

Social Care Digital Innovation Programme

Newcastle upon Tyne:
Joint Loan Equipment Service



Problem

How might we ensure that people can maximise independence by accessing the right equipment at the right time?

(Or from a service point of view, how to ensure we make best use of the resources available to the loan equipment service by ensuring equipment is quickly returned and reissued to others in need).

- Local Setting: Joint Loan Equipment Service: Commissioned by CCG & City Council; delivered by Newcastle upon Tyne Hospital Trust.
 - Budget of approx. £1.5mil
 - 30,000 items of equipment issued per year; 25,000 returned
 - 98.1% of users satisfied with the service (94% very satisfied)
- However: Significant issue with waiting lists because there is not enough equipment available to meet the demand, and insufficient funding to purchase new equipment to be added to stock.
- One cause of this is the delay or prevention in retrieving pieces of equipment once they are no longer needed.
- National Issue: February 2019 – BBC Inside Out programme on equipment: *“millions of pounds is wasted”*
- Policy Issue: Oct 2018 – Health Minister: - *“In too many instances...medical equipment is being used once and then thrown away”*

The Social Care Digital Innovation Programme 2019-21 supports the adult social care sector to use digital technology to respond to challenges in local areas. The programme is funded by NHS Digital and managed by the LGA. It is intended to enhance direct practice, improve information sharing and enable integration



Why is this are important?

About the Service

The Joint Loan Equipment Service delivers a range of equipment

1. Toileting (e.g. seats, frames, commodes)
2. Pressure relief equipment (e.g. specialist mattresses, cushions)
3. Moving and handling equipment (e.g. hoists, transfer boards, lifting belts)
4. Specialist beds (e.g. electronic, hydraulic)
5. Mobility equipment (e.g. walking sticks, frames, standing equipment)
6. Bathing/showering equipment (e.g. bath lifts, seats, standing equipment)
7. Seating (e.g. specialist chairs, raising blocks)
8. Miscellaneous equipment (e.g. perching stools, trolleys, ramps)

What does the problem look like in practice?

Service users waiting for equipment.

A recent situation where the outstanding referrals for bath lifts reached almost 100 necessitated the development of a business case to secure additional funding. This is also reflected in waiting lists for assessment where 80% relate to bathing.

A similar approach had to be taken to respond to an increasing need for specialist bariatric equipment



About the person:

Mary lives with her husband Mike in a **two bed terrace house**.
There are two steps to get into the house

Mary has a serious **long term condition** which means her **mobility has reduced** and continues to decline

Mary wants to **remain as independent as possible and can still get out an about**

What are the challenges?:

Increased difficult with personal care, **can't access the bath**
Lack of confidence on the stairs, husband supports but he is starting to struggle

What do they need?

Assessment for help with bathing – possible bath lift or shower
Assessment for safely using the stairs – possible second bannister rail

Support to get out into the community – possible ramp at front of house, walking frame

" I'd love to have a bath again"

Name: Mary

Age: 80

Job: retired school secretary



What we have done

Through the Discovery phase, we have undertaken research into the problem.

- Literature review (including grey literature)
- Journey Mapping activities to understand the process from different perspectives
- Discussions with Service Managers to understand the wider context in which the service operates
- Semi-structured interviews with service staff
- Analysis of findings from annual satisfaction survey
- Focus groups with professionals using semi-structured approach
- Observation of the work of the panel
- Research into approach of other areas

The research findings were synthesised and thematic analysis undertaken. These were then discussed and 'sense tested' with project team and other professionals.

Although the initial prompt to look at the Equipment Loan Service for this project came about because of frustrations around submitting information (such as having to use a fax machine), the research caused us to focus on a different issue as a theme for implementation.

Advantages of thematic analysis (Braun & Clarke, 2006, 97):

- Flexible
- Ease of application
- Findings understandable
- Can usefully summarise key features of large data set
- Can contrast similarities and differences
- Can generate unanticipated insights
- Can be useful to inform policy development

About the person:

Joe lives alone in a council flat.

Joe has diabetes and this has caused has **loss of dexterity in his hands** so he struggles with tasks around the home.

