



# HOW-TO GUIDE

## EQUIPMENT RE-USE

### WALKING AIDS



# The Business Case



Many medical devices (e.g. walking aids) are durable products whose useful life greatly exceeds use by a single patient, and can be refurbished and reused repeatedly, reducing waste to landfill and avoiding carbon associated with new products. Reuse schemes have tended to be limited due to concerns around liabilities, limited resource available to set up a scheme, and the perceived low cost benefit.

Why Reuse

Over the next 3 years the NHS could reduce its carbon emissions by 7.4kt, equivalent to 281,397 car trips from London to Bristol.

## Revenue and savings



Hospitals can save up to £46,000 a year by receiving returned walking aids to be cleaned and refurbished for use by future patients.

## Liability and risk



Walking Aids reuse schemes are low risk for infection control and defects. NHS Resolution's Liabilities to Third Parties Scheme provides indemnity (see slide 9 for more information)

## Greener NHS ambition



The Net Zero report set a target for 40% reuse of walking aids by 2025, which will contribute to Green Plan delivery for Trusts.

## Ease of implementation



Schemes can be in-house taking 5-10 mins to check/clean/repair each item or third-party managed collections, via drop off bins or amnesty campaigns.

**Device reuse and refurbishment could save the NHS 202 kt CO<sub>2</sub>e or 1.4% of supply chain emissions. Crutches, frames and walking sticks are in the top 20 of medical device/ equipment categories for carbon footprint due to the high Green House Gas intensity of aluminium manufacture.**

## Case study example

Mid-Essex Hospitals Trust's achieved a 40% return rate at its pilot site and expanded to a second hospital. 3,000 items worth £27k are reused each year, plus the Trust generates income from scrap metal from damaged items.



**Mid and South Essex**  
NHS Foundation Trust



# How to set up a walking aid reuse scheme



Walking aid reuse schemes set up a process for items to be returned, cleaned, and assessed prior to being redistributed to a new patient

Why Reuse



Crutches



Walking sticks



Walking frames

## Additional Guidance

Case Studies, legal guidance, example delivery models and standardised project methodology examples are provided in the Additional Guidance section to assist implementation.

If you need more support, please contact the NHSEI Sustainable Procurement team [england.ptomsustainability@nhs.net](mailto:england.ptomsustainability@nhs.net)

Reuse Roadmap

Reuse Portfolio

Case Studies

Additional Guidance

Consult and investigate

Define returns approach

Allocate resources

Develop procedures and training

Communicate to end users

**Consult stakeholders.** Some reuse may already occur. Existing practice provides a baseline and facilitates initial discussions with key stakeholders.

**Establish a simple returns approach** and locations (hospital, Council recycling centres) via drop off bins or amnesty campaigns.

Use in-house **staff to manage inspect, clean and repair**; or store and transfer collected items to a **third-party provider to manage refurbishment** offsite. Provide storage, refurbishment space and collection bins.

**Develop Standard Operating Procedures (SOP)** for checking, cleaning and repairing items in-house or provision to third-party. Train all staff involved in the movement of items.

**Provide simple, clear notice of return locations** to end users e.g. equipment labels, and inform patient contact points such as reception, ambulance staff and community nurses.

# What delivery models exist?



There are several possible delivery models to evaluate as part of your planning process; an individual Trust may deliver a programme locally, an ICS deliver may deliver regionally or you may outsource to a third-party

- Why Reuse
- Reuse Roadmap
- Reuse Portfolio
- Case Studies
- Additional Guidance

