



RIGHT CHAIR
RIGHT TIME
RIGHT NOW

WHEELCHAIR
ALLIANCE



REVEALING REALITY

WHEELCHAIR PROVISION: HOW TO DRIVE EFFECTIVE CHANGE

Report prepared for the
Wheelchair Alliance
Community Interest Company

NOVEMBER 2024

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¹ <https://www.motabilityfoundation.org.uk/>

Executive summary

Background

Wheelchairs profoundly impact the quality of life of thousands of disabled adults, children and carers. Wheelchairs and associated seating are fundamental for access to education and work as well as safely facilitate independent living and social inclusion.

This piece of work is the third of a series of reports. Our previous reports have focused on: articulating the issues within the wheelchair sector and the potential value of effective wheelchair provision.² This third report builds on this previous research to provide a set of concrete, actionable recommendations to be implemented in the wheelchair sector. This work examined three key issues:

1. How can the delivery of personal wheelchair budgets (PWBs) be improved to ensure the right wheelchair is delivered within a reasonable time period?
2. What main elements of current service models are failing and how can they be improved?
3. What wider elements of provision (e.g. national or local standards, governance, procurement processes) are no longer fit-for-purpose, and how can they be reformed?

This project has been a collaborative piece of research jointly delivered by Frontier Economics and Revealing Reality. We have closely engaged with the Wheelchair Alliance throughout to ensure the voices of wheelchair users were at the forefront of our thinking.

Methodology

The overall aim of the report was to produce a set of recommendations which could collectively drive positive change for wheelchair users if implemented. These recommendations have balanced a high level of ambition with pragmatism in terms of what is possible to achieve in the medium term.

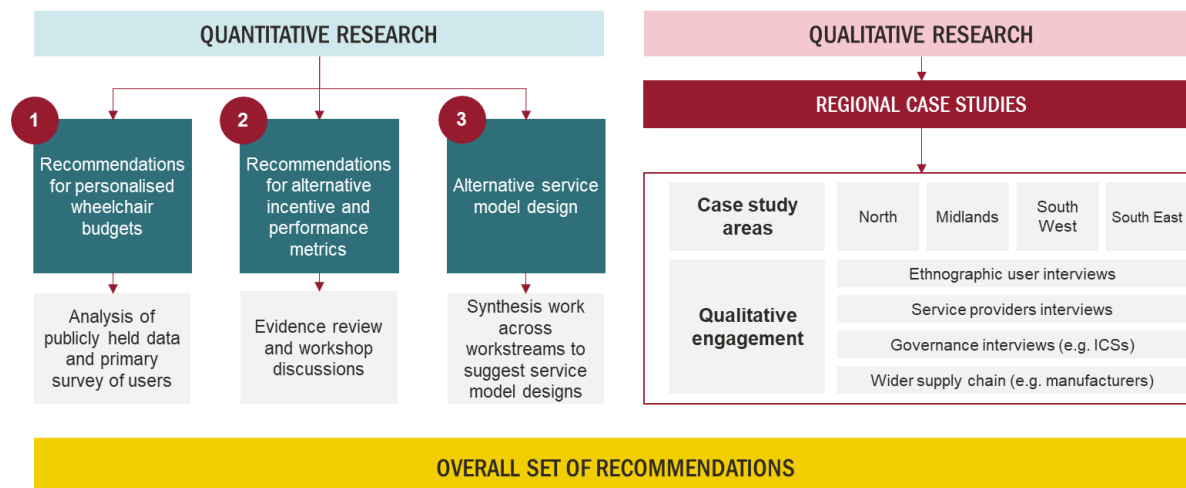
To inform these recommendations we have carried out both qualitative engagement with wheelchair users and other stakeholders, quantitative analysis of primary and secondary data and an evidence review.

Our recommendations were built by firstly identifying a set of high-level categories or areas for potential change. These categories were derived from all of the evidence that we collected as part of this project. Then within each of these category areas, we highlighted a range of specific and actionable recommendations that could be implemented.

² First report: <https://www.motabilityfoundation.org.uk/media/zsjnh4un/wheelchair-economic-study-final.pdf>
Second report: <https://www.frontier-economics.com/media/hsrb35f/the-value-of-a-wheelchair-full-report.pdf>

The final list of top priorities emerged following our scoring of the long list of recommendations.

Figure 1 Structure of the project



Our priority recommendations

These priorities represent the actions that should most urgently be implemented across the wheelchair sector. While we have been pragmatic when developing these recommendations, we are aware that implementation will require additional resources to be dedicated to wheelchair provision both at a central NHS England (NHSE) level and a local Integrated Care System Board (ICS) level. Asking staff to do more within current budgets and resource allocations is not feasible. This is an inevitable reflection of under-investment in wheelchair services which has occurred over a period of many years.³ Our previous work showed that using very conservative assumptions a relatively small additional investment in wheelchair equipment could lead to benefits more than three times the size of the required financial outlay.⁴ This is fully in keeping with the conclusion reached by Lord Darzi (as part of his independent investigation into the state of the NHS in England) that the NHS as a whole needs to invest and rebuild its capacity to better contribute to the nation's economic prosperity.⁵

Wheelchair services are not alone in this regard. As noted in Lord Darzi's recent report on the state of the NHS, average waiting lists across all types of community services have risen sharply and the share of overall NHS budgets being allocated to community care is too low.⁶

³ See for example: <https://www.frontier-economics.com/uk/en/news-and-insights/news/news-article-i20379-the-value-of-a-wheelchair/>

⁴ <https://www.frontier-economics.com/media/hsrb35f/the-value-of-a-wheelchair-full-report.pdf>

⁵ <https://www.gov.uk/government/publications/independent-investigation-of-the-nhs-in-england>

⁶ <https://assets.publishing.service.gov.uk/media/66f42ae630536cb92748271f/Lord-Darzi-Independent-Investigation-of-the-National-Health-Service-in-England-Updated-25-September.pdf>

Key takeaways: high priority recommendations to be implemented in the wheelchair sector

- **Issue:** NHSE is currently missing a centralised director of wheelchair services.
Suggested solution: Creation of an NHSE Senior Responsible Officer (SRO) role. This role would be responsible and accountable for the overall development and ongoing delivery of high-quality wheelchair services. This role would have to be sufficiently senior (e.g. equivalent to National Clinical Director) to achieve meaningful change. A process would need to be established for stakeholders (such as individual ICBs and organisations like the Wheelchair Alliance) to engage with this SRO and share feedback on policies and current issues.

 - **Issue:** Individual services have different eligibility criteria which is leading to unequal provision (e.g. variation in policy around occasional use wheelchairs and variation in policy around powered wheelchairs in care homes).
Suggested solution: NHSE mandates a set of standardised eligibility criteria across all services. This will ensure that all wheelchair users across the country are entitled to the same care regardless of where they are located. To avoid duplication this set of criteria should draw heavily on existing efforts to articulate what a “good” service looks like (e.g. NHSE’s own Wheelchair Model Specification⁷ and the forthcoming Wheelchair Quality Framework).⁸ However, the criteria need to be clearly described and implemented as mandatory rather than optional guidance. To ensure this is successful local commissioners should receive dedicated centralised training on the new set of standardised eligibility criteria. This recommendation will have funding implications and additional investment will be required to ensure that services who broaden their eligibility requirements do not offer a poorer service and reduced choice in wheelchairs. Implementing a mandatory set of eligibility criteria without investing additional funding could lead to a “race to the bottom” in terms of quality. Currently eligibility criteria are used in certain parts of the country as a rationing mechanism due to inadequate funding. As noted above additional investment in this context is very likely to lead to significant benefits for the NHS and elsewhere.

 - **Issue:** Currently wheelchair commissioning in certain ICBs is bundled with other services (such as community equipment stores). This reduces transparency in some cases, means that the specialist commissioning skills that are required in this context are not present in every service and can negatively impact budget allocations to wheelchair services.
Suggested solution: Establishing a dedicated local wheelchair commissioner in each ICB. Each ICB should ensure that wheelchair services are commissioned separately, rather than the service being ‘bundled’ with other aspects of community care and procured
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⁷ <https://www.england.nhs.uk/wp-content/uploads/2017/07/wheelchairs-model-service-specification.pdf>

⁸ The Wheelchair Quality Framework is due for publication in Spring 2025. e

as a group. In order to make this workable it may be necessary to explore merging of some wheelchair services which are currently separate. ICBs and NHSE should work with organisations like the Wheelchair Alliance to ensure that each local commissioner has access to required training. This training should include a focus on value based procurement rather than focusing on lowering product costs wherever possible.

- **Issue:** Currently some services effectively incorporate users' expertise when designing services while others do not. This is in line with Lord Darzi's report which specifically notes that patient voices are currently "not loud enough" across the NHS in England.⁹

Suggested solution: NHSE should mandate establishment of user groups and meaningful engagement with those groups as part of each wheelchair service. These groups will aid in the co-design process. This mandate should require each ICB to allocate resources to fund these groups (regardless of whether services are delivered in-house or via an externally contracted organisation). Clearly wheelchair services should not be penalised if genuine efforts to engage with users are not successful. Creative approaches should be explored in these cases. This could include relying on the networks of organisations such as Healthwatch, the Wheelchair Alliance or other disability groups to help identify users who may be interested in participating in these groups. Particular effort should be made to include 'hard to reach' groups who are not currently engaged with wheelchair services.

- **Issue:** Currently some of the data required as part of the National Wheelchair Dataset (NWD) is either incomplete or entirely missing. This is severely limiting the insights that stakeholders can draw from the information that has been provided including information relating to provision of Personal Wheelchair Budgets.

Suggested solution: NHSE should undertake discussions with ICBs who do not submit data or are providing inadequate data. NHSE should then identify and address barriers to ensure that the NWD can serve its purpose and allow for benchmarking of local area services. We expect that addressing these barriers will include NHSE providing additional guidance on data definitions (in unambiguous and plain English) and training on data submission requirements, as well as NHSE developing their own quality assurance checks on data to identify issues. It would also be beneficial to have an independent organisation such as the Wheelchair Alliance taking part in any future data review process.

- **Issue:** Private retailers offer different levels of clinical expertise when selling directly to users. Wheelchair users who buy equipment online may not benefit from any meaningful clinical input in some cases. Those who need wheelchairs and could access them directly from a retailer (saving the NHS from funding their provision) may be hampered by a lack of trust in the clinical advice available. This was expressed as a concern by wheelchair users if they were moving from NHS provision to private provision.

⁹ <https://assets.publishing.service.gov.uk/media/66f42ae630536cb92748271f/Lord-Darzi-Independent-Investigation-of-the-National-Health-Service-in-England-Updated-25-September.pdf>

Suggested solution: Trade associations should help to drive widespread incorporation of appropriate clinical input in private retail sales. This should include expert advice from a qualified professional who understands postural support prior to a piece of equipment being sold to an individual. The Wheelchair Alliance can play an important role in endorsing retailers who meet certain standards of provision. Care will be needed to ensure that efforts to boost skillsets in the retail sector does not exacerbate staffing shortages in the NHS.

Policy implications and next steps

The recommendations that we have set out above represent our independent articulation of the highest priority issues facing NHSE wheelchair provision and our evidence-based set of solutions.

We have presented these recommendations individually above. However, they form part of a package which should be considered and implemented jointly rather than rolled out in a piecemeal fashion.

Each of the recommendations above has a specific owner which includes NHSE, individual ICBs, trade associations and the Wheelchair Alliance. These organisations collectively should consider how best to take forward the recommendations set out above and build on the good work that has already been undertaken to set out what an effective NHS wheelchair service looks like (e.g. the forthcoming Wheelchair Quality Framework).¹⁰ This process would ideally be led by a new dedicated NHSE wheelchair SRO as we have set out above. A practical first step towards this outcome would be developing the job description for the new dedicated NHSE wheelchair SRO who can then explore how best to implement the other parts of the package that we have set out. We then recommend that a working group across the relevant organisation (e.g. NHSE, individual ICBs, trade associations and the Wheelchair Alliance) is established that focuses on driving change.

¹⁰ The Wheelchair Quality Framework is due for publication in Spring 2025.

1 Background and context

Frontier Economics and Revealing Reality jointly carried out this project. This work was funded by the Motability Foundation and each stage of the work has been overseen by the Wheelchair Alliance. The research conducted and recommendations have been reached independently.

This research aligns with the Wheelchair Alliance's core priorities to collect evidence on the standard of wheelchair provision, describe current best practices, and highlight the implications associated with not meeting the requisite standards, as set out in the Wheelchair Alliance's Charter.

1.1 Role of the Wheelchair Alliance

The Wheelchair Alliance champions national accountability for wheelchair users and their carers.¹¹

Wheelchair Alliance Vision

To transform the experience for wheelchair users in England through improved access, quality and effectiveness

The Wheelchair Alliance work in partnership with other organisations to influence decision makers and ensure that wheelchair users can lead independent lives. At the heart of this objective is ensuring that wheelchair users are listened to and have confidence that every NHS wheelchair service across England provides appropriate choice.

The Wheelchair Alliance strategy is composed of three complementary pillars:

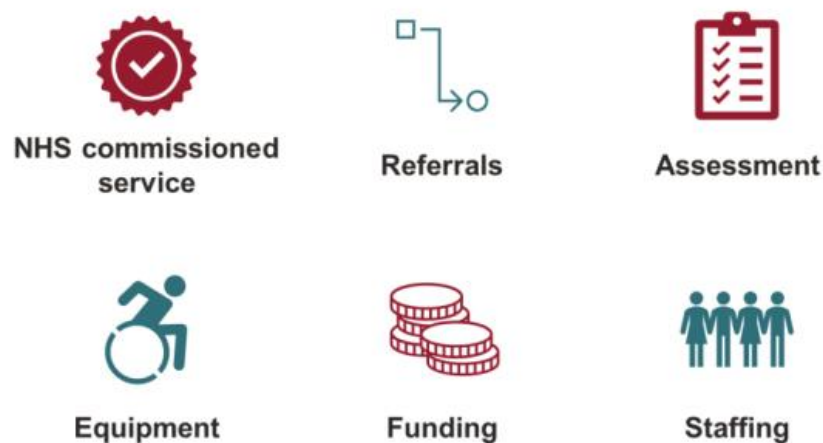
- To champion national accountability for wheelchair users. The Wheelchair Alliance will publicly support and champion services and processes that demonstrate best practice for wheelchair users and, where appropriate, their primary carers. The Wheelchair Alliance will also challenge services that do not provide equitable care in an acceptable timeframe.
- To communicate with wheelchair users. The Wheelchair Alliance aim to provide accessible information relating to wheelchairs, with a commitment to the use of simple, jargon free and easily navigated forms of communication.
- To innovate for the benefit of wheelchair users. The Wheelchair Alliance will work in partnership with wheelchair users, manufacturers, policymakers, NHS England, local commissioners and service providers to improve services and equipment that best support independent living.

¹¹ <https://www.wheelchair-alliance.co.uk/>

1.1.1 The Wheelchair Charter

The Wheelchair Alliance has also developed a Wheelchair Charter. The Charter articulates a set of principles collectively guaranteeing that everyone who needs a wheelchair in England is able to access one and that no one is left without the equipment they need because of where they live.¹²

Figure 2 Wheelchair Alliance Charter



Source: Wheelchair Alliance <https://www.wheelchair-alliance.co.uk/wheelchair-alliance-charter>

The six principles relate to:

1. An **NHS-commissioned** service that provides equity of access and provision for all, irrespective of age or postcode. NHS services should work in partnership with wheelchair users and their families and / or carers. This partnership working should include design of services as well as service change and innovation.
2. All **referrals** in the context of wheelchair services should be carried out by an appropriately skilled professional. Referrals should also enable assessment and wheelchair provision within the NHS constitutional right of eighteen weeks.
3. Wheelchair and postural support **assessment** should consider all aspects of individual current and future needs, including those of carers, with a prescription to maximise independence, health and well-being. Clinicians should work with appropriate services to achieve goals agreed between the wheelchair user, carers and wheelchair provider. This includes access to home, school, work and leisure activities.
4. All **equipment** should be delivered, maintained, and regularly reviewed according to nationally agreed-upon timescales. Individual reviews should be based on recognised

¹² The Wheelchair Charter applies to: NHS provided and commissioned wheelchair services (specialist professionals who provide wheelchairs via NHS referral) and private and independent suppliers of wheelchair services.

outcome measures. Services should be delivered across geographical boundaries where needed, and emergency backup provision should be facilitated.

5. In relation to **funding** budgets should be flexible and innovative. This includes Personal Wheelchair Budgets (PWBs) and collaboration with different services and alternate funders to facilitate agreed outcomes.
6. NHS services should be **staffed** with specialist professionals who will be appropriately qualified and will receive ongoing training and development. Staff should have a broad knowledge of wheelchair and postural support options. Staff should work with manufacturers and independent organisations to develop innovative and affordable products for the future.

1.2 Purpose of this work

This report is the third of a series of reports. Our previous reports have focused on articulating the issues within the wheelchair sector and the potential value of effective wheelchair provision:

- **Report one:** *An economic assessment of wheelchair provision in England*. This work highlighted a number of shortcomings associated with current provision and measured variation in the standard of care provided by the NHS across England. Key shortcomings identified included inaccuracy of current data collection across the wheelchair sector, inconsistent application of eligibility criteria leading to a 'postcode lottery' and a lack of effective communication mechanisms for users to provide meaningful feedback.¹³ These issues contributed to growth in the retail and charity sectors to fill gaps in the provision of wheelchairs which emerged due to uneven or ineffective NHS provision. Despite these issues this work also noted that some NHS wheelchair services offered a very high-quality service, and that staff were dedicated and focused on patients' best interests. A lack of sufficient funding and de-prioritisation of wheelchair services by some commissioners were cited as drivers of the identified unwarranted variation in service quality.
- **Report two:** *The Value of a Wheelchair*. This report estimated the potential value of appropriate wheelchair provision to wheelchair users and wider society. It adopted a mixed-methods approach, combining quantitative analysis and qualitative analysis that included in-depth engagement with wheelchair users. The analysis consider what societal value could be unlocked if the current uneven level of NHS provision could be eliminated. Our analysis showed that the provision of high-quality wheelchairs can have a significant positive impact on people's lives and also lead to meaningful financial benefits for the NHS and society. Using very conservative assumptions we showed that a relatively small additional investment in wheelchair equipment could lead to benefits more than three

¹³ <https://www.motabilityfoundation.org.uk/media/zsjnh4un/wheelchair-economic-study-final.pdf>

times the size of the required financial outlay.¹⁴ This is fully in keeping with the conclusion reached by Lord Darzi (as part of his independent investigation into the state of the NHS in England) that the NHS as a whole needs to invest and rebuild its capacity to better contribute to the nation's economic prosperity.¹⁵

This third report builds on this previous research to provide a set of concrete actionable recommendations to be implemented in the wheelchair sector. In particular, this work examined three key issues:

1. How can the delivery of PWBs be improved to ensure the right wheelchair is delivered within a reasonable time period?
2. What main elements of current service models are failing and how can they be improved?
3. What wider elements of provision (e.g. national or local standards, governance, procurement processes) are no longer fit for purpose, and how can they be reformed?

1.3 Structure of this report

The remainder of this report is structured as follows:

- Section 2 sets out the approach that we have used to deliver this study;
- Section 3 provides a summary of our recommendations;
- Section 4 provides an overview of cross-cutting themes emerging from our qualitative engagement;
- Section 5 sets out results from our quantitative analysis and review of existing evidence; and
- Section 6 concludes and draws out key policy recommendations.

¹⁴ <https://www.frontier-economics.com/media/hsrb35f/the-value-of-a-wheelchair-full-report.pdf>

¹⁵ <https://www.gov.uk/government/publications/independent-investigation-of-the-nhs-in-england>

2 Project methodology

In this Section we set out the approach that we have used to deliver this study.

