

Cardiac rehabilitation: under-referral and underutilisation

Referrals should be offered to all patients, and the individual needs of each patient considered

CARDIAC REHABILITATION has progressed markedly since it was introduced into Australia by the National Heart Foundation in 1961. At that time, the focus was on restoration of a sense of wellbeing and encouraging return to work for survivors of acute myocardial infarction and other cardiac illness. The first cardiac rehabilitation programs in Europe and the United States involved mainly supervised, high-intensity exercise training with electrocardiographic monitoring. As data accumulated that similar benefits could be achieved from low, moderate and high levels of exercise intensity,^{1,2} an Australian hospital model evolved, based on group light exercise and patient education.³ Recognition that psychosocial factors (rather than heart disease) were the main causes of disability after a myocardial infarction led to greater emphasis on counselling, education and support. This led, in turn, to the development of a multidisciplinary team approach to cardiac rehabilitation, with the aim of focusing on and dealing with the range of factors influencing patients' quality of life.

As evidence from large clinical trials emerged showing that modifying risk factors through both pharmacological interventions and lifestyle change could significantly reduce mortality and morbidity, the aims of cardiac rehabilitation broadened to include preventing progression of cardiovascular disease.

By 1986, cardiac rehabilitation had advanced sufficiently for it to be seen as an important component of cardiac care. Dr William A Seldon, a cardiologist at St Vincent's Hospital, Sydney, and the first Director of the National Heart Foundation Cardiac Rehabilitation Centre in Sydney, wrote in the Journal:

It is not difficult to envisage that a failure to provide cardiac rehabilitation services to patients with myocardial infarction will be regarded as medical negligence in the not too distant future.⁴

Since then, there has been a progressive increase in the provision of such services throughout Australia. The National Heart Foundation's 2001 *Directory of Australian cardiac rehabilitation programs*⁵ lists 265 hospital- and community-based outpatient programs, compared with only 26 in 1985.⁶

The growth and development of these programs in Australia over the past two decades has occurred alongside the publication of several evidence-based guidelines summarising the benefits of structured cardiac rehabilitation and secondary prevention programs.⁷⁻⁹ Defined benefits include reduced mortality and reduced risk of further cardiac events; improvements in physical and social functioning, risk factor profiles and quality of life; and reduced prevalence of depression.

Despite the convincing evidence and the increased availability of cardiac rehabilitation programs, the report by Scott et al¹⁰ in this issue of the Journal (*page 341*) highlights suboptimal rates of referral to and utilisation of outpatient cardiac rehabilitation programs in Queensland: 29% of patients with cardiac diagnoses discharged from participating hospitals were referred to an outpatient cardiac rehabilitation program, while 49% of discharged patients were eligible for such a referral. Fewer than a third of patients referred completed the program. It was esti-

mated that only 40% of available outpatient cardiac rehabilitation program places were fully utilised. Similarly, a study of data from the NSW Hunter Region Heart and Stroke Register¹¹ identified that only 39% of the patients on the register who were eligible for outpatient cardiac rehabilitation were invited to attend. This figure is likely to be an overestimate, as only 62% of all discharged patients consented to be on the register.

It is clear that a majority of eligible Australians are failing to achieve the potential gains available from our network of outpatient cardiac rehabilitation programs. This distressing failure reflects both a lack of initial referrals and a failure of patients to attend, despite having been referred. Key factors contributing to these deficiencies include the following:

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- data have not been collected to establish cardiovascular health indicators for monitoring the proportion of patients entering and completing a cardiac rehabilitation program;¹²

- routine referral, although recommended in Australia,⁸ is not standard practice;

- cardiac rehabilitation programs are not available or accessible to all patients, especially those in rural and remote areas;¹² and

- cardiac rehabilitation programs are not sufficiently accessible and attractive to certain population groups, such as Indigenous people, older women, those unable to speak English, and the indigent.¹²

What strategies can be implemented to address these issues? System factors resulting in failure of referral should be investigated and rectified. It is well known that discharge planning and linkages between hospitals and primary care services are often poor or non-existent. In addition, the attitude of the treating physician is a major predictor of patient non-participation in cardiac rehabilitation.¹³

Scott et al found that patients having coronary revascularisation procedures were more likely to attend rehabilitation programs than those with acute coronary syndromes.¹⁰ Is it that some patients perceive a greater need for rehabilitation programs as part of the recovery process and that this need is also appreciated by their key healthcare providers? Patient "denial" of severity of illness and a history of depression have both been found to be significant predictors of participation,¹³ and may also account for the varying participation rates by diagnosis or procedure.

Patient preferences for different program models and methods of delivery should be canvassed. Referrals should be offered to all patients, and the individual needs of each patient considered.

Medical practitioners and healthcare authorities need to understand and accept that not all patients' needs can be met by so-called "usual" medical care.

Stephen J Bunker

Manager, National Heart Foundation, West Melbourne, VIC

Alan J Goble

Cardiology Consultant, Heart Research Centre
Royal Melbourne Hospital, Melbourne, VIC
steve.bunker@heartfoundation.com.au

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