



## SUSQI PROJECT REPORT

### Sustainably supporting mobility - Developing a walking aid re-use scheme at GOSH

**Start date of Project:** September 2023

**Date of Report:** December 2023

**Team Members:** Nicola Moore, Zoe Vamplew, Amy Young and Rachel Naunton.

[zoe.vamplew@gosh.nhs.uk](mailto:zoe.vamplew@gosh.nhs.uk)

[nicola.moore@gosh.nhs.uk](mailto:nicola.moore@gosh.nhs.uk)



#### Background:

Within the physiotherapy department at Great Ormond Street Hospital for Children (GOSH), walking aids (e.g. elbow crutches, zimmer frames) are provided on a weekly basis across many different clinical specialties. The aim of walking aids is to facilitate mobility for young children who are unable to mobilise unaided, hence promoting independence. Some children are given walking aids for life, however there is a significant proportion of children who only need walking aids for a short period, for example, requiring elbow crutches after an orthopaedic surgery.

According to NHS England, reusing a refurbished walking aid is on average 98% lower in carbon emissions than using a new walking aid, and if just two out of every five walking aids were returned, the average hospital could save up to £46k per year ([NHS England » Walking aid reuse](#)).

Walking aids have historically been single use items and not accepted back by NHS Trusts. However, this has changed due to initiatives such as Greener NHS, who published a detailed how-to guide “10 reasons why to start or expand a walking aid reuse and return scheme” to support Trusts to establish in-house walking aid re-use and refurbishment schemes. Greener NHS have also developed a coordinated return scheme for patients in collaboration with Sustainable Healthcare Network Hub. Within this, patients can return used walking aids to local drop off points at a variety of locations.

The schemes discussed, refer to a communications pack that has been shared with useful resources for establishing and expanding a reuse scheme ([NHS Walking Aid Return and Reuse Communications Pack 2022 | Launch | Sustainable Healthcare Networks Hub](#)). NHS trusts have shared their reuse schemes at UK national webinars as case studies and via an open forum for discussion. The website [Walking aids | Recycle Now](#) has been promoted through these platforms.



This has helped encourage the return of walking aids nationally and locally for patients at GOSH who live across the country.

An example of a case study is the Mid and South Essex NHS Foundation Trust who saved £27,000 by achieving a 40% return rate of walking aids (approx. 40 aids per week). The refurbishment process was quick and easy for staff, taking one person around 5-10 minutes per walking aid (Greener NHS walking aid return and reuse planning support pack, Version 1.1 July 2022, available from [NHS Futures platform](#)).

Increasing return and reuse of walking aids can also improve supply chain resilience, reducing the risk of equipment shortages which can negatively impact patient care and hospital discharges. As the scheme is national, this is also convenient for patients and a positive way to involve local communities in our efforts to reach net zero carbon.

GOSH has set targets to be carbon net zero for direct emissions by 2031. As a physiotherapy team, we had identified that walking aid reuse was an area our hospital could improve on significantly and started the return scheme in January 2022. However, while we have been receiving reused aids under the scheme for some time, we identified that we could significantly improve both the return of aids by patients and the amount of aids being re-used.

#### Specific Aims:

- 1) Evaluate the sustainable value of the current process for walking aid return/reuse to inform how to optimise the process.
- 2) Measure the potential environmental, financial and social impacts of optimising our return and reuse.

#### Methods:

Studying the system:

Since September 2022, the team have been conducting research via attendance at national webinars and benchmarking with other NHS trusts. We found at least 100 trusts that had a walking aid re-use scheme and were able to gather information on their pathways, outcomes and lessons learned to inform a similar project at GOSH. Following these forums and webinars, we also reached out to University College Hospital London (UCLH) who have an established reuse scheme. Both being tertiary centres in central London, we discussed the barriers experienced at GOSH that other hospitals had not encountered.

Prior to the competition, we were aware that some walking aids were being returned. The reason for this was unclear, as was the returns process. Therefore, to evaluate the existing system we completed a physiotherapy staff survey. We realised that staff understood the importance of recycling and knew that aids could be refurbished, but there was no clear process. Staff used their previous experience to make judgements, which highlighted inconsistencies within physiotherapy practice.



From the responses, 26% of physiotherapy staff 'did not accept' walking aids returned by families. Of the 58% who 'always accepted' aids; 10% placed them in the gym, 10% the basement and 37% said 'other'. It was not clear how returned aids were then checked and if or when they would be re-issued to another patient. We also identified there was no record on the amount or the types of aids being returned. We considered the cause of these inconsistencies and explored how we could address them to develop a new standardised, sustainable and efficient process.

