



Impact of Whizz-Kidz's service for adults in Tower Hamlets

An evaluation

March 2013

Summary: Analysis of Whizz-Kidz’s work with commissioners to improve wheelchair provision for adults indicates financial savings and improvements in quality of life.

Lower costs

Cost per wheelchair issued of around £570 versus over £777 under “business-as-usual”: **a 25% saving.**

Shorter waiting times

Better quality and lower costs results in additional value. This value includes more appropriate chairs and shorter waiting times. Combining this value with the pure financial savings means that **Whizz-Kidz improved overall value by 30 – 40%**

Higher quality

Wider benefits

There are also additional benefits that it has not been possible to quantify in this study. These include:

- **wider healthcare cost savings:** faster access to appropriate equipment prevents other healthcare conditions developing in both adults and their partners or spouses that are costly to treat.
- **improved social inclusion:** greater independence allows people to be more involved in their local communities and play a more active role in society.

- **Background**

- **Approach**

- **Results**

- **Overall conclusion**

Whizz-Kidz has provided disabled children and young people with mobility equipment since 1990. The charity is now collaborating with the NHS to deliver equipment to adults as well.

Thousands of adults in the UK are waiting for appropriate mobility equipment, so they can fulfil their potential and enjoy independent lives.



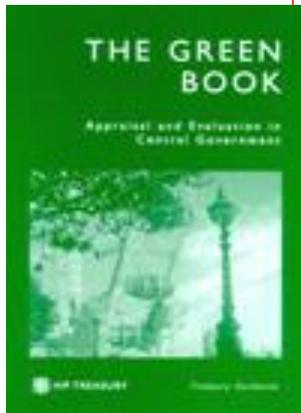
In some areas, there is a demand for Whizz-Kidz to deliver essential mobility equipment to adults as well as children, in collaboration with the local NHS provider.



Whizz-Kidz is a registered charity that raises funds to provide equipment and services for children and young people up to the age of 18. All of its work with the NHS operates through a Community Interest Company (CIC).

Whizz-Kidz asked Frontier Economics to examine the impact of the services it provides in conjunction with NHS bodies

Our advice helps clients make better decisions. That advice blends economics with innovative thinking, hard analysis and common sense.



Government has a well developed framework for assessing the impact of its interventions. It is based on HM Treasury's Green Book: *Appraisal and Evaluation in Central Government*, and associated supplementary guidance.

The Green Book provides a high level framework. Its application in practice depends on an understanding of the particular issue and applying the right economic tools robustly.



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Our approach develops a clear counterfactual for each type of impact, using quantitative estimates where available and qualitative results elsewhere

The analysis is built on comparing the cost and quality of service under a:

- **business-as-usual (“counterfactual”) scenario:** this scenario uses evidence available from across commissioners about the amount spent and outputs delivered by Adult Wheelchair Services and some specific data from Tower Hamlets prior to the involvement of Whizz-Kidz.
- **Whizz-Kidz (“intervention”) scenario:** this scenario draws on evidence from Whizz-Kidz involvement with Tower Hamlets and the wider roll-out of its programmes in support of Wheelchair Services.

We examine each stage of the process to deliver wheelchairs under the two scenarios. We then compare the costs and benefits in each scenario. The benefits are divided into immediate outputs (delivery of different types of wheelchairs) and longer term outcomes (avoidance of future expenditure, longer term quality of life improvements).

Our analysis focuses on healthcare issues. Where assumptions are needed we adopt a conservative approach and so are likely to underestimate the net benefit to healthcare. In addition, there is evidence of improvements in a wider set of outcomes – including subsequently improved chance of employment. Whizz-Kidz commissioned a separate report looking at the wider social impact (see: <http://www.whizz-kidz.org.uk/wp-content/uploads/2010/02/Whizz-Kidz-SRoI.-Frontier-Economics-Report.-March-2011.pdf>). We do not include these wider benefits in our report. For this reason alone our estimates of the net impact are likely to be a conservative estimate of the total impact on society.

This evaluation was done as a *pro bono* piece of analysis for Whizz-Kidz. It draws on the best existing data and detailed conversations with Whizz-Kidz staff and applies that evidence to a best practice framework for evaluation. There was not scope to conduct a bespoke data collection exercise or to interview other stakeholders. Anecdotal evidence and publicly available data suggests that the specific experience from which this analysis is drawn (primarily around NHS Tower Hamlets) is representative of wheelchair services more widely. This could be tested as part of further analysis.

