Some promotional claims are excessive—for instance, "the time required... to conduct an initial diagnostic interview can be reduced from 1-1·5 hours to approximately 15 minutes" (Blouin AG, Walsh G, Perez E, Computerized DSM-III diagnosis: C-DIS, Ottawa Civic Hospital). There are even claims that one system "can diagnose schizophrenia in five minutes."[6] There is, however, only modest agreement (kappa values from 0·06 to 0·60) between diagnoses on the basis of clinical assessment and of computer assessment,[5 9] leading to the conclusion that "it would be inappropriate to use [the computer] alone for diagnosis."[5 9]

A puzzled disappointment has arisen among proponents of these assessments because other doctors have not used them.[10] The reluctance has been attributed to conservatism and apprehension about information technology, which ignores doubts about the clinical validity of the assessments. Also many oppose computerised assessments because they fear a loss of human communication[11] and believe that the only motive for using them is to reduce costs. These fears are fuelled when enthusiasts call their systems "interviews"[4 5 7]—in fact they are simply multiple choice questionnaires, albeit in an elegant format. A medical interview is more than a means of gathering information and of diagnosis; rather "it is an interaction between two people and ought to be as meaningful for the person who answers the questions as for the questioner."[12] Most clinicians will not use these assessments until they have been carefully evaluated.

Computerised assessments have an undoubted role in research and may prove to be of clinical value in collecting routine information, freeing doctors to use their time with patients more constructively. But satisfaction with treatment, compliance, and non-specific healing effects are all closely related to the doctor-patient relationship. In medicine the consultation "is the beginning of therapy,"[12] and computerised assessments will not be useful if they are allowed to interfere with communication between patients and their doctors.

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The course of anorexia nervosa

About one in 30 die, and half recover fully after six years

William Gull, the originator of the term anorexia nervosa, thought that the outcome of the syndrome was generally favourable.[1] In contrast, the first systematic follow up studies of 30 years ago produced alarming results: at least 15% of patients died, most had persistent symptoms of eating disorder, and less than a fifth recovered fully.[2 3] Since then the question of what happens to patients with anorexia has become increasingly clouded—largely because data have been gathered from different clinical settings. Small samples of patients have been used, and follow up has varied in length. But recent data have begun to make things clearer.

Although several studies have reported mortality in anorexia nervosa to be below 5%,[4-6] deficiencies in their methods (including failure to report standardised mortality ratios) make interpretation difficult. A more comprehensive assessment of 481 patients over 10 years has shown a crude mortality for anorexia nervosa of just over 3%[7]—confirming the recent trend to lower mortality. The standardised mortality ratio for this group showed a sixfold increase, and that for the patients with the lowest weight (<35 kg) a 15-fold increase. The predictors of death were a patient's lowest reported weight and repeated hospital admissions. Half of those who died killed themselves through overdoses, which challenges the earlier view that death in anorexia nervosa is always a direct consequence of malnutrition.[3] An important finding was that the standardised mortality ratio increased for at least eight years after referral. This is consistent with two smaller long term studies, which showed that deaths in the chronically ill subjects continued at a high rate for 20 years after the initial consultation (R H Ratnasuriya *et al*, unpublished data).[8]

Recent studies found that after a minimum follow up of four years a quarter of patients had persisting severe problems with weight and menstruation; another quarter had improved; and half had fully recovered.[4-6] Eventually, still more patients recover: a study in Sweden with a long follow up found that a quarter of patients had recovered after three years, half after six years, and three quarters after 12 years, but that recovery thereafter was rare.[8] High rates of depression and psychosocial disturbance have been observed in follow up studies but are difficult to interpret because the studies failed to use standardised assessments or to include comparison populations. Consistent predictors of poor outcome have proved to be elusive, but the lowest weight, the length of illness, older age at onset, and disturbed family relationships seem to be the most constant.

