Heart Improvement

Cardiac Rehabilitation - National Priority Projects
Lessons and learning one year on...

October 2009
Cardiac Rehabilitation

Cardiac rehabilitation (CR) is a national priority project of NHS Improvement focusing on increasing the access to, equity of provision and uptake of CR services for heart attack, angioplasty and CABG patients.

The time scale for the projects varies, with some projects still in the initial stages. Key learning from the project is available in brief in the introduction to this document and in more detail in each of the project summaries.

Project summaries
Project summaries include issues to be addressed, baseline position, actions taken, key learning and results to date from the 11 projects participating in this work.

Contact details are included to provide additional information with regular updates available on the website at www.improvement.nhs.uk/heart/rehab
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www.improvement.nhs.uk/heart
Foreword

During this time of imminent financial constraint and commissioning pressures the national priority projects for cardiac rehabilitation (CR) have created a real sense of optimism within the clinical teams and have led to significant positive change which will become evident over the coming years. NHS Improvement - Heart has taken positive action towards ensuring that lessons learnt in one work stream become the building blocks for other teams. This critical mass approach is key to achieving the greatest impact in the shortest possible time which, for CR, is important because the challenge ahead is huge! Recent National Audit of Cardiac Rehabilitation (NACR) figures show that uptake remains low (mean 38%) and that average trends in uptake did not change in 2007-2008. The NACR report and the network survey of CR highlighted that referral to rehabilitation is one of the biggest hurdles to ensuring higher uptake. There is clearly plenty of work to do but I believe the CR priority projects have the right focus to tackle the problem, for example service redesign, innovations in commissioning and leadership development, which we all know are important issues and challenges facing practitioners and service providers.

The national priority projects for CR are the test bed for tariff debate and collectively we are making a real contribution to shaping the future national tariffs for CR. One of the lessons, so far, is that tariff doesn’t bring new money but what is does is give commissioners and providers a clear framework for what CR costs. What we have learnt, through the CR projects, is that service specification is the key to commissioning best practice CR. NHS Improvement - Heart is primed to produce meaningful support structures to help commissioners and providers achieve this in their own localities.

It is less than one year since the CR national projects started yet we already have some clear success stories from individual projects and we see similar promise as the present projects roll out. The CR projects are fully inclusive and thrive on close liaison with local commissioners, cardiologists, CR practitioners and cardiac networks all of whom are committed to innovations aimed at enhancing referral to CR and reducing inequalities in access over the next 12 months. The CR project team are tasked with making sure that the best possible outcomes prevail and that success is shared with others.

My role as national clinical lead has been made possible and strengthened by close partnership with NHS Improvement - Heart and particularly Linda Binder and Dr Jane Flint both of whom have the skills and motivation to take the battle to where it counts. We look forward to even greater success over the next few years as we enable one of the most strongly supported clinical interventions, that brings substantial benefits to patients, to become a reality for those that require it.

Professor Patrick Doherty
National Clinical Lead for Cardiac Rehabilitation to NHS Improvement

www.improvement.nhs.uk/heart
Foreword

The cardiovascular networks always promised to be effective health communities, across which sharing good practice and ultimately redesigning ideal care pathways for patients, including cardiac rehabilitation could be made. Commissioning against commitment to key defined outcomes is important. Although only a minority of networks has so far worked with the national team on priority projects, these networks already show an appreciation of both achievements of programmes, and most importantly, the challenges faced across their respective territories.

Our first completed audit cycle of the network survey of cardiac rehabilitation development has highlighted the minority view as yet of robust commissioning, but increasing opportunity with roll-out of Primary PCI for STEMI to include cardiac rehabilitation within the business case. From North of Tyne to Pan London down to Peninsula there has been real progress, through their projects, in the relationship with commissioners, but the North West London Cardiac and Stroke Network has identified the specially identified professional needed to effectively repatriate with documentation patients receiving PPCI from surrounding districts to a ‘heart attack’ centre.

Commitment to submit data to National Audit of Cardiac Rehabilitation (NACR) is universal among networks, and four of the projects make specific reference to network commitment to improve submission of data. The vital need to interface NACR with other important cardiac databases is also emphasised.

The inequalities’ agenda is ever reflected in access to cardiac rehabilitation. All projects have bravely tackled variation both within and among programmes, and between different cardiac patient pathways. Their innovative approaches involving all stakeholders bear witness to our network survey outcome that the majority have been able to favourably influence cardiac rehabilitation across their regions.

The 2008-2009 year has been a really stirring one, but there remains most yet to do! Best wishes for the coming year!

Jane Flint  BSc MD FRCP
National Clinical Advisor for Cardiac Rehabilitation to NHS Improvement
Introduction

The National Priority Project for Cardiac Rehabilitation started in September 2008 following applications by cardiac networks and NHS organisations and a stringent review process. Nine projects were chosen – some of which had several strands of work and others which were pulling together different sites into one main project.

The overall aim of the national project was to increase the access to, equity of provision and uptake of CR services for heart attack, angioplasty and CABG patients, piloting implementation of the NICE Recommendations on Cardiac Rehabilitation - as outlined in the NICE Clinical Guidelines CG48 on MI: Secondary Prevention and utilising the NICE Commissioning Guide on Cardiac Rehabilitation as a resource to support improved commissioning.

We were particularly interested in receiving applications where the focus would be on:

- Identification and active engagement of eligible CR participants using a systematic and structured approach
- Development of mixed models of provision tailored to meet the needs of individual patients
- Relevant rehabilitation for groups less likely to access the service such as women or ethnic minorities
- Development of exercise components designed to meet the needs of older people or those with significant co-morbidities
- Joint agreement, planning and commissioning of services across hospital trust, GP practice, PCT and social/leisure services and at network wide level
- Exploration of the feasibility of a generic rehabilitation model encompassing other disease modalities.

We were also keen to ensure that the components indicated below were addressed:

- Reducing inequalities
- Addressing diversity
- Increasing access to and information about CR services
- Engaging patients/carers/families in planning services
- Workforce and multi-disciplinary team approaches.

To share the learning a series of two monthly meetings were initiated attended by project managers and their teams. Led by the national project leads for cardiac rehabilitation at NHS Improvement, (Linda Binder, National Improvement Lead, Patrick Doherty, National Clinical Lead and supported by Dr Jane Flint, National Clinical Advisor) these meetings proved a very successful method of providing peer support. Learning from other projects and about national issues, such as work around tariff negotiations, has proved invaluable to progressing individual projects within the national initiative.

One year into this three year national project, the project sites are keen to share their outputs to date. These range from projects whose work around commissioning (and with commissioners) has led them to develop a service specification - and in one instance set up a tendering process - to others where the pathway has been examined, renegotiated or been subject to demand and capacity work within the service in order increase the numbers and types of patients accessing rehabilitation.

The quantifiable benefits are outlined within the projects and summarised in terms of key learning and QIPP outcomes. Further detail on these points is contained in the project summaries that follow.

Linda Binder
National Improvement Lead, NHS Improvement
Key Learning

Outlined below are some of the key learning identified by the projects after just one year:

- Ensure supportive and strong clinical leadership/engagement to champion the approach, aid decision making and manage clinical expectations of the group
- Ensure the right people are working on your project and that you are engaging with the right stakeholders from the outset
- Understand baseline activity of existing service provision and ensure there is robust data - crucial to help identify inequalities and to monitor progress of work
- Build analyst time into your project and make sure your finance team are also on board if necessary
- Understand your demand and capacity
- Ensure service reconfiguration does not create an alternative bottleneck
- Spend time defining your key performance indicators
- Good communication mechanisms (email / phone) helps resolve issues quickly
- Build sustainability into your service
- Learn from other trusts that are doing well, a site visit is often a good way of doing this
- Promote the ability of cardiac rehabilitation to reduce admissions and length of stay and generate cost savings into your business case
- Consider the implications of going out to tender and whether you will need to buy in external consultancy
- Dedicated project management time
- Multiagency partnerships can increase flexibility within your service
- Don’t forget the patients – their views are important and helpful in redesigning a service.
Quality, Innovation, Productivity and Prevention (QIPP)

Outlined below are some of the QIPP benefits identified by the projects after just one year:

**QUALITY**

**Safety**
- Centralised referral and patient tracking
- Standardised protocols and procedures assessed against evidence base
- Risk stratification form
- Criteria for shuttle testing patients
- Governance standards developed with metrics system
- Skills competency assessment.

**Effectiveness**
- New community and home based programme for IHD
- Cardiac rehabilitation outcome measures identified
- Clear management plans
- Effective use of staff and programmes – no shutdown of services.
- ICD rehab (rolled out)
- Rehab led follow up.

**Experience**
- Increased patient choice
- Care provided closer to home
- Relevant patient information
- Discovery interviews, patient forums and patient questionnaires to inform development of services which meet patient needs.

**INNOVATION**
- Rehab led follow up
- Looking at ways to include health checks
- Drug therapy reviews
- Task group acting to coordinate all quality initiatives.

**PRODUCTIVITY**
- Increased number of patients accessing rehab
- Reduced hand offs – integrated team with fewer referral steps
- Using and scheduling staff more effectively
- Rehab led follow up – reduces the need for outpatient attendance
- Ensuring availability of MDT staff to increase flow.
Commissioning an equitable service across the county

**Derbyshire County PCT**

**Synopsis**

Our challenge was to commission an effective, consistent and equitable cardiac rehabilitation service across Derbyshire PCT by providing care closer to patient’s homes and offering them a menu based service.

Over the course of two years we have aimed to identify our baseline, develop a new model of service, ‘build’ a business case to secure funding, develop a service specification and procure the service through a formal tendering process.

To date we have secured funding for the service and we are preparing to go out to tender before the end of 2009.

**Background**

The merger of six PCTs to form Derbyshire County Primary Care Trust (PCT) in 2006 led to a differing level of provision of cardiac rehabilitation across the health community. The large and diverse PCT has meant that patients have been receiving rehabilitation from a variety of service providers, many of which are located outside of the PCT boundary. In 2007 a strategy was developed to identify the main issues facing cardiac rehabilitation services in Derbyshire, these are summarised below:

- **Inequitable service.** There is no consistent cardiac rehabilitation pathway across Derbyshire; therefore it is the geographical location of the patient that has determined the service received. The lack of a coordinated approach towards rehabilitation has meant that programmes have not been distributed equitably in response to need; analysis has shown that in the area with the highest prevalence patients were expected to travel some of the largest distances to access a programme.
- **Poor uptake.** In some areas of the county it was identified that there was a poor uptake rate. This was most notable in the Bolsover Spearhead area, where it was calculated that as little as 16% of eligible patients were taking up cardiac rehabilitation. Contributing factors are thought to be; distance to hospital based programmes, associated parking charges and lack of choice of programmes available.

- **No clear funding streams.** Historically the majority of budgets have been tied up within acute trust contracts. The lack of clear funding streams has meant that the cost of cardiac rehabilitation varies across the PCT and does not always represent good value for money.
- **Lack of data to support cardiac rehabilitation.** Not all of the service providers that provide cardiac rehabilitation for Derbyshire patients use the NACR database and data varies enormously in terms of quality. The lack of a centralised system has meant that data has not been able to be used to ensure everyone eligible for cardiac rehabilitation has been offered it.