Joe is also **unstable on his feet** at times

What are the challenges?:

Food prep – unable to cook what he wants as struggles with packaging

Falls – increasingly worried about falls due to being unsteady on his feet. Losing confidence

What do they need?

Grab rails in bathroom to help getting in and out of shower

Kitchen aids for opening jars, packets and tins to aid with food prep

Support to get out into the community – currently has walking stick, assessment for walking frame



"You get a good variety of microwave meals, but nothing beats home cooked food"

Name: Joe

Age: 78

Job: retired factory worker



Research Findings

Themes



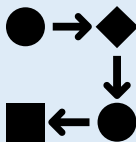
Knowledge & Information



Issuing Equipment



Stock Management



Process



Service Delivery

Knowledge & Information

At times, there appears to be a lack of connectivity between the service and professionals.

- Service doesn't necessarily know if someone has died or moved house
- Where functional needs change, prof should inform service – not all profs do
- Professionals only informed about equipment deliveries when specifically request it
- Not clear who knows the current state of the patient

There is also information that is not currently connected

- Records about stock and records about people are separate.
- Service reliant on family and professionals to let service know about change of circumstances

Importance of knowledge of equipment, regulations and good practice for the service and professionals

Issuing Equipment

There are numerous opportunities for stock to go missing or be incorrectly allocated to people (which can be problematic when there is a safety recall)

- Professionals taking numerous pieces of equipment to try with multiple clients and not recording which issued to who
- Equipment being returned to hospitals or professionals rather than the service
- Lack of sufficient record keeping in buffer stores
- Sometimes equipment taken to nursing homes when shouldn't be
- Equipment often written off when someone deceased
- Aware that equipment gets 'unofficially' passed to others to use e.g. partner,
- Professional report that "people misunderstand the recall letter"

Good use of equipment 'in stock'

- Professionals check what is in stock
- Buffer stores ensure 24-hour availability of some pieces of equipment
- Professionals report that the service has a good awareness about what in stock and communicate that



Research Findings

Stock Management

There is a lack of clarity about the location of specific pieces of equipment

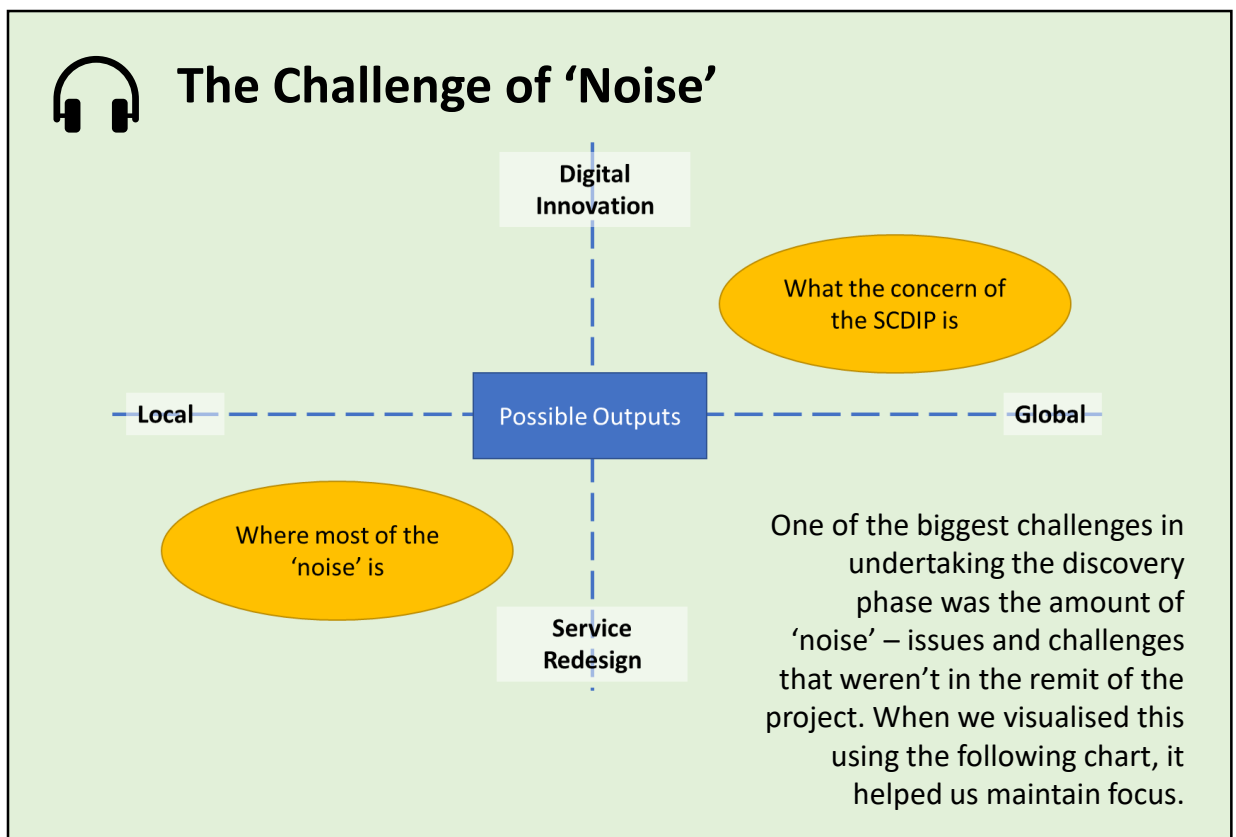
- While the service records the equipment issued to individuals, specific pieces of equipment are not recorded or tracked.

