The Heart Manual Development

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The Heart Manual Programme

The Heart Manual Pathway

The Heart Manual Development

The Heart Manual (HM) was developed over a period of a year. Individual patients and later small groups of patients were presented with sections of the HM and asked to work through them at home. As each week's assignment was completed, the users were questioned to discover which parts had been complied with and found useful. Each section was repeatedly rewritten in the light of this feedback.

The main features of the original system:

- A specially trained facilitator who guided the patient and (their) family
- A six-week home based CR programme consisting of written materials, a work book to record progress and 2 audio CDs
- All of the elements of a comprehensive rehabilitation programme: exercise, health education, relaxation and attention to psychological sequelae
- Its use was promoted in both primary and secondary settings and/or shared between the two
- It was developed to be suitable for the majority of patients

Randomised Trials of the Heart Manual

The Myocardial Infarction edition

The first evaluation of the HM was at a District General Hospital in West Lothian, a deprived post-industrial area with high rates of coronary disease and unemployment. A total of 176 patients were randomised, stratifying for age, social class and anxiety, into groups that received the HM and a control group.

The control group received a package of leaflets from sources such as the BHF, the Flora Heart Campaign and the Scottish Health Promotion Group about myocardial infarction (MI) and lifestyle change in coronary artery disease CAD. They also received the same protocol of phone calls at 1, 3 and 6 weeks post-discharge from the facilitator who asked them the same questions as the HM group, but leaving out any mention of the HM. The facilitator answered any questions they had in a truthful manner. The main results were a significant reduction in anxiety and caseness on the general health questionnaire, a reduction in visits to the GP in the first 6 months after discharge and a reduction in readmission to hospital. The incidence of clinical anxiety was reduced by 50% in the HM group.

Over the years similar results have been obtained in a number of trials throughout the UK, and the MI Manual is now used internationally.

The Revascularisation Edition

In 2007 the revascularisation edition of the HM was released. This manual supports the recovery of patients following bypass surgery and/or percutaneous coronary intervention. This manual is based on the original MI Manual. It was evaluated in a large trial conducted by Dr Jolly and her colleagues at Birmingham University (Jolly et al. 2007). The trial compared home-based rehabilitation versus supervised centre-based rehabilitation in a multi-ethnic population. The study included 525 low/moderate risk post MI and revascularisation patients who were referred to a cardiac rehabilitation programme in a 2-year period from February 2002.

The study was carried out in 4 inner-city hospitals serving a multi-ethnic population in the West Midlands. This was a randomised controlled trial and patients were followed up for 6 months. The intervention consisted of 12 weeks of home-based rehabilitation (HM and nurse follow up) [N=263] or usual hospital/community-based rehabilitation. Outcome measures used included systolic BP, diastolic BP, total and HDL-cholesterol, Hospital Anxiety and Depression Scale (HADS), distance walked on shuttle test and smoking cessation.

Analysis included intention-to-treat analysis, adjusting for baseline score, age, gender and diagnosis. The main results from primary analysis revealed no significant differences in primary outcomes between home and centre-based groups at 6

months. In a secondary analysis, statistically significant improvements in both home and centre-based groups were seen for smoking cessation, HADS anxiety and total cholesterol levels at 6 months compared to baseline. This study showed that home-based and supervised centre-based programmes equally improved outcomes at 6 months in a low risk cardiac population. These findings support the policy of increased provision of home-based programmes for selected post-myocardial infarction and revascularisation patients (Jolly et al. 2007).

A similar study, using the same measures, was carried out in Scotland by Karen McMeeken. This study included 150 patients and showed the same results as the Birmingham trial, with those using the Revascularisation Manual showing equal amount of improvement to those attending hospital-based programmes.