#### Creation of new pathway

Following research and our staff survey, we created a standardised pathway for physiotherapy staff to safely assess, clean and refurbish returned aids for re-use (Appendix 1). The pathway also included information on what staff should do when an aid was no longer suitable for re-use, and needed to be discarded.

To create the pathway, we used guidance from the Green NHS "How to Guide" to create the re-use of walking aids flowsheet with clear, standardised instructions to ensure the quality, safety and cleaning procedures of a walking aid. Once completed, we needed to find out what happened to walking aids when they were unfit for re-use and discarded. Therefore we contacted the GOSH Estates team who advised that the broken walking aids are taken to bulky waste and recycled as scrap metal.

Data collection of the previously returned aids did not exist. We created a spreadsheet to track equipment, filled in by staff returning walking aids. We now have the data from August 2023 until December 2023. Our aim is to continue data collection and analysis for the following year, to measure the carbon footprint and financial savings. This data was inputted into a spreadsheet adapted from the Centre for Sustainable Healthcare for analysis.

#### Staff engagement

In developing the pathway we identified the need to give consistent advice to all staff on the safety, cleaning, refurbishment or discarding of aids. We raised awareness of the new pathway to all teams in staff meetings and shared the flowsheet of the pathway in team meetings, via email and by placing a visual copy in our designated storage area.

A potential challenge of the time and resources required to undertake the pathway regularly was identified. As a result, we provided education and distributed roles to therapy assistants and administrative staff so that each step of the process had a named person responsible. For example we designated responsibility for the collection of returned walking aids, transporting them to storage and sorting to a specific member of the team.

#### Patient engagement

We identified that we needed to provide consistent advice to families about the new system, and that this needed to be accessible for all. To overcome these barriers the advice included information about how to return aids closer to home and education on how we make the aids safe for reuse. We added the same information to the GOSH website to facilitate wider access. In the short term,



advice is provided verbally to families at discharge and clinic appointments and via posters in clinical waiting areas.

Ongoing expansion of the project will include information being added to the bottom of clinic letters prompting the return of walking aids. Additionally, we have received funding for QR code stickers. When applied to walking aids this would offer immediate access to the postcode locator website and details of how to return the aid.

#### Additional changes

We wanted to raise the profile of the recycling scheme to those other than GOSH patients. So, as part of the pathway, GOSH was added to the online postcode-locator for return of aids [Walking aids | Recycle Now](#). This was done by making an online account through their website, adding GOSH's postcode, information about the return location and contact details for further assistance if required.

#### Measurement:

##### *Patient outcomes:*

We don't anticipate any change to patient clinical outcomes as the walking aid checking system was already robust and was reviewed recently prior to the Green Teams competition. The walking aids are checked by trained physiotherapy assistants, who then refurbish as required. The checked and refurbished aids are made available for use from the physiotherapy storeroom. The unrepairable aids are sent to bulky waste in the trust to be recycled.

##### *Environmental sustainability:*

The carbon footprint of aluminium walking frames, steel and aluminium crutches and ferrules were provided by Greener NHS (NHS Walking Aid return tracking spreadsheet, derived from ICE v3.0 2019, available on the [NHS Futures platform](#)). We took an average of the carbon footprints of an aluminium walking frame and crutches as a carbon footprint of a gold frame. The same database also provided emission factors to account for the cleaning and disinfecting process of the individual walking aids mentioned above.

The carbon footprint of split pins, walker wheels and walker legs was estimated using a process based method. Materials and weights of the items plus their packaging was accounted for as well as transport from the manufacturer to GOSH and waste disposal. The emissions factor for aluminium and steel was taken from the NHS Walking Aids tracking return spreadsheet adapted from ICE v3.0 (for the split pins and wheels). The emissions factor for rubber was taken from the ICE database v3.0. Emission factors for other materials, transport and disposal were taken from the [UK Government Greenhouse gas reporting: conversion factors 2023](#). Factors for waste to energy disposal and recycling of the parts and packaging was taken from [Rizan et al 2021](#).

Our potential CO<sub>2</sub>e reduction was translated into miles driven using emission factor 0.3386 kgCO<sub>2</sub>e/ mile driven in an average car with unknown fuel, taken from the same Government database.



*Economic sustainability:*

The cost of each walking aid and the spare parts were considered. This is demonstrated in the table below.

