmes, rather than confronting societal inequality or other societal issues as "essential conditions" underlying the spread of sexually transmitted diseases. Epidemiological research has contributed to this narrowed focus,[5] because it identifies individual risk behaviours in isolation from the critical societal context.

Public health's difficulty in addressing the indisputably predominant societal determinants of health status is exacerbated by the lack of a coherent conceptual framework for analysing societal factors that are relevant to health; the social class approach, while useful, is clearly insufficient.[2 3 6] Public health action based on social class is often simply accusatory, and it raises, but cannot answer, the question: "what must be done?" In this sense, "poverty" as a root cause of ill health is both evident and paralysing to further thought and action. Also, without a consistent approach or vocabulary, we cannot identify the societal factors common to different health problems (cancer, heart disease, injuries, infectious diseases) and to different countries. Finally, since the way in which a problem is defined determines what is done about it, the prevailing public health paradigm is unclear about the direction and nature of societal change that is needed to promote public health.

Modern human rights, born in the aftermath of the second world war and crystallised in the Universal Declaration of Human Rights of 1948, reflect a broader, societal approach to the complex problem of human wellbeing. The implicit question behind the modern human rights movement is: "what are the societal (and particularly governmental) roles and responsibilities to help promote individual and collective wellbeing?" This form of the question leads to a specific list of actions that governments should not do (discriminate, torture, imprison under inhumane conditions, interfere with the free flow of information, invade privacy, prevent associative life in society), and a basic minimum that governments should ensure for all (elementary education, housing, food, medical care). While the word health is mentioned only once in the document, to a public health professional the declaration is about the societal preconditions for "physical, mental and social well-being."

The current health and human rights movement is based on a working hypothesis: that the human rights framework provides a more useful approach for analysing and responding to modern public health challenges than any framework thus far available within the biomedical tradition. The discussion is complicated by the fact that health professionals are generally unaware of the key concepts, meaning, and content of modern human rights. Yet awareness is increasing. Health professionals