multiphasic screening in the US and Sweden. All show similar results in terms of total mortality or morbidity, even if the West Coast, US study in its description shows a slight reduction in 3 of 60 tested comparisons of mortality. The message that merely finding an abnormality on screening does not mean that health is improved appears to be difficult to disseminate or accept, even after 40 years! Although we now accept that the RCT is the ‘gold standard’ in the evaluation of a treatment or service, the difficulties of executing one in such an emotive field often means that policy-makers are willing to accept other findings. This is particularly the case if they are more ‘politically’ favourable and if legitimate criticisms can be levelled at the RCT, such as ‘it was done a long time ago’, ‘the sample size was small’, ‘the area it was done in is not representative of the country’, ‘the stated (not actual) results of other studies are different’.

Finally, two points need emphasis. This was a pragmatic trial introduced into two ‘normal’ practices. Although guidelines for investigation and treatment had been agreed at the start, and this might have influenced the behaviour of GPs for both the ‘control’ and ‘test’ groups, it is unlikely that multiphasic screening as envisaged would have an effect on improving health large enough to justify the extra resources required. The second point is that this trial could not have been done without the long-term complete dedication of the GPs involved as well as the staff from the academic department, in particular Harriet Trevelyan, Mike D’Souza, Tony Swann and David Stone.

One question the editors have asked me is what I would have done differently now. This is a difficult one to answer. I have recently re-read an article I wrote at about this time on prevention,4 given as a keynote address at the Forum Davos 78 meeting on ‘Limits of Medicine’. In this we emphasized that past successes in the battle against infectious diseases were mainly due to the improvement in living conditions and that further progress in their elimination depends not only on proper methods of surveillance, advances in treatment and vaccine development, but also on further progress in diminution in poverty. For non-communicable disease prevention we referred to a number of studies which had shown the importance of habits established during the early years of life as well as disease in childhood. We considered that these indicated that it was more important to develop total educational strategies for both children and adults (parents and teachers) rather than concentrating on risk factors in adults. We emphasized the gaps that existed in evidence for prevention of the major causes of death at different ages (e.g. congenital anomalies in children) or disability (e.g. psycho-social illnesses, musculo-skeletal disorders) and suggested possible leads. Finally, we classified and described the need to differentiate between societal, governmental (public health we said) and individual measures if we were to be successful in preventing disease.

This illustrates how much more optimistic we were in 1978 on the role and acceptance of our findings and subject and how little has been achieved in actually implementing our suggestions and findings! Looking back, even if we had problems and even if many things are better now, research in our subject was easier 25 years ago!

References
the importance of lifestyle as a contributor to ill-health, particularly cardiovascular disease. It called for action by individuals and health professionals and for a reorientation of local and national health services to place greater emphasis on prevention—both through activities at a population level and by better identification and management of high-risk individuals.

It was this issue of high-risk ‘screening’ which the South-East London Screening Study had addressed in a randomized trial initiated in the mid-1960s. The trial had investigated the effect of inviting middle-aged patients in two large London general practices to a screening clinic where a health questionnaire was administered, a physical examination conducted and a battery of tests carried out. In essence, little of importance was found at the clinic which was not already known to the general practitioner. Over 9 years of follow-up no significant differences were found between Screening and Control groups in reported symptoms, GP consultation rates, hospital admissions, certified sick absence or mortality. It was therefore concluded that this ‘multiphasic screening’ conferred no health benefit and that general practice check-ups could not be justified. But it was also acknowledged that case-finding might have been effective—and that 93% of participants would have been eligible for this, having attended the practice for other reasons during the follow-up period.1

However, uncertainties about general practice ‘health checks’ continued and in 1981 the Royal College of General Practitioners published a report5 ‘Prevention of Arterial Disease in General Practice’ which called for an active case-finding/opportunistic screening approach to detection and management of cardiovascular risk. This led to an evaluation6,7 of its recommendations and to two further large randomized controlled trials of cardiovascular risk screening and intervention in general practice—the OXCHECK Study8–10 and the Family Heart Study11,12

These studies investigated nurse-conducted screening and intervention in middle-aged patients in about 30 practices in all. At one-year follow-up both studies found small but significant reductions in blood pressure and cholesterol levels, compared with controls, and in the case of the OXCHECK Study the effect was sustained at the planned 3-year follow-up.10 An estimated 12% overall cardiovascular risk reduction was achieved in the Family Heart Study and a similar reduction in OXCHECK. Although the effects of these interventions were modest it was considered that their public health significance would be substantial—but that the workload involved and the resource implications would be great and probably not acceptable and feasible.13

Further doubt has been cast on the value of cardiovascular risk screening by a recent systematic review14 of randomized controlled trials of multiple risk factor interventions for preventing coronary heart disease which included a meta-analysis of 14 trials. It concluded that the pooled effects of multiple risk factor intervention on mortality were insignificant and that changes in risk factors were modest—and that fiscal and legislative measures might be more effective.

While debate continues about the role of general practice in primary prevention, the strong evidence base for secondary prevention—particularly pharmacological interventions—in those with established vascular disease has shifted the focus. Audits15 show a major deficit in the implementation of measures of proven effectiveness in such patients and, in England, the recently published National Service Framework16 emphasizes the priority which this issue should receive at the individual patient level in primary care. But it must be emphasized that such measures can only, however, be supplementary to a fiscal, public policy and public health approach at a population level which offers the major potential for cardiovascular disease prevention.17

References