

Meeting user's needs:
The case for the introduction of outcome measures

First draft

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Meeting user's needs The case for the introduction of outcome measures

Introduction:

For many years, wheelchair services have traditionally recorded the volume of their activities, the number of clients referred, the number of clients assessed and the number of wheelchairs issued. However, in many cases the effectiveness of the wheelchair service's interventions are not measured. Without a measurement of the service's effectiveness there are negative implications for users, the service and the service commissioners.

Are the user's and their carer's needs being met and are they gaining the full benefit from the equipment? Is the wheelchair service investing in the most appropriate equipment and targeting resources into the most beneficial areas? Is reconditioning cost effective? Is training of 'accredited assessors' adequate? Are the commissioners purchasing a service that provides positive health gains?

Without outcome measures, the answer to this question has to be that we don't know.

Wheelchair user populations

The wheelchair user population has many varied mobility and postural needs. To categorise any group of people is difficult but for the basis of argument in this paper the broad client groups have been adopted from "Guidelines for purchasers and providers based on categories of users" published by The Department of Health in 1996.

Consideration is given to the user's level of independence and the postural support they require.

[Figure 1](#) (overleaf) represent the considerations in mobility and postural management provision.

There are three broad considerations:

- the complexity of the user's mobility and postural needs,
- the level of assessment required to identify the needs and produce the appropriate prescription,
- the funding implications of the prescription.

Core constituency

The audit commission report, "Fully Equipped" (march 2000), reported that 70% of users are 60 years old or older and are usually provided with the most basic types of wheelchair. The report goes on to say that "a quarter of the users find their chair is too heavy" and many users find it "difficult to get the chair in or out of a car".

The national service framework for older people (issued March 2001) sets out eight standards aimed at driving up standards and removing unacceptable variation in standards. Although the standards do not directly refer to wheelchair services, the service provided by the wheelchair centres impact on the "packages of care" available to older people.

