Health. Unfortunately, the full document cannot be released because details relating to terms and conditions of service and other aspects of the unified training grade have not yet been announced. The Department of Health has indicated to the joint committee that this information will not be ready until next spring after extended national negotiations.

Certainly, with regard to surgery all the delays in the implementation of the Calman report can be linked to the Department of Health and not to the profession. In Richard Smith's interview with Dr Kenneth Calman, the chief medical officer, Dr Calman claims that if doctors "get their act together they will be listened to."[2] The implementation of this report remains uncertain because the Department of Health has not got its act together despite exhortations from professional bodies such as the Joint Committee on Higher Surgical Training.

GEOFFREY D CHISHOLM
Chairman,
Joint Committee on Higher Surgical Training, 1991-4

University Department of Surgery and Urology,
Western General Hospital,
Edinburgh EH4 2XU

1 The BMA's annual representative meeting. *BMJ* 1994;309: 200-5. (16 July.)
2 Smith R. Challenging doctors: an interview with England's chief medical officer. *BMJ* 1994;308:1221-4. (7 May.)

Inequality of health

EDITOR,—Peter Phillimore and colleagues described a widening gap in the mortality ratios between the most and least deprived electoral wards in the Northern region.[1] Both groups of wards showed a fall in mortality from 1981 to 1991, but the fall was greater in the richer wards. Dermot O'Reilly gives good evidence that similar "gaps" between the councils of Northern Ireland are related to healthy people leaving a council and increasing the role of unhealthy people.[2] I suggest that younger adults should be substituted for healthy people and older adults for unhealthy people. It is a natural trend for young people to move and also basic housing policy.

The table shows the mortality (not mortality ratio) per 1000 adults in each age group in England and Wales and the Northern region; postneonatal mortality is included for comparison. The number of deaths by age group in one of the poorest districts in the Northern region (Gateshead) is also included. The regional and national figures show a gradual rise from 45-54 years, but this becomes pronounced only from 55-64 years. Regional figures are higher than national figures. The figures for Gateshead show that 65% of the deaths under age 65 occurred in people aged 55-64 and that 86% of the deaths under age 75 occurred in people aged over 55. So mortality in adults now relates strongly to elderly people.

To study mortality properly we must look at causes, not just risk factors. In people aged 15-44 the chief cause of death for years has been accidents and other forms of violence, especially in males, but the proportion of the total remains small. From age 45 the main causes of death are malignant neoplasms and the results of arterial obstruction in various organs resulting from hypertension. For coronary heart disease (deaths from which are now rapidly falling in the United States and Britain), smoking and obesity are powerful precursors. Both are mainly related to personal behaviour.

Most premature deaths of adults are now due to malignancy or degenerative vascular disease. Social deprivation still exists but leads more to misery than to death.

R R GORDON
Retired consultant paediatrician

Halstead,
Essex CO9 1SF

1 Phillimore P, Beattie A, Townsend P. Widening inequality of health in northern England, 1981-91. *BMJ* 1994;308:1125-8. (30 April.)
2 O'Reilly D. Health and social inequality in Europe. *BMJ* 1994;309:57-8. (2 July.)
3 Office of Population Censuses and Surveys. *Infant and perinatal mortality, England and Wales 1981-92.* London: HMSO, 1985-93. (DH3 series.)
4 Office of Population Censuses and Surveys. *Mortality statistics, England and Wales, cause, 1981-91, 1992.* London: HMSO, 1983-93. (DH2 series.)
5 Office of Population Censuses and Surveys. *Mortality statistics, England and Wales area microfiche.* London: HMSO, 1983-94.

Mortality per 1000 adults by age in England and Wales and Northern region 1981-92, and number of deaths by age in district of Gateshead in Northern region in 1990 only. Postneonatal mortality (per 1000 live births) is included for comparison[3-5]

	Postneonatal mortality	Mortality by age group (years)					
		15-24	25-34	35-44	45-54	55-64	65-74
England and Wales	3·3	0·8	0·9	1·7	4·3	13·4	29·4
Northern region	3·6	0·8	0·9	1·8	5·0	16·5	43·9
Gateshead district	3·8	16	12	37	106	325	733

Teaching students in the community

EDITOR,—Diane Plampling and Angela Towle are right to highlight the potential for teaching in community health service trusts.[1] The potential for community based teaching is wider then they suggest. We have just completed a research project on this, during which we interviewed a broad range of stakeholders.[2] We found great enthusiasm for teaching medical students among primary health care practitioners, including health visitors, district nurses, therapists, practice nurses, managers, and receptionists and complementary practitioners. Patients were also enthusiastic about having a more active role. This suggets that considerable untapped resources exist in the community, which, if used effectively, would allow education to follow health care and be more relevant and up to date.

