while always maintaining highest medical standards. How best to achieve this will vary depending on local needs, interests, skills, and geography, and the only way forward is by dialogue, collaboration, and cooperation. Departments that remain blinkered and defensive will not serve the community and are more likely to wither while their populations continue to be at risk.

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Calculating drug doses

Mass concentration can't be used universally

EDITOR,—S Rolfe and N J N Harper draw attention to the NHS specification for ampoule labels and suggest that all drugs should be measured as mass concentration.[1] The original work that was undertaken on ampoule labelling arrived at the same conclusion.[2] Wider discussions with practitioners when the NHS specification was being prepared highlighted potential dangers of making the changes that Rolfe and Harper now request. The NHS specification also recognises that many biological products—for example, vaccines—cannot be defined in terms of mass concentration.

Lee Baldwin suggests that adopting a standard for type size might enable more information to be placed on ampoule labels.[3] The particular problem with ampoule labels is their small size. The information on the labels needs to be kept to a minimum so that essential information, defined in the NHS specification as volume, generic name, amount, route(s) of injection, and expiry date, are clearly legible.

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Teaching of undergraduates must be improved

EDITOR,—I have always found it curious that the drugs whose concentrations are most likely to be expressed as per cent or as 1 in x thousand are also the most important drugs used in resuscitation. One can speculate on the reluctance of the appropriate authorities to tamper with the presentation of such important drugs, yet it comes as no surprise to find that most doctors are unable to deal with these expressions of concentration effectively.[1] Although anaesthetists scored highly in the survey of S Rolfe and N J N Harper,[1] I believe that the results of the survey reflect poorly on our specialty.

The performance of anaesthetists in the survey merely illustrates the importance of familiarity in being able to make these simple calculations reliably. Most of the staff called on to use these drugs in the emergency setting, however, do not have this same benefit of familiarity. Until we express all concentrations as mass per unit volume, as Lee Baldwin suggests,[2] we should ensure that all medical staff, and in particular junior doctors involved in resuscitation, are able to use the current units of concentration correctly. This responsibility must fall to anaesthetists since medical students receive most exposure to drugs whose concentrations are expressed in this way when they are being taught anaesthetics. Unfortunately, in my personal experience, from several different regions, this does not happen at present. Whereas most medical students reaching the end of their anaesthetic module will, for example, be able to describe the differences between various neuromuscular blocking agents, they cannot even begin to explain what is meant by a 2% concentration of a drug. More seriously, nobody has ever explained the expression to them, let alone emphasised it.

My impressions are borne out by the current survey, which suggests that, in addition to improving the expression of drug concentrations, we might also ensure that current teaching of undergraduates provides the best preparation for routine clinical practice.

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Provision of screening for Down's syndrome

EDITOR,—There are no official statistics on the extent or type of maternal serum screening for Down's syndrome. An ad hoc survey found that in 1991 one third of pregnancies in Britain were screened, less than half for multiple markers.[1] We have obtained more recent data from the United Kingdom national external quality assessment scheme for screening for Down's syndrome.

The primary purpose of the scheme is to monitor analytical and interpretive quality, and currently 78 laboratories participate. Although there is no legal requirement to join the scheme, participation is a condition for accreditation of the laboratory. Each month samples are distributed for assay of concentrations of αfetoprotein, unconjugated oestriol, intact human chorionic gonadotrophin, and free β human chorionic gonadotrophin as appropriate.[2]

A questionnaire was included with the samples distributed in November 1994, requesting the annual number of pregnancies in the geographical area served, the number of women screened annually, and the current weekly number and size of analytical batches tested. The product of the batch number and size multiplied by 52 is an indirect estimate of the laboratory's annual throughput of specimens. All but 10 questionnaires were returned.

The number reported as being screened annually was 354 549, or 44% of the estimated 802 230 pregnancies (from projections of births in the United Kingdom,[3] increased by 2% to allow for late miscarriages). If it is assumed that the laboratories that did not respond to the questionnaire had similar screening activity to those that did respond, 51% of pregnancies will have been screened.

The total reported laboratory throughput was 423 072 specimens (table), nearly all of which were tested for multiple markers; this figure is one fifth greater than the number of pregnancies reported as screened. While part of the excess is accounted for by repeat testing, most will be due to throughput being a better reflection of recent increases in screening activity. On this basis the proportion of pregnancies screened may have increased to almost 60%.

