opportunity. First and foremost, this requires the provision in the United Kingdom of levels of state support for the care of children and other dependents that are routinely available in the seven countries that have made genuine progress towards women's empowerment. It also requires women to continue to summon the determination to break down gender barriers both within and between occupations[9]; and men to have the courage not to respond, as they have tended to do historically, by turning away from occupations as they become predominantly female.

Only when Britain's gender pay gap has disappeared and sexual segregation of occupation has been minimised, when women no longer have to choose between personal commitments and professional power,[10] will status and gender finally become disconnected. Whether this process will be helped or hindered by Carol Black's statement, however valid, remains an open question.

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Reporting systems for cardiac surgery

Existing systems assure safety but do not indicate quality

Papers pp 421, 424, and *Education and debate* p 450

The outcomes of medical treatment arouse political and public interest around the world. In the United States the departments of health in New York, New Jersey, and Pennsylvania publish cardiac surgical results that are specific to surgeons and hospitals. The New York initiative, which broke new ground, provides robust risk stratified data, and identifies surgeons and hospitals with better or worse outcomes than the state average.[1] However, it lumps all coronary artery bypass graft operations together, uses only mortality as an outcome measure, and takes three years to produce by which time the results are not of much use to patients to make a choice.

Is mortality a good indicator of outcome? Mortality is defined by the Society of Cardiothoracic Surgeons in the United Kingdom as death in the hospital where surgery is done, during the same admission.[2] This excludes deaths in patients who have been discharged to peripheral hospitals or rehabilitation facilities. The definition of mortality could be improved to include these deaths as is done in New York, but systems in the United Kingdom are unable to capture these deaths consistently. Mortality after coronary artery bypass graft surgery is low (1-3%), and is therefore a poor measure for differentiating between surgeons. Advances in anaesthetics and intensive care can prevent mortality even when the operation has been imprecise. Postoperative morbidity, however, cannot be prevented and is a better indicator of quality.

Coronary artery bypass graft surgery is not a homogeneous operation. Most patients require three bypass grafts, and the standard operation is done with a single internal mammary artery and two vein grafts by using cardiopulmonary bypass. Depending on the experience and preference of the surgeon the operation may be done with or without using cardiopulmonary bypass, and one, two, or more arterial conduits may be used. The off-pump approach has been shown to decrease morbidity.[3 4] The use of arterial conduits is associated with a decreased incidence of long term cardiac events.[5 6] Reliable figures for the number of operations done off-pump in the United Kingdom are not available. Despite evidence supporting the use of arterial conduits, fewer than 20% of patients receive two or more arterial grafts in the United Kingdom.[2] The use of these techniques, however, increases the complexity of the operation, reduces the margin for error, and can increase morbidity in inexperienced hands.

In this issue Bridgewater et al report on the practice of newly appointed surgeons in the first four years of independent practice.[7] They find that mortality in patients operated by this group of surgeons is not higher than that in those operated on by their more experienced colleagues. Moreover, in the first four years of practice, mortality outcomes adjusted for risk improved. "Practice makes perfect" is easy to understand and could explain the improvement of performance over the first four years. However, this would also mean that more experienced surgeons should have better results.

What might explain this discrepancy? Possibly mortality figures will not improve beyond a certain limit, and that limit is reached by year four. The system used by Bridgewater, EuroSCORE, has limitations, and referring doctors could be diverting high risk patients to more experienced surgeons. Moreover, experienced surgeons are more likely to train junior surgeons, this could possibly have an impact on results. Like most of the reports in the non-specialist literature, this paper does not take into account the variations in coronary artery bypass graft operations (off-pump or on-pump, number of arterial conduits used) and uses only

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mortality as the outcome measure. These limitations aside, the paper highlights that newly appointed surgeons are able to deliver extraordinarily good results, especially for low risk patients.

In another paper in this issue Keogh et al explain the background to public reporting of cardiac surgical outcomes in the United Kingdom.[8] The Society of Cardiothoracic Surgeons has been collecting surgeon specific activity and mortality data since 1996. These raw data are not stratified according to risk. Using 99.99% confidence intervals broadens the acceptable range considerably, but this is a sensible first step as it ensures that surgeons who operate on high risk patients are not penalised. Keogh et al rightly say that this initiative can help to reassure us about patients' safety but cannot help patients to make a choice. Then what can?

What is the purpose of coronary artery bypass graft surgery? It provides symptomatic relief to and improves the quality of life of patients with coronary artery disease, and it can increase survival in certain anatomical patterns of disease. The ideal test of a good operation would be long term survival benefit and improvement in quality of life. However, these markers are unlikely to be measured for individual surgeons and hospitals in a way that can help produce relevant and timely reports. The proportion of patients receiving multiple arterial conduits could be used as a surrogate marker for long term superior outcomes.

In the future cardiac surgical outcomes must be risk stratified and include mortality and postoperative morbidity as outcome measures. Reports should include the number of operations performed with and without the off-pump technique and the number of patients receiving multiple arterial conduits. Keogh et al question whether publishing a list of names is important. Perhaps not in its current form, as shown in figure 1 in the article by Keogh et al, but preparing a report card with the details suggested here will act as a spur like no other to improve the quality of coronary artery bypass graft in the United Kingdom.

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People with intellectual disabilities

Their health needs differ and need to be recognised and met

People with intellectual disabilities comprise about 2% of the UK population. Demographics are, however, changing and the population of people with intellectual disabilities increased by 53% over the 35 year period 1960-95, which equals 1.2% per year.[1] A further 11% increase is projected for the 10 year period 1998-2008. These changes are the result of improved socioeconomic conditions, intensive neonatal care, and increasing survival. The health needs of people with intellectual disabilities have an impact on primary healthcare services and all secondary healthcare specialties.

People with intellectual disabilities experience health inequalities compared with the general population. Although their life expectancy is increasing, it remains much lower than for the rest of the population.[2–5] The standardised mortality ratio has been found to be 8.4 for people with severe intellectual disabilities in United States and 4.9 for people with intellectual disabilities of all levels in Australia.[4 5] Additionally, people with intellectual disabilities have higher levels of health needs than the general population,[6–9] and these are often unrecognised and unmet.[6 10 11] This contributes to ongoing health inequality, chronic ill health, and premature death. Many biological, psychological, social, and developmental factors, as well as life experience, contribute to this inequality. People with intellectual disabilities also experience access barriers in using health services.[12]

People with intellectual disabilities have a different pattern of health need. For example, epilepsy, gastro-oesophageal reflux disorder, sensory impairments, osteoporosis, schizophrenia, dementia, dysphagia, dental disease, musculoskeletal problems, accidents, and nutritional problems are all much more commonly experienced.[12] Conversely, health problems related to smoking, alcohol, and use of illegal drugs are uncommon.[12] Some problem behaviours, such as self injury and pica, are specific to intellectual disabilities and may be associated with particular genetic syndromes. The commonest causes of death also differ.[12] For the general population, the leading cause of death is cancer, followed by ischaemic heart disease, then cerebrovascular disease. For people with intellectual disabilities, respiratory disease followed by cardiovascular disease related to congenital heart disease are the leading causes of death, with cancer ranked lower. Their pattern of cancers is also different, with lower rates of

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