Systematic Reviews of the Heart Manual Literature

The Heart Manual evidence has been surveyed in three systematic reviews in the British Medical Journal (Dalal et al. 2010), European Journal of Cardiovascular Nursing (Clark et al. 2011), International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy (Blair et al. 2011). Dalal et al (2010) found that the home-based programmes using the Heart Manual were as equally effective as hospital-based rehabilitation. This was also the conclusion of Clark et al (2011) in their review of published and unpublished evaluations of the HM programme.

The Heart Manual Programme

All of the major aspects of a comprehensive cardiac rehabilitation programme are included in the HM: an exercise programme, risk factor education, advice about safe and unsafe activities and pacing, the common psychological responses and their management, information about frequently prescribed medications, event and intervention specific information, investigations and treatments. The manual should be used daily, identifying targets on a weekly basis and pacing activities. Psychological and health behaviour issues are discussed throughout the manual. Patients who do not have these specific problems do not have to read about them. If the self-help advice is not sufficient, the patient can be directed towards additional

sources of help, such as community services, voluntary agencies, library resources or internet information.

What is included within the Heart Manual package?

Both the MI and revascularisation programmes include a book written in simple language and laid out in an easy-to-follow format. The contents of the books consist of three parts:

Part 1: Your Heart Condition: The Facts. This part contains important information for the patient to read during the initial phase of their recovery.

Part 2: The Weekly Programme. This part consists of six weekly sections, each containing important information to aid the patient's recovery, and a graded exercise programme to enable them to regain their fitness.

Part 3: Facts and Advice to Help Your Recovery. This part contains important information about the patient's recovery, medication, and other significant issues relating to their condition such as hospital investigations and treatments.

Provided with the HM book is a CD containing a programme of relaxation exercises.

Equal Opportunities

As resources allow, the HM service is making provision for non-English speaking patients. The relaxation CD which accompanies the HM is available in the following languages:

- Punjabi
- Urdu
- Hindi
- Gujarati

These can be supplied with copies of the HM. The HM book is not yet available in the UK in languages other than English. Non-English reading patients and carers are therefore encouraged to access help with the book via English reading family members where practical and acceptable. Some health services may also provide link workers to assist with the facilitation process. These practitioners often have a good appreciation of the social and cultural diversity of their local population, as well as the ability to translate and discuss the HM text.

The Heart Manual Training

To maintain quality, as well as for safety reasons, the HM is not supplied directly to the public, or to untrained staff, and the service maintains a register of ‘qualified’ facilitators. This number stands at 3,000 of whom the majority are hospital and community nurses but also includes a number of allied health professionals such as physiotherapists and occupational therapists. An additional training programme has been developed for non-registered or regulated health service workers. The HM Support Worker training is provided over a single day with the completion of a mentor facilitated work-based learning package required to achieve certification within this role.

The facilitator training is an essential part of the method. It introduces health behavioural change techniques, the core principles of self-care management strategies such as lifestyle change, pacing and goal-setting, suggests patient rehabilitation pathways and develops the skills required to monitor and promote psychological well-being.

There is a regular programme of training days throughout the year both in Edinburgh and across Great Britain. In demographic areas where there is a need for many HM facilitators to be trained, a franchise plan can be operated. Information regarding this can be obtained from the Heart Manual Office.

Who may receive the Heart Manual?

The HM not only focuses on short-term recovery but aims to assist the patient to adopt self-management skills. This allows not only those who have experienced a cardiac event (MI) or cardiac revascularisation (percutaneous coronary intervention or coronary artery bypass graft) to recover, but promotes the maintenance of well- being in people with coronary artery disease, from their event or intervention to long- term condition self-management. In this respect the HM is appropriate to many individuals who may have previously been excluded from traditional rehabilitation programmes, due to poor functional capacity. The primary objective is to offer a tailored programme of rehabilitation and secondary prevention care in order to promote physical recovery and function where possible, while enhancing quality of life.

Is anyone excluded?