Item	Cost of new item (£)
Medium frame	17.46
Colourful crutches(pair)	15.30
Grey crutches (pair)	10.62
Gold frame	22.41
Ferrules	0.45
Split pins (each)	1.89
Walkers wheels (each)	1.94
Walkers legs (each)	2.88

There is no specific additional cost of manual labour involved with this project as the physiotherapy assistant's time to refurbish the walking aids had been included within their departmental roles. This will need to be considered if this becomes more time consuming in the future.

There is no data available for the cost of cleaning devices with Clinell wipes as we share a pack of these wipes with all other equipment in the store room. It would be approximately one Clinell wipe per walking aid. This is something that will need to be considered further in the future.

*Social sustainability:*

Prior to the commencement of the Green Team Competition, we had completed a staff survey as detailed in our method (Appendix 2) section to gain an understanding of staff knowledge, use and perceptions of the return scheme. We plan to repeat this staff survey after 12 months and evaluate the response.

We also created and have begun distributing a patient and family survey (using Smart Survey) exploring use of walking aids, knowledge and confidence in walking aid return as well as perceptions of receiving a re-used aid (Appendix 3). An information poster (Appendix 4) was provided alongside the survey to explain the purpose of data collection. We plan to repeat this survey after 12 months and evaluate the response.

In the meantime we have received informal feedback from staff and families about the project.



## Results:

### *Patient outcomes:*

Prior to the walking aid re-use scheme implementation, clinical outcomes were optimised and not negatively affected. For example, discharge planning was not delayed due to lack of walking aid availability, nor were there problems with risk or patient safety.

### *Environmental sustainability:*

Data was collected over a 4 month period. From August to November 2023, we had a total of 23 aids returned. Of those, 18 (78%) were eligible for reuse either with cleaning only or with ferrules replaced. This has reduced carbon emissions by 400 kgCO<sub>2</sub>e, equivalent to driving 1,181 miles in an average car. The largest savings was from medium zimmer frames where we saved 191 kgCO<sub>2</sub>e from 3 aids.

Walking aid type	Devices Ordered since August 23	Number returned since August 23	Suitable for reuse	individual ferrules replaced	New Walking aid carbon footprint [kg CO <sub>2</sub> e]	Disinfection carbon footprint [kg CO <sub>2</sub> e] <sup>2</sup>	Ferrules carbon footprint [kg CO <sub>2</sub> e]	Carbon emissions reduction through reuse [kg CO <sub>2</sub> e]
Zimmer frame	20	5	3	1	64.64	0.32	0.14	191
Colourful crutch (pair)	40	7	6	3	19.76	0.16	0.14	116
Grey crutch (pair)	0	9	7	10	5.43	0.08	0.14	36
Gold frame	15	2	2	2	29.94	0.19	0.14	58
Overall	75	23	18	16				400

Based on our current return rate and 4 months of data, we estimate potential annual savings of **1,600 kgCO<sub>2</sub>e**, equivalent to driving 4,725 miles in an average car. However, we hope we will increase the rates of returns over the coming year and therefore exceed this prediction. A 20% increase return rate would increase our annual saving to 1,920 kgCO<sub>2</sub>e.

The aids ineligible for reuse were sent to bulky waste for recycling. We did not carbon footprint this as there has been no change to the disposal process. No returned aids required replacement of split pins, walker legs or wheels however this would be accounted for in the carbon footprint should they be required in the future.

Of the overall number of devices ordered in the 4-month period, it appears 24% were returned. However, it is likely that some of the returned items were issued prior to August 2023, and patients supplied with aids since August 2023 will be continuing to use theirs. More time to collect data is required to accurately estimate our current rate of return and monitor increases in this. We plan to re-evaluate after 1 year as most returns are made at our outpatient clinics. This will give time for patients and families to attend follow up appointments and return walking aids.

*Economic sustainability:*

We have calculated the cost saved from reusing and refurbishing walking aids over the past 4 months, from August 2023 until December 2023. We have then considered the cost of the replacement parts needed for the refurbishment and subtracted this from the total.

Economic savings from walking aid reuse

Walking aid	Number returned	Fit to re use on return	Required maintenance		Cost of maintenance (£)	20% increase in maintenance cost	Cost of new aid	Cost of new aid x number returned	Total cost savings for reuse	20% increase predictions for cost savings – 20% increase in maintenance cost
			Number aids	Number Ferrules						
Colourful crutch (pair)	6 pairs	4 pairs	2 pairs	3	1.35		15.30	91.8	90.45	108.47
Grey crutch (pair)	7 pairs	1 pair	6 pairs	10	4.5		10.62	74.34	69.84	83.81
Zimmer frame	2	0	2	1	0.45		17.46	34.92	34.47	41.36
Gold frame	2	0	2	2	0.90		22.41	44.82	43.92	52.69
Overall					£7.2	£8.64			£238.66	£277.69

Walking aid savings minus refurbishment cost savings are £238.66. Projected across a year, this is a saving of **£954.64**.