Laboratories' annual throughput of specimens according to combination of markers used

Combination of markers	No of laboratories	Annual throughput
AFP alone	1	4 316
AFP and intact hCG	35	208 728
AFP and free β hCG	22	121 160
AFP, unconjugated oestriol, and intact hCG	6	54 184
AFP, unconjugated oestriol, and free β hCG	4	34 684
All	68	423 072

AFP = α fetoprotein; hCG = human chorionic gonadotrophin.

Not all laboratories were able to give the number of pregnancies in their geographical area, but those that could reported a total of 485 022, with 321 069 (66%) being screened. This proportion is an estimate of the rate of uptake in areas where screening is offered, but it is a minimal estimate since the offer may be restricted, for example, to older women.

Provision of maternal serum screening for Down's syndrome has changed considerably in recent years: it has become extensive, and more markers are being used. Our survey shows that the information needed to assess current practice can be readily obtained from the United Kingdom national external quality assessment scheme. We suggest that this source be used to monitor any future changes.

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Ongoing electronic conference is available for general practitioners

EDITOR,—The importance of the Internet has already been recognised in public health,[1] and Coiera points to the potential of the Internet as an enormous information resource, to which the *BMJ* now contributes.[2] Tony Delamothe suggests that the *BMJ*'s presence on the Internet may also change the one to many relationship that the journal has with its readers.[3] As well as reading web pages, "net surfers" with shared interests can correspond by joining a listserver, which is an ongoing electronic conference.

Mailbase is the main electronic mailing list service in the United Kingdom, and it enables groups to manage their own discussion topics (Mailbase lists) and associated files. The service is run by a dedicated team based at Newcastle University and is funded by the Joint Information Systems Committee of the Higher Education Funding Councils for England, Scotland, and Wales. A Mailbase list specifically discusses

general practice in the United Kingdom. Called, imaginatively, GP-UK, the list is run by collaboration between the Sowerby Unit for Primary Care Informatics at Newcastle University and the Primary Health Care Specialist Group of the British Computer Society. GP-UK deals with topics such as clinical research and medical informatics, with specific reference to British general practice. Within its first six months it has over 150 members. Views from outside the United Kingdom are also welcome, and, indeed, the list includes members from Europe, Australia, and the United States. To join simply send an email message containing the following command to mailbase@mailbase.ac.uk:

join gp-uk <firstname> <surname>
stop

A few words of caution may be appropriate amid the euphoria, however. As interest and traffic increases, discussion lists are in danger of becoming swamped: the bulk of information becomes too daunting for regular readers, who then cease to contribute. In response, list owners may become in reality editors, producing a regular digest of important contributions, or the list may have to be divided into daughter lists covering specialist subjects.

This all requires human and financial resources. We are grateful to Mailbase for its support, but this can be maintained only for as long as the list is perceived to be academic rather than clinical. As interest broadens and deepens additional resources will be required.

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Helping health services in the developing world

EDITOR,—Michael Harper outlines an excellent example of a mutually beneficial relationship between general practice in Britain and a community health scheme in rural India.[1] We too are engaged in giving help to the health services in part of the developing world. Current development theory equates sustainable development with economic self sufficiency. Our experience, like Harper's, is that it is more a question of "holistic interchange." With the meagre resources available to the health service in a country such as Nepal, insisting on economic self sufficiency is equivalent to doing nothing (or, at least, very little) while Rome burns. There is no realistic prospect of adequate government funding of the health service in this part of the world within the next several decades.

Western health centres should not allow concern about continuing financial burdens to prevent them from exploring the rich experiences, both personal and professional, available through contact with a southern health programme. Nor should general practitioners balk at helping overseas district hospitals, which are often of equivalent scope to group practices, with similar problems and novel solutions—we are all engaged in primary health care.[2,3]

Would that there was some kind of exchange for interested parties to make contact, as Whiteladies Healthshare Project has done. Social workers with their initiative are, alas, too rare. We would certainly welcome any interest in our work in the district general hospitals of this remote area of Nepal.

