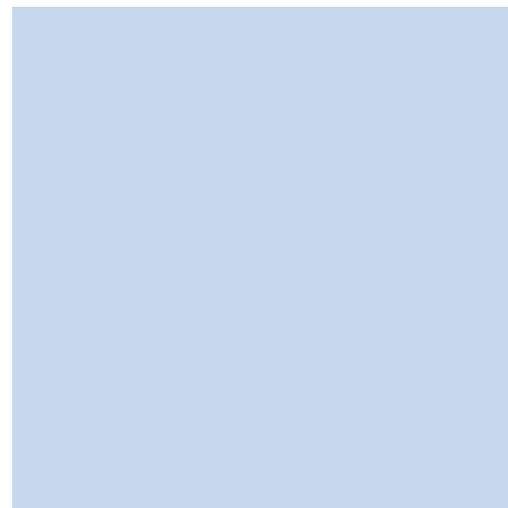


# Improving Services for Wheelchair Users and Carers

## Good Practice Guide

Learning from the Wheelchair Services Collaborative



## DH INFORMATION READER BOX

Policy	Estates
HR/Workforce	Performance
Management	IM & T
Planning	Finance
Clinical	Partnership Working

<b>Document Purpose</b>	For Information
<b>ROCR Ref:</b>	<b>Gateway Ref:</b> 3221
<b>Title</b>	Improving Services for Wheelchair Users and Carers – Good Practice Guide
<b>Author</b>	NHS MA
<b>Publication Date</b>	December 2004
<b>Target Audience</b>	Wheelchair Managers and Teams, Representative Wheelchair Users and Carers, Commissioning Managers, Allied Health Professionals, GPs, Communication Leads, NHS/DH/Voluntary Organisations
<b>Circulation List</b>	Chief Executives of Primary Care Trusts, Acute Trusts, Care Trusts, SHAs and Foundation Trusts (information only)
<b>Description</b>	Describes many improvements in services achieved by teams belonging to the Wheelchair Service Collaborative. Offers guidance for those teams wanting to improve their service.
<b>Cross Ref</b>	n/a
<b>Superseded Docs</b>	n/a
<b>Action Required</b>	n/a
<b>Timing</b>	n/a
<b>Contact Details</b>	Peter Gage, Clinical Service Manager North Essex Wheelchair Services, Gemini Centre, 88, New London Road, Chelmsford. Essex. CM2 0PD  Henry Lumley, Assistant General Manager Musculo-Skeletal Directorate, North Bristol NHS Trust Westbury on Trym Bristol BS10 5NB  e-mail via <a href="http://www.wheelchairmanagers.nhs.uk/contact.asp">www.wheelchairmanagers.nhs.uk/contact.asp</a>
<b>For Recipients Use</b>	

December 2004

For additional copies call **08701 555 455**

Quoting ref: MA/SIT/OSI/WSC/001

© Crown Copyright 2004

● We recognise that some people with a visual impairment may prefer to access the document via [www.dh.gov.uk/publications](http://www.dh.gov.uk/publications) or [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

NHS Modernisation Agency. Improving services for wheelchair users and carers – Good Practice Guide: Learning from the Wheelchair Services Collaborative. Eds Sedgwick M, Frank AO, Kemp P, Gage P. London: DH, 2005



# contents

**Foreword** by the Parliamentary Under-Secretary of State for Community Care, Dr Stephen Ladyman 4

**Executive summary** .....5

**Background** .....6

**Framework** .....8

**Strategies and opportunities table**....9

**Programme of events** .....10

**Strategy one**  
Overall experience.....12

**Strategy two**  
Minimise delay .....16

**Strategy three**  
Efficient use of resources .....20

**Strategy four**  
Outcomes .....25

**Getting started** .....29

**End note** .....32

**Appendix 1** .....33

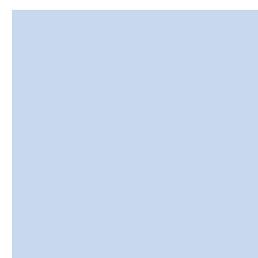
- Wheelchair Services Collaborative Faculty membership
- Wheelchair Services Collaborative Modernisation Agency Team

**Appendix 2** .....34

- Map showing distribution of Wheelchair Service Teams

**Appendix 3** .....35

- Useful information





## Foreword by the Parliamentary Under-Secretary of State for Community Care, Dr Stephen Ladyman

I am pleased to be able to introduce and give my support to the Wheelchair Services Collaborative Good Practice Guide produced by the collaborative team. The guide has been written to help staff, commissioners, users and carers improve their wheelchair services.

The guide provides a background to the work of the collaborative, the journey undertaken by the participating teams, the learning and sharing and most importantly the successes achieved.

I would like to thank the Reference Panel and Faculty members for all their hard work and commitment, and to thank and congratulate all the users, carers, and wheelchair services staff who participated so enthusiastically in the collaborative programme to achieve such impressive results.

Users and carers were at the centre of all the work undertaken and worked in partnership with the teams to achieve significant improvements to services such as reduced waiting times and better quality of care.

The government is committed to raising the standards of health and social care services and promoting the independence of disabled children, adults and older people.

National Service Frameworks for Older People and for Children have been developed and a National Service Framework for people with Long Term Conditions is forthcoming. Improving and modernising wheelchair services is a key element in the achievement of these standards.



Those who have participated in the wheelchair collaborative have demonstrated that real service improvement can be achieved. I would encourage them to continue to build on their successes and urge those who were unable to take part to adapt some of the ideas and innovation contained within this guide to improve their services.

Together we can move towards a modern wheelchair service which better meets the needs of its users and supports them in leading more independent lives.

**Stephen Ladyman**



## Executive summary

**It is estimated that there are 1.2 m wheelchair users in England<sup>1</sup>. Some 825,000 are regular users of NHS wheelchair services – with still more needing to use the service for a time limited period only.**

For those individuals, their wheelchair is integral to living an independent life in the community. Thus wheelchair services need to be at the heart of local policy and service delivery. The equipment supplied has a potential impact upon several of the determinants of public health such as; improving **individual lifestyle** by increasing independence, improving access to transport and leisure by increasing **social and community networks** and reducing **social isolation** and consequent depression.

Developed in partnership with the NHS Modernisation Agency (MA), the Department of Health and the Audit Commission, the Wheelchair Service Collaborative was launched in November 2002 with two clear aims:

- To work with a cross section of services from across the country who were committed to bringing about significant improvements in their services and support them in doing just that.
- To track the improvements that each service made and draw together a publication that summarised the conclusions of the work both as a source of reference for participating teams and others to use as a guide to get started.

Users and professionals from all aspects of wheelchair service provision came together as a Reference Panel to discuss and design opportunities for improvement that would inform the framework. Services from all parts of the country were then invited to join the

Collaborative and 44 teams were selected from across England joined by a team from Wales. Each team was asked to identify areas that would benefit from redesign. Teams began to make small changes locally, coming together every two or three months to share and build upon the work they had been doing. Measurement played a key part with teams defining their baseline, setting themselves clear targets and reporting progress against targets.

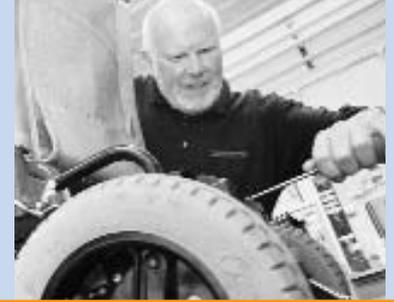
Teams have made significant improvements. For example, 75% of teams reported that they had reviewed or developed eligibility criteria with commissioners, users, carers, therapy staff and neighbouring wheelchair services and an equal percentage reviewed the quality and quantity of information provided to users and carers. One service reduced the time taken from assessment to supply of a wheelchair by 40 weeks; another reduced waiting times by decreasing the number of priority waiting levels from five to two – urgent and routine.

The collaborative concluded with a Celebration Event in May 2004.

*This Good Practice guide summarises the excellent work of teams who participated and details innovative, sustainable and measurable service improvements affecting thousands of wheelchair users and carers. We hope that teams not currently part of the collaborative will pick up some useful ideas to build upon within their own service.*

<sup>1</sup> The English wheelchair user population was estimated from the results of a research exercise carried out by the NHS Purchasing and Supply Agency rehabilitation team during 2000. 91 questionnaires were returned (56.2% response rate). The wheelchair user numbers returned by the wheelchair services were extrapolated to give a projected national user population.

*NHS Purchasing and Supply Agency rehabilitation team (2000).*



## Background

In 2000 the Audit Commission published *Fully Equipped*<sup>1</sup> and one of the specific recommendations was the introduction of incremental improvements to wheelchair services. However their subsequent report *Fully Equipped 2002<sup>2</sup> – Assisting Independence* revealed that progress had been patchy.

The Department of Health therefore commissioned the NHS Modernisation Agency (MA) to:

- develop a framework for a collaborative programme to enable services from across the country to work together to bring about significant improvements in service
- run that programme for a period of 18 months.

It was initially intended that the programme would be offered to up to 20 of the 151 services but interest was overwhelming and the number of places was extended to 45, including a team from Wales.

Each team made a commitment in line with the programme framework to:

- Reduce delays in their service
- Maximise efficiency
- Make sure that the needs of users and carers were understood and addressed
- Ensure that the outcome for each user and carer was an enabling experience which promoted independence.