Ensuring sufficient pieces of equipment are available is a challenge

- Changes to supply – manufactured to order
- “you might order 10 beds and suddenly you get 10 beds returned...it happens all the time”
- Greater willingness to fund lower cost items
- Professionals report frustration around waiting times / limited choice at times
 - e.g. someone on list for 10 months caused by lack of funding
 - Sometimes delay means – by time delivered, no longer useful
 - “Sometimes patients die before they get their equipment”
- Trade off between available and suitable; clinical vs cost; function vs comfort

Perception of ‘loan’

- At times, appears that patients and professionals don’t recognise that equipment is issued on loan e.g. request particular colour, no consideration of ongoing use





Research Findings

Process

Processes are very manual and paperwork-heavy

- There is a lot of duplication in recording.
- Paperwork – “lots of paperwork just to collect a sling”
- May be multiple requests from different services for the same patient

Process not always understood or followed

- e.g. info not included with requests, inappropriate requests (e.g. just for school), no EHCP in place for children
- At times, appears that professionals tend to purchase equipment for people; service orders equipment for stock

Your Equipment Newcastle

- Professionals identified problems when people buy their own equipment but which is not suitable or even detrimental
- Having said that, the need for a link to Your Equipment Newcastle was identified

Service Delivery

Pragmatism

- *“For many years now, the service has been run on common sense”*
- Prioritisation e.g. palliative or hospital discharge are seen as more urgent
- Professionals report – no issues with delayed discharges because of equipment
- Flexible service – advice given, suggest people come in to check stock

Professionals recognised lots of positives about the service

- Quick at collecting equipment when it is not needed anymore
- Good at recognition of short-term and urgent needs
- Personal response, efficient (In contrast to experience of other authorities – may have IT system but crashes, password needs resetting, pictures and description not matching)

However, challenges also noted

- Waiting lists
- Useful if drivers could fit equipment
- Not much scrutiny of the service e.g. “commissioners don’t ask for anything”, KPIs are old and not used



What we have done

As well as the thematic analysis, an important output from the research was a high-level process map to describe the current system.

