

executive in not exercising effective and comprehensive data collection, monitoring, and implementation procedures.

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## Costs of screening are important

EDITOR,—Recent issues of the journal have included four articles on screening programmes.<sup>1-4</sup> The outcome of a screening programme (as with many other health care activities) depends on its effect on three main variables: length of life, quality of life, and costs. It is therefore surprising that none of the articles includes any mention of the costs that might be incurred. D M Bradley and colleagues' paper on a screening programme for Duchenne muscular dystrophy in newborn infants describes the benefits for the nine affected families that were identified.<sup>2</sup> It would be interesting to be able to weigh these against the costs of over 34 000 blood tests, pretest information, and more sophisticated analysis and counselling in those in whom the result of the test was positive. Fritz H Schröder's editorial on screening for prostatic cancer makes the point that the specificity and positive predictive value are too low for any of the available screening tests to be recommended.<sup>3</sup> This statement needs to be expanded in relation to the cost disadvantages of screening as well as the physical and psychological disadvantages. Finally, A L Clark and A J S Coats's editorial on screening for cardiomyopathy suggests that improved test validity and proved treatment would be sufficient to justify echocardiography on a mass scale.<sup>4</sup> Though this may be the case, it would be helpful to be given some idea of the potential cost-benefits and disadvantages.

A screening programme is a public health measure, and any balanced discussion should make at least some reference to its overall impact on the use of health care resources.

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- 3 Schröder FH. Prostate cancer: to screen or not to screen? *BMJ* 1993;306:407-8. (13 February.)
- 4 Clark AL, Coats AJS. Screening for hypertrophic cardiomyopathy. *BMJ* 1993;306:409-10. (13 February.)

## Increase in staff grade posts

EDITOR,—The number of advertisements in the *BMJ* for staff grade positions seems to have increased in recent months. Funding for such posts seems to be easier to obtain than funding for additional consultant posts, and the restrictions imposed by the Joint Planning Advisory Committee do not apply.

This trend has important implications. There may be a change in the balance between junior staff posts and consultant posts, which is the basis of the advisory committee's calculation of the number of trainees required. The trend will probably further delay the creating of new consultant posts, which is

critically important for some specialties, including oncology, where unrealistic workloads are carried. It is important that proper consideration is given to the educational needs of people appointed to such posts, which could quickly become dead end jobs. Experience suggests that these posts will mostly be occupied by women wishing to work less than full time, particularly since the full time contract in many specialties implies a considerable amount of unpaid overtime work. It is possible that there will be a trend to suggest such posts for women, rather than efforts being made to develop training and working schemes that take into account the professional potential of all qualified doctors.

Those interested in postgraduate and continuing medical education and in the best use of all qualified medical practitioners should be concerned at these developments. They should continue to seek solutions for the needs of the service that take into account equality in opportunity and education rather than just short term financial considerations.

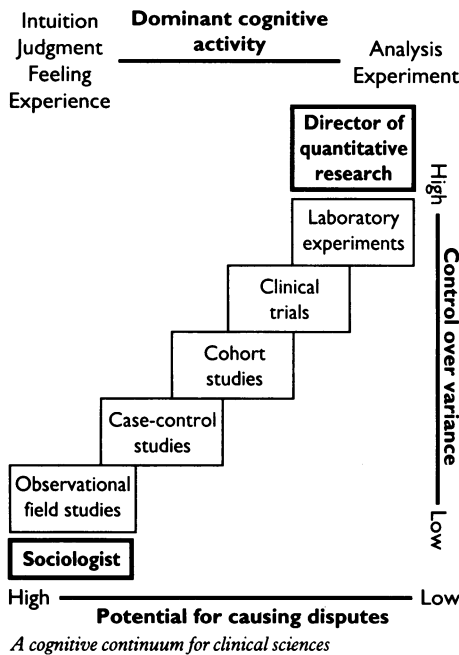
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## Health services research

EDITOR,—The dialogue between a sociologist and a director of research, by Catherine Pope and Nicholas Mays, sounds all too familiar.<sup>1</sup> The unproductive conflict between "soft" science and "hard" science obscures their complementary contribution to our understanding of the world. The general form of their relationship has been expressed in Hammond's cognitive continuum, on which can be mapped any of the processes by which we gain knowledge of our environment.<sup>2</sup> At one extreme lie true experimental procedures, which demand a high degree of control over possible confounding factors. At the other end lie experiential and non-interventional studies of human behaviour that use the sort of "let it all hang out" approach that so exasperates directors of quantitative research. Pope and Mays's cognitive approaches fit well into this framework (figure).

What is clear from their paper and from everyday experience is that the potential for dispute, although considerable at the experimental end of the continuum, becomes seemingly limitless at the observational end. Where most of life actually happens, however, is in the subjective, soft, and statistically unclear world of human experience



and judgment. Our challenge is to make explicit the basis for the intuitions and judgments that happen there and to make applicable the results of experimental interventions gained under more constrained conditions. For example, the informal decision making that is a component of "surgical signatures" and "practice style" can be made explicit by use of clinical judgment analysis<sup>3</sup> and related techniques, which set the basis for variations in diagnostic and therapeutic judgment on a statistically firm footing. Once made explicit in this way judgment policies can be used to help reach a consensus when unaided discussion fails.<sup>4</sup> This failure may be a consequence of the inability of most experts to describe the policies they operate and consequently the systematic basis for their skill.

Clinical judgment analysis and related approaches have allowed us to probe why doctors' diagnostic and therapeutic decisions vary,<sup>5</sup> what is really meant by a treatment success, and what it is that patients really value (and fear) about the treatments they are given. These are the questions and concerns of the moment. Some of the necessary tools for opening the black box of human judgment are now available. The means of hardening the soft end of the cognitive continuum are now tried and tested. All that remains is for their critical application to be supported by imaginative funding.

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## Aspiration of earwigs from metered dose inhaler

EDITOR,—V S Taskar and colleagues' article on foreign body aspiration as a hazard of metered dose inhalers appropriately emphasises aspects of good inhaler technique.<sup>1</sup> I experienced the problem about five years ago, when I had a bout of wheezing in the late summer. At about 2 am I fumbled across the bedside table for my bronchodilator. After a sharp deep draught on the inhaler I was horrified to experience a disagreeable and wriggly sensation somewhere in the centre of my chest. Rapid and explosive coughing followed, with the production of first one earwig and then, after further excruciating coughing and slight haemoptysis, a second.

Nowadays I am obsessive about checking the gadget, particularly as I use it infrequently. Dust, grit, and "wee beasties" seem to be able to gain admission to the vestibule of the inhaler through the open top of the canister housing, even though the safety cap has been religiously applied.

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