|           | Individual Trust  | Regional co-ordination   | Third-party outsourcing   |
|-----------|---|--|---|
| Benefits  | <p><i>Programme ownership at individual organisation level with supporting guidance from the centre (see <a href="#">case study</a>)</i></p> <ul style="list-style-type: none"> <li>• Understanding of local / regional dependencies and requirements</li> <li>• Items continue to circulate locally</li> </ul> | <p><i>Regional co-ordination through ICS community. Options on contracting approach</i></p> <ul style="list-style-type: none"> <li>• Understanding of local / regional dependencies and requirements</li> <li>• More product circulating in region</li> <li>• Consistent approach for patients and increased drop off locations</li> <li>• Early adopters encourage wider take up</li> </ul> | <p><i>Outsourced to third party (incl. VCSEs*) with ownership and governance at central level (see <a href="#">case study</a>)</i></p> <ul style="list-style-type: none"> <li>• Leverage existing experience within the private sector</li> <li>• Logistics and workforce provided</li> <li>• Established performance reporting system</li> </ul> |
| Drawbacks | <ul style="list-style-type: none"> <li>• Lack of Trust engagement could slow down the programme</li> <li>• Multiple programmes across a region may duplicate effort</li> </ul>  | <ul style="list-style-type: none"> <li>• More stakeholder engagement required initially</li> <li>• Reduced control and oversight of progress</li> <li>• Potential need for additional logistics set up across region</li> </ul>  | <ul style="list-style-type: none"> <li>• Reduced control and oversight of progress</li> <li>• Reduced savings</li> </ul>  |

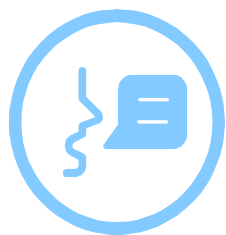
**Hybrid Approach:** Additional benefits can be realised through the blending of delivery models. For example, a **regional ICS co-ordinated** approach could engage a **third-party** to minimise administrative requirements and use existing logistic networks, inventory management systems, cleaning and storage facilities.

# Key Stakeholders



A walking aid reuse scheme will establish a solution to return, clean and assess items prior to being redistributed to another patient

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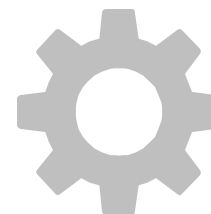
## Clinicians, Physiotherapists, Occupational Therapists, A&E

Teams whose budgets are affected.  
Staff that issue patients with equipment and need to support approaches to equipment tracking, and assurance of appropriate procedures for quality control.



## Sustainability & Procurement managers

A Walking Aid reuse scheme can support broader sustainability programme ambitions.  
Third party collection contracts may be available through CCGs or Local Authority Social Care teams.



## Peripheral Stores, Porters, Waste Teams

Staff involved in stock management, ordering, storage and transfer (and reuse activity for inhouse schemes).  
Joint development of procedures and training.



## End User Contact Points

Reception – contact points for general patient queries  
Ambulance – abandoned patient equipment  
Community Nurses – patient visits  
Care Homes – long-term users, including higher cost items

# **Additional Guidance**

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**Case studies**

**Liability and risk assessment**

**Delivery models**

**Project methodology examples**

# In-house reuse programme



Mid Essex Hospital Trust achieved a 40% return rate through its Walking Aids reuse programme, which involves staff inspecting, cleaning and repairing equipment onsite, saving around £25,000.

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|                        |   |
|------------------------|---|
| <b>Organisation</b>    | <b>Mid and South Essex NHS Foundation Hospital Trust</b>  |
| <b>Issue</b>           | Broomfield hospital with over 800 beds and over 6,000 employees treats a variety of injuries and conditions. In a year they spent £60K on walking aids (£24K on walking frames and £36K on crutches), mainly issued through the Therapies Department, who established and coordinated the reuse scheme.   |
| <b>Action</b>          | An equipment return area was established in reception, staff then transfer items to a designated room for cleaning and assessment. A member of staff pairs, inspects them for functionality and faults, cleans them following local agreed SOP, and replaces worn feet bungs. Any walking aids that fail the checks are treated as waste and allocated for metal recycling.   |
| <b>Impact</b>          | <ul style="list-style-type: none"> <li>• Around 40 walking aids are reused each week</li> <li>• 21% of crutches and 61% of frames are returned</li> <li>• Reusing more than 3,000 pieces of equipment and saving around £27,000 per year</li> <li>• The refurbishment process is quick and easy, taking one person around 5-10 minutes per walking aid.</li> </ul>  |
| <b>Lessons learned</b> | <ul style="list-style-type: none"> <li>• The reuse scheme needs a clear owner and coordinator</li> <li>• A dedicated room is needed to inspect and recondition equipment along with a member of staff supporting this work ~5 hrs/wk (it is not a resource intensive activity)</li> <li>• A set and agreed <i>procedures to follow</i> simplifies the task and ensures appropriate checks are completed.</li> <li>• Communicating a simple returns approach to patients is important for success (the team used labels on equipment to encourage patients to return items)</li> </ul> |



