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The complexities of patient choice in cardiac rehabilitation: findings from the qualitative component of a mixed methods study.

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ABSTRACT

Aims: This paper is a report of a study of the choices patients make when offered home or hospital-based cardiac rehabilitation.

Background: In some countries patients may be offered a choice of home or hospital-based cardiac rehabilitation. Whilst evaluating a home-based programme, *Road to Recovery,* developed by the British Heart Foundation, we examined the patient experience of being offered this choice.

Methods*:* Interviews conducted with 35 patients and 12 staff delivering the pilot programme in five rehabilitation services during 2006-2008.

Findings: While staff interviewed reported that all patients were given a clear choice between a home and hospital or community-based programme, this choice was less clear cut in the patient interviews. When choice was offered, the choice of a home-based programme was often based on constraints rather than being a positive choice. Obstacles patients faced in making the choice included: lack of information on which to base a choice; inadequate systems of referral; insufficient appropriately trained staff; restricted choice of times to attend the hospital programmes; the geographic location of services

and restrictive socio-economic factors (inflexible working hours, access to transport).

Conclusion*:* The possibility of informed choice relies in the first instance on the availability and accessibility of appropriate services. Nurses need an awareness and commitment to finding out about and overcoming obstacles that impede patient participation in cardiac rehabilitation. Only in this way will it be possible to fulfil the calls in national and some international clinical guidelines for 'individualised' or 'menu-based' programmes tailored to specific patient needs.

KEYWORDS

Cardiac rehabilitation, qualitative research, patient choice, nursing, service evaluation, home-based rehabilitation

SUMMARY STATEMENT

What is already known about this topic

- In many countries patients are not being offered cardiac rehabilitation despite its recognition as a life saving service. Only a minority of patients invited subsequently attend hospital-based programmes.
- Home-based rehabilitation is as effective as hospital-based rehabilitation. Providing patients with a choice between a programme based at home instead of in hospital has been shown to increase patient uptake.
- Little is known about the patient experience of being offered a choice of cardiac rehabilitation programme or how they make those choices.

What this paper adds

- Enabling patients to make informed choices about cardiac rehabilitation services starts with ensuring evidence-based interventions are made available to them.
- Staff report that they offer choice of format for cardiac rehabilitation, but patients found the choice far less clear cut.
- Obstacles to patient choice include: lack of information; inadequate referral; insufficiently trained staff; restricted opening times; the location of services and restrictive socio-economic factors (inflexible working hours, access to transport).

Implications for practice and / or policy

- Staff making referrals should be fully informed about the range of services available and have time to discuss the specific benefits, drawbacks and appropriateness of each with each patient.
- Choices offered to patients should be true and unconstrained and not pre-determined by the convenience of providers. Patients may benefit from doing both home-based *and* hospital or community-based rehabilitation.
- Rehabilitation might be perceived differently if presented as part of a treatment programme *prescribed* by cardiologists rather than an optional lifestyle improver *suggested* by nurses (current UK practice).

INTRODUCTION

Coronary heart disease (CHD) is a leading cause of death and chronic illness in western post/industrialised nations and its incidence is predicted to rise internationally (World Health Organisation 2007). People with established CHD are at high risk of further cardiac events, demonstrating the importance of secondary prevention (British Cardiac Society *et al.* 2005). Secondary prevention programmes are diverse in format, and include risk factor counselling, case management, and cardiac rehabilitation (CR) (Clark *et al. 2005).* CR is more than secondary prevention, it is "coordinated, multifaceted intervention[s] designed to optimize a cardiac patient's physical, psychological, and social functioning" (Leon *et al.* 2005 p369).