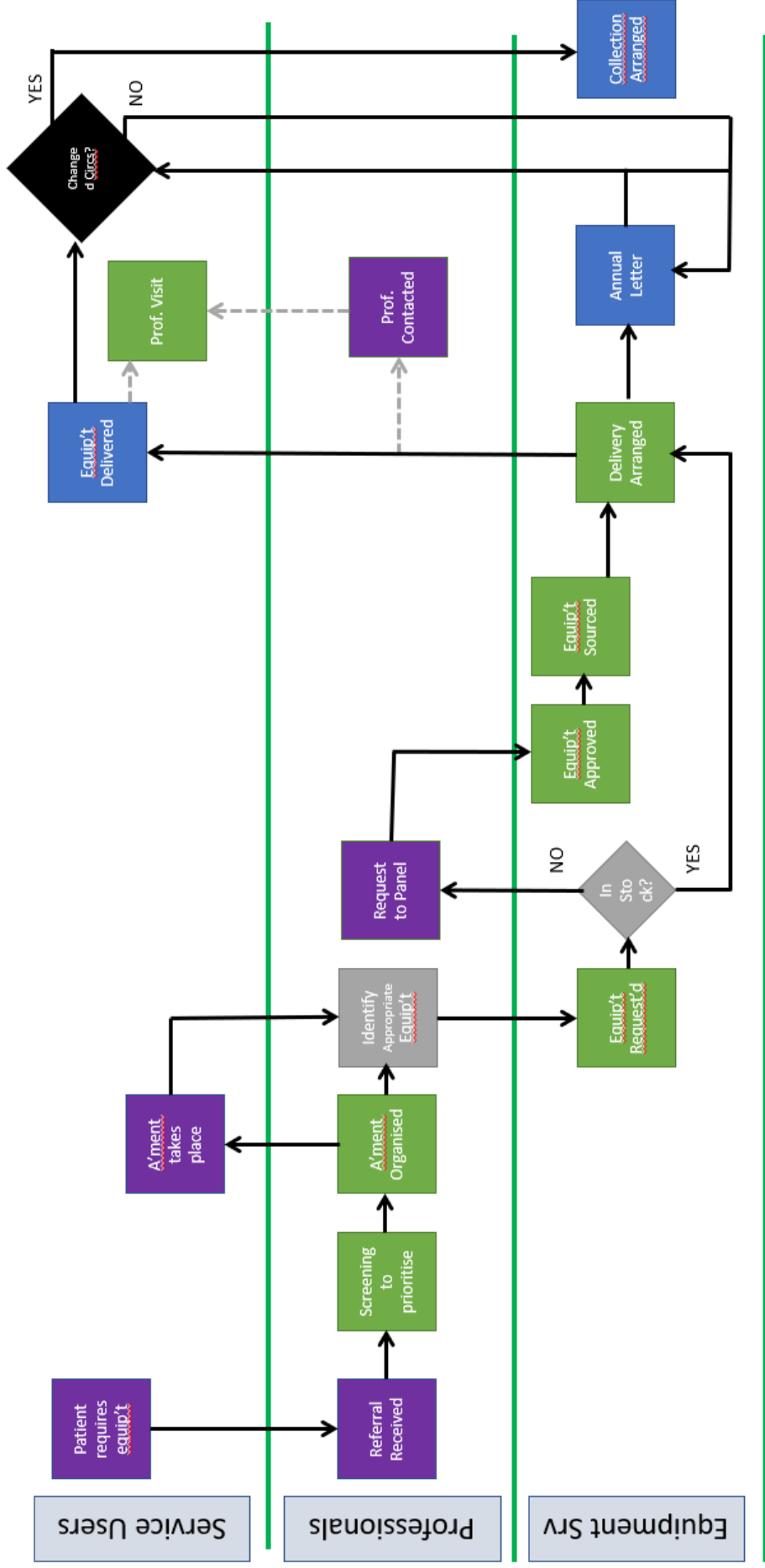
Having mapped the process, we have identified numerous ways in which digital technology could support most, if not all, stages in the journey from referral to the issuing of equipment and then the return and re-issue.

Working with colleagues in ICT, we grouped these and represented as a multi-layered platform covering user experience, workflow management, knowledge base, asset management, and reporting and analysis.

User Experience	Main focus of user Interface for platform solution. Interfaces could be multiple in type and available functionality / link to prebuilt products. Could dynamically change based on consumption medium / users need.
Workflow Mgt	Solution for management of workflow / cases / processes / assets. A lot of agencies have digital solutions in place.
Knowledge Base	Knowledge base solution to be used as: -Tailored recommendation engine for equipment to uses -Discover / informing users of process flow documentation / next steps-Measurement of Success
Asset Mgt	Asset management process in terms of:-Better asset tracking.-Improved measurements / new MI data exploration-Feedback in to other platform Layers-schematisation/standardisation of information gathered around assets to aid use within a platform approach and enable further innovation
BI / MI	Business intelligence and management information layer used to pull in data from all internal and external platform layers and inputs. Used to enable data centric decision making for service delivery and service strategy.