Considerations in mobility provision

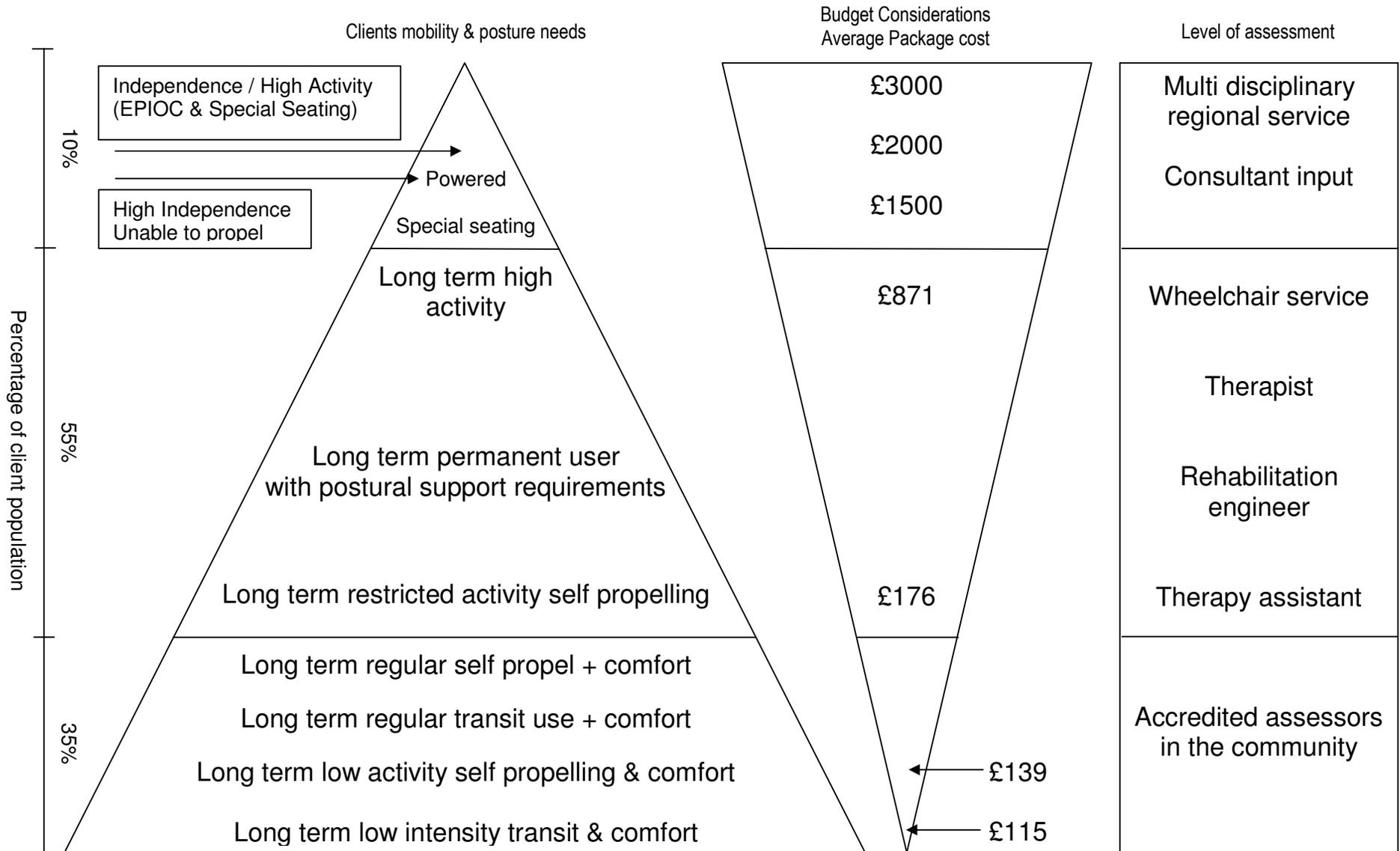


Figure 1. The considerations in mobility and postural management provision.

Standards 1 and 2 can both be related to services provided by wheelchair centres:

Standard 1 – Rooting out age discrimination:

As stated in the Audit commission report, 70% of users are 60 Years old or older and are usually provided the most basic types of wheelchair. Just because this user group may have basic mobility requirements is no reason to restrict their ability to get the full benefits of the equipment by the nature of the equipment itself.

Low intensity need is still 'need' and the feedback appears to point to the equipment not being appropriate to meet even basic requirements.

Standard 2 – Person centred care:

As part of the assessment process, wheelchair services need to consider the user's lifestyle and their carer's needs and not simply undertake an equipment led process.

It would appear from the subjective feedback that in many cases wheelchair services are failing to provide appropriate services and equipment to meet the mobility and postural needs of their core group.

Client compliance or silence cannot be taken as client satisfaction. Empirical data is required to refute claims or assist in the redesign of the services.

Accredited assessors

The majority of wheelchair services currently accept referrals from trained assessors in the community. The level of training varies for service to service but the National wheelchair managers forum are developing "guidelines for accredited wheelchair prescriber's course"

Since a large percentage of elderly users with basic mobility needs will be assessed by the "community assessors" and as previously stated, this group would appear, at least subjectively, dissatisfied with the equipment they receive – surely this is a case for wheelchair services to ensure that the community/accredited assessor concept is working successfully.

Wheelchair services should be able to identify that:

1. User's and carer's need are being met.
2. Assessor are trained to assess need and prescribe appropriately (or refer onto the wheelchair service), not simply request equipment.
3. The equipment purchased/made available is appropriate to the needs of the client group(s)
4. The community/accredited assessor concept represents value for money/cost effectiveness.

Failure to answer these questions could be seen as negligently perpetuating a "hit or miss" service, at worst the service is in breach of its duty of care.

Proposal

The majority of users are issued with a general purpose wheelchair. These may vary from a basic transit wheelchair to an energy efficient enhanced specification self propelling model. By general purpose, that is to say the primary consideration is mobility. It is not a wheelchair with a specific use or a specific client group (for example reclining back or heavy duty). Since a large percentage of these users will not be seen directly by the wheelchair service it would appear appropriate to introduce a review with this client group with the option to roll the scheme out across the entire user population.

Discussion

Services which have looked at introducing outcome measures have reported that the process has been time consuming and has tied up therapist time. Therefore, any scheme will need to provide benefits that outweigh resource implications. The process should be built into the accredited assessor programme.