The most recent Cochrane Review of CR (Taylor *et al*. 2004) demonstrated a relative reduction of 26% in cardiac deaths and 20% in all cause death at 2-5 years; yet in many western countries, referral and uptake to cardiac rehabilitation is poor, with rates among eligible patients of less than 30% reported in the United States (Ayala *et al*. 2003), 34% across Europe (Jennings et al. 2008) and 38% in the United Kingdom (UK) (National Audit of Cardiac Rehabilitation 2009). Offering patients a choice between home and hospital-based cardiac rehabilitation services has been shown to increase patient uptake to 85% (Dalal *et al*. 2009). For the British Heart Foundation (BHF), we evaluated the piloting of a home-based programme, "the Road to Recovery" (R2R); this paper examines the patient experience of being offered a choice of programme type or venue.

Background

Comprehensive CR is usually delivered as a centre-based group programme, supervised by a multi-disciplinary team, and is now recommended for most people following diagnosis with CHD or following revascularisation (Department of Health 2000, Leon *et al.* 2005, Piepoli *et al.* 2009). International guidelines concur that CR programmes should include components for risk factor reduction, patient education, management of drug therapy, psychosocial and quality of life support and long term management strategies (Bairey Merz *et al.* 2009, British Association for Cardiac Rehabilitation 2007, Piepoli *et al.* 2009).

Despite its efficacy, many patients are not referred for CR and among those that are, uptake is poor (Beswick *et al.* 2005, Suaya *et al.* 2007). It has been suggested that offering home-based CR as an option will increase uptake (Beswick *et al.* 2005).

Versions of home-based CR have been available since the mid 1980s when Miller *et al*. (1984) demonstrated that home-based exercise was as effective as hospital-based group exercise in people post myocardial infarction (MI). The MULTIFIT model of home-based rehabilitation, followed up by telephone support, proved to be more effective than usual care in improving risk factor profile and activity levels (De Busk *et al*.1994). A form of home-based CR common in the UK is the Heart Manual (Lewin *et al*. 1992). This uses written and audio-taped materials and is supervised by phone or through home visits

with a specially trained “facilitator”, usually a nurse or physiotherapist. The Heart Manual has been evaluated in a number of randomised controlled trials and shown to deliver benefits equal to conventional hospital or group-based rehabilitation programmes with better long-term maintenance of physical activity (Dalal *et al*. 2007, Jolly *et al*. 2007). A recent meta-analysis found that home-based CR was as effective as centre-based in improving clinical outcomes and quality of life, some evidence of superior patient adherence to home-based CR, and no difference in costs. The review states that the choice of programme format should reflect patient preference (Dalal *et al.* 2010). The accompanying editorial suggests that home-based programmes can provide support for longer periods than is usual for centre-based rehabilitation, with the possibility of improved long-term effects on mortality and morbidity (Clark 2010).

A randomised trial incorporating choice of hospital- or home-based CR (the Heart Manual) demonstrated that offering choice improved adherence (Dalal *et al*. 2007) and a subsequent audit, showed that uptake had increased to 85% (Dalal *et al.* 2009).

The UK National Health Service (NHS) is currently engaged in a drive to expand patient choice with a view to making choice, “a core feature of a responsive NHS in the 21st century” (DH 2009). Little is yet known about the patient experience of being offered a choice of CR programme. Wingham *et al*. (2006) conducted a small qualitative study to identify the factors influencing

the choice patients made when given the option of hospital or home-based CR after MI. This study was linked to the Dalal *et al*. (2007) research discussed above. Those patients who preferred hospital-based CR emphasised supervision during exercise and sought group support, they were willing to make travel arrangements and believed they lacked self-discipline. The home-based group were self-disciplined, disliked groups and preferred their CR to fit in with their lives.

For the British Heart Foundation we carried out a mixed methods formative evaluation of their pilot home-based exercise and education programme, the *Road to Recovery* (R2R). The pilot commenced in 2006 when R2R programme materials were issued free of charge to 36 CR programmes in Primary Care Trusts (PCTs) in England. This paper is based on the qualitative element of the evaluation and what its findings tell us about the patient experience of being offered a choice of programme type or venue.

THE STUDY

Aims

The qualitative evaluation focused on patients' and staff views and recommendations about the programme gained from their experiences of participation. Its aims were:

- to explore the experience of the home-based cardiac rehabilitation programme from the patients' viewpoints;

- to gather detailed patient feedback on component materials

- to gather detailed feedback on component materials from staff involved in delivering the programme;

- to invite suggestions for improving the patient experience from those staff.