The programme was designed to link directly to the national health and social care policy agendas, in particular the National Service Frameworks (NSFs)



The NSF for Older People<sup>3</sup> sets out eight nationwide standards which aim to integrate and improve access to health and social care, raise standards and promote independence for the older person. The Collaborative supported local implementation of two of the eight standards:

### Standard 2: Person-centred care

### Standard 8: The promotion of health and active life

There were similarly links with the NSF for Diabetes<sup>4</sup> as many people with diabetes need equipment to help them to lead independent lives.

There is a further NSF in development to which this work relates. The NSF for Long Term Conditions, which is due to be published



in 2005, considers some of the generic issues of relevance to a wide range of people with long term conditions and disabilities.

Standard 8 of the NSF for Children<sup>5</sup> published in September 2004 states: "Children and young people who are disabled or who have complex health needs receive co-ordinated, high quality child and family-centred services which are based on assessed needs." By encouraging teams to improve the overall experience and outcomes for users, the collaborative helped teams to start working towards achieving this and other NSF targets.

More recently the increased incidence of chronic disease presents a growing challenge to equipment services. Good chronic disease management can make a real difference enabling people living with chronic conditions to attain the best possible quality of life<sup>6</sup>.

If you want to know more about these and other government policies go to:

[www.dh.gov.uk](http://www.dh.gov.uk)



*'I am delighted to see the exciting progress that teams taking part in the collaborative have achieved so quickly. As the good practice spreads across all wheelchair services these achievements will greatly benefit the end users of the service'*  
**Peter Kemp, Chairman, National Forum for Wheelchair User Groups**

- <sup>1</sup> Audit Commission. Fully Equipped: The Provision of Equipment to Older or Disabled People by the NHS and Social Services in England and Wales. Audit Commission, 2000
- <sup>2</sup> Audit Commission. Fully Equipped 2002 – Assisting Independence. Audit Commission, 2002
- <sup>3</sup> National Service Framework for Older People, DH, 2001
- <sup>4</sup> National Service Framework for Diabetes: Delivery Strategy, DH, 2003
- <sup>5</sup> National Service Framework for Children, Young People and Maternity Services, DH, 2004
- <sup>6</sup> Improving Chronic Disease Management, DH, 2004



## Framework

### Overarching Goal

The needs of the user and carer are addressed, facilitating improved quality of life for both, in a way that minimises delay and ensures an efficient use of resources  
*Reference Panel 2002*

### Professional Framework

A Reference Panel of 60 members representing users, carers, rehabilitation professionals, charities, manufacturers and suppliers, service managers, commissioners, academics and colleagues from the Department of Health set the framework for the programme. The Panel described the current journey for users and their carers, from the identification of the need for a wheelchair to the point when the chair is supplied, reviewed and maintained. They identified areas of practice that were working well around the country and others where that was not the case. From there, they were asked to select areas for improvement or 'opportunities' that in combination would bring the greatest improvement in services. Each opportunity had to be both clear and measurable. The Panel identified 13 key areas for improvement under four strategy headings. At least one opportunity had to be chosen from each of the four strategies

### Faculty

A Faculty with members drawn from the original Panel, plus others representing wheelchair services including the voluntary sector, met quarterly and supported national learning and sharing events. The Faculty made sure that the programme offered appropriate breadth and depth to its work and challenged participants to make significant improvements

in service. Faculty membership is listed in Appendix 1.

### Wheelchair Service Teams

Services were selected from across England joined by one from Wales. The smallest had 1800 regular users, the largest 35,000. Each service was asked to nominate an Improvement Lead to put together a team. Each team consisted of staff from across the whole service including users and carers. A map illustrating the distribution of teams by Strategic Health Authority can be found in Appendix 2.

### Modernisation Agency

A small team from the NHS Modernisation Agency co-ordinated the day to day delivery of the programme providing support and facilitation in the local workplace and at national events. There was a total of eight events consisting of four larger events for up to four team members and four smaller events for the Improvement Leads. Networking was an important part of the learning and sharing events. The MA team introduced redesign tools and techniques to the teams which would help them improve their service. Members of the MA team are listed in Appendix 1.



## Wheelchair Services Collaborative strategies and opportunities

 <b>Strategy One - Overall experience</b>	 <b>Strategy Three - Efficient use of resources</b>
<p>The needs of each user and carer are understood and addressed</p> <ul style="list-style-type: none"> <li>• Eligibility criteria to be agreed and published for all parts of the service</li> <li>• All users and carers to receive clear and appropriate information on the chair supplied, full tuition and point of contact if problems arise</li> <li>• All services to agree local guidance for repair response with local user groups</li> </ul>	<p>There is optimum deployment of existing expertise and facilities</p> <ul style="list-style-type: none"> <li>• Inappropriate referrals to be no greater than 5% unless clinical circumstances have changed</li> <li>• Reduce inappropriate prescription decisions to less than 5%</li> <li>• All equipment to be regularly maintained based on NHS Controls Assurance Standards</li> </ul>
 <b>Strategy Two - Minimising delay</b>	 <b>Strategy Four - Outcome</b>
<p>The only time spent in the pathway by each user is consistent with their optimum treatment and care</p> <ul style="list-style-type: none"> <li>• 100% of referrals to be acknowledged within five working days and a named contact given</li> <li>• 100% of standard prescriptions to be processed by an appropriate assessor and the chair delivered within 10 working days</li> <li>• To reduce the time from urgent referral to assessment by at least 60%</li> <li>• To reduce the time from routine referral to assessment by at least 60%</li> <li>• To reduce the time from assessment to supply on both urgent and routine prescriptions by at least 60%</li> </ul>	<p>The outcome for each user and carer has been an enabling experience and promotes independence</p> <ul style="list-style-type: none"> <li>• All users to have a mechanism for contact/review based on original assessment objectives</li> <li>• All users and carers to rate the service as very good or excellent</li> </ul>



## Programme of events

### Learning, developing and sharing

The programme was launched in November 2002, bringing together the teams to introduce them to the framework for the programme and some basic redesign tools and techniques that would help them get started.

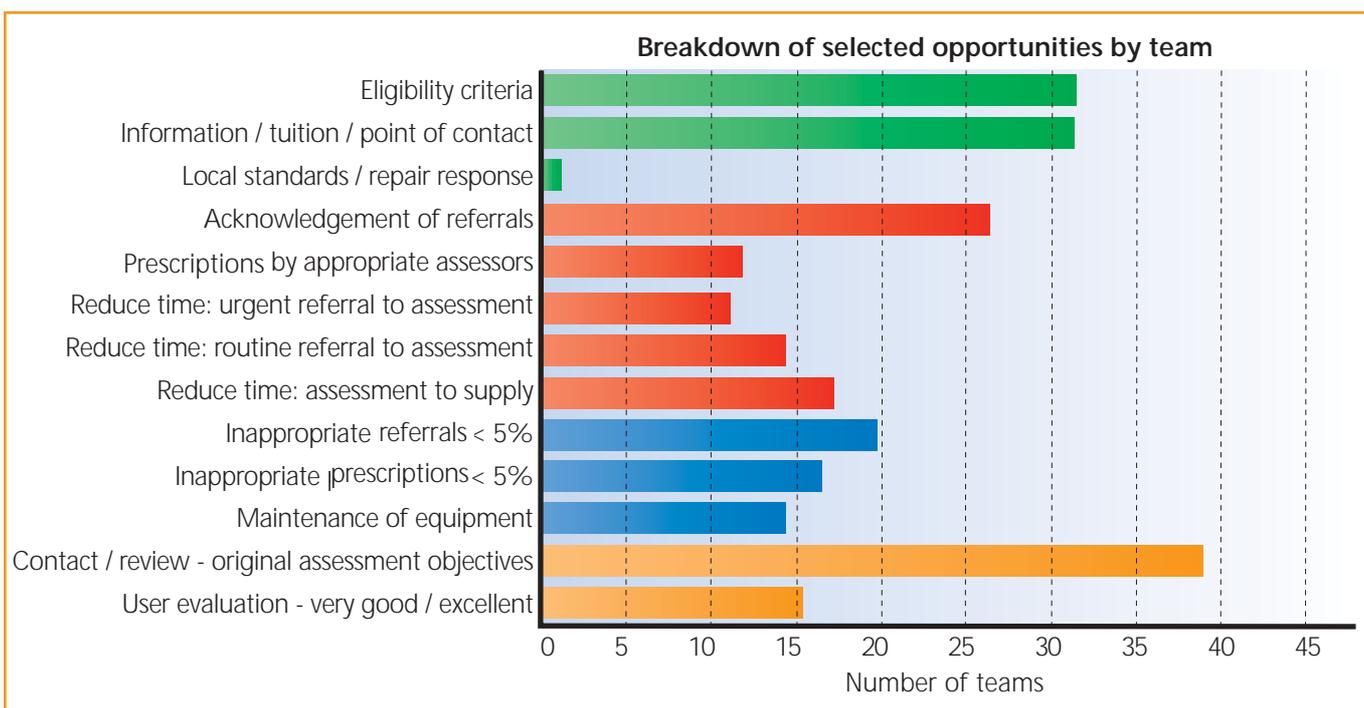
Over the next six months teams built their confidence and skills supported by the MA team. They began to look at new ways of working, alternative roles and responsibilities. By the next main event in April 2003 teams were able to deliver presentations about the many improvements already being made. An on-line reporting system was introduced and teams were able to record their own improvements on a monthly basis and track the progress of other teams. Measurement played a key part in the programme with teams defining their baseline, setting targets and reporting progress against targets.

### National Conference

October 2003 marked a unique event when the programme extended an invitation to all teams not currently part of the collaborative to hear about the work first hand. The event opened with a keynote address from Dr Stephen Ladyman, Parliamentary Under Secretary of State for Community Care. Leadership, engagement and diversity were the key themes of the day with each of the participating teams hosting their own storyboards. Those wheelchair services not part of the original collaborative were invited and those who expressed a serious interest in modernising their service continued to attend subsequent sharing events.