Disabled adults can access wheelchair services through a referral process that takes them to a local wheelchair service

R

Referral from GP, occupational therapist or other medical professional to a local Wheelchair Service.

A

An **assessment** of need that determines (sometimes across more than one visit) what type of wheelchair to provide.

P

Provision of the equipment – which may or may not perfectly match what was identified in the assessment.

M&M

Monitoring, maintenance – adjustments and maintenance to the chair and monitoring for when a new one is needed.



Referral – Whizz-Kidz has developed a number of innovations that make the process between referral and assessment more efficient.

Whizz-Kidz

Whizz-Kidz' s collaboration with Tower Hamlets Wheelchair Service has introduced a number of innovations that make the referral process faster and more efficient.

They include collection of:

- as much data as possible about the adult during the referral period (by phone and email), before they turn up to be fitted for a chair
- information about their entire life circumstances rather than the narrow reason for the chair (e.g. employment, family, level of spatial awareness)

Through lean processes, Whizz-Kidz has optimised clinical time and made the system quicker and more efficient.

Through prioritising so much information at the referral stage, Whizz-Kidz has been able to introduce a 'chair in a day' approach, and adults can often take their chairs home on the day of assessment.

The Tower Hamlets collaboration suggested that appointments would be made within 4 weeks of referral, depending on the urgency of the need.

Typical provider

The referral process is used as a way of getting the adult to meet someone who can evaluate their needs.

Limited information is collected during this process, with the actual assessment appointment used to collect most of the information needed to determine the client's needs.

Source of referrals

Available data indicates that about:

- 48% of referrals to Wheelchair Services come from occupational or physiotherapists
- 24 % of referrals come from GPs
- balance from self referrals and other sources (e.g. social workers, trusts)

Source: Tower Hamlets data

Assessment – the efficiency and effectiveness of the assessment depends on the information given at referral stage, and the expertise of the Whizz-Kidz therapist

Whizz-Kidz

The collection of information during the referral stage means that the Whizz-Kidz therapist has a good idea of the chair required when the client arrives for their assessment.

The information they collect looks at the person as a whole - assessing their mobility, their requirements with the chair, and how they will use it. This holistic way of assessing the client means that Whizz-Kidz can provide a wheelchair that suits the requirements of the life they lead.

That means there is a chair that can often be ready when the client turns up, with a team on hand that can make the final necessary adjustments to equipment.

One of Whizz-Kidz's expert therapists will make the final assessment on the day.

Typical provider

Existing Wheelchair Services typically use the face-to-face assessment visit to collect the information needed to decide on the appropriate chair. That often means more than one session is required to get the right chair.

Adults report that they expect to wait for a long time to receive mobility equipment through their local services.

Provision – Whizz-Kidz’s process leading up to providing the chair has introduced a “chair in a day” approach.

Whizz-Kidz

Whizz-Kidz operates a “chair in a day” programme that provides the majority of adults with their chairs immediately.

The holistic work done at the referral and assessment stages facilitates this process. It means that comprehensive information about the client is collected before they meet.

Whizz-Kidz has looked closely at the supply chain and its processes to improve how it sources and provides wheelchairs. It has worked closely with wheelchair manufacturers to achieve free consignment stock and to limit the time for delivery of new chairs. It has also agreed a matrix of equipment from which therapists can prescribe. The equipment can then be adjusted at the assessment to meet the specific needs of the client.

Whizz-Kidz has worked closely with dealers and suppliers to find those offering best value for money. As a consequence it currently works with three preferred manufacturers, with one dealer as a strategic partner providing logistical support.

Typical provider

Existing NHS providers tend to have a stock of wheelchairs but have poor information about what is actually in that stock. Therefore, they struggle to match it to client needs and often end up ordering new chairs.

The fact that they use the assessments to collect the information about a client’s needs means they are often unable to provide the right chair at the first appointment.

Wheelchairs are not a high priority service for commissioners and so ordering chairs often involves long delays. Furthermore, because they tend to order small volumes it appears they do not get as good a price as Whizz-Kidz is able to get for a given quality chair. For example, they often source seating regionally and the chair itself locally which requires them to deal with different suppliers and coordinate deliveries.

Finally, the mixture of wheelchairs provided is different. Existing services tend to provide manual (often relatively heavy) wheelchairs which can be difficult to manoeuvre and transport. Whizz-Kidz tends to provide either light-weight manual chairs or powered chairs depending on the needs of the client.