Design

This formative evaluation was designed to assess the value of a programme while its activities were forming or happening (Scriven 1991) and was utilization-focused (Patton 2002, p.173). Its primary intended users were BHF who sought to apply the evaluation findings to their decision-making about the R2R programme. The qualitative component of the study was designed to elicit patients' experiences, perceptions and knowledge of heart disease and of this cardiac rehabilitation programme. Semi-structured interviews were chosen as an appropriate method with the potential to provide powerful and detailed information about the context and contradictions that people with chronic clinical conditions experience (Dunderdale *et al*. 2005, Campbell *et al*. 2003).

Participants

The interviews were conducted with staff and patients from five sites across England. These sites were chosen to achieve a geographical spread.

Patients

The sample size (35) and a purposive sampling strategy aimed to maximise diversity across the patient group (Kuzel 1999). However, the unexpectedly small number of patients accessing the service meant that purposive sampling was not feasible. Instead, all patients accessing the service at the evaluation sites were given the chance to participate. A clinician from each local R2R team was asked to alert all patients to the evaluation and to refer anyone who gave permission to be contacted by the researcher. A request not to be contacted again prevented participation in the study but the clinician's views as to how well the patient was doing on the programme did not. None of the patients referred came under the rubric of the evaluation exclusion criteria which included severe illness or documented severe mental health problems. The sample of 35 patients interviewed does not claim to be representative but is 4% of all patients using R2R in England during the evaluation period.

We compared the demography of our sample with that of patients in the rest of R2R and in NACR. R2R patients were mostly white British (84.2%). Our interview sample was as likely to be White British (85% vs. 84% in all R2R programmes). 5/35 interviewees (14%) were not born in the UK. Two of these interviewees were Indian, one East African Asian, one Chinese and one was Spanish. Ethnicity was self-described.

The interview sample achieved was younger and comprised fewer women than the overall picture for R2R (Table 1). No such difference in age was observed in men.

Insert table 1 about here

When compared to the overall sample of R2R patients as shown in the NACR data, the study patients were more likely to be employed; 20/35 (57%) were in full or part-time work (vs. 35% all RTR). 3/35 (9%) were unemployed and looking for work.

Health Professionals

All health professionals facilitating R2R at each of the five sites were asked to participate in an interview which focused on a service provider's view of the patient experience. All agreed, providing a complete sample of staff at these sites.

The mean age of the 12 health professionals interviewed was 40 (ranging from 26-61 years). 3/12 (25%) interviewees were men. The mean length of NHS experience was 10 years (ranging from one year to 26 years). Six were cardiac specialist nurses; three were exercise instructors, one physiotherapist, one exercise physiologist and one clinical psychologist. 9/12 (75%) were White British of UK origin. One person was German, one Irish and one Middle Eastern. Job title and ethnicity were self-described.

Data collection

Interviews were conducted with 35 patients and 12 staff delivering the pilot programme in five rehabilitation services during 2006-2008. All interviews in English were conducted by the same researcher and digitally recorded. A topic guide provided open-ended prompt questions covering the following themes (Table 2):

Insert table 2 here

The questions asked of staff mirrored those asked of patients. First interviews with patients were conducted at a time and place chosen by themselves, most frequently in their own home; in one case a patient preferred their place of work. A trained bilingual researcher was available where necessary. Follow-up interviews with patients were conducted by telephone 9-12 months later. Interviews with staff were conducted by telephone. Field notes were made, by the interviewer, during and after the interview and added to the transcribed interviews as addenda.

All interviews in English were transcribed in full from copies of the original digital recordings. The transcription format focused on speech content rather than discourse construction. The bilingual researcher conducted one interview and provided a recording of an oral translation into English which was then transcribed.