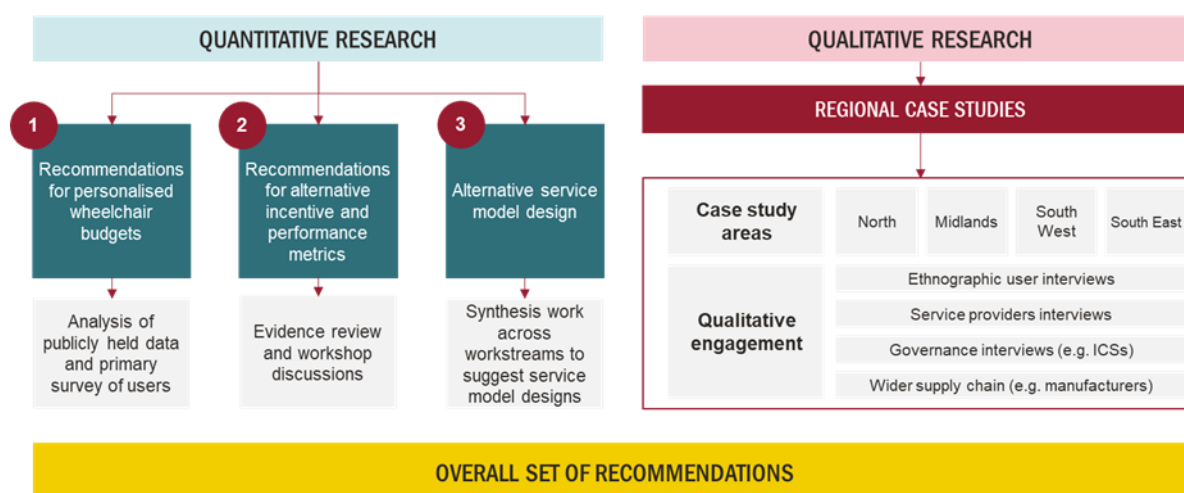
2.1 Overview of the project

This project has been a collaborative piece of research jointly delivered by Frontier Economics and Revealing Reality. We have engaged with the Wheelchair Alliance throughout to ensure the voices of wheelchair users were at the forefront of our thinking.

The overall aim of the report was to produce a set of recommendations which could collectively drive positive change for wheelchair users if implemented. These recommendations have balanced a high level of ambition with pragmatism in terms of what is possible to achieve in the medium term.

To inform these recommendations we have carried out qualitative engagement with a range of sector stakeholders, quantitative analysis of primary and secondary data, and an evidence review. Each aspect is discussed in turn in the subsequent sections.

Figure 3 Structure of the project



2.2 Qualitative workstreams

The qualitative component aimed to uncover and illustrate how different wheelchair service models work and how the provision impacts experiences from the perspective of a wheelchair user. The qualitative research took a **regional approach** – engaging with wheelchair users, NHS stakeholders and private provider staff in four locations across the UK. The regions were chosen to include contrasting service delivery models, including private providers and in-house NHS providers.

Across the four locations, Revealing Reality conducted **19 ethnographic interviews** with wheelchair users and **24 stakeholder interviews**. Ethnographic interviews involved in-depth conversations with wheelchair users, in their homes, about their lifestyle, health conditions, and experiences of accessing support from wheelchair services. Stakeholder interviews covered a range of roles including NHS commissioners, a variety of clinical roles, and a range of staff within the wheelchair provision, which spanned from operational and administrative roles to senior and managerial roles.

The wheelchair users selected for interviews represented a diverse range of experiences and backgrounds varying in age, socio-economic status, and ethnicity. To ensure accurate recall, all participants had used the wheelchair service within the last 5 years, including a spread of time periods across the sample to reflect any recent changes in providers or processes. The sample included people with varying levels of need, from those requiring basic mobility assistance to those with more complex needs; and a range of wheelchair use duration, from lifelong users to those who had acquired wheelchairs more recently. The sample also included participants with experience using different forms of Personal Wheelchair Budgets (PWBs).¹⁶ Wheelchair users were recruited via stakeholders interviewed for this research, with additional assistance from local charities, support services and social media groups and forums.

From the data collected in service user interviews, researchers aimed to map the individual's journey through the wheelchair service, capturing their firsthand experiences, the impact of service interactions, and identifying areas where the service worked well or fell short.

2.3 Quantitative workstreams

As shown in Figure 3 above, our overall set of recommendations are built on a layered approach that draws from multiple sources of evidence.

1. **Analysis of secondary quantitative data:** We examined datasets published by NHSE related to wheelchair provision. This included the National Wheelchair Dataset¹⁷ and the Personal Health Budget dataset.¹⁸ We analysed these datasets to both:
 - a. **highlight patterns of unwarranted variation across local areas and the current state of provision** (particularly in relation to PWBs). This helped us determine the extent of potential improvements which fed into our recommendations; and
 - b. **explore the underlying quality of the data** that individual ICBs submit to NHSE, in terms of accuracy and completeness. This helped us determine whether the datasets were collectively fit-for-purpose (e.g. enabling meaningful service benchmarking).

¹⁶ See Table 3 (page 37) for an overview of the different types of Personal Wheelchair Budgets.

¹⁷ <https://www.england.nhs.uk/statistics/statistical-work-areas/national-wheelchair/>

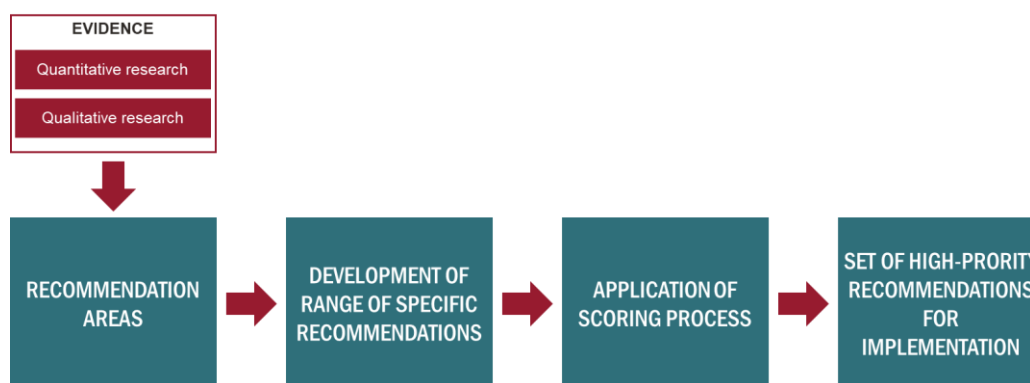
¹⁸ <https://digital.nhs.uk/data-and-information/publications/statistical/personal-health-budgets>

2. **Analysis of primary quantitative data:** We complemented our analysis of publicly available data by designing and distributing a survey of wheelchair users in conjunction with the Wheelchair Alliance. The survey covered methods of obtaining a wheelchair and usage of PWBs. We analysed these responses to capture valuable insights into user satisfaction, PWB awareness and sufficiency of PWBs. The conclusions of this analysis fed directly into our recommendations.
3. **Review of existing evidence:** Across all our quantitative workstreams, we reviewed relevant legislation, existing guidance, and related best practice documentation. This included evidence related to wheelchairs and posture services directly as well as other broader policy papers and evidence from NHSE.¹⁹ In addition, we reviewed existing evidence to create a summary of issues and list of potential incentives and performance metrics. This included academic literature, and experience from all parts of healthcare provision, both across England and abroad.²⁰ We then mapped these findings across the patient pathway, taking into account the relationships and interactions between the different key stakeholders involved in the delivery and management of wheelchair services. This holistic approach allowed us to capture the broader context and ensure that our recommendations are informed by any existing best practices.

2.4 Building our recommendations

Our set of high-priority recommendations has been built through an auditable, evidence-led process, as shown in Figure 4.

Figure 4 Steps for building our recommendations



¹⁹ For example, [Lord Darzi's report on the state of the NHS in England](#), [NHS England's model service specification for wheelchair and posture services](#), [key dataset collection guidance documents](#) and [The Wheelchair Alliance's Wheelchair Charter](#).

²⁰ For example, we reviewed research from [The Health Foundation](#) on the importance of data in improving data quality. We also considered wider evidence, for example, we reviewed research from [Shaping Our Lives](#) which explores the role of disabled users in commissioning, designing, delivering and evaluating public sector services

We first developed **recommendation areas** that are drawn from the evidence we have collected as part of this project, and wider evidence from our previous reports. Under each of these individual recommendations areas, we developed **a range of specific and actionable recommendations** that could be implemented in the wheelchair sector. We conducted additional desk research and stakeholder engagement to understand the feasibility of the recommendations and test their expected effectiveness in the wheelchair sector.

Our recommendation areas and specific recommendations are pragmatic. They represent high-priority areas for changes, rather than an exhaustive list. We included practical considerations in their development (e.g. focusing on recommendations that build on the existing structure of wheelchair services and policies in place). We also ensured that the areas involve a range of different recommendation ‘owners’ (e.g. those who should in our view be tasked with implementing the recommendations).

We applied a scoring process to each of the specific recommendations to arrive at our final set of highest priority recommendations. This was to ensure that final selection of recommendations was arrived at in a transparent and auditable way. The scoring factors used are shown below in Table 1.

In summary, the scoring factors assess the recommendation’s potential effectiveness in creating change in the wheelchair sector, how feasible it would be to implement the recommendation and the potential wider impact of the recommendation.

We arrived at a score for each scoring factor across each recommendation using qualitative judgements which were informed by a wide range of evidence, including previous reports, desk research, our quantitative analysis, qualitative research and engagement with expert stakeholders including representatives from the Wheelchair Alliance.

Table 1 Scoring areas

Scoring area		Scoring factor
Effectiveness	Impact on outcomes	Quality of care
		Cost of wheelchair services
	Impact on processes	Transparency of services
		Accountability of services
		User centrality (i.e. the extent which the recommendation focuses on delivering for users)
Ease of implementation	Existing roadmaps e.g. the existence of similar measures within wheelchair services or other NHS services	
	Governance requirements e.g. whether new data-sharing agreements are required	

Scoring area	Scoring factor
	Dependencies with other services e.g. other local services such as social care, education, housing
	Applicability to heterogeneous services e.g. the ability to be implemented in ICBs with different service models and local arrangements
Wider impact	Impact on the workforce in wheelchair services
	Need for additional funding
	Impact on wider user outcomes e.g. general well-being, social inclusion, labour force participation

3 Building our recommendations and immediate priorities

In this section we have identified recommendations to be implemented across NHS wheelchair services.

3.1 Our recommendation areas

As outlined in Section 2.4, our recommendations were built by identifying a set of recommendation areas which derived from all of the evidence that we collected as part of this project.

We have developed seven recommendation areas that draw from both the qualitative and quantitative evidence collected as part of this project, and wider evidence from our previous reports. We have outlined these recommendation areas and the underlying evidence base in Table 2.

Table 2 Recommendation areas

Recommendation area
Greater overall prioritisation of wheelchair services in the NHS
Increasing consistency and collaboration across wheelchair services
Enhancing the delivery of Personal Wheelchair Budgets
Improving data collection and data use
Improving the efficiency of procurement and supply chain
Improving retail practices
Greater integration of user voices

Under each of these recommendation areas, we developed a range of specific and actionable recommendations that could be implemented in the wheelchair sector. We conducted additional desk research and stakeholder engagement to understand the feasibility of the recommendations and test their expected effectiveness in the wheelchair sector. The next section outlines these potential recommendations in detail.

We developed these specific recommendations by applying economic concepts such as market power and informational asymmetries to current provision. Further detail on individual recommendations that sit under each of these areas is outlined in the Annex.

3.2 Top priority recommendations

The final list of top priorities emerged following our scoring of the long list of recommendations. These priorities represent the actions that should most urgently be implemented across the wheelchair sector. Importantly these recommendations collectively form part of an overall package which should be considered and implemented jointly rather than rolled out in a piecemeal fashion.

While we have been pragmatic when developing these recommendations, we are aware that implementation will require additional resources to be dedicated to wheelchair provision both at a central NHSE level and a local ICB level. Asking staff to do more within current budgets and resource allocations is not feasible. This is an inevitable reflection of persistent under-investment in wheelchair services which has occurred over a period of many years. Correcting this imbalance will lead to significant benefits and a positive return on investment.²¹ Wheelchair services are not alone in this regard. As noted in Lord Darzi's recent report on the state of the NHS, average waiting lists across all types of community services have risen sharply and the share of overall NHS budgets being allocated to community care is too low.²²

High priority recommendations to be implemented in the wheelchair sector

- **Issue:** NHSE is currently missing a centralised director of wheelchair services.
Suggested solution: Creation of an NHSE Senior Responsible Officer (SRO) role. This role would be responsible and accountable for the overall development and ongoing delivery of high-quality wheelchair services. This role would have to be sufficiently senior (e.g. equivalent to National Clinical Director) to achieve meaningful change. A process would need to be established for stakeholders (such as individual ICBs and organisations like the Wheelchair Alliance) to engage with this SRO and share feedback on policies and current issues. The SRO would also be responsible for ensuring that insights from the national data is used to drive improvements in wheelchair services.
- **Issue:** Individual services have different eligibility criteria which is leading to unequal provision (e.g. variation in policy around occasional use wheelchairs and variation in policy around powered wheelchairs in care homes).
Suggested solution: NHSE mandates a set of standardised eligibility criteria across all services. This will ensure that all wheelchair users across the country are entitled to the same care regardless of where they are located. To avoid duplication this set of criteria should draw heavily on existing efforts to articulate what a “good” service looks like (e.g. NHSE's own Wheelchair Model Specification²³ and the forthcoming Wheelchair Quality Framework).²⁴ However, the criteria need

²¹ See for example: <https://www.frontier-economics.com/uk/en/news-and-insights/news/news-article-i20379-the-value-of-a-wheelchair/>

²² <https://assets.publishing.service.gov.uk/media/66f42ae630536cb92748271f/Lord-Darzi-Independent-Investigation-of-the-National-Health-Service-in-England-Updated-25-September.pdf>

²³ <https://www.england.nhs.uk/wp-content/uploads/2017/07/wheelchairs-model-service-specification.pdf>

²⁴ The Wheelchair Quality Framework is due for publication in Spring 2025. e

to be clearly described and implemented as mandatory rather than optional guidance. To ensure this is successful local commissioners should receive dedicated centralised training on the new set of standardised eligibility criteria. This recommendation will have funding implications and additional investment will be required to ensure that services who broaden their eligibility requirements do not offer a poorer service and reduced choice in wheelchairs. Implementing a mandatory set of eligibility criteria without investing additional funding could lead to a “race to the bottom” in terms of quality. Currently eligibility criteria are used in certain parts of the country as a rationing mechanism due to inadequate funding. As noted above additional investment in this context is very likely to lead to significant benefits for the NHS and elsewhere.

- **Issue:** Currently wheelchair commissioning in certain ICBs is bundled with other services (such as community equipment stores). This reduces transparency in some cases, means that the specialist commissioning skills that are required in this context are not present in every service and can negatively impact budget allocations to wheelchair services.

Suggested solution: Establishing a dedicated local wheelchair commissioner in each ICB. Each ICB should ensure that wheelchair services are commissioned separately, rather than the service being ‘bundled’ with other aspects of community care and procured as a group. In order to make this workable it may be necessary to explore merging of some wheelchair services which are currently separate. ICBs and NHSE should work with organisations like the Wheelchair Alliance to ensure that each local commissioner has access to required training. This training should include a focus on value-based procurement rather than focusing on lowering product costs wherever possible.

- **Issue:** Currently some services effectively incorporate users’ expertise when designing services while others do not. This is in line with Lord Darzi’s report which specifically notes that patient voices are currently “not loud enough” across the NHS in England.²⁵

Suggested solution: NHSE should mandate establishment of user groups and meaningful engagement with those groups as part of each wheelchair service. These groups will aid in the co-design process. This mandate should require each ICB to allocate resources to fund these groups (regardless of whether services are delivered in-house or via an externally contracted organisation). Clearly wheelchair services should not be penalised if genuine efforts to engage with users are not successful. Creative approaches should be explored in these cases. This could include relying on the networks of organisations such as Healthwatch, the Wheelchair Alliance or other disability groups to help identify users who may be interested in participating in these groups. Particular effort should be made to include ‘hard to reach’ groups who are not currently engaged with wheelchair services.

- **Issue:** Currently some of the data required as part of the National Wheelchair Dataset (NWD) is either incomplete or entirely missing. This is severely limiting the insights that stakeholders can draw from the information that has been provided including information relating to provision of Personal Wheelchair Budgets.

Suggested solution: NHSE should undertake discussions with ICBs who do not submit data or are providing inadequate data. NHSE should then identify and address barriers to ensure that the NWD can serve its purpose and allow for benchmarking of local area services. We expect that addressing these barriers will include NHSE providing additional guidance on data definitions (in

²⁵ <https://assets.publishing.service.gov.uk/media/66f42ae630536cb92748271f/Lord-Darzi-Independent-Investigation-of-the-National-Health-Service-in-England-Updated-25-September.pdf>

unambiguous and plain English) and training on data submission requirements, as well as NHSE developing their own quality assurance checks on data to identify issues. It would also be beneficial to have an independent organisation such as the Wheelchair Alliance taking part in any future data review process.

Issue: Private retailers offer different levels of clinical expertise when selling directly to users. Wheelchair users who buy equipment online may not benefit from any meaningful clinical input in some cases. Those who need wheelchairs and could access them directly from a retailer (saving the NHS from funding their provision) may be hampered by a lack of trust in the clinical advice available. This was expressed as a concern by wheelchair users if they were moving from NHS provision to private provision.

Suggested solution: Trade associations should help to drive widespread incorporation of appropriate clinical input in private retail sales. This should include expert advice from a qualified professional who understands postural support prior to a piece of equipment being sold to an individual. The Wheelchair Alliance can play an important role in endorsing retailers who meet certain standards of provision. Care will be needed to ensure that efforts to boost skillsets in the retail sector does not exacerbate staffing shortages in the NHS.

4 Qualitative findings

This section presents the key findings from the qualitative interviews with stakeholders and wheelchair users in four regions across the UK.

The focus has been on understanding the reported tensions, strengths and weaknesses within these specific areas, rather than making broad claims about the effectiveness or ineffectiveness of the wheelchair services. The complex interplay of factors influencing each service user's experience, coupled with the limited scope of the study, does not enable the research to draw definitive comparisons between different services. Even within a single region, individual experiences varied considerably.

Region case studies were chosen to include contrasting service delivery models. All services are funded by the NHS with the provision either directly provided or tendered out:

- **Region 1:** In-house NHS wheelchair provider across two ICB's, via a hub and spoke model. Ongoing maintenance completed by private sector provider.
- **Region 2:** Private sector wheelchair provider
- **Region 3:** In-house NHS wheelchair provider located within an acute hospital (with ongoing maintenance completed by private sector provider)
- **Region 4:** Private sector wheelchair provider

Overarching themes from the qualitative engagement are presented below. Please refer to the Annex for detailed case studies from the service user interviews.

4.1 Barriers to efficient communication and data sharing

All stakeholders spoke about the importance of effective communication and the need for efficient collaboration between different actors across the system.

However, stakeholders reported a range of barriers to receiving and sharing accurate information.

Challenges in accessing information, specifically with private providers

Across the different locations and service structures, there was variation in the level of communication and joined up working between community roles and wheelchair service teams. Most stakeholders, especially clinical teams who referred into the wheelchair service, agreed that improved communication would positively impact patient outcomes.

When the wheelchair services were carried out in-house and part of NHS systems, some clinical stakeholders noted that collaboration between teams and individuals was smoother as it was easier to share and check patient notes. One **physiotherapist** who worked within an

area where the wheelchair service had previously been integrated within the NHS but was now provided by a private sector provider explained, *“When it was an NHS provider, our systems talked to each other. I could see the wheelchair therapist’s notes, they could see mine... **joint working is often easier within your own organisation.**”*

Others spoke about the challenges in working with GPs, particularly when patients were outside the hospital system. A **lead wheelchair therapist**, who worked in a wheelchair service that was carried out in-house and located in a hospital, explained, *“Some pros are that we have access to the hospital system, so we can see what’s going on with them... But if they haven’t been into the hospital or live in peripheral towns, we only have information from the GP service or what the patient tells us, which can be difficult... people sometimes confabulate to get what they want.”*

Some clinical stakeholders attended their patients' wheelchair assessments, regardless of whether the service was in-house or outsourced. This was seen as beneficial, particularly for patients with complex needs or communication difficulties, where a clinician's understanding of the patient could support the assessment process. One physiotherapist who refers into the wheelchair service, explained that wheelchair assessment appointments can be short, and it can be challenging for the wheelchair clinician to fully grasp the needs of patients with complex presentations. In these situations, she would try to attend the assessment to provide additional context on the individuals lifestyle and wider health needs.