# Third-Party Outsourcing



Third-party equipment providers can collect and prepare items for reuse, with many Trusts using them to manage reuse schemes, providing waste and carbon reductions and financial savings.

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|                        |   |
|------------------------|---|
| <b>Organisation</b>    | <b>Medequip</b>   |
| <b>Issue</b>           | Medequip works with local councils and commissioning groups across the UK, supplying equipment ranging from simple walking aids through to sophisticated bed packages. Health authorities and councils spend some £207m in a year on Community Equipment Services. Around 2 million of the 3.5 million items loaned to patients are returned.   |
| <b>Action</b>          | Medequip collects loaned equipment from designated addresses using 'dual capacity' vehicles, with separate doors and areas for clean and dirty items and antibacterial linings, maximising logistics capabilities and reducing journey numbers. Each item has a unique barcode to track it across the system, manage stock in line with anticipated requirements and providing the customer with returns data. Used equipment is assessed and prepared for reuse, or recycling and salvage of spares where the whole item cannot be reused. |
| <b>Impact</b>          | Medequip developed its 'Return, Reuse, Recycle' campaign in partnership with West Suffolk NHS Trust, increasing rates of return significantly and rolling the approach out in other areas. Some 77% of West Suffolk's equipment is successfully returned – (higher than the 55% national average) of which 91% is reused. More detail on the Medequip process can be found <a href="#">here</a> .   |
| <b>Lessons learned</b> | The general public need to be made aware of the importance of returning these items. It needs to be easy to arrange a collection and equipment return locations need to be easily accessible.   |

**National Association of Equipment Providers (NAEP)**

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NAEP is a membership body that supports equipment providers and equipment services. They can provide details of suppliers offering services.

See more information on NAEP [here](#).



# Liability and risk assessment



Liability for defects can arise for manufacturers, importers or Trusts. The risk for a walking aid reuse scheme is low and should not be a barrier to implementing a scheme when balanced against the significant environmental, health and cost benefits savings.

Why Reuse

## Liability depends on specific circumstances...

Is the aid authorised for reuse? Have any conditions and instructions for re-use, maintenance and/or repair been followed?

Did the defect arise through manufacture or supply to the Trust, or did it arise through the reconditioning/repair process?

Ensure the patient is provided with sufficient information, guidance and support on safe use and risks arising from use

If a patient is injured, establish whether the patient's own negligence (e.g. inappropriate use) or voluntary assumption of risk (e.g. Risks known to the patient) contributed to the injury.

Reuse Roadmap

Reuse Portfolio

Case Studies

Additional Guidance

## Trusts can mitigate the risk by...

- Only issue devices intended for reuse ([NHS Supply catalogue](#) crutches: NHS SC - GTB1817)
- Implement a quality and safety assurance programme with procedures to safely inspect, recondition, repair (minor) and set limits of reuse
- Ensure indemnity/insurance is in place e.g. NHS Resolution's Liabilities to Third Parties Scheme, contact [generalenquiries@resolution.nhs.uk](mailto:generalenquiries@resolution.nhs.uk)
- Avoid being seen as a producer of the walking aids by only reusing aids that require minor reconditioning, and avoid 'white label' partnerships
- Maintain an inventory of manufacturers/suppliers of aids issued, a log of inspections, reconditioning, repairs and re-issue
- Provide and record written guidance and instruction/ demonstration given to patients on the safe use of walking aids and reporting and dealing with any issues.
- Report any adverse incidents to [MHRA Yellow Card](#)

## Potential Liabilities

**Strict Product Liability:** The Consumer Protection Act 1987 (CPA), liability for damage caused by a defective product.