Understandably, if we are to expect more walking aids to be returned, we do expect an increase in refurbishment costs. We predict within the next year there will be a 20% increase in financial gain from reusing walking aids. This is based on the current return rate of 18 aids returned every 4 months. A 20% increase in walking aids returned minus refurbishment costs will save £277.69 over 4 months, or £1,169.58 per year.

*Social sustainability:*

Staff feedback during the initial survey was positive with most staff wanting to see more walking aids returned and re used, however they were unsure of how to do this. The most frequently cited barriers were concern over the safety of re used walking aids and whether the project would adhere



to infection control guidelines. Education sessions which reviewed our standardised cleaning flowsheet and NHS Green re use scheme, staff reassured staff who were then keen to work with the re-use project.

Following the newly implemented standardised pathway, the feedback from the physiotherapy assistants was very positive, quoting *“It is easy to follow”* and *“following the chart helps me check the aids logically”*.

The results of the patient and parent attitudes towards reused walking aids are still being collected but informal feedback received has been positive. Preliminary comments are listed below. These corroborate our expectations that reducing the barriers to return of equipment can make the process easier for families.

*“It is great to not have the old crutches in my cupboard”*

*“Returning them when we come back to clinic is easy”*

*“Returning my crutches locally saves a lot of time and hassle”*

*“I’m happy they’re not just going to waste”*

There are many other benefits which it has not been possible to measure. By using the postcode locator to find a local drop-off point or return a locally issued walking aid at a GOSH appointment, families can save time and travel costs. Families also expressed a relief in being able to de-clutter, especially if walking aids were causing a hazard. Lastly, several families reported wishing to re-use walking aids by giving them to others personally, leading to inappropriate re-issue and potential injury. By offering an easy way to return walking aids and education on the re-use scheme, families are reassured that their walking aids will not go to waste.

### Discussion:

In summary, we have created a walking aid re-use scheme at Great Ormond Street Hospital for children that is in its first trial phase. As expected there have been challenges to navigate and limitations to the process. However, with a plan to evaluate the scheme in one year (end of September 2024) we will be able to reflect and modify our processes to optimise the environmental, social and economic sustainability.

From the sustainability outcomes considered we interpret the following:

The patient outcomes of the walking aid re-use scheme will not alter significantly. Prior to the walking aid re-use scheme implementation, clinical outcomes were optimised and not negatively affected. For example discharge planning was not delayed due to lack of walking aid availability, nor were there problems with risk or patient safety.

Environmental outcomes. During our 4 month assessment period we have found that three quarters of the aids returned have been able to be recycled. This data is limited by a small sample size and a short period of data collection. However, it does highlight that it is feasible to return walking aids and refurbish them at GOSH. We estimate that after 1 year of the project we would be able to recycle 90% of walking aids returned. However this is dependent on the integrity in which they are





returned and the robust risk assessment. From our carbon calculations, we were able to reduce carbon emissions through re-use by 234 KgCo2e. This included packaging, replacement parts and transport for the walking aids. Medium zimmer frames allowed the greatest carbon savings of 126 kgCo2e. This may be because they are the most stable products so less easily broken. Similarly children who get discharged with these will tend to progress to less supportive mobility aids with rehabilitation, thus not using them for as long a duration so are at less risk of being broken. This means that when they are returned they are more likely to be able to be refurbished and the only aspects needing refurbishment are change ferrules or wheels which are small parts compared to replacing the larger frame structure. Similarly families are more likely to want to return zimmer frames as they are more bulky and take up space in a home, so it is possible the return rate is higher for this item.

Economic outcomes. The economic savings in our 4 month period is £238.66. This includes savings from returns and not ordering new stock with the refurbishment costs deducted. This is promising looking forward in saving money within the trust and the physiotherapy budget. We will continue to monitor this cost saving over the next one year. The hope is that the finances saved could be put towards replacement parts or developing our walking aid scheme further.

Social Outcomes. As previously mentioned, with education and support, Physiotherapy staff have been engaged with the project. This included reassurance and explanation of the benefits to the environment, the trust and the work flow of the physiotherapy staff. As expected, barriers to change from staff members was one of the major factors that we had to initially consider. For example fears around health and safety of misused aids or infection control concerns. This may have been because people were familiar with their own process for a long time, had preconceived ideas about safety of re-using walking aids and a high turn over of staff needing training. We are pleased to be able to comment that no further challenges have been made towards the scheme since the education sessions.