Ethical considerations

Following the guidelines for NHS service evaluation (National Research Ethics Services formerly The Central Office for Research Ethics Committees), the field researcher first negotiated ethical clearance with the Research and Development Department for each participating NHS site. The field researcher obtained an honorary contract with the participating Primary Care Trust (PCT) where necessary.

The field researcher telephoned every patient referred to the study by the on-site clinician. All those who said that they might be willing to take part were sent a leaflet explained why the interviews were being conducted and what was involved in taking part. Each was then telephoned to arrange an interview time. Patients were informed that they could withdraw at any time without giving a reason. They were assured that the decision to withdraw or to not take part would not affect the standard of care they received. A consent form was completed before each interview which provided a fourth opportunity for patients to discuss the study and consider their participation before taking part.

Each staff member interviewed was given access to the information leaflet and the study protocol. All were given the opportunity to ask questions and also advised that they could withdraw their consent at any time.

All participants were made aware of how the information gained would be used and were told that if we did use anything that they said it would be made anonymous so that individuals could not be identified. The investigation

conforms with the principles outlined in the Declaration of Helsinki (World Medical Assembly 1996).

Data analysis

Transcript data were analysed to produce readable narrative descriptions with major themes, categories, and illustrative examples extracted through content analysis, a systematic technique for condensing text into fewer content categories (Stemler 2001, Gbrich 2007). This was an inductive, data driven process. Although some broad themes were anticipated, detailed coding was developed in analysis rather than predetermined. This paper focuses on contrasts and correspondences within and between patient and staff accounts of their choice of a home-based programme.

Rigour

The stability and reproducibility of the coding was checked by the Principal Investigator by comparing her own preliminary analyses of sample scripts with those of the main field researcher. No differences of note were identified. The final stage was deductive in checking and affirming the authenticity and appropriateness of the inductive analysis; this included carefully examining any unusual cases or data that did not fit the categories developed. The validity of the findings is supported by being consistent with previous work and deepens our understanding of how choice is operationalised in CR.

RESULTS

Offering a choice between home and hospital or community-based programmes

Not all patients reported being given a choice between a home and hospital/community CR programme; 21/35 patients interviewed (60%) said that they were given a choice (these included all interviewed patients at two of the five participating sites). One patient could not remember being offered a choice. 13/35 patients (37%) said they were not given a choice between a home and a hospital/community-based programme. Seven of these patients had access to other programmes either during or after R2R; four undertook the R2R programme as an optional supplement to a hospital/community-based programme and three were given the option of joining a community-based programme alongside R2R once space was available. Four of the remaining six patients (11%) who said that they had not been offered a choice said that they would have preferred a group-based programme.

In contrast, all of the staff interviewed said that patients had been offered a choice of programmes. However, this was subject to qualification. In three out of five sites this choice was offered as part of the referral process at another hospital or another part of the hospital. Staff at these R2R sites were therefore not present when the choice they reported had been offered. Staff at one site said that due to resource constraints, some referrals were dictated by the procedure that the patient had undergone. Staff at two sites reported that the service was offered only to patients who had refused or could not participate in the standard hospital or community-based programmes.

Informed choice

It is important to note that not all patients interviewed had been made aware that they were taking part in a pilot CR programme. These patients may have been told and did not recall, or they may have been offered R2R without being advised that they would be deciding to take part in a new (and therefore untested) intervention.

Gaps in individual treatment pathways

The NHS operates pre-ordained treatment 'pathways' through which patients are guided by staff. Gaps in individual treatment pathways created obstacles to patients receiving and/or completing CR (c.f. Tod et. al. 2002). Patient pathways were harder to negotiate for those who moved between hospitals for treatments. Three such patients were not initially offered a CR programme but took their own initiative to contact hospitals to try and find a rehabilitation programme.