**Negligence:** A claimant who has suffered personal injury as a result of a defect may bring a common law action for negligence against the manufacturer and/or the Trust.

**Contracts:** may manage the liability between the parties and indemnify each other against potential liabilities.

**Regulatory:** Product safety is regulated and can result in legal action. In most cases the Medical Devices Regulations 2002 (MDR) will apply to Walking Aids. The General Product Safety Regulations 2005 (GPSR) may apply more broadly to products intended for consumer use.

**[NHS Resolution](#) have stated a Trust/ICS with appropriate indemnity insurance will be covered for a walking aid re-use scheme.**

# Delivery models | Walking Aid amnesties



A walking aid amnesty is a useful starting point in establishing reuse and can be used to test capability and processes, particularly for an in-house reuse programme in your Trust/ICS.

Why Reuse

## What is a walking aid amnesty?

A one-off or periodic campaign to encourage patients to return items after use. An amnesty allows any patient, their relatives or friends to return items that are no longer used. They can then be inspected and refurbished as needed and made available for re-issue to patients.

West Suffolk NHS Foundation Trust's amnesty campaign resulted in 8,500 items worth around £800,000 returned. More information can be found [here](#).

Reuse Roadmap

## Where to start

- ❑ **Identify potential partners:** Understand whether there are any local suppliers or equipment providers with whom you might wish to partner to support collection and storage of mobility aids
- ❑ **Set up logistics / infrastructure:** Purchase cage / bins for collecting items and decide where to locate them. For example, [George Eliot Hospital Trust](#) set up an amnesty cage outside the hospital's Rehabilitation Entrance so people did not have to enter the hospital to reduce the risk of COVID-19 transmission .
- ❑ **Standard Operating Procedure (SOP) for cleaning and assessment:** Set up an SOP for infection control prevention

Reuse Portfolio

Case Studies

Additional Guidance

Refer to [MHRA Guidance](#) on managing medical devices and the approach to maintenance, repair and decontamination to determine the best delivery model for your Trust/ICS

## Walking aid amnesty at QEH



The Queen Elizabeth Hospital King's Lynn ran an amnesty on walking aid equipment to recover items such as crutches and walking frames.

Rehabilitation Services Manager Nigel Tarratt said: "When patients are discharged from hospital they are often given items of equipment to help with their recovery. This could be something straightforward such as a walking aid or crutches.

"If patients and their families fail to return the equipment when it is no longer needed we do our best to recover it. Very often it cannot be found because it has been put away out of sight."

A drop-off point was set up in the Rehabilitation entrance at the hospital to enable easy returns. More information can be found [here](#).

An inhouse model can be more cost effective, using quick and simple refurbishment processes that follow a Standard Operating Procedure agreed locally with clinicians and therapists.

## What does an inhouse approach involve?

An in-house approach uses internal staff and facilities to complete all aspects of the refurbishment process, from inspection, cleaning and completing minor repairs, to tracking, monitoring, collection, storage and movement of items. The process is simple and quick, taking 5 – 10 minutes per item.

## Where to start

- ❑ **Identify programme owner:** The programme owner will provide project sponsorship
- ❑ **Set up refurbishment room:** Establish a dedicated area with sufficient space for inspecting, cleaning and repairing items, and storage space to clearly separate dirty returned items and clean items ready for reissue.
- ❑ **SOP for cleaning and assessment:** Set up a standard operating procedure (SOP) that includes infection prevention control, documented approval for products to be used and an escalation process.
- ❑ **Order supporting equipment:** storage cages or bins for collection, replacement parts, labels to mark equipment as 'on loan' and identify returns location or contact, any other communication materials and disinfecting cleaning products.
- ❑ **Measuring progress:** Agree a standard set of KPIs and establish monitoring processes for measuring progress. See the monitoring and reporting examples.
- ❑ **Staff Training:** Train all staff in infection control, and portering staff in the process

## Lessons Learned

- Establish a clear owner and coordinator for the programme
- Allocate a room for the reconditioning to be carried out and a member of staff to support this (it is not a resource intensive activity)
- Set and agree processes (SOP) to follow
- Communicate with users (i.e. add stickers to encourage the return of devices)
- Equipment tracking needs to be quick and simple to encourage participation by time pressurised teams
- Focus on ease of implementation by staff and improving returns over tracking individual items
- Performance data can be provided by third party providers.