Engaging the public, parents and patients in the scheme has been less challenging than expected. This may be because families are keen to remove items cluttering their homes, it may signify the next step in their child's rehabilitative journey, or even perhaps they have experience with walking aid re-use in their local area so are already on board. We have felt it is important that accessible information is available to advertise the scheme to increase our yield of returns. So far this has been done via the GOSH website, online postcode locator drop off, verbally and with posters in waiting areas. However we know this information needs to be not only to families at GOSH (inpatient and outpatient) but also the wider multidisciplinary team. This is a consideration for the future - engaging wider teams such as consultants in clinics prompting families to return their aids if no longer required.

### Risks

Perceived risks by staff and families included faulty equipment or improperly checked equipment being redistributed to patients, as well as infection control risks of contamination and infections spread between patients. The fear of risk of injury to patients and the resultant consequences has led to some negative attitudes. These were risks we had already considered and safety had been



factored into our pathway. For example having a simple flowsheet of how to assess the aids and a decision tree for when they should be refurbished versus when they should be recycled as scrap metal. Once presented with evidence and education there have been no further concerns raised.

#### Wider application

This project, if successful, could be relevant to other contexts locally within our physiotherapy department but also hospital wide. Examples of this could include other equipment such as posterior walkers, assistive devices such as sling and standing hoists. Similarly we could use this with broken toys or toys missing pieces. We could expand to collaborate with our orthotics colleagues for discarded and broken splints and materials.

This would need further investigation in each area to identify a key contact who is on board with the scheme and has access to the relevant information e.g. product sourcing. We would need to know where the materials come from and also if there is any charity donation in existing processes. For example, are old splints and toys sent to charities?

#### Limitations

Although we have tried to problem solve most barriers, inevitably some limitations persist to the project in its current state. The greatest factor has been the lack of staff resources. Every person involved in this re-use scheme is employed as a clinical member of staff with other roles and clinical duties that must be prioritised. Therefore, the time that can be provided to the creation of the scheme and keeping the project moving can vary.

Additionally, space for the equipment to be collected and stored has been challenging. This has partially been solved by having an interim collection point and a sorting area in a different location. However, looking forward, should we get more returns we would need to think about efficiently utilising the space available.

Another limitation was the lack of responses from the physiotherapy staff survey during our initial research phase. This means the initial data collection sample size was small. We are looking to re-survey the physiotherapy team in the future to gain feedback on the efficiency and any possible improvements to the scheme. In doing this we will aim to get a larger number of responses to get a better reflection of the thoughts of the physiotherapy team.

A further limitation is the short time (4 months) of data collection to date. However, over the next one year we hope to have gathered more data on the type of aids, numbers refurbished and cost benefit analysis. This will help us better understand our scheme and we can compare to other centres across the UK.

In the future, we would hope to be able to distribute the posters promoting walking aid re-cycling in more outpatient departments. We would like to discuss with other professionals including porters, volunteers and ward staff in the hope that more staff that know of the scheme, the more it will be promoted, and the more families will be supported to return their walking aids.



Future work could also include using an app software for instance using “Orca Scan” that would allow the ability to track walking aids’ life cycle. We have attended an initial meeting looking into this with GS1 Ltd as a trial. We would like to look into whether we could track if aids we have provided are recycled locally, for example if patients do not return to GOSH.

### Conclusions:

Overall, this project has been useful to help understand the processes required to undertake a detailed quality improvement on our existing walking aid re-use scheme.