### Consolidating and celebrating

In March 2004 an event was held for the Improvement Leads to draw out the learning from the work they had done.





## Celebration Event

The improvements evident from the reporting analysis and case studies were presented at the Celebration Event in May 2004. Users, carers, visiting teams and Department of Health representatives were just some of the delegates who joined the collaborative teams at the event.

## Collaborative outcomes

In the box below you will find a summary of the processes through which the teams introduced improvements to their services.

Over the next few pages you will find many examples of service improvement and good practice achieved by the collaborative teams. Some of the improvements are described as case studies. Additional case studies are available to view at: [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

The improvements are grouped together under the four strategy headings detailed on page 9.

- Overall experience
- Minimising delay
- Efficient use of resources
- Outcomes for the user and carer

*'It's interesting that the case studies often demonstrate that measuring just one parameter can result in a much greater area of sustainable change than would have been envisaged by the original parameter itself'*

**Dr Linda Marks,**  
**Consultant in Rehabilitation Medicine**  
**Stanmore Disablement Services Centre**

## Processes used by teams when introducing improvements to their services

Teams came together with users and carers, colleagues who refer into the service and in some cases suppliers to review current systems and redesign processes and supporting documentation. They followed a five-step process:

- process mapped their service to help them fully understand the current systems and who did what
- identified six areas of improvement from the programme framework – see page 9 – with at least one from each strategy heading
- worked out their starting point and agreed a minimum 25% improvement that they would make, and how they would chart their progress each month

- identified changes in service which they considered would bring about an improvement and tried these with a small number of users initially
- shared the results of their work at each of four National Learning Events and four Improvement Lead events that were held during the 18 months of the programme

**To find out more about the MA redesign tools and techniques that teams used to help improve their service have a look at the 'Getting Started' section on pages 29 and 30 and also at**

[www.modern.nhs.uk/improvementguides](http://www.modern.nhs.uk/improvementguides)



## Strategy one

### Overall experience

*The needs of each user and carer are understood and addressed*

- Eligibility criteria to be agreed and published for all parts of the service
- All users and carers to receive clear and appropriate information on the chair supplied, full tuition and point of contact if problems arise
- All services to agree local guidance for repair response with local user group

All teams worked on at least one of the opportunities identified in strategy one described above.

The key emphasis in this strategy was developing and reviewing eligibility criteria and improving information with over 75% of teams choosing to work on these areas.

Teams made good use of the networking opportunities from the Collaborative by sharing and adapting criteria from other services. All those involved in the provision of wheelchairs, often referred to as stakeholders, made valuable contributions and criteria was circulated widely for comment prior to agreement. Examples of eligibility criteria developed by teams are available on [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

The following section summarises the work undertaken by some of the teams.

### **Improving eligibility criteria**

Sharing eligibility criteria began early in the Collaborative when **West Kent Wheelchair Service** presented their countywide work at one of the national learning events.

**Chantry Wheelchair Service** re-formed their commissioning group as a forum to review and re-develop their eligibility criteria. The group includes service users, representatives of

all five primary care trusts (PCTs), wheelchair service staff and members of the finance department.

Whilst working on improving their eligibility criteria **West Pennine Wheelchair Service** sampled different referrers each month and asked them if they knew that the service had eligibility criteria and if they did, where to find it. The team invited comments on the criteria. At the outset only 5% of referrers sampled knew this information.

By raising awareness, communicating with GP practices and responding to individual referrers the service met their target of 100%. After evaluating comments received from the





surveys and after a local 'away day' the team reduced their standard referral / prescription form from four sides of A4 to one.

Many teams made information on eligibility criteria much clearer and more readily available and in some cases criteria is available on publicly accessible internet sites. Many teams found that reviewing and developing eligibility criteria contributed to the reduction of inappropriate referrals. Work around this is described in more detail in Strategy Three.

Clients ineligible for an NHS wheelchair are often referred on to a voluntary body such as the Red Cross or Whizz-kidz, just two charitable organisations who work in partnership with NHS wheelchair services, including **North West Surrey Wheelchair Service** and **Birmingham Wheelchair Service**.

### **Improving information**

**Mid Essex, Wirral & West Cheshire** and **Lincolnshire Wheelchair Services** made small changes to the information they provided and to its delivery process in order to establish the best way to supply information to users and carers. All users now receive an information pack or booklet with the delivery of their wheelchair.

**South Tyneside Wheelchair Service** found that it was time consuming for staff to match information booklets to reconditioned wheelchair models. Wheelchairs are now labelled with manufacturer, make and model which enables booklets to be matched more quickly. The service keeps a record of all information given to the users and carers.

Users of **South Warwickshire Wheelchair Service** were much happier with the service



when they were provided with key information before assessment. Feedback to the Wheelchair Service showed that 100% of clients were satisfied with the information they had received.

*Continued on page 15*



## Case Study: Milton Keynes Wheelchair Service

*Milton Keynes Wheelchair Service published and circulated their eligibility criteria. This has promoted the service amongst professionals and users who are now clear about the remit of the service*

### Opportunity

- Eligibility criteria to be agreed and published for all parts of the service

### Starting point

- Service was not clear about what its remit was and what it was able to provide
- There were criteria for some parts of the service, but not for all parts and these were not readily available
- Referrals were received that were deemed inappropriate but there was no criteria to measure this against

### What did they do?

- Established the criteria that the therapists were working from and identified how these criteria were being interpreted
- Obtained criteria from other services and devised local criteria
- Circulated criteria to stakeholders for comment and incorporated amendments
- Established that wheelchair staff interpreting criteria in a similar way
- Criteria ratified by Trust Management Team and Clinical Executive Committee
- Criteria circulated to stakeholders
- Referrers informed when referral did not meet eligibility criteria
- Criteria posted on PCT intranet. PCT users e mailed with access link
- Meetings arranged with GP practice managers. Old referral forms retrieved and new ones issued
- Training offered to referrers
- Relevant parts of criteria sent to users when queries raised

### Key improvements

- Clear eligibility criteria for referrers to work with resulting in a reduction in inappropriate referrals
- Reduction in the number of complaints

### Challenges faced

- Referrers were still inclined to make a referral when it was known that the person did not meet the criteria
- Changing the service culture, making it acceptable to circulate the criteria widely

### Lessons learnt

- Involving users and other voluntary organisations has improved relationships between the service and users
- Involving statutory organisations when drafting criteria has raised awareness of the service and service constraints
- Being open and honest with people has reduced the number of complaints
- Other services were willing to share criteria
- Communication to other professionals is vital

### Next steps

- Continue to respond to referrers of inappropriate referrals
- Continue to promote eligibility criteria
- Formally review criteria one year after ratification
- More involvement of other therapists in implementing the prescription

### Any other information/comments/tips

- Attending practice managers and district nurse meetings is a good way of reaching a large number of people



## Strategy one continued

Several teams developed 'checklists' that helped to ensure consistency in the information and tuition given at hand over. **Bexhill & Rother** and **Sussex Downs & Weald Wheelchair Services** were among those teams who found that this resulted in a more co-ordinated approach. During the collaborative, they recorded the number of users and carers receiving clear and appropriate information starting with a baseline of 0% steadily rising to 100%.

At the outset of the collaborative only a small number of teams selected the opportunity to review local standards for repair response. However during the 18-month period many more teams began to work more closely with approved repairers and user groups to agree service standards.

*'The commission is delighted to have played a part in developing wheelchair services. The work of the collaborative has shown what can be achieved without increasing resources – simply by tapping the commitment and expertise of staff who work at the sharp end of service delivery'*

**Nick Mapstone,  
Audit Commission**

### Key learning

- Developing and publishing agreed eligibility criteria can be a long and involved process. Work out realistic time scales and individual responsibilities for:
  - reviewing existing criteria
  - consulting with national colleagues
  - developing and agreeing revised criteria
  - circulating widely to colleagues and users/carers for comments
  - publication and distribution
- Ensure that everyone involved in the provision of wheelchairs understands the need for clear and appropriate documentation and tuition. Consider producing documentation in alternative formats such as large print, audio, supplemented by diagrams/photographs

and translations into other languages

- Actively seek the opinions of users and carers, ensuring that they know how to access the service
- When planning and developing improvements within your service your local Modernisation Lead may be able to help identify potential sources of funding. These may include your Strategic Health Authority or local Workforce Development Organisation [www.nationalworkforce.nhs.uk](http://www.nationalworkforce.nhs.uk)

*Information on how you can start to improve the overall experience for your users and carers can be found on pages 29 and 30.*



## Strategy two

### Minimising delay

*The only time spent in the pathway by each user is consistent with their optimum treatment and care*

- 100% of referrals to be acknowledged within five working days and a named contact given
- 100% of standard prescriptions to be processed by an appropriate assessor and the chair to be delivered within 10 working days
- To reduce the time taken from urgent referral to assessment by at least 60%
- To reduce the time from routine referral to assessment by at least 60%
- To reduce the time from assessment to supply on both urgent and routine prescriptions by at least 60%

Within this strategy the majority of teams chose to work on acknowledging referrals and reducing the waiting time from assessment right through to the supply of wheelchairs. We have described how the teams actually started to manage their waiting lists in key stages.