**Current service provision for people resident in Derbyshire**

- The stars in blue are community services that provide cardiac rehabilitation phase 3 only
- The green stars show the number of acute provider services that our patients in Derbyshire can access. Some of these also provide a phase 3 programme. However, apart from the two main provider trusts in the county many patients find the distance to travel back to the other provider trusts challenging and therefore for our patients there is little uptake of the phase 3 provision.
What we did

The aim of the project
The aim of the project is to commission an effective, consistent and equitable cardiac rehabilitation service across Derbyshire in order to optimise uptake and maximise health outcomes for the population.

Planned outcomes for the project

- **Increased access**: the service is moving towards a menu based model whereby patients will be able to choose a service that meets their individual need. This will optimise uptake and provide more patient centred care. The planned increase in community based provision will reduce the distances people currently are required to travel and as a result increase access. The referral criteria will include angina and heart failure patients, two groups who are not consistently offered cardiac rehabilitation at present.
- **Reduction in health inequalities**: service provision will be planned in accordance with the greatest health need, taking into account disease prevalence, deprivation and access. A menu based service will ensure that people are not excluded from cardiac rehabilitation because they choose not to attend a formal, group programme.
- **Increased links with primary care and long term maintenance options**: community based services will support the development of stronger links with the communities that patients live in. The new pathway will seek to ensure a seamless transfer of patients into long term healthy lifestyle options as well as making sure that all patients receive structured follow up by primary care.
- **Increased effectiveness**: the service will be commissioned with a focus on outcomes. This will ensure delivery of the health benefits that cardiac rehabilitation can provide.
- **Increased financial effectiveness**: the new pathway will seek to standardise the cost of cardiac rehabilitation across Derbyshire so that value for money can be achieved. It is anticipated that by commissioning for both activity and health outcomes service providers will be driven to deliver quality care and efficiencies.

The steps taken to achieve the aim and planned outcomes of the project are summarised below:

a. **Baseline measurement**
Work commenced to understand our current levels of activity and financial commitment. This was challenging due to the number of providers, complicated financial arrangements and variation in data collection.

b. **Development of a new cardiac rehabilitation pathway for Derbyshire**
A work group consisting of clinicians from the major providers, commissioners, public health specialists and a patient representative came together to develop a new pathway for Derbyshire County PCT residents. A clinical lead who works across both primary and secondary care was appointed and her role was critical in leading the development. Some of the actions the group took to facilitate the development of the pathway included:
- Process mapping with clinicians and patients
- Brainstorming what an ideal pathway should look like against national evidence and best practice
- A site trip to a cardiac rehabilitation service reporting high uptake and good outcomes
- A patient representative working with us throughout the project.

c. **Identification of additional funding**
A business case was developed by commissioners outlining the key issues and risks with the current service and identifying potential benefits and savings to the PCT.

d. **Development of a service specification**
Additional funding was secured through the PCTs Local Operating Plan for 2009-10 and work commenced to translate the pathway into a service specification and define key performance outcomes.

e. **Commencement of a procurement process to drive improvement**
Due to the number of existing providers, the potential value of the contract and the level of service redesign it was decided that a formal procurement process would be the best method for securing the best health outcomes and value for money service.
The biggest issue/challenge

Defining the baseline was crucial to identifying the amount of activity to be commissioned and to understand the local picture. It proved extremely difficult to calculate the current spend on cardiac rehabilitation services because of the lack of clear funding streams. In one case, investigation by one of the acute trust service providers highlighted the fact they had not been charging the PCT at all for the activity. Getting reliable and accurate data on the number of patients who would be eligible for cardiac rehabilitation and understanding which patients were already accessing the different pathways was also a complicated process. Both tasks took longer than expected and required significant finance and analyst input.

The impact to date

This project is about planning for and commissioning a new cardiac rehabilitation service. To date the key success factors include:

- Development of a new pathway
- Securing additional funding in order to implement the new pathway
- Development of a service specification.

The service specification will ensure that the impact of the service, once commissioned, will be able to be measured by commissioners on a regular basis. This will include:

- Activity – up take rate against national targets, decliner rate, completion rates, referral rates to other services
- Health outcomes – patients will be expected to achieve a certain number of health outcomes including, treatment outcomes, clinical outcomes and patient centred outcomes
- Quality outcomes such as accessibility of the service, patient and carer satisfaction, compliance with national standards and waiting times etc.

Barriers, challenges, and lessons

Key learning points from Derbyshire County PCT project:

a. Ensure the right people are working on your project and that you are engaging with the right stakeholders from the outset of the project. These may include cardiac rehabilitation clinicians, public health, GPs, finance, HR, information, leisure services, support groups, cardiology etc.

b. Understand what is currently happening in your PCT in terms of baseline activity and understand how it is being paid for. Build analyst time into your project and make sure your finance team are also on board to assist.

c. Consider early the possibility of going out to tender and communicate this to your stakeholders.

d. Ensure you have strong clinical leadership but consider the implications of going out to tender and whether you will need to buy in external consultancy.

e. Build a business case and make sure you promote the ability of cardiac rehabilitation to reduce admissions and length of stay and produce cost savings.

f. Learn from other trusts that are doing well, a site visit is often a good way of doing this.

g. Spend time defining your key performance indicators. Allow potential providers to be innovative in their response to your service specification.

h. Dedicated project management time.

Next steps

The new pathway for cardiac rehabilitation is expected to be commissioned by the PCT via a formal tendering exercise within this financial year. The successful provider or providers will then work with the PCT to implement the new pathway through a phased approach over the following six months.

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Delivering tomorrow’s improvement agenda for the NHS
A sector wide approach to cardiac rehabilitation in South West London

South West London Cardiac and Stroke Network

Synopsis

What was the problem, challenge or issue you were trying to resolve?
The network’s cardiac rehabilitation task group had agreed on a high level pathway for cardiac rehab services (see appendix 1) and wanted support from the network to implement this across the sector. In addition, they sought support in establishing robust commissioning arrangements for their programmes.

What were you trying to achieve in the time available?
As the scope of this project is broad (covering all cardiac rehab programmes in the sector) we felt it was realistic to focus on project planning and starting to pilot initiatives during the first year, with ongoing evaluation and roll-out of successful initiatives running into the second and third years of the project.

What was your solution(s) or approach to this?
Our approach has been two-pronged. New initiatives are being trialled using a PDSA cycle based approach (plan, pilot, review, and roll-out). In addition, the network team agreed to support service redesign work that had already commenced, ensuring that the agreed pathway was firmly embedded in this work.

What worked/ didn’t work to date?
So far, the approach we have taken to piloting and rolling out initiatives has been successful. We have had been able to implement initiatives that have worked well in other areas, using the learning from pilot sites to support this. We have also trialled some initiatives in one or two sites (such as ward staff delivering phase one) and found these to be less successful and therefore these have not been picked up post-pilot.

Involvement in the national priority project has been very valuable to stay abreast of what’s going on both at a national level and in other organisations from across the country.

Work on the commissioning and tariff workstream has been slow, partly due to the lack of information available about the tariff. However, a pan London event focusing on the commissioning of cardiac rehab services in May was successful, with a lot of positive feedback received and work is now progressing to agree a pan London set of outcomes for cardiac rehab.

What would you do differently?
The initial focus of the project was on the incoming phase one tariff as programmes in the sector were keen to look at implications of this. In retrospect, the initial work should have focused on ensuring all teams had robust data to inform commissioners and to support shadow modelling of tariff once agreed.

Also, tighter project planning in the early phases for elements which are reliant on others to deliver would have enabled us to be clearer about roles and responsibilities and manage the process more firmly.

Background

The idea for this project arose from the findings of a retrospective audit of cardiac rehab programmes in South West London, and an assessment of these programmes against the NSF and the BACR standards (appendix 4). These indicated that there was a range of rehab provision across the sector, with inequalities in provision for different groups. In addition, cardiac rehab services across the country are striving to provide a ‘menu’ of rehab options, to promote onward referral to existing prevention services, and to increase the range of settings in which rehab is provided. The aim of this is to provide services which are more flexible and can be tailored to fit patient needs more easily, thereby increasing uptake.
Research findings and local patient feedback indicate that patients feel most vulnerable in the early post discharge phase and this is most evident in patients who spend short periods of time in hospital (such as primary angioplasty patients who have an average length of stay of three days). The network task group therefore developed a high level pathway for implementation (see appendix 1). The key features of this pathway are the emphasis on the early post discharge phase, the range of options available, the range of settings available, and the links with existing prevention services. The aims and anticipated benefits of the project are outlined in appendix 2.

What we did

The baseline data for this project was taken from the retrospective audit and baseline assessment conducted in 2007. Workstreams were developed in conjunction with the task group, and have evolved as the project has gone on to reflect changes locally (i.e. within existing services) and nationally (i.e. tariff development). Pilot sites for initiatives were selected based on enthusiasm of programme leads, fit with ongoing work (redesign work and other initiatives currently underway) and an assessment of need (e.g. drug therapy review pilots will be selected based on audit results).

Initiatives are being implemented through a pilot, evaluate and roll-out approach and through integration with service development and service redesign work already underway. It is anticipated that the pathway will be embedded throughout the sector once workstreams have been evaluated and the learning from these shared amongst the organisations in our sector. The project leads plan to drive and embed ongoing service improvements through supporting robust commissioning of CR services in our sector.

Metrics have been developed for the cardiac rehab workstreams of both South London network workstreams, which will be reviewed for sign off in September 2009. These have been aligned with the project measures to enable ongoing measurement of impact and monitoring to ensure sustainability (see appendix 3 for the draft dashboard).

This project has taken a sector wide approach which has been beneficial in working towards reducing inequalities and supporting programme leads to progress service improvement work. Pan London work has also commenced to develop a joined up approach to the key issues for rehab services, promote networking, to support joined up working between providers in different sectors, and to ensure some standardisation in the commissioning of CR services.

The aims of this project were:

• To improve access to cardiac rehab for all groups of cardiac patients
• To reduce inequalities throughout the sector
• To improve uptake by providing a sector-wide service that is responsive to the needs of patients and clinicians
• To ensure providers and commissioners are working together to plan, develop and commission appropriate services for local populations.

The key high level outcome of this project was that all communities in the sector have high quality, robustly commissioned CR services providing a range of activities in a range of settings that can be equitably accessed by all groups of patients that can benefit. The aims and anticipated benefits of the project are outlined in appendix 2.
The biggest issue/challenge

The network task group has a quality assurance role for rehab programmes in the sector and this has led to unplanned involvement in programmes undergoing changes which have destabilised other local programmes. However, this has clear links to the project as ensures equity of provision across the sector.

The quality assurance role has been essential to the delivery of the project as services in development and those undergoing significant change are taken to the network task group to enable them to have oversight of CR services in our sector, allowing them to assess equity of provision. This role was signed off by chief executives in the sector and enables our task group (professionally and organisationally representative) to input to local decision making from a clinical perspective.

Involvement of the project leads in quality assurance activities has been particularly time consuming and has adversely affected time scales for the project as several initiatives have had to be placed on hold while issues are resolved. This has, however, been essential to achieving the project objectives and although some of this work has been unplanned, and something we were unable to anticipate, it is has been important in helping us to achieve the end project goals.

The impact to date

The scope of this project means that many initiatives are still at the planning or early implementation stage. Preparatory work has included:

- Business case development
- Project planning for drug therapy review (including South London audit) and rehab led follow up (pilots to commence later this year)
- Skills competency assessment tool development using Skills for Health CHD competencies (used with two teams to identify training needs in relation to the new pathway and has been shared with national priority project colleagues).

Work to reduce inequalities in access to CR for different patient groups is progressing well in many areas, including the development of a number of new programmes.