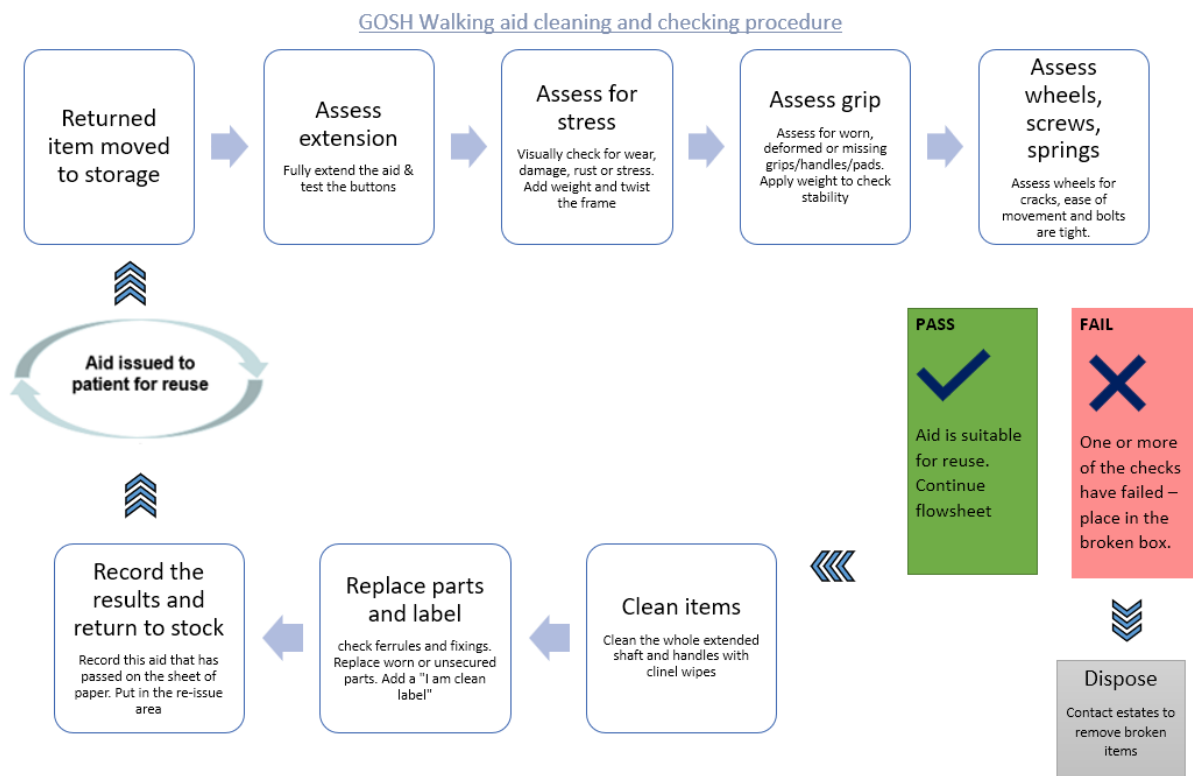
The key elements that contributed to this learning was the wider discussion with professionals around carbon footprinting and how to set up a quality improvement project. Also the wider research and national webinars were interesting to attend and discuss to learn what is going on in the wider NHS.

Areas that didn’t go as well included being able to allocate sufficient time to the efficient set up and running of the scheme. However having regular meetings with professionals outside of our physiotherapy team ensured we remained accountable and focussed on the project. This has taught us that to ensure this project and others similar in the future are successful, clear roles need to be established and maintained.

To ensure lasting change and the ongoing continuation of the walking aid scheme, we have made sure that the pathway is clearly defined as are the roles of the physiotherapy sustainability team, administrative and assistant staff. The GOSH sustainability team are aware of this scheme and support our progress. However have not to date expressed interest in spreading the initiative within GOSH or wider. This is something that we may consider exploring further especially to be able to have a more significant contribution to national discussions. Going forward we would like to collect more data on the opinions of families and patients. This should help us focus our scheme and may raise points that are important to families. It may also help us learn from strategies that are used outside of GOSH to optimise our scheme so it can benefit our families and create sustainable practice socially, economically and environmentally.



## Appendix 1 – Pathway of cleaning, checking and refurbishment process



*If you have any questions, please contact Nicola Moore via email [nicola.moore@gosh.nhs.uk](mailto:nicola.moore@gosh.nhs.uk)*

## Walking aid physiotherapy staff questionnaire

### 1. How often do you give out walking aids? \*

- Multiple times a day
- Daily
- A couple of times a week
- Weekly
- A couple of times a month
- Monthly
- A few times a year
- Never
- Other (please specify):

### 2. What team are you currently working in?

- Neurodisability and SDR
- Neuro team
- Orthopaedics
- Rheumatology and chronic pain
- Neuromuscular
- Respiratory
- IPC
- Haemophilia

### 3. Do you accept walking aids that are given back to you? \*

- Yes
- No

Sometimes

Comments:

**4. What do you do to assess when a walking aid is given back to you? \***

- Clean it with clinell wipes at the height it is
- Clear it with clinell wipes with the whole shaft extended
- Assess the fully extended aid and test all the buttoned extensions
- Check for wear, damage, rust or cracks
- Apply weight and twist to the frame to check rigidity and strength
- Ensure the metalwork is not bent or bowed
- Assess the grips
- Assess the ferrules
- Nothing
- Other (please specify):