Some teams introduced whole system changes and others a series of small changes through individual processes and systems. In many cases, they used the basic principles of capacity and demand to understand their current system:

- They looked at whether their current system was 'in balance' – which involved a simple check to see whether they had enough appointments each week to cope with their new referrals and also their regular users needing follow up appointments. If a system is not 'in balance' then it will always be increasing the numbers on the waiting list
- They then looked at the current numbers on their waiting list - teams checked that the lists were up to date and in some cases ran extra sessions to reduce numbers of users waiting.
- A number of teams introduced partial booking, offering appointments that were mutually convenient to both the user and service.

### Acknowledging referrals

**Bexhill & Rother** and **Sussex Downs & Weald Wheelchair Services** reduced the number of telephone calls from clients enquiring about their referral, by 80%, after they began acknowledging referrals. The services introduced a waiting list system to keep records of referrals, the date the acknowledgement letter was sent and the outcome of the referral, i.e. ineligible, clinic or home visit. Administrative cover was arranged to ensure that referrals were consistently screened and acknowledged during periods of annual leave or sickness. An audit showed that 80% of referrals were acknowledged within five working days.

Making some tasks part of the daily or weekly routine can bring improvement. **Wandsworth Wheelchair Service** halved the time it took to acknowledge new referrals by making sure that the senior therapist screened new referrals twice weekly.

### Reducing waiting times from referral to assessment

**North Bristol Wheelchair Service** achieved a reduction in the time clients waited from routine referral to assessment of 70 days (from 120 days to 50 days). The service carried out a



study of the number of clients they could potentially see (capacity) and the number needed to be seen (demand). They checked all clients on their waiting list to see if they still needed to be there. This allowed them to use their staff and clinic space more effectively leading to a reduction in the time clients waited to get access to the service.

The number of clients waiting for a booked appointment in **Mid Essex Wheelchair Service** was reduced by 32% (from 60 to 41). They achieved this by improving the waiting list system. The service changed the way the waiting list was categorised from priority levels (Priority 1 & 2) for all clients to an Adult and a Paediatric list. The service found that adding clients to the waiting list and booking them into clinics in date order reduced the waiting time and the numbers waiting.

With the support of their commissioners, waiting times fell to 17 weeks for clients of **Exeter Mobility Centre**. They reduced the size of their waiting list by a quarter through updating the list and removing those no longer in need of the service. In addition they temporarily increased their capacity to assess all clients who had waited more than three months.

Towards the end of the collaborative, the maximum waiting time from referral to assessment for an Electrically Powered Indoor / Outdoor chair (EPIOC) in **North Cumbria Wheelchair Service** was reduced to 12 weeks and is currently six weeks or less. The service checked that all those referrals on the waiting list still needed to be there and then matched the weekly supply of clinic slots to the referrals coming through each week. They then introduced 'partial booking' whereby clients are invited to contact the clinic to arrange a

*'Modelling demand against capacity and looking at efficiency enabled us to better understand the overall problems that we were facing. We had a backlog that we are still trying to address but modelling the process enabled us to bring down the time from referral to assessment. The Collaborative helped us develop this work and make improvements more quickly'*

**Henry Lumley, Wheelchair Services Manager,  
North Bristol NHS Trust  
Wheelchair & Special Seating Service**

mutually convenient appointment. This reduced the number of users who 'did not attend' and helped ensure that all their clinic slots were full. Finally the service temporarily increased the number of appointments available in order to reduce the size of the waiting list and consequent waiting time for users.

Client waiting times were reduced by an average of 34 days (from referral to assessment) to only four days after **Shropshire Wheelchair Service** mapped their administrative processes and discovered a major bottleneck. Historically the service manager had screened new and re-referrals but other responsibilities meant that this could often be delayed. The bottleneck was removed by delegating screening of referrals to the clinical team who were given dedicated time slots in which to carry out the screening.

Mapping their service enabled **Southern Derbyshire Wheelchair Service** to remove a



## Strategy two continued

step between referral and assessment by vetting and prioritising referrals, at the same time, avoiding unnecessary delays.

**Northamptonshire Wheelchair Service** was able to reduce the time between referral and assessment by four weeks for specialist wheelchairs. They achieved this by changing their screening method from postal to telephone thereby cutting out the delay in clients receiving and returning screening forms.

By the end of the Collaborative **Tower Hamlets Wheelchair Service** were able to reduce the longest wait for an assessment to 10 weeks. Clients of the service had experienced huge variability in waiting times, some waiting only days, others waiting several months. The reduction in waiting time was achieved by selecting users in date order and carrying out regular audits to keep track of waiting times. This resulted in a more equitable service to clients referred for assessment.

### **Do Not Attend**

Clients who do not attend an appointment (DNA) can be a major problem for many wheelchair services resulting in wasted clinic slots and clinician time. Giving a choice of appointment times and dates to users is effective in reducing the number of DNAs and thus improving efficiency in clinics.

DNAs reduced from 35% to 5% when **West Dorset Wheelchair Service** introduced a booking system. An appointment was agreed with the user and was followed by a reminder phone call 48 hours before the appointment.

**Leeds Wheelchair Service** reduced their DNAs from 15% to 3% using a new computerised partial booking system. A letter is

sent to the client inviting them to contact the clinic to arrange a convenient appointment. Users welcome the opportunity to choose a clinic time convenient to them and the new system has improved the relationship between the service and its users.

Working with their User Group enabled **Haringey Wheelchair Service** to reduce the DNA rate from 35% to 3%. Users suggested that the service inform clients well in advance of clinic appointments. To make sure that clients received sufficient notice a letter was sent to the client advising that they would be assessed in approximately four weeks time. Giving clients a timely reminder ensured that fewer clients missed their appointments. The improved clinic utilisation enabled staff to carry out additional client reviews.

### **Reducing waiting times from assessment to supply**

A reduction of four days (from eight days to four days) was made in the time between assessment and supply by **South East Staffordshire Wheelchair Service**. Reorganising clinic times allowed therapists and rehabilitation engineers time to write up reports immediately after assessment, speeding up the ordering of equipment.

The time from assessment to delivery for Electrically Powered Indoor/Outdoor wheelchairs (EPIOC) was reduced from 47 days to four days in **Brighton Wheelchair & Special Seating Service**. The assessment and delivery processes were reviewed and revised to allow tasks to be done in parallel. The assessment process was made more flexible, allowing the 'driving test' to be carried out either at the centre or in the client's home environment. An EPIOC is delivered to the client's home to be used in the



assessment. If the assessment is successful the EPIOC is issued to the client on site.

The **Isle of Wight Wheelchair Service** was able to reduce the time taken to process all urgent prescriptions to three working days. A number of changes were put in place to help them achieve this. The service:

- agreed a definition of 'urgent'
- clarified 'who needed to do what and when' to ensure the smooth running of the process
- arranged administrative cover for sickness and absence
- ensured that a senior therapist was available to sign off prescriptions regularly
- measured and recorded data relating to delivery times

In more than 70% of cases wheelchairs coming directly from stock in **South Durham, Darlington, North Tees & Hartlepool Wheelchair Services** can be ready for an

assessor to hand over in two to five days. Administrative staff taking on the role of monitoring and actioning direct issue referrals speeded up the process.

The time between ordering and supply reduced from 18 weeks to three weeks for clients of **North Durham Wheelchair Service**. The service introduced an electronic ordering system removing a step from the process. Orders no longer needed to be sent to the Supplies Department before they could be placed with a supplier.

**West Pennine Wheelchair Service** increased the percentage of direct issue wheelchairs delivered within 10 working days from 34% to 95%. The efficiency of the ordering process was improved and administrative staff ensured that orders were placed within five days of the assessment, giving the supplier five days to deliver the equipment.

## Key learning

- Mapping your service will help identify parts of the pathway that add no value and can be eliminated, thereby reducing waiting time without needing to invest extra resources
- Measuring, producing and recording data about your service can be invaluable in supporting requests for additional funding, eg. monitoring number of referrals
- Backlogs may have built up over a long period. Reduce your waiting list so that no one waits longer than they need to:
  - Ensure that everyone on the waiting list needs to be there
  - Make sure that you have the right

- number of assessment slots in place to deal with new referrals and existing clients
- Keep to two queues – urgent and routine – seeing clients in date order
- Introduce partial booking to ensure that appointments are convenient and thereby reduce the number of clients not attending
- Offer services outside traditional hours and at alternative locations if appropriate
- Keeping clients informed about their expected wait time and letting them know you are working towards reducing waits can improve client relationships

*Information to help you minimise delays can be found on pages 29 and 30.*



## Strategy three

### Efficient use of resources

*There is optimum deployment of existing expertise and facilities*

- *Inappropriate referrals to be no greater than 5% unless clinical circumstances have changed*
- *Reduce inappropriate prescription decisions to less than 5%*
- *All equipment to be regularly maintained based on NHS Controls Assurance Standards*

The aim of this strategy was to use existing expertise and facilities to optimum effect. By reviewing and redesigning systems and work processes teams were able to improve the quality and efficiency of their service.

Just over a third of teams chose to work on reducing inappropriate referrals and prescription decisions. This linked closely with the work on eligibility criteria described in Strategy One. Some teams chose to work on role redesign and maintenance of equipment to further improve efficiency.

In addition to the work around appropriateness of referrals, teams looked at incomplete and incorrectly completed forms. The main omissions from incomplete forms were height, weight and diagnosis, all of which are both necessary and helpful when referring a client.

### **Reducing inappropriate/incomplete referrals**

**Cardiff & Vale Artificial Limb and Appliance Service** redesigned their referral form to include photographs of different types of wheelchair which made it easier for referrers and prescribers to select the appropriate wheelchair.