Charlie

Charlie, 16, has cerebral palsy, which significantly impacts his posture and mobility. He has been using a specialised wheelchair since the age of four, and over the years, both he and his family have built a strong relationship with his occupational therapist and the wheelchair service assessment team. Charlie has a customised wheelchair, and he undergoes regular assessments to remould the foam. At each of these assessments, both his occupational therapist and the wheelchair service therapists are often present. Charlie's mum believes there is great value in having both professionals involved. They are able to discuss not only his specific wheelchair needs but also his broader health and lifestyle requirements.

*“The wheelchair OT is very specialised in wheelchairs, whereas the community OT is much more general. They both know him really well” **Mum of Charlie, 16***

However, within one region, a few physiotherapists from a community learning disabilities team expressed frustration over delays in communication regarding appointment scheduling and updates, hindering their ability to attend assessments. One **physiotherapist** explained, *“I’ve made two referrals recently, and I’m regularly not invited to the appointments. We often don’t get told at all, and when we do, it’s usually weeks down the line.”*

*“I’ve just had one recently where I found out after the appointment that they’d had the appointment and I wasn’t invited.” **Physiotherapist***

Wheelchair services therapists also highlighted the challenge of aligning appointments for service users with physiotherapists' availability. One **lead wheelchair therapist** reflected on this tension between booking in appointments with service users to assess their needs rapidly, versus working out when physiotherapists might be available to join appointments...*"It can be really challenging because when you're trying to line up kind of three people's diaries...sometimes it can be really tricky."*

There were positive instances of proactive communication between teams, often facilitated through informal channels. One physiotherapist, who regularly referred patients to the wheelchair service, reported the effective practices they had developed in collaboration with the privately provided service. This included ad-hoc discussions about patients to determine the necessity of referrals, attending appointments whenever feasible, and providing email summaries in advance to help share information.

"Sometimes it's as bold as saying hello... and suggesting ways to work more efficiently. It comes down to relationships." **Physiotherapist**

Receiving inaccurate or missing information

In one region with an in-house wheelchair service, multiple stakeholders expressed concerns about recurring problems with referral forms arriving incomplete or containing errors.

*"A lot of the **referrals come in with missing information**... and so we have to double check everything and send them back. And we're getting a lot stricter now with sending them back just because they'll put other people's NHS numbers on them or they'll get the name spelling wrong, things like that, or they'll miss practically everything. They'll miss height and weight, all the measurements. Sometimes they'll misdiagnosis. They just **miss a lot of information we need.**"* **Wheelchair Therapist**

One wheelchair therapist attributed these issues to human error or healthcare staff rushing through the forms. To address this, staff had implemented a new system with an updated referral form featuring mandatory fields, preventing submission until all required information was provided.

Staff at the private provider in another region also reported this issue.

"If they [HCPs] complete it as it indicates, then we are sorted. Everything in there is sufficient and it is what we need. But what we find is they don't elaborate or give you enough information... for example only one diagnosis and then when you speak to the service user they reveal more problems that they have." **Wheelchair Therapist**

Staff noted that, in addition to inefficiencies, missing information on referral forms sometimes resulted in service users receiving wheelchairs without an in-person assessment, leading to wheelchairs that did not meet their needs.

One wheelchair therapist advocated for increased training for healthcare professionals making referrals to the service. They wanted the training to encompass both practical aspects, such as accurate completion of referral forms, and a broader understanding of the service's operation, including eligibility criteria, to help manage service users' expectations effectively.

Similar issues were noted by some service users who felt that necessary information had not always been passed onto the wheelchair service by healthcare staff who had referred them. As, **Tammy, aged 27**, noted about the staff at her appointment, *"They didn't have all my medical history or anything like that. I had to explain everything again when I got there."*

Inaccurate information also affected maintenance. Wheelchair users across the different regions expressed concerns about the accuracy of information shared by service providers to maintenance and repair staff. This issue was reported in regions where the wheelchair service and ongoing maintenance were delivered by different providers. **Kerry, aged 30**, described one interaction she had with the maintenance provider:

*"A number of times we've had someone turn up to fix the chair and **they've tried to fix something else**... One time [the repair staff] brought me some new wheels, but it was an electrical problem [...] Often he says he hasn't brought equipment with him. We told them [what the problem was], but he says it's not on his list".*

Variability in performance of private sector providers

A few stakeholders in one region observed noticeable differences in service quality among private providers, especially during contract transitions. One lead physiotherapist, familiar with multiple contract changes, noted that with the previous provider it became *"increasingly difficult for both families and professionals to get a response, even to simple queries"* towards the end of their contract.

However, a **wheelchair service commissioner** explained that *"Sometimes it's not deliberate... If they're winding down, they might not be doing as many assessments, or some people might leave... **The backlog slowly builds up, and they [the new provider] inherit a much larger backlog than expected.**"*

Jemima

Jemima, aged 71, has been using a wheelchair for over fifty years, ever since polio left her with scoliosis and limited use of her right side. For years, she managed with crutches and walking aids, but as her body weakened, she found a self-propelling manual wheelchair easier to use. Since then, she has relied on an NHS-provided wheelchair to maintain her independence. A few years ago, when a fault developed in her wheelchair, Jemima reached out to the service provider for help. However, the response was far from what she expected. *“They said they hadn’t done much for the last three months of their term of office so to speak, you know they said they’d just been winding down.”* Frustrated by the lack of support, Jemima took matters into her own hands. She ordered the necessary parts directly from the manufacturer and fitted them herself, a task she felt she shouldn’t have had to manage alone.

Paige

Paige, aged 39, is a first-time wheelchair user with FND (functional neurological disorder). She became increasingly frustrated at the lack of communication she was receiving from the wheelchair provider whilst waiting for an assessment for her first wheelchair. Paige rang who she believed to be the wheelchair service provider, where she was told that they did not hold the contract anymore and that her details had been passed onto the new provider. A few weeks passed and Paige had still heard nothing, so she chased the new contracted company to schedule in an appointment. Paige was frustrated at the responsibility she felt she had to take to find this information out. *“I just thought it would be a bit more organised, it felt very chaotic, it was like each person didn’t know what they were doing.”*

Both regions with private sector providers reported receiving referral volumes that frequently exceeded the numbers outlined in the contract. They stated that this was due to backlogs existing at the start of a new contract. The **service operations manager** at one private provider noted:

*“We are contracted for a certain number of referrals each month, but for the last 13 months, we’ve **overshot that by at least 100 referrals per month.**”* The manager then went on to say *“We were contracted for 3,000 referrals per year, including everything. I’m currently at five and a half thousand for the first year of the contract.”*

The significantly higher than expected referral rates were reportedly creating significant pressure and in some cases delays. One NHS stakeholder said *“the number of referrals are increasing, caseload complexity is increasing, [but] we still have the same KPI’s”*.. As we set out in the next section of this report improving data collection across each ICB would help to provide clarity on actual numbers of wheelchair users which in turn can inform appropriate funding levels.

4.2 The tension between a prescription for clinical needs and suitability for wider life

Stakeholders recognised the tension between prescribing wheelchairs for clinical needs and ensuring they are suitable for the user's broader life activities.

Exploring the wider context of service users' lives in assessments

Across all locations, stakeholders described challenges with ensuring that the assessment process was done with full consideration of both the individual's clinical needs as well as the broader aspects of their life. These considerations included recreation, family, childcare, work and study. Stakeholders reflected on existing attempts to build in consideration of patients' lifestyles in the assessment process, for example, via the prescription form. Many stakeholders said that the initial goal of introducing PWBs was to support with meeting patients' wider needs.

*"The whole premise of the NHS provision is around clinical need ... and so **personal wheelchair budgets is all about helping to bridge that gap** so that the NHS will meet your clinical mobility needs, but if you've got additional wants, then you can by all means have it, but the NHS will not be funding it. It has to be funded from other sources."* **Wheelchair Commissioner**

Some stakeholders highlighted the barriers to capturing patients' wider needs and lifestyles during the assessment process. Within the context of the 1-hour assessment, stakeholders said that some non-clinical considerations might be missed, which would impact the suitability of a wheelchair for the patient. One **wheelchair service therapist** said this challenge can be mitigated by *"involving the service user's key worker or support worker to ensure that assessment is patient-centred and that nonverbal cues are picked up effectively."*

With the scope of this research, it is difficult to determine the extent to which wheelchair service therapists were using standard processes for systematically capturing patient lifestyles. In some locations, wheelchair users said they felt clinical needs were prioritised in assessments. While some wheelchair users recalled being asked about their life circumstances, others felt that crucial factors like support at home, living arrangements, and typical wheelchair use were overlooked during the assessment process.

For example, **Kerry** was never asked about the size of her car during her assessment despite repeatedly emphasising the importance of using a car to access the town. In the end Kerry received a wheelchair that barely fit in her car. Although she managed to make it work by removing the footrests and adjusting the control panel, she felt disappointed by the service: *"I don't think they think about how you're going to travel in the chair."*

However, many stakeholders advocated for a more holistic approach to wheelchair prescriptions, recognising the importance of considering patients' broader life activities and not just their immediate clinical needs.

*“People’s **needs are sometimes wider than just seating and mobility**... people with a sensory need for movement might need a more robust wheelchair because they put stresses on it through their own movement patterns.”* **Lead Physiotherapist**

Most healthcare staff involved in referring users to the wheelchair service saw participating in the assessment process as a valuable opportunity to contribute to this more holistic approach. They believed that sharing their insights into a user's lifestyle and support network, gathered through frequent interactions, could lead to more suitable and personalised wheelchair prescriptions.

*“We try to **work closely with the wheelchair clinicians**... as we often develop relationships with our clients and their families over longer periods of time.”* **Clinical Manager**

Another factor to consider is the way success in wheelchair provision is measured - whilst fast delivery times are often a KPI (key performance indicator) for providers, this may not always reflect whether the wheelchair actually meets the needs of the user.

*“Do you get something in x number of days? That’s not the most meaningful measure... **What we need to know is: does it meet your needs?** Personally, I’d rather something take 20 weeks and know it’s the right wheelchair than get something which necessarily isn’t.”*

Wheelchair Service Commissioner

Is there always such thing as one ‘right’ wheelchair?

Most of the service users interviewed owned multiple wheelchairs. This was driven by a variety of reasons. Some purchased wheelchairs before knowing about NHS provision or their eligibility; others bought them while waiting for NHS prescriptions to arrive; and some had received multiple wheelchairs from the service over time. However, the primary reason for owning multiple wheelchairs was to meet a range of needs, from requiring a lightweight wheelchair for independent short trips, to needing a powered wheelchair for travelling longer distances.

Andy

Andy, 41, has cerebral palsy, a condition that affects his muscle control and mobility. He shared his experiences of using multiple wheelchairs, each tailored to meet his specific needs. His primary everyday wheelchair is the one he uses most frequently to help him move around and carry out daily tasks. This wheelchair is unique in its ability to lower all the way to the ground and rise back up, giving Andy greater independence in his home. In addition, Andy has what he calls his 'Mercedes' wheelchair, which is designed for 'willpower challenges', referring to challenges like travelling from Cheltenham to Cardiff with his wheelchair, which he did to raise money for charity. This 'Mercedes' wheelchair is built for long-distance events and intense use, offering the durability and performance required for such activities. Andy appreciates the different roles his wheelchairs play in his life, explaining, *"I wanted a chair that is totally bespoke to me, to what my needs are, to what I want in a chair."*

Kenneth

Kenneth, 56, lives with idiopathic muscle hypertrophy, a condition that progressively weakens his muscles with use, impacting his mobility and central nervous system. His primary wheelchair, provided by the NHS, is electric powered and ideal for his daily activities, particularly outdoors due to its suitability for long distances and varied terrain. In addition, Kenneth owns a lighter powered wheelchair with a collapsible frame, primarily used for travel and holidays. This wheelchair offers him independence while being easier for his family to transport.

This does raise the question, is there such thing as 'one right wheelchair'? The system currently assumes prescription of a single 'correct' wheelchair will be the best solution for a patient, but is that in itself causing waste? Would prescribing multiple wheelchairs in certain cases be more practical and cost-effective than expecting one wheelchair to cover every requirement?

Some wheelchair users had adapted their wheelchairs or purchased add-ons to better meet their needs after receiving them from the NHS wheelchair service. One individual, in particular, felt actively discouraged by the wheelchair service from improving her situation. Despite knowing the modifications would increase her independence, she feared the service might penalise her for making these changes. However, it should be caveated that it is unclear if these modifications would have affected the manufacturer's guarantee or other necessary guidelines.

Suzy

Suzy, 33, has cerebral palsy, which affects the mobility and strength in all four of her limbs. While she can self-propel over short distances, she relies on carers to push her for longer trips, like going to the supermarket. Suzy has always used a manual self-propelling wheelchair provided by the NHS wheelchair service. However, as she has grown older, larger, and weaker, she has struggled to manoeuvre it independently. After requesting a lighter frame from the wheelchair service and being denied, Suzy began exploring other options to help her maintain her independence.

She discovered a powered attachment that seemed ideal for her needs, but when she approached the wheelchair service, they not only refused to help but Suzy felt they actively discouraged her from pursuing it. She was left with the impression that, if she went ahead and purchased the add-on, they could take her wheelchair away.

Ultimately, Suzy fundraised to buy the powered attachment herself, which has significantly improved her ability to travel independently and expanded how she uses the wheelchair. She hasn't informed the service about the purchase and now feels anxious about what might happen if they find out.

Most service users had only used the standard NHS provision (notional PWB)

The majority of the service users in the sample had only used the standard NHS provision for their wheelchairs and were not aware of the range of personal wheelchair budget (PWB) options available to them.

Most service users were unfamiliar with the term 'PWB', even if they had some understanding of the concept. The majority of those who hadn't used notional plus or third-party PWB options reported no recollection of discussions about these possibilities during their assessments

"I asked about the wheelchair budget because I'd googled it, and I got an email saying they'd talk me through it. But they never did... I didn't know exactly how it worked, whether I could transfer the assessment to other retailers or use online options. I didn't get that information."

Paige, 39

Kenneth, 56, recalled being told, but was confused about how PWB's worked.

"I didn't know... I didn't know how to do any of it. I was so naïve... I believe that was part of the thing, that I could actually take that budget and go get it somewhere else... but then they said I'd need to be reassessed again."

Despite the limited understanding of PWBs, some service users had successfully utilised the "notional plus" option to enhance their NHS-provided wheelchairs. **Tammy's partner** described how she was able to make a small but significant adjustment to her wheelchair.

“She’s made one change on the chair, the push rim style, because she struggles with the metal push rims. She’s gone for the oval shape, which has a rubberised grip, making it easier to hold and push.”

While a few service users expressed a desire to explore third-party providers, there were concerns about the potential loss of clinical support if they moved away from NHS provision. **Kenneth** was offered the different PWB options, but declined as he reflected that *“If they’ve said this is the chair and I like the chair and they can support me in the future, then this is the chair for me. I’m getting what I need.”*

Stakeholders also reported that service users often prefer an NHS-provided wheelchair because the NHS assumes responsibility for all repairs and maintenance.

“We don’t get a lot of third-party.. most of our service users still prefer the NHS to be custodian of their wheelchairs because we offer repairs and maintenance” **Wheelchair Therapist**

A small number of stakeholders within the wheelchair service also highlighted that service users may overestimate their purchasing power when considering third-party options.

“The number one issue... is the cost differential. If you go to an independent retailer, it can be four or five times more expensive.” **Wheelchair Service Commissioner**

It is important to note that, in line with population data, only one service user in the sample had used a third-party PWB.

5 Quantitative findings and review of existing evidence

In this section we describe the results of our quantitative analysis, review of existing evidence and our application of economic concepts to stakeholder relationships that exist within the provision of wheelchairs. Insights from these workstreams fed into the final list of recommendations presented in Section 3.

5.1 Personal Wheelchair Budgets quantitative analysis

PWBs are a core aspect of wheelchair delivery in England and have been carefully considered during our recommendation-building process. This section provides a comprehensive assessment of PWBs, focusing on their purpose, accessibility, sufficiency, and efficiency. We have also considered the current data landscape for PWBs.

The analysis is divided into five key areas:

- **Purpose - What are PWBs?** Why were they introduced? What are the different types of budgets available?
- **Data landscape - Are the current datasets published by NHSE fit-for-purpose?** How well are PWBs recorded in NHS datasets? Are there any data quality issues?
- **Accessibility - How accessible are PWBs?** Who is eligible for a PWB? Are wheelchair users aware of PWBs? Are there any particular groups that are more or less likely to access a PWB?
- **Sufficiency - Are PWBs sufficient?** How does allocated funding compare to that necessary to purchase a high-quality and adequate wheelchair? To what extent are PWB recipients having to 'top-up' their PWB?
- **Retail-sector – What is the role of the retail sector in wheelchair provision?** Are resources being used effectively when PWBs are directly deployed in the retail sector? Are PWB recipients having to pay a substantial mark-up in the retail sector relative to NHS list prices?

5.1.1 Overview of analysis conducted

We conducted three strands of analysis for our quantitative analysis of PWBs. We analysed publicly available data, collected primary data and tested our emerging conclusions through targeted stakeholder interviews.

Publicly available data

Our PWB analysis is centred around two publicly available datasets, published by NHSE:

- The **National Wheelchair Dataset** (NWD) – Introduced in 2015/16 to enhance transparency and evaluate the performance of different areas, with the overarching goal of continuous improvement of wheelchair services nationwide. It contains quarterly data on the expenditure, access, and patient experience for each of England's 42 ICBs.²⁶
- The **Personal Health Budget dataset** (PHB) – Introduced in 2018, the dataset provides insight into the number of people receiving PHBs and how these budgets are managed (notional, third-party, or direct payments). Similarly to the NWD, it contains quarterly data for each ICB.²⁷

Survey of wheelchair users

To complement the analysis of publicly available data, we conducted a survey of wheelchair users. The sample was drawn from the Wheelchair Alliance's membership network. The aim of the survey was to fill important data gaps and provide insights on areas not adequately covered by the NWD and PHB datasets. With a total of 579 responses, the survey provided insights into wheelchair costs and the level of NHS support. Respondents were also asked about their PWB status, the type of PWB received, and whether it was sufficient to cover an appropriate wheelchair.

Of the 579 respondents, 41% obtained their wheelchair at least in part through the NHS, while the remainder of respondents did not access NHS services for their wheelchair provision, largely self-funding their purchase.²⁸ Amongst the respondents who relied on NHS provision 40 users reported receiving a PWB. This highlights the limited uptake and/or awareness of PWBs across wheelchair users within our specific sample. Despite this, the survey offers valuable insights which we have referred to throughout the following subsections. Further details can be found in the Annex.

Additional qualitative evidence

Our data analysis has been supplemented with in-depth interviews with key stakeholders, including a wheelchair service manager, an NHS commissioner, and a representative from an industry body. Additionally, several wheelchair users were interviewed to capture their personal experiences with the full user pathway.

These interviews provided valuable insights into the provision and effectiveness of PWBs. These interviews are additional to the ethnographic qualitative engagement which is set out in Section 4.

²⁶ Source: [NHS England and NHS Improvement](#)

²⁷ Source: [NHS England](#)

²⁸ NHS provision includes different ways of accessing wheelchairs, including PWBs and the legacy voucher system which we explain below.