The HM is not suitable for patients with a very poor prognosis, those who have unstable conditions or those with complex comorbidities such as severe cognitive impairment. This is because the manual takes an active and optimistic approach which may be inappropriate or increase individual risk. The judgement of who receives the HM is therefore a clinical one. Patient safety should always be considered by the practitioner who prescribes and those who facilitate the manual.

How many patient contacts are required?

The traditional method of facilitating the HM was to initiate it in phase I and support the patient through their first 6 weeks of recovery, or what was considered phase II of the rehabilitation process. Further referral to additional rehabilitation phases (III or IV) or primary care services could then be provided as necessary, thus offering an alternative or adjunct to standard rehabilitative care. This remains an appropriate method and may continue to be adopted within some areas.

As discussed in the Cardiac Rehabilitation chapter, the Department of Health have suggested a change to the traditional cardiac rehabilitation approach, moving from 4 standard phases to 7 stages. By utilising a care pathway as described by this model

the HM can easily be fully utilised as an alternative to traditional centre-based programmes. Following a care pathway will allow patients to be identified earlier either through secondary or primary care identification; this is particularly relevant to those awaiting elective revascularisation procedures. In many respects this model favours community-based services through the addition of stage 6 which focuses on the transition of care to long-term maintenance and secondary prevention; these are most frequently delivered within primary care settings.

Patient contacts should be decided on an individual basis. We have however found that for those who are recovering from an acute event or following elective revascularisation, making a contact within one week of discharge and then at week 3 and at week 6 provides a structure which not only meets the patient's needs but can be realistically implemented within practice (Lewin et al. 1992; Dalal et al. 2007; Jolly et al. 2007). Those who have received surgical intervention (coronary artery bypass graft) tend to have a more protracted recovery, thus require additional support, with a visit at 12 weeks often being deemed necessary.

Follow-on contacts should then be arranged at regular intervals to monitor the patient's general well-being and assess the effect and maintenance of secondary prevention strategies. This may be through additional facilitator contacts, the patient's general practice or alternative community health services.

As a home-based programme the HM is primarily a community-delivered resource. It is therefore essential that the facilitator be aware of the wider resources available to meet the individual and families needs such as: local exercise prescription services, smoking cessation clinics, voluntary support groups and weight management programmes, as well as the referral systems to access these longer-term support systems.

Although the HM has not been designed around all service models, its inherent flexibility makes it possible to deliver the resource to most individuals within both urban and rural settings. Small group facilitation may also be appropriate for those who are unable to attend standard rehabilitation programmes but would benefit from group interaction within briefer intervention sessions.

The Heart Manual Pathway

The pathway outlines a patient's rehabilitation journey from acute event or elective revascularisation. The pathway may help you and your area to plan the referral process and the number of contacts that may be required. Please note the pathway is a flexible guide only and each area may differ in their resources and referral processes (Figure 2).