**Liverpool Wheelchair Service** agreed eligibility criteria and redesigned their referral form. In

order to publicise these improvements the service arranged personal visits to GP practices and held an awareness raising open day for referrers. Raising awareness reduced incomplete and ineligible referrals from 50% to 10%.

### **Reducing inappropriate prescription decisions**

Inappropriate prescription decisions cause delays in the user pathway, sometimes leading to undesirable effects for the user, such as discomfort, compromising safety or potential deterioration of their condition.

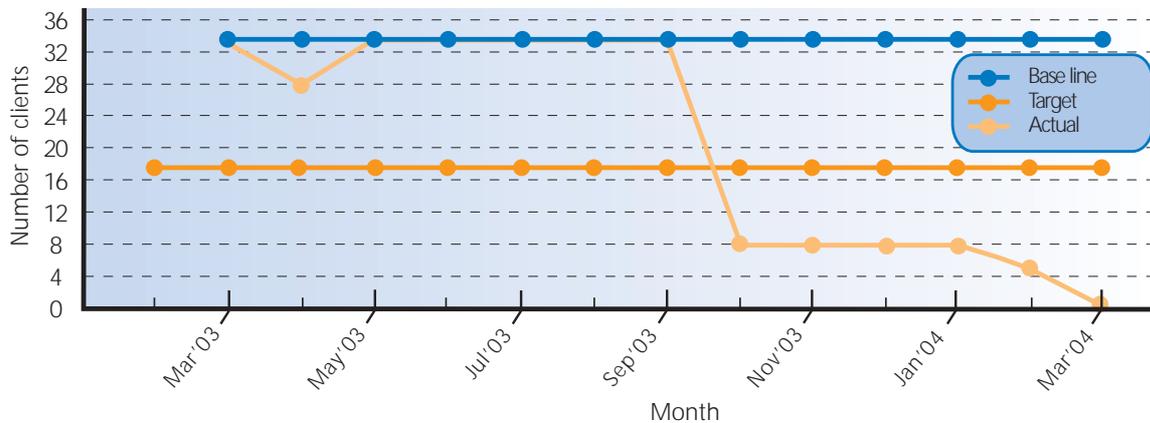
As a starting point some teams needed to revisit the definition of an 'inappropriate prescription decision' and agree guidelines around what it meant to their service.

*'Modernisation Agency service improvement tools and techniques have been vital in introducing improvements to our service. All wheelchair /NHS departments should have the opportunity to learn about them''*

**Gary Williams & Jane Sledge,  
Wirral & West Cheshire Wheelchair Service**



**Wirral & West Cheshire Wheelchair Service**  
 Chart showing the reduction in numbers of inappropriate prescription decisions



In order to reduce inappropriate prescription decisions made by external prescribers, for example GP's and therapists from outside the immediate team, **Wirral & West Cheshire Wheelchair Service** ran 'approved prescriber'

courses. These courses raised prescriber awareness of the importance of correct prescribing. The team was able to reduce inappropriate prescription decisions from a monthly average of 34 to nil (see above).

**Teams asked themselves why the referrals were not complete in the first place and what they could do to reduce the number of inappropriate ones. These are some of the questions:**

- Does the referral form need updating or redesigning?
- Do referrers know what is expected of them?
- Are referrers up to date with what information is required?
- Are referrers aware of what equipment is available?
- Do referrers know who to ask about the service?
- Does your service make itself clear about what is expected to be included in the referral?
- Does your referral form ask clearly for the information needed?

- Is your service consistent in its approach?

**In answer to these questions teams:**

- redesigned referral forms – many making use of forms shared by other wheelchair services
- increased the number of referrals completed correctly by returning incomplete or incorrect forms and telephoning to explain the importance of full information
- reviewed the training and education services provided to referrers and prescribers in order to improve the quality of referrals and prescriptions received
- reduced the number of inappropriate referrals by agreeing eligibility criteria with stakeholders. Teams included information on eligibility criteria in referrer and prescriber training and made the criteria widely available.



## Strategy three continued

With funding obtained from the Workforce Development Organisation **North Lincolnshire Wheelchair Service** were able to release a therapist to carry out improvement work. By reviewing their referrals they achieved an 8% reduction in inappropriate referrals for Electrically Powered Indoor/Outdoor (EPIOC) wheelchairs. The service also developed an action plan with their new approved repairer, ensuring that 75% of powered wheelchairs received annual planned preventative maintenance (PPM).

### **Maintenance of equipment**

In addition to the prescription of wheelchairs another important and resource intensive area of responsibility for wheelchair services is the regular maintenance of equipment. One third of the teams reviewed and improved their PPM systems for wheelchairs.

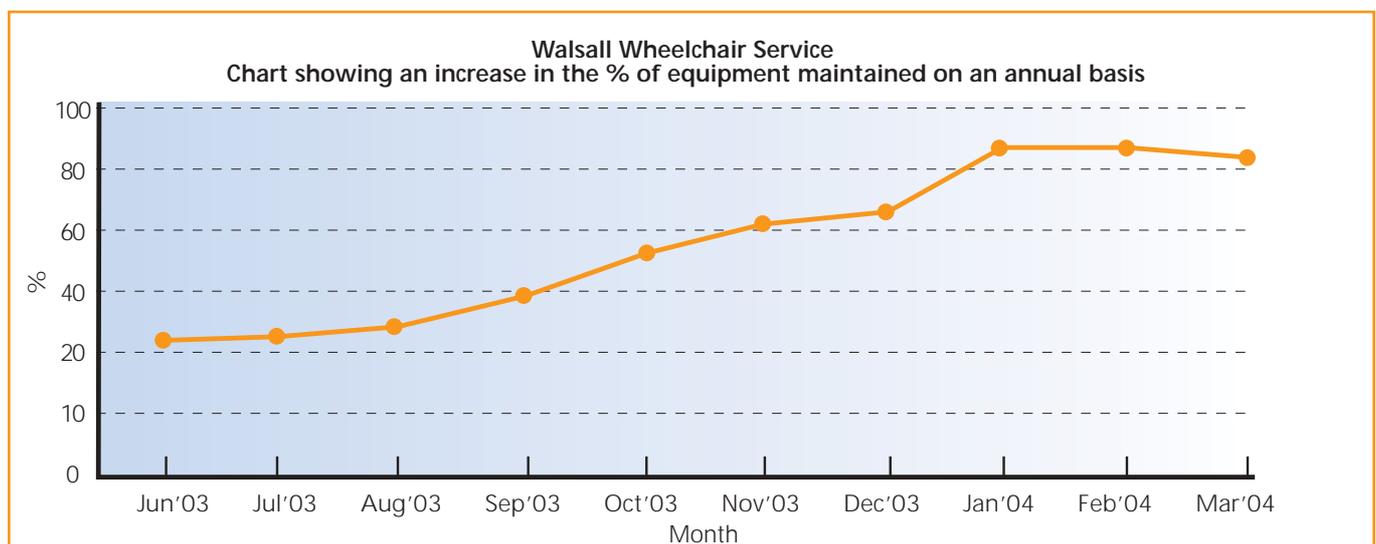
A logbook was introduced for each powered wheelchair issued by **Kings Lynn Wheelchair Service** providing a written record of maintenance. This initiative gave the user more

ownership and confidence in the process and helped improve efficiencies around the PPM programme.

### **Redditch & Bromsgrove Wheelchair Service**

adapted the model used by another collaborative team to develop their risk assessment tool. The service carries out inspections of powered wheelchairs, equipment issued to young users and those at high risk at least every twelve months. Those defined as high risk, include highly active users, those within 10% of the maximum equipment weight limit and suspected equipment abusers. All other wheelchairs receive a three-year inspection.

This system reduced the number of inspections by enabling the service to prioritise those most at risk. The inspection success rate for powered wheelchairs, for those deemed high risk, improved by 100% and has therefore significantly reduced clinical risk.





In order to introduce improvements to their PPM for powered wheelchairs the team at **Walsall Wheelchair Service** needed to establish a baseline or starting point to work from. They found that just over 20% of powered wheelchairs were being inspected. Before introducing any changes the team decided to monitor how their current system was working. In doing this, they found that the actual number of current users was difficult to identify. Further investigation highlighted the fact that repair contractors spent valuable time making abortive visits to users whose addresses were incorrect or who were no longer using a powered chair.

The team acknowledged that their current work systems had become slack – the user database was outdated, some administrative processes were inefficient and the team did not monitor performance against the contract. By

monitoring the current situation, establishing a baseline, identifying areas of 'slack' and tightening up on procedures, the percentage of equipment maintained on an annual basis increased from just over 20% to an average of 80%.

An important factor in their success was improving verbal and written communications between the service and the approved repair contractor.

Both **Brent Wheelchair Service** and the **Oxford Centre for Enablement** had significant challenges to face before implementing any large-scale improvements. Before joining the Collaborative, both services were in the process of merging with neighbouring wheelchair services. Although this bought its own challenges and priorities, the ideas, tools and techniques shared through their involvement in the Collaborative will continue to be used in developing and implementing best practice.