- A successful ICD CR pilot has enabled sector wide roll out to commence
- A new community IHD CR programme has commenced targeted specifically at hard to reach populations
- A new community programme incorporating heart failure rehab has been developed with network support (recruitment almost complete, programme to commence autumn 2009)
- A local PCT has agreement to develop a stable angina community CR programme, supported by discovery interviews conducted by network leads.

In addition, existing programmes have begun to broaden their inclusion criteria, enabling more patients who can benefit from cardiac rehab to access services.

The scope of this project means that lead in time for delivery is much longer than for projects with a more discrete focus, however this means that the impact and benefits of this work once realised will be much broader. It is anticipated that this project will impact on patient outcomes (such as quality of life, knowledge of their condition, risk factor modification, etc as well as mortality and morbidity), process of care outcomes, resource utilisation outcomes (such as onward referral to services such as smoking cessation) and cost outcomes. It is envisaged that the impact of the project of some of these outcome measures may not be noticeable in the short term but these will be reviewed one year after project work has finished.

The impact of this project is being measured through the South London cardiac rehab workstreams dashboard. This measures the impact at a high level as the scope of the project is broad (sector wide), with the recommendation that local / workstream level data be measured and monitored locally through NACR. For example, the dashboard monitors which groups of patients are able to access cardiac rehab in
each borough, with a recommendation that programmes use NACR to monitor activity data for different patient groups.

**Barriers, challenges, and lessons**

**What worked and what didn’t work; what you would do differently/the same;**

Pan London working has been very useful, enabling us to minimise duplication, develop contacts and network effectively, and provide the London networks with an approach to tackling inequalities in cardiac rehab provision more easily. A pan London cardiac rehab conference was successful, with positive feedback from delegates who felt that this improved their knowledge of the commissioning process. Delegates also felt that developing a pan London set of outcomes for cardiac rehabilitation was an important piece of work and that networks were in a position to support this.

An initiative to pilot role changes for phases one and two was not successful. The aim of this was to have ward nurses provide phase one input, thereby freeing up the time of the rehab team to focus on a delivering a more comprehensive phase two service. This was unsuccessful due to the lack of time for the ward nurses to provide a full phase one service. In addition, it became evident that this did not fit well with incoming tariff once the tariff costs were confirmed. In retrospect, it would have been better to assess more closely staff capacity on the wards, to wait until tariff information was clearer, and to run a skills competency assessment with key staff before commencing this initiative.

This project has taken a broad approach to patient involvement and this has been very helpful in informing the project direction to date. A decision was made not to have a patient representative on the task group but to have a liaison member from network patient group and to have a range of mechanisms for patient involvement tailored as appropriate. The aim of this was to gain a broader picture of the patient and carer perspective of rehab services and pathways, and to avoid tokenistic representation. Appendix 4 outlines this approach.

**Key challenges/barriers to implementation/risks to delivery and how you overcame them**

A major challenge for this project has been the lack of robust data available to us. Better data would have been immensely helpful to support commissioning discussions. A lack of understanding by individual programmes regarding their funding streams has been a particular hurdle as this has had to be clarified whilst trying to avoid leaving unfunded programmes in a vulnerable position. The pan London work on developing outcomes for cardiac rehab has also been hindered due to the lack of robust data and the approach altered to allow for a ‘shadow period’ to help identify realistic parameters for outcome measures.

**Key learning/sharing points**

**Leadership and planning**

Our clinical lead has been very supportive of this project and has been involved in project decision making and championing the approach. We have a cardiology lead on our group who has helped us with applying our quality assurance role to programme changes in the sector.

Joined up working with other network workstreams has been very productive. For example, our patient diaries project has run across the revascularisation and rehab workstreams, with the diaries being completed from pre-assessment, through the inpatient stay and throughout the rehab phase, giving us a full picture of the pathway and not just the rehab element.

**Clinical engagement**

Clinical engagement has been essential in driving this project. Involvement of local cardiac rehab clinicians in the development of the pathway prior to the project commenced definitely helped to achieve early buy-in. This has also ensured that programmes in the sector had early consensus on the project goal/end point. In addition, the group has an enthusiastic and supportive clinical, and is organisationally and professionally representative, both factors which have been essential to decision making and implementation.
Information transfer
Our task group meets every six-eight weeks and this has been the forum for project issues to be discussed. We have found interim communication (email / phone) as well as being available for ad hoc discussion has helped resolve issues quickly. Within the network team we have used our NPP monthly reports and the NHS Improvement System to communicate project progress.

For initiatives that have multiple leads and multiple organisations involved we have found it really useful to have a set of communication tools that clearly articulate the background, approach and plan for the work. For example, the drug therapy reviews pilot is being set up by network leads from South East and South West London along with the pharmacy lead that works across these networks. Early in the project we produced a PID and a briefing paper that have been used for meetings with network task groups, potential pilot sites, and industry links, ensuring consistency of communication and minimising duplication of effort.

Provision in community settings
There are a number of community cardiac rehab services in our sector now, with several more in development. An important learning point for us has been around ensuring that these are joined up with other programmes (e.g. hospital based programme and existing prevention schemes) right from the beginning. Wherever possible teams should be in a position to cross-cover to maintain flexibility and consistency in provision. For small teams these links can also help prevent professionals feeling isolated by promoting shared learning and peer support. In boroughs with multiple CR providers it is also very important to ensure there is clarity and good communication about patient choice and referral routes. The project team are currently producing a strategic vision paper to inform commissioners at hub level regarding cardiac rehab provision.

Work to address health inequalities
We have found that having a good baseline of existing service provision and robust data is crucial to help identify inequalities and to monitoring progress of work aimed at reducing these.

Next steps
We will continue with the approach outlined previously, ensuring that this is supported by robust evaluation processes and that the learning from each initiative is shared appropriately. We plan to monitor progress at a sector wide level through the South London dashboard, which will be signed off in autumn 2009, along with a set of governance requirements. A South London leads group will be established to support this and to take a strategic overview and to help align the workstreams.

We will continue to review progress in an ongoing manner with pilot and roll out sites to help embed and sustain this work. We anticipate the task group as having a key role in sustaining changes and rolling out good practice.

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NB: Appendices 1-4 are available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries
Rehabilitation triage assessment
North Lincolnshire and Goole Hospitals NHS Trust

Synopsis
What was the problem, challenge or issue you were trying to resolve?
We noted that patients were not getting timely access to their cardiac rehabilitation. This appears to have resulted from the fact that we as nurses have stopped attending a secondary prevention clinic run by the medical team; and also as patients are transferred to other hospitals for intervention they are not always referred back in a timely manner.

What were you trying to achieve in the time available?
We were trying to ensure that patients receive timely and appropriate access through triage to phase three cardiac rehabilitation. This will reduce inequalities in accessing the service and so improve patient’s quality of life. To be able to give patients a date for pre-assessment in advanced without having to be added to a waiting list.

What was your solution(s) or approach to this?
• We intend to use the national audit for cardiac rehabilitation database as a backup for those patient’s who have had a procedure in another hospital
• We have changed our paperwork
• We have developed a flow chart to ensure that we are all working to the same guidelines and standards so that all patients have equal access at the appropriate time.

What worked/didn’t work to date?
We attempted in spring 2009 to undertake a piece of demand and capacity work which was supported by our cardiac network. However, due to staffing issues within the department we were unable to complete this piece of work successfully. Since June 2009 these issues have been resolved. We have not attempted to recreate the original piece of demand and capacity work as our service configuration has changed.

What would you do differently?
Capacity and demand work would have been managed differently, we feel that this was too large a piece of work and should have been split into two smaller pieces. We have now broken it into two sections one is looking at current demand and one looking at attendance against attendance.

Background
The priority project initiative is to triage participants into appropriate cardiac rehabilitation, using a structured pre-assessment and follow up evaluation. Prior to the project patients were put on a waiting list for exercise. The waiting list dates back to 2001, we have made several attempts to try to address waiting times, but have been unsuccessful. However, during this time the service has expanded to include angioplasty and heart failure patients, with a year on year increase in service users. Due to the time on the waiting list we find that some patients have declined to undertake exercise by the time we are able to bring them into the programme, either because they have started exercising on their own, or they are back at work and do not feel that they would benefit from an exercise programme. We have increased our capacity for exercise by now providing community based exercise programmes and a home based programme from a British Heart Foundation/Big Lottery grant. We initially thought that this would help us to address these issues in people having to wait to start the exercise programme; however, we have found that we now have a longer wait to access the programmes. Our team felt the national priority project initiative would give us the required framework to look at our service and help us to highlight the relevant issues in order for us to make the appropriate changes.

What we did
The aims and objectives of our project are to triage participants into appropriate cardiac rehabilitation, using a structured pre-assessment and follow up evaluation. This will benefit the patients by enabling them to have timely and appropriate access through triage to physical activity; improved quality of life for individuals, it will provide an ideal opportunity to signpost individuals to other aspects of the cardiac rehabilitation service, and provide an opportunity to re-enforce key health care messages.
The expected outcome measures are:
- An improved quality of life measured via hospital anxiety and depression (HAD) score
- A reduction in service utilisation by this group of individuals, (reduction in readmission, outpatient follow up and consultations)
- Flexibility of waiting time to attend the cardiac rehabilitation programme to meet the individuals needs
- Improved physical function by an appropriate tool
- A clear management plan for each individual which will be informed by discussion with the patient and their carers.

We have added some health outcomes into our guidelines for referral and entry into the cardiac rehabilitation programme, for those who complete 70% of the phase three cardiac rehabilitation exercise programme there should be evidence of benefit in two out of four of:
- Improvement in functional capacity test by 10%
- Improvement in HAD score by four points
- A measure of continued exercise either by referral to phase four sessions or individual programmes
- Attainment of more than one risk factor treatment goal (eg stopping smoking, reducing cholesterol, reduction in blood pressure).

**Demand and capacity**
We have now revised the demand and capacity work; as this was not as successful as we had originally hoped, due to staffing issues, and the need to change our service configuration. We have changed our registers for the programmes, so that we are continually monitoring demand/capacity/uptake and unused capacity on a weekly basis.

**Allocation of pre-assessment appointment**
We have now allocated designated slots for pre-assessments, as we felt that with offering seven different exercise programmes, the management of allocating these patients was left to one person which often became overwhelming with other work commitments. At pre-assessment we are able to discuss with the patient and their relative what their needs are, and make an appropriate plan to meet their needs. We do this through an assessment of their lifestyle; record their blood pressure and pulse; undertake a functional capacity test; all patients complete a NACR questionnaire, and a risk assessment is carried out using the BACR risk assessment tool. Once we have all this information we discuss with the patient and relative where is the most appropriate place for them to exercise.

**Individual programme manager**
We now have split up the management of the exercise programmes, and pre-assessment allocation, so that each member of the team has a specific programme that they manage. The team then meets on a weekly basis and each program leader updates the rest of the team on their specific programme. We also discuss each patient who has been highlighted as fit and interested to undertake the exercise component of cardiac rehabilitation. If we notice at these meetings that there is a wait starting to develop at one particular programme, we will discuss if there is any capacity elsewhere and offer the patients an alternative site. Each programme leader will then make an appointment for the patients that are relevant to their programme in order for the patient to be assessed fully.
The biggest issue/challenge

Challenges remain regarding identification of patients who are ready to exercise but who experience a complex patient journey. We feel that one reason for this is because our main tertiary centre has a high patient workload but a limited cardiac rehabilitation service. The referral of our patients back into our service is not seen as a priority by their nursing teams.

