

variations, and the other is that no idea is given of the outcome in the various groups.

The paper is useful in classifying antibiotic prescribing, but there must surely be well-conducted clinical trials (which on the evidence Dr Howie presents could ethically be double-blind) before we can tell whether the agreement on clinical care is justified. Are the younger doctors being over influenced by the advertisers?

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REFERENCE

Howie, J. G. R. (1973). *Journal of the Royal College of General Practitioners*, 23, 895-904.

DELAY PATTERN ANALYSIS IN CLINICAL AUDIT

Sir,

Hodgkin may be right in the November *Journal* in suggesting that the main impetus for evaluation must come from the doctor himself. However, in proposing delay pattern analysis (DPA) as a method of evaluating clinical performance, he has ignored some basic issues.

(1) "*Delay is capable of measurement*"

This is literally, of course, true; but what of the accuracy and reliability of measurement?

Delay in reporting. Measurement here is based on the assumption that delay is to be measured from the onset of particular symptoms or symptom-clusters: e.g. cough—carcinoma of bronchus; altered bowel habit, blood mucus—carcinoma of rectum.

This assumption is plainly untenable—as is well illustrated by his own comment that "... in almost every case, the long delays arose because the carcinoma (of lung) arose in someone with already established chest disease". Equally difficult to accept are his periods of patient reporting delay in myxoedema—for the same reason.

Delay by the doctor. This too, has major difficulties in measurement. Delay of what? The answer in his Fig. 1 is "before action is taken": in table 5 it is "diagnosis". Yet vigorous early action may paradoxically delay diagnosis (e.g. his statement "a high index of suspicion may be counter-productive by leading to early, falsely negative, results") and accurate diagnosis may even delay effective action (e.g. his patient whose carcinoma of breast lay untreated for 26 weeks because of four previous negative biopsies).

The importance of what is here being measured may thus be obscure. So, in many situations, is its end point.

Before concluding that "the widespread circulation of similar delay pattern analyses by interested doctors . . . has considerable potential". Hodgkin must demonstrate that the measurements of delay for a given situation have high reliability in the hands of multiple observers. However much self-motivated criticism reduces distortion or manipulation of "key facts", the matter of observer variation must be considered.

(2) *Delay is capable of analysis*

True again, but the analysis of such uncertain measurement serves only to compound confusion.

(3) *Consensus criteria*

"If DPA is performed . . . by different doctors, it is possible to produce a consensus picture that will allow doctors to evaluate their own performance".

This is true but only in consensus terms. And this may be counter productive. Thus, for example, by deciding to x-ray the chest of every cigarette-smoking male patient complaining of cough, the stomach of every patient complaining of ulcer type dyspepsia, the doctor could doubtless improve his DPA ratings in competition with his peers.

But whether this would represent an improvement of care is perhaps questionable.

Before we rush into delay pattern analysis perhaps we should pause and think about observer variation, reliability, validity and consensus criteria. Clinical audit is far too important a subject to do otherwise.

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IMPORTANCE OF GENERAL- PRACTITIONER LISTS

Sir,

Dr Donald Crombie (December *Journal*) emphasises the significance of the general-practitioner lists as the one basic unit of population in the health service—the one exclusive sub set—in relation to records and research. I should like to re-iterate its importance to the planning of services and buildings. Trying to plan for primary care in relation to arbitrary geographical areas, when real units—the general-practitioner lists—already exist, is both laborious and unsatisfactory.

Not only do these real units exist, but machinery for their maintenance and checking is in continuous operation and its margins of error are known: the size and content of every unit is always currently available, without the need for extrapolation from intermittent surveys. By using the general-practitioner lists planners can take account of the patient's freedom to choose his own doctor, whereas when services are provided in relation to a geographical area economic considerations require that all residents of that area be persuaded to use the appropriate centre. This element of direction runs counter to a basic principle of primary care, and it also weakens the motivation, which competition supplies, towards maintaining and raising standards of care.

Crombie asserts that "at the main level of regions and areas no problems of incongruity of populations will arise." This will only be true in so far as the districts can solve their boundary problems, and at present the complicated administrative arrangements necessary to allow attached