*‘Through the collaborative we now have electronic links with wheelchair services nationally providing an unlimited pool of experience to access and share, ultimately providing an improved quality of service to our users’*

**Cathy St John,  
Wheelchair Services Manager,  
Enfield Wheelchair Service**



## Strategy three continued

### Role Redesign at Birmingham

Efficiency was increased at Birmingham Wheelchair Service by introducing a dedicated Stores Technician. In addition to boosting morale, the appointment of the Stores Technician avoided clinicians spending time searching for and setting up equipment. The technician:

- keeps an accurate computerised inventory of equipment available
- adjusts chairs and seating systems in clinics held at special schools
- enables alterations to be checked straight away rather than asking the Approved Repairer to do so at a later date
- sets up all equipment for handover by clinical staff, this was previously done by the clinicians themselves
- enables handover dates to be booked in advance when equipment is ordered as the Stores Technician is available to set up on receipt

*‘The Collaborative has been a great opportunity for wheelchair services and their users and carers to engage with modernisation. If we can embed the collaborative methodology into everyday activity, not only will our users and carers benefit from sustained improvements, but the services will produce the robust statistics and evidence base we so desperately need to compete for investment’*

**Peter Gage, Chair,  
National Wheelchair Managers Forum**

## Key learning

- Following up incorrectly completed referral forms by telephone or post and giving feedback to the referrer about the need for information can improve the quality of referrals
- Providing training for prescribers' can reduce the number of inappropriate prescription decisions and improve the comfort and safety of users
- Developing simple systems for planned preventative maintenance such as annual reminder letters and accurate logbooks accessible to users and carers as well as the

wheelchair service can reduce clinical risk

- Highlighting the cost implications to your commissioners of PPM and the risks of not carrying it out can assist your planning process
- Maximising the use of staff skills available to the service and redesigning roles can result in increased efficiency, quality and boost staff morale

*Information to help you improve efficiency can be found on pages 29 and 30.*



## Strategy four

### Outcomes

*The outcome for each user and carer has been an enabling experience and promotes independence*

- *All users to have a mechanism for contact and review based on original assessment objectives*
- *All users and carers to rate the service as very good or excellent*

Service user and carer needs were the specific focus of this strategy ensuring that the outcome for all was an enabling experience and promoted independence. Just over two thirds of the teams worked on reviewing assessment objectives and just over a third chose to look at user and carer satisfaction.

Discussing needs, wants and expectations with users and carers was crucial to the development of shared objectives at assessment. These objectives were helpful in subsequent reviews.

User and carer representation has been fundamental to the improvement work in the form of the Reference Panel, Faculty and attendance at learning and sharing events. Services with limited experience of user and carer involvement came to recognise that this involvement was pivotal in ensuring a true user/carer focus for the service.

### **Improving assessment objectives**

Many teams acknowledged that their current systems for contact and review were inadequate and needed improving. For most of these teams, the first step was to establish a process to ensure that in addition to clinical objectives, client goals were discussed, set and measured together with the client.

The second step was to make wheelchair service contact details readily available and to improve the frequency of reviews as appropriate.

Assessment objectives were not always recorded. Some teams developed their own templates, others adapted templates created by colleagues in other services. The objectives could then be used to ensure that user, carer and therapist goals were recorded in the pursuit of the provision of the wheelchair best suited to their needs. Subsequent reviews could then be based on these objectives.

### **North West Surrey Wheelchair Service**

noted that 25% of users had 'agreed assessment objectives' recorded in their notes. The team reviewed and redesigned their existing assessment paperwork and added a specific section for recording client and clinician objectives. The result was a more user-friendly assessment record. Within four months the percentage of users with agreed assessment objectives in their notes increased to 100% and this level has been sustained. Feedback to the service from client satisfaction surveys showed that by contributing to the assessment, clients felt part of the process and appreciated the fact that their personal objectives had been taken into account.



## Strategy four continued

### Case Study: North Cumbria Wheelchair Service

#### Starting point

- The team was providing a full assessment but needed to check that they were recording all the necessary information
- Literature search to find existing guidelines / best practice to base their new documentation on

#### What did they do?

- Audited both clinic and domiciliary assessment forms to see if users had a mechanism for contact / review based on original assessment.
- The audit proved that the team was not able to meet the objectives using the current assessment forms
- A new assessment form was devised and trialled

#### Key improvements made

- New documentation contains joint goals with time scales and is standardised to College of Occupational Therapists recommendations

#### Lessons learnt

- How effective small changes can be
- The importance of audit – the team thought their documentation standards were high but audit showed they were missing important information

#### Impact

- The team are providing a more detailed assessment of the user's, carer's and referrer's aims and goals and agreeing joint goals, which can be measured

The **Isle of Wight Wheelchair Service** had not recorded objectives before the Collaborative; now 100% of wheelchair users discuss their objectives at assessment with an approved prescriber trained in objective setting. As a result of this change users and carers now benefit from a more in-depth assessment process, which considers the wider aspects of their wheelchair use.

By identifying steps in the pathway where users had contact with the service, **Enfield Wheelchair Service** was able to identify opportunities to provide important information and deliver a better service to clients. Working in partnership with their Approved Repairer the service was able to identify those users who needed a full review appointment and those who did not. In eight months they recorded a 42% increase in the number of users provided with updated information, a planned preventative maintenance appointment or a face-to-face review, as appropriate.

**Bromley Wheelchair Service** did not have an established mechanism for informing clients of their assessment review process. They therefore redesigned their assessment form to prompt the clinician to discuss review options with the client. As a double check, a question was included in their client satisfaction survey asking, "Do you know what to do if your wheelchair no longer meets your needs?" All clients now know that they can self refer if their clinical circumstances change.

**North Cumbria Wheelchair Service** began their review of the documentation of assessment objectives by carrying out an audit. Their case study on the left shows how they did this.

*'The input of all was valued and discussed. Professionals, users, carers and support staff became more open-minded when working in partnership with each other [through the Collaborative]'*

Mike Nash  
Wheelchair User



### **User and carer satisfaction**

Teams working on user outcomes learned the value and potential of user and carer involvement and began to see this as an untapped resource. In some instances, user and carer representatives took the lead in the development or redesign of satisfaction questionnaires and surveys.

Their involvement helped to strengthen the relationship with the service and ensured that the questions asked were important to the user and carer as well as to the service. This approach freed service staff to continue with other tasks. When designing questionnaires some teams used a method whereby the questionnaire was agreed, tested with a number of clients, the responses reviewed within the service, the questions amended as necessary and then tested with more clients. This method provided a mechanism for checking that questions were set in such a way as to elicit the required information in a measurable and comparable way.

Questionnaires, surveys, interviews and informal conversations offer simple ways to obtain information about your service and assess the impact of improvement.

Involving and listening to users made it possible for **Doncaster Wheelchair Service** to successfully establish its own special seating service. Their case study on the right tells the story.

The user group at **Shropshire Wheelchair Service** welcomed the chance to become involved on a more practical level and helped develop a user satisfaction survey on the clinic assessment process. Members of the user group

## Case Study: Doncaster Wheelchair Service

### **Starting point**

- For clients and their families living in Doncaster, Special Seating was provided at the Regional Centre, which meant a round trip of 50 miles. This resulted in a lengthy waiting time and a limited choice of seats due to demand on the Regional Centre. In addition, the service was often fragmented due to the Wheelchair and the Special Seating Services being run by separate organisations.

### **What did they do?**

The local Community Health Council (CHC) carried out a service user satisfaction survey around special seating, which highlighted areas of dissatisfaction:

- Travel to the regional centre
- Limited choice of wheelchairs and seats
- Number of visits required
- Long waiting time

The local service was committed to improving services for these users

Local service provision was costed and funding identified. Doncaster Wheelchair Service set up a Special Seating Service as an integral part of the Wheelchair Services

### **Key improvements**

- Waiting time from referral to the receipt of the seat reduced from an average of 39 weeks to five weeks due to direct referrals and better working arrangements
- Reduced travelling for clients and carers
- Reduced number of visits due to joint working with the Orthotists
- Introduced flexibility and wider choice of seats and chairs, i.e. Tilt in space wheelchairs
- No complaints from the service users

### **Key challenges**

- Difficulty in identifying and withdrawing appropriate funding from the regional centre due to the service being a fraction of a bigger contract
- Steep learning curve for staff
- Managing the inherited waiting list backlog

### **Outcome**

A further satisfaction survey was carried out and feedback was very positive.

- 89% of clients were happy that their views had been taken into account
- 89% were happy with their first appointment wait time
- 79% clients thought that the choice of special seating was good/very good



## Strategy four continued

interviewed clients waiting for clinic appointments using the questionnaire. There were two unexpected benefits. Having a user group representative in the clinic waiting room created a calmer atmosphere, particularly for new wheelchair users, and it created an opportunity to promote the user group.

**Leicester Wheelchair Service** improved the relationship with their users and carers by ensuring that telephones were answered and queries dealt with. The service reviewed the process and developed a staff rota system to ensure that administrative and clinical queries could be handled and responded to in a timely fashion. This reduced the number of times users and carers needed to call the service with a query and led to improvements in both user and carer satisfaction and staff morale.

Teams including **North Cumbria, North West London, Hillingdon, Chantry** and **West Dorset Wheelchair Services** improved user and carer satisfaction by redesigning clinic sessions to suit their needs. Ideas included



running extended clinics, evening clinics and clinics in alternative locations.

**Leeds, Birmingham, Shropshire, Lincolnshire** and **Exeter Wheelchair Services** are just some of the teams who offer clients the opportunity to choose a convenient appointment time and date by offering partial booking.

### Key learning

- Discussing and agreeing assessment objectives between clients and clinicians can take time to establish but will result in real benefits for both the user and service. Clients are more satisfied with the service and feel part of their process of care
- Assessment objectives are essential to regular and effective reviews and to ensuring that equipment is fit for the purpose
- Support and encourage user group involvement in service redesign and

development. Wheelchair users and carers are a valuable and often untapped resource who add value and credibility to your service

- Seeking a comprehensive understanding of the user and carer perspective will increase satisfaction and raise staff morale

*More information on user and carer involvement can be found on page 29.*



## □ Getting started

**Here are some ideas to consider if you want to take forward improvement work in your wheelchair service.**

The first step is to secure local agreement for the work that you want to take forward and identify all the key people who you will need to engage. This will include users, carers and colleagues from within your organisation such as therapists, managers, your local commissioner (who is responsible for what to purchase) and the director who leads your department (responsible for how money is spent) or even your Chief Executive.

