testicular tumours has improved appreciably,¹⁹ but patients treated at specialist centres rather than general oncology units still seem to have the highest survival rate.²⁰ The message that specialist centres get the best results has not, however, got through to all concerned. As survival for Hodgkin's disease in the United States has improved more patients are being treated at local hospitals seeing under three cases a year.²¹ Such a reversal of the policy of centralisation slows down the scientific evaluation of new treatment regimens. This applies both to the rarer cancers (in some of which, for example subgroups of testicular tumours and Hodgkin's disease, the aim is now to elucidate the minimum treatment necessary for cure) and to the common cancers—for which there is still scope for substantial improvement in survival. These more common cancers could be treated at large numbers of hospitals without the numbers of patients at each becoming too low; in some district general hospitals, especially those distant from regional cancer centres, physicians with an interest in oncology can participate in clinical trials in cooperation with the regional centres.²²

Cooperative treatment and multicentre trials are flourishing for childhood cancer, leukaemia, and some other rare tumours. For most cancers, however, few of the eligible patients are entered into trials.^{4 23} Yet without doubt trials are needed to evaluate new developments in treatment for the benefit of future patients. The results of several comparative studies of childhood cancer—and now also of multiple myeloma—suggest that entry to trials and centralised treatment are also of direct, immediate advantage for the patients concerned. More such studies are needed for other tumours and in other countries. The Finnish myeloma study and other comparative studies drew on population based cancer registries for their data. The importance of cancer registries for

investigating the effects on survival of referral patterns and entry to trials cannot be overemphasised.

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Annual reports on public health

Should identify problems and audit their solution

After regular publication for 100 years local annual reports on the state of public health ceased in 1972. Their demise was welcomed in many quarters, including the offices of the newly created community physicians, who saw the earlier efforts by medical officers of health as producing documents of uncertain value in improving the health of the population. During the 1970s, however, many district based community physicians discovered that release from this annual chore was not the only change resulting from the 1974 reorganisation. Stripped of their responsibility to manage district nurses, health visitors, environmental health officers, and social workers, they found themselves with few responsibilities and little influence. By the 1980s concern had grown sufficiently for the establishment and subsequent report of a committee of inquiry into the public health function in England.¹ Among its proposals was the need for health authorities to commission an annual report from their director of public health. This proposal was endorsed by the government^{2 3} and more recently has been accepted, at least implicitly, as an integral part of any future changes in the NHS.⁴

Given that annual public health reports have been born again, is there a consensus as to the objectives? Firstly, they should clarify the responsibilities of health authorities (G Winyard, paper to annual report of the public health meeting, London, December 1988) and contribute to their account-

ability both to the people they serve and, through the NHS review process, to parliament.¹ Secondly, by focusing attention on public health problems the reports should help health authorities solve them (N D L Olsen. Public health in Hampstead 1988, Hampstead Health Authority, 1988; Faculty of Community Medicine. Report of the working party on annual reports of directors of public health, 1989). Many public health physicians envisage that this will be achieved through the influence that the reports will have on both strategic and short term planning. Though these laudable aims may be met in some districts and regions, there seems to be another more focused and thus more achievable objective that has received little attention: improving and maintaining the quality of public health practice.

Just as there is now widespread acceptance of the need for quality assurance in clinical practice so is there an equally urgent need to audit the work of public health physicians. Annual reports will require them to select topics for action on the basis of scientific evidence and the feasibility of successful intervention rather than on belief and desirability. They will also need to establish criteria (definitions of what constitute high quality public health); standards (the level of compliance with the criteria which they expect to achieve); methods of monitoring their achievements; and, finally, interventions to improve their performance further. To do anything less when

they will be entreating their clinical colleagues to undertake quality assurance would be tactless and foolhardy. Some of the annual reports that have been produced show signs of such an approach, and the Faculty of Community Medicine has established a working group to develop proposals.⁵