5.1.2 Role of PWBs

Personal Health Budgets (PHBs) were introduced in 2014 as a tool to enhance personalised and user-focused healthcare provision in the NHS. PHBs were rolled out as an emerging body of evidence showed that giving people the ability to actively participate in shaping their care and support leads to improved outcomes, better experiences, and a reduction in health inequalities.²⁹ PHBs were extended to wheelchair users in 2019.³⁰

A PWB represents a 'virtual' amount of money, typically equivalent to the cost the NHS would have incurred by providing the prescribed wheelchair. Unlike the previous wheelchair voucher system, PWBs can be flexibly combined and managed to create a personalised package that meets a user's clinically assessed needs. For instance, a PWB can be used to secure a wheelchair with additional functions by pooling funds from other PHBs, contributions from external organisations and third-sector partners (e.g. charity funding) or self-funding.³¹

"A personal wheelchair budget is a resource available to support people's choice of wheelchair, either within NHS commissioned services or outside NHS commissioned services. Personal wheelchair budgets enable postural, and mobility needs to be included in wider care planning and can support people to access a wider choice of wheelchair."

NHS England

Any individual who meets the eligibility requirements of their local NHS wheelchair service, as well as those already registered with the service, has a legal right to a PWB when they need a new wheelchair, including manual and powered chairs and specialist buggies.³² Given their central role in wheelchair provision in England, our recommendations needed to consider the current state of the PWB system.

The different types of PWBs

PHBs (and consequently, PWBs) can be classified into different types depending on how the relevant funding is managed. Table 3 describes the three types of budgets, and what these imply in the context of wheelchair provision.

²⁹ Source: [Explanatory Memorandum to The National Health Service Commissioning Board and Clinical Commissioning Groups \(Responsibilities and Standing Rules\) \(Amendment\) \(No. 2\) Regulations 2019](#)

³⁰ Source: [NHS England](#)

³¹ For example, a user might choose to complement their prescribed wheelchair by self-funding an accessory that isn't deemed clinically necessary. Alternatively, they could combine their PWB with other available statutory funding (e.g., Local Authority support or Access to Work) to purchase a more advanced wheelchair that better meets their individual needs.

³² Source: [NHS England](#)

Table 3 **Types of Personal Health Budgets**

Type of PHB	Description	Wheelchair provision
Notional budget	Where the ICB holds the budget and utilises it to secure services based on the outcome of discussions with the person and/or their family and carers	The NHS commissioned service purchases, provides and maintains the prescribed wheelchair. When users self-fund additional accessories (e.g. specific set of tyres, seat riser etc.) this is known as a Notional 'Plus' or Notional with contribution .
Third-party budget	Where an organisation independent of the person and the NHS manages the budget on the person's behalf and arranges support by purchasing services in line with the agreed personalised care and support plan	The person chooses to use their PWB outside NHS commissioned wheelchair service. An independent provider receives the personal budget by invoicing the NHS. This can also be topped-up as with Notional budgets.
Direct payment	Where money is transferred to the person, their representative or nominee, or, in the case of children, their families or carers, who contracts for the necessary services	Direct payments are not available as an option for managing a standalone PWBs.

Source: [NHS England](#) guidance (adapted)

5.1.3 Are the current datasets published by NHS England fit for purpose?

Findings from the analysis

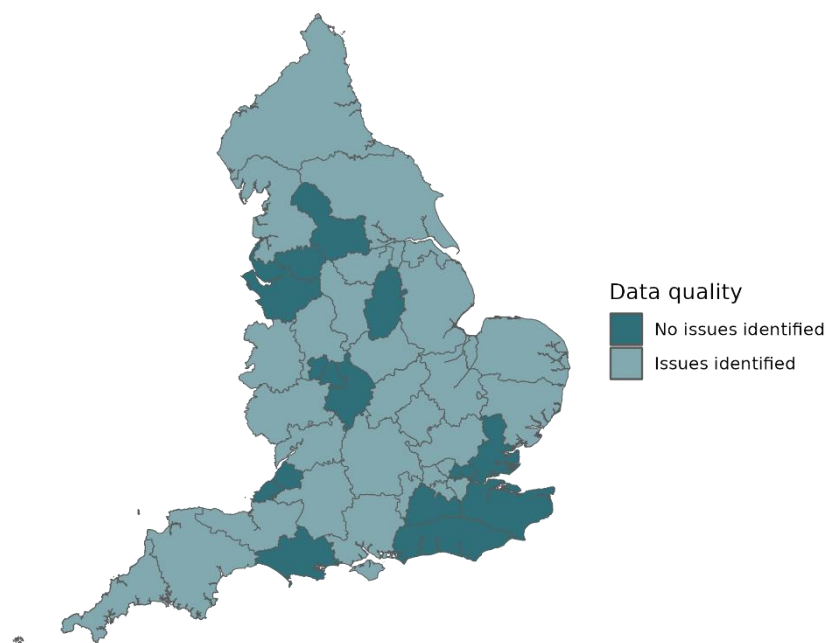
Our analysis of the PWB and PHB datasets has uncovered several material data quality issues that significantly impact the data's reliability and transparency.

Table 4 highlights the issues encountered in the PWB and PHB datasets individually and when combined. For example, these issues include missing or incomplete records, discrepancies across time. We find that 28 out of 42 ICBs are affected by at least one data quality issue (see below for details). This means that quality problems and their effect on the overall reliability of the data affect more than half of ICBs. As we have shown in Figure 5, these issues are spread across England.

A small number of ICBs are either failing to complete one aspect of these data collections or failing to complete them entirely. However, the data collection process is intended to be mandatory for each ICB. Discussions with stakeholders suggest that this is due to a range of

issues, such as a lack of resources within an ICB and an absence of guidance for ICBs on how best to record, collect, combine and submit the data.

Figure 5 ICBs with data issues identified in the NWD and PHB datasets



Source: Frontier Economics based on NWD and PHB dataset analysis.

These data quality issues hinder our ability (and the ability of NHSE) to draw conclusions on the current effectiveness of PWBs. This in itself highlights the importance of improving data quality and reporting practices.

Our qualitative engagement with stakeholders has revealed that, despite NHSE publishing data collection guidance, wheelchair service managers continue to interpret reporting requirements and key variable definitions inconsistently, likely contributing to the discrepancies identified. Additionally, we were told that disparities in quality assurance capabilities across ICBs, partially driven by variation in wheelchair funding allocations, further exacerbate variations in data accuracy. While NHSE provides data-related guidance, it is unclear whether this is sufficient or being effectively implemented at the operational level.

Therefore, currently the time that ICBs invest in submitting this information and the time that NHSE spends collating and publishing data tables is of limited value given the incomplete response rates and apparent misalignment in how certain variables have been interpreted by specific ICBs.

Table 4 Data quality issues in the NWD and PHB datasets

Dataset	Issue encountered in 2023-34 data	Number of ICBs affected
NWD	Missing one or more quarters of data on closed episodes of care or number of registered patients	1
NWD	Missing data (or £0 reported) for expenditure in wheelchair services in at least one quarter	10
PHB	Negative or non-cumulative quarterly data for PWBs ³³	7
PHB	First quarter data is more than 50% of financial year 2024 total number of PWBs ³⁴	18
PHB	Missing one or more quarters of data for PWBs	1
NWD and PHB	Ratio of PWBs over closed episodes of care greater than 1 for financial year 2024 ³⁵	22
Total number of ICBs affected with at least one issue		28 out of 42

Source: Frontier Economics based on NWD and PHB dataset analysis

We note that our finding on the poor data quality in wheelchair services is in line with findings from the recently published Lord Darzi's 'Independent Investigation of the National Health Service in England'. Lord Darzi's report did not specifically mention wheelchair services but did highlight a lack of data in relation to community services.³⁶

³³ According to [PHB data collection guidance](#), health budgets should be reported cumulatively. This means that the number of PWBs reported in Q2 should reflect the total awarded in both Q1 and Q2, rather than just those awarded in the second quarter alone. However, when calculating data by individual quarters, we found that some ICBs reported a negative number of budgets in certain quarters, indicating potential reporting errors.

³⁴ Although there are potentially some seasonal patterns meaning that budgets aren't perfectly even across the financial year, we have assumed that if an ICB issues more than half of its budgets in the first quarter this indicates a data anomaly. This likely indicates that ICB data submissions may include data carried across from the previous year, data entry errors, or inconsistencies in how budgets are recorded across quarters.

³⁵ As we explain below, this implies that the number of Personal Wheelchair Budgets awarded is greater than the number of episodes which were closed and with a wheelchair received by the patient.

³⁶ Source: [Darzi Review](#)

Lord Darzi's review highlights significant gaps in data collection for community services. The report admits that poor quality of the existing data makes it hard to establish whether community services are performing well or not. While patient-level data for hospitals has been collected centrally since 2007, there was virtually no centralised data for community services until 2021, which complicates efforts to assess productivity, costs, and care model efficiencies, particularly in non-hospital settings.

"The lack of data makes it difficult to assess the productivity of community services. It means the unit costs and minimum efficient scale are poorly understood. The poor quality of data means it is difficult to establish how well or how poorly community services are performing."

Lord Darzi Review³⁷

The poor quality of data makes it difficult to establish how well or how poorly services are performing. In particular the datasets are neither comparable nor comprehensive.

NHSE's wheelchair and posture services' model service specification states that the NWD allows for services to be benchmarked enabling a "*more detailed analysis of the best and worst performing areas*".³⁸ Currently this is not possible. It is crucial that decision-makers are provided with good-quality data from which they can make fair and reasonable inferences. It is clear from our analysis that the datasets are not able to provide the data to conduct a robust assessment of wheelchair services.

5.1.4 How accessible are PWBs?

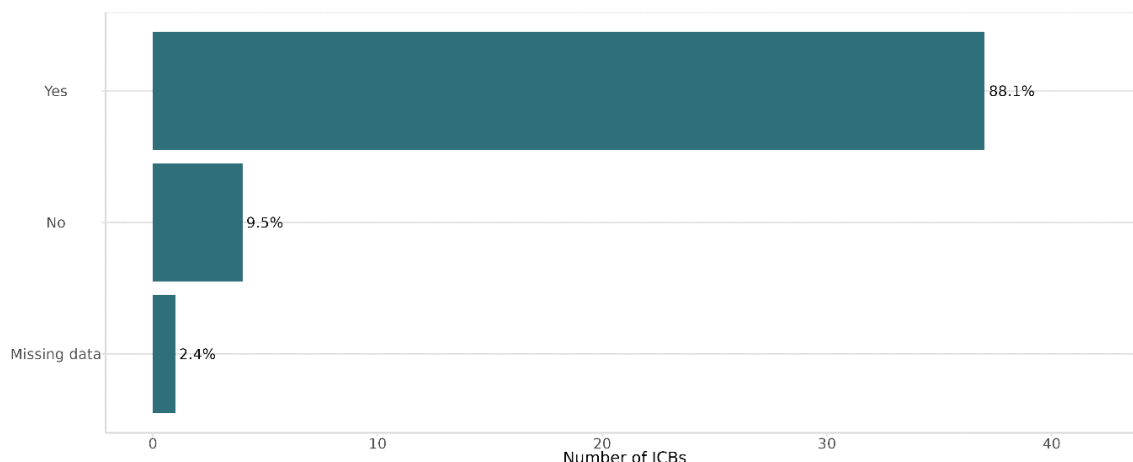
Findings from the analysis

All users who have a wheelchair prescribed by an NHS-commissioned service have had the legal right to have a PWB since 2019. Therefore, we would expect all ICBs to have fully transitioned to a PWB system. As shown in Figure 6 below, by the end of financial year 2023-24, there were still four ICBs that operated under the legacy voucher system. Although this is a minority of ICBs, it nonetheless shows an uneven progress in the adoption of PWBs (and/or differential understanding across local areas regarding the question that ICBs are being asked). This indicates that individuals in some areas may not be able to access this more flexible option.

³⁷ Source: [Darzi Review](#)

³⁸ Source: [NHS England](#)

Figure 6 **Number of Integrated Care Boards that have made the transition from the legacy voucher system to PWBs**



Source: Frontier Economics based on National Wheelchair Dataset

Note: This data is for financial year 2024Q4

In Figure 7 below we present the prevalence rate of PWBs across ICBs with no identified data quality issues.³⁹ It shows for the year ending in March 2024, the ratio of PWBs to relevant episodes of care was 44%. Therefore, **fewer than half of patient pathways conclude with a PWB.**⁴⁰ We also note that Figure 7 shows a similar distribution of the prevalence of PWBs for adults and children.

44% OF NEW EPISODES OF CARE ARE CLOSED WITH A PWB

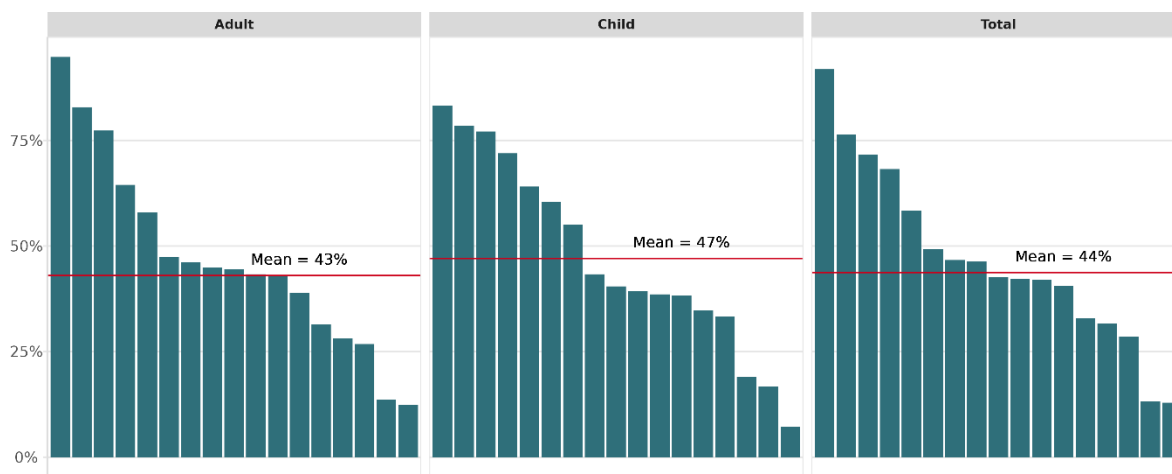
Frontier analysis of publicly available data

Our analysis of PWBs also finds significant variation in the uptake of PWBs across ICBs. There is a wide range in the prevalence rate of PWBs in different parts of the country. Some ICBs have a prevalence of less than 10%, while others exceed 80% (see Figure 7). This highlights that **although most ICBs have declared a transition from the voucher system to PWBs, the data suggests that the extent of their use varies greatly within and across ICBs.**⁴¹

³⁹ However, it is important to note that this filtered dataset may still contain problematic data, and caution should be exercised in interpreting the results as it represents only a minority of ICBs.

⁴⁰ An episode of care is considered closed when the patient pathway is complete i.e. equipment, assessment, accessories or modification received by patient. We have excluded episodes of care which are assessed as needing a modification and no new equipment was provided.

⁴¹ We note that this may be due to differences in definitions used by ICBs. For example, some ICBs may be including notional PWBs within PWB provision, whereas others may be excluding notional PWBs from their PWB reporting.

Figure 7 Variation in the prevalence of Personal Wheelchair Budgets by ICB in

Source: Frontier Economics using the NWD and PHB datasets.

Note: This data is for 2023-24. Only ICBs without any issues identified in their data are included. Excludes episodes of care which conclude with a modification to the existing equipment.

Through our stakeholder engagement and qualitative research, several possible drivers of this variation in PWB prevalence have come to light.

1. **Variation in how services record and manage these budgets.** Stakeholders told us that some wheelchair services issue a combined PWB for the entire package of care, while others allocate separate budgets. For example, some services might issue one budget for the wheelchair itself and another for maintenance costs. It is unclear whether both examples would be correctly identified in the data.
2. **How notional budgets are counted and reported.** Since every eligible patient should receive at least a notional PWB, the relatively low number of recorded notional budgets suggests a degree of under-reporting. Stakeholders told us that some services only record PWBs when explicitly requested by patients or where the budget is used as a notional-plus or third-party PWB.

We also find that there is low awareness of PWBs among wheelchair users. According to our wheelchair user survey, 71% of respondents who accessed a wheelchair through the NHS reported not receiving a PWB.⁴² This is inconsistent with the national data described above. This means that **it is likely that some users were awarded a notional budget, but it was not communicated to them explicitly that this is a PWB.** Regardless of how different models of provision are described to wheelchair users it is essential that every user receives the same standard of care. This implies that every user (or their carer) should be given the flexibility to pursue the model that works best for them (in conjunction with their clinicians).

⁴² Out of the 240 users accessing a wheelchair through the NHS, in response to the question 'Did you use a Personal Wheelchair Budget to obtain your wheelchair?' 16% answered 'Yes', 71% answered 'No', 12% answered 'Don't know' and 1% 'Prefer not to say'. See Figure 15 in Annex B.

Currently it seems as though this is not the case and simplification of the current language used to describe different categories of PWB could help in this regard.

5.1.5 Are PWBs sufficient to cover high-quality wheelchair provision?

Findings from analysis

Assessing whether PWBs are currently sufficient to cover high-quality wheelchair provision is challenging due to gaps in the available NHS data. **The current datasets do not provide adequate information on whether users have topped up their budgets and if so by how much.** To address this gap, we included questions around the sufficiency of PWBs as part of our wheelchair user survey to gain insights into the adequacy of PWBs.

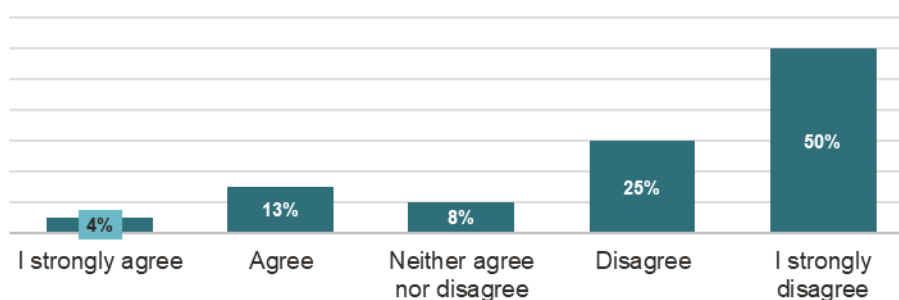
As shown in Figure 8 below, 75% of respondents who obtained their wheelchair via a PWB disagreed or strongly disagreed that their budget was sufficient to fund a wheelchair that met their needs.

The survey also revealed that **most users had to top up their PWB to cover additional costs (58%), with these top-ups typically being self-funded (43%)** rather than supported by charitable contributions (18%) or other external sources.⁴³

**75% OF SURVEY
RESPONDENTS DID NOT
AGREE THAT PWBS ARE
SUFFICIENT TO FUND AN
ADEQUATE WHEELCHAIR**

Frontier analysis of
survey data

Figure 8 Distribution of PWB users who agree that the amount awarded was sufficient to fund an adequate wheelchair



Source: Frontier Economics based on a survey of 579 wheelchair users.

Note: Users were asked 'Do you agree that your PWB was sufficient to fund a wheelchair that meets your needs?'. Only users who indicated that they were awarded a PWB answered this particular question.

⁴³ See Figure Figure 18 and Figure 19 in Annex B.