**5. Where do you put walking aids that are given back to you? \***

- Store cupboard in the physiotherapy gym
- Level 5 offices
- Basement storage
- Leave on the ward
- Give to someone else to sort
- Do not accept the walking aid

- Other (please specify):

**6. When giving out walking aids, do you give advice on what to do with the walking aid once no longer need it?**

**If yes, please comment on the advice you give \***

- Yes
- No
- Other (please specify):

Comments:

**7. Do you give advice about broken walking aids? If yes, please comment on what advice do you give? \***

- Yes
- No
- Other (please specify):

Comments:

**8. What do you currently do with broken walking aids? \***

- Don't accept them
- Put them in the store cupboard
- Throw them in the bin
- Try to fix it yourself
- Contact estates
- Unsure

Comments:

**9. We are about to launch a walking aid reuse project. When giving out walking aids we want to educate both children and families on returning them. How would you rather give out this information? \***

- Verbal education
- A letter to parents on EPIC with information
- A printed leaflet
- Other (please specify):

**10. Do you ever record when a walking aid is return to you? If yes, where does this get recorded? \***

- Yes
- No

Comments:

## Parents attitudes on reusing walking aids

1. Have you or you child ever needed a walking aid? \*

- Yes  
 No  
 Other (please specify):

2. What would you do with a walking aid you no longer need? \*

- Throw it away  
 Store in a cupboard at home  
 Return to a hospital  
 Return to another location  
 Unsure

Comments:

3. Have you ever been given advice on what to do with a walking aid when you no longer need it? \*

- Yes  
 No  
 unsure  
 Other (please specify):

Comments:

4. Do you think walking aids have a high carbon footprint?

- High  
 Medium



- Low
- Other (please specify):

**5. Would you be happy for you or your child to be given a fully refurbished and checked walking aid?**

- Yes
- Maybe
- No

Comment:

**6. What would be the positives of returning and reusing walking aids?**

- Unsure if to do options or just comment??

**7. Do you have any reservations about using a refurbished walking aid? If yes, please explain what these are. \***

- Yes
- Unsure
- No

Comment:

**8. When giving out walking aids we want to educate both children and families on returning them safely and conveniently. How would you rather receive this information? \***

- Verbal education
- A letter to parents on EPIC with information
- A printed leaflet
- Direction to a webpage with information
- A QR code on the walking aid itself with information linked
- Other (please specify):



**Return Reuse Recycle**



## Walking aid reuse and refurbishment Questionnaire

This document details information about an audit that the Physiotherapy Sustainability Team are completing.

### What are we looking at?

The Physiotherapy sustainability team at GOSH are collecting thoughts, opinions & suggestions about walking aid refurbishment and reuse.

### What are walking aids?

A walking aid is anything that helps a child to walk. This includes a walking stick, elbow crutches or Zimmer frames.

### What is sustainability?

Sustainability is the ability to maintain our environment over time. Sustainable value is linking the social, environmental and financial benefits. This is called the "Triple bottom line".



**SUSTAINABLE VALUE** = **OUTCOME FOR PATIENTS AND POPULATIONS**  
ENVIRONMENTAL • SOCIAL • FINANCIAL IMPACTS  
(THE TRIPLE BOTTOM LINE)

### Why are we collecting this information?

We are collecting this information to help us understand how our patients and their parents/carers feel about sustainability and

reusing refurbished walking aids. Who are we collection information from?

We are collecting information about children of all ages, who have, currently or will use a walking aid. This will include children on the wards and in outpatient clinics. The information will come from the questionnaire filled in by both parents/ carers and children together.

### What will we do with the information?

Your answers to the questionnaire will remain anonymous. This information will be collated and analysed by the Physiotherapy sustainability team.

### Parent/ Carer Questionnaire

Here is a QR code link to the questionnaire. We appreciate you taking the time to fill it in. Paper copies are available on request from the Physio team.



