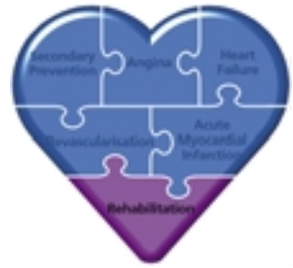
Better care without delay: cardiac rehabilitation



We continue our series of articles from the Coronary Heart Disease Collaborative (CHDC) focussing, this month, on the issues around cardiac rehabilitation.

Cardiac rehabilitation received full support in the National Service Framework (NSF) for Coronary Heart Disease (CHD). The NSF encourages an expansion of evidence-based practice within rehabilitation services. Box 1 highlights some of the benefits. The CHD Collaborative's role is to provide practical guidance and support to local clinical teams on how to redesign services to achieve NSF targets, including rehabilitation.

Rehabilitation is classically divided into discreet phases. Historically this has been useful to identify the patient moving from hospital (phase 1), into primary care (phase 2), returning to secondary care for hospital-based rehabilitation (phase 3) and then on to the local leisure centre for maintenance (phase 4). These phases may not be so evident in future as rehabilitation services evolve to better fit the needs of patients.

Rehabilitation is a truly multidisciplinary activity involving medical staff, general and specialist nursing staff, physiotherapists, district nurses and health visitors. The composition of each health community's rehabilitation service differs, giving unique challenges to development of the service.

Cardiac rehabilitation has matured over the years. Services geared towards physical

Box 1. Evidence of the benefits of cardiac rehabilitation

The benefits of exercise in cardiac rehabilitation programmes are well documented. The challenge is to keep it part of patients' daily routine

- Cardiac rehabilitation that is 'menu driven' (i.e. flexible in terms of timing and location of sessions, and variable in length of participation in a programme) and which aims to explore patients and carers' cardiac misconceptions, involving them in action planning is most likely to promote healthy adaptations and recovery.
- Increasing evidence demonstrates that psychological distress post-myocardial infarction (MI) is an independent risk factor for early mortality. Comprehensive rehabilitation programmes should include measures of patients' psychosocial functioning and offer professional advice and support to patients.
- Post MI, as many as 30% of patients rate their quality of life as superior to that pre-infarct. Reasons given are adoption of a healthier lifestyle and a re-evaluation of life in general.
- One in four post-MI patients never resume sex again. Partners are often anxious and their fear may be a major component in reduced sexual activity and enjoyment.
- Increasing and maintaining fitness can significantly improve patients' quality of life improving even chronic symptoms, such as angina, and those related to the early stages of heart failure.
- Non-compliance is a major problem in exercise programmes, especially amongst women and Asian/ethnic populations. As many as 50% drop out and maintenance studies report only 30% exercising at one year. If regular exercise is built into a daily routine and can also be perceived as enjoyable, and not too time or money consuming, then compliance is increased.
- Smoking cessation reduces the risk of subsequent mortality and further cardiac events by as much as 50%. Patients should be referred to a smoking cessation counsellor if practitioners do not have the necessary expertise or time.
- During rehabilitation it is worthwhile to explore patients' own health beliefs. Those who believe their MI was caused by overwork, worry or stress, are less likely to change their risk behaviour than those who make connections between unhealthy lifestyle and CHD.
- Rehabilitation programmes combining exercise with occupational advice have been shown to improve return to work times compared with those not receiving such interventions.

Box 2. Case history: one programme's experience

‘In North East Essex we considered that we had a good rehabilitation programme, writes CHD Collaborative national clinical lead, Penny Parker, a community cardiac rehabilitation nurse specialist at Tendring and Colchester Primary Care Trust. We prided ourselves on the seamless transition of patients from phase 1 to the community where district nurses and health visitors delivered phase 2. From here, we believed patients moved back to the hospital for phase 3 and then onto phase 4 at the local leisure centre. Sadly, we were, unwittingly, being very complacent.