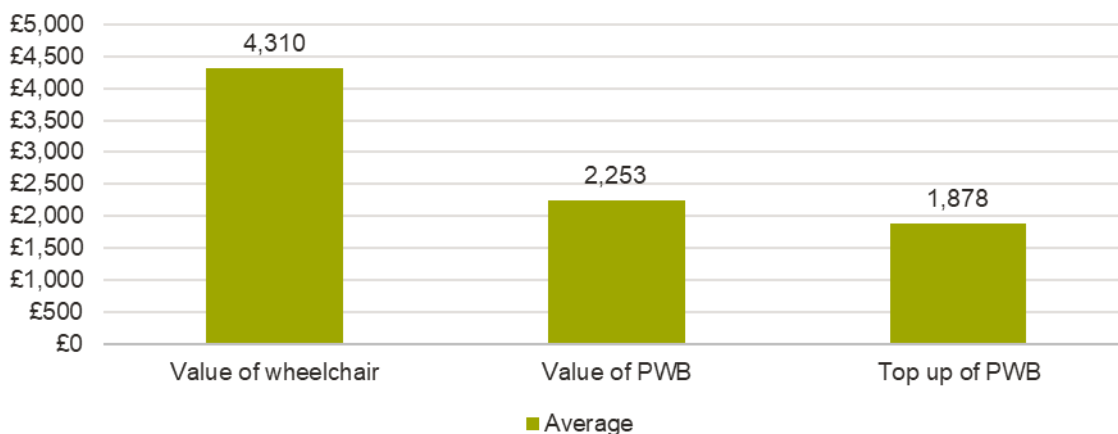
Our survey shows that these top-ups are used to fund a mix of accessories such as cushions, lights and covers, or to fund an upgraded wheelchair compared to that recommended by the wheelchair service.⁴⁴

The role of the NHS is to provide equipment that meets clinical needs, which may not necessarily include accessories or adaptations that users desire for wider holistic needs. Therefore, while the survey gives us an understanding of users' own perceptions regarding the adequacy of their PWBs, it does not directly indicate a failure of the commissioned service to provide an adequate wheelchair.

However, given the current limitations in data collected around PWBs, **there is no comprehensive mechanism to evaluate user feedback or benchmark service adequacy in providing a good quality service through PWBs.**

Our survey findings show that there is **significant variation in the value awarded through PWBs, reflecting the personalised and diverse nature of wheelchair provision.** Figure 9 below shows that, on average, an individual receives a PWB worth £4,310 and, if they top-up their PWB, top-ups are worth £1,878 on average. However, the size of PWBs awarded ranges from as low as £1,000 to as high as £7,500. There is also considerable variation in the size of top-ups: ranging from as low as £290 to as high as £15,000.⁴⁵

Figure 9 Range of average PWBs awarded and value of user top-ups



Source: Frontier Economics based on a survey of 579 wheelchair users.

Note: Users were asked the following three questions: 'What is the value of wheelchairs provided (at least in part) by the NHS?', 'What was the pound value of your Personal Wheelchair Budget?' and 'How much were the additional costs beyond your Personal Wheelchair Budget? e.g. for accessories, maintenance etc.'.

⁴⁴ See Figure 20 in Annex B.

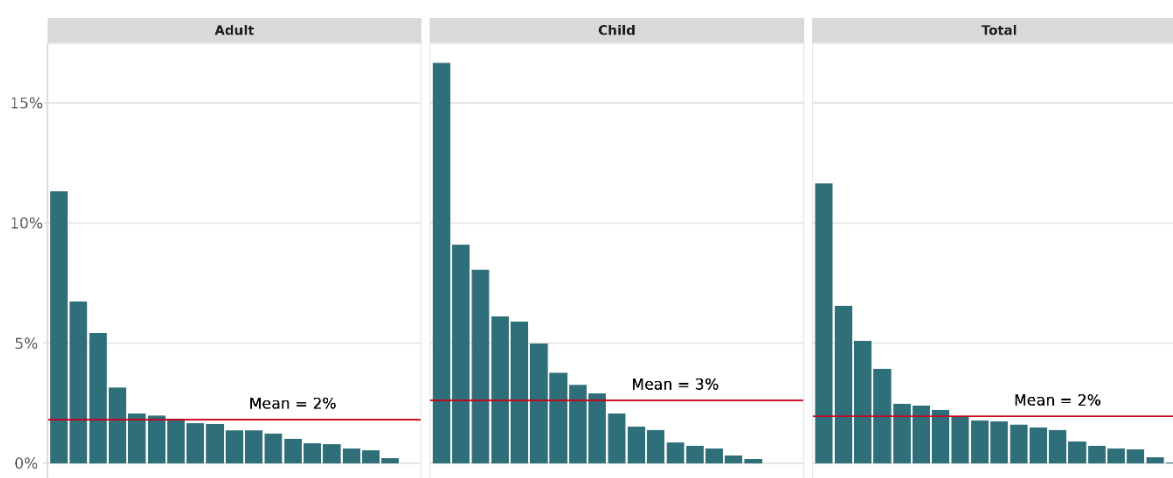
⁴⁵ We note that there can be limitations in interpreting users' self-reported wheelchair values and top-ups. In particular, the retail value for a user does not represent the cost to the NHS given its ability to purchase at scale and negotiate prices with equipment producers.

5.1.6 What is the role of the retail sector in providing PWBs?

Findings from the analysis

A limited number of individuals are using their PWB to obtain their wheelchair through the private retail sector. Figure 10 below shows that according to PHB data, only a small proportion of budgets - approximately 2% - are used as third-party budgets. This indicates that the majority of wheelchair users rely on a standard notional or notional-plus NHS provision, with very few exploring alternative avenues in the retail environment.

Figure 10 Percentage of PWBs awarded as third-party budgets



Source: Frontier Economics based on PHB dataset.

Note: This data is for 2023-24. The vertical axis represents the percentage of PWBs awarded as third-party budgets, and the bars represent different ICBs. Only ICBs without any issues identified in their data are included.

The low levels of third-party PWB uptake may be due to the following:

- The **NHS is offering wheelchair users better value-for-money**. Our stakeholder engagement and previous work suggests that the NHS is able to negotiate prices at scale with wheelchair suppliers. In contrast, individuals purchasing wheelchairs in the retail environment might face higher costs due to individuals' lack of purchasing leverage and the need for retailers to cover overhead costs. This may deter many users from exploring third-party options.
- Some wheelchair service managers have shared **concerns about budget constraints and the potential for retail-purchased equipment to be unsuitable for users' needs**, leading some services to discourage third-party budgets.
- The **lack of awareness of PWBs** explored in the previous sub-section may mean that users are not aware that they can obtain a wheelchair through the retail sector using NHS funding.

- Currently the level of **clinical input** provided by retailers as part of sales direct to wheelchair users is inconsistent (particularly in regards to online sales). Our stakeholder discussions suggest that some retailers effectively integrate clinical expertise in their engagement with customers while others do not. This may contribute to a reluctance on the part of both wheelchair services and users to spend budgets in a retail setting.⁴⁶ There is a general lack of data on the role of the retail sector in wheelchair provision. We have heard anecdotal evidence from retail representatives that demand for wheelchairs outside of NHS-commissioned procurement has been increasing steadily over time. This illustrates the overall lack of data understanding the extent that the retail sector plays a role in wheelchair provision, and how this has evolved with changes in NHS wheelchair services.

5.2 Implications of quantitative analysis

5.2.1 Strengthening ICB accountability

Stakeholders suggested that the uneven transition from wheelchair vouchers to PWBs may stem from a combination of resource constraints, operational challenges, and differing interpretations of how to implement PWBs at a local level. There is a need for **a targeted review of the ICBs that have not transitioned to PWBs**. This review will help identify barriers to adoption, which may relate to inadequate resources, lack of expertise amongst commissioners in certain areas due to frequent service redesign and ensure that all ICBs align with national standards.

Our recommendation to **appoint a dedicated Senior Responsible Officer at NHSE** would further contribute to ensuring consistency in the adoption of PWBs and that identified adoption barriers are addressed.

5.2.2 Data quality and reporting standards

The data quality issues we have identified in relation to PWBs have highlighted the need for a **comprehensive audit of the current scope of data collection** across all aspects of wheelchair provision. This audit will help identify gaps in reporting practices and assess whether the datasets accurately capture the necessary information for effective performance evaluation.

For example, there currently is limited data on the scale of the role of the retail sector in providing wheelchairs through PWBs. This suggests the needs for **collection of data from**

⁴⁶ As we discuss in our [first report](#), there are some concerns around certain types of retail provision of wheelchairs. One wheelchair manager we spoke to discussed that some services outright restrict the use of third party PWBs, with fear of having to fund additional care options once users realise their retail-provided options do not fit their needs.

the retail sectors to enable an assessment of the role of retail sector and support informed decision-making in future assessments.

There is also **limited publicly available data to understand the sufficiency of PWBs**. This is a critical question in order to assess how well PWBs are working. This highlights the need for wider data collection including an extension of the PHB dataset to collect data on the number of, and average amount of notional top ups.

Stakeholders have also highlighted the **need for greater standardisation in reporting practices** to address these data quality issues. This has motivated our recommendations in relation to improvements in data quality. Improvements to data quality are also required to compare and understand PWB uptake. Provision of **technical training, development of revised definitions and implementation of data quality guidance** should provide clarity on issues we have identified above.

5.2.3 Enhancing patient information, awareness, and feedback

Our analysis has shown that even among ICBs that have transitioned to PWBs, there is significant variation in how frequently these budgets are used and communicated to users. Some ICBs show extremely low prevalence rates. This may be linked to patient awareness and reporting inconsistencies which are themselves driven by a lack of consistent reporting standards for notional PWBs. There is, therefore, a need to **raise awareness of PWBs** through improved communication and information sharing to ensure users understand their options and can make informed decisions.

We are also not aware of the collection of **user feedback that includes specific information on user experiences in using the retail sector** to obtain equipment via PWBs. This highlights a gap in current understanding of how well PWBs are working in the retail environment.

However, our user survey reveals that patients tend to think that PWB values are not sufficient and often require top-ups. This raises the need for **clearer communication around the purpose of PWBs**, ensuring users understand their options and the distinction between clinical adequacy and holistic need.

5.2.4 Retail sector engagement

The role of the retail sector in providing wheelchairs both through PWBs and outside of the NHS-commissioning framework remains largely underexplored. As previously noted, there is limited data on the aggregate volume of retail sales direct to wheelchair users. Understanding the extent and nature of this sector is crucial for assessing whether users are relying on retailers to fill the gaps left by NHS services.

To optimise wheelchair delivery, it is important that **clinical expertise within the wheelchair retail sector is deployed** to ensure that equipment provided meet users' needs.

5.3 Incentive and performance interventions

In this section we provide an overview of incentive and performance metrics which have fed into our recommendations in Section 3. We start by outlining the aims of incentive and performance metrics before setting out relevant stakeholder relationships and examples of potential levers that could be pulled.

5.3.1 What are the aims of incentive and performance interventions?

Incentive and performance interventions cover a range of potential measures that could be implemented in the context of wheelchair provision to change behaviour. They cover a spectrum of potential levers from softer nudges (e.g. encouraging information sharing via the development of peer networks) to the provision of more overt incentives (e.g. offering additional funding for ICBs who collaborate with other local services).

The purpose of these incentive and performance interventions is to correct for 'market failures' that are leading to sub-optimal outcomes in the wheelchair sector. Our previous work identified economic concepts that are key drivers of the market failures in the wheelchair sector.⁴⁷ These included:

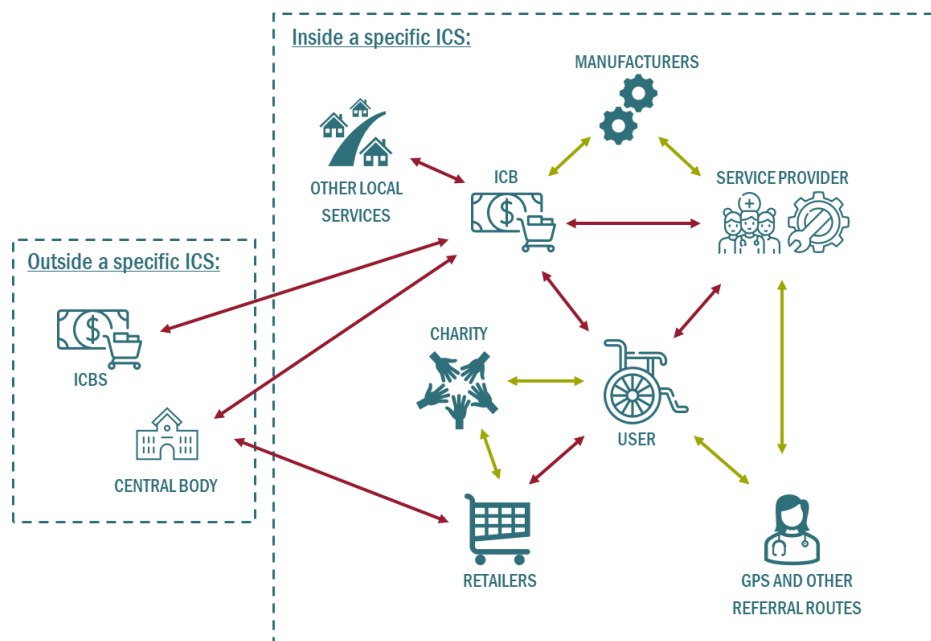
- **Information asymmetries** which occur when one party (e.g. retailer) possesses more information than another (e.g. user). It can lead to a breakdown in trust due to the potential to take advantage of one party. This can lead in turn to a reduction in size and scope of certain markets; and
- **Market power** which is when an individual or organisation can influence market outcomes in a way that benefits them (e.g. in terms of price and quality).

5.3.2 What stakeholder relationships would benefit from introduction of incentive and performance interventions?

Our previous work highlighted the variety of complex stakeholder relationships which exist across the wheelchair sector (see Figure 11). To develop our recommendations, we mapped the key issues in the wheelchair sector to various stakeholder relationships, in order to identify the parts of the system that the recommendations should target.

⁴⁷ <https://www.frontier-economics.com/uk/en/news-and-insights/news/news-article-i9706-assessing-the-economic-conditions-of-wheelchair-provision-in-england/>

Figure 11 Illustration of stakeholder relationship in NHS wheelchair services



Source: Frontier Economics

Broadly there are two main groups of stakeholder relationships that incentives and performance measures could target. Below we have discussed each of these two groups in turn.

Governance focused relationships

1. **ICS⁴⁸ and a central body such as NHSE:** A lack of enforcement and mandates from NHSE has resulted in geographic variation of services. NHSE is not exercising the market power it possesses.
2. **ICSs and other ICAs in different areas:** Currently there is limited transparency in terms of how each ICS operates and the outcomes that are achieved within each ICS. As we described above limitations in current data collection is leading to informational gaps and preventing comparability across ICSs.
3. **ICSs and service providers (within an area).** We were told that there are a range of ways in which ICSs, and wheelchair service providers could work innovatively with other local services (e.g. education, housing). This could help to boost the level of care provided to wheelchair users. However, despite the benefits of these potential innovations there is

⁴⁸ Integrated Care Systems were legally set up on 1st July 2022 covering all England. There are 42 ICSs, and each runs a joint Integrated Care Partnership (ICP) integrating NHS, councils, social care providers, voluntary sector and others including education, housing, employment in improving local health and wellbeing. Their aims are to (1) Improve outcomes in population health & healthcare (2) Tackle inequalities in outcomes, experience & access (3) Enhance productivity and value for money (4) Help the NHS support broader social & economic development

currently limited means for coordination. Efforts made within individual ICSs are piecemeal and rely on the initiative of individuals rather than appropriately supportive underlying infrastructure and set of policies.

User focused relationships

- 1. Users and ICSs / service providers:** existing evidence and our engagement has suggested that not all users are provided with an adequate wheelchair promptly that meets their needs. In some services users and potential users also lack clarity on relevant eligibility criteria and communication issues have been repeatedly flagged. These issues are exacerbated by the fact that users do not currently have adequate mechanisms to provide feedback to service providers and communicate with ICSs.
- 2. Users and retailers:** Currently wheelchair retailers who sell directly to the public have a variety of different operating models and are not always subject to sufficient oversight. This can lead to variation in the quality of offerings provided and lead to a perception amongst some stakeholders in certain areas that users may be taken advantage of. This in turn reduces the attractiveness of retail provision amongst certain stakeholders.

5.3.3 Potential incentive and performance metrics that could be implemented

Below we have listed several potential incentive and performance metric interventions which could be implemented. These general categories of intervention have fed directly into our proposed recommendations that are set out in Section 3.

Greater collaboration and coordination between services

There are a range of potential measures to encourage greater coordination across ICSs and providers with varying degrees of centralisation. Healthcare networks involve the collaboration of healthcare professionals, for example all wheelchair service managers in a region forming a regional service managers network. Wider evidence suggests the potential effectiveness of healthcare networks in improving healthcare services. The British Medical Journal (BMJ) found through a systematic review of healthcare professional networks that networks can facilitate the coordination of care and contribute to improving the quality and safety of care.⁴⁹

We have identified a number of wheelchair networks as part of our stakeholder engagement and previous work. These include the regional manager's wheelchair network(s), the national wheelchair managers forum, and the southeast regional commissioner's network. All networks are voluntary and managed by commissioners/service managers respectively. It is unclear whether all regions have a network, and individuals from one regional network have limited knowledge/awareness of other regional networks.

⁴⁹ <https://qualitysafety.bmj.com/content/21/3/239#T2>

We have found numerous examples of regional networks being effective in driving collaboration. For example, regional networks have been used in areas to drive improvements to standardise the eligibility criteria. However, stakeholders suggest limitations to the effectiveness of networks due to:

- their dependency on voluntary participation of individuals;
- their non-mandatory nature; and
- a lack of a senior responsible officer in NHSE that is able to discuss any key concerns or recommendations that have been identified through the network.

Greater standardisation of service quality

Mandating of a single set of eligibility criteria and guidance by NHSE is essential going forward. Currently information on what a good service looks like (e.g. NHSE's own Wheelchair Model Specification⁵⁰ and the Wheelchair Quality Framework)⁵¹ is presented as optional or aspirational. Mandating implementation would help to drive beneficial standardisation.

Current variation in eligibility criteria vary across ICSs and has led to a 'postcode lottery' in wheelchair services across England. Individuals in different ICSs are eligible for different equipment. This was explored in detail as part of our first report 'An economic assessment of wheelchair provision in England'.⁵²

In both our current stakeholder interviews and previous research, we have found that eligibility criteria are adjusted to match the available budgets rather than reflecting clinical needs. For example, in areas with high demand for wheelchair services (relative to the available budget), it may be that individuals with high and medium needs are prioritised over individuals with low or non-complex needs. This has resulted in individuals with low needs struggling to obtain provision through the NHS. This prevents fair access to wheelchair services in England.

Increased focus on knowledge sharing and relationship development across the workforce

Any effective NHS wheelchair service relies on adequate levels of staff who possess the requisite suite of skills. Additional training and networking programs could help create knowledge-sharing practices and increase the retention of knowledge in wheelchair services.

Likewise, further clarity on the service designs and models used by services and ICSs across the country could help to highlight innovations or best practices. Currently this type of information is siloed within an individual area.

⁵⁰ <https://www.england.nhs.uk/wp-content/uploads/2017/07/wheelchairs-model-service-specification.pdf>

⁵¹ The Wheelchair Quality Framework is due for publication in Spring 2025.

⁵² <https://www.motabilityfoundation.org.uk/media/zsjnh4un/wheelchair-economic-study-final.pdf>

Development of incentives within contracts to encourage innovations and best practices

Contracts that exist for the provision of NHS wheelchair services could be enhanced to encourage innovation. To enable this NHSE could develop and publicise guidance that focuses on learnings from best practice that have been implemented successfully at ICS level (e.g. examples of how contract design has enabled pooled budgets to be used successfully).

Other parts of the health and care sector currently rely on the use of explicit incentives within contracts. Examples include:

- Quality premiums which are used to compensate commissioners for the extra resources they require to reward providers for delivering high-quality services⁵³
- The Commissioning for Quality & Innovation (CQUIN) framework which encourages a culture of continuous improvement whilst delivering better patient outcomes⁵⁴
- The Better Care Fund⁵⁵ was a separate fund that encouraged integration between health and social care by providing bonuses to services who met certain metric targets
- The Quality Outcomes Framework (QOF)⁵⁶ used to incentivise performance in primary care.

A greater emphasis on collection of user feedback and integration of user feedback into service provision

Currently users' voices are not adequately reflected in the design of all wheelchair services. Adoption of a regular national user satisfaction survey which is collected from a sample of users across all ICSs could help to address this. Examples of surveys across other healthcare areas could be used as a starting point, e.g. the National Cancer Patient Experience Survey.⁵⁷ For this new survey to be valuable the content would have to be tailored directly to wheelchair users and the potential issues that they may encounter when engaging with NHS services. The Wheelchair Alliance could use the expertise of its members to help with the design of this new survey.