Reminding yourself who is involved in your local community will be helpful, for example, representatives from neighbouring health trusts, your approved repairer and your Strategic Health Authority.

Once you have the necessary agreement and support you might choose to work on two or three of the opportunities described in this guide or use the guidance developed around best practice for wheelchair services referred to on page 35. For more information see [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk) [www.pmguk.co.uk](http://www.pmguk.co.uk)

Check the map showing the distribution of wheelchair collaborative teams on page 34 and talk to other teams about their experiences – learn from them before you get started. Contact details can be found at [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

There are an increasing number of initiatives in health and social care, which explore how to actively engage members of the public in determining local priorities and service improvement.



For further information see:  
[www.modern.nhs.uk/improvementguides/patients](http://www.modern.nhs.uk/improvementguides/patients)  
[www.cppih.org](http://www.cppih.org)  
[www.expertpatient.nhs.uk](http://www.expertpatient.nhs.uk)

### ***Process mapping***

The next step is to map your service and involve all the key people identified earlier in a process mapping exercise. Process mapping is a simple, tried and tested technique for understanding the whole user journey and highlighting where problems can occur. It helps identify steps in the user pathway that can be removed enabling you to reduce the time taken from one stage to another. Process mapping helped collaborative teams identify issues and bottlenecks in the service and examples can be found in Strategy Two of this guide. For more information about process mapping see [www.modern.nhs.uk/improvementguides/process](http://www.modern.nhs.uk/improvementguides/process)



## Getting started continued

### **Making changes**

After mapping your service you will now be able to identify current practices which, if changed will bring about an improvement. Rather than changing your whole system in one go, you can plan your changes and then try them out with a small number of service users. If the change works then you can implement it, if not then adjust and re-run. This method is referred to in the guide and is known as a 'Plan Do Study Act' cycle or PDSA cycle and is described in the Model for Improvement diagram on the page opposite. See also the guide on [www.modern.nhs.uk/improvementguides/measurement](http://www.modern.nhs.uk/improvementguides/measurement)

Process mapping can help identify the steps in the process where there are the longest delays for users. Some delays are caused by 'bottlenecks' where a particular resource, perhaps a member of staff or a room, does not have enough 'capacity' to meet 'demand'. You can then map the bottleneck in more detail to find out the real reason for the delay.



### **Matching capacity and demand**

In our experience, the process of truly matching capacity and demand can lead to significant reductions in waiting times for users and carers. Once teams had process mapped and better understood their current systems, they went on to measure their demand, capacity, backlog and activity in the same units for the same period of time:

- 1 Demand – they identified all new and re-referrals coming into their service and multiplied this by the amount of time it would take to see these users**
- 2 Capacity – they identified the resources they had to do the work in units of time**
- 3 Backlog – they identified the number of users that were waiting meanwhile – again in units of time**
- 4 Activity – they identified how much of that resource they were actually using**

There is a guide that explains how this works in more detail – go to [www.modern.nhs.uk/improvementguides/capacity](http://www.modern.nhs.uk/improvementguides/capacity)

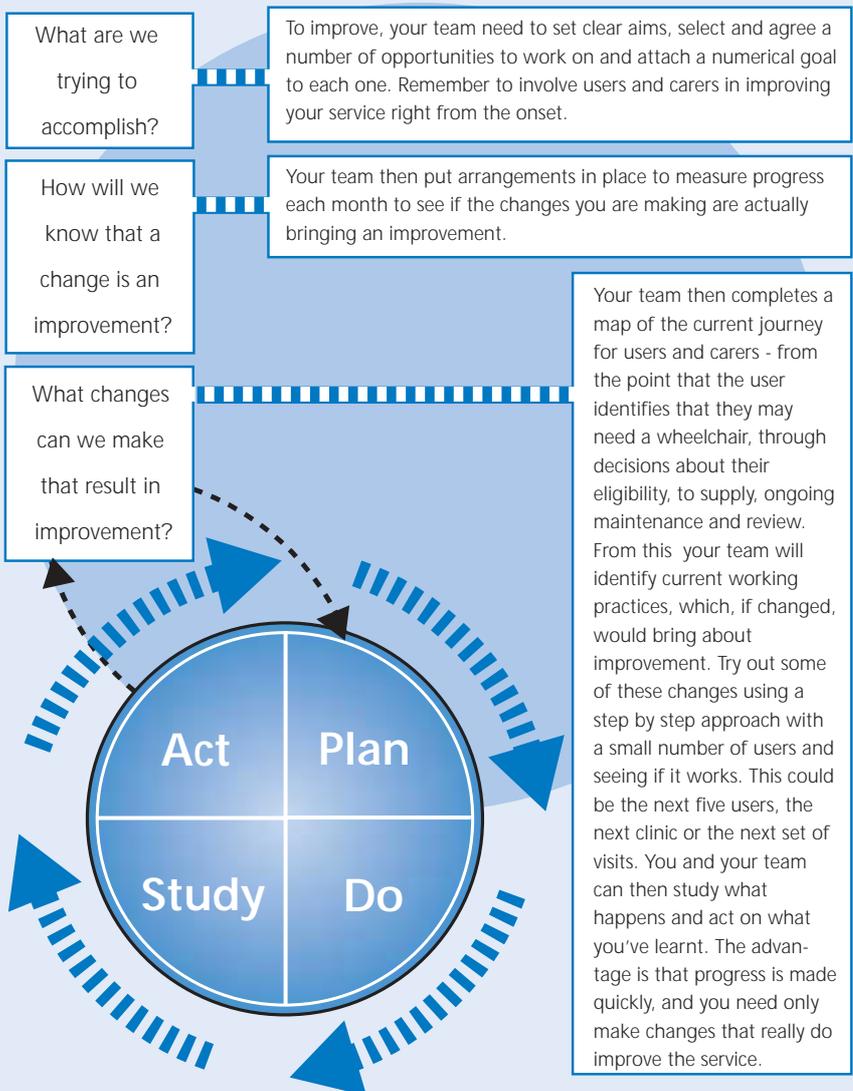
With the help of the tools and techniques referred to above and on page 29, collaborative teams have provided better quality care, more convenient services along with a significant reduction in urgent and routine waiting times. The **Key Learning** described throughout this guide is summarised on the page opposite.



## The Model for Improvement© IHI

# Model for Improvement

Guidance notes for you to consider when improving your service using the Model for Improvement



Adapted from: The Model for Improvement, Langley G, Nolan K, Nolan T, Norman C, Provost L (1996) The Improvement Guide: a practical approach to enhancing organisational performance. Jossey Bass Publishers, San Francisco

## Key learning

- Involve users and carers in the design and development of your service
- Communicate with all those involved in your service, raise the profile of the service in the locality, ensure users and carers know how to access the service
- Provide clear understandable service information, being open with users and carers. Review, develop and publish eligibility criteria, improve quality and consistency of information
- Validate waiting lists making sure those clients who are on the list actually still need to be there. Prioritise clients according to clinical need, seeing routine referrals in date order. Reduce the number of waiting lists and categories of urgency
- Develop systems to minimise cancellations and "Do Not Attends" (DNAs) such as pre-booking of appointments. Make best use of clinics and home visits using staff skills appropriately
- Consider redesigning staff roles and introduce new ways of working



## End note

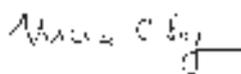
We hope that you have enjoyed reading this Good Practice Guide and that it will provide a useful reference source for you in the future. The guide is designed to support the continuous improvement of wheelchair services across the country. We know from the work of this programme that there are many people who are key to this process – those working within the service, users, carers, local commissioners of services, colleagues with experience of service improvement and all who are working hard to deliver real improvements.

Our thanks go to the Reference Panel, Faculty members, invited speakers and last but not least all of our colleagues who have participated in the programme for their willingness to try out new ideas, for sharing their learning about what worked and what did not and above all their enthusiasm to carry on improving services for wheelchair users and carers.

