transplanted into primary care after a brief introductory course. Continuing education will therefore be crucial if the teams are to deliver a reasonable standard of care, integrating health promotion and treatment of common diseases. If such a programme cannot be developed quickly there is a danger that teams will function poorly, provide perfunctory care, and rapidly become demoralised.

A lively debate is growing between those who see primary care professionals as having a mainly clinical role similar to that of the American family physician and those who have a broader vision. Under this broader vision primary care teams would be responsible for the health of the population, epidemiological surveillance, and an active programme of collaboration with the community to try to solve basic health problems such as sanitation and malnutrition. It seems clear that this latter approach is more appropriate for the most needy communities in Brazil.

Because of the size of Brazil some parts of the programme may have to be delivered by means of a distance learning approach. Others, particularly in the larger cities, could be based on existing or developing training programmes. There is also a need to develop vocational training programmes for doctors and nurses who wish to make a career in primary care.

At a recent conference at Santarem discussions were held about collaboration between Brazil and Britain in training people for this ambitious programme. The British Council in Brazil has already sponsored exchange programmes in health care⁵—for instance, between Porto Alegre and University College London Medical School and between Natal and the Institute of Child Health in Bristol. It is keen for more collaboration to help the development of the family health programme. Clearly, it would be inappropriate to transplant the British experience to Brazil. Nevertheless, some experience of British general practice may be relevant, particularly postgraduate training, the multidisciplinary team approach, and the strong role of the general practitioner as gatekeeper to hospital services. The development of an appropriate referral system in Brazil will be a key factor in determining the success of primary care and in curbing the excessive

expenditure on hospitals. At the same time no collaborative programme should be one way, and Britain can learn much from the emphasis on community involvement and community diagnosis in some of the better established Brazilian primary care programmes.

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Corneal transplantation in Britain

Organisation is good; clinical outcome should get better

Over 3000 corneal transplant operations are performed each year in Britain, making this the commonest type of allografting. In most procedures a full thickness corneal button, about 8 mm in diameter, is removed and replaced. The change from using fresh tissue (within 24 hours of death) to stored tissue during the 1980s converted keratoplasty from an out of hours procedure to a mainly planned, routine operation. Cold storage (for up to 8 days at 4°C) and organ culture (for up to 30 days at 34°C) both allow for planned surgery. Organ culture allows a reserve of tissue for genuine emergencies and affords ample time for the required routine screening of donors for hepatitis B and C viruses and HIV. Extra advantages may follow the more widespread matching for HLA types.

After initiatives in the United States, Denmark, and the Netherlands, Britain's Corneal Transplant Service, based on banks in Bristol and Manchester, began in 1986. It now offers to accept, store, and issue material throughout Britain and the Republic of Ireland. Other banks, including those at Moorfields Eye Hospital and the corneoplastic unit at East

Grinstead, send surplus tissue to the service, where longer storage times avoid wastage of tissue. In 1994 the Corneal Transplant Service attracted central funding from the Department of Health; it is administered by the United Kingdom Transplant Support Service Authority.

The coordination of activity has allowed collation of data on over 3000 grafts transplanted between 1987 and 1991 and followed up for one year. This first analysis of activity in Britain not only emphasised the impact of irregular corneal curvature (astigmatism) on visual acuity¹ but is a timely contribution to the international debate on tissue matching² fuelled by the results of other large studies in North America,³ Australia,⁴ and continental Europe.

Although results are best in patients with keratoconus (about 90% of grafts survive five years), nearly half the grafts in heavily vascularised recipients will fail within five years.⁵ The comfortable notion of full "immunological privilege" for the cornea was dispelled some years ago; topical immunosuppression has significantly improved outcome in high risk recipients, but the influence of tissue matching remains controversial.²

In a recent North American study, matching for HLA type did not reduce rejection in recipients who followed a rigorous protocol of topical steroid treatment.⁶ Interestingly, this study found that ABO blood group compatibility improved survival of the graft. In Britain the most cited work on the benefit of HLA matching in corneal grafting comes from East Grinstead.⁷ More recent reports from mainland Europe suggest benefits for matching for both class I (HLA-A,B,C)⁸ and class II (HLA-DR,DQ,DP)⁹ antigens. Data from the British corneal transplantation follow up study show that, when the fact that high risk patients often receive grafts matched for HLA type is controlled for, the risk of rejection rises with increasing mismatches for HLA-A and HLA-B specificities.¹⁰ Surprisingly, the opposite was true for HLA-DR mismatches. A true biological basis for this dichotomy of an effect for HLA class I but not class II antigens may exist as a similar observation has been reported from another study in corneal grafting¹¹ and in liver transplantation¹². Alternatively, poor definition of HLA polymorphisms, particularly for class II, would prevent accurate assessment of the matching of donor and recipient HLA types in corneal grafting.

Although considerable progress has been made in elaborating the mechanisms of rejection of corneal grafts,¹³ the confusion of data that currently faces eye surgeons¹⁴ required to manage high risk patients needs resolution now. Notwithstanding increased cost and a delay in surgery for some patients, class I matching should be defined (as, for example, no more than two mismatches) and should be made available only to carefully defined at risk patients—for example, recipients with deep corneal vascularisation or previous immunologically mediated failure. Prospective studies are still required to address the relevance of class II antigens¹⁵ by using molecular biological techniques that identify allele polymorphisms, ABO group matching, and sensitisation in patients who have received a corneal graft previously.¹⁶ The design of the studies should take into account the several studies already published or under way so that results are amenable to meta-analysis.¹⁷ A consensus on topical immunosuppression after transplantation would also be welcome.¹⁸

The network of a limited number of eye banks now underpinned by central funding has an economy of scale that will keep unit costs per cornea low compared with those in other countries. In addition, it will help to protect the service from the bureaucracy and fragmentation of the internal market. The prospects for most patients currently awaiting corneal transplantation in Britain are good, and those for high risk patients should continue to improve.

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Recertifying general practitioners

If not now, when? If not this, what?

In two weeks' time general practitioners from Britain's 117 local medical committees will have to make up their minds about reaccreditation—not whether it is a good idea, but whether the detailed scheme drawn up by the General Medical Services Committee fits the bill. It proposes that all general practitioners should have an educational performance review by a trained general practitioner "mentor" each year and should undergo assessment by a regional reaccreditation team every five years. This team would be accountable to a national reaccreditation council.

Although general practitioners generally support reaccreditation^{1,2} and both the Royal College of General Practitioners and the regional advisers in general practice have welcomed the GMSC's initiative, the proposal has already come under fire. Criticism has focused on the substantial extra workload for tutors and regional advisers, the costs, and the timing.^{3,4}

These salvoes are unsurprising, but reaccreditation, or recertification (the preferred term when the process is applied

to individuals rather than practices) is an issue that cannot be side stepped. It may lack the immediacy of the out of hours dispute, but the implications are more far reaching. The pace of change in medicine and the pressure on doctors from all sides to practise high quality, cost effective medicine throughout their professional careers are mounting. The demand for tangible evidence that they are doing so will increase. The debate has thus moved on from whether recertification is desirable to how to do it.

There is a clear consensus that the process should be professionally led, not imposed by the government. Explicit national standards need to be set and competence and performance against these standards assessed in a non-threatening way, by fair and consistent methods. Peer review of various components of practice including medical audit is regarded as far preferable to any form of knowledge based assessment.⁵ The aim of the process should be positive, not punitive—to encourage self learning and help general practitioners to keep their knowledge and skills up