Adoption of outcome assessment tools across ICSs could also be beneficial. Outcome-based measures are tools that help services collect information on users' goals and assess the extent to which they have been met. They help service providers close their knowledge gap on users' priorities and satisfaction. The NHS's Wheelchair Model Service Specification recommends the use of outcome-based measures as best practice. However, this guidance is non-

⁵³ <https://www.england.nhs.uk/wp-content/uploads/2016/09/annx-b-quality-premium-april-18.pdf>

⁵⁴ <https://www.england.nhs.uk/nhs-standard-contract/cquin/>

⁵⁵ <https://www.england.nhs.uk/ourwork/part-rel/transformation-fund/better-care-fund/>

⁵⁶ <https://qof.digital.nhs.uk/>

⁵⁷ <https://www.england.nhs.uk/statistics/statistical-work-areas/cancer-patient-experience-survey/>

mandatory, and there is currently limited up-take of outcome-based tools. This may be due to the additional requirements they place on an already constrained workforce.

The WATCH Tool is an example of an outcome-based measure used by some services to monitor service outcomes.⁵⁸ Users are presented with sixteen areas that a wheelchair might be able to help with, and they are asked to decide which are the five most important areas to them. They are then asked to score how satisfied and happy they are with each of their top five areas before and after getting their new wheelchair. The aim is that this allows the service provider to monitor whether there have been improvements in users' lives after getting their wheelchairs. Other outcome-based measures identified include the 'Wheelchair Outcome Measure' (WhOM)⁵⁹ and 'Functioning Everyday with a Wheelchair' (FEW).⁶⁰

Finally, an increased formal role for local user groups could help to drive increased service quality. User groups in healthcare settings involve the active incorporation of users into service design.

Wider evidence from mental health services suggests a range of potential benefits from this form of co-production. However, these benefits only materialise if care is taken with regards to how users' input is incorporated. For example, existing evidence shows that both service users and healthcare professionals value having user involvement in decision making. However, users have noted that their involvement can be tokenistic (i.e. not result in any change in practice) which leads to frustrations and disengagement.

Shaping Our Lives, The National Network of Service Users and Disabled People, produced user-led research focusing on the good and bad experiences of service users involved in the commissioning, design delivery and evaluation of public sector services. They identified the following recommendations for good practice that improve service user involvement:

1. **Training.** Ensure that training that promotes inclusive communication is delivered for everyone who will form part of meetings that involve user groups. Offer opportunities for service user representatives to take part in relevant training and up-skilling activities and find ways of accrediting participation in training for users.
2. **Access.** Ensure meetings are fully accessible and involve service user representatives in identifying what the access requirements are. Identify a person who is the central point of contact for matters leading up to and following meetings with user groups.
3. **Equal participation.** Involve service users in setting the agenda for the meeting and provide space for participation during meetings

Our previous research found that the existence and influence of wheelchair user groups varies widely from area to area. User groups are suggested to be one of the more effective means

⁵⁸ <https://cheme.bangor.ac.uk/watch-tool/>

⁵⁹ <https://millerresearch.osot.ubc.ca/tools/mobility-outcome-tools-2/the-wheelchair-outcome-measure-whom/>

⁶⁰ https://www.researchgate.net/publication/327023575_Functioning_Everyday_with_a_Wheelchair_FEW_Tools_A_review

for ICSs to communicate with users. We have found examples of user groups working effectively to influence wheelchair services. For example, as part of our stakeholder engagement we found that an accessible car park for wheelchair users was constructed after a suggestion by a user. We also found examples of user group representatives being involved in recruitment for wheelchair services and helping to co-produce service design. However, we have also found many areas where there are no active user groups which can be due to the lack of infrastructure for service user groups or the limited uptake of users to form part of service user groups.

User groups in wheelchair services often represent a limited group of wheelchair users. Our stakeholder engagement suggested that user groups' membership may not always represent the entirety of wheelchair service users. For example, children and their carers are often underrepresented in wheelchair user groups as well as ethnic minorities. Also, individuals who are not eligible for wheelchair services (e.g., because they do not meet the specifics of the eligibility criteria) are often excluded from wheelchair user groups. There needs to be more awareness of user groups and their role.

Expanding the communication avenues for users to increase accountability in wheelchair provision

Our engagement suggests that some NHS wheelchair services are reluctant to publicise or promote the service that they offer as they are concerned with meeting demand within constrained budgets. Better signposting across wheelchair services would help to ensure users are aware of the care they should be expected to receive and the responsibilities of the different organisations in providing care.

Consideration should also be given to providing users with choice regarding their care provider (if they live in certain areas of the country where this is feasible). This could help to ensure that service providers are accountable to service user needs.

Finally, introducing an independent complaints body could provide an additional communication route. This body could be used by wheelchair users (and those who are unable to access a NHS wheelchair) to raise any concerns that they have regarding wheelchair provision.

Improved provision in the retail sector

The performance of the retail sector is important to the overall functioning of the wheelchair sector. Wheelchair users who obtain their wheelchair through PWBs have the option of using retail provision to source their wheelchair.

Trade Associations exist that represent wheelchair retailers. For example, BHTA is a membership body that retailers of wheelchairs are able to join. Members include companies that manufacture, distribute and are involved in the retail of products like manual wheelchairs, mobility scooters, powered wheelchairs and accessories such as cushions, power add-ons

and seating systems. Retailers who wish to be a member of the BHTA are required to agree to a code of practice that they must adhere to as part of their retail practices.

Currently private retailers offer different levels of clinical expertise when selling directly to users. Stakeholder interviews suggested that some retailers have effective partnerships with occupational therapists (OT) as part of sophisticated clinical assessment processes. However, there are also retailers who do not incorporate any meaningful clinical expertise. A more consistent incorporation of clinical input in private retail sales (which is clearly advertised so users know which retailers have the necessary expertise to provide the right wheelchair for them) would be beneficial.

6 Policy implications and next steps

The recommendations that we have set out in this report represent our independent articulation of the highest priority issues facing NHSE wheelchair provision and our evidence-based set of solutions.

We have presented these recommendations individually. However, they form part of a package which should be considered and implemented jointly rather than rolled out in a piecemeal fashion.

Each of the recommendations above has a specific owner or multiple owners as we have set out below.

Table 5 Recommendation owners

Recommendation	Owners
Creation of an NHSE Senior Responsible Officer (SRO) role	Primary owner: NHSE
Mandating a set of standardised eligibility criteria across all services	Primary owner: NHSE
Establishing a dedicated local wheelchair commissioner in each ICS	Primary owner: Each ICS
Mandating establishment of user groups within each wheelchair service	Primary owner: NHSE Secondary owner: Wheelchair Alliance
Engage with ICSs who do not submit data and identify and address barriers	Primary owner: NHSE
Drive widespread incorporation of appropriate clinical input in private retail sales	Primary owner: Trade Associations

The organisations listed above should collectively consider how best to take forward the recommendations we have set out and build on the good work that has already been undertaken to articulate what an effective NHS wheelchair service looks like (e.g. the Wheelchair Quality Framework).⁶¹ A new 10-year plan for the NHS is currently due in Spring

⁶¹ The Wheelchair Quality Framework is due for publication in Spring 2025.

2025.⁶² It is essential that wheelchair provision and the recommendations listed above are incorporated within this plan. Any delays to the publication of a new 10-year plan should not prevent action being taken in relation to wheelchair services. Stakeholders have emphasised that wheelchair services are in need of urgent attention so that users and wider society can realise significant benefits.

A practical first step towards this outcome would be developing a role description for the new dedicated NHSE wheelchair SRO who can then explore how best to implement the other parts of the package that we have set out.

⁶² <https://www.gov.uk/government/publications/change-nhs-help-build-a-health-service-fit-for-the-future/change-nhs-help-build-a-health-service-fit-for-the-future>

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Annex A- Detailed Case Studies on users

In this Annex we present detailed case studies which relate to individual wheelchair users.



Meet Martin

Aged 54

Martin felt his appointment didn't thoroughly explore his wider life needs

Martin, aged 54, lives alone in a flat. Since a spinal infection left him with severely reduced mobility, he's had to make significant adjustments to his life, including leaving his job and moving into what was supposed to be a wheelchair-accessible flat. While separated from his wife, Martin still enjoys spending time with his children, particularly picking them up from school and taking them on outings like to the cinema. Looking ahead, he's also hoping to take them on a holiday next year.

"I pick them up every day, just so I get to see them."

Following his spinal infection, Martin was referred to the wheelchair service for an assessment. However, the process fell short of what he expected. During his appointment with an occupational therapist, Martin recalls there being little discussion about his living situation or his specific needs. He wasn't asked about the challenges he faced in his flat, such as the height-adjustable kitchen sink, which was no longer functional, or the heavy doors that he struggles to open without hitting them with his wheelchair.

"You can't get your legs under it [the sink]. It was meant to be adjustable, but you can see where they've put the tiles in. It's not adjustable anymore, it can't go up and down."

The assessment also didn't address how Martin's wheelchair would fit into his daily life. Key sections of the assessment form, used to explore health and wellbeing aims, were left blank. Martin believes that discussing these aspects could have resulted in a wheelchair better suited to his specific needs.

The wheelchair he received was a standard model, with only a few basic modifications—such as removing the handles and footrests in the hope of gaining more independence. However, these changes ended up creating new challenges. Without footrests, he struggled to stabilise himself when opening the heavy doors in his building or when navigating hilly roads outside.

"It's a nightmare really, you can't do anything. You go outside and it's hilly, or the terrains not ideal for wheelchairs. You're limited, you're stuck in really."

As a result, Martin's current wheelchair limits his ability to live independently and fully engage in activities that matter to him. Whether it's something as simple as shopping or planning future holidays with his children, the wheelchair has become more of an obstacle than a support. Martin feels that had the assessment taken his home environment and lifestyle into account, he might have received a wheelchair that empowered him rather than restricted him.





Meet Andy

Aged 41

Andy hopes to be the first person to complete the Tour de France route in a powered wheelchair – but problems with his new wheelchair have delayed that dream

"I literally cried on the way home, because I was like, 'I should have - I should have stopped him. I should have stopped and said, no, can you put me back in my old chair?'"

Andy, 41, has cerebral palsy, which causes spasticity in all four of his limbs. A lifelong power wheelchair user, he is passionate about the role wheelchairs play in improving and protecting the independence of their users, and volunteers for a charity that teaches wheelchair skills to children.

In December 2023, after years of reliable use, Andy's powered wheelchair broke down. Given the urgency of the situation, he was fast-tracked for a new NHS-powered wheelchair. During his initial assessment, the occupational therapist prescribed him a new reclining powered wheelchair and re-measured him to ensure the correct fit.

However, two months later when Andy went to collect the new wheelchair it was not what he expected. He found out that the occupational therapist who had completed his assessment was no longer there, and Andy felt that there had been a poor handover of his case. The new wheelchair didn't fit his body at all – it was too large and lacked the essential seat cushion he needed.

"The OT knew nothing about this chair. She had to look over the notes. And I first looked at the chair and went, this is too big. It didn't have the seat cushion that I needed. It didn't have anything."

During the fitting, Andy expressed his concerns about the size and discomfort, but felt his feedback was dismissed. He was encouraged to take the wheelchair home where the pain and discomfort continued.

"For about four months, I was having problems with my back, problems with my coccyx bones, problem with everything, and then that was having an impact on my day-to-day."

Andy leads an active life, attending festivals, comedy nights, and working on his podcast, but the issues with his wheelchair have been inhibiting this. He is also planning a wheelchair challenge for 2026 – to be the first person in a powered wheelchair to complete the Tour de France route. However, his preparations have been slowed by the problems with his wheelchair.

"I'm prepping for my next big challenge, but the delays with my chair have slowed everything down. I've done John O' Groats to Land's End before, and I'm ready for the next one."



Meet Kerry

Aged 29

Kerry has faced years of frustration with the wheelchair maintenance team and has now been given a wheelchair with ongoing faults after feeling her concerns weren't listed to during the assessment

Kerry, 29, has multiple complex health conditions, including Ehlers-Danlos syndrome, which causes frequent joint dislocations and seizures. She has relied on a power wheelchair since 2010 and recounted experiencing multiple problems with a slow and unreliable wheelchair maintenance service.

Her powerchairs have broken down multiple times over the years, leaving her stranded, unable to attend band practice and rugby matches, or even go about her daily activities. Each time, she has faced waits of up to two weeks for repairs. On one occasion, her wheelchair broke down in the middle of the road – Kerry's support worker had to stand with her, redirecting traffic until help arrived. But when the maintenance staff got there, they told Kerry they couldn't fix the issue, and she had to rely on staff from the appointment centre to push her wheelchair back home.

"The chair just stopped, and it wouldn't move, and the cars coming up and down and I couldn't move the chair."

In 2023, after only a few months of use, Kerry's new NHS powerchair stopped working. The model was different from her previous wheelchair, and it had been causing problems since the day it arrived – including battery issues and swerving unexpectedly.

"We were told they weren't going to use that brand anymore because she said that a lot of people have had faults with the chair."

However, when Kerry arrived at the centre for her assessment, she was surprised to hear from the occupational therapist that she would in fact be receiving the same model. "They said it was the only one they could give me at the time," Kerry recalled. When she expressed her concerns about the wheelchair's faults, she was told that the new wheelchair wouldn't have the same problems. Kerry felt pressured into accepting the wheelchair, worrying that insisting on a different model would leave her without a working wheelchair.

"You don't really get much of a choice in it, so it's either agree to it or you don't, and then you don't get the chair."

Six weeks later, Kerry's new powerchair arrived, but problems arose immediately. It came without a 'tilt and recline' footrest which had been crucial in her previous wheelchair, especially during seizures. Kerry was informed that she would need to pay an extra £500 for this feature. After a few weeks, the service was able to source free plastic alternatives that provided the same functionality. However, they made the wheelchair bulkier and had to be removed each time Kerry got into her dad's car, which she relies on as her primary means of transport into town. There was also an issue with the armrests, which were ill fitting and fell off as soon as Kerry returned home from collecting the wheelchair. Kerry's dad initially tried to fix them with duct tape and cable ties as they waited for the wheelchair service's external repairs contractor. When the armrests were fixed by the contractor, the way they were secured meant the side panel was no longer adjustable. Kerry decided against booking in another maintenance request, as she worried that each fix might lead to additional issues.

"I thought if I rang them up again, they might make it wrong again. So I thought, well, I can live with it like this."



Meet James

Aged 59

James's uses additional additions and features to make his simple wheelchair work for him on all occasions

"The NHS's provision is great, but the maintenance side of it doesn't work as it should. I can cope and get on with it myself, but it's not fair for those who can't"

James, aged 59, lives with his wife, in a rural house they've adapted to meet James' growing needs. After a successful career in events management, he now works part-time in a remote medical tech role. Diagnosed with multiple sclerosis in 2012, his condition has gradually worsened, leaving him unable to use his legs. Despite this, James has a positive outlook and is determined to stay active.

In 2020, after years of using crutches and a walker, James decided it was time for a wheelchair. Having not been aware of the wheelchair service, he researched extensively and bought a second-hand, lightweight, foldable self-propelling wheelchair for everyday use, predominantly outside the house. However, after two years, he realised he needed an additional wheelchair for indoor use and decided to explore his options. At this point, James came across the wheelchair service. Despite initial reservations, his experience with the service was positive, he was impressed with the straightforward assessment process and the basic but functional wheelchair he received.

"My point of view about NHS wheelchairs was 'no thank you'. I thought it would be something lumbering and heavy and so I was fairly surprised."

With two different wheelchairs, James has found that customising each to suit specific aspects of his life is essential for maintaining his active lifestyle. For outdoor adventures, he's made significant modifications to one of his wheelchairs, including adding a third-wheel mechanism that enhances stability on rough terrain.

This allows him to enjoy more demanding environments without sacrificing mobility. In addition, after lots of research and the ability to self-fund, James has fitted advanced electric assist wheels to this wheelchair, giving him the extra power needed for long distances and uphill journeys.

"I use those when we go on holiday or take city breaks. They're perfect when I know I'll be covering 10 miles or more in a day."

For indoor use, James has taken a different approach. His lightweight, foldable wheelchair is equipped with practical, everyday modifications like a Velcro-attached tray, which lets him carry items around the house, hands-free.

"This tray sits on my lap, so when I'm wheeling around, I've got my hands free to carry stuff."

James' ability to adapt his two wheelchairs for his specific needs: outdoor adventures, and indoor tasks has enabled him to remain active, as well as independent in all aspects of his life.



Meet Paige

Aged 39

Paige was frustrated with the wheelchair service, leaving her with an unused wheelchair

“I was confused and frustrated every step of the way.”

Paige, aged 39, lives with her husband and two children. She has multiple health challenges, including chronic fatigue syndrome, Ehlers-Danlos syndrome, functional neurological disorder (FND), and Bell's Palsy. In 2022, after a serious fall, Paige's mobility was drastically reduced, and she found herself needing a wheelchair.

When she was discharged from the hospital, Paige wasn't referred to any wheelchair service. Left struggling to move around her home, she reached out to her GP for advice. Her GP submitted a referral online, but no one really knew what was supposed to happen next. Paige was left guessing when she'd hear back.

“I felt completely in the dark. I heard nothing for weeks and had to chase the service provider myself.”

As it turned out, the private company in charge of wheelchairs in her area was in the middle of switching contracts. After hearing nothing for weeks, Paige took matters into her own hands and chased up the provider she thought was responsible, only to be told they were no longer handling her case. She then had to track down the new provider herself. Paige felt frustrated, as she felt she shouldn't have to be the one chasing her own referral.

When the new provider finally contacted her, Paige was scheduled for a home assessment. Paige assumed this meant she was finally getting assessed for a wheelchair. When the staff showed up, she found out they were actually assessing her house—for a powered wheelchair she didn't even know she was getting.

As Paige thought things were moving forward, she received another letter booking in the same home assessment she had already completed. Frustrated and confused, she called to cancel.

“The whole situation felt disorganised. I thought I was finally getting assessed, but then they tried to book the same assessment again. I declined it, as I'd already done it.”

A few weeks later, Paige finally had her formal wheelchair assessment, but the experience was far from what she had expected. There was no discussion about her lifestyle, her family responsibilities, or the range of wheelchairs that could meet her needs. Paige also wasn't informed about the PWB options. For someone with children, hobbies like attending festivals, and a desire to remain active, Paige saw this as a missed opportunity in finding a wheelchair that would fit her wider life.

“It was incredibly frustrating to realise that I was given no choices, and I felt pressured into accepting what they decided for me.”

When her wheelchair was finally ready, Paige went to collect it from the centre—only to find that it was too large to fit in her car. This further delay meant she had to arrange for it to be delivered to her home at a later date.

“The whole process felt chaotic, and it shouldn't have been this hard to get the support I need.”

In the end, the wheelchair turned out to be too bulky for Paige to navigate. It was heavy, cumbersome, and impractical for her everyday life. Paige hardly used it, and it soon became clear it wasn't going to work. Rather than go through the system again, Paige and her partner decided to spend their own money on a foldable powered wheelchair that better suited her needs. The NHS wheelchair has been returned, relatively unused.

“I'm sending my NHS wheelchair back, it was uncomfortable and only used for short journeys. I don't really need it since I got an upgraded model of the folding wheelchair”

Annex B- Personal Wheelchair Budgets user survey

In collaboration with the Wheelchair Alliance, we designed and distributed a survey targeting wheelchair users to complement our analysis of publicly available data. The purpose of this survey was to gather insights on wheelchair provision methods and the associated levels of satisfaction among users, particularly regarding Personal Wheelchair Budgets (PWBs).