> C5 (man aged 45)
> *I weren't impressed that I had to chase them up for it. I think that's what's lost my motivation really. It took so long to get there; I just couldn't be bothered in the end.*

The following patient was offered a choice of attending rehabilitation at a hospital nearer to home than the one in which he had his treatment. The implications that this choice might have for the type of programme available were not made clear. One hospital offered only group-based CR and the other only home-based CR:

> C14 (man aged 59)
>
> *I said, 'Can I do at both?' because I was determined to get fit and she said, 'Well, you can but it seems a bit silly.' So I said, 'OK then, I'll do [name of hospital] because it's right on my doorstep' …*
>
> Did she say the programmes might be different that you'd get at [these hospitals?]
>
> *No she didn't… naturally, I assumed that one [hospital] was liaising with the other and they [the rehabilitation programmes] were of equal, and when they [R2R staff] came I was quite surprised that they weren't medical and was disappointed because I had some questions about some pain…and some things that were happening to me bodily-wise that they didn't know the answer…and I felt a bit cast off at that point – adrift… I stopped asking in the end because I felt guilty and embarrassed for them, because they were clearly embarrassed that they didn't have medical answers for problems.*

There are two reasons for the problems this patient encountered in getting answers to medical questions. The cardiac specialist nurse who should have seen him was on maternity leave and secondly he missed out on the post-

operative support programme that should have followed his bypass surgery. Problems of staff retention, staff sickness, lack of like-for-like cover for maternity leave and a wide variety of local difficulties affected most of the sites during the life of the evaluation which coincided with a major NHS restructuring and short term financial crisis. This patient reported that choice was offered to him and he was able to access and complete a programme. However, his interview raises questions about the quality of the choice offered.

Although the patient's interest in doing both programmes was dismissed as "silly" some of the other patients interviewed had been given this opportunity and had done both home and hospital-based programmes simultaneously. There is no current evidence that supports an either/or choice between home-based and hospital or community-based cardiac rehabilitation services. Patients may benefit from doing both.

Positive choice vs. choice based on constraints

For some patients, the choice of a home-based programme was a positive one. For others it was a decision based on personal or socio-economic constraints. For example, nine patients gave work as the reason why they chose a home-based programme. Five of these said that without work constraints they might have preferred to join a group-based programme.

C2 (man aged 57)

Yes, it's work related. I don't get paid, unfortunately. I know it shouldn't matter really for my health, but unfortunately it's a factor…

If you hadn't had the pressures of work, do you think you would still prefer a home-based rather than a group-based programme?

Me personally, probably a group-based, because I sometimes have not done them, or find it hard to get up and do them…I mean – I've done all right, but with the group it would be better.

Our sample contained more workers than the overall picture for R2R. Some of these interviews contradicted the idea that a home-based programme was the best choice for workers. Two working patients said it was better for those who are at home and had time to do it rather than fitting it into a tiring work day and two more confirmed that they had given the programme up for this reason.

After work, the most frequent reasons for choosing a home-based programme were: avoiding problems with transport; not being tied to a fixed schedule; being able to exercise at their own convenience and not wanting to join a group. This was consistent with the findings of Wingham *et al.* (2006). Some patients gave combinations of sometimes contradictory reasons for choosing a home-based programme:

C3 (man aged 50)

There's a lot of different reasons. First of all I think because I didn't see myself as being in a bracket of an old fogey who's had a heart attack. … I hate being on a tube when it's crowded, it drives me bananas. I can't be going and doing it as a group. So it had to be as an individual, whether it be at home or going to the hospital…

Yet, going to the hospital was also reported as not being an option for this man because of his work and family commitments.

Choices were also influenced by prior expectations and experiences of rehabilitation. For example, two patients who had previous experience of hospital-based rehabilitation chose a home-based programme in preference to that.

A4 (man aged 61)

I was bored. I mean, I'm sixty-one years of age, at that time I was fifty-eight.... There was a lot of old people there and the exercise they were asking me to do, I thought, 'This is pointless. It's doing nothing at all for me.' Walking about, picking a ball up' … So I didn't complete the course. [After a third heart attack] I was then offered the exercise at home and whatnot and I thought, 'What? I'll have a go' …

Having done the home-based programme, two people thought that they might have been better off in a group where instructors could give them more

guidance. Or, to be called into the hospital for more assessment during the home-based course:

C15 (man aged 54)

…perhaps it might be better to say for the first six weeks you'll be in a class and we will show you this, this, this, this… I said to her [wife], I said, 'I think I should have gone to the class.' She said, 'But you wouldn't have gone.' I said, 'But I think that's what should be drummed in to me, to go.'…I think it should be a part of the rehab thing. Should be if you don't go to the class then we'll assess you every three weeks or four weeks...