Essex CHD collaborative took us through a series of process mapping exercises. All staff with any involvement with rehabilitation, patients and their carers, were invited to attend these sessions where it became very clear that there were a number of gaps (or ‘hand-offs’) in the patient journey, which impacted on the level and quality of the service provided. In the community we were seeing below the CHD Collaborative's 85% target of patients and certainly not reaching the four-day post-discharge contact target. Referrals were ad-hoc with poor systems in place for the identification of staff to whom referrals should be made. We learnt that if a patient's exercise tolerance test was positive, rehabilitation for them ended on the treadmill!

The narratives of the patients and carers who were invited to join us for some of the process mapping exercises, together with the discovery interviews, readily persuaded us that we needed to make changes. Through the ‘Plan Do Study Act’ (PDSA) cycles, we were able to make small changes with confidence. Once staff began to see themselves as part of the same system, some real restructuring work took place. All of this was made possible because we were given space for reflection in our working time and the support to carry out our own ideas for improving practice. There was a real sense of ownership as we set about making service improvements that would benefit patients and their carers.

Our cardiac rehabilitation has developed over the past two to three years. We know now that ‘one size does not fit all’. We deliver a more ‘menu-driven’ service, combining initiatives such as the Heart Manual and an exercise programme that can be tailored to patient's own level and requirements. By improved communications between all staff delivering rehabilitation, we have actually reduced the number of community nurses delivering the service but continue to reach our targets for referrals and timeliness of contact. The Essex CHD Collaborative has helped to show us that we are part of a dynamic system – which means that soon it will be time to start process mapping all over again!’

rehabilitation are now complemented by rehabilitation programmes tailored to individual need, and also by patient-delivered activities, such as those exemplified in the ‘Heart Manual’. The range of people benefiting from cardiac rehabilitation has increased to include patients following coronary artery bypass grafting (CABG), percutaneous intervention, angina and heart failure. In many areas of the country, the CHD Collaborative has been the vehicle for promoting change.

Mapping the patient journey

One of the strengths of the CHD Collaborative is its use of methodology to help improve patients' recovery. The process begins with mapping a typical patient journey, which identifies any gaps and deficits in the service plus any duplication. This process also enables staff to see themselves as part of the service. By facilitating this process, the CHD Collaborative has watched multidisciplinary teams solving their own service issues. This, in turn, positively impacts on patients' experiences and helps improve the rehabilitation process.

Service improvements resulting from mapping

This work has brought benefits throughout the country. The improvement in services in North East Essex through work with their local CHD Collaborative is summarised in box 2.

In Doncaster, the work of the North Trent CHD Collaborative identified areas where the service needed improvement, e.g. they found that post-MI patients often felt isolated, alone and anxious when they were discharged from hospital. They often had no identified person to contact if they had any concerns or worries. This led the team to come up with ideas for change.

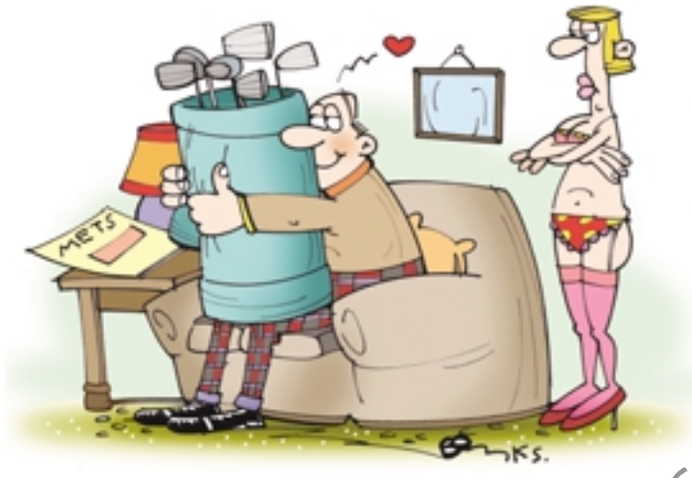
A new information pack was produced containing advice on topics, such as diet, exercise, medication, sex and work. A cardiac rehabilitation sister has been employed to visit patients before discharge and to be available for patients to ring if they have any concerns or problems they need to discuss. She provides patients with a contact card and routinely telephones them within four days of discharge. Two-weeks post-discharge, patients are invited back to an advice session at the hospital. As a result, patients feel less isolated and anxious when they first go home because they are better supported.