If you have any questions about this short survey, please contact the team via email at [Nicola.moore38@nhs.net](mailto:Nicola.moore38@nhs.net)



## Sustainably supporting mobility - Developing a walking aid re-use scheme at GOSH

(NICOLA MOORE<sup>1</sup>, AMY YOUNG<sup>1</sup>, RACHEL NAUNTON<sup>1</sup>, ZOE VAMPLEW<sup>1</sup>)  
<sup>1</sup> Physiotherapy Department/ Great Ormond Street Hospital

✉ Zoe.Vamplew@gosh.nhs.uk  
Nicola.Moore@gosh.nhs.uk

### Background

GOSH has set targets to be carbon net zero for direct emissions by 2031. Walking aid re-use schemes have been introduced UK-wide because:

- The products are durable and can be refurbished and reused
- It reduces landfill waste and avoids carbon emissions from new production

### Aims

The GOSH Physiotherapy Sustainability team set out to:

- Recognise what exists nationally
- Identify the current process at GOSH
- Advance the provision, return and recycling of mobility aids

### Methods

- The Physiotherapy Sustainability team
- Attended national webinars
- Contacted other trusts to establish current processes and potential barriers
- Distributed a Smart Survey regarding aid use to 99 GOSH Physiotherapy staff with 23 responses

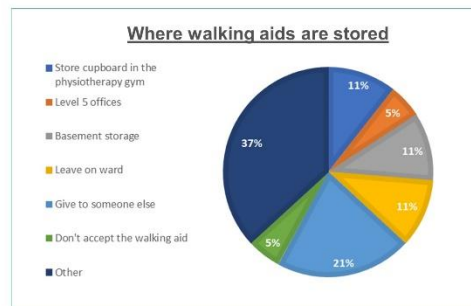
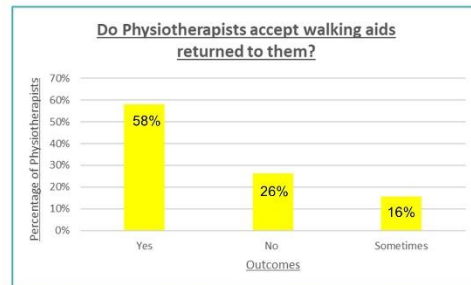


### Results

- At least 100 NHS trusts already had a scheme and were able to share case studies and processes, including another London tertiary centre.

#### The survey:

- 26% of physiotherapy staff did not accept returned walking aids
- Of those who always accepted aids, the management of varied; 11% placed them in the gym, 11% the basement and 37% said 'other'



### Conclusion

- One quarter of physiotherapy staff did not process returned aids
- Inconsistencies for those that were returned existed

### Next steps

- Development of a standardised pathway
- Educate physiotherapy staff to establish reliability through sustainability champions
- Advice to families on recycling aids verbally, via posters and QR codes
- Develop and implement a Quality Improvement project

### Long-term aims

Evaluate the effectiveness of the pathway, the impact on patient experience and the improvement in carbon emissions in line with the trust's sustainability pledge.



#### Making returning aids easy

You can find your local drop off point by scanning the QR code or online at [www.recyclenow.com/walking-aids](http://www.recyclenow.com/walking-aids)



**GOSH Climate and Health  
Emergency declaration  
Protecting our planet  
for our patients**



**GOSH  
Green  
Physios**

## Critical success factors

Please select one or two of the below factors that you believe were most essential to ensure the success of your project changes.

People	Process	Resources	Context
<p><b>X Patient involvement and/or appropriate information for patients - to raise awareness and understanding of intervention</b></p> <p><b>X Staff engagement</b></p> <p><input type="checkbox"/> MDT / Cross-department communication</p> <p><input type="checkbox"/> Skills and capability of staff</p> <p><input type="checkbox"/> Team/service agreement that there is a problem and changes are suitable to trial (Knowledge and understanding of the issue)</p> <p><input type="checkbox"/> Support from senior organisational or system leaders</p>	<p><input type="checkbox"/> clear guidance / evidence / policy to support the intervention.</p> <p><input type="checkbox"/> Incentivisation of the strategy – e.g., QOF in general practice</p> <p><input type="checkbox"/> systematic and coordinated approach</p> <p><input type="checkbox"/> clear, measurable targets</p> <p><input type="checkbox"/> long-term strategy for sustaining and embedding change developed in planning phase</p> <p><input type="checkbox"/> integrating the intervention into the natural workflow, team functions, technology systems, and incentive structures of the team/service/organisation</p>	<p><input type="checkbox"/> Dedicated time</p> <p><input type="checkbox"/> QI training / information resources and organisation process / support</p> <p><input type="checkbox"/> Infrastructure capable of providing teams with information, data and equipment needed</p> <p><input type="checkbox"/> Research / evidence of change successfully implemented elsewhere</p> <p><input type="checkbox"/> Financial investment</p>	<p><input type="checkbox"/> aims aligned with wider service, organisational or system goals.</p> <p><input type="checkbox"/> Links to patient benefits / clinical outcomes</p> <p><input type="checkbox"/> Links to staff benefits</p> <p><input type="checkbox"/> 'Permission' given through the organisational context, capacity and positive change culture.</p>