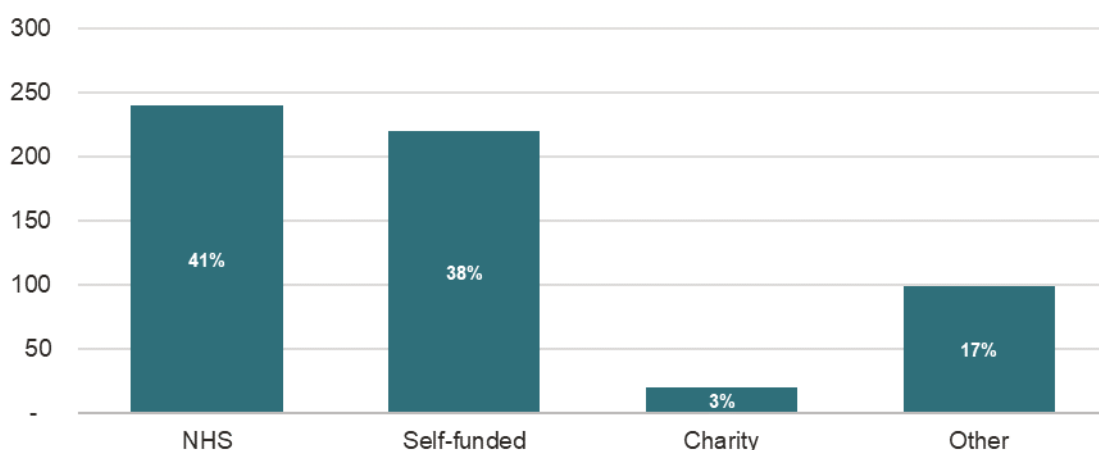
Sample

A total of 579 responses were collected between 23rd May and 30th June 2024. All responses were recorded using an online questionnaire.

While the primary focus was on individuals accessing NHS-funded wheelchairs, we also received responses from a broader audience, enhancing the scope of our analysis. Over 200 respondents reported acquiring their wheelchairs through NHS funding. The majority of respondents (60%) were aged between 30 and 64, although a significant proportion were aged 65 and over, ensuring a wide representation of age groups. Additionally, the survey captured views from users across England, offering insights into experiences from various geographical regions.

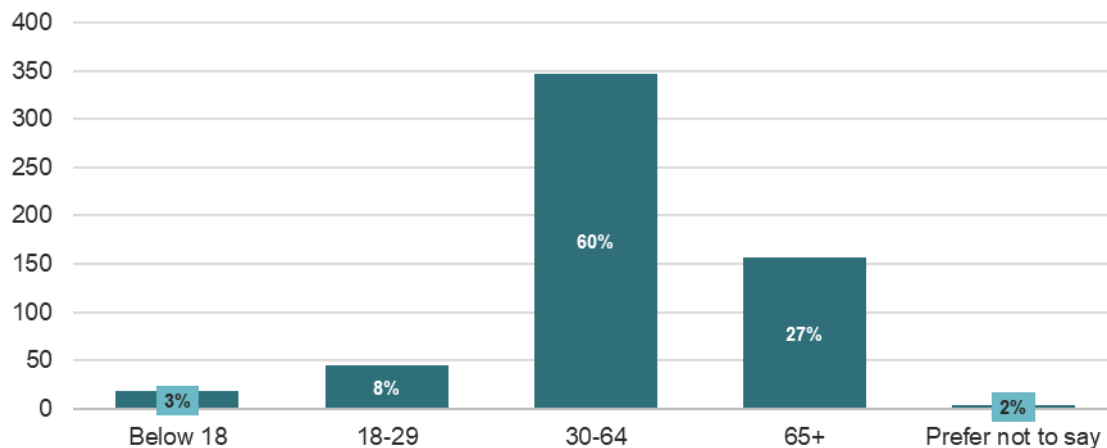
It is important to note that we did not seek to apply any weightings, nor does the sample aim to be statistically representative of the entire population of wheelchair users. Instead, the survey was designed as a tool for gathering insights into user experiences with PWBs, providing a qualitative view of their satisfaction and acquisition methods. This data offers valuable complementary evidence to our broader analysis of wheelchair provision.

Figure 12 Breakdown of user survey responses by mode of access

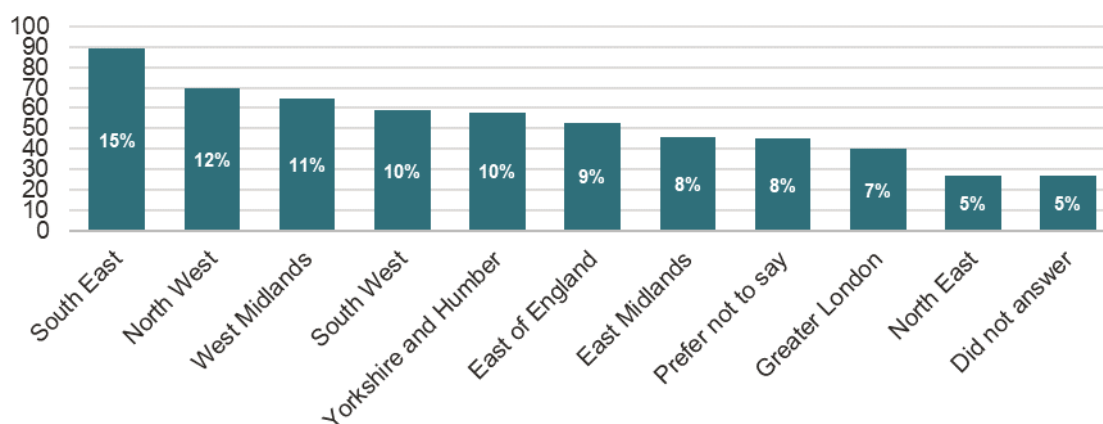


Source: Frontier analysis

Note: Other sources of funding include Motability grants, family support, DWP Access to Work, and crowdfunding.

Figure 13 Breakdown of user survey responses by age group

Source: Frontier analysis

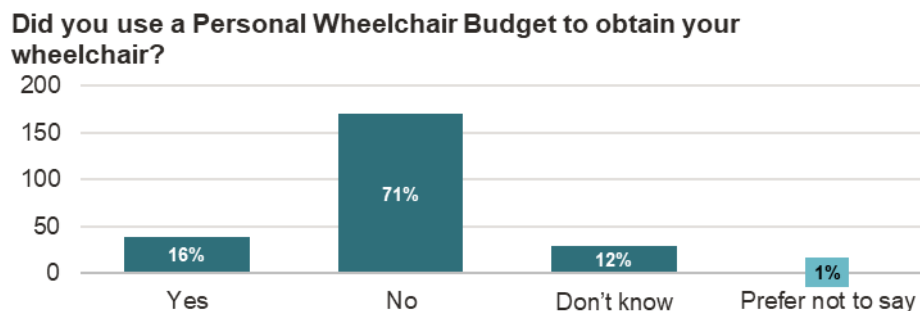
Figure 14 Breakdown of user survey responses by Region

Source: Frontier analysis

Results

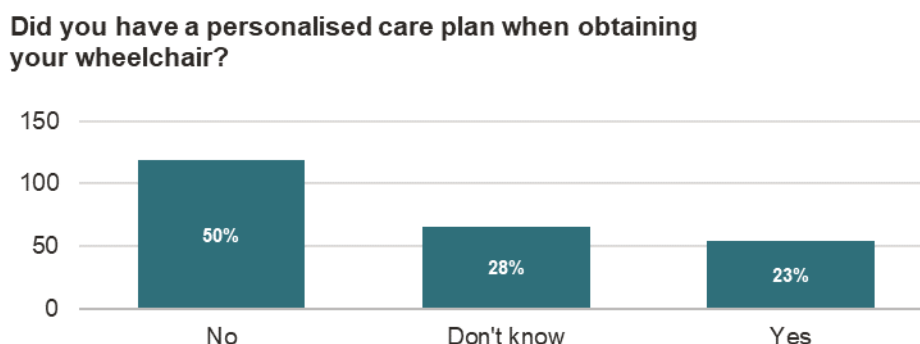
There is limited awareness of Personal Wheelchair Budgets

Although the NHS emerged as the most common route for wheelchair acquisition among users our results suggest the majority of respondents reported that they were not aware of having received a PWB. This suggests a potential gap in communication or understanding regarding the PWB process, which may require further investigation to ensure that users are informed and able to make the most of the resources available to them. This awareness issue extends beyond PWBs. For example, our survey reveals that 28% of NHS users did not know whether they had a personalised care plan.

Figure 15 Number of respondents who obtained a Personal Wheelchair Budget

Source: Frontier analysis

Note: Only includes respondents who indicated they obtained a wheelchair through the NHS are considered.

Figure 16 Number of respondents with a personalised care plan

Source: Frontier analysis

Note: Only respondents who indicated they obtained a wheelchair through the NHS are considered.

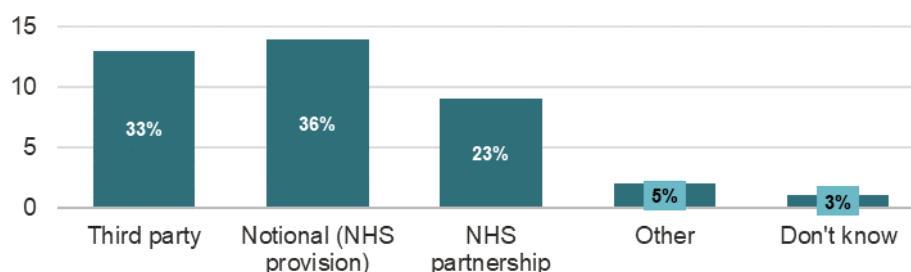
There is a mix of budget types, with most respondents reporting the need to top up their PWBs

The survey results show that respondents used a mix of budget types, with the most common response (36%) being notional budgets – the default mechanism provided by the NHS, where the funding for the wheelchair remains within the NHS and is managed directly by wheelchair services. However, a notable proportion (33%) of users reported accessing third-party PWBs. These budgets provide users with direct funding to purchase their wheelchairs from external providers, offering greater flexibility and choice in terms of wheelchair models and customisations.

One of the key findings from the survey is that a majority (58%) of respondents, regardless of the budget type, reported the need to "top up" their PWB in order to access wheelchairs that met their specific needs. Although most (60%) respondents preferred not to answer how these top ups were funded, the majority that did answer reported using their own money to do so (43%). This creates an inequality within the system as some wheelchair users will not have

disposable income available to fund these top-ups. Only 8% indicated receiving the support from a charity. These additional contributions are used to fund a mix of wheelchair upgrades and additional accessories not covered by the initial award.

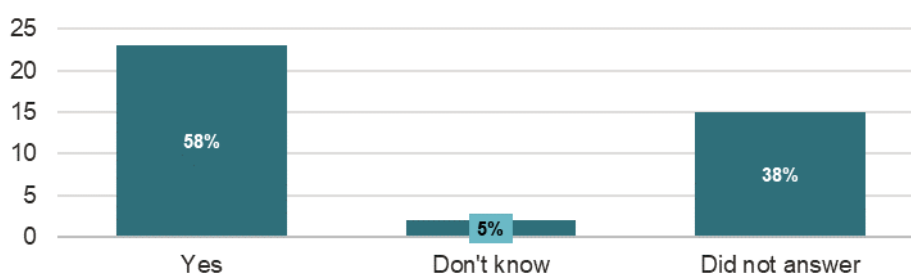
Figure 17 Breakdown of respondents by type of PWB



Source: Frontier analysis

Note: Only respondents who indicated they obtained a wheelchair with a PWB are considered.

Figure 18 Number of respondents that topped-up their PWBs

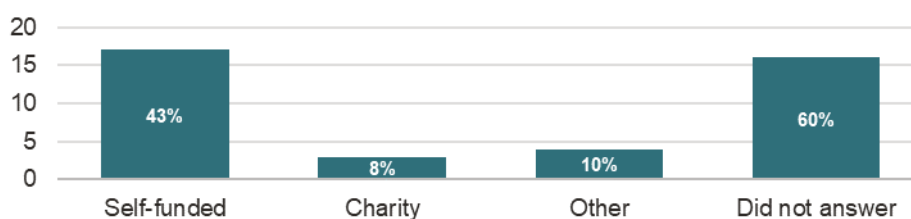


Source: Frontier analysis

Note: Respondents were asked "Did you have any additional wheelchair costs which meant that you had to 'top-up' the amount provided to you in your Personal Wheelchair Budget or add upgrade/accessories to the wheelchair provided to you, and if so by how much? These costs may be self-funded, or funded by charities and other services.". Only includes respondents who indicated they obtained a wheelchair with a PWB.

Figure 19 Sources of funding for additional contributions to PWBs

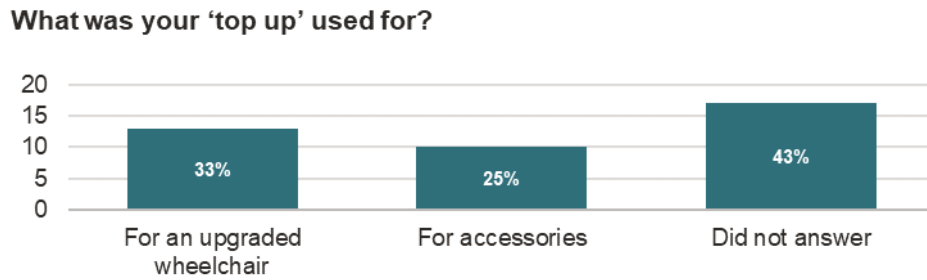
How did you fund these 'top-up' costs?



Source: Frontier analysis

Note: Only includes respondents who indicated they topped-up their PWB.

Figure 20 Breakdown of reasons for topping-up PWBs



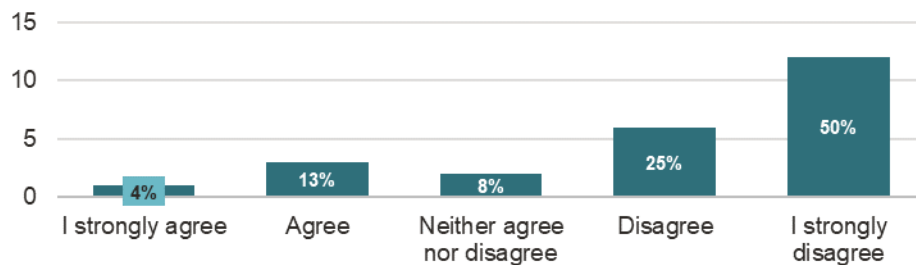
Source: Frontier analysis

Note: Only includes respondents who indicated they topped-up their PWBs.

Users tend to disagree that their PWB was sufficient to cover a suitable wheelchair

The survey findings indicate that a significant proportion of respondents expressed dissatisfaction with the amount provided through their PWB. Specifically, 75% of respondents either disagreed or strongly disagreed with the statement that the budget was sufficient to cover a wheelchair that fully met their needs. This dissatisfaction was often linked to the need for users to top up their budgets, as discussed earlier.

Figure 21 Satisfaction of PWB users relative to the sufficiency of their awarded budget value



Source: Frontier analysis

Note: Respondents were asked 'To what extent do you agree that the amount offered to you as part of your Personal Wheelchair Budget was sufficient to fund a wheelchair that meets your needs?'. Only respondents who indicated they obtained a wheelchair with a PWB are considered.

Annex C- Further detail on recommendations

C.1 Our recommendation areas

We have developed seven recommendation areas that draw from both the qualitative and quantitative evidence collected as part of this project, and wider evidence from our previous reports. We have outlined these recommendation areas and the underlying evidence base in Table 6.

We developed these recommendations in a pragmatic way that reflects the current state of NHS provision. They represent high-priority areas for changes, rather than an exhaustive list and are not in a priority order

Table 6 Recommendation areas

Recommendation area
Greater overall prioritisation of wheelchair services in the NHS
Increasing consistency and collaboration across wheelchair services
Enhancing the delivery of Personal Wheelchair Budgets
Improving data collection and data use
Improving the efficiency of procurement and supply chain
Improving retail practices
Greater integration of user voices

Under each of these recommendation areas, we developed a range of specific and actionable recommendations that could be implemented in the wheelchair sector. We conducted additional desk research and stakeholder engagement to understand the feasibility of the recommendations and test their expected effectiveness in the wheelchair sector. The next section outlines these potential recommendations in detail.

C.2 Development of specific recommendations

For each recommendation area we have developed a number of specific recommendations that could be implemented in the wheelchair sector.

Greater overall prioritisation of wheelchair services in the NHS

A dedicated wheelchair commissioner

Currently wheelchair commissioning in certain ICSs is bundled with other services which reduces transparency and, in some cases, means that the specialist commissioning skills that are required in this context are not present in every service and can negatively impact budget allocations to wheelchair services. Establishing a dedicated local wheelchair commissioner in each ICS could help address this. Each ICS should ensure that wheelchair services are commissioned separately, rather than the service being ‘bundled’ with other aspects of community care and procured as a group. In order to make this workable it may be necessary to explore merging of some wheelchair services/elements of wheelchair services which are currently separate. ICSs and NHSE should work with organisations like the Wheelchair Alliance to ensure that each local commissioner has access to required training.

The Wheelchair Alliance could also play a role in the training of commissioners so that the nuances of the Wheelchair Quality Framework.⁶³ are fully understood.

Creation of an NHSE senior responsible office (SRO) role

To drive improvements a dedicated NHS wheelchair SRO is needed. This role would be responsible and accountable for the overall development of wheelchair services. A process would need to be established for stakeholders (such as individual ICSs and organisations like the Wheelchair Alliance) to engage with this SRO and share feedback on policies and current issues.

This is a key recommendation as it overlaps extensively with other recommendations set out in this report. Specifically, the SRO role would also be responsible for using insights from improved data collection to highlight areas which needs attention and would act as a point of contact for the regional networks we have proposed elsewhere.

Increasing consistency and collaboration across wheelchair services

Mandating a nationally set eligibility criteria

The eligibility criteria determine who can access NHS wheelchair provision and the types of care and equipment an individual is able to access. The eligibility criteria are currently set at an ICS level rather than a national level. Although NHSE’s Model Wheelchair Service Specification provides guidance for ICSs to develop their eligibility criteria, it is in need of updating and it is non-mandatory.⁶⁴ This means that the eligibility criteria vary across ICSs and has led to a ‘postcode lottery’ in wheelchair services across England, with individuals in

⁶³ The Wheelchair Quality Framework is due for publication in Spring 2025.

⁶⁴ <https://www.england.nhs.uk/wp-content/uploads/2017/07/wheelchairs-model-service-specification.pdf>

different ICSs being eligible for different equipment. This was explored in detail as part of our first report 'An economic assessment of wheelchair provision in England'.⁶⁵

A universal set of eligibility criteria has been suggested to be important for the successful implementation of other recommendations. The comparability of nationally compiled data on wheelchair services has been suggested by stakeholders to be limited unless a consistent eligibility criteria is mandated. Clearly any set of eligibility criteria will have to be implemented with a degree of flexibility as not all users will fit into defined categories.

Expansion of regional networks/service managers' network

Healthcare networks involve the collaboration of healthcare professionals, such as for example all service managers in a region forming a regional service managers network. Wider evidence suggests the potential effectiveness of healthcare networks in improving healthcare services. For example, the British Medical Journal (BMJ) found through a systematic review of healthcare professional networks that networks can facilitate the coordination of care and contribute to improving the quality and safety of care.⁶⁶

In addition, wider literature review helps identify the key characteristics of effective healthcare networks. For example, the Health Foundation identifies the key factors that enable a network to create healthcare service improvements.⁶⁷

1. A **common purpose** that draws members together, keeps them aligned and working in the same general direction.
1. A **cooperative structure** that allows people to work together across organisations, make decisions and pool resources.
2. Gaining a **critical mass**, which leads to increasing values for its members.
3. Gathering of **collective intelligence**, which accumulates as members share and learn from each other.
4. Development of a sense of **community**, where members benefit from each other and build relationships that foster reciprocity.

We have identified a number of wheelchair networks as part of our stakeholder engagement and previous work. These include the regional manager's wheelchair network(s), the national wheelchair managers forum, and the southeast regional commissioner's network. All networks are voluntary and managed by commissioners/service managers respectively. It is unclear

⁶⁵ <https://www.motabilityfoundation.org.uk/media/zsjnh4un/wheelchair-economic-study-final.pdf>

⁶⁶ <https://qualitysafety.bmj.com/content/21/3/239#T2>

⁶⁷ <https://www.health.org.uk/sites/default/files/EffectiveNetworksForImprovement.pdf>

whether all regions have a network, and individuals from one regional network have limited knowledge/awareness of other regional networks.