Monitoring and maintenance – Whizz-Kidz’s ability to supply chairs that more closely match need and its system of check-ups helps to reduce future costs.

Whizz-Kidz

The Whizz-Kidz approach from referral through assessment and provision has a knock-on effect in terms of monitoring and maintenance. The choice of chair is appropriate to a client’s life, therefore reducing the need to order new chairs in the future. There is also greater use of configurable chairs to allow growth and adjustment to accommodate changing condition or circumstance.

Whizz-Kidz operates a responsive maintenance policy with the majority of repair calls being made within 24hrs.

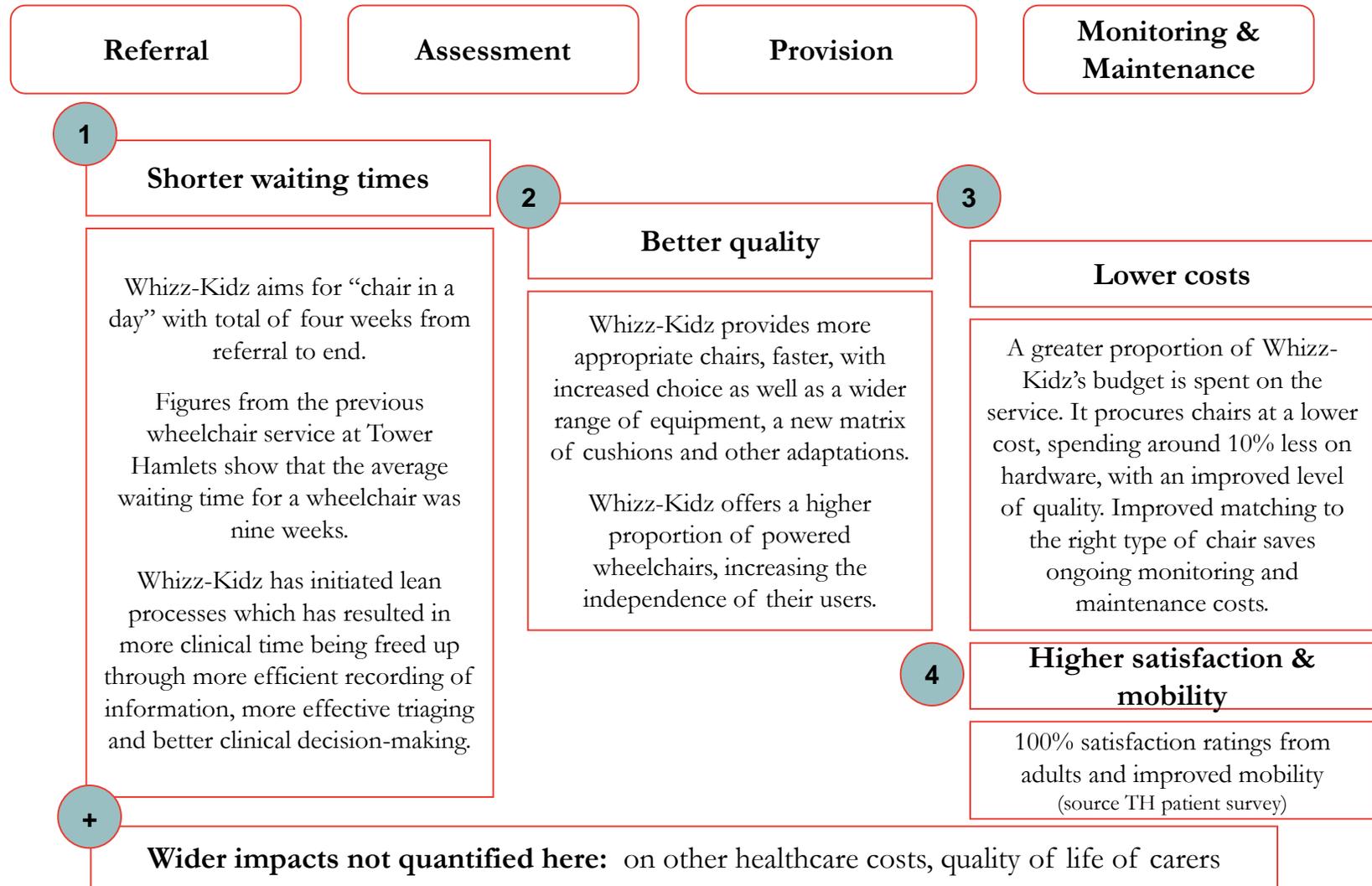
Typical provider

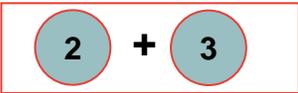
Existing NHS Wheelchair services typically will only undertake maintenance if something breaks and the adult turns up at a clinic.

