

Our health, our care, our say

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The latest UK Government White Paper on health policy, 'Our health, our care, our say',¹ describes how the new directions for health and social care will shift the emphasis of health care to community interventions and place choice and control in the hands of service users. One of the new policies, the introduction of additional, regular health 'screening', or MOTs, for citizens of all ages was identified as a priority from consultations with the public.

There has been much discussion about evidence-based policies for at least the last decade, although this may be something of an oxymoron. Evidence-based health policy has been encouraged,² and yet there is evidence to suggest that policies on public health interventions are not based on scientific evidence.^{3,4}

The policy of health checks, or MOTs, for cardiovascular disease prevention by general practitioners (GPs) in the UK, formulated in the 1990 and 1993 contracts for GPs, is not supported by evidence, but possibly founded on political and financial considerations.⁵ There was, at the time, uncertainty about the benefits of promoting population-based multiple risk factor screening (health checks) to prevent coronary heart disease. The OXCHECK⁶ and British Family Heart Study (Bfhs)⁷ were large, nurse-led randomized controlled trials of screening *and* health promotion for middle-aged patients from about 30 practices, established in the 1980s to study the effectiveness of health checks. The studies had not been completed by the time the 1990 contract was published, but it was well known that they were in progress.

The health promotion component of the 1990 GP contract was revised in 1993, when the results of the aforementioned studies were available, although not yet published. Among the conclusions from the OXCHECK trial was 'that the real work in cardiovascular disease prevention is not in screening but in providing and sustaining follow-up. The major failing of health checks has been to confuse the process of screening with that of intervention and follow up. It is time that these two processes were separately identified so that it becomes clear to all concerned that identifying risk does not necessarily reduce it'.⁸ This conclusion, however, appeared not to have influenced the revised arrangements for health promotion, which were entirely concerned with identification and recording of risk factors. There was no mention of what to do if these risks were identified.

The interest and enthusiasm for health checks to prevent ill health in the UK goes back to the 1960s. In his commentary on the republication of the seminal randomized controlled trial of multiple risk factor screening, 'A Controlled Trial of Multiphasic Screening in Middle-age: Results of the South-East London Screening Study'⁹ in 2001, Holland recalls the introduction of multiphasic screening in Rotherham by Dr Paddy Donaldson, the erstwhile Medical Officer of Health. This innovation rapidly became popular with the local population, but sadly, the evaluation was negative. The clinic was attended mostly by women, and there was no intervention available for the large number of abnormalities found on screening.¹⁰

The South-East London Screening Study was established in 1967 in two large general practices in southeast London.⁹ All patients registered with those practices aged 40-64 were randomly allocated to either screening or control groups. The screening group was then invited to attend the practice for screening on two separate occasions, with an interval of two years. Screening consisted of an administered health questionnaire, physical examination and a battery of investigations. The control group continued to have the usual services offered by the practices. Both groups were then surveyed five years later, when no difference in morbidity was found. At nine years, there were no differences between the screened and control groups in reported symptoms, sickness absences, hospital admissions or surgery attendances. Furthermore, an estimate of the cost for screening the entire middle-aged population in the UK was made, which came to £142 million at 1976 prices. The trial was popular with the patients in the screening group, but they did not press for screening to continue.

Further doubt has been cast on the predictive possibilities of risk factors for future cardiovascular morbidity and mortality.¹¹ The risk factors generally used in screening are not very discriminating, and the best predictor of risk for cardiovascular heart disease is age and sex.

This experience that population screening for risk factors gives no significant benefit is not unique to the UK. Multiphasic screening in Scandinavia and the US, including results from the Kaiser Permanent Foundation Health Plan screening programme in the 1970s, all showed similar results. There were no demonstrable benefits in terms of morbidity and mortality. The enthusiasm for turning asymptomatic individuals into patients with identified conditions for which no effective intervention was available rapidly waned.

This is not the say that all mass screening for early disease is pointless or harmful. However, the doctor-initiated (or in this case the UK Department of Health public-health-initiated) search for unrecognized disease in healthy individuals carries with it a number of ethical obligations. If disease is found, there must be effective and acceptable intervention. Any form of screening, including multiphasic screening, must be judged on demonstrable health benefits.

As long ago as 1968, the World Health Organization published the Wilson and Jungner criteria for population screening,¹² and Wald and Cuckle later set out the principles for assessing screening and diagnostic tests.¹³ Based on these principles, the UK National Screening Committee (NSC) published criteria for appraising the viability, effectiveness, and appropriateness of a screening programme,¹⁴ and in 1996 the National Health Service (NHS) was instructed not to introduce any new screening programmes until the NSC had reviewed their effectiveness. The requirement that there should be more benefit than harm at reasonable cost is common to all screening programmes.

The NSC principle most pertinent to the latest public health policy for doing MOTs is that 'There should be an effective treatment or intervention for patients identified through early detection, with evidence of early treatment leading to better outcomes than late treatment'.

From the evidence of the South-East London Screening Study and the later OXCHECK and Bfhs, this new proposal for mass screening does not fulfil this criterion. Furthermore, a systematic review of randomized controlled trials of multiple risk factor interventions for the prevention of coronary heart disease in 1997 concluded that the effect on mortality was negligible and the resulting changes in risk factors were modest.¹⁵ The focus has now shifted to secondary prevention.

But the present proposal is not all about cardiovascular risk. One might argue that the discovery of the human genome changes the context for screening. Until a defective gene can be 'fixed', however, identifying the defect will give rise at least to anxiety and the often rehearsed debate about disclosing the information.

Setting health screening as a priority may not be evidence-based, but a populous decision based on public consultation: 'Your health, your care, your say'. What the questionnaire did not ask was if, for the 1976 price of £142M to screen all middle-aged people in England, waiting lists for total hip replacement and cataract surgery could be abolished, which option the public would choose.

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