For patients whose weight remains low the course of anorexia nervosa may be further clouded by physical complications. Osteoporosis, perhaps caused by a combination of malnutrition and oestrogen deficiency, tends to reverse with weight gain.[9] But in patients whose weight remains low in the long term the loss of bone seems to be cumulative: pathological fractures occur commonly after 10 years.[10] Computed tomography in patients of low weight has shown structural changes to the brain—ventricular and sulcal enlargement.[11 12] Because weight gain does not reverse the ventricular enlarge-

ment and only partially restores the sulcal changes a chronic anorexic state has been suggested to cause persisting morphological changes in the brain.[13]

Although bulimia nervosa was originally described as an ominous variant of anorexia nervosa,[14] the short term outcome in the two disorders seems similar[15]—but because bulimia nervosa is an episodic condition the short term findings may be misleading. An observation that mortality in bulimia nervosa was as high as in anorexia nervosa gives some support for a pessimistic view of the disorder, but until longer term follow up of persisting eating disturbance is reported this view remains unsubstantiated.[7]

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Cardiac surgery in the elderly

Can produce substantial benefits at the price of a moderately increased risk

Twenty years ago a leading article in the *BMJ* noted that surgical treatment for elderly patients with cardiac valvular disease was "not at present feasible,"[1] and as recently as 1979 the benefit of coronary artery bypass grafting in the elderly was questioned.[2] Since then, however, growing numbers of progressively older patients have had aortic or mitral valve replacement and coronary artery bypass grafting.[3-7] In Edinburgh 10% of all adult open cardiac surgery is performed in patients aged over 70. Many of these operations are, however, attended by a higher risk of death or complications[4 8 9] and a longer, more expensive hospital stay.[10] Do the results justify these greater physical and financial costs?

The operative mortality in coronary artery grafting has fallen progressively[11] and in the United States is now 0·7% for those aged under 65, 2% for those aged 65 to 75, and 5% for those aged over 75.[5] Recent data from Britain are based on smaller numbers,[3 12] but the Papworth group's report of no early deaths in 117 operations in those aged over 65 is exceptional.[3] These figures become even more impressive when it is considered that age is not the sole risk factor in these patients. When compared with younger patients more of the elderly have multivessel or mainstem stenoses, unstable symptoms, impaired left ventricular function, and, perhaps most importantly, disease of other systems, as over half the hospital deaths relate to non-cardiac conditions.[4 13-15] Postoperative complications are also more common than in younger patients,[8] with stroke, the complication most likely to carry prolonged sequelae, occurring in 2-5%.[5 9 16]

Balanced against these risks is the fact that symptoms, commonly disabling, are greatly diminished,[5 7 15 17] perhaps even more so than in younger patients.[5] Patients need fewer tablets after their operations, and from experience and anecdote they have a happier and better life after coronary surgery. The long term survival after coronary artery bypass grafting in most patients aged over 65 exceeds that of patients treated medically[17] and equals that of the general population, with 95% surviving one year and 89% eight years after operation.[3]

Replacement of the aortic or mitral valves in the elderly has a higher operative mortality, with an overall rate of 5% for those aged over 65 in one series in Britain,[3] rising to 8% in those aged over 70,[9] and up to 30% in those aged over 80.[6] Coronary artery disease often coexists, and this increases mortality,[18] but concurrent coronary artery bypass grafting carries little additional risk to those aged over 70 having aortic valve replacement.[9] Serious late complications of valve replacement relate to congestive cardiac failure, coronary artery disease, thromboembolism, and the problems of anticoagulation,[19] but long term survival after these operations in patients aged over 65 is good, with 88% surviving one year and 74% surviving five years compared with expected survivals in these age groups of 96% and 80% respectively.[3] Moreover, appreciable, prolonged relief of symptoms commonly follows valve surgery, up to 92% of survivors returning to an improved functional state.[19]

Clearly, therefore, elderly patients, whose alternative without surgery is often poorly controlled symptoms and early death,[17 20] benefit from coronary artery bypass grafting and valve replacement at the expense of a modestly increased risk. Application of standard selection criteria coupled with careful assessment of each person's risk and capacity to benefit can maintain the high standards already achieved.

But can the newer, alternative treatments with balloon dilatation techniques match these standards? Currently, for most elderly patients, they cannot. Balloon angioplasty of the coronary artery can reduce symptoms in those fewer elderly patients with limited coronary artery disease,[21] and balloon dilatation of the mitral valve (T R D Shaw, British Cardiac Society spring meeting, 1989) and perhaps the aortic valve[22] may be a worthwhile alternative to medical treatment in patients unfit for surgery, but none of these procedures is likely to reduce greatly the number of elderly patients requiring operations.

As the proportion of people aged over 65 continues to rise[23] and their incidence of cardiovascular disease fails to fall appreciably the present demand for surgery is likely at least to be maintained. Most patients are prepared to meet the increased physical cost of these operations, and, arguably, they have already met the higher financial cost in their long working lives. We can only hope that our changing health