In Barnsley, some patients found it inconvenient to attend exercise classes at the hospital gymnasium. The rehabilitation team reached an agreement with a local sports centre to run rehabilitation sessions for phase 3 and 4 patients. Many patients are now active participants in the sports centre's activities outside of the formal programme.

Discovery interviews

Establishing the needs of individual patients is crucial if rehabilitation teams are to deliver a tailored care plan. This is often referred to as a ‘menu-based’ approach to rehabilitation. It can be achieved by using the technique of discovery interviews, which were pioneered by the CHD Collaborative.

Discovery interviews are loosely structured interview sessions that aim to provide a wide-ranging picture of patient and carer journeys, from the initial event to the current situation. They provide an insight into what is important to patient and carers, highlighting – from their perspective – the effects



A humorous approach for the cover of an exercise information booklet from Essex CHD Collaborative. It lists MET scores for everyday activities and was produced in response to patient feedback saying: "Tell us what we can do, not what we can't do."

and/or deficiencies in the rehabilitation process. This enables clinical teams to identify potential areas for change, improvements can then be made to the provision and process of services.

One area in which the CHD Collaborative has worked together with patients and carers is in helping develop a seamless transition following a heart attack from hospital through to the resumption of normal activities and a healthy lifestyle at home. This is highly dependent on good communication between secondary and primary care, and between all the individuals involved in the patient's journey through rehabilitation.

For example, in Manchester, the delay in primary care teams receiving a discharge summary on patients being discharged from hospital was identified as a problem. A full discharge summary had to be dictated by a hospital doctor and typed by a secretary before it could be sent to the patient's general practitioner. This could take well over a week and prevented primary health care teams receiving timely and detailed information about their patients. This led to patients not receiving a home visit or follow-up visit within a reasonable timescale. Now a discharge summary is faxed to practices on the day the patient is discharged prompting an early visit by primary care to patients. It also promotes links between secondary and primary care, and encourages the use of CHD registers.

The technique of discovery interviews has also enabled the CHD Collaborative to learn, at first hand, what happens to patients and carers when everything does not go according to plan.

For example, the Essex CHD Collaborative found that little information was given directly to the carers of patients when they were discharged from hospital. Patients were sometimes given information but this was not passed on to their carers by staff, e.g. the dietitian talked to the patient, although, in many cases, the main shopper and cook was the carer. Since information on lifestyle and diet can readily be shared with carers and families with no risk of breaching medical confidentiality, a leaflet was produced and evaluated by relatives. One carer responded that before he had read the leaflet, he would not even let his wife pick up a handkerchief after her heart attack. Now he jokingly said he could get her to lay the front path!

The CHD Collaborative also produced a second leaflet in response to carers' pleas to be told what you can, rather than what you can not do. It contained a table of activities, shown in ascending order of exertion, and also arranged alphabetically. Each activity was assigned a Metabolic Equivalent (MET) score. Patients have welcomed this initiative saying that they have found the scores useful in determining which activities they can safely undertake.

A guide to using discovery interviews, and other guides and materials relating to the work of the CHD Collaborative is available from NHS responseline on 08701 555 455 or online at www.modern.nhs.uk/chd

Acknowledgements

This article was compiled by Dr Walter Rhoden, Consultant Cardiologist at Barnsley District General Hospital and Penny Parker, Community Cardiac Rehabilitation Nurse Specialist at Tendring and Colchester PCT, who are both national clinical leads for the CHD Collaborative and have a special interest in cardiac rehabilitation. Additional input was from Linda Binder, Vanessa Lodge, Sandie Forrester and Kate Mudge, National Managers with the CHD Collaborative.

Editors' note

This is the third article in the series on the work of the CHD Collaborative. Previous articles have covered an overview (*Br J Cardiol* 2003; **10**:91-2), acute myocardial infarction (*Br J Cardiol* 2003; **10**:101-04) and heart failure (*Br J Cardiol* 2003;**10**:189-92).