Models of provision and review

Figure 2 (below) illustrates open loop wheelchair provision. Following the issue of the equipment, further contact is initiated by the user when the situation dictates that, for a variety of reasons, the equipment is no longer suitable.

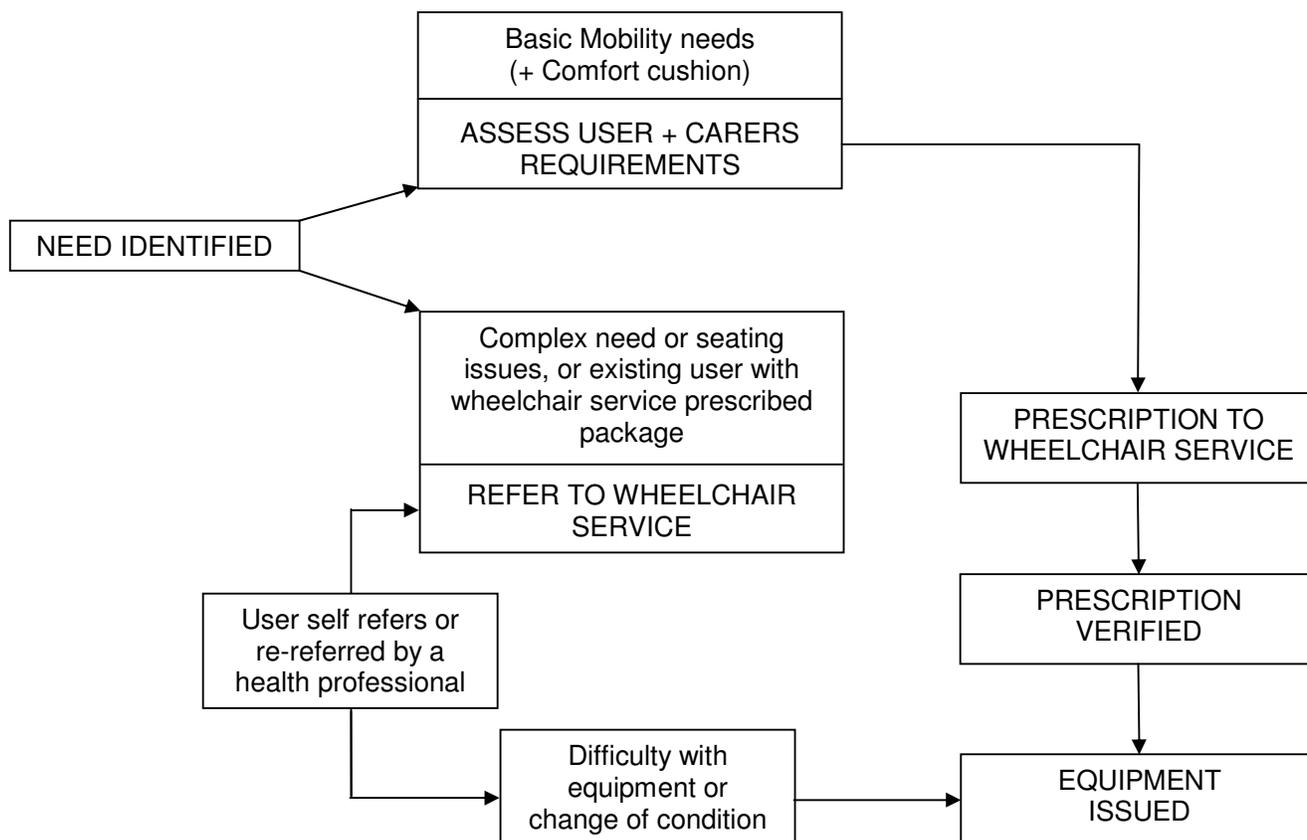


Figure 2: In figure 2, the feedback loop is only completed when the user experiences difficulty or their condition changes to the point where re-assessment is required.

