Improving provision of cardiac rehabilitation services

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AUTHORS Jennifer Wingham, BNS, RGN, is research nurse; Catherine Proctor, RGN, is cardiac rehabilitation liaison nurse; both at Royal Cornwall Hospital, Truro; Hasnain Dalal, MD, FRCGP, is a GP at Lower Lemon Street Surgery, Truro, Cornwall.

ABSTRACT Wingham, J. et al (2007) Improving provision of cardiac rehabilitation services. Nursing Times; 103: 45, 32–33. In the UK there has been significant investment in cardiac interventions but little in enabling patients to improve or manage their condition. This article outlines the four phases of cardiac rehabilitation (CR) and describes innovations in Cornwall. It discusses how CR was developed in the county using local research, strengthening the interface between primary and acute care. Future development needs are identified at local and national levels.

The Scottish Intercollegiate Guidelines Network (2002) identified four phases of cardiac rehabilitation (CR).

Phase 1 occurs during hospital admission with a change in a patient’s cardiac condition and includes risk assessment, education and advice, reassurance and discharge planning. Phase 2 occurs during the early discharge period when patients may feel isolated and insecure. Usually they are supported by telephone but they may also be visited at home. Phase 3 involves structured CR with advice on disease management, lifestyle and medication, and an exercise programme. Phase 4 involves long-term maintenance of health through physical activity and a healthy lifestyle, which may include a long-term support group or gym membership. Secondary prevention in primary care is an integral part of phase 4.

In the UK there are two main structured programmes for CR – group based (usually in a hospital setting) or home based.

Cornwall’s six-week, home-based programme uses the Heart Manual – a book and two tapes or CDs giving information and advice on CR including symptom changes, lifestyle advice, exercise, medication and psychological care (www.theheartmanual.com). The manual is used during phases 2 and 3, supported by a trained nurse facilitator through home visits and telephone contact.

In the group-based programme, the above information is given in weekly outpatient classes, with exercise as a core component facilitated by a team of CR professionals.

CR DEVELOPMENT IN CORNWALL

A physiotherapist and a cardiologist set up Cornwall’s rehabilitation service in the early 1980s at the Royal Cornwall Hospital in Truro. In 1998, a conference by the then Cornwall and Isles of Scilly Health Authority identified areas for improvement in local CR services.

It called for better coordination of services between primary and acute care, and for the introduction of a community-based rehabilitation service for patients who had difficulties accessing hospital facilities.

An innovative scheme offering CR to patients who survive a heart attack in the Carrick district of Cornwall won funding from the British Heart Foundation after a pilot project in a Truro surgery showed positive outcomes and was highlighted as an example of good practice (DH, 2000).

The service began in 1999 and funding was granted for two years to establish a seamless CR service that incorporated nurse-led secondary prevention clinics in primary care. Following its success, the former Carrick primary care group and the then Central Cornwall PCT agreed to long-term funding for a CR liaison nurse to work with the hospital-based CR team.

The PCT also funded practice nurses to run coronary heart disease (CHD) clinics where patients discharged from hospital after myocardial infarction (MI) would be seen.

PATIENT PATHWAY

Phase 1

All patients admitted to the Royal Cornwall Hospital who have had an MI are identified via a daily printout of cardiac biomarkers (troponins), and have face-to-face contact with a CR nurse or the CR liaison nurse before discharge. Clinical, psychological, social and vocational needs are assessed and individual care is planned accordingly. Appropriate referral is made to other services such as smoking cessation, the psychological team or occupational therapy for a return-to-work assessment, or to other specialist nurses. Patients are assessed for their suitability for an exercise programme, which follows the Heart Manual or group-based programme.

Phase 2

Within the first few days of discharge, all suitable patients are followed up by telephone. Those using the Heart Manual are followed up by home visits or telephone.

The CR team is notified by a tertiary hospital of all patients who have undergone

IMPLICATIONS FOR PRACTICE

- The CHARMS trial and the qualitative study show that both hospital and home-based cardiac rehabilitation (CR) services should be provided widely in the UK to address the patchy and suboptimal uptake by offering a choice of methods.
- Joint working between primary and acute care, which should involve nurses, GPs and cardiologists, is essential.
- CR nurses and healthcare professionals need to learn the skills of business planning, use the BHF campaign and patient voices to promote their services, and demand evidence-based CR as recommended in the NSF (DH, 2000).
BACKGROUND

- Cardiac rehabilitation (CR) is an evidence-based intervention that aims to optimise patients’ functioning, enhance quality of life and minimise the risk of recurrent cardiac events (SIGN, 2002).
- The World Health Organization (1993) defines CR as ‘the sum of the activities required to influence favourably the underlying cause of disease, as well as to ensure the patient’s best possible physical, mental and social conditions so that they may by their own efforts preserve, or resume when lost, as normal a place as possible in the life of the community’.
- The NSF for CHD (DH, 2000) recommends CR be made available to all patients with CHD, not just those who have had an MI. Despite this, provision and uptake of CR remains poor.

Cardiac rehabilitation surgery and these receive similar follow-up. Once wounds have healed, usually 6–12 weeks after surgery, patients are assessed for referral to group-based exercise.

The community CR nurses and the CR liaison nurse refer both groups of patients to the CHD practice nurses for long-term liaison nurse refer both groups of patients to the CHD practice nurses for long-term follow-up. Patients may be referred back to the CR team, for example if a psychologist’s intervention is required.

Phase 3

All group-based patients are offered a choice of venue. High-risk patients generally attend a programme for eight weeks. Phase 3 CR classes are held at the Royal Cornwall Hospital and in the community. Other venues are being explored to give care near patients’ homes and in a ‘normal’ environment, to promote the concept that CR is ongoing.

Group sessions include an exercise programme meeting British Association for Cardiac Rehabilitation (BACR) standards, while the flexible, menu-based education programme can be individually tailored. Patients are advised on reducing risk factors and on a range of topics including medication, weight reduction, smoking cessation and managing stress.

Phase 4

Some patients form their own support groups to carry on the social support and exercise components. These are affiliated to the British Heart Foundation. The CR teams provide advice where requested.

CR RESEARCH IN CORNWALL

A pragmatic randomised controlled trial with patient preference arms (CHARMS – Cornwall Heart Attack Rehabilitation Management Study) compared the clinical outcomes of quality of life, depression and anxiety, exercise tolerance and lipid profile with each form of CR after an MI. Cost-effectiveness was also assessed. The study showed home-based CR was as clinically effective as that based in hospital (Dalal et al, 2007). Both were cost-effective (Taylor, 2007).

The study included qualitative research to explore patients’ experience of MI and identify factors that influence their decision to opt for hospital or home-based CR (Wingham, 2006). Seventeen participants were interviewed before CR.

The hospital-based group emphasised the importance of supervision during exercise and the need for the camaraderie of a group. They were also willing to make transport arrangements and believed they lacked self-discipline.

By contrast, the home-based group thought CR should fit in with their lives rather than the other way round, and they were self-disciplined. Some said without the Heart Manual they would not have taken part in CR.

FUTURE DEVELOPMENTS

This CR service focuses on patients who have had an MI, so meets the requirements of NICE guidance on MI patients (NICE, 2007) but fails to meet the SIGN, BACR and NSF targets for all patients with CHD. Some CR services in the UK have closed or are under threat. Input from cardiologists and GPs would help secure funding.

CONCLUSION

CR is vital to recovery and management in CHD, and a choice of delivery methods will improve poor uptake. Cornwall has improved its CR services through joint working between primary and acute care but more work is needed in order to meet national standards.

REFERENCES