One issue identified through the project was our inability to quantify demand against capacity. As already identified we were unable to successfully complete this piece of work. We have not attempted to recreate the original piece of demand and capacity work but have changed the focus to monitor attendance against capacity and unutilised capacity.

Work undertaken during the project has identified the programmes running with unused capacity. We were able to identify that this was due to our management of the existing patient pathway. The impact of our action/inaction created a waiting list and caused us to ‘fire fight’ to reduce waiting times rather than having a clear long term strategy to promptly identify patients who are ready to attend an exercise programme.

Prior to the project one person managed all the exercise programmes. This created an issue when workload increased. The identification of patients suitable for exercise became inconsistent, pre-assessment dates were not requested in a timely manner and if patients cancelled their appointment we were not consistently reallocating the appointment to another individual.

The impact to date

We no longer have a waiting list for our Scunthorpe and community programmes. All patients are allocated a pre-assessment date within one week of being identified as being suitable for exercise.

The issues which created a waiting list at the Goole programme are almost resolved. Our target is that by 31 October 2009 there will be no waiting list at the Goole programme.

The waiting list for the seated exercise programme will remain as this group of patient’s ability to exercise can be affected by non cardiac reasons causing the group to change at short notice. However to optimise attendance we have developed a 10 week rota.

We are now able to consider the introduction of a programme specifically for heart failure patients. By managing our demand and capacity better will enable us to utilise our resources differently to enable us to offer our Heart Failure patients a specific programme in the future rather than including them in the gym with non heart failure patients.

Working in partnership with local service providers has enabled us to fast track patients through Phase three exercise onto phase four programmes when appropriate resulting in increased capacity in the Phase three programmes.

We are currently developing flow charts by which all team members can identify which programme is appropriate for each patient. The flow chart will identify a pathway for complex patients to enable us to identify when they are ready to attend an exercise programme.
Each programme has an identified programme coordinator who manages and monitors demand, capacity, waiting times and attendance on a weekly basis.

At our weekly team meeting each programme coordinator updates the rest of the team on their programme. If a programme is not running at available capacity we discuss the related issues and agree a strategy to prevent capacity wastage. (see appendix 6)

**Barriers, challenges and Lessons**

**What worked/what didn’t work**
The process mapping exercise plus demand and capacity work has given us a better understanding of patient flow through our service. The team can now see how our action/inaction impact on waiting times for patients ready to access cardiac rehabilitation.

We have revised our demand and capacity work to reflect current practice. Staffing issues within the department, which are currently in the process of being resolved, resulted in reconfiguration and suspension of some programmes in spring 2009. Although the team recognize this was not ideal we felt it was better to offer the majority of patients some rather than no rehabilitation.

**Challenges/barriers**
A challenge for the future success of our project is to ensure that when making changes to our service to meet the project aims and objectives that we do not create an alternative bottleneck in the patient journey.

Our cardiac rehabilitation team has been stable for several years however there have been recent unavoidable changes within the team. One consequence has been the need to re-evaluate the sustainability of our service. The team feel that these issues and changes prevented us making the progress in the project that we envisaged in the first year of the project.

A long term barrier to the success of the project is the continued delay in the referral pathway from our local tertiary centre. We are working in partnership with our local cardiac network and partner agencies to work out a long term strategy to address this challenge.

**Key learning /sharing points**
- Understand your demand and capacity
- Ensure service reconfiguration does not create an alternative bottleneck
- Build sustainability into your service
- Multiagency partnerships can increase flexibility within your service.

**Next steps**
- Our ability to assess health outcomes and develop a strategy for follow up evaluation has been hampered by staffing issues within our department and the need to reconfigure our demand and capacity work
- Our team together with our local cardiac network is developing a prompt and reliable referral pathway for post intervention patients discharged from our tertiary centre
- We intend to commence collecting health outcome measure data
- The second year of the project will concentrate on these elements of our project.

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**NB:** Appendices 5-6 are available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries

www.improvement.nhs.uk/heart
Planning cardiac rehabilitation commissioning
Dorset Cardiac and Stroke Network

Synopsis

What was the problem, challenge or issue you were trying to resolve?
To fully understand the current cardiac rehabilitation service across Dorset so that all programmes are supported to reach the minimum BACR Standards and Core Components (2007).

What are you trying to achieve in the time available?
The project will take into account the NICE Commissioning Guide for Cardiac Rehabilitation (2008) in terms of determining local service levels, developing a service specification and building on mechanisms for quality assurance.

What was your solution(s) or approach to this
The cardiac rehabilitation service across Dorset will jointly agree a minimum service specification which will form a basis by which all future services will be commissioned to ensure equity for all patients who require cardiac rehabilitation across Dorset.

What worked/did not work to date?
The project has been well supported by commissioners and clinician from primary and secondary care. The cardiac lead nurses have also shown commitment and enthusiasm for driving the project forward and implementing changes that have improved cardiac rehabilitation services. The national peer support meetings have been well attended by the nurses and by our patient representative.

What would you do differently?
Have a clear project plan from the start, with timeframes and specific roles and responsibilities formulated. The initial bid and the first six months of the project was managed by two different project managers. Learning service improvement methodologies has been valuable to drive the project.

Background

Pan-Dorset serves a population of 758,000 and this project involves three Acute Trusts: Royal Bournemouth NHS Foundation Trust, Poole Hospital NHS Foundation Trust and Dorset County NHS Foundation Trust. The three cardiac rehabilitation programmes vary in length, content and the place of delivery. All programmes access cardiac rehabilitation phase one and two in secondary care.

Dorset is a rural location and offers phase three programmes in four community sites. Bournemouth offers phase three in secondary care only and Poole offers phase three in both secondary care and in the community.

Cardiac rehabilitation across Dorset is offered routinely to only three of the many diagnostic groups who might benefit. Such as those who undergo cardiac surgery, have a heart attack, and those who have percutaneous coronary Intervention. Patients with heart failure, angina, valve disease and have cardiac implantable devices are not routinely offered cardiac rehabilitation.

What we did
We set up a Dorset wide cardiac rehabilitation sub-group to promote joint working and steer the project. The sub-group members involved in the project include clinicians, commissioners, local authority, cardiac network team and patient and carer representatives.

The Dorset Cardiac Network embraces the principle that Patient and Public Involvement (PPI) should be central to service provision and development. The Dorset Cardiac Network has produced a paper detailing the PPI plans for this project (see appendix 7). In brief it includes how representatives will be empowered and supported in their role as members of the project team and also describes how various methodologies will be employed throughout the duration of the project to ensure that the views of local patients and carers inform the work of the project team on an ongoing basis.
The key aims of the project – using a phased approach is to:

• To improve access for all groups of cardiac patients
• To increase uptake of cardiac rehabilitation
• To minimise inequalities across Dorset
• To meet the South West ambitions target which says:

“By March 2011 at least 85% of people with a heart attack, bypass surgery or coronary angioplasty will receive cardiac rehabilitation.”

In order to fully understand the local cardiac rehabilitation services between September 2008 – April 2009 an extensive audit and analysis of the cardiac rehabilitation programmes across Dorset was benchmarked against the British Association for Cardiac Rehabilitation (BACR) Standards and Core Components (2007).

The key findings from the audit received comments from members of the cardiac rehabilitation sub-group and recommendations have been planned to address inequalities and aid service improvement.

**Recommendations from the BACR Audit**

1. Patients should be offered choice of home, community or hospital cardiac rehabilitation programmes. The delivery of cardiac rehabilitation should be predominately based in the community, particularly for those patients with mild to moderate risk. For patients with more complex needs, referral to hospital based rehabilitation programmes should be available. In both cases programmes should be arranged to maximise patient choice with regard to day, time and venue.

2. On completing the cardiac rehabilitation programme all patients should be provided with information regarding existing voluntary groups, networks, psychological support so that patients can access for ongoing support.

3. On completion of the cardiac rehabilitation programme all patients should be provided with a discharge management summary explaining diagnosis, recent blood pressure, cholesterol result, list of medications and recommended medication optimisation plan for the GP to follow.

4. Links should be improved with local community leisure services to support the provision of suitable phase four exercise programmes for cardiac patients in the community.

The second step was to undertake an uptake and access audit to identify the number of people receiving cardiac rehabilitation and the reasons why people did not take up cardiac rehabilitation or complete the course. The two baseline assessments will form the basis of ongoing work.

Each phase three cardiac rehabilitation programme across Dorset was asked to collect data on patients who had a cardiac event during the sample period of 1 January - 31 March 2009. The analysis started in August when all patients in the sample group should have completed the programme. Full results of the audit will be completed by the 30 September and published on the NHS Improvement website. Preliminary results are available (see appendix 7).

**The biggest issue/challenge**

- Defining the South West ambition target was a challenge and caused much debate – the team were unsure if it meant 85% of patients offered cardiac rehabilitation or 85% should receive phase three cardiac rehabilitation.
- There is no direct guidance that exists on what proportion of a programme needs to be completed to ensure efficacy. Comments from Patrick Doherty National Clinical Lead by email are helpful to aid discussion:

“If you are fortunate to run a programme twice weekly for eight weeks or more then you could use 80% because it will keep you within the 12 sessions threshold (two sessions per week for six weeks) which, via the NSF for CHD and Joliffe et al's review, is considered the minimum a number of sessions related to efficacy.
The difficulty comes when you have set goals that require more time to achieve such as smoking cessation and weight reduction. Equally if you have patients with high levels depression/anxiety or those with difficulties taking on board secondary risk management behaviours it is important to ensure that they attend all sessions.

It is easier to make up for a drop in exercise sessions in the community but less so for the education sessions. Programmes should try and ensure that all educational components are delivered prior to discharge”.

Professor Patrick Doherty
National Clinical Lead, NHS Improvement - Heart

- Understanding the cardiac rehabilitation tariff has been difficult and remains a focus at the sub-group meetings.
- Nurses reported that although the network has funded staff ‘back fill’ for the project; the nurses did not have the extra staff to fill whilst attending the national peer support meeting and local meetings. The nurses also found allocating time for project work difficult at times, specifically whilst undertaking the audits.
- The nurses reported that the BACR and uptake audit was very time consuming and collecting the data was not easy as the information needed was not accessible from the National Audit of Cardiac Rehabilitation (NACR) data base.

The impact to date
The project is still at its early stage of development and many of the recommendations are at the planning stage or early implementation stage.

- All patients discharged from a programme will receive a management plan and this will be copied to the GP.

- Patient referral and pre-assessment letters have been improved in response to patient information from patient discovery interviews
- A pilot using the Heart Manual as a basis for phase three rehabilitation has been funded by Dorset Cardiac and Stroke Network and is due to start in November 2009.
- All three programmes are inputting data to the National Audit of Cardiac Rehabilitation and communication between the three sites has improved.
- A resource folder for services that patients can access has been updated at each site and information of patient services across Dorset are shared.
- Psychological services have been mapped across Dorset and referral pathways to these services have been identified.

Next steps
- Complete uptake and access audit and share results with the NHS Heart Improvement Team. Key findings from the audit will form recommendations that will aid service improvement and increase uptake and access to cardiac rehabilitation.
- Undertake Geo mapping exercise to identify if any locations across Dorset show variation in uptake.
• Introduce the Heart Manual as an additional method of delivery to support those patients who could not attend a traditional rehabilitation programme. It was agreed that this would be a pilot in the rural parts of Dorset. The patient experience and views will be recorded using discovery interviews.