One patient on the home-based programme who did not follow the exercise programme said that ideally he would have liked a hi-tech hospital programme:

B2 (man aged 54)

…[with] hi-tech equipment where somebody can understand how their heart is functioning during exercises… where people would feel more attracted to the venue because of enough space, enough equipment…

One patient started the home-based programme before she had a bypass operation but decided that she preferred the group sessions after her procedure. The woman below was not offered a choice of programmes, but

given the choice, would have preferred to attend a hospital or community-based group programme:

> C4 (woman aged 53) interview translated into English.
>
> *I think the way that they designed this programme was not so good. Because they want you to…do the exercises at home…I got really bored. I'm sure other people are out there as well who will get bored and they won't like to do this, and then leave it… I think the thing that would help me more is that if they called me back… and they would be able to show me how to do the exercises, I would meet other people … I think I'm better with appointments. It's just when you're sat at home alone all day, you get depressed. You don't feel like doing this exercise.*

Two of the staff interviewed were concerned that recruitment to and retention on the programme in their areas suffered because it was not presented as a positive choice for patients. Instead, it became a default option for those unwilling or unmotivated to do hospital or community-based rehabilitation.

> AP1 cardiac specialist nurse
>
> *… if patients didn't want the community, didn't want hospital, then we'd offer them Road to Recovery. And I think on reflection that made life very, very hard. Because you were getting the very, very unmotivated patients …We did have patients who completed, but they were more the minority rather than the majority and I think it was because we said,*

do you want the Leisure Centre, no, do you want to come to hospital, no, then you can do Road to Recovery, and I think probably now, I would make sure that it was offered on an equal basis. …– it sounds dreadful but you're always left with the people who see it as an easy option.

Lack of motivation was a problem across the programme and attributed to a number of different causes (Madden *et al.* 2009).

Language difficulties

Lack of interpreter services has been identified as a barrier to choice and access in CR (Tod *et al*. 2002). Staff interviewed at two of the five sites said they had had no experience on the programme of patients who were unable to communicate in English. Staff at the other three sites routinely relied on family members to act as interpreters.

CP2 cardiac specialist nurse

Usually we ask a family [member] who speaks English to translate for us and that usually works quite well, because the family is very supportive and the background they come from, there is an extensive family there and there's always somebody who can speak English and translate for us... it's not just the patient we're giving help and advice, it's the family.

Some staff members found it difficult communicating with patients through family members. Staff at one site switched to resource intensive home visits because telephone support was so difficult, but this still presented problems.

> DP1 physiotherapist
>
> *Very difficult. Because although we'd arranged home visits and for him to come here and we'd say he'll need somebody with him, it just wouldn't happen. There'd be some other need to take the family away, or they'd just nipped out. I don't think for the family it was as high a priority as it was for us…*

While 11/12 staff members interviewed said that they had access to interpreters should they need them, only one reported actually using this service. He had accessed a Social Services interpreter for a patient who spoke German and did not have family to act as translators.

DISCUSSION

Limitations of the study

Site recruitment and retention were affected by a wide variety of local difficulties and the NHS reorganisation that came into effect in October 2006. Site recruitment began in April 2006 and continued until June 2007. One site was disproportionately much more active and provided 56.5% of the referrals. The researcher stopped taking new referrals from this site when it had

provided 46% of the interviews. While disproportionate, this referral pattern reflected the national picture of a few very active sites amongst the majority of sites which were much slower to develop or where the service petered out quickly (Madden *et al*. 2009).

The study sample does not purport to be representative. The aim was to sample as wide a range of experience as possible in the time given. However, the choice to participate in the study may have been less available to patients in services where staff reported concerns about overloading patients with information. The sample achieved is skewed toward workers. This data provides a useful insight into the experience of some workers doing home-based rehabilitation. The experiences of older women are not captured.

