but difficulties have arisen in defining the role of these consultants and resourcing them.

When these consultant posts were set up it was agreed that they should be open to public health doctors, infectious disease physicians, and medical microbiologists. In practice this has not always happened. Some departments of public health medicine clearly want the appointees to cover some or all the functions of the old medical officer of environmental health. Control of infection requires an extensive knowledge of infection and does not sit easily with a multitude of other functions. Problems arise with the post of consultant in communicable disease control, firstly, when appointees have extensive experience in public health other than control of communicable disease and, secondly, when it is realised that there are doctors already working in hospitals who are knowledgeable about the cost of communicable disease in hospitals. Skill is available from microbiologists, and there is no need to move, for reasons of empowerment, control of infection to regional or subregional centres remote from where it is most needed-that is, close to hospitals and local communities.

O'Brien and colleagues make it clear that control of infection is a job for a specialist working with other infection specialists, and we strongly support this view. For several years the Association of Medical Microbiologists has proposed that departments of microbial disease with microbiological, clinical, and epidemiological skill are needed in every health district where there is sufficient work for them. Control of infection in the community and control of infection in hospitals seem to be closely linked and mutual extensions of the same problem, to sit naturally in district departments of infection based in microbiology laboratories, and thus to belong better to providers than purchasers. Like O'Brien and colleagues, we believe that the need for additional medical staff is not great, but other resources such as dedicated staff should be provided and protected.

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- O'Brien JM, O'Brien SJ, Geddes AM, Heap BJ, Mayon-White RT. Tempting fate: control of communicable disease in England. BMJ 1993;366:1461-4 (29 May.)
  Committee of Inquiry into the Future Development of the Public
- 2 Committee of Inquiry into the Future Development of the Public Health Function. Public health in England. London: HMSO, 1988. (Acheson report.)

## Government ignores control of viruses

EDITOR,—J Michael O'Brien and colleagues draw attention to the serious flaws in monitoring the activities of infectious agents in the market led, reorganised NHS.<sup>1</sup> Writing as a diagnostic virologist, I wish to add a further point on behalf of laboratory services.

Because there are comparatively few antiviral drugs there is a risk that confirming the exact cause of a virus infection may be thought to be unnecessary when the major watchword is cost effectiveness. This is to misunderstand the situation. A specific diagnosis will save money in reducing further investigations, antibiotic use, and hospital stay in a proportion of cases. Even more importantly, the major weapon against a virus is an adequate vaccine. The justification for developing it and proof that it works depend on specific epidemiological data-which can be realistically collected only through a comprehensive diagnostic service constantly deployed to identify the viruses circulating in the community. It is impractical to monitor viruses one by one by targeted individual surveys because to do so assumes we know when and where to look for them.

It is this basic need to underpin surveillance by a diagnostic service capable of detecting those viruses active at any one time which is under threat. This is a national need, not a local one, and it is unrealistic to expect market led local services focused on individual patients to underwrite it. For many months I have been trying to get the Department of Health to respond to this question, so far without success. Faced with demands for extra money from all directions, the department seems to be taking the view that there is no need to mend this particular fence until it has collapsed completely, by which time the experienced staff to provide the service will have been lost. Once these staff have been made redundant because local demand is insufficient to sustain their salaries, it will take many years to rebuild the service.

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1 O'Brien JM, O'Brien SJ, Geddes AM, Heap BJ, Mayon-White RT. Tempting fate: control of communicable disease in England. BMJ 1993;306:1461-4. (29 May.)

## Assessing GPs' performance

## Videotape assessment is threatening

EDITOR,—Jim Cox and Helen Mulholland correctly distinguish competence from performance when using video assessment.<sup>1</sup> They seem to have invited patients specifically for the assessment rather than use real consultations.

The West of Scotland Committee for Post Graduate Medical Education has introduced a pilot scheme of assessment into the trainee curriculum this year. This takes the form of an end point or summative assessment, part of which uses videotapes of real consultations. It is possible that in future a poor assessment will mean that the doctor will not be given a certificate of satisfactory completion for the year, thus becoming unable to become a principal in practice. It is obvious that this process is inherently threatening.