• Invite Leisure Services to join sub-group and be involved in the project to forge partnership working to expand the provision of phase four in the community.

• Invite primary care colleagues to be involved in the project to improve seamless discharge from cardiac rehabilitation to the community.

• Provide training to primary care colleagues on coronary heart disease lifestyle management to increase knowledge and awareness in order to empower patients to self-manage.

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NB: Appendices 7-8 are available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries
Modernising a cardiac rehabilitation service
North of Tyne, North of England Cardiovascular Network

Synopsis

What was the problem, challenge or issue you were trying to resolve?
The North of Tyne area is geographically diverse, with densely populated inner city and remote rural communities, and includes spearhead areas of deprivation. The project aims to inform NHS North of Tyne, to assist commissioning of a patient centred, cost effective, equitable CR service for patients having PCI, CABG and MI, acknowledging there are other groups who would benefit from rehab (HF, angina etc.). The objective is to resolve the differences in the cardiac rehabilitation services already established in the three PCO areas and to move towards more individualised and accessible services.

What were you trying to achieve in the time available?
The current cardiac rehabilitation service was to be reviewed with a view to informing commissioning decisions and addressing any gaps and inequities in services, whilst actively engaging with stakeholders and patients in the process. Alongside staff and patient involvement, the project had to correspond and adhere to national policy drivers for the core standards of a cardiac rehabilitation service. The next stage of the project involves benchmarking providers against the new service specification. Good practice would be highlighted and shared and any duplication in the patient pathways between the different stages of care were to be addressed.

What was your solution(s) or approach to this?
Both patients and professional stakeholders representing community and acute settings were consulted with on a regular basis. Several stakeholder events were held to discuss the proposed service specification and also to comment on the ongoing project report. Patient focus groups within cardiac rehabilitation services were also held along with GP interviews.

What worked/ didn't work to date?
Communication with service providers in the initial stages of the review could have been improved as it was felt that commissioners did not keep professional stakeholders fully informed of the scope and proposed outcomes of the project. However, as the project progressed, it was recognised that sustained and frequent meaningful engagement with both patients and professionals led to the project report being fully representative from a wide range of stakeholders.

What would you do differently?
As previously mentioned, communication would be more explicit at the outset as there was an element of uncertainty and concern about what the review would entail – fears about tendering for total service change and potential job losses were real issues for provider staff. It should have been clearer at the start of the project that it was a scoping exercise to produce a report to inform commissioning decisions rather than an end in itself.

Background

The project was a joint collaboration between the North of England Cardiovascular Network and NHS North of Tyne. NHS North of Tyne is a joint management structure encompassing three PCOs – North Tyneside, Newcastle and Northumberland Care Trust. It also covers two acute trusts – Northumbria Healthcare NHS Foundation Trust and Newcastle upon Tyne Hospitals NHS Foundation Trust. NHS North of Tyne commissions cardiac rehabilitation services for a large and diverse population of around 775,000 people and covers a geographically diverse area including inner city and remote rural areas. NHS North of Tyne as a commissioning organisation has experienced the commissioner-provider split at an early stage and as such the commissioning functions of the PCOs are well established.

The scope of the project was to map current cardiac rehabilitation services and to include patients who had MI, CABG and PCI ensuring they had timely and equitable access to rehabilitation services in line with national policies and guidelines. This service was to be tailored to the individual and also needed to respond to the requirements of a very diverse population. The project spanned the entire patient pathway and focussed on the community element of this, i.e. discharge from hospital. Each cardiac rehabilitation team was structured differently with some elements of the
service duplicated at different stages of the patient pathway and as such, a revised and overarching service specification was written alongside a project report, with both documents going out to consultation with stakeholders and which would inform commissioning decisions for 2009/10.

What we did

In spring 2008, a scoping workshop was undertaken with the three cardiac rehabilitation teams from across the North of Tyne PCO areas.

The workshop identified that:

• The models of service vary across the three areas
• The team that provide the service are structured and resourced differently
• There is duplication of service provision within existing programmes.

These outcomes led to the conclusion that it would be beneficial to explore the options for modernising the service from a one-size fits all programme to a menu-based rehabilitation programme tailored to individuals needs.

The project team consisted of:

• Commissioning representation from NHS North of Tyne (project manager).
• North of England Cardiovascular Network
• Clinical champion - consultant cardiologist.

The aims of this project are:

• To ensure all that patients after MI, PCI and CABG across the North of Tyne area have equitable access to high quality and timely cardiac rehabilitation that identifies and meets the needs of the individual, encourages engagement with patients and also ensures that the needs of a widely diverse population are met
• To explore the potential of extending routine cardiac rehabilitation to other groups such as heart failure, angina and implantable cardioverter defibrillators
• To secure an agreed model of service for cardiac rehabilitation that can be commissioned across North of Tyne.

The intended outcomes of this project are to generate recommendations that inform commissioning decisions for the forthcoming financial year.

These recommendations will ensure that:

• The current pathway for cardiac rehabilitation will be enhanced and changed where appropriate
• Cardiac rehabilitation is tailored to the needs of the individual patient and encourages patients to identify their own goals
• Access to the service is equitable for the diverse population across North of Tyne
• The needs of patients with co-morbidities are addressed in the best possible way
• Existing local training and education provision is built upon with competency based assessment, ensuring a skilled, knowledgeable and sustainable workforce throughout the cardiac rehabilitation pathway
• Robust systems are in place to measure sustainability and evaluate the service provision.

To achieve this we:

• Held interviews with staff from within the cardiac rehabilitation pathway across secondary care and community services (NECVN)
• Interviewed a sample of GPs from across North of Tyne (NECVN)
• Held patient and carer group discussions within Phase three cardiac rehabilitation groups, using a sample of groups that represented the diversity of the three PCO localities within North of Tyne (NHS North of Tyne)
• Held patient and carer focus groups that particularly centred on the patient experience after Primary PCI (NECVN)
• Received professional stakeholder feedback on current service provision which was compared against patient and carer views and also referenced against National Policies and Standards (NHS North of Tyne)
• Using all of the information and feedback gathered, a service specification was drafted. We engaged with professional stakeholders to progress the specification into an agreed document that was both realistic and met the required national standards. The agreed service specification will ensure that cardiac rehabilitation will be provided in a high quality, consistent and equitable manner to accomplish the ultimate intention of ensuring patients achieve better outcomes after participating in the cardiac rehabilitation programme (NHS North of Tyne and clinical champion).
All of the information is currently being compiled into a draft report to be submitted to the NHS North of Tyne Executive Commissioning Team as recommendations for commissioning decisions for 2010/11.

**The biggest issue/challenge**

The biggest issue that the project team has sought to address is inequity of service across the three localities and identifying the barriers to providing a menu-based, personalised service. There is currently a wide variation in how services are provided such as waiting lists, input from acute and community staff and the use of the home based programme to name a few. Having engaged with service providers to develop a standard service specification for all three PCO localities across North of Tyne to work within, we have been able to identify these variances and address them locally. One identified barrier to ensuring that all cardiac rehabilitation patients receive the same quality, personalised service is the inconsistency of expertise in staff. It is acknowledged that all staff provide a high quality service. However, it is also recognised that without established protocols, the needs of patients who have additional needs over and above the cardiac rehabilitation programme would more likely be identified by staff with specialist skills. For example, if a member of staff has additional training in psychological interventions, they are more likely to recognise the need for a referral to a clinical psychologist.

**The impact to date**

The objective of this project is to make recommendations to inform commissioning decisions. Therefore, none of these changes have been implemented at present so there are no outcomes to be identified as a result. Arrangements for collecting information, performance monitoring and evaluating the changes to the service are currently being identified through the benchmarking process and will be established within the final service specification. One current benefit from this project has been the development of the relationship between the commissioners and providers of the service. Although this is an outcome from the project itself rather than an outcome of the development of the service, we felt that this was significant to mention.

**Barriers, challenges and lessons**

What worked and what didn’t work; what you would do differently or the same

- Set clearer tasks within the project group and ensure that mechanisms for reporting back into the project team are more robust
- By engaging with both professional stakeholders and service users to understand the requirements of the service, we have been able to develop a realistic yet high quality service specification with buy-in from service providers
- Clearer definition of organisational roles and their input into the project.
Key challenges/ barriers to implementation/ risks to delivery and how you overcame them

- A recognised challenge in implementing the service specification is the requirement for robust staff training to ensure consistent, high quality service delivery.
- The potential bid for additional funding may not be supported, however we envisage that the work undertaken in the project will strongly underpin the business case and reduce this risk.

Key learning and sharing points

Leadership and planning
Commissioners leading the project have ensured that the project feeds directly into the commissioning cycle.

Clinical engagement
A consultant cardiologist who is well respected by service providers in community and secondary care settings across all PCO boundaries championed the project. This has provided significant benefit when engaging with professional stakeholders, particularly when negotiating the service specification.

Information transfer
The outcomes of the project are yet to be implemented and information transfer is being addressed through the service specification.

Provision in community settings
The localities within NHS North of Tyne provide a good range of cardiac rehabilitation services in the community however any identified deficiencies will addressed through the commissioning process.

Work to address health inequalities
The service specification and pathway approach will ensure equity in service provision and eliminate organisational barriers.

Next steps

- A benchmarking tool has been developed and we are currently benchmarking services against the proposed service specification standards.
- All areas in North of Tyne (Newcastle, Northumberland and North Tyneside) are to agree a service specification and protocols in order to provide a service that is equitable and accessible to all members of the population.
- There is a need to identify workforce training requirements.
- Cardiac rehabilitation is provided by different staff groups in different areas e.g. cardiac rehabilitation nurses or district nurses. An important aspect of future work will be ensuring that individuals have access to the same high quality training.
- Outcomes of the project will inform commissioning decisions for the coming year. The benchmarking exercise is to be completed and the gaps and areas identified for development will provide the basis for a bid for the Annual Operating Plan 2009/10.
- Commissioners will continue with this work with a view to implementing changes in 2010/11.

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A redesigned service for North Staffordshire
Shropshire and Staffordshire Heart and Stroke Network

Synopsis
The network formed a cardiac rehabilitation group in February 2008. At the first meeting it was agreed that a baseline audit would be undertaken to highlight good practice and identify gaps in service.

The main project identified from the baseline work was the redesign of cardiac rehabilitation service in North Staffordshire. Increased capacity was required in order to offer all cardiac patients rehabilitation.

Background
The Shropshire and Staffordshire Network consists of four acute trusts (one tertiary centre and three district general hospitals), five primary care trusts (PCTs) and one ambulance trust.

Two of the acute trusts work with the model of a combined cardiac rehabilitation and heart failure teams and the remaining trusts have separate teams.

When the baseline was completed a detailed document was drawn up of the services within the Network and all the documents can be found in the document store.

The network had completed a project initiation document detailing the aims and objectives for a cardiac rehabilitation project and was keen to join the national priority project initiative. Having worked with the national team on previous priority projects, the network knew that this would provide rehabilitation colleagues with a chance to exchange ideas and discuss initiatives from other areas and to ensure that they received timely updates regarding national initiatives within the field of cardiac rehabilitation.

What we did
When we joined the national priority project the network had already started a baseline audit of cardiac rehabilitation services available across Shropshire and Staffordshire.

From the audit, gaps were identified and the following aims and objectives agreed with the rehabilitation project group.