At that point, new parts or a new chair may have to be ordered but with no pre-warning that is likely to take time, during which the adult has to continue with what they have.

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This process leads to four areas where there is quantitative evidence that Whizz-Kidz out-performs the “business-as-usual” situation. Improved value for money comes from the sum of all four areas, plus additional areas that are not quantified in this study.



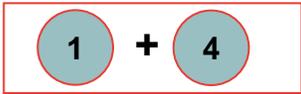


Better quality and lower costs result in Whizz-Kidz providing wheelchairs in excess of 25% cheaper than a typical provider.

	Tower Hamlets	Whizz-Kidz
Annual cost	£431,905	£362,596
<i>Staff</i>	£280,157	£206,420
<i>Equipment</i>	£151,748	£156,176
Approx. annual wheelchairs issued	556	636
Cost per wheelchair issued	£777	£570

Sources: administrative data from Tower Hamlets and Whizz-Kidz, Frontier calculations

The improvement in service also means Whizz-Kidz tend to supply a greater number of wheelchairs and a higher quality service and chair, which is not fully reflected in the numbers.



Shorter waiting times significantly improve quality of life – and result in much higher total value of care

Whizz-Kidz’s faster and better quality service means it reduces waiting lists and provide higher quality chairs. These benefits are on top of the lower costs of provision documented on the previous page. To value these benefits we combined information about the improvements in quality of life (using the standard Quality Adjusted Life Years – QALYs) and typical values for these improvements.

	Pre Whizz Kidz	Post Whizz Kidz	Unmet need
Wheelchairs issued	556	636	80
Waiting time for a wheelchair (months)	2.25	1	1.25
Total additional waiting time Pre Whizz Kidz (months)			100
Total additional waiting time Pre Whizz Kidz (years)			8.3
Gain in QALY per 1 year reduction in waiting time			0.15 - 0.2
Total gain in QALYS from reduced waiting			1.3 – 1.8
Approx. annual powered wheelchairs issued (assumes Whizz Kidz serve all need)	32	48	16
QALY lost when manual supplied but powered required (per year)			0.12
Total gain in QALYS from supply of right chair			1.92
Total gain in QALYS : improved waiting time + supply of right chair			3.22 – 3.72

Sources: NHS Scotland, 2006, “Moving Forward Review of NHS Wheelchair and Seating Services in Scotland”; Tengs & Wallace, 2000, “One Thousand Health Related Quality-of-Life Estimates”, *Medical Care*; “Tower Hamlets Activity Analysis”; Whizz-Kidz Survey of waiting times.

In Tower Hamlets, Whizz-Kidz **reduced the total cost of the service by about 16% and delivered an additional 3.2 – 3.7 quality adjusted life years (QALYs)**. This results in a further quality improvement valued at over £64,400 - £111,600 (using the NICE* thresholds). Compared to the initial cost of the service **Whizz-Kidz improved overall value by 30 – 40%**

*NICE: National Institute for Health and Clinical Excellence – the independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

These estimates are likely to be conservative because they exclude a number of wider benefits including: savings to wider healthcare budgets, improved quality of life for carers

Without a bespoke data collection exercise, it is inevitable that some outcomes will be difficult to measure. In this case, meetings and discussions with those involved suggest that lack of comparable data in two important areas likely means that we have under-estimated the net positive impact of Whizz-Kidz's involvement. *