# Delivery models | Third party enabled solution



An outsourced model reduces administrative requirements for the Trust/ICS and provides wider access to patients looking to return items. Schemes that do not return items to the Trust/ICS for re-issues may not deliver savings to the Trust/ICS.

Why Reuse

A third party enabled solution provides experience of rolling out a reuse programme. The solution might include:

- **Fully outsourced model to third party:** Engage with a third party who provide a managed service for community equipment. If unsure where to start, The National Association of Equipment Providers ([NAEP](#)) is a membership body for providers of equipment and services.
- **Use of VCSE\*, providing a level of social value:** Explore whether any local VCSE organisations provide take back or reuse services, for example British Red Cross
- **Collaboration across the region with third party (private sector or VCSE):** Blended model harnessing the benefits of Regional / ICS delivery and Third party enabled delivery

Reuse Roadmap

Reuse Portfolio

Case Studies

Additional Guidance

## Where to start

- ❑ **Identify potential partners:** Understand existing contracts and relationships through SCCL or your local area, as well as potential other third parties who might be suitable to partner with
- ❑ **SOP for cleaning and assessment:** Work with the third party to set up a SOP for your programme that follows local IPC and decontamination policy. They might already have standard procedures from similar schemes
- ❑ **Measuring progress:** Agree a standard set of KPIs and process for measuring progress. See the monitoring and reporting examples.

## VCSE take back schemes

There are a number of voluntary, community and social enterprise organisations who provide take back schemes, both locally and nationally.



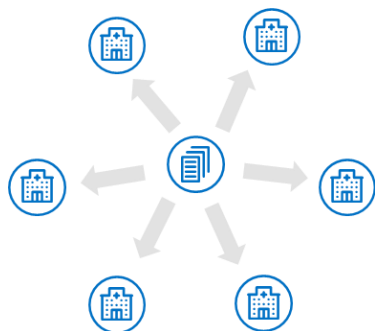
For example, Warrington Disability Partnership runs a mobility equipment recycling scheme.

The scheme recovers, recycles and reuses electric mobility scooters and wheelchairs, manual wheelchairs, crutches, wheeled and framed walkers. Donated equipment, once restored, is used in their Shopmobility fleet and independent living equipment loan services. Surplus goods are sold on at affordable prices from their Shopmobility service.

Aggregating contracts or procurement approaches from across your ICS/region could enhance the benefits of your programme

Why Reuse

Regions can have a variety of separate contracts and logistics operations for walking aids with a mix of in-house operations and outsourced. Fragmented service delivery is likely to incur higher costs than delivery at scale. Warehousing, cleaning, monitoring systems and other support contracts could be consolidated under a regional model.



A regional model would provide a consistent service for users through a consolidated operating platform.