• Improve the cardiac rehabilitation pathway across services within Shropshire and Staffordshire
• Share information and skills
• Increase equity of access to rehabilitation.
• Work with commissioners and trusts to provide plans to reform rehabilitation services where required
• Assist organisations in the implementation of electronic submission to NACR
• Support organisations in the implementation of the myocardial infarction guideline
• Provide an overview of models currently being followed across the network.

The outcomes of the project will be:

• A redesigned service at North Staffordshire which provides a patient menu driven approach to cardiac rehabilitation ensuring that rehabilitation is also provided in the community
• Improved uptake of cardiac rehabilitation in North Staffordshire
• Regular opportunities to share information and skills across the cardiac rehabilitation community
• All trusts submitting electronic data to NACR
• Equity in provision and access to cardiac rehabilitation across the network.

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The main project identified from the baseline data was the redesign of services at North Staffordshire. This has now started and the new cardiac rehabilitation lead manager has been appointed and commenced in post from July 2009. The service improvement manager has had initial discussions with the commissioners regarding their involvement in the rehabilitation project and the cardiac rehabilitation lead is setting up meetings with the commissioners to take this work forward. Cardiac rehabilitation at Stoke will be part of the fit for the future programme which will see both PCTs working together with the acute trust and the Network to deliver a reformed service over the next few months.

Paula Wells, the public and patient partnership lead for the network, has been in contact with local groups to provide links to cardiac rehabilitation. A DVD is currently being trialled for Asian women and will be rolled out across the country if successful.

There are two sites within the network who currently submit data to NACR manually and work is in progress to ensure that both sites can submit information electronically by April 2010. A module has been purchased for one hospital that is being installed on their computer system which will allow data to be input and sent to NACR. At the other hospital trust the network information manager is working with staff to ensure that their existing database can upload data to NACR.

The biggest issue/challenge

The main priority is the redesign of services at North Staffordshire.

From the baseline audit it was noted that a redesign of service and an increase in workforce was required to ensure that the team provided equity of access into cardiac rehabilitation for all appropriate cardiac patients to meet national guidelines of best practice. This will require the team to increase capacity by redesigning the service and reviewing the workforce skill mix and numbers. This notion was also eluded to in the analysis of the patient satisfaction surveys completed from 2006 to 2009.

The need to create capacity is demonstrated in the graphs below:

The number of patients who have received phase one rehabilitation is falling whilst the amount of work at the trust is growing. This highlighted the need for training to be provided to the nurses on the cardiac ward so that they can provide phase one rehabilitation to patients who are discharged out of the teams normal working hours:

Similarly this graph demonstrates that with the number of procedures being undertaken at the trust, cardiac rehabilitation should be offered to a larger number of patients.

The service redesign will include:

• Review of current practice relating to phase three care
• Rapid access into phase three rehabilitation
• Risk stratification for patients to identify location of phase three care
• Ensure additional capacity in the community for phase four cardiac rehabilitation
• Increase in workforce and review of skill mix
• Access into cardiac rehabilitation for heart failure and patients post elective coronary revascularisation.

Dr R Butler, consultant cardiologist and James Rushton, the cardiac rehabilitation lead manager will be leading the work and a paper has been produced detailing the additional resources required to ensure that the rehabilitation service meets the needs of its patients.

Within Northern Staffordshire the two PCTs are committed to a programme of developing services through the initial work and liaise with the commissioning leads. The next round of investment will include cardiac rehabilitation. This work will commence in September and due to the background work already completed should move fairly rapidly.

The Impact to date

The main project is still in its infancy and data is being collected on a monthly basis to monitor the take up of cardiac rehabilitation so that as the service and additional capacity is available this can be recorded as a measure of success of the project.

The analysis of the patient satisfaction questionnaires has been a very powerful tool and will be used to inform the project of areas that need to be improved. The questionnaire is sent to all patients and will be used as an ongoing measure (see appendix 9).

The project will also monitor the uptake of rehabilitation within the community once this facility is available to patients.

Feedback from patients who attended the Stafford Saturday education group has been obtained. The group is run for patients by patients and provides an informal atmosphere where patients can chat and provide support to each other. Members of the cardiac rehabilitation team are also in attendance to provide support and advice and education is provided by a dietician, consultant cardiologist, etc. There are four programmes per year that last for four weeks. This is an excellent example of good practice and has been fed back to the national priority project lead.

Barriers, challenges and lessons

One of the biggest barriers for the main project was not having the lead rehab manager in post until July 2009. However, the project is now gathering pace in terms of proposed new service models. Yet for these to be successfully implemented the support and vision of the commissioners is vital to provide synchrony of services across North Staffordshire.

The provision of cardiac rehabilitation within the community is key to the plans for the future of the service. This will bring rehabilitation closer to the patient and free up additional space within the cardiac gym to accommodate all patients who require rehabilitation.

Next steps

The project is fully integrated into the working life of the staff at University Hospital of North Staffordshire and will be sustained once completed as it will be a totally new way of working for the team. Once the new pathway has been agreed, protocols and revised documentation will be produced in line with the new ways of working. The network information manager is working with the lead for rehabilitation to look at introducing documents that can be scanned both for providing information to NACR and the department database and also for the patient satisfaction surveys. This will free up clinician time from administrative chores.

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NB: Appendix 9 is available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries
Improving access for Surrey patients
Surrey Heart and Stroke Network

Synopsis
This project reviewed current cardiac rehabilitation services offered to the Surrey population, to enable the delivery of equitable services, in preparation for the commissioning intentions of Surrey PCT and development of a local tariff.

To address the inequities in service provision for Surrey patients a project group, involving key stakeholders, was formed by Surrey Heart and Stroke Network. Services were mapped against an agreed ‘ideal cardiac rehabilitation pathway’, following review of national guidelines by project group. Gaps in service provision were identified and service specification and business case agreed to enable the development of a more patient centred comprehensive rehabilitation service, in particular to enable rehabilitation closer to home.

Key challenges included development of robust methods of data collection to assess uptake of patients to phases, gaining consensus on defining rehabilitation phases and overcoming public and professional perceptions regarding safety of patients receiving phase three programmes in community and leisure centre venues.

Background
Surrey has five acute hospital providers who offer cardiac rehabilitation phase one, two and three. Two of the acute hospital providers serve two neighbouring PCTs. Patients following cardiac surgery or cardiac events in Tertiary centres are referred back to acute hospital providers for rehabilitation.

All providers had limited experience of networking across Surrey and sharing practices. A significant difference in cardiac service provision has led to known inequalities in service provision for Surrey patients. However, there was no previous evidence of base lining of all services in one report. Two out of the five hospital localities provide community based phase three services. One out of the five localities provides a comprehensive cardiac rehabilitation programme, including a choice of hospital, community or home programmes using facilitated manual based programmes. In addition service varied in access to patients groups, nature, and duration and information management.

In addition, there was no network wide agreement on a minimum standard for operation of cardiac rehabilitation. Consequently, it was felt important that in preparation for the development of an agreed service model and specification and base lining of services against this standard to identify gaps in service provision and agree development plans.

Funds had been identified for cardiac rehabilitation across Surrey, however during the life of project it had become increasingly apparent that such funds were now limited. As a result the minimum output for the project was an agreed standard for cardiac rehabilitation services and identification of gaps in service provision and a development plan for each provider.

What we did
- A project group was formed and chaired by a consultant cardiologist who also attends Surrey Cardiac Clinical Reference Group. Key stakeholders from all providers and disciplines were invited. Four meetings were held between June and September 2009
• An ideal cardiac rehabilitation pathway was developed and agreed, in collaboration with key stakeholders from current providers in Surrey. Pathway was developed following review of current literature and guidelines on cardiac rehabilitation
• Services were benchmarked against key elements of the ideal cardiac rehabilitation pathway. Mappings were carried out by visiting each provider and by presentations of providers at each meeting. Patient pathways for all phases were mapped
• Each provider was requested to provide referral, activity data and coded data per primary diagnosis and PCT e.g. patients with angina, MI, PCI, heart failure, cardiac surgery, and with implantable cardiac devices
• Patients views are being gained by comment cards of patients who have attended services to determine comments regarding preferred choice of venue for phase three rehabilitation
• Patients who did not attend for phase three were sent ‘reasons why’ letter
• Cardiac rehabilitation specification currently being consulted with Surrey Cardiac Clinical Reference Group and via patient groups.

Impact to date

Key outcomes of the project included:
1. The cardiac rehabilitation base lining document was presented to Surrey PCT which identified the gaps and gave recommendations.

Key findings included:
• Gaps in current service provision across all providers, in particular community based rehabilitation programmes (see appendix 10, tables 1 and 2)
• Variation in robust methods for data collection – not all providers’ sign up to one year follow up questionnaire. Not all providers can report activity per diagnostic group therefore have difficulty in reporting % uptake of patients to each phase (see appendix 10, tables 3 and 4).
• Variation in governance arrangements – not all providers have operational procedures documented with lines of responsibility to consultant cardiologists. Those services that were able to provide guidelines were not outlined as an integrated service to all phases (see appendix 10, table 5).

2. Network wide minimum standard for cardiac rehabilitation services phase one, two and three, agreed by project group (can be viewed on NHS Improvement website at: www.improvement.nhs.uk/heart).
3. Network wide model for cardiac rehabilitation agreed by project group.
4. Network wide monitoring and evaluation criteria agreed.
5. Robust methods for data collection implemented across all providers
6. Networking of all cardiac rehabilitation services across Surrey and willingness to share and develop practice.
7. All providers agreed to undertake one year NACR follow up.
8. All providers agreed to use DNA evaluation form for those patients who do not attend.
9. Methods for consulting with users agreed, comment cards, support groups, organisation of cardiac rehabilitation public awareness event November 2009.

The biggest issue/challenge
• Development of services with no investment
• Development of a local tariff – as services involve professionals from a variety of organisations and because all services are included in block contracts the development of a local tariff will mean monies will be taken out of acute trust contracts, this may destabilise existing services as workforce usually undertake other cardiology services such as Rapid Access Chest Pain Clinics or support other rehabilitation services
• Development of robust methods of data collection – concerns were raised at an early stage that many providers were unable to present activity for all phases per diagnostic group and PCT. Data was also collected differently by providers. Many providers also had different interpretation for input of data to NACR.

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Barriers, challenges and lessons learnt

- Changing perceptions of clinicians regarding traditional versus new ways of working when new service model could threaten role/job. This was overcome by always trying to get clinicians to ‘think outside of the box’ and wearing the ‘hat of the patient’
- Changing perceptions of patients – many patients did not understand that they are not at risk by undertaking phase three programmes at other centres outside of hospital. This could bias obtaining user views. Hence, we have planned public awareness sessions on cardiac rehabilitation
- Managing clinician expectation of the project group in a climate of PCT financial constraint. Needed to demonstrate some quick wins, frequent monthly meetings enabled networking and sharing of work. Every meeting had a product and tangible milestone outcome. The group did not fully understand commissioning processes and challenges. Therefore were initially defensive and reactive to any base lining work and defining model of rehabilitation. In hindsight, it would have helped if clinicians could have attended more NHS Improvement support days but it was difficult to gain commitment from organisations but we did manage to network with neighbouring PCTs to obtain information and support.

Next steps

- The group is to continue to meet to develop a plan of how individual providers will meet minimal standard of specification
- Surrey Heart and Stroke Network to facilitate all providers to develop plans to streamline services to meet standard and to monitor achievements of plans
- Cardiac rehabilitation data to be reported quarterly and Surrey Cardiac Clinical Reference Group
- Public awareness day to celebrate achievements and consult on model of cardiac rehabilitation
- Specification/ business case to be supported by PEC within Surrey PCT and to be progressed to obtain increased community based rehabilitation services.