These layers were then represented on the process map (other than BI/MI which is system wide).

From a SCDIP point of view, we explored the different options with the project team and stakeholders and agree that focusing on the asset management layer was most appropriate. Having said that, all stakeholders concerned are keen to explore ways in which the learning and possibilities around the other layers can be further explored and developed.



BI / MI

Asset Management

Knowledge Base

Workflow Management

User Experience

Recommendations

Having gathered such rich intelligence through the Discovery Phase, it is recommended to build on the learning from discovery phase and bid for funding in Implementation Phase

Information came through as a central theme in the research. Both in terms of sharing (or not as the case may be) information between the service, professionals and families, and the importance of the knowledge of professionals about pieces of equipment.

Therefore, our proposed solution centres on utilising information – both structured and unstructured – to enable a more dynamic allocation of equipment to service users. As well as supporting the local situation, this was recognised as meeting the sector-wide issue focus on the SCDIP.

We will do this by:

- Developing a mechanism and process to automate the sharing of information known to professionals about significant changes of circumstances for service users.
 - For the implementation stage, we will implement a solution that uses Adult Social Care information about deaths, house moves and residential placements and notifies the Equipment Loan Service about changes in status against these items.
- Creating a joined data set containing Adult Social Care information and Equipment Service Information and analysing to support an improved knowledge base. Specifically,
 - We want to identify any patterns between the condition of service users over time and the equipment they have been issued.
 - We also want to identify where information is contained in the Adult Social Care record (both structured and unstructured) that would affect their allocation of equipment.
- We then want to develop a mechanism to use these patterns to flag to the professional that they should consider changes to the equipment a service user has.

In identifying this solution, other alternatives were considered.

For example, the idea of using sensors to identify whether certain pieces of equipment were in use and how they were being used. Whilst this would certainly have been at the ‘cutting edge’ of innovative uses of technology, given the scope and scale of this project, this option was discounted because of the multiple risks of failure, the resource implications for the existing service maintaining and delivering the equipment, and the challenges around scaling-up.

Other recommendations (outside of SCDIP)

- The project has been complicated by lack of clarity about the role of the commissioner and of the provider.
 - Recommend review of commissioning arrangements and incorporate digital development into expectations of provider.
- In addition, consideration should be given into how to make best use of Your Equipment Newcastle and incorporate into process



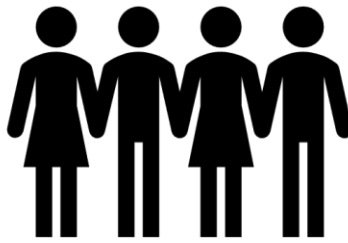
What will be different?



Service Users

Access to equipment sooner
Less wait – less risk – increased likelihood / ability to maximise independence

Most appropriate equipment



Health & Care Professionals

Increased availability of equipment identified through assessment

Better informed assessment



Equipment Loan Service

Less need for large quantities of stock 'just in case'

More efficient processes to ensure the timely return of loan equipment

How will we know?

OUTCOME / IMPACT	HOW MEASURED & EXPECTED DIRECTION OF CHANGE?
Equipment available for re-use sooner	#/% Equipment Lost or Written-Off (↓) #/% Equipment returned vs issued (↑) #/% Equipment returned in response to letter (↓) Avg gap (days) between death/move and equipment returned (↓)
Fewer people with long waits for equipment	Internal (NCC) waiting list (↓) Panel Waiting list (↓) Average time (days) from assessment to delivery (↓)
Most appropriate equipment allocated according to current needs	Increasing reference to equipment in annual review (↑)
People enabled to maximise independence because they have the right equipment, at the right time	Professionals reporting this (↑) Number of professionals reporting more timely availability of equipment (↑)

For more information contact

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