Closed loop wheelchair provision

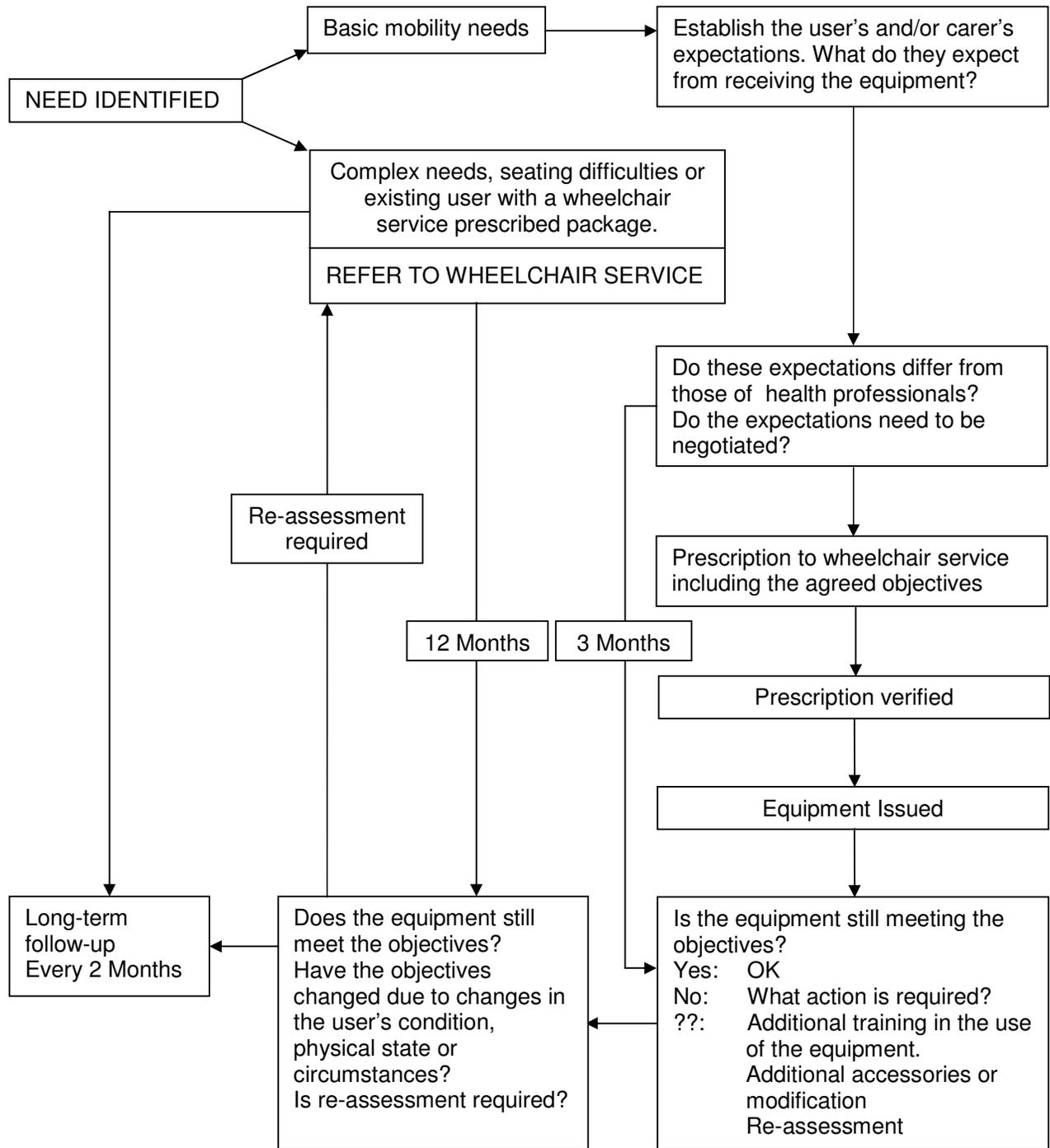


Figure 3: Closed loop wheelchair provision

[Figure 3](#) (above) shows a closed loop model for wheelchair provision.

The review of the user's ongoing requirements are shared between the original assessor (this may require refining in the case of acute hospital based staff) and the wheelchair service.

The proposal is for the original assessor to agree the objectives of supplying the equipment with the user and their carer and to follow-up after 3 Months. Since almost 30% of wheelchair are returned in the first twelve months, it is important to establish suitability at an early stage.

An early intervention should ensure that any additional training requirements or additions to the wheelchair are identified. Additional training in the use of the wheelchair or the addition of accessories may be all that is required to ensure the prescribed equipment meets the user's expectations. However, if the equipment is unsuitable remedial action is required.