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NB: Appendix 10 is available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries
Audit on the uptake of phase three cardiac rehabilitation
Black Country Cardiovascular Network

Synopsis

What was the problem, challenge or issue you were trying to resolve?
The challenge was to increase the uptake of phase three cardiac rehabilitation across the Black Country Cardiovascular Network (BCCN) and ensure that all eligible patients are being offered cardiac rehabilitation.

What were you trying to achieve in the time available?
We are hoping to identify reasons/barriers why patients are declining cardiac rehabilitation and determining whether there is a significant difference in the level of rehabilitation uptake between various demographics. If time permits, interventions to address any barriers identified will be trialled.

What was your solution(s) or approach to this?
A three month audit was undertaken of all post MI and revascularisation patients discharged from hospital in the BCCN. This formed the baseline data for:

- Current uptake
- Reasons for decline
- Possible inequalities likely to result in patients not being referred or declining their invitation.

What worked/didn’t work to date?
The three month baseline audit was a success and proved to be very thought provoking with respect to the referral process, trends in uptake and the quality of information collected. In particular, the baseline audit has helped to:

- Identify potential inequalities in the referral process
- Identify potential inequalities in uptake, particularly with respect to age and gender
- Identify that some of the data are ambiguous, with respect to both non-referral and non-uptake
- Improve our audit forms to enable us to collect better quality data
- Raise the profile of cardiac rehabilitation within the care pathway.

What would you do differently?
- The audit numbers (555) allowed us to interrogate the data on a network level but not on a locality level. Accordingly, the baseline audit was a successful ‘pilot’ but we would ideally increase the audit sample size to allow us to look at the data on a locality level
- Ensure that staff collect more accurate information on non-referral and non-uptake.
- Ensure that staff complete all audit questions.

Background

The Black Country Cardiovascular Network has three mature and comprehensive CR programmes that are well respected by the network and its component PCTs. The network covers Dudley, Walsall and Wolverhampton. The rehabilitation services are based at:

- Russells Hall Hospital, Dudley
- Heart Care Walsall
- New Cross Hospital, Wolverhampton.

Accordingly, the PCTs are keen to encourage all patients to participate in the CR services. However, in line with national statistics, the programmes were aware that the general uptake of CR services remains frustratingly stable and sub-optimal.

The network was already embarking on its audit project at the time of the national priority project being announced. The network project met the criteria of the national project and it was felt that signing up as part of the national project would be more beneficial than carrying out the project solely within the network. By signing up nationally it would allow us to:

- Keep up to date with the national picture
- Attend peer support meetings
- Look at outcomes of project and address actions
- Receive training on use of improvement reporting system, demand and capacity etc
- Share learning
- Pick up ideas
- Get national clinical director expertise
- Showcase work in publications/conferences
- Have improvements written up and published nationally
- Work directly with NACR
- Influence commissioners.

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What we did

The Network Standard Group for Rehabilitation embarked on a three month audit to obtain baseline data for referral and uptake trends. This would generate enough numbers to allow statistical analysis and a short enough period of time to detect any ‘flaws’ in the audit process. All three programmes fully complied with the audit and referral/uptake information was collected on 555 patients.

Wolverhampton City PCTs Public Health Department kindly agreed to take responsibility for the statistical analysis of the data and this was duly undertaken.

The project team considered the results which did highlight potential issues with both referral and uptake to CR services. For example, the audit demonstrated unequivocally that elderly and female patients were less likely to accept their invitation to CR. However, it also became evident from the audit that some of the data were ‘ambiguous’ and thus potentially misleading.

The project team presented the results of the audit widely amongst colleagues and patient representatives within the network, gathering feedback at every opportunity. The project team, having had time to reflect, sought permission from the network to prepare for a nine month improved audit which will attempt to eliminate the ambiguity of the data and provide the power required to interrogate the results on both a locality and network level.

Support of the network was duly confirmed for the audit and preparations were put in place; the preparations included, the improvement of the referral form, education of the referral staff to ensure complete and accurate data collection, education of referral staff to ensure appropriate referral/non-referral.

During this time it has also been decided to focus on the female and elderly groups that declined their invitation to CR, as these data are fairly unequivocal and are very much inline with national trends. Accordingly, the reasons for decline will be investigated further in case any common issues can already be identified.

A one month trial of the new audit form was successfully completed in June 2009 and the starting date for the nine month audit confirmed as 1 September 2009.

The project aim is to help identify barriers and inequalities that may exist within the BCCNs CR services that result in lower than optimal uptake of these services. In the first instance, the project will focus on post MI patients and patients having undergone revascularisation. The project will then attempt to address any barriers/inequalities identified in a bid to increase uptake.

It is anticipated that the project will, as a minimum, inform commissioners whether all eligible patients with the above diagnoses within the BCCN are being offered CR services. This will, in the process, reveal whether the referral process is responsible for introducing any inequalities. The project will then investigate whether the reasons given by patients declining their invitation identify any common barriers/inequalities in the current CR services. On the assumption that certain barriers /inequalities are identified the project will attempt to address these with new initiatives.
Cardiac Rehabilitation - National Priority Projects

The biggest issue/challenge
The main issue that the project sought to address was to identify potential 'groups' of patients that were either not being referred or were not accepting their invitation to CR services. The ultimate challenge is to eliminate health inequalities within the referral system and to increase the percentage take up of CR services in the BCCN.

The impact to date
Changing the audit form and having discussions with the referring health professionals, has already resulted in fewer non-referrals and more patients being offered home exercise programmes. For further information and results on the audit see appendix 11.

Barriers, challenges and lessons
Leadership and planning
The project enjoyed effective leadership and planning from the following, to start the project and to sustain it:
- Rehabilitation leads
- NCA for CR to NHS Improvement
- Cardiac rehab network standard group
- Audit project team
- Network facilitator.

The involvement of the above has been extremely useful in maintaining the high profile and commitment to the project.

Clinical engagement
It was essential to obtain clinical engagement; in this project this was particularly the case for the project team and for the clinicians that were making referral decisions and collecting data. The baseline audit has also confirmed this to be the case, particularly as we are asking the clinicians to take on additional tasks during the life of the project.

The inclusion of these clinicians in project feedback has been appreciated and will, hopefully, help to maintain their commitment for the duration of the project.

Information transfer
The information obtained from the project has been shared at network and locality meetings to help maintain the profile of the project. This appears to have worked well and also with the clinicians directly involved in the project. The information has also been presented more widely at 'opportunistic' events that were interested in our results.

It has been very beneficial to have an identified person in charge of data/information collection to ensure appropriate safekeeping/analysis and spread.

Work to address health inequalities
The project has already clarified that there is nothing that beats having a look at your own data! The data collected to date, and their subsequent analysis, has already proved to be thought provoking, highlighting a number of potential issues with respect to health inequalities.

It has been useful to include the MOSAIC software in our data collection as this enables an insight to potential correlations between levels of deprivation and referral/uptake patterns.

The project has already confirmed the national trend that elderly and female patients are less likely to accept their invitation to rehabilitation.

Next steps
We have agreed to undertake a nine month audit, using the new and improved audit form, from September 2009. This audit will give us the numbers required to interrogate the data on a locality level as well as on a Network level and allow us to identify service improvements so that we can introduce any new initiatives to improve the uptake to cardiac rehabilitation.

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NB: Appendix 11 is available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries

www.improvement.nhs.uk/heart
Referral to cardiac rehabilitation for PPCI patients
North West London Cardiac and Stroke Network

Synopsis
This project was collaboration between the North West London Cardiac and Stroke Network and Imperial College Healthcare NHS Trust. It involved the cardiac prevention and rehabilitation team for Charring Cross and Hammersmith Hospitals. There had been a gap identified in the cardiac rehabilitation services offered to PPCI patients that came into Hammersmith Hospital. These patients were from a wide geographic area covering North West London and beyond. It was felt that those PPCI patients from outside the hospital’s local population were not being picked up and referred on for cardiac rehabilitation. The project aimed to ascertain whether these cohorts of PPCI patients were receiving cardiac rehabilitation. It also aimed to make changes to improve the service, through increasing staffing to ensure that these patients were picked up and setting up a system to audit and monitor their onward referral.

Background
There had been a successful primary angioplasty service running at Hammersmith Hospital since 2003. However, there had been an issue with the cardiac rehabilitation team (based at Charing Cross Hospital) not always picking up these patients and referring them on for rehabilitation. The cardiac rehabilitation team at Charing Cross decided to set up a new system for identifying these patients and ensuring that they were appropriately referred for cardiac rehabilitation.

The project aims were as follows:
• To look at ways of identifying all patients admitted to the primary angioplasty service
• To ensure that they receive Phase one cardiac rehabilitation and onward referral to their chosen cardiac rehabilitation centre
• To follow up referred patients to establish whether they were offered cardiac rehabilitation, if they took up the offer, and if they completed their programme
• To map the type of CR programme the patient was offered and to provide a clear picture of CR provision across the sector
• To develop close working with the referring centre’s and having up-to-date information on service availability and type so that patients can be fully informed of what is available to them.

What we did
A new nursing post was appointed to the cardiac rehab team, whose remit was to pick up all of the patients that required cardiac rehabilitation and yet who lived beyond the boundaries of the local primary care trust. A new database was set up to record the patient’s details and where they should be referred to for their cardiac rehabilitation. A detailed patient information leaflet was created to give all patients information about rehabilitation as well as contact details for all of the fourteen different rehab centres in North West London (see appendix 12). This would enable these patients to be able to choose which centre they could be referred onto.
There is therefore now a clear system for identifying out-of-area patients, offering them a choice of CR provider and tracking their referral to the provider to ensure they are followed up. There was also a telephone audit undertaken in order to ascertain how many patients were receiving rehab prior to this system being introduced. This audit showed that as few as 20% of patients were receiving rehab prior to this system being introduced – although the response rate to this audit was lower than expected due to difficulties in getting through to many patients.

Barriers, challenges, and lessons
Cardiac rehabilitation departments use different data systems for collecting patient data and making referrals. It was therefore difficult to receive up-to-date data on whether this cohort of patients had received rehab at the different centres of North West London. To be sure of monitoring what happened with these PPCI patients, it was therefore necessary to set up a separate excel database for tracking this cohort of patients.

The impact to date
During a six month period from January to June 2009, 150 PPCI patients have been picked up and either offered rehab at the department at Charring Cross Hospital or referred onto another centre where appropriate.

Next steps
The cardiac rehabilitation department at Charring Cross Hospital will continue to use this system for monitoring cardiac rehabilitation referrals for PPCI patients across the sector. North West London Cardiac and Stroke Network will ensure that the other centres offering PPCI in North West London also have systems in place for this cohort of patients. In addition, the information leaflet used for this project will continue to be used and may well be rolled out across the sector.