The study can be subject to radical critique about the extent to which interviews provide access to attitudes or perspectives governing behaviour outside the interview setting (Hammersley 2008).

Discussion of study findings

This study found a gulf between the choice staff perceived they offered and the experience of choice reported by patients. The current state of CR service provision does not cohere with a model of the autonomous patient, who is fully informed about service options, and then chooses from the menu without interference or medical paternalism. Patients who make an informed choice of CR format are more likely to complete their programme (Wingham *et al.*

2006). The discourse of choice is a complex one in which there are patients who seem to be asking for coercion: “[it] should be drummed into me to go” (C15). This echoes the findings of Wingham *et al.* (2006), that patients often desire firm guidance.

Patients interviewed did not always know what a CR service is and why it is important. Some linked the question of choice with the (lack of) perceived status of the service, raising an interesting (and possibly gendered) question about whether CR services might be perceived differently if presented as part of a treatment programme *prescribed* by cardiologists rather than an optional lifestyle improver *suggested* by nurses. In the UK, CR programmes rarely have a cardiologist actively involved, in contrast to the experience in many European states (Bethell *et al.* 2009). Ades *et al*. (1992) found that amongst older coronary patients, “the primary strength of the primary physician’s recommendation for participation was the most powerful predictor of cardiac rehabilitation entry.” Here, “primary physician” does not mean primary care but the patient’s medical consultant.

Routinely relying on family members rather than establishing the need for interpreters when working with people with little use of English does not comply with best practice guidelines (DH & BHF 2004). The assumption of a caring extended family rests on a cultural stereotype and family members may bring to bear their own misconceptions about heart disease (Robinson 2002, Chattoo & Ahmad 2004). Staff should ascertain if there is an interpreter

service and if the patient agrees make use of this service (Gerrish *et al*. 2004).

CONCLUSION

For many patients no choice exists because alternatives services are not available. If CR services are to move away from pre-determined one-size-fits-all programmes towards 'individualised' or 'menu-based' multi-factorial CR tailored to specific patient needs, as stressed in national and international clinical guidelines, current services will have to be significantly increased. Services will also need to ensure that they are complying with best practice in considering language, literacy and audio-visual disabilities when designing and delivering programme materials.

The choices offered to patients should be true and unconstrained and not pre-determined by the convenience of providers. Where a range of delivery methods are available, it is important that cardiac nurses take a role in ensuring that patients are equipped to make fully informed choices. Widening participation will require cardiac nurses to help in discovering and overcoming the range of obstacles to CR through practice and research: so far, this study shows that in the UK these include, lack of information on which to base a choice; inadequate systems of referral; insufficient appropriately trained staff; restricted opening times; the location of services and socio-economic factors such as inflexible working hours and access to transport.

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Table 1: Comparisons between national and study R2R patient characteristics

	Patients enrolled nationally on Road to Recovery from [2006-2008]* (N=1178)		Road to Recovery interviewees (N=35)	
	Average Age	%	Average Age	%
Male	63	74.8	59 (n=29)	83.0
Female	65	25.2	55 (n=6)	17.0
* taken from National Audit for Cardiac Rehabilitation data				

Table 2: R2R study topic guide themes

Patients	Health professionals
• Introduction to heart condition • Introduction to the programme • Cardiac knowledge base and information needs • Referral and choice of	• Clinical experience of cardiac rehabilitation; role on the R2R programme • Local delivery and adaptations • Views on the component parts

programme • Use of the component parts of the programme • Views on service delivery • The degree to which R2R met their own perceived needs (medical, lifestyle, psychological and social) • The value of the programme • Anything that they wished to add • Demographic data • Views on the interview process	of the programme • The degree to which R2R met their patients' needs (medical, lifestyle, psychological and social) • Views on training required for delivery of programme • The value of the programme • Anything that they wished to add • Demographic data • Views on the interview process