Our research identified key areas that each health professional group believed that it could teach and students should learn. The groups were clear about their needs as teachers: for relevant information about the students' learning programme and their specific contribution; students' levels of attainment; and training in teaching methods. They believed that their participation in teaching would lead to a better understanding of the roles and responsibilities of different team members and thus to better teamwork in primary health care in the future.

Funding of community based teaching is, however, problematic because the service increment for teaching and research was designed for hospital based education. Over the years the money has become integrated into the provision of hospital services and cannot be easily transferred to the community. Our research shows clearly that new money needs to be found to support community based teaching. In some areas local arrangements to fund innovative community based schemes have been negotiated (for example, the King's medical firm in the community), and in the short term research grants may be used to establish pilot schemes. In the longer term, however, a new funding system that allows greater flexibility to place teaching with a range of health care providers is required. This issue needs urgent consideration if we are to provide an appropriate education for the doctors of the future.

MARY SEABROOK
Project development officer
TYRRELL EVANS
Senior lecturer
PAUL BOOTON
Subdean (curriculum)

Department of General Practice and Primary Care,
King's College School of Medicine and Dentistry,
London SE5 9PJ

1 Plamping D, Towle A. Service increment for teaching and research. *BMJ* 1994;309:197-8. (16 July.)
2 Seabrook M. Booton P, Evans T, eds. *Widening the horizons of medical education.* London: King's Fund, 1994.

Managing a Jehovah's Witness who agrees to blood transfusion

EDITOR,—The article by Simon Finfer and colleagues[1] and the ensuing correspondence[2] illustrate the difficulties of treating Jehovah's Witnesses who refuse blood transfusions. I have been faced with the opposite problem, though a similar ethical dilemma.

A previously fit Jehovah's Witness suffered multiple trauma after trying to commit suicide by jumping off a bridge. He was resuscitated and admitted to intensive care for stabilisation before the extensive orthopaedic surgery he would require. His haemoglobin concentration was 40 g/l and he was continuing to bleed, and it was decided that he required a transfusion before surgery. Though intubated and ventilated, he could make his feelings known, and the possibility of a transfusion was discussed with him. To our surprise he agreed with our suggestion. It was not clear from our discussion how committed a Jehovah's Witness he was, but his family was adamant that he should not receive blood. We discussed the matter with the patient again, and he reaffirmed that he would agree to a blood transfusion if we recommended it. We felt, however, that his response was a further expression of the depressive illness that had triggered his suicide attempt and that by accepting a blood transfusion he was, in effect, proving to himself how "unworthy" he was. We therefore decided that, though we thought that he needed a transfusion and he had agreed to receive one, we would decline to provide it. A psychiatrist agreed with our assessment, so our patient went for surgery without transfusion.

The patient recovered fully after surgery, though we were not able to contact him after his psychiatric treatment was complete to find out his true feelings about blood transfusion. Though I believed that our ethical judgment was correct, I am relieved that we were never required to defend our decision in court.

C GRANGER
Clinical fellow in critical care

St Paul's Hospital,
Vancouver, BC,
Canada V6Z 1Y6

1 Finfer S, Howell S, Miller J, Willett K, Wilson-MacDonald J, Wilson DH, *et al.* Managing patients who refuse blood transfusion: an ethical dilemma. *BMJ* 1994;308:1423-6. (28 May.)
2 Correspondence. Managing patients who refuse blood transfusions. *BMJ* 1994;309:124-5. (9 July.)

Correction

Travellers' malaria risks

A printers' error occurred in a letter attributed to David Bailey and David Warhurst (30 July, p 343). The name of the first author is David Bradley.