After 24 Months the wheelchair service should follow up to see if the equipment still meets the user's objectives (has there been a change in the user's or the carer's condition? Has the user put on or lost weight? Is the equipment still in working order?)

The ongoing review is required at agreed intervals.

Wheelchair review and outcome measures.

Proposed protocol

- I. **Pre Delivery.** The accredited assessor and the user (and their carer) complete the "wheelchair user requirement" questionnaire¹ (appendix 1) and forward it with the wheelchair prescription to the wheelchair service
- II. **Initial review.** Once the user has had the equipment on issue for three months, an initial review is required. This review is likely to pick up any issues around the prescription or handover of the equipment (for example the chair does not fit into the user's car boot or additional training is required to show the carer how to get the chair into a car or manoeuvre the occupied chair down a kerb.

The review would be structured around the "wheelchair assessment review" questionnaire (appendix 2) and the original "wheelchair user requirement" questionnaire.

The options are:

- a) the assessor is responsible for this review
- b) a postal review is carried out by the wheelchair service
- c) a telephone review is carried out by the wheelchair service
- d) a visit by the wheelchair service. (this would appear to negate the advantages of not using accredited assessors. It may however be appropriate for longer term reviews which would incorporate planned preventative maintenance of the equipment and review of the user's (and carer's) needs)

A pilot of options a) to c) would be appropriate to establish the best method for the specific wheelchair service.

- III. **Long term ongoing reviews.** A decision is required regarding ongoing review periods. Since the average basic wheelchair is on issue for 4 years it may be appropriate to review after twelve months and then for every twenty four months.

The options are:

- a) a postal review carried out by the wheelchair service
- b) a telephone review carried out by the wheelchair service
- c) a visit by the wheelchair service

A visit by a trained member of the wheelchair service could combine a review of the user's needs and condition with a mechanical review of the equipment. This approach may be more cost effective than a planned preventative maintenance call by a repair contractor which may find the equipment satisfactory but fail to report a change in the user's needs or circumstances

- d) incorporate completing the review questionnaire with a planned preventative maintenance call by the wheelchair repair contractor.

(This option would include the need for the wheelchair service to train the contractor's staff and to monitor the quality of reviews.

A pilot of option a) and b) could be carried out. Options c) and d) would require longer term strategic decisions by the wheelchair service.

Conclusion

There are in the region of 825,000 people using NHS wheelchairs in England and currently it is hard to estimate the effectiveness in terms of health and social gains to the user and their family and the cost effectiveness to the service commissioners and providers.

The equipment may be cheap but if it is not being used then is it cost effective? Is the equipment adding to the user's difficulties, or at worst, is it contributing to a deterioration in the user or their carer's condition? On the whole the answer is we don't know.

It is difficult to build a case for additional funding to either expand or develop the service without the data to support the argument, these proposals set out a starting point for collecting the required data.

¹ The questionnaires are adapted from *K.Moore et al. Hull & East riding community NHS trust (2001)* and *Ward and Church. King's healthcare & West Herts wheelchair service (2002)*.



TRUST NAME NHS TRUST

Wheelchair user requirements questionnaire

Your Details:

1 Please provide the following information about yourself			
Name		Tel. No	
Regular Carer's Name		Carers Tel. No	
Address			

Primary need:

2 What do you hope to be able to do when you receive you wheelchair that you have difficulty or cannot do now?

Functional need:

3 How will you most regularly use your wheelchair?		
To be pushed by my regular carer		<input type="checkbox"/> 1
To be pushed outdoors but you help by self propelling when my carer needs assistance		<input type="checkbox"/> 2
To propel myself indoors but be pushed outdoors		<input type="checkbox"/> 3
To propel myself indoors and out		<input type="checkbox"/> 4
To be pushed indoors and out		<input type="checkbox"/> 5
Comments:		

Frequency of use:

4 How often do you think you will use the wheelchair?		
	Daily – All day	<input type="checkbox"/> 1
	Daily – Part of the day	<input type="checkbox"/> 2
	4 to 6 times per week	<input type="checkbox"/> 3
	Less than 4 times per week	<input type="checkbox"/> 4

Carer:

5 What considerations do we need to take into account regarding you carer?

Transfer:

6 How will you get in and out of the wheelchair?	
Can you get in and out of the chair unaided	<input type="checkbox"/> 1
With assistance from your carer	<input type="checkbox"/> 2
By hoist	<input type="checkbox"/> 3
Other, please specify	<input type="checkbox"/> 4
Comments:	

Transport

7 Will your wheelchair be transported in any of the following:	
By private car? (please specify make & model below)	<input type="checkbox"/> 1
By converted vehicle	<input type="checkbox"/> 2
By minibus	<input type="checkbox"/> 3
By ambulance	<input type="checkbox"/> 4
By taxi	<input type="checkbox"/> 5
On public transport	<input type="checkbox"/> 6
Vehicle make:	Model:

Signature:

User's Name	Assessor's Name
User's signature	Assessor's signature
Date	Date



TRUST NAME NHS TRUST

Wheelchair assessment review

Your Details:

1 Please provide the following information about yourself			
Name		Tel. No	
Regular Carer's Name		Carers Tel. No	
Address			

Your needs:

2 The wheelchair has enabled me to meet my main needs							
Strongly agree	<input type="checkbox"/> _1	Agree	<input type="checkbox"/> _2	Disagree	<input type="checkbox"/> _3	Strongly disagree	<input type="checkbox"/> _4

3 If you disagree or strongly disagree what is the main reason for the equipment failing to meet your needs?

--

4 Is there anything the wheelchair service could do to rectify the situation?

--

Ease of Use:

5 The wheelchair has enabled me to get around indoors more easily									
Not applicable (go to question 6)	<input type="checkbox"/> _1	Strongly agree	<input type="checkbox"/> _2	Agree	<input type="checkbox"/> _3	Disagree	<input type="checkbox"/> _4	Strongly disagree	<input type="checkbox"/> _5

6 If you disagree or strongly disagree what is the main reason for the equipment failing to meet your needs?

--

7 The wheelchair has enabled me to get around indoors more easily							
Strongly agree	<input type="checkbox"/> _1	Agree	<input type="checkbox"/> _2	Disagree	<input type="checkbox"/> _3	Strongly disagree	<input type="checkbox"/> _4

8 If you disagree or strongly disagree what is the main reason for the equipment failing to meet your needs?

--

Frequency of use:

9 How often do you use the wheelchair?	
Daily – All day	<input type="checkbox"/> ₁
Daily – Part of the day	<input type="checkbox"/> ₂
4 to 6 times per week	<input type="checkbox"/> ₃
Less than 4 times per week	<input type="checkbox"/> ₄

10 Was this:	
More than you expected	<input type="checkbox"/> ₁
As regularly as you expected	<input type="checkbox"/> ₂
Less than you expected	<input type="checkbox"/> ₃

11 If this was less than you expected, is there any reason you have been unable to use the chair more often

--

Your carer

12 The wheelchair has met my carer's requirements									
Not applicable	<input type="checkbox"/> ₁	Strongly agree	<input type="checkbox"/> ₂	Agree	<input type="checkbox"/> ₃	Disagree	<input type="checkbox"/> ₄	Strongly disagree	<input type="checkbox"/> ₅

13 If you disagree or strongly disagree what is the main reason for the equipment failing to meet your carer's needs?

--

Transfer:

14 I am able to transfer into an out of the equipment safely							
Strongly agree	<input type="checkbox"/> ₁	Agree	<input type="checkbox"/> ₂	Disagree	<input type="checkbox"/> ₃	Strongly disagree	<input type="checkbox"/> ₄

15 If you disagree or strongly disagree what is the main reason for the equipment failing to meet your needs?

--

General impressions:

16 Would you say the wheelchair and cushion have had a positive effect on you lifestyle?							
Strongly agree	<input type="checkbox"/> ₁	Agree	<input type="checkbox"/> ₂	Disagree	<input type="checkbox"/> ₃	Strongly disagree	<input type="checkbox"/> ₄

17 If you disagree or strongly disagree what action can the wheelchair service take to improve the situation?

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General impression:

18 Is there any other advice or services you require from your wheelchair service?

Signature:

User's Name		Assessor's Name	
User's signature		Assessor's signature	
Date		Date	

Office use only

Wheelchair service actions