Reuse Roadmap

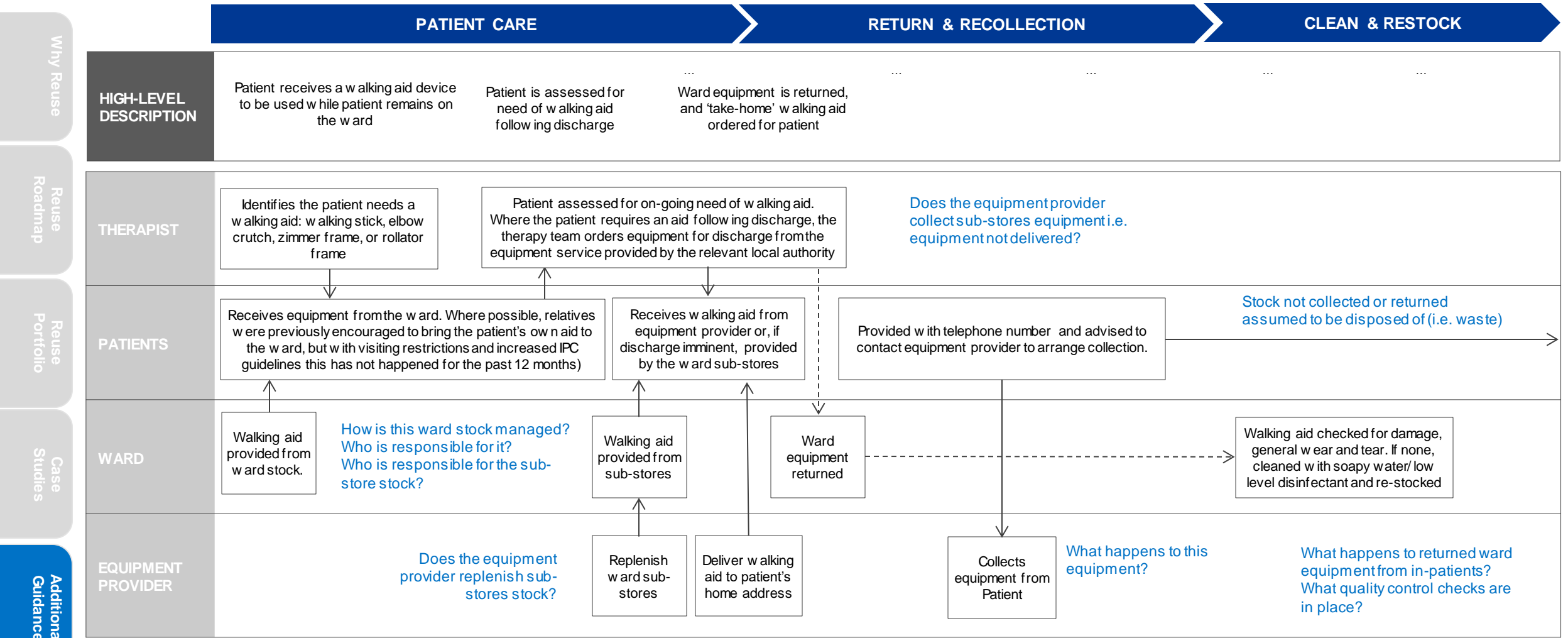
Reuse Portfolio

Case Studies

Additional Guidance

| Regional models  | Description  | Benefits   | Drawbacks  |
|--|--|--|--|
| <b>Common platform across in-house providers</b>             | <ul style="list-style-type: none"> <li>Implement a central procurement function and single IT system across the non-outsourced providers</li> <li>No change to outsourced contracts</li> </ul> | <ul style="list-style-type: none"> <li>Lower one off and recurring costs</li> <li>Short time to deliver (est. 3-6 months)</li> </ul>     | <ul style="list-style-type: none"> <li>Limited regional collaboration</li> </ul>   |
| <b>Consolidated operating model with in-house providers</b>  | <ul style="list-style-type: none"> <li>Integrated model across the non-outsourced providers delivered by one service provider</li> <li>No change to outsourced contracts</li> </ul>            | <ul style="list-style-type: none"> <li>Potential for high recurring and one-off benefits</li> </ul>                                      | <ul style="list-style-type: none"> <li>Longer time to deliver (est. 14-17 months)</li> <li>Lower net benefit compared to #3</li> <li>Limited regional collaboration</li> </ul> |
| <b>Single consolidated operating model across the region</b> | <ul style="list-style-type: none"> <li>Fully integrated single operating model across the region delivered by one service provider</li> </ul>  | <ul style="list-style-type: none"> <li>Potential for high recurring and one-off benefits</li> <li>Full regional collaboration</li> </ul> | <ul style="list-style-type: none"> <li>Longer time to deliver (est. 17 – 20 months)</li> </ul>   |

