an important focus on which community care efforts may be based. Suffice to say, psychiatrists will need to provide a service worth buying. Although this will not be easy for either discipline, improved treatment for patients must remain the goal.

There may be confusion about who carries clinical responsibility, particularly if the general practitioner has an interest in psychiatry.[13] The Royal College of General Practitioners, although somewhat equivocal in its recommendation, favours overall responsibility by the general practitioner.[23] When asked, however, most general practitioners prefer clinical responsibility for patients to remain with the psychiatrist.[15] Guidelines are needed, preferably at local level, whereby clinical responsibility for physical and psychiatric problems, as well as out of hours emergencies, is clear and unambiguous.

Lastly, shared care needs to be worked out at a college level and fortunately this is already under way. Over the past 12 months a working party, incorporating members of the RCGP and Royal College of Psychiatrists, has been meeting to formulate joint recommendations for the shared management of patients with chronic mental illness. Members of this working party plan to produce a document that will outline how the two specialties might best work together in the future, as well as detailing ideas on shared care that can be applied to local services to enhance the care for patients with chronic mental illness.

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Desktop laboratory technology for general practice

DESKTOP analysers are becoming increasingly available in general practice and a comparison of the use of four such analysers appears in this issue of the *Journal*.[1] This increasing availability should make us think again about the clinical information needed to make diagnoses and solve problems in the surgery. The main sources of information are the patient's history, the examination and the results of tests. Will the availability of on site tests alter the balance between these categories?

Tests extend our clinical skills by allowing us to analyse body fluids and in effect to see inside the patient. Our profession has been party to an effective public relations campaign, which over two generations has persuaded many patients that science can solve the mysteries of health and disease. This means that even ordering a test can be therapeutic, whatever the result. We must beware of pseudo-science; tests often give a numerical result which implies a comforting, if spurious, accuracy for our clinical reasoning which is so often beset by uncertainty. Such apparent precision is seldom offset by feedback from expert colleagues in the laboratories who are more aware of the limitations of their techniques.[2] On the other hand experienced general practitioners do seem to be aware of the limitations of tests; full time general practitioners use fewer tests than part time general practitioners or trainees.[3]

Until recently most laboratory testing has been carried out in hospitals without budgetary consequences for the general practitioner. General practitioners have come to assume that open access to tests is their right but any assumption that more necessarily means better, which seemed appropriate when general practitioners had to fight for access, should now be challenged.

With open access, the only deterrents to ordering tests are the inconvenience to patients, especially if they have to attend hospital for venepuncture, and the inconvenience for doctors and nurses of collecting specimens and arranging transport to the laboratory. Tests using desktop laboratory technology bring increased convenience and, with the advent of fundholding, they may also be financially attractive if they can be provided cheaply enough. However, Hobbs and colleagues point out that the latter

may not be true for diagnostic testing unless relatively large numbers of tests are ordered; a striking finding of their study was the number of analyses needed merely for quality control which may limit desktop analysis to frequently used tests.[1] Thus, a further, hidden cost, in terms of both time and money, is the responsibility for quality control emphasized by Stott;[4] up to now we have been able to leave this to our colleagues in laboratory medicine. If practices do buy or lease desktop analysers they may feel pressure to order more tests to justify their investment. Patients may also wish to take advantage of equipment which is on view in the consulting room or treatment room.

Until a wider range of tests is available and the need for frequent quality control tests is reduced it may thus make little sense to set up new systems separate from professional laboratories. As Hobbs and colleagues point out, it may be preferable to invest in better forms of communication with laboratories, such as fax machines and computer links, allowing quicker access to the results.[1] Decentralization could perhaps be considered as part of a more general package where a range of specialist services are available on general practice premises, close to the patients.

Testing in general practice may be more appropriate for monitoring than for diagnosis, for example in antenatal care or control of diabetes. This is particularly relevant where desktop technology can give a rapid result, during the consultation.[5] Indeed, blood glucose testing strips have already helped shift much diabetes control from hospital to the patient's home. Demand for monitoring tests is easier to predict and there may be more agreement about the interpretation of results. However, we must beware of becoming committed to the use of the technology we have invested in; even the use of simple weighing scales is now being queried in antenatal care.[6]

Screening is a seductive field for testing in general practice. The ready availability of portable cholesterol testing equipment on free loan has already spawned a new cholesterol screening industry. Unfortunately this has happened in advance of the necessary understanding which would allow us to interpret the results for our patients.[7]

Testing using desktop laboratory technology may change other aspects of clinical behaviour. Immediately available test results would end the option of closing a consultation by handing the insistent patient with non-specific symptoms a laboratory request form rather than the traditional prescription, in order to gain diagnostic and therapeutic time. In the long term this should encourage a more honest response to such problems, but it may take both physicians and patients time to adjust.

Some important questions about desktop testing have yet to be answered by relevant research. While testing has been based in hospitals it has been effectively rationed by its inconvenience, with the result that laboratory services primarily serve patients attending hospitals and research into predictive values has been carried out on this selected population. Ideally, the practising general practitioner needs good information about the predictive values of tests in each specific clinical situation. Such is the variety of general practice that it will take years to carry out the necessary research. Even so, a more widespread awareness of the meaning and application of terms such as sensitivity, specificity and post-test probability will encourage a suitably critical attitude to testing much sooner.[8]

Even in hospital the role of the laboratory has too often been exaggerated at the expense of the clinical history.[9] In general practice we still have relatively little idea how much use to make of laboratory tests in diagnosis; some progress is being made, however. The extensive literature on testing urine for infection has suggested more than once that use of the microscope with its low running costs might increase confidence in diagnosing bacteriuria,[10,11] but, even this diagnosis is not an end in itself, and must be considered alongside the history.[12] The erythrocyte sedimentation rate has been evaluated by Norwegian general practitioners — the results were perceived to influence clinical decisions in three quarters of cases.[13] A prospective study with three month follow up in the Netherlands gave useful guidelines about the predictive value of the erythrocyte sedimentation rate for malignancy and for inflammatory pathology; clinicians need to be clear whether they are trying to demonstrate disease or to rule it out.[14] An illustration of the scale of the diagnostic problem faced by general practitioners in the case of cancer is provided by Nylenna's work in Oslo.[15] He found that for each patient eventually verified to have cancer, the general practitioner had initiated follow-up actions for more than 10 other patients where this was not confirmed; tests were ordered for 50% of these patients.

Naturally there are differences between individual general practitioners in their use of tests,[3] for as yet we are at an early stage of understanding the relative contributions of history, examination and tests to our clinical practice. Similar differences occur for other clinical activities such as prescribing and referral. Ideally each practice's decision whether to invest in a desktop analyser or any other on site test should be based on appropriate clinical research, or failing that on clear professional reasoning. However, if the stimulus of the increasing availability of desktop analysers encourages us to audit old habits and reassess our clinical method then all our patients should eventually benefit.

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