Might there be objections to the annual report being used in this way—on the grounds that improvements in the health of the population are not the sole responsibility of public health physicians nor are the interventions required always under their direct control? The answer is that public health doctors have a responsibility to provide realistic advice to health authorities about achievable goals. If annual reports achieve nothing more than dispelling such optimism as reducing mortality from heart disease by a third in five years, they will have made a major contribution to re-establishing realism in public health. For these reasons the reintroduction of annual

reports is a welcome and potentially exciting step in the development of the subject. There is every sign that public health physicians intend to embrace it with enthusiasm.⁶

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Gall bladder lithotripsy

Investment decisions require sound evidence

The NHS has a poor track record for resisting pressure from manufacturers and politicians to invest in new technology. Clinicians are easily lured by a promise of prestige, and our hospitals contain many expensive machines that have never fulfilled their early promise. The many publications on technology assessment contrast with the few on the process by which a health authority decides to provide—or not—some new treatment. Gall bladder lithotripsy is a case in point.

Let us examine the process. The straightforward assessment of the machine and its use is covered by the manufacturer. Confident that the treatment is effective and safe and has minimal unpleasant side effects, the manufacturer moves rapidly into marketing—because he wants to keep ahead of the competition. It may be good business to donate a machine for a “clinical trial” and so to convert clinicians into advocates for the product. Before it knows what is happening the health authority may be on the defensive—having to explain why it is not offering this new invention to long suffering patients.

Yet the only fact established at that stage is the availability of a safe new treatment. We want to know more than that. Is the immediate benefit sustained? Is there a long term improvement in the patient's life? Who decides what is a better outcome? A patient may perceive this differently from a clinician.

Assessment of benefit should be based on properly designed studies. The health authority will want advice on the confidence it can place in such studies—the soundness of sampling methods, statistical analysis, and interpretation. It will wish to know the pattern of disease to be treated within its own population—or in any larger catchment it may wish to serve in these entrepreneurial days.

Another question that needs an answer is whether the authority actually wants to install this technology in one of its hospitals. Might the service be bought in? It might be easier to let someone else cope with teething troubles and face unforeseen disbenefits. Will the innovation fit into the existing service strategy? How does it fit with other priorities? Next, is installation feasible? If it is going to damage other departments the authority may want to think again. A district general hospital should have a site control plan based on

perceptions of need and balance of services. This plan may not be immutable but it should not be ignored.

What are the implications for other services? The availability of clinic space, inpatient beds, back up tests, and the capacity to treat complications are all relevant. If the pathology department is already working near capacity the introduction of a new service based on a multidistrict catchment may cause an overload.

No one would buy a car or a dishwasher without knowing the price, but cost is a deceptively simple word. Capital cost comprises the equipment purchase price, plus the cost of installation, maintenance, and eventual replacement. The true revenue cost includes not only the salary of extra technicians but also the staff costs of all the increased functions described. These may be offset by a reduction in other activities—but it is a rare innovation that is not a cause of growth, hidden or otherwise. Any reduction in other services may occur outside the providing district. These other districts will deny to the last their falling activity, claiming it as quite impossible to cost with any useful degree of accuracy.

We may now at last begin to assess the cost, benefits, and realism of the proposal. We will have assessed the benefit to patients: we have a feel for disbenefits and can estimate total costs. With this better understanding of the implications, shall we now look at gall bladder lithotripsy?

Numerous non-comparative studies have described the progress of small numbers of patients.¹⁻⁴ The prevalence of gall stones is high (they are found in around 9% of the British population aged over 60), and untreated patients may suffer much pain and illness. Cholecystectomy is an established and safe procedure that gives good long term results. We should learn from the way renal lithotripsy was introduced and the arguments about its proper evaluation.⁵⁻⁷ We need to be absolutely sure with comparative studies that gall bladder lithotripsy offers substantial advantages over conventional surgery. A full, prospective evaluation needs to be done—before clinicians' beliefs and public expectations are such that a true comparison is thought to be unethical. Once a new technology has become absorbed into medical and social folklore it is close to impossible to agree on the probity of a randomised trial.