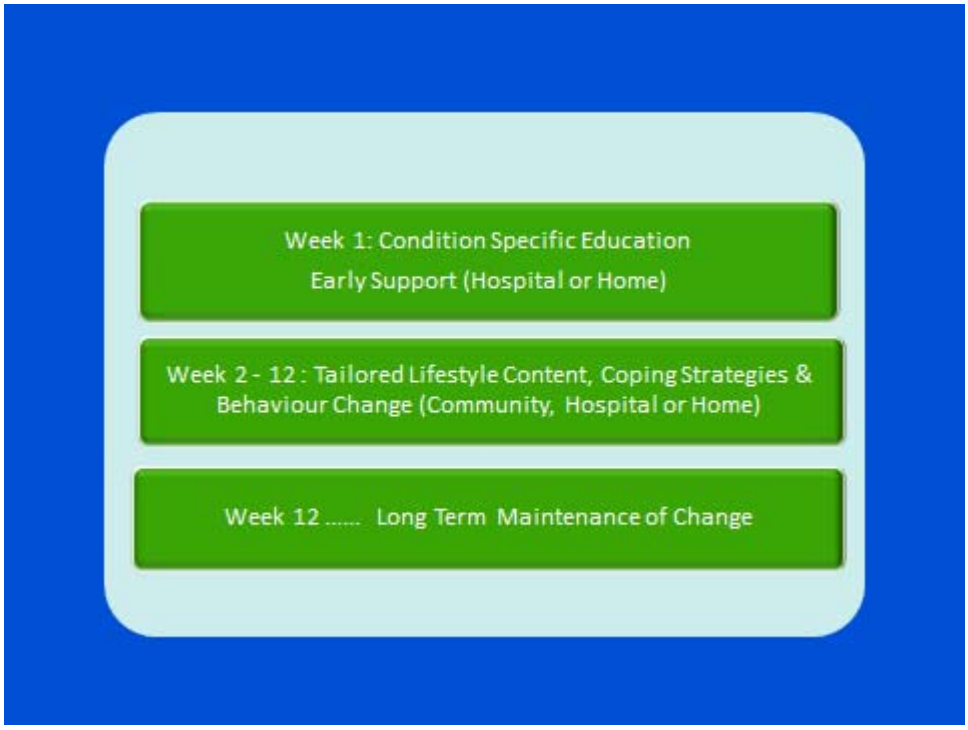

Figure 2 The Heart Manual Pathway

How much time does it take?

The initial contact/consultation takes about one hour. Subsequent contacts take on average 30-45 minutes, but this is highly dependent on how talkative the patient and family members are and the specific needs of these individuals. It is normal to find that the first few patient meetings take longer until you become confident with the process. You may find it useful to work with a specific recording sheet as this can help to guide you through the consultation by working within the headings used.

Some patients will participate in the programme with minimal help and need less time, others will need more. It is an advantage if several members of staff are familiar with the system to help spread the workload and cover holidays and shifts.

Providing appropriate information at an early stage can help patients take control of their condition, allow them to manage their condition more effectively and reduce the need for unnecessary GP contacts and readmission. Remember not all contacts need to be face to face, and telephone contacts may be used when additional contacts are required or staffing levels demand an alternative approach. It is however important to try to make time to visit these patients or see them within the practice, as often a direct contact provides additional information and allows the facilitator to develop a greater understanding of the patient's personal circumstances.

Using the Heart Manual Resources

The HM provides the opportunity for practitioners to support their patients from stage 0-6 by encouraging the patient to take control of their condition and manage it through the use of goal-setting and pacing. The HM offers 6 key resources. Walking and exercise records as well as daily activity records can be found in the weekly sections of part 2. These are used to document and monitor daily progress as well as changes in mood and symptoms. A medication chart can be found in part 3. This is intended to increase awareness of the standard cardiac medications and promote concordance.

Additional resources can be found within the facilitator's resource section of the training folder and include a goal-setting and risk factor chart. These are used by the facilitator to work with the patient in the identification of their specific risk factors and identify short, medium and long-term goals. The resources aim to encourage the patient to focus on their recovery and reduce their risk of further events by working towards lifestyle change in a structured way. The process of rehabilitation therefore goes beyond recovery to secondary prevention and maintenance of well-being.

Using the HM resources will allow practitioners to work across health boundaries while encouraging the patients to take control of their own condition. An example of this is when the HM is initiated while in hospital. The patient is then followed up on discharge at home and the goals set in hospital can be discussed and broken-down

into achievable targets. These targets are worked on and activities paced on a weekly basis and new goals added when targets are reached.

Following an appropriate recovery period (such as 6 weeks following a heart attack) the patient may be referred for further support via other risk reduction programmes such as smoking cessation, weight reduction or phase IV programmes. Here the patient's goals and pacing strategies can continue to be built on and documented by using the goal-setting and risk factor charts, thus allowing the practitioner to see the progress which has been made and to continue to support the patient in an appropriate manner. These resources therefore promote effective communication between the patient and the various health services which provide rehabilitation and secondary prevention care.

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