# Examples | Workflow map



# Examples | Roles & responsibilities\*



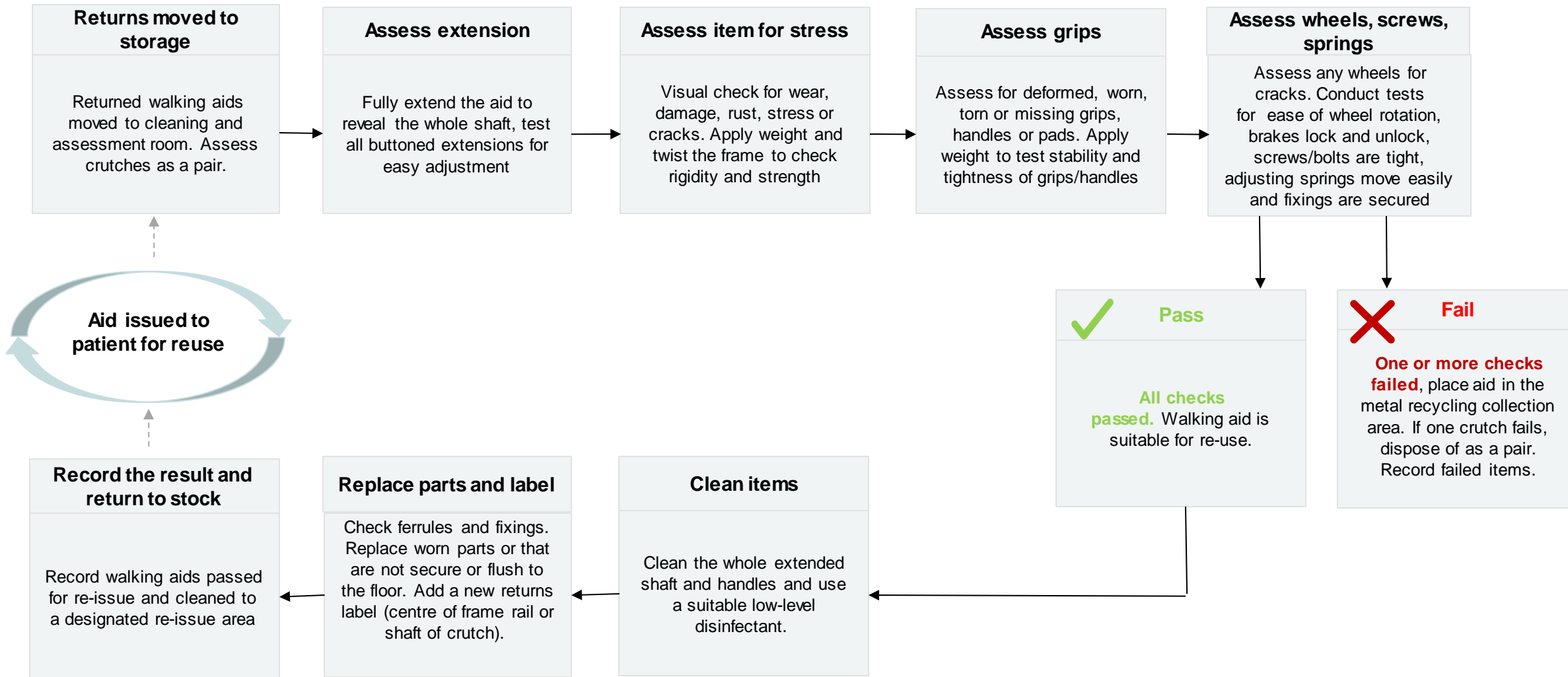
Define required roles and responsibilities within the Trust/ICS and at a committee level, including oversight of procedural documents, compliance with decontamination guidance and cleaning standards audit results