External organisations such as the Wheelchair Alliance can also play a valuable role in developing these networks and fostering collaboration by bringing together a range of stakeholders to work towards a common goal.

Enhancing the delivery of Personal Wheelchair Budgets

Our qualitative engagement and data analysis shows there is low awareness of PWBs amongst users accessing NHS-commissioned services. Patients do not always seem to know what PWBs are, why they were introduced, and the different options available to them.⁶⁸ This one-sided information asymmetry means that users may miss out on a legal entitlement that could potentially offer a better-suited care package.

NHS England has public facing outputs which describe PWBs and provides information for users, commissioners, clinicians, and wider stakeholders.⁶⁹ However, this material does not clearly explain the options available to users, and what this means for them in simple and unambiguous terms. From our user engagement, the lack of awareness of PWBs suggests that this material is not making its way down to users.

The use of plain language has been extensively researched in healthcare settings, where patients tend to have adverse attitudes towards medical jargon.⁷⁰ This is also documented in other settings including the legal profession.⁷¹ As a result government and other public-facing bodies have tended to adopt an approach to simplify their writing style.^{72, 73}

Moreover, material such as leaflets and ‘how to guides’ can be a useful way to empower individuals to take informed decisions. In healthcare, research has shown that patient information leaflets are especially effective when patients suffer from existing lack of information, leading to improved health outcomes.⁷⁴ Finally, we note that mandating the requirement for users to be informed of their options is present in other settings. For example,

⁶⁸ As we describe in our report, this includes the distinction of Notional vs. Third-party budgets, the ability to make added contributions (‘top-ups’) and combining funding sources.

⁶⁹ <https://www.england.nhs.uk/personalisedcare/personal-health-budgets/personal-wheelchair-budgets/>

⁷⁰ For example, [Allen et al. 2023](#) find that patients perceive the jargon-using doctors as confusing, technical, and uncaring, while doctors who avoided jargon were seen as empathetic, approachable, and effective communicators.

⁷¹ See for example [Trudeau 2012](#)

⁷² See for example [Cabinet Office guidance](#)

⁷³ See for example [PIF TICK Certification | Patient Information Forum](#)

⁷⁴ See for example [Sustersic et al. 2017](#)

since 2015, landlords are required to provide tenants with a copy of the Government's "How to rent guide".⁷⁵

Review into ICSs who are reporting low prevalence of PWBs

Another finding of our PWB workstream is that a number of ICSs either report that they have not implemented PWBs or report extremely low levels of prevalence rates.⁷⁶ We have identified a number of potential causes including resource constraints and incorrect data reporting. However, a targeted review of ICSs that have not transitioned to PWBs is needed to definitively identify the barriers to adoption.

A targeted review would involve a detailed assessment of the operational, financial, and clinical contexts of the ICSs with low PWB uptake. This process would likely include interviews with key decision-makers, clinical staff, and users, as well as a review of local policies, budget allocations, and the administrative processes behind wheelchair commissioning. The review would pinpoint why some ICSs are struggling to implement or scale PWBs, and to explore whether localised factors such as funding allocations, competing priorities, or service delivery structures are playing a role.

Importantly, a review should assess if these are systemic issues that can be addressed with additional support, or if they stem from structural misalignments which make PWBs difficult or impossible to roll-out.

Additional data collected on 'top-ups'

The PWB regime allows for users to contribute additional amounts to the budget awarded by the NHS. These 'top-ups' allow, for example, for additional accessories or upgrades to be included in the package of care. As we explain in Section 5.1, although the NHS currently collects data on the number and types of PWBs awarded in each ICB, it has no overview of how frequently users rely on additional contributions.

Understanding how often top-ups are used, for what purpose and the typical amounts involved is critical to track whether the NHS is currently providing sufficient high-quality wheelchairs. As Lord Darzi points out in his independent review, "*In the NHS, what gets measured, gets funded*".⁷⁷ This is not captured by the data currently published by NHS England.

⁷⁵ Source: [Explanatory Memorandum to The Assured Shorthold Tenancy Notices and Prescribed Requirement \(England\) Regulations 2015](#)

⁷⁶ See Section 5.1.4

⁷⁷ [Darzi Review](#), p. 81

Improving data collection and data use

As we explain in Section 5.1, NHS data on wheelchair services has serious quality shortcomings. We estimate that over half of ICBs either do not report or inaccurately report parts of their wheelchair service data.

Research shows that high-quality data is crucial to deliver quality care for patients, but also to improve research and analysis, and to drive innovation. For example, according to the Health Foundation, data can address several of the NHS' challenges including addressing backlog, wait times and health inequalities, and in ensuring ambitions are properly funded and resourced – issues which are relevant to the provision of wheelchairs in England.⁷⁸ Unsurprisingly, Lord Darzi's review recommends a "*step-change improvement in data quality for community and mental health services in particular*".⁷⁹

However, while NHSE provides data guidance online, our engagement with wheelchair managers and commissioners indicates that these guidelines often fail to reach those responsible for data collection, cleaning, and submission. For example, we have received anecdotal evidence from one wheelchair service manager that some services still rely on manual data collection methods, such as pen and paper, which presents obvious limitations.

Some services have taken proactive steps to improve data accuracy. For instance, one service manager reported needing to challenge clinicians to ensure accurate data entry, particularly regarding the definitions of care subgroups (high-, medium- and low-complexity). However, these efforts are resource-intensive, creating a tension between ensuring accurate data and dedicating time to patient care. Without investment in robust quality assurance processes, no meaningful insights can be drawn from the current data.⁸⁰

We understand that some data collections, including the National Wheelchair Dataset, continue to depend on ICBs and individual services processing and aggregating their own data before submitting it to NHSE. After submission, NHSE receives these aggregated figures; however, any discrepancies in the calculation methods or assumptions made by different ICBs cannot be identified at this stage.

Recent data modernisation efforts have mandated that services and ICBs submit data through NHSE's Strategic Data Collection Service (SDCS Cloud), which includes built-in quality checks. For example, the SDCS Cloud platform facilitates patient-level data submission and applies logic tests to ensure data accuracy, such as preventing the upload of data where a discharge date precedes the referral date. While this initiative marks a positive advancement in addressing data quality issues, the submissions through SDCS are not comprehensive and do not entirely eliminate errors at the point of data collection. Therefore, despite the

⁷⁸ [How better use of data can help address key challenges facing the NHS - The Health Foundation](#)

⁷⁹ [Darzi Review](#), p. 91

⁸⁰ According to the principles outlined in [HMT's Aqua Book](#), quality assurance is essential in **both** data collection and analysis.

improvements in data validation, further actions are necessary to ensure accuracy at the source.

Collection of data from retail / charity sector

Currently, the NHS does not capture data on wheelchair provision by retail and charity sectors, despite anecdotal evidence suggesting rising demand in these areas. Retailers anecdotally report increased sales of wheelchairs outside NHS procurement channels, while charities continue to play a crucial role in supporting individuals who do not meet NHS eligibility criteria or face inadequate provision. However, the absence of formal data leaves a significant gap in the NHS's understanding of the overall wheelchair market.

Collecting data from retail and charity sectors would provide several key benefits, the most important of which would be to provide a more robust picture of the market. Key decision makers would gain a more complete understanding of the total demand for wheelchairs, including those acquired outside its commissioned services. This would reveal unmet demand or gaps in service that may be pushing users towards external options. Data from retail and charity sources could help identify patterns across regions, service models, or demographics, providing critical insights into how different service designs or local factors affect user choices.

Improving the efficiency of procurement and supply chain

Focus on value-based procurement

One of NHS Supply Chain's stated goals is to pursue Value Based Procurement.⁸¹ This involves a shift in emphasis from a reduction in product costs to working with industry to consider technologies that can influence a reduction in total costs within the patient pathway. In principle this could mean purchasing a slightly more expensive wheelchair for a user if this wheelchair more adequately meets their clinical needs and will reduce the future care they require from other parts of the NHS and also reduce the need for spending elsewhere (e.g. home adaptations).

However, our engagement with organisations who provide equipment to NHS wheelchair services suggests that this principle is not yet evidenced in procurement decisions made by ICBs. They have suggested that the focus remains on lowering product costs wherever possible. This may be shortsighted in some cases and NHSE should consider how best to provide guidance and support to enable commissioners to adopt value-based procurement principles in relation to wheelchair equipment. This is particularly relevant as an inappropriate wheelchair can lead to significant future costs for the user, the NHS and society as a whole.⁸²

⁸¹ <https://www.supplychain.nhs.uk/programmes/value-based-procurement/>

⁸² See for example: https://www.motabilityfoundation.org.uk/media/xb2jxcdo/rpt_final-report_211123.pdf

Development of a national procurement stakeholders forum

Our stakeholder engagement also suggested that because individual procurement activity is concentrated within individual ICBs, regional silos are developing. This is preventing adoption of best practice in procurement. NHSE may therefore want to develop mechanisms to enable shared learning in wheelchair procurement. This could include the development of a national procurement stakeholders forum which brings together NHS Supply Chain as well as both suppliers and wheelchair commissioners to jointly discuss issues and scope out potential innovations.

Logging of wheelchair equipment distributed

We have been told by a range of stakeholders that there is a degree of wastage in current prescription and distribution of NHS wheelchair equipment. This can lead to an individual accruing multiple, less than ideal wheelchairs, and uncertainty regarding what exactly has been prescribed to a specific individual.

Point-of-care scanning could be considered to help rapidly trace any piece of equipment prescribed. This form of barcode scanning has been used successfully in other parts of the NHS in the recent past.⁸³ Specifically a barcode scanning programme led to freeing up clinical time and significant financial inventory savings across a number of NHS trusts.⁸⁴

Our stakeholder engagement suggests that this form of inventory management is already happening within some services across the country. However, in line with several other recommendations we have put forward it would be beneficial if this was standardised to some degree and rolled out more consistently.

Improving retail practices

The performance of the retail providers is important to the overall functioning of the wheelchair sector. Wheelchair users who obtain their wheelchair through a PWBs have the option of using retail provision to source their wheelchair. Although we find in our analysis of PWBs that only a small proportion of PWBs are 'third-party' budgets, we believe that this is an underestimate of the importance of the retail sector in the delivery of wheelchairs. We expect even if an individual obtains a wheelchair directly through the NHS (i.e., a notional PWB) an individual may be using the retail sector to purchase accessories or adapt their wheelchair. Further, in our previous work, we found that gaps in NHS provision resulted in users obtaining equipment privately.

⁸³ <https://www.gs1uk.org/insights/press-releases/new-report-proves-point-of-care-scanning-in-the-nhs-improves-patient-safety-releases-back-clinical>

⁸⁴ In 2016 the DoH committed to Scan4Safety with GS1 Standards (a NPO) which has been successful and expanded under NHSE responsibility <https://healthcare.gs1uk.org/scan4safety/>

Currently some retailers have partnerships with therapists (occupational therapists or physiotherapists) with expertise in assessing and prescribing wheelchairs and have robust clinical processes. However, other retailers do not. More widespread incorporation of clinical expertise as part of retail sales would be beneficial. This would need to be carefully managed as it could exacerbate current staff shortages across NHS services.

Greater integration of user voices

We have developed three recommendations around the integration of user voices. Our first potential recommendation is **the expansion of user group and service user representation**. This is a forward-looking integration of user voices i.e. aims to use user voices to improve the future delivery of wheelchair services. Secondly, the integration of user voices in current care being delivered by wheelchair services through **the adoption of outcome-based tools**. And finally, the development of a **user feedback survey** that collects backward-looking data on the effectiveness of wheelchair services.

User groups in healthcare settings involve the active incorporation of users into the service. This could be through users providing feedback or involving user groups in a particular service into the decisions and design of the service itself.

Wider evidence conducted in mental health services suggests a range of potential benefits and disadvantages to service user involvement from the perspective of both service users and healthcare professional.⁸⁵ Both service users and healthcare professional value having user involvement in decision making. However, users suggest user involvement can be tokenistic (i.e. not result in any change in practice).

Table 7 Benefits and disadvantages to service user involvement

	Benefits of service involvement	Disadvantages of service involvement
Service users perspective	<ul style="list-style-type: none"> ▪ Having a say, included in decision making ▪ Improvement in services ▪ Feeling listening to, chance to give opinion ▪ Therapeutic benefit, self-esteem, recovery, ▪ Opportunities for social inclusion 	<ul style="list-style-type: none"> ▪ Tokenism, no resulting change

⁸⁵ We have reported the benefits and disadvantages with of user groups with the highest number of responses. <https://link.springer.com/article/10.1186/s12913-014-0491-7/tables/7>

	Benefits of service involvement	Disadvantages of service involvement
Healthcare professionals perspective	<ul style="list-style-type: none"> Service users having a say, empowerment Therapeutic benefit, self-esteem recovery Improvements in services 	Service users too negative or critical of services

Source: Omeni et al. 2014

Note: We have reported the benefits and disadvantages with the highest number of responses

Additionally, wider literature helps suggest ways in which user groups involvement can be improved. For example, Shaping Our Lives, The National Network of Service Users and Disabled People, produced user-led research focusing on the good and bad experiences of service users involved in the commissioning, design delivery and evaluation of public sector services.⁸⁶ They recommend the following recommendations for good practice for improving service user involvement:

- 1. Training.** Ensure that training that promotes inclusive communication is delivered for everyone who will form part of meetings that involve user groups. Offer opportunities for service user representatives to take part in relevant training and up-skilling activities and find ways of accrediting participation in training for users.
- 2. Access.** Ensure meetings are fully accessible and involve service user representatives in identifying what the access requirements are. Identify a person who is the central point of contact for matters leading up to and following meetings with user groups.
- 3. Equal participation.** Involve service users in setting the agenda for the meeting and provide space for participation during meetings.

Outcome-based measures are tools that help services collect information on users' goals and assess the extent to which they have been met. They help service providers close their knowledge gap on users' priorities and satisfaction. The NHS's Wheelchair Model Service Specification recommends the use of outcome-based measures as best practice. However, this guidance is non-mandatory, and there is currently limited up-take of outcome-based tools. This is suggested to be, in part, due to the additional requirements they place on an already constrained workforce.

In our previous work, we found that stakeholders suggested that outcome-based measures are a potentially effective mechanism to improve communication between service providers

⁸⁶ <https://shapingourlives.org.uk/wp-content/uploads/2021/08/Service-User-Identity-Research-Findings2.pdf>

and users, can encourage more holistic care, and create greater incentives for wheelchair services to be user-focused.⁸⁷

User feedback surveys are designed to periodically capture feedback from service users in order to assess service performance, allow for the comparison of the quality of care across services, identify the areas that drive high-quality services from a user perspective and highlight any areas where improvement is required for services.

Wider literature review suggests the potential positive impact that user feedback surveys can have in healthcare settings. For example, a systematic review by the BMC Medical Education Journal finds that patient feedback can have a positive impact on medical performance and that the impact of patient feedback is more influential if it is specific, collected through credible methods and contains narrative information.⁸⁸

There are examples of the effective incorporation of centralised user feedback surveys in the NHS, such as in cancer services. The National Cancer Patient Experience Survey allows cancer patients to give feedback on the care they receive. Individuals with a cancer diagnosis are invited to take part.⁸⁹ The survey is run by an external organisation, Picker, on behalf of NHSE. The questions included in the National Cancer Patient Experience Survey are sufficiently general that they can be answered by individuals across a large range of cancer diagnoses and different prognoses.⁹⁰ Results are published at a national level, trust level and cancer alliance level, which means that it can be used to compare ratings across different areas in a standardised way. The survey is centrally analysed to understand the key drivers for a high rating of care.⁹¹

A publicly available robust user feedback survey also has the potential to foster further research. There is a wide body of literature that uses the data developed as part of the National Cancer Patient to explore how care varies across different groups (e.g. the BMJ explored inequalities in care experience and also, separately, how patient satisfaction varies for minority ethnic groups).^{92,93} This shows how the potential for new publicly available collected user feedback has the potential to create wider research and interest.

⁸⁷ <https://www.motabilityfoundation.org.uk/media/zsinh4un/wheelchair-economic-study-final.pdf>

⁸⁸ <https://link.springer.com/article/10.1186/s12909-018-1277-0>

⁸⁹ <https://www.ncpes.co.uk/about-the-survey/>

⁹⁰ Questions included, for example: Did you have confidence and trust in the team looking after you? Did you feel you were involved in decisions about your care and treatment while you were in hospital? Thinking about the time between your final treatment and your first follow up appointment, did the team looking after you provide you with information and support that was right for you? Overall, how would you rate the administration of your care (getting letters at the right time, doctors having the right notes/tests results, etc)? Overall, how would you rate your care?

⁹¹ https://www.ncpes.co.uk/wp-content/uploads/2024/05/CPES22_Key-Drivers_final-27032024.pdf

⁹² <https://bmjopen.bmj.com/content/4/2/e004567.short>

⁹³ <https://bmjopen.bmj.com/content/6/6/e011938.short>

We understand that there currently are user feedback mechanisms in wheelchairs services but these are ad hoc and developed in silos in different regions. There are also limited mechanisms for user feedback to be used and inputted into decisions/service design

C.3 Application of the scoring process

We **apply a scoring process** to each of the specific recommendations to arrive at our final set of recommendations. This is to ensure that final selection of recommendations is arrived at in a transparent and auditable way. The scoring factors that are used in our scoring process are outlined in Section 2.4.

Table 8 shows the overall score of each recommendation, ordered by total score. Table 9 shows more detail on the scoring of recommendations, by providing the score of each recommendation in terms its potential effectiveness of the recommendation, its ease of implementation and its potential wider impact.

Table 8 **Ranked recommendations**

Rank	Recommendation	Total score
1	Creation of an NHSE senior responsible officer role	44
2	Expansion of user groups	43
3 (tie)	Mandating guidance - eligibility criteria	42
3 (tie)	Incorporation of clinical expertise in the wheelchair retail sector	42
5 (tie)	A dedicated wheelchair commissioner	41
5 (tie)	Increased awareness of PWBs	41
5 (tie)	Review into ICBs who are not reporting PWBs	41
8	Improvements to data quality	39
9	Additional data collected on 'top up' values that is used to inform PWB budgets	38
10 (tie)	Expansion of regional networks	36
10 (tie)	Adoption of outcome-based tools	36
11	Development of user feedback surveys	35
12	Collection of data from the retail and charity sector	34
12	Focus on value-based procurement	34
14	Logging of wheelchair equipment distributed	32
15	Development of a national procurement stakeholders forum	30

Source: Frontier Economics

Table 9 Detailed scoring of recommendations

		Effectiveness	Ease of implementation	Wider impact
1. Prioritisation of wheelchair services as an important part of NHS services	A. A dedicated wheelchair commissioner	13	20	8
	B. Creation of an NHSE senior responsible officer role	17	20	7
2. Increasing consistency and collaboration across wheelchair services	A. Mandating guidance - eligibility criteria	20	17	5
	B. Expansion of regional networks	11	17	8
3. Enhancing PWB delivery	A. Increased awareness of PWBs	17	18	6
	B. Review into ICBs who are not reporting PWBs	18	18	5
	C. Additional data collected on 'top up' values that is used to inform PWB budgets	18	15	5
4. Improving data collection and data use	A. Improvements to data quality	16	17	6
	B. Collection of data from the retail and charity sector	12	14	8
5. Improving the efficiency of procurement and supply chain	A. Focus on value-based procurement	11	16	7
	B. Development of a national procurement stakeholders forum	8	15	7
	C. Logging of wheelchair equipment distributed	8	16	8
6. Improving retail practices	A. Incorporation of clinical expertise in the wheelchair retail sector	15	18	9
	A. Expansion of user groups	14	19	10

		Effectiveness	Ease of implementation	Wider impact
7. Greater integration of user voices	B. Adoption of outcome- based tools	16	14	6
	C. Development of user feedback surveys	14	15	6

Source: *Frontier Economics*



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