A multidisciplinary approach to cardiac rehabilitation in SA

To the Editor: As is known, a significant amount of South Africa's (SA's) burden of disease is attributed to non-communicable diseases (NCDs) such as ischaemic heart disease (IHD). The South African National Burden of Disease Study 2000[1] showed that 58% of the Western Cape's burden of disease alone can be attributed to NCDs, with 12% due to IHD. The Global Register of Acute Coronary Events (GRACE) study[2] showed that within 6 months after discharge, 15.8% of patients who have had a myocardial infarction (MI) will suffer a possibly fatal repeat event.

The benefits of cardiac rehabilitation (CR) as a preventive measure have been well documented, prompting the development of guidelines for international programmes. In SA, CR is mainly offered in the private sector, with little or none offered in the public sector. Such a programme has, however, existed at Victoria Hospital Wynberg (VHW) since the 1990s, directed at changing the health behaviours and lifestyles of patients who have recently had an MI.

VHW serves patients from the Southern Suburbs drainage area of Cape Town. In this population, NCDs accounted for a total of 30.7% of years-of-life-lost, with IHD contributing 7.6%.[3] Between 15 July 2013 and 11 August 2013, an audit was undertaken that compared the CR programme at VHW with the 1995 guidelines of the British Association for Cardiovascular Prevention and Rehabilitation (BACPR).

The BACPR guidelines state that a 'patient pathway of care' (Fig. 1)[4] should be followed and that seven 'core components' (Table 1)[5] should be implemented by a multidisciplinary team.

The CR programme at VHW is facilitated by the occupational therapy department, with involvement of members of the departments of medicine, physiotherapy and dietetics. An audit of the VHW programme was carried out using an auditing sheet that was developed for the South African context, adapted from the auditing sheet of the BACPR.

During the four-week audit, four patient sessions were observed (one cycle of CR). The audit confirmed that the programme followed a patient pathway of care similar to that described by the BACPR, and that six of the seven core components were met. The only outstanding component was 'audit and evaluation', as this was the first formal audit of the programme itself (Table 1).

We concluded that the VHW CRP programme is functional and suitable in the South African context. With further auditing and research, along with partnership with other industries, the programme can be improved and used as a model for the development of national guidelines for CR in SA.

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1. Bradshaw D, Nannan N, Laubscher R, et al. South African National Burden of Disease Study: Estimates of Provincial Mortality Western Cape 2000. Cape Town: South African Medical Research Council, 2004.
2. Fox KAA, Dabbous OH, Goldberg RJ, et al. Prediction of risk of death and myocardial infarction in the six months after presentation with acute coronary syndrome: Prospective multinational observational study (GRACE). BMJ 2006;333(7578):1091. [http://dx.doi.org/10.1136/bmj.38985.646481.55]
3. Groenewald P, Bradshaw D, Daniels J, et al. Cause of Death and Premature Mortality in Cape Town, 2001-2006. Cape Town: South African Medical Research Council, 2008.
4. Coates AJS, McGee HM, Stokes HC, Thompson DR. BACR Guidelines for Cardiac Rehabilitation. Oxford: Blackwell Science Ltd, 1995.
5. The British Association of Cardiovascular Prevention and Rehabilitation. The BACPR Standards and Core Components for Cardiovascular Disease Prevention and Rehabilitation 2012. 2nd ed. London: BACPR, 2012.

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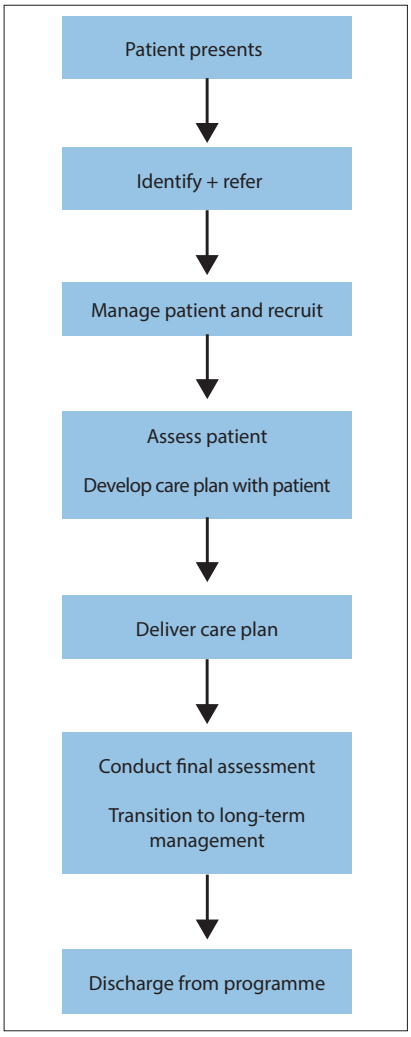

Fig. 1. 'Patient Pathway of Care' proposed by the BACPR guidelines 2012.[5]

Table 1. BACPR requirements fulfilled in the VHW CR programme

BACPR core component	Fulfilled	Method used by VHW programme
Health behaviour change and education	Yes	Angina v. MI, what action to take in the event of an MI
Lifestyle and risk-factor management	Yes	Exercise, cessation of smoking, better diet
Psychological health	Yes	Stress and time management, dealing with harsh emotions
Medical risk factor management	Yes	Graded exercise, monitoring of BMI, monitoring of blood glucose in diabetic patients; the venue is located near the emergency unit
Cardioprotective therapies	Yes	Record of surgery and/or pacemaker, use of warfarin is also noted
Long-term management	Yes	The physician addresses treatment concerns and alterations to medical treatments
Audit and evaluation	No	This was the first comparative audit done, auditing is otherwise sporadic

BACPR = British Association for Cardiovascular Prevention and Rehabilitation; VHW = Victoria Hospital Wynberg; CR = cardiac rehabilitation; MI = myocardial infarction; BMI = body mass index.