|                     | ROLE   | RESPONSIBILITIES   |
|---------------------|--|--|
| Why Reuse           | <b>Chief Executive</b>                                     | Overall responsibility for ensuring the Trust has robust and up to date procedural documents in place to govern and guide activities   |
| Reuse Roadmap       | <b>Executive Directors</b>                                 | Ensure all procedural documents under their remit are appropriate, up to date and available at the point of need   |
|                     | <b>Director of Nursing</b>                                 | Overseeing progress on all procedural documents and reviewing and taking action where appropriate in relation to updates received from the procedural document group.  |
| Reuse Portfolio     | <b>Musculoskeletal (MSK) Directorate Committee Meeting</b> | Ensure their procedural documents are reviewed in a timely manner.   |
|                     | <b>Musculoskeletal (MSK) Managers</b>                      | Support the dissemination and implementation of new / revised procedural documents.  |
|                     | <b>All Musculoskeletal (MSK) Staff</b>                     | Responsible for familiarising themselves with this procedural document and co-operating with the development and implementation of all procedural documents as part of their normal duties and responsibilities.               |
| Case Studies        | <b>All Staff</b>   | All staff have a duty to maintain a clean environment. Those assisting with walking aid cleans must follow the provided flowchart.   |
| Additional Guidance | <b>Musculoskeletal (MSK) Clinical Governance:</b>          | Ensure procedural documents are updated and reviewed within the required timeline.   |
|                     | <b>Author</b>  | Lead on the development or major review of a procedural document. The author must also provide a brief summary for staff communication / launching purposes. All procedural documents must have an equality impact assessment. |

# Examples | Cleaning and checking procedure



Below is a basic example cleaning and checking procedure based on case studies and supplier guidance of 'not for single use' aids



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- Additional Guidance



Create SOP for assessing items and the decontamination process and training materials that address the technical skills and knowledge requirements

Why Reuse

## Training Requirements

- Infection prevention control learning - mandatory for all staff
- Process and criteria training for new portering staff

Reuse Roadmap

## Infection prevention control

Walking aids are low risk – commonly coming into contact with intact healthy skin and are non-clinical in nature.

A reusable cloth (where validated laundry process is available) or wipes for cleaning to remove organic matter and the use of a low-level disinfectant suitable for the equipment according to local trust IPC and decontamination policy is considered a suitable decontamination method. Refer to the [National Standards of Healthcare Cleanliness 2021](#) and your local Infection Prevention Control lead for further guidance.

Reuse Portfolio

| Category | Indication                | Examples              | Level of Decontamination | Method  |
|----------|---------------------------|-----------------------|--------------------------|---|
| Low Risk | Items used on intact skin | Washbowls, mattresses | clean                    | Wash with warm water and neutral detergent and dry thoroughly or use reusable cloth and suitable low-level disinfectant (following manufacturers guidance on compatibility, contact and drying times) |

Case Studies

Additional Guidance

Collecting and periodically analysing data from the programme is vital in order to understand success and areas for improvement

Why Reuse

A log sheet and accompanying spreadsheet should be used to measure and track the volume of walking aids returned and reused as well as the accompanying financial benefits. The data should be monitored and evaluated periodically in order to identify opportunities for further improvement. The log sheet should look to include information on items returned, refurbished and disposed, as well as monitor any replacement parts and their stock levels. For example:

| Date | Crutches returned (pairs) | Crutches refurbished (pairs) | Crutches disposed of (pairs) | [Other items] returned (pairs) | [Other items] refurbished (pairs) | [Other items] disposed of (pairs) | Number of ferrules used (single) |
|------|---------------------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
|------|---------------------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|-----------------------------------|----------------------------------|

Reuse Roadmap

This log sheet can then be used to monitor the percentage of items refurbished, volume of waste avoided and carbon savings. Other example success measures include:

- Total saved on walking aids (per category)
- % return rate of walking aids
- Refurbishment time
- Patient satisfaction with refurbished walking aid

Reuse Portfolio

## Measuring carbon and waste impact

Collecting the right data will enable you to calculate your impact on cost, waste and carbon.

Case Studies

Example metrics:

- **Total savings from refurbished items:** Cost savings from not needing to repurchase items
- **Carbon savings from refurbished items:** kgCO<sub>2</sub>e diverted by not needing to repurchase items
- **% Refurbished instead of disposed of:** Ratio of returned items refurbished versus disposed of (due to wear and tear)
- **Waste collections saved:** Average waste collections per tonne multiplied by total weight refurbished
- **Waste savings per tonne:** Cost per tonne multiplied by volume avoided

Additional Guidance