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Effects of drinking green tea

EDITOR,—The *BMJ* is regarded as one of the most important journals for original medical research in the United Kingdom and often acts as a source of information for the lay press. The fact that K Imai and K Nakachi's paper was accepted for publication reflects badly on the journal's peer review system.[1] The paper states that "green tea may act protectively against cardiovascular diseases and disorders of the liver." This is based on the observation that drinking more than 10 cups of green tea a day changes the mean alanine amino transferase concentration to 19·9 from 24·1 U/l in patients drinking less than three cups a day.

I would be interested in the evidence that an alanine amino transferase concentration of 19·9 U/l indicates a reduced risk of liver disease compared with a concentration of 24·1 U/l, both of which lie well within the normal range for this variable. We are also told that the cholesterol concentration was 4·58 mmol/l in the high consumers compared with 4·85 mmol/l in the low consumers and that this again represents a significant reduction in the cardiovascular risks. While this lowering may be statistically significant, I defy the *BMJ* to show evidence that it is of any clinical significance.

The *BMJ* has a responsibility to publish only well researched studies with valid conclusions. This paper shows that it is failing in that duty.

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1 Imai K, Nakachi K. Cross sectional study of effects of drinking green tea on cardiovascular and liver diseases. *BMJ* 1995;310: 693-6. (18 March.)

CD4 cell counts used as surrogate test for HIV infection

EDITOR,—The Haematological Malignancy Diagnostic Service in Leeds provides a diagnostic service for patients with suspected haematological malignancy in Yorkshire. Recently, we have become aware of increasing numbers of requests for CD4 cell counts. On further investigation we have found that in most instances these investigations have been requested as a surrogate for serological testing for HIV infection.

Knowlege of the CD4 cell count is useful only in monitoring the progression of disease in patients who are known to be infected with HIV. The count may be normal or decreased in HIV infection and in a wide range of other infective or immunological conditions. If HIV infection is suspected the CD4 cell count is of no value in either confirming or excluding the diagnosis.

Explicit informed consent should be sought before an HIV test is performed, and facilities for counselling are made available to the patient should the result be positive. Some clinicians may consider that a request for a CD4 cell count circumvents the need for consent and counselling, especially in those in whom they have only a low index of suspicion of HIV infection. When they fail to request the definitive test such a suspicion may persist and be conveyed to other health professionals in contact with the patient. This may ultimately be detrimental to the delivery of effective health care to the patient. The confidentiality that patients suspected of having HIV infection have a right to expect may be compromised.

It has also been our experience that requests of this type rarely contain accurate clinical information, and samples are seldom labelled as a potential infection hazard. This constitutes a risk to a wide range of staff, including phlebotomists, medical laboratory assistants, and technologists.

We recommend that laboratory staff should always verify the reason why a clinician has requested a CD4 cell count. Samples sent from a surrogate HIV test should be discarded in the interests of good patient care and laboratory safety.

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General practice's last stand

EDITOR,—As the author of the discussion document from the BMA's General Medical Services Committee on core general medical services and the classification of activity by general practitioners,[1] I wish to respond to D P Kernick's attack on the document as "a milestone in our professional decline."[2] Kernick, who targets not only me but also the president of the BMA and the chairman of its council, portrays the discussion paper as futile, misconceived, anachronistic, and the product of a bunker mentality. While Kernick purports to have positive ideas about the future of general practice, the article seems to be singularly negative and lacking in faith.

The author's case seems to be that doctors should now no longer be paternalistic but should work in partnership with their patients; that the quality of care should be improved; and that general practitioners will increasingly have to develop business and managerial skills and a role in assessing need and in planning, managing, and delivering services accordingly. How Kernick conceives that I, the GMSC, or the discussion document espouses contrary views I cannot imagine.

Kernick's contention that "virtually all change has been imposed from without and almost universally characterised by professional antagonism" rewrites history with a vengeance. I would contend that the three greatest developments in general practice since the inception of the NHS have been the introduction of the Cameron contract in 1966, of mandatory vocational training in 1979, and of commissioning of care in 1991. The first two of these developments were the direct result of pressure from general practitioners, in which the GMSC took a leading role. Only the most recent development met with opposition from most general practitioners before its introduction, and, whatever the different attitudes to fundholding that remain, the commissioning role that is available to all practitioners as a result of the