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NB: Appendix 12 is available from the NHS Improvement website at: www.improvement.nhs.uk/heart/rehabprojectsummaries
Vocational rehabilitation project
North West London Cardiac and Stroke Network

Synopsis

• A cardiac rehabilitation service baseline assessment completed in December 2007 and a stroke service baseline assessment completed in July 2008 within North West London highlighted that vocational rehabilitation was a missing factor within the package of care across the majority of the serviced PCTs by the North West London Cardiac and Stroke Network (NWLC SN)

• This project aimed to design a pathway for vocational rehabilitation that is cost neutral for providers to pilot

• In the time available a pathway was designed with referral templates and criteria and established referral links between NHS providers and specialist department of work and pensions funded vocational rehab providers

• The NHS organisations involved were
  • Imperial College Healthcare NHS Trust: Charing Cross and Hammersmith Hospitals, Cardiac Prevention and Rehabilitation Team
  • Ealing Hospital NHS Trust: Cardiac Prevention and Rehabilitation Team
  • Shaw Trust
  • NHS Improvement Heart Team

• The main outcome of the project was that a cost neutral pathway was designed which can be shared to organisations to pilot within any remit of healthcare. The limitation to this project is that NHS providers learnt key information from the project setup stage which was passed onto the patient, resulting in fewer referrals and therefore data collection. The uncontrollable factor was that the type of patients accessing rehab services often did not require vocational rehab support for various reasons.

Background

The project comprised a simple referral pathway between cardiac rehabilitation and an external vocational rehabilitation provider. This provider was Shaw Trust, a national charity organisation which has supported disadvantaged individuals in the labour market due to disability, ill health or other social circumstances over the last 25 years. In the last year alone 60,055 individuals were supported nationwide (Shaw Trust, Year End Report 2006-07).

The project aims were:

• To provide a vocational rehabilitation pathway as an additional resource within a cardiac rehabilitation menu
• To allow patients to receive specialist information and guidance on vocational rehabilitation
• To increase the number of patients (if eligible for the service) within a working age returning to employment having received specialist support based on their post cardiac event needs
• To support those patients who were previously not employed (if eligible for the service) to seek methods for coming off state benefits and attaining full time employment based on their post cardiac event needs
• To increase the vocational rehabilitation knowledge of the healthcare professionals involved in the pilot
• To increase the number of resources available within the remit of cardiac rehabilitation
• To allow patients to receive more continuity of care.

What we did

A detailed pathway document was designed to allow patients with vocational need to be referred onto independent sector support organisations (see appendix 13).

Pathways were designed to allow the patient to access one of three services: a job retention programme for those at risk of losing their job due to their medical event, a job start programme for those who wish to engage in employment and a group education programme for those patients who may not want to engage with support agencies, preferring to attend group education settings within the outpatient setting.

The project aims were:

• To provide a vocational rehabilitation pathway as an additional resource within a cardiac rehabilitation menu
• To allow patients to receive specialist information and guidance on vocational rehabilitation
• To increase the number of patients (if eligible for the service) within a working age returning to employment having received specialist support based on their post cardiac event needs.
• To support those patients who were previously not employed (if eligible for the service) to seek methods for coming off state benefits and attaining full time employment based on their post cardiac event needs.
• To increase the vocational rehabilitation knowledge of the healthcare professionals involved in the pilot.
• To increase the number of resources available within the remit of cardiac rehabilitation.
• To allow patients to receive more continuity of care.

Expected outcomes

• A greater synergy between vocational services and the cardiac rehabilitation teams will exist so that patients are better prepared and have a continual reinforcement when returning to employment.
• Involved organisations will acquire up to date information from service collaboration.
• Coping strategies will be established amongst identified patients to aid their return to employment process and to reduce the number of stressful episodes.
• A reduction in inequalities of service related to vocational rehabilitation within cardiac rehabilitation programmes.
• Existing time recourses for cardiac rehabilitation services can focus on enhancing other aspects of their service.
• Improved quality of life for those receiving this service.
• Referred patients receive specialist vocational advice and support.

Several meetings were set up between providers and Shaw Trust to develop the pathway ready for a six month service evaluation period. Once referrals were live within this time frame, providers found it difficult to locate appropriate patients suitable for the service, and once located patients often did not require the service or did not fit the referral criteria. As a consequence referral criteria and documentation was simplified.

The biggest issue/challenge

The biggest challenge was locating appropriate patients to refer to this service. As it was funded via the Department of Work and Pensions (DWP), strict eligibility criteria was in place to allow government funding to follow each patient once accepted for vocational rehabilitation. This resulted in no successful referral and episodes of vocational rehabilitation completed. Patients were referred, screened and found to be either not suitable or gained the appropriate information to reduce their employment issues and that an episode of vocational rehab was not required.
The impact to date

By establishing this pathway healthcare professionals at the pilot sites gained further knowledge of vocational advice and were able to relay this information to their patients without the need for specialist support. This pathway would positively impact an organisation as it does not require a set up cost - it is a simple referral process completed within usual outpatients settings, and the eligible patients are funded via DWP revenue streams.

Barriers, challenges, and lessons

The main barriers initially were the requirement to increase the skills of healthcare providers in the terminology associated with vocational support.

Repeating this project, to ensure that referrals were adequate more pilot sites were recruited. This was not permitted within the pilot time period as Shaw Trust could only designate one employee to accept referrals with limited geographical scope.

Continuing the project, suggestions would be to switch vocational rehab providers to ones with an increased capacity to service the sector, recruit more pilot sites and/or open the pathway to other areas of healthcare rehabilitation.

Next steps

The project requires a re-launch to gather evaluation data or issue the pathway design to other networks to pilot.

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NB: Appendix 13 is available from the NHS Improvement website at:
www.improvement.nhs.uk/heart/rehabprojectsummaries
Cardiac rehabilitation across the Peninsula
Peninsula Heart and Stroke Network

Synopsis
Cardiac rehabilitation is proven to be value for money and is aligned with Chapter 7, CHD NSF. The Peninsula Heart and Stroke Network aims to provide commissioners current, relevant information to inform local decision making on the provision and delivery of high quality cardiac rehabilitation services across the Peninsula in line with new national guidance, based on best practice and value for money, and to ultimately benefit people diagnosed with Coronary Heart Disease (CHD) and their carers.

Background
Despite the publication of the evidence there has always been patchy development of cardiac rehabilitation services both nationally and across the SW Peninsula. This is chiefly due to the fact that funds were subsumed by more pressing CHD priorities such as the achievement of hard targets associated with revascularisation. At this time there was no national tariff for cardiac rehabilitation making it difficult to understand the costing implications. Few NHS organisations have developed tight commissioning specifications for cardiac rehabilitation or have audit data enabling them to understand the exact cost of cardiac rehabilitation and what value is being delivered for their investment. Patients derive immense comfort and support from cardiac rehabilitation and December 2007, thousands of heart patients around England campaigned to local MPS and PCT Chief Executive Officers (CEOs), for the increase of service provision, to allow all heart patients who can benefit to have access to high-quality cardiac rehabilitation. A number of patients lobbied and campaigned for better cardiac rehabilitation services both nationally and locally which raised the profile of cardiac rehabilitation with PCTs across the South West.

What we did
In 2008, the Peninsula Cardiac Network was commissioned by the Peninsula Commissioning Group to undertake a review of existing cardiac rehabilitation services within the peninsula and to draw up a new proposal which incorporates PCI patients, and provide commissioners sufficient information and advice to enable them to address the inequity of cardiac rehabilitation services across the peninsula.

A scoping exercise was undertaken to review current service provision for Devon, Torbay, Plymouth and Cornwall PCTs. Compared with the vast body of evidence being collated nationally, it was evident that cardiac rehabilitation was not only good for patients, but value for money. However, in scoping current local services, it was clear that to meet the full demand, new ways of working had to be considered for the future.

As a network, cardiac rehabilitation has always been one of our main priorities and this is largely due to our highly motivated Peninsula wide patient group ably led by Liz Clark. The network is often required to provide updates to the PPISG regarding both national and local cardiac rehabilitation issues which include the tariff implications.

Throughout this work, the network has considered the excellent work being provided by other cardiac rehabilitation services across the country and this has provided us valuable insight to better understand how cardiac rehabilitation services can be developed in the future.

Proposal model
The cardiac rehabilitation paper proposes a new model for delivering services offering all that people admitted to hospital suffering from coronary heart disease (CHD) have been invited, prior to leaving hospital, to participate in a multidisciplinary programme of cardiac rehabilitation based on their individual level of risk and need, through a menu of services available locally.
Menu-based approach (also known as menu-driven model)

This approach still comprises the core components required of a comprehensive cardiac rehabilitation service:

- BACR Standards and Core Components 2007) taking into account patient individual needs (i.e. not every patient requires every element of the programme) also disease complexity, therefore offering a more inclusive model of care, with greater patient choice and flexibility. Therefore, this model is based on an individual person’s assessment of physical, psychological and social needs for cardiac rehabilitation using a risk stratification and guidance.

Proposed recommendations

- Cardiac rehabilitation should be provided as a central service across both the acute and primary care with a ‘one point of contact’ to accept all referrals. It should be developed in accordance with national standards and competencies, such as those set out by NICE and BACR including the implementation of the NACR database
- All patients should receive an individually designed menu driven programme relevant for their needs
- PCTs should develop a commissioning specification for cardiac rehabilitation services with key performance indicators (KPIs) and quality markers that will need to be achieved
- Cardiac rehabilitation including secondary prevention should overlap where appropriate with the management of other diseases
- PCTs should develop a service directory, giving a clear description of all relevant programmes and services including content of the service and referral pathways
- The PCT should develop a provider lead such as ‘life style’ service co-ordinator to work closely with commissioners to ensure services are commissioned in a co-ordinated manner and relevant schemes are integrated.

Endorsement

The cardiac rehabilitation paper was drafted and submitted to for the Peninsula Cardiac Commissioning group where it received full endorsement. The document was also submitted to the NHS Improvement Programme – from which, Professor Patrick Doherty, National Clinical Lead, NHS Improvement, expressed an interest in the work and requested the network to further consider writing a risk stratification to combine with the model.

Risk Stratification Working Group

The network implemented a small working group from each sector of the peninsula to provide a generic risk stratification document that would be used in conjunction with a generic service specification.

This group consists of; cardiac rehabilitation nurses, cardiac rehabilitation physio, a manager, a service improvement manager and community service provider for phase four. The group has access to both GPSI and cardiologist (network clinical lead) and has met twice to agree an outline of what the risk stratification should include.
This is in the process of nearing completion where it will be examined by the network clinical lead cardiologist before submission to the commissioning group. It will also be given consideration by the national team and Patrick Doherty.

**Next steps**

As a result of this, commissioners requested a shell service specification be written to draw the model together.

**Shell Service Specification (SS)**

A ‘shell’ service specification to define minimum standards, performance indicators and monitoring/audit has been drafted and will be reviewed by a commissioner led sub group to discuss all aspects of providing comprehensive cardiac rehabilitation services.

**The biggest issue/ challenge**

This model poses a challenge for existing phased models but also offers great opportunities to give consideration to all cardio and vascular disease prevention. It suggests the alignment of both secondary and primary prevention and supports integration of existing services using a lifestyle lead role to co-ordinate these services.

**Barriers, challenges and lessons**

The concept of using an individual risk stratification method to provide and offer patients a choice has brought many challenges from cardiac rehabilitation teams. Breaking down barriers to change mindsets has taken time and quite often require reminding that patients should be provided appropriate services based on their individual level of risk. An example would be that not all PCI patients require a full programme of cardiac rehabilitation, however, they still require lifestyle modification advice.

**Next steps**

The network is currently scoping and developing a skills competency framework based on the competencies Skills for Health. This is to enhance the proposed model and provide commissioners a full comprehensive option of choice for setting up cardiac rehabilitation services which may provide further scope for future ‘prevention’ service developments.

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