Approximately 200 hours of consultations a year will be recorded for use in this scheme. The use of real consultations raises new issues. These are confidentiality; changes in patient behaviour; and changes in trainee and trainer behaviour.

The possibility of breach of confidentiality has to be considered and the responsibility for such a breach clearly defined. Ownership of such a record of the consultation might well be another area of contention.

All students are aware that patients' behaviour will alter when they are in an examination. Some will be helpful, others obstructive. It is likely that the relationship built up with a trainee will alter the patients' approach during summative assessment.

For the trainee, the setting of another agenda within the consultation (namely, the passing of an examination) will reduce the quality of communication for many patients. Adding such an agenda to a consultation is a bad example to set to those being trained.

More than half the trainers in the Ayrshire and Wigtownshire group have written expressing serious objections. Threat of career disruption, however remote, will result in inappropriate behaviour, and it is probable that communication with patients will suffer. The committee's response to objections has been to ask for evidence that such damage has occurred. Since no one until this study has attempted to assess objectively the quality of a consultation by using video techniques, this response seems irrational.

Cox and Mulholland make a useful addition to the debate but have not advocated the use of video in summative assessment of using real consultations. In their study trainers seemed to be reliable assessors. Perhaps this suggests that such assessment could be made within the practice rather than elsewhere. If this is so, then threat (perceived or otherwise) induced by the process could be minimised and competence, rather than performance, properly judged. We hope that any further study will consider these issues.

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1 Cox J, Mulholland H. An instrument for assessment of videotapes of general practitioners' performance. BMJ 1993;306: 1043-6. (17 April.)

## Authors' reply

EDITOR,—L M Campbell and T S Murray's letter<sup>1</sup> raises questions about our videotape assessment instrument.<sup>2</sup> Firstly, if the method is to be used for summative assessment—that is, to help to decide if a doctor is competent—how many consultations must be assessed by how many markers to achieve generalisable results?

Using generalisability theory' as the statistical model, we estimated the variation arising from both controllable sources: the number of videotaped consultations and the number of markers. Generalisability coefficients were calculated with the GENOVA (general purpose analysis of variance) program, version 2.2. An acceptable coefficient of 0.80 or greater<sup>4</sup> was achieved for six consultations and eight markers; seven consultations and seven markers; and eight consultations and six markers. For example, for summative assessment of one trainee, a group of six trainers should watch eight consecutive consultations, each trainer scoring each consultation independently.

The second question applies to assessment of random consultations. Of course, priorities vary from one consultation to another. However, whether the patient presents with a myocardial infarction or a psychosexual problem, attributes such as listening to the patient, picking up body language, explaining the diagnosis, inspiring confidence, and making a safe diagnosis and management plan are general attributes of a good doctor. The instrument was validated on the strengths and weaknesses of the doctor, not the consultation.

In their letter, A G Baird and J C M Gillies stress the importance of obtaining consent from patients and of treating tapes as confidential. We used real consultations and made the purpose of the recording clear on the consent form. There is no objective evidence that videotaping affects doctors' or patients' behaviour.<sup>50</sup> The method is suitable for formative assessment. For summative assessment, however, several markers must score several consultations.

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 Campbell LM, Murray TS. General practitioners' performance. BMJ 1993;306:1417. (22 May.)
Cox J, Mulholland H. An instrument for the assessment of

- 2 Cox J, Mulholland H. An instrument for the assessment of videotapes of general practitioners' performance. BMJ 1993; 306:1043-6. (17 April.)
- 3 Brennan RL. Elements of generalizability theory. Ames, Iowa: ACT Publications, 1983.
- 4 Van der Vleuten CPM, Swanson DB. Reliability issues in objective structured clinical examinations. In: Hart IR, Harden RM, Des Marchais J, eds. Current developments in assessing clinical competence: proceedings of 4th Ottawa conference on assessing clinical competence. Montreal: IRH Medical, 1992: 66-78.
- 5 Pringle M, Stewart-Evans C. Does awareness of being video recorded affect doctors' consultation behaviour? Br J Gen Pract 1990;40:455-8.
- Pringle M, Robins S, Brown G. Assessing the consultation: methods of observing trainees in general practice. BMJ 1984;288:1659-60.