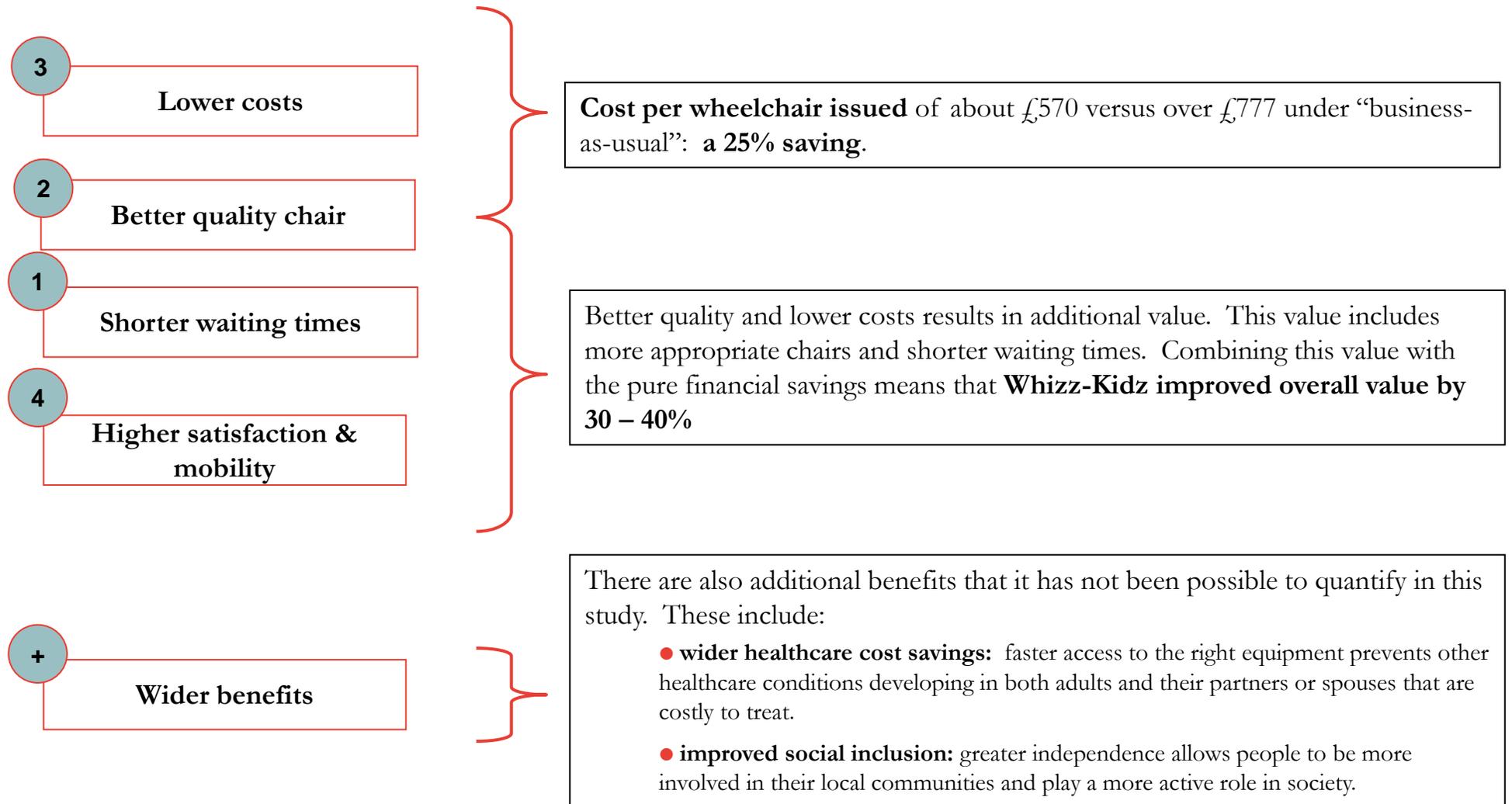
We have not been able to quantify two further positive benefits that would be additional to those that have been quantified:

- **Wider healthcare savings:** putting people into the right wheelchair quickly is likely to result in wider healthcare savings. While waiting for a chair, or sitting in the wrong chair, they can develop spinal and other injuries that require subsequent, costly, NHS treatment. Furthermore, if adults use inappropriate chairs and need to be pushed around, their carers can also suffer medical conditions (e.g. from having to push and lift them more frequently than would be necessary if they had a proper chair). To the extent that these wider healthcare costs are avoided by getting people into the right chairs faster, the involvement of Whizz-Kidz is linked to wider financial benefits to the NHS that free up local budgets to be spent elsewhere.
- **Improved social inclusion:** the right wheelchair offers adults a level of independence that often isn't possible while they are seated in a chair that requires someone to push it, or doesn't fit all their needs. It gives some people an increased ability to take up employment opportunities and make a contribution to the economy and society. Others can be more involved in their local communities and play a more active role in society.

*: "Incorporating Carer Effects into Economic Evaluation", Pharmacoeconomics, 2006: 24(1).

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The analysis indicates that the involvement of Whizz-Kidz can offer significant improvements in value for money, as well as real financial savings.





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