Contact details for the wheelchair service collaborative teams are available at [www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

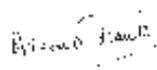
*'I was very impressed by the energy and enthusiasm generated by the Collaborative... wheelchair service managers who described being sceptical initially were now talking of culture change within their teams and achieving significant improvements to their wheelchair services'*

**Ms Beryl Palmer**  
Disability Policy Branch,  
Department of Health



**Marie Sedgwick**

Associate Director, Wheelchair Services Collaborative



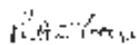
**Andrew Frank**

Clinical Chair Wheelchair Services Collaborative



**Peter Kemp**

Chair National Forum for Wheelchair User Groups



**Peter Gage**

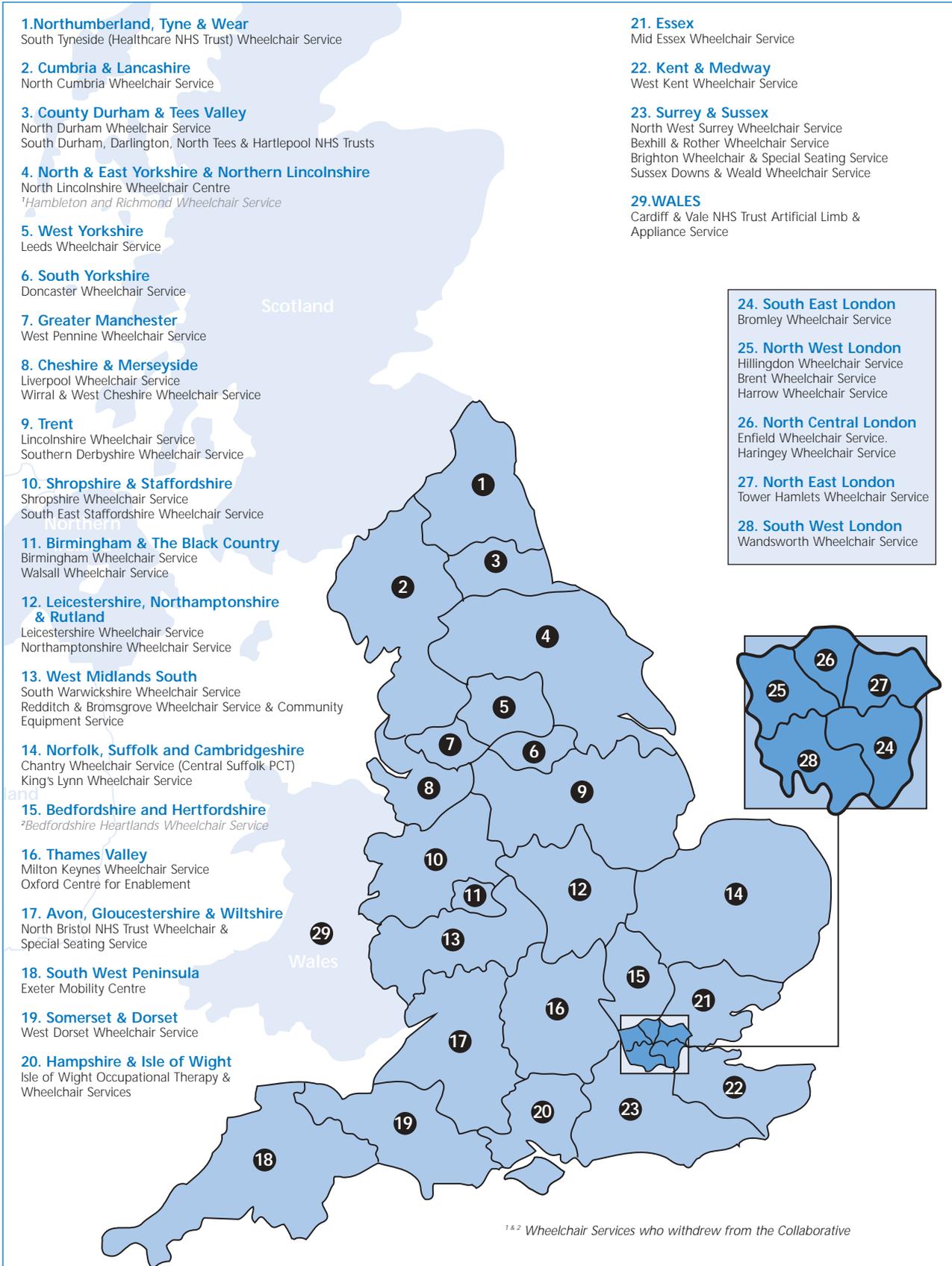
Chair National Wheelchair Managers Forum

# Appendix 1

Wheelchair Services Collaborative Faculty membership	
Zac Arif	Director, The Access Partnership – an NHS programme designed to improve access and best practice to specialist and therapy services across the UK
Sharon Barrington	Head of Governance and Modernisation, Nuffield Orthopaedic Centre NHS Trust
Virginia Beardshaw	Director of UK Service Development, British Red Cross Society, UK Office
Harriet Beynon	Clinical Co-ordinator, Brent PCT Wheelchair Service
Sam Brinn	Programme Manager, Wheelchair Services Collaborative Orthopaedic Services Improvement
Aisling Devlin	Wheelchair Services Mapping Project Manager, <i>emPOWER</i>
Professor Martin Ferguson-Pell	ASPIRE Professor in Disability and Technology, Director – ASPIRE Centre for Disability Science, University College London – (Association for Spinal Injury Research and Rehabilitation and Reintegration)
Dr Andrew Frank	Clinical Chair of the WSC, Consultant in Rehabilitation Medicine, Stanmore Specialist Wheelchair Service
Peter Gage	Chair, National Wheelchair Managers Forum/Clinical Services Manager, N Essex WC Services
Sam Gallop	Chair, <i>emPOWER</i> c/o Limbless Association
Ros Ham	Director of Children's Services, Whizz-Kidz
Anne Harris	Regional Mobility Therapist, Whizz-Kidz
Sally Howard	Director, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Fiona Jackson	Head of Allied Health Professions, Barnet Primary Care Trust
Peter Kemp	Chair, National Forum for Wheelchair User Groups
Ian Legrand	Buyer – Rehabilitation Services, NHS Purchasing and Supply Agency
Henry Lumley	Assistant General Manager, Musculo Skeletal Directorate, North Bristol NHS Trust
Nick Mapstone	Senior Manager, Audit Commission
Dr Linda Marks	Consultant in Rehabilitation Medicine, Stanmore Disablement Services Centre,
Pam Marsh	Disability Policy Branch, Department of Health
Pam Nicklin	Programme Manager, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Beryl Palmer	Senior Policy Advisor, (Disability) Disability Policy Branch Department of Health
Lisa Pepperrell	Clinical Lead Occupational Therapist, Brighton Wheelchair & Special Seating Service, South Downs Health NHS Trust
Marie Sedgwick	Associate Director, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Tim Soffe	Rehabilitation Engineering Services Manager, Nottingham City Hospital NHS Trust
Wheelchair Services Collaborative Modernisation Agency Team	
Sam Brinn	Programme Manager, Wheelchair Services Collaborative / Orthopaedic Services Improvement
Sally Howard	Director, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Richard Morris	Programme Manager, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Pam Nicklin	Programme Manager, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Marie Sedgwick	Associate Director, Wheelchair Services Collaborative/Orthopaedic Services Improvement
Helen Simpson	Programme Manager, Wheelchair Services Collaborative/Orthopaedic Services Improvement

# Appendix 2

## Map showing distribution of Wheelchair Service Teams by Strategic Health Authority



# Appendix 3

**Audit Commission** – contains commissioning guidance for wheelchair services.  
[www.audit-commission.gov.uk/olderpeople](http://www.audit-commission.gov.uk/olderpeople)

**The National Service Framework for Older People** – It is estimated that over 70% of wheelchair service users are aged 60 or over. The National Service Framework (NSF) for Older People aims to integrate and improve access to health and social care, raise standards and promote independence for the older person.  
[www.dh.gov.uk](http://www.dh.gov.uk)

**National Service Framework for Diabetes**  
– There are similar links with the National Service Framework for Diabetes. Many people with diabetes need equipment to help them to lead independent lives. [www.dh.gov.uk](http://www.dh.gov.uk)

**National Service Framework for Long Term Conditions**  
– In February 2001 the Secretary of State announced the development of a National Service Framework for long term conditions which is expected to be published in 2005. The framework will set out clear expectations about the standards expected across health and social care.  
[www.dh.gov.uk](http://www.dh.gov.uk)

**The National Service Framework for Children, Young People and Maternity Services**  
– At the heart of this NSF is a fundamental change in the thinking about children's health. Published in September 2004, it advocates a shift with services being designed and delivered around the needs of the child, looking at the whole child rather than just the illness or problem. Staff from all sectors need to work together so that the services they provide join up across health, social care and education. By 2014 these services are expected to have met the standards set in the document. [www.dh.gov.uk](http://www.dh.gov.uk)

**NHS Wheelchair and Seating Services Mapping Project – Final Report – 2004**  
– *emPOWER* has published the findings of a major national mapping exercise, funded by the Department of Health, resulting in a comprehensive report titled 'NHS Wheelchair and Seating Services Mapping Project'  
[www.empowernet.org](http://www.empowernet.org)

**Independence Matters: an overview of the performance of social care services for physically and sensory disabled people**  
– This report published in December 2003 provides an opportunity for councils, with their partners, to appraise the quality of their current services in preparation for the NSF for people with long term conditions. It includes a checklist against which organisations, users and carers can measure the quality of services and improvements needed.  
[www.dh.gov.uk](http://www.dh.gov.uk)

**Guidance around best practice for wheelchair services** – was published in March 2004. The document contains a framework for providers and commissioners with a view to helping them provide a first class service. The guidance has been developed and supported by the National Wheelchair Managers Forum, British Society of Rehabilitation Medicine, Posture and Mobility Group, *emPOWER*, National Forum for Wheelchair User Groups and Whizz-Kidz and is available at:  
[www.pmguk.co.uk](http://www.pmguk.co.uk)  
[www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)  
[www.chairpower.org](http://www.chairpower.org)

**Specialised Wheelchair Seating National Clinical Guidelines** – British Society of Rehabilitation Medicine (BSRM). Report of a multidisciplinary expert group (Chair: Marks, LJ). London: British Society of Rehabilitation Medicine 2004.

**PaSA – NHS Purchasing and Supply Agency "Purchasing Wheelchairs – Best Practice guide"** [www.pasa.nhs.uk](http://www.pasa.nhs.uk)

[www.dh.gov.uk/publications](http://www.dh.gov.uk/publications)  
[www.wheelchairmanagers.nhs.uk](http://www.wheelchairmanagers.nhs.uk)

For additional copies  
call **08701 555 455**  
Quoting ref: MA/SIT/OSI/WSC/001

The NHS Modernisation Agency is  
part of the Department of Health

  
***Modernisation Agency***

 **Department  
of Health**